



Documents may be obtained,
free of charge, in electronic format,
from the eTenders website.

Reference is to be made to
Clause F.1.2 of the
Tender Data.

WATER AND SANITATION UNIT

SPECIAL PROJECTS

PROCUREMENT DOCUMENT

INFRASTRUCTURE

CONTRACT No.: **WS 7614**

TITLE: **Provision of Water and Sanitation in Schools (Cluster 1) Lambothi High School and Inhlanganiso Primary School**

Clarification Meeting: **A Compulsory Clarification Meeting will be held Aldenville Primary School on 19 January 2023 at 11H00am.**

Issued by:

WATER AND SANITATION UNIT
SPECIAL PROJECTS

Date of Issue: **December 2022**

Document Version: 01/03/2022

NAME OF TENDERER:

INDEX

<u>PART</u>		<u>PAGE</u>
<u>TENDER</u>		
T1 TENDERING PROCEDURES		
T1.1 Tender Notice and Invitation to Tender	(white)	2
T1.2 Tender Data	(pink)	3
T1.2.1 Standard Conditions of Tender		
T1.2.2 Tender Data (applicable to this tender)		
T2 RETURNABLE DOCUMENTS		
T2.1 List of Returnable Documents	(yellow)	13
T2.2 Returnable Schedules, Forms and Certificates	(yellow)	14
<u>CONTRACT</u>		
C1 AGREEMENT AND CONTRACT DATA		
C1.1 Form of Offer and Acceptance	(yellow)	46
C1.1.1 Offer		
C1.1.2 Acceptance		
C1.1.3 Schedule of Deviations		
C1.2 Contract Data	(yellow)	49
C2 PRICING DATA		
C2.1 Pricing Assumptions / Instructions	(yellow)	58
C2.2 Bill of Quantities (with separate page numbering)	(yellow)	60
C3 SCOPE OF WORK		
C3.1 Project Description and Scope of Contract	(blue)	143
C3.2 Project Specifications	(blue)	146
C3.3 Standard Specifications	(blue)	156
C3.4 Particular Specifications	(blue)	158
C3.5 Contract and Standard Drawings	(blue)	159
C3.6 Annexures	(blue)	160
C4 SITE INFORMATION		
C4.1 Locality Plan	(green)	161
C4.2 Conditions on Site	(green)	161
C4.3 Test Results	(green)	161

PART T1: TENDERING PROCEDURES
T1.1: TENDER NOTICE AND INVITATION TO TENDER

Tenders are hereby invited for the works to provide water and sanitation infrastructures at Lambothi High School and Inhlanganiso Primary School within Ilembe District.

(F.1.1.1) The Employer is the eThekweni Municipality as represented by **Project Executive: Special Projects**

It is estimated that tenderers should have a CIDB contractor grading designation of **6 CE or GB** (or higher).

(F.2.7) **A Compulsory Clarification Meeting will be held Aldenville Primary School on the 19 January 2023 at 11H00am.**

(F.2.8) Queries relating to these documents may be addressed to the Employer's Agent's Representative whose contact details are, **031 311 8125 (t) , Silindile.Xulu2@durban.gov.za**

(F.2.13) Tender offers shall be delivered to **the Municipal Building, 166 K.E. Masinga Road** and placed in the tender box located in the ground floor foyer.

(F.2.15) Tender offers shall be delivered on or before **3 February 2023** at or before **11:00am**

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

PART T1: TENDERING PROCEDURES

T1.2: TENDER DATA

T1.2.1 STANDARD CONDITIONS OF TENDER

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (July 2015) as published in Government Gazette No 38960, Board Notice 136 of 2015 of 10 July 2015.

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.

T1.2.2 TENDER DATA

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

F.1: GENERAL

F.1.1 The employer: The Employer for this Contract is the eThekweni Municipality as represented by: **Project Executive: Special Projects**

F.1.1 Tender documents: The Tender Documents issued by the Employer comprise:

- 1) This procurement document.
- 2) Drawings, issued separately from this document (or alternately: Bound in Section C3.4 as an Annexure).
- 3) "New Engineering Contract 3rd Edition 2013" issued by the South African Institution of Civil Engineering (NEC 3 2013). This document is obtainable separately, and Tenderers shall obtain their own copies.
- 4) "City of Durban Technical Specifications" hereinafter referred to as the Standard Engineering Specifications. This document is obtainable separately, and Tenderers shall obtain their own copies of the applicable Sections.
- 5) In addition, Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations, and standards referred to in this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies, and the participation of targeted enterprise and labour.
 - The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).
 - The Construction Industry Development Board Act No 38 of 2000 and the Regulations issued in terms of the Act (July 2013).
 - The Preferential Procurement Policy Framework Act No 5 of 2000, and the Preferential Procurement Policy Framework Act Regulations (January 2017).
 - SANS 1921:2004 – Construction and Management Requirements for Works Contract, Parts 1-3.
 - The Employer's current Supply Chain Management Policy.
 - Any other eThekweni Policy documents referenced in the Tender Documents.

Electronically downloaded documentation is obtainable from the National Treasury's **eTenders Website** or the eThekweni Municipality's **Website** at URLs:

- <https://ethekwinivendor.durban.gov.za/tenders/availabletenders/> ; or
- <https://etenders.treasury.gov.za/>

The entire downloaded document should be printed and suitably bound by the tenderer.

F.1.4 The employer's agent: The Employer's agent is

- Siphesihle Mncube Pr. Tech Eng.
- Tel: 031 311 8927 (t)
- Email: siphesihle.mncube@durban.gov.za

The tenderer's contact details as indicated in the Contract Data under Clause C1.2.2.2 "Data to Be Provided by Contractor" shall be deemed as the only applicable contact details for the tenderer for use in communications between the employer's agent and the tenderer after the closing time stated in the Tender Data.

F.1.6 Procurement procedures: Method 2

F.2: TENDERER'S OBLIGATIONS

F.2.1 Eligibility: A Tenderer will not be eligible to submit a tender if:

- (a) the Tenderer does not comply with the legal requirements as stated in the Employer's current SCM Policy;
- (b) the Tenderer cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract;
- (c) In the event of a Compulsory Clarification Meeting:
 - i) the Tenderer fails to attend the Compulsory Clarification Meeting;
 - ii) the Tenderer fails to have form "Certificate of Attendance at Clarification Meeting / Site Inspection" (in Part T2.2) signed by the Employer's Agent or his representative.
- (d) in the case of JV submissions, two or more JV entities have common directors / shareholders or common entities tendering for the same works.
- (e) at the time of closing of tenders, the Tenderer is not registered on the National Treasury Central Supplier Database (CSD) as a service provider. In the case of a Joint Venture, this requirement will apply individually to each party in the Joint Venture.

F.2.1.1 Eligibility:

Only those tenderers who are registered (as "Active") with the CIDB (at time of tender closing), 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 or GB** class of construction work, are eligible to have their tenders evaluated.

Joint ventures are eligible to submit tenders provided that:

- (a) Every member of the joint venture is registered (as "Active") with the CIDB (at time of tender closing);
- (b) The lead partner has a contractor grading designation in the CE or GB class of construction work and has a grading designation of not lower than one level below the required grading designation; and
- (c) The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations (2013) is equal to or higher than a contractor grading designation

determined in accordance with the sum tendered for a CE or GB class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.

F.2.1.1 Eligibility: Only those tenderers who are registered (as “Active”) with the CIDB (at time of tender closing) in a CE or GB class of construction work, are eligible to have their tenders evaluated.

F.2.2.2 The cost of the tender documents: Replace this paragraph with the following:

“Documents may be obtained, free of charge, in electronic format, from the National Treasury’s eTenders website or the eThekweni Municipality’s Website. The entire electronically downloaded document should be printed and suitably bound by the tenderer.

F.2.6 Acknowledge addenda: Add the following paragraphs to the clause:

“Addenda will be published, in electronic format, on the National Treasury’s eTenders website (see F.2.2.2 above). Tenderers are to ensure that the eTenders website is consulted for any published addenda pertaining to this tender until three days before the tender closing time as stated in the Tender Data.”

“Acknowledgement of receipt of the addenda will be by the return of the relevant completed, dated and signed portion of the addenda, to the address / fax number / email address as specified on the addenda. Failure of the tenderer to comply with the requirements of the addenda may result in the tender submission being made non-responsive.”

F.2.7 Clarification meeting: A Compulsory Clarification Meeting will be held Aldenville Primary School on the 19 January 2023 at 11H00am.

In the event of a Compulsory Clarification Meeting, Tenderers must sign the attendance register in the name of the tendering entity. Addenda will be issued to, and tenders will be received only from, those tendering entities appearing on the attendance list.

F.2.12 Alternative tender offers: No alternative tender offers will be considered.

F.2.13 Submitting a tender offer: Submissions must be submitted on official submission documentation issued (either in hard copy or in electronic format) by the eThekweni Municipality.

Identification details to be shown on each tender offer package are:

- Contract No. : **WS 7614**
- Contract Title : **Provision of Water and Sanitation in Schools (Cluster 1) Lambothi High School and Inhlanganiso Primary School**

The Employer’s address for delivery of tender offers is:

the Municipal Building, 166 K.E. Masinga Road

and placed in the **Tender Box** located in the ground floor foyer.

Parts of each tender offer communicated on paper shall be submitted as an original,.

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

F.2.15 Closing time: The closing time for delivery of tender offers is:

- Date : **3 February 2023**
- Time : **11:00am**

F.2.16 Tender offer validity: The Tender Offer validity period is **24 weeks (168 Days)** from the closing time for submission of tenders.

F.2.20 Submit securities, bonds, policies: The tenderer is required to submit with his tender a letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Part T2.2 of this procurement document.

F.2.23 Certificates: Refer to **Part T2.1** for a listing of certificates that must be provided with the tender. All certificates must be valid at the time of tender closing.

CIDB Registration

Tenderers are to include with their submission a printout of their registration with the CIDB, obtained from the CIDB website (<https://registers.cidb.org.za/PublicContractors/ContractorSearch>).

The Joint Venture Grading Designation Calculator should be used when submitting as a Joint Venture (<https://registers.cidb.org.za/PublicContractors/JVGradingDesignationCalc>).

The date of obtaining the above printouts is to be indicated on the printout. Registration with the CIDB must be reflected as “Active” at time of tender closing.

Tax Clearance

SARS has introduced a new Tax Compliance Status System. Tenderers can submit a Tax Compliance Status PIN (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer’s real-time compliance status.

Separate Tax Clearance Certificates / TCS PINs are required for each entity in a Joint Venture.

B-BBEE Status Level of Contribution

The Amended Construction Sector Code (Government Gazette No.41287) is applicable to the B-BBEE compliance measurement of all entities that fall within the Construction Sector.

The requirements for measurement and verification of entities are contained in the “Amended Code Series CSC000: Framework for Measuring Broad Based Black Economic Empowerment in the Construction Sector”, as published in Notice 931 of 2017, Government Gazette No.41287 of 01/12/2017.

The requirements are summarised in the following table:

Enterprise Type	Total Annual Revenue (R million)	Ownership and Annual Turnover
EME: Built Environment Professional	< R1.8m	May present an affidavit OR a certificate issued by the CIPC OR
EME: Contractor	< R3.0m	authorised B-BBEE verification certificate (as below)
Reference should be made to Cl.3.6.2.4.1 of the Amended Construction Sector Code regarding the above exceptions.		
EME: Built Environment Professional	< R6m	
EME: Contractor	< R10m	
QSE: Built Environment Professional	≥ R6.0m and < R25m	Must present an authorised B-BBEE verification certificate by a SANAS accredited Verification Agency
QSE: Contractor	≥ R10.0m and < R50m	
Large Enterprise	>R50m	

The requirements for measurement of Joint Ventures is described in Cl.2.8 of the Amended Construction Sector Code. The compilation of a consolidated verification certificate is required.

B-BBEE Verification Certificates must be from a Verification Agency accredited by the South African National Accreditation System (SANAS).

Central Supplier Database (CSD)

The entities (full) Registration Report, obtained from the National Treasury Central Supplier Database, is to be included in the tender submission (<https://secure.csd.gov.za>).

Separate CSD Registration Reports are required for each entity in a Joint Venture.

Audited Financial Statements (F.2.1(f))

F.3: THE EMPLOYER'S UNDERTAKINGS

- F.3.1.1 Respond to requests from the tenderer:** Replace the words “five working days” with “three working days”.
- F.3.2 Issue addenda:** Add the following paragraph: “Addenda will be published, in electronic format, on the National Treasury’s eTenders website. In the event that the Clarification Meeting is compulsory, Addenda will only be issued to those tendering entities appearing on the Clarification Meeting Register.”
- F.3.4 Opening of Tender Submissions:** Tenders will be opened immediately after the closing time for tenders. The public reading of tenders will take place in the SCM Boardroom, 6th Floor, Engineering Unit Building, 166 KE Masinga Road, Durban.
- F.3.11 Evaluation of Tender Offers:** The procedure for evaluation of responsive Tender Offers will be in accordance with the Employer’s current SCM Policy, the Preferential Procurement Policy Framework Act (5 of 2000), and the Preferential Procurement Policy Framework Act Regulations (January 2017).

The procedure for the evaluation of responsive tenders is **Method 2 (Price and Preference with functionality)**.

The **80/20** preference points system will be used where the financial value (incl. VAT) of one or more responsive tender offers have a value that equals or is less than R 50,000,000. The Formula used to calculate the **Price Points**, and the **Preference Points** that will be allocated, will be according to the specified PPPFA Regulations.

F.3.11.9 The value of W_2 is 100. The Functionality criteria (and sub criteria if applicable) and maximum score in respect of each of the criteria are as follows:

Functionality Criteria / Sub Criteria		Maximum Points Score
Tenderer's Experience		35
Project Organogram and Experience of Key Staff	Contracts Manager	20
	Site agent	15
	Foremen	15
Construction Methodology & Quality Control		15
Maximum possible score for Functionality (M_s)		100

The minimum number of evaluation points for Functionality is **70**. Only those tenderers who achieve the minimum number of Functionality evaluation points (or greater) will be eligible to have their tenders further evaluated.

Functionality shall be scored by not less than three evaluators and the scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for Functionality. Each evaluation criteria will be assessed in terms of six indicators and scores allocated according to the following table:

Level 0	Level 1	Level 2	Level 3	Level 4
0	40	70	90	100

Evaluation criteria will be adjudicated according to submissions made in accordance with the following schedules, which are found in Part T2.2: Returnable Schedules:

Functionality Criteria	Returnable Schedules
Tenderer's Experience	Experience of Tenderer (Appointment and Completion Letter Per Project)
Project Organogram and Experience of Key Staff	- Proposed Organisation and Staffing - Key Personnel - CV's with Experience of Key Personnel
Construction Methodology & Quality Control	- Construction Approach, - Methodology, and Quality Control - Schedule of Proposed Subcontractors - Plant and Equipment

Unless otherwise stated, evaluation criteria will be adjudicated with respect to the contract specific Scope of Work, as specified in Part C.3. In this regard the following definitions apply to the evaluation criteria prompts for judgement:

- “**successfully completed**” implies a project has been completed on time and to specification;
- “**similar nature**” implies projects that refer to the construction and maintenance of ablution facilities and the provision of water and sanitation services (i.e installation of water and sanitation infrastructure). Reference to the Scope of Work in terms of project description and scope of contract under item C3.1.1.
- “**experience**” implies experience on projects of a similar nature;
- “**accredited degree / diploma**” implies qualification within the built environment, from a registered University or Institute of Technology.

Criterion: Tenderer's Experience	
Note: Projects of a similar nature will only be considered if proof of appointment and completion letters are submitted.	
Level 0	No information provided; OR submission of no substance / irrelevant information provided
Level 1	To have successfully completed 3 <u>projects</u> of a similar nature within the past 7 years.
Level 2	To have successfully completed 6 <u>projects</u> of a similar nature within the past 7 years.
Level 3	To have successfully completed 8 <u>projects</u> of a similar nature within the past 7 years.
Level 4	To have successfully completed 10+ <u>projects</u> of a similar nature within the past 7 years.

Criterion: Project Organogram and Experience of Key Staff			
	CONTRACTS MANAGER	SITE AGENT	FOREMAN
Level 0	No information provided OR submission of no substance / irrelevant information provided OR BSC Civil or BTech Civil with Pr Eng or Pr Tech and less than 1 year's experience.	No information provided OR submission of no substance / irrelevant information provided OR Relevant accredited diploma / degree and less than 1 year's experience.	No information provided OR submission of no substance / irrelevant information ORs Less than 2 year's experience.
Level 1	BSC Civil or BTech Civil with Pr Eng or Pr Tech and minimum 2 year's experience.	Relevant accredited diploma / degree and minimum 2 year's experience.	Minimum 3 year's experience.
Level 2	BSC Civil or BTech Civil with Pr Eng or Pr Tech and minimum 4 year's experience.	Relevant accredited diploma / degree and minimum 4 year's experience.	Minimum 5 year's experience.
Level 3	BSC Civil or BTech Civil with Pr Eng or Pr Tech and minimum 7 year's experience.	Relevant accredited diploma / degree and minimum 7 year's experience.	Minimum 8 year's experience.
Level 4	BSC Civil or BTech Civil with Pr Eng or Pr Tech and minimum 9 year's experience.	Relevant accredited diploma / degree and minimum 9 year's experience.	Minimum 10 year's experience.

Criterion: Construction Methodology & Quality Control	
Level 0	No information provided; OR submission of no substance / irrelevant information provided
Level 1	The technical approach and/or methodology is less than acceptable and unlikely to satisfy project objectives or requirements. Plant and equipment is unlikely to provide adequate protection of the works. Quality control statement is generic.
Level 2	Brief overview of a site-specific methodology which encompasses all programmed activities in appropriate order; Plus: • Including staff, plant and equipment resources • Including subcontractors if applicable
Level 3	Brief overview of site-specific methodology which encompasses all programmed activities in appropriate order; Plus: • Including staff, plant and equipment resources, • Including subcontractors if applicable, • A brief description of preparatory work, construction processes including finishing works for each activity.
Level 4	Brief overview of site-specific methodology which encompasses all programmed activities in appropriate order; Plus: • Including staff, plant and equipment resources, • Including subcontractors if applicable, • A brief description of preparatory work, construction processes including finishing works for each activity. • Demonstrates how the important issues are approached in an innovative and efficient way, indicating that the tenderer has excellent knowledge of working in the projects environment and producing the required final product.

F.3.13 Acceptance of tender offer: In addition to the requirements of Clause F.3.13 of the Standard Conditions of Tender, tender offers will only be accepted if:

- (a) The tenderer submits a valid Tax Clearance Certificate OR Tax Compliance Status PIN, issued by the TCS System of the South African Revenue Services, or has made arrangements to meet outstanding tax obligations.
- (b) The tenderer is registered, and “Active”, with the Construction Industry Development Board, at time of tender closing, in an appropriate contractor grading designation.
- (c) The tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector.
- (d) The tenderer has not:
 - Abused the Employer’s Supply Chain Management System; or
 - Failed to perform on any previous contract and has been given a written notice to this effect.
- (e) The tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer’s ability to perform the contract in the best interests of the employer or potentially compromise the tender process.
- (f) The tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer.
- (g) The employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
- (h) If this tender is subject to “Local Content and Production”, the tenderer must complete and sign MBD 6.2 and attach Annexure C (of SATS 1286:2011).
- (i) The Municipality does not bind itself to accept the lowest or any tender. It reserves the right

to accept the whole or any part of a tender to place orders. Bidders shall not bind the Municipality to any minimum quantity per order. The successful Tenderer (s) shall be bound to provide any quantities stipulated in the specification.

F.3.15 Complete adjudicator's contract/appointment Refer to the New Engineering Contract NEC3 2013 Clause W2 sub clause W2.2 (1) and the Contract Data.

F.3.17 Copies of contract: The number of paper copies of the signed contract to be provided by the Employer is ONE (1). **Bidders are required to submit their complete document saved and scanned onto a memory stick.**

The additional conditions of tender are:

ACT.2 Prohibition on awards to persons in the service of the state

Clause 44 of the Supply Chain Management Regulations states that the Municipality or Municipal Entity may not make any award to a person:

- (a) Who is in the service of the State.
- (b) If that person is not a natural person, of which a director, manager, principal shareholder, or stakeholder is a person in the service of the state; or
- (c) Who is an advisor or consultant contracted with the municipality or a municipal entity.

Should a contract be awarded, and it is subsequently established that Clause 44 has been breached, the Employer shall have the right to terminate the contract with immediate effect.

ACT.3 Code of Conduct and Local Labour

The Tenderers shall make themselves familiar with the requirements of the following policies that are available on web address: <ftp://ftp.durban.gov.za/cesu/StdContractDocs/>:

- Code of Conduct.
- The Use of CLOs and Local Labour.

PART T2: RETURNABLE DOCUMENTS
T2.1: LIST OF RETURNABLE DOCUMENTS

T2.1.1 General

The Tender Document must be submitted as a whole. All forms must be properly completed as required, and the document shall not be taken apart or altered in any way whatsoever.

The Tenderer is required to complete each and every Schedule and Form listed below to the best of his ability as the evaluation of tenders and the eventual contract will be based on the information provided by the Tenderer. Failure of a Tenderer to complete the Schedules and Forms to the satisfaction of the Employer will inevitably prejudice the tender and may lead to rejection on the grounds that the tender is not responsive.

T2.1.2 Returnable Schedules, Forms and Certificates

Company Specific

Certificate of Attendance at Clarification Meeting	15
Certificate of Authority	16
Declaration of Municipal Fees	17
Compulsory Enterprise Questionnaire	18
Tax Compliance Status PIN / Tax Clearance Certificate	20
B-BBEE Status Level of Contribution Certificate	21
Verification of CIDB Registration and Status	22
CSD Registration Report	23

Consolidated MBD Documents

MBD2: Tax Clearance Certificate Requirements	24
MBD4: Declaration of Interest	
MBD5: Declaration For Procurement Above R10 Million (if applicable)	
MBD6.1: Preference Points Claim Form ITO the Preferential Regulations	
MBD6.2: Declaration Certificate For Local Production And Content (if applicable)	
MBD8: Declaration of Bidder's Past SCM Practices	
MBD9: Certificate of Independent Bid Determination	

Technical and Evaluation

Experience of Tenderer	32
Experience of Key Personnel	35
Construction Approach, Methodology, and Quality Control	37
Proposed Organisation Staff	Error!
Bookmark not defined.Error! Reference source not found.Error! Reference source not found.	
Plant and Equipment	39

Contractual

Joint Venture Agreements (if applicable)	43
Record of Addenda to Tender Documents	44
Amendments, Qualifications and Alternatives	45
Form of Offer	46
Bill of Quantities	60

T2.1.3 Preferential Procurement Schedules and Affidavits

In the event of the Tenderer not being registered with the eThekweni Municipality, the tenderer must register on the internet at www.durban.gov.za by following these links:

- eThekweni Municipality
- City Government
- Administration
- Administrative Clusters
- Finance
- Supply Chain Management
- Accredited Supplier and Contractor's Database.

NOTES

- (a) The information for registration as in the possession of the eThekweni Municipality will apply.
- (b) It is the Tenderer's responsibility to ensure that the details as submitted to the Municipality are correct.
- (c) Tenderers are to register prior to the submission of tenders.

T2.2: RETURNABLE SCHEDULES, FORMS, AND CERTIFICATES

The returnable schedules, forms, and certificates as listed in T2.1.2 can be found on the pages 15 to 41.

CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING / SITE INSPECTION

This is to certify that:

(tenderer name)

of (address)

.....

was represented by the person(s) named below at the Clarification Meeting held for all tenderers, the details of which are stated in the Tender Data (F.2.7).

I / We acknowledge that the purpose of the meeting was to acquaint myself / ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for me / us to take account of everything necessary when compiling our rates and prices included in the tender.

Particulars of person(s) attending the meeting:

Name:

Name:

Signature:

Signature:.....

Capacity:

Capacity:.....

Attendance of the above person(s) at the meeting is confirmed by the Employer's Agent's Representative, namely:

Name:

Signature:

Date:

CERTIFICATE OF AUTHORITY

Indicate the status of the tenderer by ticking the appropriate box hereunder.

COMPANY		CLOSE CORPORATION		PARTNERSHIP		JOINT VENTURE		SOLE PROPRIETOR	
Refer to Notes at the bottom of the page									

I / We, the undersigned, being the Chairperson (Company), Member(s) (Close Corporation), Partners (Partnership), Sole Owner (Sole Proprietor), Lead Partner (JV), in the company / business trading as:

.....

hereby authorise Mr/Mrs/Ms

acting in the capacity of

to sign all documents in connection with the tender for **Contract No. WS 7614** and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Notes

The following documents must be attached to the back inside cover to this procurement document:

If a Company : a "Resolution of the Board" in this regard.

If a Joint Venture : a "Power of Attorney" signed by the legally authorised signatories of all the partners to the Joint venture.

DECLARATION OF MUNICIPAL FEES

I, the undersigned, do hereby declare that the Municipal fees of

.....
(full name of Company / Close Corporation / partnership / sole proprietary/Joint Venture)
(hereinafter referred to as the TENDERER) are, as at the date hereunder, fully paid or an
Acknowledgement of Debt has been concluded with the Municipality to pay the said charges in instalments.

The following account details relate to property of the said TENDERER:

Account

Account Number: to be completed by tenderer.

Consolidated Account No.												
Electricity												
Water												
Rates												
JSB Levies												
<u>Other</u>												
<u>Other</u>												

I acknowledge that should the aforesaid Municipal charges fall into arrears, the Municipality may take such remedial action as is required, including termination of any contract, and any payments due to the Contractor by the Municipality shall be first set off against such arrears. ATTACHED, to the back inside cover of this document, please find copies of the above account's and or agreements signed with the municipality.

- Where the TENDERER'S place of business or business interests are outside the jurisdiction of eThekweni municipality, a copy of the accounts/agreements from the relevant municipality must be attached (to the back inside cover of this document).
- Where the tenderer's Municipal Accounts are part of their lease agreement, then a copy of the agreement, or official letter to that effect is to be attached (to the back inside cover of this document).

NAME :

(Block Capitals)

SIGNATURE :
(of person authorised to sign on behalf of the Tenderer)

DATE:

COMPULSORY ENTERPRISE QUESTIONNAIRE

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

- 1) **Name of enterprise:**
- 2) **VAT registration number, if any:**
- 3) **CIDB registration number, if any:**
- 4) **Particulars of sole proprietors and partners in partnerships**

Full Name	Identity number*	Personal income tax number *

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

- 5) **Particulars of companies and close corporations**

Company registration number, if applicable:

Close corporation number, if applicable:

Tax Reference number, if any:

- 6) **Record in the service of the state**

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

- | | |
|--|---|
| ☐ a member of any municipal council | ☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) |
| ☐ a member of any provincial legislature | ☐ a member of an accounting authority of any national or provincial public entity |
| ☐ a member of the National Assembly or the National Council of Province | ☐ an employee of Parliament or a provincial legislature |
| ☐ a member of the board of directors of any municipal entity | |
| ☐ an official of any municipality or municipal entity | |

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

Insert separate page if necessary

7) **Record of spouses, children and parents in the service of the state**

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

- | | |
|--|---|
| ☐ a member of any municipal council | ☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) |
| ☐ a member of any provincial legislature | |
| ☐ a member of the National Assembly or the National Council of Province | ☐ a member of an accounting authority of any national or provincial public entity |
| ☐ a member of the board of directors of any municipal entity | |
| ☐ an official of any municipality or municipal entity | ☐ an employee of Parliament or a provincial legislature |

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

Insert separate page if necessary

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

- authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my/our tax matters are in order;
- confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercise, 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;
- confirms that no partner, member, director or other person, who wholly or partly exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- 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 bidders or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- 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

Enterprise Name

TAX COMPLIANCE STATUS PIN / TAX CLEARANCE CERTIFICATE

Reference is made to F.2.23 of the Conditions of Tender.

SARS has introduced a new Tax Compliance Status System. Tenderers can submit a Tax Compliance Status PIN (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status.

Separate Tax Clearance Certificates / TCS PINs are required for each entity in a Joint Venture.

Tenderers are to attach to this page a printout of their Tax Compliance Status PIN (TCS PIN) OR an original Tax Clearance Certificate.

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

B-BBEE STATUS LEVEL OF CONTRIBUTION CERTIFICATE

Reference is made to F.2.23 of the Conditions of Tender.

The Amended Construction Sector Code (Government Gazette No.41287) is applicable to the B-BBEE compliance measurement of all entities that fall within the Construction Sector.

The requirements for measurement and verification of entities are contained in the "Amended Code Series CSC000: Framework for Measuring Broad Based Black Economic Empowerment in the Construction Sector", as published in Notice 931 of 2017, Government Gazette No.41287 of 01/12/2017.

The requirements are summarised in the following table:

Enterprise Type	Total Annual Revenue (R million)	Ownership and Annual Turnover
EME: Built Environment Professional	< R1.8m	May present an affidavit OR a certificate issued by the CIPC
EME: Contractor	< R3.0m	OR authorised B-BBEE verification certificate (as below)
Reference should be made to Cl.3.6.2.4.1 of the Amended Construction Sector Code regarding the above exceptions.		
EME: Built Environment Professional	< R6m	
EME: Contractor	< R10m	
QSE: Built Environment Professional	≥ R6.0m and < R25m	Must present an authorised B-BBEE verification certificate by a SANAS accredited Verification Agency
QSE: Contractor	≥ R10.0m and < R50m	
Large Enterprise	>R50m	

The requirements for measurement of Joint Ventures is described in Cl.2.8 of the Amended Construction Sector Code. The compilation of a consolidated verification certificate is required.

Tenderers are to attach to this page an affidavit, or a B-BBEE certificate issued by an authorised SANAS accredited Verification Agency.

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

VERIFICATION OF CIDB REGISTRATION AND STATUS

Reference is made to F.2.23 of the Conditions of Tender.

Clause F.2.1.1 of the Conditions of Tender – “Eligibility”, requires a tenderer to be registered, as “Active”, with the CIDB (at time of tender closing), 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 or GB** class of construction work.

Tenderers are to attach to this page a printout of their registration with the CIDB, as obtained from the CIDB website <https://registers.cidb.org.za/PublicContractors/ContractorSearch>. The date of obtaining the printout is to be indicated on the printout.

The following is an example of a printout obtained from the above website.

Home

Contractor Detail Print

Contractor Detail

CRS Number: _____ Type of Enterprise: _____

Contractor Name: _____ Registration Date: _____

Trading Name: _____ Expiry Date: _____

Status: _____

Contractor Grades

Grade: _____

Back

Copyright © cidb 2011. All rights reserved
[Website technical enquires contact](#)

01/01/2017

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

CSD REGISTRATION REPORT

Reference is made to F.2.23 of the Conditions of Tender.

Clause F.2.1 of the Conditions of Tender – “Eligibility”, requires a tenderer to be registered at the time of tender closing on the National Treasury Central Supplier Database (CSD) as a service provider.

Tenderers are to attach to this page a printout of their CSD Registration Report, as obtained from the National Treasury’s CSD website <https://secure.csd.gov.za/Account/Login>. The date of obtaining the printout is to be indicated on the printout.

The following is an example of the beginning of the printout obtained from the above website.

 CENTRAL SUPPLIER DATABASE FOR GOVERNMENT	Report Date:
	Report Ran By:
CSD REGISTRATION REPORT	

SUPPLIER IDENTIFICATION			
Supplier number		Have Bank Account	
Is supplier active?		Total annual turnover	
Supplier type		Financial year start date	
Supplier sub-type		Registration date	
Legal name		Created by	
Trading name		Created date	
Identification type		Edit by	
Government breakdown		Edit date	
Business status		Restricted Supplier	
Country of origin		Restriction Last Verification Date	
South African company/CC registration number			

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

CONSOLIDATED MUNICIPAL BIDDING DOCUMENTS

The following SECTIONS are required to be completed as part of this procurement document

<u>Section</u>	<u>Description</u>	<u>Required?</u>
A	General Enterprise Information	Yes
B	MBD2: Tax Clearance Certificate Requirements.....	Yes
C	MBD4: Declaration of Interest	Yes
D	MBD5: Declaration for Procurement Above R10 Million.....	No
E	MBD6.1: Preference Points Claim Form ITO the Preferential Regulations.....	Yes
F	MBD6.2: Declaration Certificate for Local Production and Content for Designated Sectors.....	Yes
G	MBD8: Declaration of Bidder's Past SCM Practices	Yes
H	MBD9: Certificate of Independent Bid Determination	Yes
I	Confirmations, Authorities, Certifications, Acknowledgements and Signatures.....	Yes

NOTES

- MBD4. MSCM 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 enterprise;
 - (c) an official of any municipality or municipal enterprise;
 - (d) an employee of any national or provincial department, national or provincial public enterprise or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
 - (e) a member of the accounting authority of any national or provincial public enterprise; or
 - (f) an employee of Parliament or a provincial legislature.
- "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.
- MBD9. Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

Ref	Description	Complete or Circle Applicable
-----	-------------	----------------------------------

SECTION A: GENERAL ENTERPRISE INFORMATION

- 1.0 Full Name of bidder or his or her representative
- 1.1 ID Number of bidder or his or her representative
- 1.2 Position occupied in the enterprise
- 2.0 Name of enterprise:
- 2.1 Tax Reference number, if any:
- 2.2 VAT registration number, if any:
- 2.3 CIDB registration number, if any:
- 2.4 Company registration number, if applicable:
- 2.5 Close corporation number, if applicable:
- 2.6 Supplier reference number (PR), if any:
- 2.7 South African Revenue Service Tax Compliance
Status PIN:
- 2.8 National Treasury Central Supplier Database
registration number
- 2.9 Company active email address **(Compulsory)**

[illegible]

- 3.0 The names of all directors / trustees / shareholders / members / sole proprietors / partners in partnerships, their individual identity numbers and state employee numbers must be indicated below. In the case of a joint venture, information in respect of each partnering enterprise must be completed and submitted

Full Name	Identity No.	State Employee No.	Personal income tax No. *

Use additional pages if necessary

Ref	Description	Complete or Circle Applicable
-----	-------------	----------------------------------

SECTION B: MBD 2: TAX CLEARANCE CERTIFICATE REQUIREMENTS

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.

- 1.0 In order to meet this requirement bidders are required to complete the TCC 001: "Application for a Tax Clearance Certificate" form and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
- 2.0 SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3.0 The original Tax Clearance Certificate must be submitted together with the bid (attached to the inside back cover of this procurement document). Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4.0 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 5.0 Copies of the TCC 001: "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
- 6.0 Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.
- 7.0 Notwithstanding Clauses 1.0 to 6.0 above: Since 18 April 2016, SARS has introduced a new Tax Compliance Status System (TCS). As part of this enhanced system, tenderers can now submit a Tax Compliance Status PIN instead of an original Tax Clearance Certificate (TCC). This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status. This number, if available, is to be entered in Item 2.7 of Section A of these consolidated Municipal Bidding Documents.
For further particulars please contact your nearest SARS branch, or call the SARS Contact Centre on 0800 00 7277, or log onto SARS eFiling.

SECTION C: MBD 4: DECLARATION OF INTEREST

No bid will be accepted from persons "in the service of the state". 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 bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

1.0	Are you presently in the service of the state?	YES	NO
	If yes, furnish particulars:		
2.0	Have you been in the service of the state for the past twelve months?	YES	NO
	If yes, furnish particulars:		
3.0	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
	If yes, furnish particulars:		
4.0	Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?	YES	NO
	If yes, furnish particulars:		
5.0	Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?	YES	NO
	If yes, furnish particulars:		
6.0	Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?	YES	NO
	If yes, furnish particulars:		
7.0	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
	If yes, furnish particulars:		
8.0	The names of all directors / trustees / shareholders / members / sole proprietors / partners in partnerships, their individual identity numbers and state employee numbers are indicated in SECTION A of these Consolidated Municipal Bidding documents .		

Ref	Description	Complete or Circle Applicable	
SECTION D: MBD 5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)			
For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire.			
1.0	Are you by law required to prepare annual financial statements for auditing? If YES, you will be required to submit audited annual financial statements (on request during the tender evaluation period) for the past three years or since the date of establishment if established during the past three years.	YES	NO
2.0	Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days? If NO, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days. If YES, provide particulars on a letterhead. (Attach this letter to the back inside cover of this procurement document).	YES	NO
3.0	Has any contract been awarded to you 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? If YES, provide particulars on a letterhead. (Attach this letter to the back inside cover of this procurement document).	YES	NO
4.0	Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic? If YES, provide particulars on a letterhead. (Attach this letter to the back inside cover of this procurement document).	YES	NO

SECTION E: MBD 6.1: PREFERENCE POINTS CLAIM ITO THE PREFERENTIAL REGULATIONS		
Preference points for this tender shall be awarded as per the Tender Data and the Preferential Procurement Regulations (2017). Failure on the part of a tenderer to submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS), or a Sworn Affidavit for an EME, or sworn affidavit for a QSE (in line with the revised BBBEE codes of Good Practice), together with the bid will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed. The Employer reserves the right to require of a tenderer, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the Employer.		
1.0	B-BBEE Status Level of Contribution claimed:	
	Will any portion of the contract be sub-contracted?	YES NO
	If YES, indicate:	
	(i) what percentage of the contract will be subcontracted?	
	(ii) the name of the sub-contractor?	
	Name:	
	(iii) the B-BBEE status level of the sub-contractor?	
2.0	(iv) whether the sub-contractor is an EME?	YES NO
The undersigned, certify that the B-BBEE status level of contribution indicated in paragraph 1.0 above qualifies the company / firm for preference points and acknowledges that the remedies as per Clause 14 of the Preferential Procurement Regulations (2017) shall apply.		

SECTION F: MBD 6.2: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS	
This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably). 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)].	
1.0	General Conditions
1.1	Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.
1.2	Regulation 8.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
1.3	Where necessary, for bids 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.

Ref	Description	Complete or Circle Applicable										
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 the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below. 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 if – (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.											
2.0	Definitions											
2.1	“bid” includes written price quotations, advertised competitive bids or proposals;											
2.2	“bid price” price offered by the bidder, excluding value added tax (VAT);											
2.3	“contract” means the agreement that results from the acceptance of a bid by an organ of state;											
2.4	“designated sector” means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;											
2.5	“duly sign” means a Declaration Certificate for Local Content that has been signed by the 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).											
2.6	“imported content” means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;											
2.7	“local content” means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;											
2.8	“stipulated minimum threshold” means that portion of local production and content as determined by the Department of Trade and Industry; and											
2.9	“sub-contract” means 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.											
3.0	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: <table border="1"> <thead> <tr> <th>Description of services, works or goods</th> <th>Stipulated minimum threshold</th> </tr> </thead> <tbody> <tr> <td>.....</td> <td>..... %</td> </tr> <tr> <td>.....</td> <td>..... %</td> </tr> <tr> <td>.....</td> <td>..... %</td> </tr> </tbody> </table>	Description of services, works or goods	Stipulated minimum threshold		 %		 %		 %			
Description of services, works or goods	Stipulated minimum threshold											
.....	 %											
.....	 %											
.....	 %											
4.0	Does any portion of the services, works or goods offered have any imported content?	<table border="1"> <tr> <td>YES</td> <td>NO</td> </tr> </table>	YES	NO								
YES	NO											
4.1	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 general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid. The relevant rates of exchange information is accessible on www.reservebank.co.za. Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011): <table border="1"> <tr> <td>US Dollar:</td> <td>Pound Sterling:</td> <td>Euro:</td> <td>Yen:</td> <td>Other:</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> NB: Bidders must submit proof of the SARB rate (s) of exchange used.	US Dollar:	Pound Sterling:	Euro:	Yen:	Other:						
US Dollar:	Pound Sterling:	Euro:	Yen:	Other:								
5.0	Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?	<table border="1"> <tr> <td>YES</td> <td>NO</td> </tr> </table>	YES	NO								
YES	NO											
5.1	If yes, provide the following particulars: (a) Full name of auditor: (b) Practice number: (c) Telephone number: Cell number: (d) Email address: (Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority)											
6.0	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 Accounting Officer / Accounting Authority provide directives in this regard.											

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

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:

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

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.

NB 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 in Section H of these Consolidated MBD returnable questionnaires (comprising 8 pages), do hereby declare the following:

- (a) The facts contained herein fall within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works 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; and
 - (ii) the declaration templates have been audited and certified to be correct.
- (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
• Imported content (x), as calculated in terms of SATS 1286:2011.....	R
• Stipulated minimum threshold for local content (paragraph 3 above)	%
• Local content %, as calculated in terms of SATS 1286:2011.....	%

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 4.1 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 Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SECTION G: MBD8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

This Municipal Bidding Document must form part of all bids invited. It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

The bid of any bidder may be rejected if that bidder, or any of its directors have:

- a) abused the municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b) been convicted for fraud or corruption during the past five years;
 - c) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d) 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).
- In order to give effect to the above, the following questions must be answered.

1.0	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer / Authority of the institution that imposed the restriction after the audi alteram partem rule was applied. The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page. If yes, furnish particulars:	YES	NO
2.0	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page. If yes, furnish particulars:	YES	NO
3.0	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years? If yes, furnish particulars:	YES	NO

4.0	Does the bidder 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? If yes, furnish particulars:	YES	NO
5.0	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract? If yes, furnish particulars:	YES	NO

SECTION H: MBD9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

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

Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:

- (a) take all reasonable steps to prevent such abuse;
- (b) reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
- (c) cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

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

In order to give effect to the above, the following Certificate of Bid Determination must be completed and submitted with the bid. The undersigned, in submitting the accompanying bid, in response to the invitation for the bid do hereby make the following statements that I certify to be true and complete in every respect:

- 1.0 I have read and I understand the contents of this Certificate;
- 2.0 I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
- 3.0 I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
- 4.0 Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
- 5.0 For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - a) has been requested to submit a bid in response to this bid invitation;
 - b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
- 6.0 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding. (Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.
- 7.0 In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - a) prices;
 - b) geographical area where product or service will be rendered (market allocation);
 - c) methods, factors or formulas used to calculate prices;
 - d) the intention or decision to submit or not to submit, a bid;
 - e) the submission of a bid which does not meet the specifications and conditions of the bid;
 - f) bidding with the intention not to win the bid.
- 8.0 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 9.0 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 10.0 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

SECTION I: CONFIRMATIONS, AUTHORITIES, CERTIFICATIONS, ACKNOWLEDGEMENTS and SIGNATURES

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

- 1.0 Confirms that the contents of these Consolidated MBD returnable questionnaires (comprising 8 pages) fall within my personal knowledge and are to the best of my Knowledge and belief, both true and correct;
- 2.0 Confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercise, 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;
- 3.0 Confirms that no partner, member, director or other person, who wholly or partly exercise control over the enterprise, has within the last five years been convicted of fraud or corruption;
- 4.0 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 bidders or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- 5.0 Certify that the B-BBEE status level of contribution indicated in Section E.1: Item 1.0 qualifies the enterprise for preference points and acknowledges that the remedies as per Clause 14 of the Preferential Procurement Regulations (2017) shall apply. In the event of a contract being awarded as a result of points claimed, the enterprise may be required to furnish documentary proof to the satisfaction of the employer that the claims are correct;
- 6.0 Accept that, in addition to cancellation of a contract, action may be taken against me should these declarations prove to be false.

Signed Date

Name Position

Refer to Clause F3.11.9 for Functionality Points evaluation prompts.

Note: Tenderers are to submit copies of signed Appointment and Completion Letters for them to be considered

[illegible]

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

PROPOSED ORGANISATION and STAFFING

The tenderer should propose the structure and composition of their team i.e. the main disciplines involved, the key staff member / expert responsible for each discipline, and the proposed technical and support staff and site staff.

The roles and responsibilities of each key staff member / expert should be set out as job descriptions. In the case of an association / joint venture / consortium, it should, indicate how the duties and responsibilities are to be shared.

The tenderer must attach his / her organization and staffing proposals to this page. (this is to include both the on-site and off-site staffing resources used for this project)

In addition to any lists, this information should also be shown in an organogram format (flow chart) clearly indicating the staff hierarchy and reporting lines, again for on- and off-site resources.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

KEY PERSONNEL

The Tenderer shall list below the personnel which he intends to utilize on the Works, including key personnel (Contract's Manager, Site Agent, and Foremen) which may have to be brought in from outside if not available locally.

CATEGORY OF EMPLOYEE	NUMBER OF PERSONS	
	KEY PERSONNEL, PART OF THE CONTRACTOR'S ORGANISATION	KEY PERSONNEL TO BE IMPORTED IF NOT AVAILABLE LOCALLY
Site Agent, Project Managers		
Foremen, Quality Control and Safety Personnel		
Technicians, Surveyors, etc		
Artisans and other Skilled workers		
Plant Operators		
Unskilled Workers		
Others:.....		
.....		

Note: CVs of key personnel may be requested during the contract period.

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

EXPERIENCE OF KEY PERSONNEL

Refer to Clause F3.11.9 for Functionality Points evaluation prompts.

The experience of assigned staff member in relation to the Scope of Work will be evaluated from three different points of view:

- 1) General experience (total duration of professional activity), level of education and training and positions held of each discipline specific team leader.
- 2) The education, training, skills and experience of the Assigned Staff in the specific sector, field, subject, etc which is directly linked to the scope of work.
- 3) The key staff members' / experts' knowledge of issues which the tenderer considers pertinent to the project e.g. local conditions, affected communities, legislation, techniques etc.

A CV of the contract manager, site agent(s) and general foreman of not more than 2 pages should be attached to this schedule:

Each CV should be structured under the following headings:

- a) Personal particulars
 - name
 - date and place of birth
 - place (s) of tertiary education and dates associated therewith
 - professional awards
- b) Qualifications (degrees, diplomas, grades of membership of professional societies and professional registrations)
- c) Skills
- d) Name of current employer and position in enterprise
- e) Overview of post graduate / diploma experience (year, organization and position)
- f) Outline of recent assignments / experience that has a bearing on the scope of work

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

The Tenderer shall detail below or attach a preliminary programme reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this Contract. The programme shall be in accordance with the information supplied in the Contract, requirements of the Project Specifications and with all other aspects of his Tender.

[illegible]

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

CONSTRUCTION APPROACH, METHODOLOGY, AND QUALITY CONTROL

Refer to Clause F3.11.9 for Functionality Points evaluation prompts.

Construction Approach and Methodology

The construction approach and methodology must respond to the Scope of Work and outline the proposed approach to undertake the work showing a detailed programme including health and safety aspects, the use of plant and resources for this Project.

Quality Control

The quality control statement must discuss what tests and control measures are to be employed on site to attain the specified results and is to cover the program associated activities.

The tenderer must attach his / her Construction Methodology and Quality Control information to this page.

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

The following firms have been identified as possible subcontractors for work in this contract.

[illegible]

NAME : (Block Capitals)

T2: Returnable Documents

PLANT and EQUIPMENT

The following are lists of major items of relevant equipment that I / we presently own or lease and will have available for this contract if my / our tender is accepted.

(a) Details of major equipment that is owned by me / us and immediately available for this contract.

DESCRIPTION (type, size, capacity etc)	QUANTITY	YEAR OF MANUFACTURE

Attach additional pages if more space is required

(b) Details of major equipment that will be hired, or acquired for this contract if my / our tender is accepted

DESCRIPTION (type, size, capacity etc)	QUANTITY	HOW ACQUIRED	
		HIRE/ BUY	SOURCE

Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

CONTRACTOR'S HEALTH AND SAFETY PLAN

At tender stage only a brief overview (**to be attached to this page**) of the tenderer's perception on the safety requirements for this contract will be adequate.

Only the successful Tenderer **shall submit separately** the Contractor's Health and Safety Plan as required in terms of Regulation 7 of the Occupational Health and Safety Act 1993 Construction Regulations 2014.

The detailed safety plan will take into consideration the site specific risks as mentioned under **Part C.3: Project Specification**. A generic plan will not be acceptable.

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

CONTRACTOR'S HEALTH AND SAFETY DECLARATION

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

In terms of Clause 5(1)(h) of the OHSA 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Principal Contractor may only be appointed to perform construction work if the Client is satisfied that the Principal Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2014.

To that effect a person duly authorised by the tenderer must complete and sign the declaration hereafter in detail.

Declaration by Tenderer

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I propose to achieve compliance with the Regulations by one of the following:

Tenderers are
to Circle Applicable

- | | |
|---|---------------|
| (a) From my own competent resources as detailed in 4(a) hereafter: | YES NO |
| (b) From my own resources still to be appointed or trained until competency is achieved, as detailed in 4(b) hereafter: | YES NO |
| (c) From outside sources by appointment of competent specialist Subcontractors as detailed in 4(c) hereafter: | YES NO |

4. Details of resources I propose:

(Note: Competent resources shall include safety personnel such as a construction supervisor and construction safety officer as defined in Regulation 8, and competent persons as defined in Regulations 9, 10, 11, 12, 13, 14, 16, 17, 20, 21, 22, 23(1), 24, 25, 26, 27, 28 and 29, as applicable).

- (a) Details of the competent and qualified key persons from my company's own resources, who will form part of the contract team:

NAMES OF COMPETENT PERSONS	POSITIONS TO BE FILLED BY COMPETENT PERSONS

(b) Details of training of persons from my company's own resources (or to be hired) who still have to be trained to achieve the necessary competency:

(i) By whom will training be provided?

(ii) When will training be undertaken?

(iii) List the positions to be filled by persons to be trained or hired:

.....
.....

(c) Details of competent resources to be appointed as subcontractors if competent persons cannot be supplied from own company:

Name of proposed subcontractor:

Qualifications or details of competency of the subcontractor:

.....

.....

5. I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 7(1) of the Construction Regulations, which plan shall be subject to approval by the Client.

6. I confirm that copies of my company's approved Health and Safety Plan, the Client's Safety Specifications as well as the OHSA 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Principal Contractor's personnel, the Client's personnel, the Employer's Agent, visitors, and officials and inspectors of the Department of Labour.

7. I hereby confirm that adequate provision has been made in my tendered rates and prices in the Bill of Quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2014, and that I will be liable for any penalties that may be applied by the Client in terms of the said Regulations (Regulation 33) for failure on the Principal Contractor's part to comply with the provisions of the Act and the Regulations.

8. I agree that my failure to complete and execute this declaration to the satisfaction of the Client will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2014, and accept that my tender will be prejudiced and may be rejected at the discretion of the Client.

NAME :

(Block Capitals)

SIGNATURE :
(of person authorised to sign on behalf of the Tenderer)

DATE:

JOINT VENTURES AGREEMENTS

Joint Venture agreement and Power of Attorney Agreements to be attached here (if applicable).

RECORD OF ADDENDA TO TENDER DOCUMENTS

I / We confirm that the following communications received from the Employer or his representative before the date of submission of this tender offer, amending the tender documents, have been taken into account in this tender offer.

ADD.No	DATE	TITLE OR DETAILS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

(This is not an invitation for amendments, deviations or alternatives but should the Tenderer desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder. The Employer will not consider any amendment, alternative offers or discounts unless forms (a), (b) and (c) have been completed to the satisfaction of the Employer).

I / We herewith propose the amendments, alternatives and discounts as set out in the tables below:

(a) AMENDMENTS

PAGE, CLAUSE OR ITEM NO	PROPOSED AMENDMENT

- (1) *Amendments to the General and Special Conditions of Contract are not acceptable;*
 (2) *The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.*

(b) ALTERNATIVES

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

- (1) *Individual alternative items that do not justify an alternative tender, and an alternative offer for time for completion should be listed here.*
 (2) *In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.*
 (3) *Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.*

(c) DISCOUNTS

ITEM ON WHICH DISCOUNT IS OFFERED	DESCRIPTION OF DISCOUNT OFFERED

- (1) *The Tenderer must give full details of the discounts offered in a covering letter attached to his tender, failing which, the offer will be prejudiced.*

NAME :

(Block Capitals)

SIGNATURE :
(of person authorised to sign on behalf of the Tenderer)

DATE:

PART C1: AGREEMENT AND CONTRACT DATA

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.1.1: OFFER

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

Contract No: WS 7614

Contract Title: Provision of Water and Sanitation in Schools (Cluster 1) Lambothi High School and Inhlanganiso Primary School

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

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

*** The offered total of the prices inclusive of Value Added Tax is:**

R..... (In words
.....)

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

For the Tenderer:

*** Name of Tenderer (organisation)** :

*** Signature (of person authorized to sign the tender)** :

*** Name (of signatory in capitals)** :

Capacity (of Signatory) :

Address :

:

Telephone :

Witness:

Signature : **Date** :

Name(in capitals) : :

Notes:

*** Indicates what information is mandatory.**

Failure to complete the mandatory information and sign this form will invalidate the tender.

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.1.2: FORM OF ACCEPTANCE

This Form will be completed by the Employer

By signing this part of the 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 : Agreement and Contract Data, (which includes this Agreement)
- Part C2 : Pricing Data, including the Bill of Quantities
- Part C3 : Scope of Work
- Part C4 : Site Information

and the schedules, forms, drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

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

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 bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfill 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). Unless the Tenderer (now Contractor) within five days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

Signature (*person authorized to sign the acceptance*) :

Name (*of signatory in capitals*) :

Capacity (*of Signatory*) :

Name of Employer (*organisation*) :

Address :

:

Witness:

Signature : Date :

Name (*in capitals*) : :

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.1.3: SCHEDULE OF DEVIATIONS

This form will be completed by THE EMPLOYER and ONLY THE SUCCESSFUL TENDERER

1. Subject :

Details:

:

2. Subject :

Details:

:

3. Subject :

Details:

:

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

FOR THE TENDERER

.....

Signature

.....

.....

Name (in capitals)

.....

.....

Capacity

.....

.....

Name and Address of

.....

.....

Organisation

.....

.....

.....

Witness Signature

.....

.....

Witness Name

.....

.....

Date

.....

FOR THE EMPLOYER

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

C1.2: CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

C1.2.1.1 GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract are the New Engineering Contract, (NEC 3 2013) published by the South African Institution of Civil Engineering. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering (Tel: 011-805-5947, Fax: 011-805-5971, E-mail: civilinfo@saice.org.za).

The Contract Data (including variations and additions) shall amplify, modify, or supersede, the NEC 3 2013 to the extent specified below, and shall take precedence and shall govern.

Each item of data given below is cross-referenced to the clause in the NEC 3 2013 to which it mainly applies.

C1.2.2 CONTRACT DATA

C1.2.2.1 DATA TO BE PROVIDED BY THE EMPLOYER

1.1.1.13 The **Defects Liability Period**, from the date of the Certificate of Completion, is **1 Year**

1.1.1.14 The **time for achieving Practical Completion**, from the Commencement Date is **6 Months**. The period as stated in 5.3.2, and the 7 days referred to in 5.3.3, are included in the above time for achieving Practical Completion. The special non-working days as stated in 5.8.1 are excluded from the above time for achieving Practical Completion.

1.1.1.15 The Employer is the eThekweni Municipality as represented by:

WATER AND SANITATION UNIT : Project Executive: Special Projects

1.2.1.2 The address of the Employer is:

Physical: **3 PRIOR ROAD, DURBAN, 4001**

Postal: **3 PRIOR ROAD, DURBAN, 4001**

Telephone: **031-311 8927 (t)**

Fax: **N/A**

E-Mail: **siphesihle.mncube@durban.gov.za**

1.1.1.16 The **name of the Employer's Agent** is **Siphesihle Mncube Pr. Tech Eng.**

1.2.1.2 The address of the Employer' Agent is:

Physical: **3 PRIOR ROAD, DURBAN, DURBAN, 4001**

Postal: **3 PRIOR ROAD, DURBAN, DURBAN, 4001**

Telephone: **031 311 8927 (t)**

Fax: **N/A**

E-Mail: **siphesihle.mncube@durban.gov.za**

1.1.1.26 The **Pricing Strategy** is by **Re-measurement Contract**.

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:

- **6.3: Council approval in order to authorise any expenditure in excess of the Tender Sum plus 15% contingencies.**

5.3.1 The **documentation required** before commencement with Works execution are:

- **Health and Safety Plan (refer to Clause 4.3)**
- **Initial programme (refer to Clause 5.6)**
- **Security (refer to Clause 6.2)**
- **Insurance (refer to Clause 8.6)**

5.3.2 The **time to submit the documentation** required before commencement with Works is **21 Days**.

5.3.3 Add the following paragraph:

“If a construction work permit, in terms of Clause 3(1) of the Construction Regulations (2014), is applicable, the instruction to commence carrying out of the works may only be issued once the construction work permit has been obtained by the Employer’s Agent. If a construction work permit is applicable, the contractor shall allow for a minimum period of 37 days, after the submission (or re-submission) of the documentation referred to in Clause 5.3.1., for the issuing of the construction work permit.”

5.8.1 The **non-working days** are **Saturdays and Sundays**.

(5.1.1) The **special non-working days** are:

- All statutory holidays as declared by National or Regional Government.
- The year-end break:
 - Commencing on the first working day after 15 December.
 - Work resumes on the first working day after 5 January of the next year.

5.8.1 Delete the words “sunset and sunrise” and replace with “17:00 and 07:00”.

5.12.2.2 **Abnormal Climatic Conditions (Rain Delays)** - The numbers of days per month, on which work is expected not to be possible as a result of rainfall, for which the Contractor shall make provision, is given in the table below. During the execution of the Works, the Employer’s Agent’s Representative will certify a day lost due to rainfall only if at least 75% of the work force and plant on site could not work during that specific working day.

Extension of time as a result of rainfall shall be calculated monthly being equal to the number days certified by the Employer’s Agent’s Representative as lost due to rainfall, less the number of days allowed for as in table below, which could result in a negative figure for certain months. The total extension of time for which the Contractor may apply, shall be the cumulative algebraic sum of the monthly extensions. Should the sum thus obtained be negative, the extension of time shall be taken as NIL.

<u>Month</u>	<u>Days Lost</u>	<u>Average Rainfall</u>	<u>Month</u>	<u>Days Lost</u>	<u>Average Rainfall</u>
January	4*	134	July	1	39
February	3	113	August	2	62
March	3	120	September	2	73
April	2	73	October	3	98
May	2	59	November	3	108
June	1	28	December	1*	102
TOTAL	27	1009mm	* = The number of working days lost allows for the annual statutory Construction holiday in December and January of each year.		

5.13.1 The **penalty for delay** in failing to complete the Works is **R 2 500** (per Day).

5.14.1 The **requirements for achieving Practical Completion** will be determined by the Employer's Agent (in consultation with the Contractor) and recorded in the minutes of the first Site Meeting / Handover Meeting. (Refer to 1.1.1.24 for a generic definition.) The requirements are to be regularly reviewed with respect to any variations to the Contract.

5.16.3 The **latent defect liability** period is **10 Years**.

6.2.1 **Security (Performance Guarantee)**: Delete the word "selected" and replace it with "stated".

The liability of the Performance Guarantee shall be as per the following table:

Value of Contract (incl. VAT)	Performance Guarantee Required
Less than or equal to R 1m	Nil
Greater than R 1m and less than or equal to R 10m	5% of the Contract Sum
Greater than R 10m	10% of the Contract Sum

6.5.1.2.3 The **percentage allowance** to cover overhead charges for daywork are as follows:

- **80%** of the gross remuneration of workmen and foremen actually engaged in the daywork;
- **20%** on the net cost of materials actually used in the completed work.

NB: The Day work arrangement will only apply on a NEC 3 contract, any additional work executed outside the scope will be claimed as a Compensation Event (CE) as per NEC3 2013 **Clause 60 sub clause 60.1**

6.8.2 **Contract Price Adjustment Factor**: The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule (GCC 2015 - page 86) with the following Indices / Descriptions / Coefficients:

- The proportion not subject to adjustment: **x = 0.10**.
- The base month will be the month prior to the month in which tenders close.
- The Index for Labour, Plant, and Materials shall be based on **December 2016 = 100**.
- The Index for Fuel shall be based on **December 2020 = 100**.
- The Index shall be based on **December 2020 = 100**.

	STATS SA Statistical Release	Table	Description	Coefficient
• "L" is the "Labour Index"	P0141	Table A	Geographic Indices; CPI per Province; Kwa-Zulu Natal	a = 0.28
• "P" is the "Contractor's Equipment Index"	P0151.1	Table 4	Plant and Equipment	b = 0.28
• "M" is the "Materials Index"	P0151.1	Table 6	Civil Engineering Material (excluding bitumen)	c = 0.38
• "F" is the "Fuel Index"	P0142.1	Table 1	Coke, petroleum, chemical, rubber and plastic products; Coal and petroleum products; Diesel	d = 0.06

6.8.3 Price adjustments for **variation in the cost of the special material(s)** listed below, will be allowed.

Bitumen - escalation will be calculated using the "Rise and Fall" method as determined by the Employer. The base price for bitumen on this contract shall be the ruling price of 40/50 grade bitumen from the Durban SAPREF Refinery, seven (7) days prior to the closing date of tenders.

6.10.1.5 The **percentage advance** on materials not yet built into the Permanent Works is **80%**.

The **percentage advance** on Plant not yet supplied to Site: **Not Required**

6.10.3 **Retention Money:** Delete the word "selected".

The percentage retention on the amounts due to the Contractor is 10%.

The limit of "retention money" is 5% of the Contract Sum.

Should the Contract Price exceed the Contract Sum then the limit of "retention money" is 5% of the Contract Price.

Interest will not be paid on retention withheld by the Employer.

8.6.1.1.2 The **value of Plant and materials** supplied by the Employer to be included in the insurance sum: **Not Required**.

8.6.1.1.3 The **amount to cover professional fees** for repairing damage and loss to be included in the insurance sum: **Not Required**

8.6.1.2 **SASRIA Coupon Policy** for Special Risks to be issued in joint names of Council and Contractor for the full value of the works (including VAT).

8.6.1.3 The limit of indemnity for **liability insurance**: **R 10,000,000**.

8.6.1.4 **Ground Support Insurance:**

- Minimum amount for any one occurrence, unlimited as to the number of occurrences, against any claim for damages or loss caused by vibration and / or removal of lateral support:

R 1,000,000.

- Maximum first excess: **R 10,000**.

8.6.1.5 Furthermore, the insurance cover effected by the Contractor shall meet the following requirements:

Third Party Insurance (Public Liability)

- Minimum amount for any one occurrence, unlimited as to the number of occurrences, for the period of the contract, inclusive of the maintenance period: **R 10 000,000**.
- Consequential loss to be covered by policy: **Yes**
- Liability section of policy to be extended to cover blasting: **Nil**
- Maximum excess per claim or series of claims arising out of any one occurrence: **R10,000**.

Principal's own surrounding Property Insurance

- Minimum amount for any one occurrence unlimited as to the number of occurrences against any claim for damage which may occur to the Council's own surrounding property: **Nil**.
- Maximum first excess: **Nil**.

Insurance of Works

- Minimum amount for additional removal of debris (no damage): Nil.
- Minimum amount for temporary storage of materials off site, excluding Contractor's own premises: **Nil**.
- Minimum amount for transit of materials to site: **Nil**.

8.6.5 **Approval by Employer:** At the end of the sub-clause, add the following paragraph:

"Except where otherwise provided in the Special Conditions of Contract, the insurance cover effected by the Contractor in terms of this clause shall not carry a first loss amount greater than those set out below:

Contract Price	First Loss
Less than R 100,000	R 5,000
R 100,000 to R 500,000	R 10,000
R 500,000 to R 1,000,000	R 20,000
R 1,000,000 to R 2,000,000	R 30,000
R 2,000,000 to R 4,000,000	R 40,000
Greater than R 4,000,000	R 50,000

The insurance policy shall contain a specific provision whereby cancellation of the policy prior to the end of the period referred to in Cause 8.2.1 cannot take place without the prior written approval of the Employer."

10.7.1 Failing ad-hoc adjudication, the determination of disputes shall be by arbitration.

C1.2.2.2 DATA TO BE PROVIDED BY CONTRACTOR

1.1.1.9 The legal name of Contractor is:

.....
.....
.....
.....

1.2.1.2 The Physical address of the Contractor is:

.....
.....
.....
.....

The Postal address of the Contractor is:

.....
.....
.....
.....

The contact numbers of the Contractor are:

Telephone:

Fax:

The E-Mail address of the Contractor is:

.....

NB: Clause 6.5.2.1.3 will not apply to this contract and is to be replaced by clause 60 sub clause 60.1 of the NEC3 2013 contract

C1.2.3 ADDITIONAL CONDITIONS OF CONTRACT

C1.2.3.1 COMMUNITY LIAISON OFFICER

The Ward Councillor(s) in whose ward(s) work is to be done will, collectively, identify a community liaison officer (CLO) for the project and make the person known to the Contractor within two days of being requested to do so. The Contractor will be required to enter a written contract with the CLO that specifies:

- The hours of work and the wage rate of the CLO (200% of the Civil Engineering Industry minimum wage).
- The duration of the appointment.
- The duties to be undertaken by the CLO which could include:
 - Assisting in all respects relating to the recruitment of local labour.
 - Acting as a source of information for the community and councillors on issues related to the contract.
 - Keeping the Contractor advised on community issues and issues pertaining to local security.
 - Assisting in setting up any meetings or negotiations with affected parties.
 - Keeping a written record of any labour or community issue that may arise.
 - Any other duties that may be required by the Contractor.

Responsibility for the identification of a pool of suitable labour shall rest with the CLO, although the Contractor shall have the right to choose from that pool. The Contractor shall have the right to determine the total number labourers required at any one time and this may vary during the contract.

The Contractor shall have the right to replace labour that is not performing adequately. Should such occasion arise, it must be done in conjunction with the CLO.

Payment: The CLO will be reimbursed from the PC Sum item in the Preliminary & General Section of the Bill of Quantities.

C1.2.3.2 EMPLOYMENT OF LOCAL LABOUR

It is a condition of contract that the contractor will be required to employ local labour as specified in eThekweni Council Policy "The use of CLOs and Local Labour". The contractor will be required to ensure that a minimum of 50% of the labour force is made up of local labour. For the purposes of this contract, "Local labour" will be deemed to be any **persons who reside within iLembe district**. The contractor will be required to provide proof of authenticity of local labour. Signed confirmation by the appointed CLO will suffice for this.

No additional costs will be entertained due to this Particular Specification. The contractor will remain responsible for providing proper supervision of all labour, and will be responsible for the quality of work produced.

C1.2.3.3 FTE (Full Time Equivalent) EMPLOYMENT INFORMATION

It is a condition of contract that the Contractor supplies the Employer's Agent's Representative with information in respect of the employment of all foremen, artisans and labour (skilled and unskilled) employed to work on this contract. The information required is:

- Initials (per ID doc)
- Last Name (per ID doc)
- ID Number
- Disability (y / n)
- Education Level

Level 1 Unknown	Level 2 No Schooling	Level 3 Grade 1-3	Level 4 Grade 4	Level 5 Grade 5-6
Level 6 Grade 7-8	Level 7 Grade 9	Level 8 Grade 10-11	Level 9 Grade 12	Level 10 Post Matric

- Category of Employment

Category A: Employed as Local Labour for this contract only
Category B: Temporarily employed by the Contractor
Category C: Permanently employed by the Contractor

In addition, the following information is required in respect of each person listed above, on a monthly basis:

- Number of days worked during the month;
- Daily wage rate;
- Number of training days during the month.

The information is to be forwarded in a format acceptable to the Employer's Agent's Representative, but preferably in the form of an emailed EXCEL file (an original file, to be used as a template, will be issued to the Contractor). Contractors without computer facilities will be required to submit a hard copy of the information in a format as agreed to between the Contractor and the Employer's Agent's Representative.

In addition to the tax invoice, to be submitted by the Contractor with his monthly statement, The Employer reserves the right to withhold payment until the monthly FTE information has been forwarded to the Employer's Agent's Representative. No additional payment for complying with the above will be made and the Contractor is to make allowance for complying through the time related P & G items (sum) under Part AA: Preliminaries, of the Bill of Quantities.

C1.2.3.4 PERFORMANCE MONITORING OF SERVICE PROVIDERS

The Contractor shall be subjected to "Performance Monitoring" assessments in terms of the applicable Section of the Employer's Supply Chain Management Policy.

Key Performance Indicators (KPIs) are specified in the Part C3: Scope of Works, or will be discussed and agreed with the Contractor before commencement of the contract.

C1.2.3.5 EMPOWERMENT STRATEGIES

As per section 52(24)(1) of the SCM Policy where it is feasible, bidders are required to subcontract a minimum of 30% of the value of the contract to the following designated groups:

- (a) an EME or QSE;
- (b) an EME or QSE which is at least 51% owned by black people;
- (c) an EME or QSE which is at least 51% owned by black people who are youth;
- (d) an EME or QSE which is at least 51% owned by black people who are women;
- (e) an EME or QSE which is at least 51% owned by black people with disabilities;
- (f) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;
- (g) a cooperative which is at least 51% owned by black people;
- (h) an EME or QSE which is at least 51% owned by black people who are military veterans; or
- (i) more than one of the categories referred to in paragraphs (a) to (h).

In addition to the above, the eThekweni Municipal Council has adopted a framework for empowerment strategies for contracts between R5m and R30m.

The penalty for not achieving the specified CPG will be 0.5% of the contract value (excluding PC Sum items and Fixed Cost allowances) for every 1% of CPG not achieved.

C1.2.3.7 EXCEPTED RISKS (Clause 8.3)

Pursuant to Clause 8.3 of the Conditions of Contract (NEC 3 2013), the Employer shall not be liable for the payment of standing time costs as a result of the occurrence of any of the “Excepted Risks” as defined under Clause 8.3.

However, the Employer shall reimburse the Contractor in respect of plant de-establishment and re-establishment costs as a result of “Excepted risks” when a written instruction to de-establish is issued to the Contractor

C2.1: PRICING ASSUMPTIONS / INSTRUCTIONS

C2.1.1 GENERAL

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents (refer to F.1.2 of the Tender Data).

C2.1.2 PRICING INSTRUCTIONS AND DESCRIPTION OF ITEMS IN THE SCHEDULE

Measurement and payment shall be in accordance with the relevant provisions of **Clause 8 of each of the Standard Engineering Specifications** referred to in the Scope of Work. The Preliminary and General items shall be measured in accordance with the provisions of **C2.1.8**.

The descriptions of the items in the Bill of Quantities are for identification purposes only and comply generally with those in the Standard Engineering Specification.

Clause 8 of each Standard Engineering Specification, read together with the relevant clauses of the Scope of the works, set out what ancillary or associated work and activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standard Engineering Specification, or the Scope of the works, conflict with the Bill of Quantities, the requirements of the Standard Engineering Specification or Scope of the work, as applicable, shall prevail.

C2.1.3 QUANTITIES REFLECTED IN THE SCHEDULE

The quantities given in the Bill of Quantities are estimates only, and subject to re-measuring during the execution of the work. The Contractor shall obtain the Employer's Agent's detailed instructions for all work before ordering any materials or executing work or making arrangements for it.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities and in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications and the

Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste.

The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.

C2.1.5 MONTHLY PAYMENTS

Unless otherwise specified in the Specifications and Project Specifications, progress payments in Interim Certificates, referred to in **Conditions of Contract (NEC 3 2013)**, in respect of "sum" items in the Bill of Quantities shall be by means of interim progress instalments assessed by the Employer's Agent and based on the measure in which the work actually carried out relates to the extent of the work to be done by the Contractor.

C2.1.4 PROVISIONAL SUMS / PRIME COST SUMS

Where Provisional Sums or Prime Cost sums (PC Sum) are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with **Conditions of Contract (NEC 3 2013)**. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Any unauthorized changes made by the Tenderer to provisional items in the schedule, or to the provisional percentages and sums in the Summary of the Bill of Quantities, will be treated as arithmetical errors.

C2.1.6 PRICING OF THE BILL OF QUANTITIES

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to

be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which only rates are required (Rate Only), or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

All rates and amounts quoted in the Bill of Quantities shall be in Rands and Cents and shall include all levies and taxes (other than VAT). VAT will be added in the Summary of the Bill of Quantities.

C2.1.7 "RATE ONLY" ITEMS

The Tenderer shall fill in rates for all items where the words "Rate Only" appear in the "Total" column. "Rate Only" items have been included where:

- (a) an alternative item or material is contemplated;
- (b) variations of specified components in the make-up of a pay item may be expected; and
- (c) no work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For "Rate Only" items no quantities are given in the "Quantity" column but the quoted rate shall apply in

the event of work under this item being required. The Tenderer shall however note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.

C2.1.8 PRELIMINARY AND GENERAL

The Preliminary and General Section is provided to cover the Contractor's expenses incurred in complying with the requirements of the tender documents and consists of the following parts:

- Part AA: Preliminaries
- Part AB: General Specifications
- Part AH: Occupational Health and Safety

Fixed Charge Items: Each item should be priced separately and, subject to the Engineer certifying in terms of **Conditions of Contract (NEC 3 2013)**, that the work has been done, payment will be made as follows:

- (i) the total amount due when the certified value fixed charge items in this section is less than 5% of the net contract price;
- (ii) when the certified value of fixed charge items in this section is greater than 5% of the net contract price, payment will be limited to 5% of the net contract price. The remainder will be paid when the value of the work done under the contract, excluding the value of fixed charge items in this section, is greater than 50% of the net contract price, excluding the value of fixed charge items in this section.

Time Related Items: Any Time Related items not priced shall be deemed to be covered by the prices of other items in the section.

Payment of Time Related items in this section will be made throughout the contract period, the amount per month being the value of the item divided by the completion in months or, if specified in weeks, the equivalent number of months, in terms of **Conditions of Contract (NEC 3 2013)**. The final monthly increment will only be paid upon the issue of a completion certificate.

C2.2: BILL OF QUANTITIES

The Bill of Quantities follows and comprises of 79 pages.

SECTION	DESCRIPTION	AMOUNT (ZAR)
1	PRELIMINARY AND GENERAL	
2	EARTHWORKS (PROVISIONAL)	
3	CONCRETE, FORMWORK AND REINFORCEMENT	
4	MASONRY	
5	WATERPROOFING	
6	ROOF COVERINGS	
7	CARPENTRY AND JOINERY	
8	IRONMONGERY	
9	METALWORK	
10	PLASTERING	
11	PLUMBING AND DRAINAGE	
12	GLAZING	
13	PAINTWORK	
14	STORMWATER DRAINAGE, ETC	
15	WALKWAYS	
16	SECURITY FENCING	
17	PROVISIONAL SUMS	
SUB-TOTAL		
Add: 15% Vat		
TOTAL		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	<u>SECTION 1</u> <u>BILL NO. 1</u> <u>PRELIMINARIES</u>				
1.1	Fixed charged Items				
1.1.1	Contractual Requirements	Sum	1		
1.2	Establishment of Facilities on Site				
1.2.1	Facilities for the Engineer	Sum	1		
1.2.2	Furnished Office and Latrine Facilities for Engineers Representative	Sum	1		
1.2.3	Project Sign Board as Per Specification	Sum	1		
1.2.4	Survey Equipment and Material	Sum	1		
1.3	Facilities for The Contractor				
1.3.1	Office, storage sheds, fencing	Sum	1		
1.3.2	Contractors ablution and latrine facilities	Sum	1		
1.3.3	Water supplies, electric power and communications, dealing with water and access	Sum	1		
1.3.4	Tools and equipment	Sum	1		
1.3.5	Construction plant	Sum	1		
1.3.6	Supervision for duration of construction	Sum	1		
1.3.7	All other fixed charges including contractual requirements	Sum	1		
1.3.8	Remove all site establishment on completion including equipment store	Sum	1		
	CARRIED FORWARD				

1.4	General Safety, Safety Plan, Monitoring and review				
1.4.1	The sum shall include all costs necessary in complying with the occupational health and safety act (1998 as amended) and the construction regulation 2014 and the eThekweni health and safety requirements.	Sum	1		
1.4.2	Compliance with environmental management plan (Note: Access plan to be developed in conjunction with the ECO and allowed for in rates)	sum	1		
1.5	Other time related charges				
1.5.1	Compliance with environmental management specification	Sum	1		
1.5.2	Compliance with occupational health and safety requirements (act 83 of 1994 and construction regulations)	Sum	1		
1.5.3	Security	Prov. Sum	1		
1.5.4	Compliance with broad based black economic empowerment requirements	Sum	1		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2.0	<u>SECTION 1</u> <u>BILL NO. 2</u> <u>EARTHWORKS</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> NOTE IN RESPECT OF REMEASUREMENT OF FOUNDATIONS Foundation brickwork and concrete walls have been measured to top of unfinished floor level Earth excavated All excavations are measured as being in "earth" and/or filling compacted to 93% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling, or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking				
	CARRIED FORWARD				

	Working space Working space for formwork to sides of all concrete, except columns, shall be measured only where the concrete face is less than 750mm from the face of the measured excavations Working space for formwork to sides of columns shall be measured for the width of the column face only where both: the top of the column base is more than 1500mm below the commencing level of the excavations and the column face is less than 500mm from the face of the measured excavations No claim shall be considered for any working space for formwork to concrete other than as above described or for working space beyond the sides of trench excavations for the building of brick or block walls Descriptions of excavations for working space shall be deemed to include for any additional risk of collapse so incurred and for the returning and compacting of the excavated material as described Carting away of excavated material Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stockpiles situated on the building site				
2.1	Site clearance				
2.1.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m ²	980		
2.1.2	Stripping average 150mm thick layer of top soil and stockpiling on site	m ²	980		
	Taking out and removing, grubbing up roots and filling in holes				
2.1.3	Tree stump exceeding 200mm and not exceeding 1000mm girth	No	1		
2.1.4	Tree stump exceeding 500mm and not exceeding 1500mm girth	No	1		
	CARRIED FORWARD				

	Excavation in earth not exceeding 2m deep				
2.1.5	Trenches	m ³	120		
2.1.6	Pits holes	m ³	220		
2.1.7	Reduced levels under floors	m ³	60		
2.1.8	Cut and fill platform material to meet platform level.	m ³	490		
	Extra over all excavations for carting away				
2.1.8	Surplus material from excavations and/or stockpiles on site to a dumping site to be located by the contractor	m ³	360		
	Extra over trench and hole excavations in earth for excavation in				
2.1.9	Soft rock	m ³	20.00		
2.1.10	Intermediate Material	m ³	20.00		
2.1.11	Hard rock	m ³	60.00		
	Risk of collapse of excavations				
2.1.12	Sides of trench and hole excavations not exceeding 1,5m deep	m ²	260		
2.1.13	Sides of trench and hole excavations exceeding 1,5m deep	m ²	75.00		
2.1.14	Keeping excavations free of water Keeping excavations free of all water other than subterranean water	Item	1		
	Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density				
2.1.15	Backfilling to trenches, holes, etc.	m ³	120		
	CARRIED FORWARD				

2.1.16	Earth filling supplied by the contractor of G7 quality material in layers of 150mm thick compacted to 93% Mod AASHTO density Under floors, paving, etc. Coarse river sand filling supplied by the contractor	m ³	26		
2.1.17	Compaction of surfaces Compaction of ground surface under floors etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m ²	225		
2.1.18	Prescribed density tests on filling Modified AASHTO Density test	No	5		
2.2	<u>SOIL POISONING</u> Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years				
2.2.1	Under floors etc. including forming and poisoning shallow furrows against foundation walls etc., filling in furrows and ramming	m ²	255		
2.2.2	To bottoms and sides of trenches etc.	m ²	310		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.0	<u>SECTION 1</u> <u>BILL NO. 3</u> <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> Type of cement All cement used in concrete work is to be OPC cement, no cement containing fly ash will be allowed Cost of tests The costs of making, storing and testing of concrete test cubes shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Representative/Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Representative/Agent. (Test cubes are measured separately) DEGREE OF ACCURACY				
	Degree of accuracy shall be in accordance with SABS 0155 - 1980 : Grade 2 Foundations, concrete on plan : 35mm Elements above foundations on plan : 10mm vertical up to 3m : 15mm Door, window opening on plan : 15mm plumpness of jamb each meter : 5mm Max : 15mm Ceilings: Any point above a 3m straight edge placed level in any direction : 6mm				
	TOTAL TO SUMMARY				

3.1	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
	Mesh reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days				
3.1.1	Surface bed slab				
3.1.2	Aprons				
3.1.2	Ramps				
3.1.3	Thickening's under surface bed				
3.2	<u>REINFORCED CONCRETE</u>				
	Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength at 28 days				
3.2.1	Top Slabs	m ³	10		
3.3	<u>TEST BLOCKS</u>				
	Prepare set of three 150 x 150 x 150mm concrete strength test cubes, label and send to an approved laboratory for testing, pay all charges and submit report to the Representative/Agent. Only successful tests will be paid for				
3.3.1		No	16		
3.4	<u>CONCRETE SUNDRIES</u>				
	Finishing top surface of concrete smooth				
3.4.1	Power float Surface beds, slabs, ramps etc.	m ²	180		
3.4.2	Steel/wood Float Surface beds, slabs, ramps, apron etc.	m ²	260		
3.5	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>				
	Rough formwork to sides of				
3.5.1	Edges, risers, ends and reveals not exceeding 300 mm high or wide	m	230		
	Rough formwork to soffits				
3.5.2	Slab propped up exceeding 1,5m and not exceeding 3.5m high	m ²	76		
	CARRIED FORWARD				

	Rough formwork to form:				
3.5.3	100-200mm Diameter opening through 170mm slab	No	15		
3.5.4	200-300mm Diameter opening through 170mm slab	No	15		
3.5.5	450 x 600mm Wide opening through 170mm slab	No	8		
	Permanent formwork to soffits:				
3.6	<u>MOVEMENT JOINTS ETC.</u>				
	Two layer of 375 micron damp proof course in slip joints between horizontal concrete and brick surfaces including cement mortar bed:				
3.6.1	Not exceeding 300mm wide.	m	70		
	Horizontal joggle construction joints through concrete including applying bond breaker to mating face and finishing joint with a nosing tool				
3.6.2	Slabs not exceeding 300mmm thick	m	110		
3.7	<u>REINFORCEMENT</u>				
	High tensile steel reinforcement				
3.7.1	10mm Diameter bars	t	1.00		
3.7.2	12mm Diameter bars	t	2.00		
	Fabric reinforcement				
3.7.3	Type Ref 193 reinforcement in concrete surface beds, slabs, etc.	m ²	200		
3.7.4	Type Ref 395 reinforcement in concrete surface beds, slabs, etc.	m ²	50		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4.0	<u>SECTION 1</u> <u>BILL NO. 4</u> <u>MASONRY</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick Wall ties Descriptions of solid walls (except if built in English bond) and cavity walls shall be deemed to include metal wall ties complying with SABS 28 and of the butterfly or of the modified PWD type, of the required length with each end built at least 75mm deep into brickwork, spaced at not more than 1m centres alternatively to every third course of brickwork Cavity walls etc. Descriptions of cavity walls shall be deemed to include leaving every fifth prebends of the bottom course of the external skin open as a weep hole Face bricks Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc.				
	CARRIED FORWARD				

	Degree of accuracy Degree of accuracy shall be in accordance with SABS 0155 - 1980 : Grade 2 Foundations, concrete on plan : 35mm Elements above foundations on plan : 10mm vertical up to 3m : 15mm Door, window opening on plan : 15mm plumpness of jamb each meter : 5mm Max : 15mm Ceilings: Any point above a 3m straight edge placed level in any direction : 6mm				
4.1	SUBSTRUCTURE & FOUNDATION WALLS Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar				
4.1.1	Half brick wall in pit in honeycomb bond with openings <u>Brickwork in extra hard burnt clay bricks in (4:1) cement mortar with all joints grouted in solid with liquid cement mortar</u>	m ²	160		
4.1.2	One brick wall in foundation	m ²	180		
4.1.3	One and half brick wall in pit	m ²	260		
4.1.5	Bagging of (3:1) sand cement mixture and sealing to brickwork Bagging and sealing the outer face of the inner skin of walls with 1:3 cement and sand mixture and seal with two coats 'Brixal' bitumen emulsion waterproofing coating	m ²	690		
4.2	SUPERSTRUCTURE Brickwork of NFX bricks (14MPa nominal compressive strength) in Class I mortar				
4.2.1	Piers	m ³	20		
4.2.2	Half brick wall	m ²	150		
4.2.3	Half brick wall in beamfilling	m ²	70		
4.2.4	One brick wall	m ²	450		
	CARRIED FORWARD				

	FACED BRICKWORK External facings in approved face bricks (FBS) with a PC Amount of R6 500.00 (Six Thousand Five Hundred Rands) per thousand bricks delivered to site (excluding VAT) pointed with square recessed horizontal and vertical joints				
4.2.5	Extra over brickwork for facebrick work	m ²	420		
4.2.6	Extra over ordinary brickwork in piers for facing and pointing in stretcher bond	m ²	15		
4.2.7	Extra over brickwork in beam filling for face brickwork	m ²	70		
4.2.8	Face brick-on-edge coping on top of one brick wall in cement mortar and pointing on top and both sides	m	10		
4.2.10	Cut face brick-on-edge external window cill, 180mm wide, set sloping and slightly projecting in cement mortar and pointed on top, front edge and projecting soffit including all necessary fair raking cutting to facings under and fair and fitted ends	m	7		
4.2.11	Extra over sill for solid face brick on ends of sills	No	15		
4.2.13	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	50		
4.2.14	Movement joints Movement joint formed of 20mm softboard built in vertically between brickwork	m	20		
4.2.15	Brickwork reinforcement 75mm Wide reinforcement built in horizontally	m	850		
4.2.16	150mm Wide reinforcement built in horizontally	m	3,000		
4.2.17	Galvanised hoop iron cramps, ties, etc. 40 x 2mm Diameter roof tie 1800mm girth bent double with one end fixed to timber and other end built into brickwork	No	60		
4.2.18	Prestressed fabricated lintels 110 x 76mm Lintels in lengths not exceeding 3m	m	30		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5.0	<u>SECTION 1</u> <u>BILL NO. 5</u> <u>WATERPROOFING</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> Waterproofing Waterproofing of roofs, basements, etc. shall be laid under a ten-year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc. with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labor to turn-ups and turn-downs				
5.1	<u>DAMP-PROOFING OF WALLS AND FLOORS</u> One layer of 375-micron black embossed polyethylene damp-proof course				
5.1.1	In walls, under cills, etc. 250 Micron green medium density damp-proof membrane laid loose under solid floors with pressure sensitive tape jointing	m ²	20		
5.1.2	Under surface beds and ramps <u>WATERPROOFING TO WALLS</u> Prepare and apply ecofelt membrane with "Duraflex", two coats of "Duraflex" layer and one layer of Abecote SF356 or other equal and approved waterproof membrane in accordances to manufacturers instructions On pit walls <u>JOINT SEALANTS, ETC.</u> Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc. 10 x 10mm In vertical isolation joints in brick walls including raking out joint filler as necessary For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC)	m ²	180		
		m ²	100		
		m	150		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
6.0	<u>SECTION 1</u> <u>BILL NO. 6</u> <u>ROOF COVERINGS</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) PREAMBLES <u>SUPPLEMENTARY PREAMBLES</u> PREAMBLES Certificate for galvanised roof covering The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied, complies with the required thickness specified				
6.1	<u>CORRUGATED METAL SHEETING AND ACCESSORIES</u> 0,6mm IBR-profile Z275 galvanised roof sheeting 0,8mm thick and accessories fixed to timber purlins				
6.1.1	Safintra Widedek or (rain cload sheeting) or similar aprove or classicorr Roof covering with pitch not exceeding 17,5 degrees	m ²	200		
6.1.2	Ridge capping 460mm girth and three times bent along girth.	m	35		
6.1.3	Ridge closer or broad flute closer to suit profile	m	62		
6.1.4	Holes for 150mm diameter pipe including flashing around	No	15		
6.1.5	Isoboard High Density 32 - 36 kg/m ³ Rigid Extruded Polystyrene 100% Closed Cell Insulation Boards; 30mm Thick x 600mm Wide	m ²	200		
6.1.6	Translucent sheeting/ semi- transparent sheeting to allow light	m ²	60		
6.1.7	Roof cap around 110-160mm dia pipe for vents	No.	25		
6.1.8	Trouble sasilation laid under roof sheeting	m ²	200		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7.0	<u>SECTION 1</u> <u>BILL NO. 7</u> <u>CARPENTRY AND JOINERY</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> Joinery: Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc. Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes Fixing Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete Timber All softwood to be South African Pine <u>DESCRIPTIONS</u> Items described as "bolted" shall be deemed to exclude the bolts and include the holes unless otherwise described Where the fixing of members is not stated it shall mean the nailing of one timber member to another The term "planted on" shall mean the nailing of one timber member to another The term "screwed on" shall mean the countersunk screwing of one timber member to another The term "screwed on and pelleted" shall mean the screwing of one timber member to another with the heads of screws sunk and pelleted. The term "plugged" shall mean the countersunk screwing of a timber member to and including plastic plugs in brickwork or concrete The term "plugged and pelleted" shall mean the screwing of a timber member to and including plastic plugs in brickwork or concrete with heads of screws sunk and pelleted Shelving, etc.. described as screwed to steel must be fixed from underside and prices are to include for countersunk drilling through the steel for screw fixing Descriptions of floors, ceilings, joinery, etc.. shall be deemed to include for all square cutting Descriptions of items given in lineal metre shall be deemed to include for mitres, stopped ends, fitted intersections, etc.. Descriptions of rounded angles, rebates, grooves, chamfers, moulded edges, etc.. shall be deemed to include for angles, ends, etc.				
	CARRIED FORWARD				

	<u>PRE-FABRICATED TIMBER ROOF TRUSSES AND ASSOCIATED BRACING</u> NOTE: The following is applicable in respect of roof trusses and bracing: Plate nailed timber trusses shall be of approved design and manufacture and constructed with softwood structural timber by a truss Fabricator holding a current Certificate of Competence awarded by the Institute of Timber Construction. Each roof truss shall have all its members accurately cut and closely butted together and rigidly fixed by CSIR approved patented galvanized metal spiked connectors, precision pressed on both sides of each intersection by an approved method, all in accordance with the manufacturer's instructions. The design, manufacture and transportation of the trusses, bracing, etc. shall be under the control of a registered Structural Engineer in accordance with SABS 0160 and SABS 0163, who shall, after erection, provide a certificate confirming that the design, manufacture, transportation, erection and bracing has been carried out in accordance with the specifications. The design shall include for all live loads, wind loads and dead loads imposed by roof covering, purlins, ceilings, etc.. Fully detailed shop drawings of all trusses, etc., indicating sizes, bracing, loading, etc., shall be submitted to the Representative/Agent for approval prior to fabrication. Erection shall be carried out in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber Roof Trusses" published by the Institute for Timber Construction and the Council for Scientific and Industrial Research or as detailed by the designer. Prices for trusses and bracing shall include design and preparation of shop drawings. The following is applicable in respect of the general roof construction: Roof pitches are 7 degrees as per roof construction notes on the relevant drawings. Roof covering is ribbed sheet steel on 50 x 75mm purlins at maximum 1200mm centres nailed and tied with wire ties. Ceilings are 6.4mm gypsum plasterboards on 38 x 50mm bracing. The dimensions in the description of the roof construction are nominal and actual measurements are to be obtained from the Representative/Agent and/or the site before design or fabrication of roof trusses commences. NOTE: The roof construction is detailed on the drawings and details included at the back of these Bills of Quantities for tender purposes.				
	CARRIED FORWARD				

7.1	<u>COMPLETE ROOF</u> Sawn softwood pre-fabricated plate nailed timber in roof construction to roofs complete with 38 x 114mm wall plates (elsewhere treated with carbolinium before fixing), trusses, jack rafters, additional supports for jack trusses and louvre frames, etc., all necessary permanent bracing, metal hangers, cleats, bolts, etc., purlins as described and one gang plank per roof layout over entire building length between fire walls (Roof covering, louveres to Dutch hips and fascias elsewhere) Double pitched truss construction to 17.5 degrees pitch at 4000mm- 7000mm wide block, comprising 38 x 114mm SAP grade 7 rafter 38x 114 SAP grade 7 webs and struts including all sprokets, bracing, gangnails, nails, nuts, washers, joints etc, with eaves and verge overhang as per details by engineer.				
7.1.1		No	25		
7.2	<u>WOOD PRESERVATIVES</u> Carbolinium protective wood coatings				
7.2.1	Two coats applied hot sawn timber before fixing	m ²	70		
7.2.2	Two coats applied hot wrought exposed roof timbers	m ²	50		
7.3	<u>DOORS</u> Purpose made wrot Meranti door hung to timber frames				
7.3.1	40mm x 813 x 2032mm High TDM Hardwood doors SA Sub frame double top and bottom rail (D2)	No	12		
7.3.2	40mm x 813 x 1882mm High TDM Hardwood doors SA Sub frame double top and bottom rail (D1)	No	22		
7.3.3	1100mm Long single action purpose cut timber "meranti" frames 40 x 250mm Frame suitable for door size 850 x 2050mm high, with 1pair hinges	No	22		
	CARRIED FORWARD				

7.4	<u>FASCIAS AND BARGE BOARDS</u>				
	Tempered fibre-cement				
7.4.1	12 x 225mm Fascia and barge boards countersunk screwed to roof timbers (elsewhere) with two brass screws at maximum 1200mm centres and jointed with and including standard aluminium halfround cover strips at all joints	m	96		
7.5	<u>WINDOWSILLS</u>				
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
8.0	<u>SECTION 1</u> <u>BILL NO. 8</u> <u>IRONMONGERY</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish				
8.1	<u>IRONMONGERY FIXED TO DOORS, ETC.</u> Locks 40mm Brass five pin tumbler padlock keyed alike with one pair of keys per every five padlocks	No	6		
8.1.2	75mm Three lever upright mortice lockset with satin chrome furniture	No	9		
8.1.3	Indicator locks	No	22		
8.1.3	Handles 100mm Chromium plated bow handle bolted through door with the bolt ends hammered to prevent the nuts being removed	No	7		
8.2	<u>SUNDRIES</u>				
8.2.1	38mm Rubber door stop plugged and screwed to wall or floor	No	7		
8.3	<u>LETTERS, NAMEPLATES, ETC.</u> Indicator plates countersunk holed for and screwed to door or brickwork with chromium plated dome-headed screws				
8.3.1	75 x 150mm Aluminium international toilet sign with FEMALE figure screwed to door	No	2		
8.3.2	75 x 150mm Aluminium international toilet sign with MALE figure screwed to door	No	2		
8.3.3	75 x 150mm Aluminium international toilet sign with WHEELCHAIR figure screwed to door	No	3		
8.3.4	75 x 150mm Aluminium international toilet sign with Grade R figure screwed to door	No	2		
8.4	<u>BATHROOM FITTINGS</u> Chairman Industries Grabrails or equal and approved				
8.4.1	32mm Diameter code DL2 side grab rail, plugged and screwed to the wall	No	1		
8.4.2	32mm Diameter code SR2 rear grab rail around cistern, plugged and screwed to the wall	No	1		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
9.0	SECTION 1 BILL NO. 9 METALWORK For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) SUPPLEMENTARY PREAMBLES Descriptions Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
9.1	HOT DIPPED GALVANISED PIVOT DOORS, SCREENS, GATES, ETC The following in galvanised gates to brickwork				
9.1.7	Single gate size 900 x 2105mm high formed of 25 x 25 x 2mm thick hollow section steel frame with two 25 x 6mm flat section cross rails, 12mm diameter vertical bars at 109mm centres, three 20mm diameter x 20mm long tubular sockets for pinned hinges, 18mm diameter x 50mm long tubular sleeve with 12mm diameter x 85mm long pad bolt, two 35 x 25 x 6mm thick flat section padlock plates and one 25 x 15 x 3mm stop plate welded on.	No	6		
9.1.8	Pin hinge formed of 12mm diameter x 20mm long dowel welded to 21 x 21 x 6mm welded to 50 x 75 x 6mm plate twice holed for 6mm diameter galvanised expansion bolts (elsewhere measured).	No	12		
9.1.9	6mm Diameter galvanised expansion bolts.	No	24		
	CARRIED FORWARD				

9.2	<u>GALVANISED STEEL WINDOWS, DOORS, ETC</u>				
	Standard school type windows with 10 x 10mm solid square section burglar bars to all opening sashes				
9.2.1	Window type; size 457 x 889mm high with one opening light (W1)	No	8		
9.2.2	Window type; size 535 x 655mm high with one opening and fixed light (W2)	No	12		
	Door Frame Steel 1.2mm thick for Stable Door Single Rebate Left Hand Opening- 115mm thick-w813xh2032mm	No	48		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	QUANTITY
	<u>SECTION 1</u> <u>BILL NO. 10</u>				
10.0	<u>PLASTERING</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC)				
10.1	<u>SCREEDS</u>				
10.1.1	1:3 Cement plaster screeds steel trowelled on concrete 40mm Thick on floors and landings	m ²	150		
10.2	<u>EPOXY SCREED</u>				
10.2.1	4mm Thick self leveling non-slip epoxy screed, no metallic additives, including primer applied to manufacturer's specification On screeds on floors and landings	m ²	150		
10.3	<u>INTERNAL PLASTER</u>				
10.3.1	One coat 1:4 cement plaster to brickwork On walls	m ²	490		
10.3.2	On narrow widths	m ²	70		
10.4	<u>SPECIALIST WALL FINISH ON PLASTERED WALLS</u>				
10.4.1	4mm Thick self-leveling non-slip epoxy finish, no metallic additives, including primer applied to manufacturer's specification On plastered walls	m ²	500		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
11.0	<u>SECTION 1</u> <u>BILL NO. 11</u> <u>PLUMBING AND DRAINAGE</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> UPVC pipes and fittings Soil, waste and vent pipes and fittings shall be solvent weld jointed uP VC pressure pipes and fittings Pipes for water supply shall be of the Class stated Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uP VC loose sockets and fittings Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uP VC and all other fittings shall be cast iron, all with similar push-in type joints Copper pipes Fixing of pipes Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc., casting in, building in or suspending not exceeding 1m below suspension level				
	CARRIED FORWARD				

	Reducing fittings Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc. will be entertained Wire gratings Descriptions of gutter outlets, etc. shall be deemed to include wire balloon gratings Exposed concrete surfaces Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catch pits, inspection chambers, etc. shall be finished smooth with plaster Excavations No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling Soft rock and "Hard rock" shall be as defined in "Earthworks" Laying, backfilling, bedding, etc. of pipes Pipes shall be laid and bedded, and trenches shall be carefully backfilled in accordance with manufacturers' instructions Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L: Medium-pressure pipelines SABS 1200LD: Sewers SABS1200LE: Storm water drainagePipe trenches etc. shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches)Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes)Unless otherwise described bedding of rigid pipes shall be Class B bedding Flush pans Flush pans shall have straight or side outlets and "P" or "S" traps as necessary				
	CARRIED FORWARD				

	Stainless steel basins, sinks, wash troughs, urinals, etc. Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable Waste unions Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings Petroleum anti-corrosion tape Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc. Prices for wrapping of pipes shall include for all work as described to couplings in the length				
11.1	<u>GUTTERS ETC.</u> PVC Rainwater Goods with Patented Flexible Elastomeric Joints Half round eaves gutter including union clips and fixing to falls on patent brackets spaced at maximum 1000mm centres fixed to fibre reinforced cement fascia with brass bolts with nuts and washers.				
11.1.1	Extra over gutter for stopped end.	m	60		
11.1.2	Extra over gutter for outlet for 90mm diameter pipe.	No	16		
11.1.3	90mm Diameter rainwater pipes.	No	12		
11.1.4	Extra over rainwater pipe for bend.	m	24		
11.1.5		No	12		
	CARRIED FORWARD				

11.2	SANITARY FITTINGS NOTE: All sanitary fittings shall be sealed next to walls, fitting sides and shelves with an approved type non-fungal sustaining white silicon Polyethylene fittings Atlas Plastics rotomoulded polyethylene Christy wash hand basin (code: 382AP) 570 x 395mm wide, or equal approved, with two tapholes and 40mm waste outlet, plugged and screwed to the wall with galvanised screws and brackets				
11.2.1	Atlas Plastics (Code 222 AP) VIP 200 pit pedestal with lid, or equal approved, size 507 x 565 x 480mm high overall fitted into VIP Flange cast into concrete slab of pit.	No	10		
11.2.2	Atlas Granite bowl urinal (code: 507AP) or equal approved, size 320mm x 350 x 495mm high, coupled with Atlas waterless urinal waste fittings (code: 496 AP) complete plugged and screwed to the wall with galvanised screws and brackets	No	18		
11.2.3		No	8		
11.2.5	Kimberly Clark professional or equal approved Roll dispenser (two rolls) code 405606 plugged to walls	No	22		
11.3	<u>TAPS, VALVES, ETC.</u> 'Cobra-Watertech' or equally approved:				
11.3.1	15mm Chromium plated elbow action pillar tap	No	10		
11.3.2	15 mm Chromium plated biptap with 3/4" BSP hose union with star tap handles	No	12		
11.3.3	15mm compression type angle regulating valve with 15mm x 10mm outlet compression nut and ring	No	15		
	CARRIED FORWARD				
11.4	<u>WASTE UNIONS, TRAPS, ETC.</u>				

	Chromium plated				
11.4.1	32mm chrome plated waste with anti-theft plug and spindle.	No	22		
11.4.2	40mm chrome plated bottle trap with 75mm deep re-seal, adjustable telescopic pipe and 40mm outlet.	No	22		
	Rubber traps, etc.				
11.4.3	38mm Deep seal "P" or "S" trap	No	22		
11.5	<u>SANITARY PLUMBING</u>				
	uPVC soil and vent pipes for above ground installations				
11.5.1	50mm Pipes	m	50		
11.5.1	110mm Pipes	m	30		
11.5.2	110 mm Black A/G pipes	m	20		
	Extra over uPVC soil and vent piping for above ground fittings				
11.5.3	50mm Bend	No	60		
11.5.4	110mm Bend	No	30		
11.5.5	50mm Junction	No	10		
11.5.6	50mm Access bend	No	20		
11.5.7	110mm Access bend	No	20		
	Ventilators				
11.5.8	240mm Polycarbonate 'Turbo Ventura' ventilator with 150mm diameter throat fixed to top of 150mm vent pipe (vent pipe elsewhere measured).	No	27		
11.6	<u>WATER SUPPLIES</u>				
	Polycop uPVC pipes fixed on walls, including fittings and etc				
11.6.1	15mm Pipes	m	70		
11.6.2	22mm Pipes	m	150		
	Grating, covers, etc				
11.7.7	450 x 600mm Type 9D Polymer manhole cover and frame cast into slab complying with SABS specification 558, including approved galvanised locking bar and padlock.	No	10		
	CARRIED FORWARD				

[illegible]

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	SECTION 1 BILL NO 12 For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) SUPPLEMENTARY PREAMBLES UPVC pipes and fittings Soil, waste and vent pipes and fittings shall be solvent weld jointed uPVC pressure pipes and fittings Pipes for water supply shall be of the Class stated Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uP VC loose sockets and fittings Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uP VC and all other fittings shall be cast iron, all with similar push-in type joints Copper pipes Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be architects specification. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground Fixing of pipes Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc., casting in, building in or suspending not exceeding 1m below suspension level				
	CARRIED FORWARD				

	Reducing fittings Where fittings have reducing ends or branches, they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc. will be entertained Wire gratings Descriptions of gutter outlets, etc. shall be deemed to include wire balloon gratings Exposed concrete surfaces Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catch pits, inspection chambers, etc. shall be finished smooth with plaster Excavations No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling Soft rock and "Hard rock" shall be as defined in "Earthworks" Laying, backfilling, bedding, etc. of pipes Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L: Medium-pressure pipelines SABS 1200LD: Sewers SABS1200LE: Storm water drainagePipe trenches etc. shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches)Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes)Unless otherwise described bedding of rigid pipes shall be Class B bedding				
	CARRIED FORWARD				

	Flush pans Flush pans shall have straight or side outlets and "P" or "S" traps as necessary Stainless steel basins, sinks, wash troughs, urinals, etc. Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable Waste unions Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings Petroleum anti-corrosion tape Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc. Prices for wrapping of pipes shall include for all work as described to couplings in the length GUTTERS ETC. PVC Rainwater Goods with Patented Flexible Elastomeric Joints Half round eaves gutter including union clips and fixing to falls on patent brackets spaced at maximum 1000mm centres fixed to fibre reinforced cement fascia with brass bolts with nuts and washers. Extra over gutter for stopped end. Extra over gutter for outlet for 90mm diameter pipe. 90mm Diameter rainwater pipes. Extra over rainwater pipe for bend.				
	CARRIED FORWARD				

Document Version: 01/03/2022

Manholes: 1000 dia. with light duty circular concrete cover as per EWS std drawing 38750. All rings shall be 250mm in depth. Manhole depths: a) 0,0 to 1.5m b) 1.5 to 2.0m WATER SUPPLIES u/PVC pipes fixed to walls, Speedfit etc 15mm Pipes 25mm Pipes Grating, covers, etc 450 x 600mm Type 9D Polymer manhole cover and frame cast into slab complying with SABS specification 558, including approved galvanised locking bar and padlock. Rodding eye TANKS Tanks and fittings, etc 2500 Litre plastic seamless horizontal water storage tank complete with fixing lugs and lid, fitted with and including 15mm brass bibtap with handle suitable for padlocking and setting in position on concrete tankstand (elsewhere measured) and tying down with 4mm diameter galvanised wire wrapped twice around centre of tank and secured to each corner of tank stand with a double strand of 4mm diameter galvanised wire embedded into concrete. Hole through top of tank lid for 75 x 100mm pipe.	No.	4		
	No.	2		
	m	40		
	m	120.5		
	No	5		
	No	4		
	No	6		
	No	6		
TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>SECTION 1</u> <u>BILL NO. 12</u>				
12.0	<u>GLAZING</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC)				
12.1	<u>GLAZING TO STEEL WITH PUTTY</u> 4mm Opaque laminated safety glass				
12.1.1	Panes exceeding 0,1m2 and not exceeding 0,5m2.	m²	10		
12.1.2	Panes exceeding 0.5m2 and not exceeding 1m2	m²	6		
12.1.2	Mirrors NOTE Mirrors shall be of 6mm thick silvered GG quality polished float glass with rounded and polished edges and splayed corners Unless otherwise described, mirrors shall have four holes for and be screwed to and including approved patent plugs in plastered or tiled wall with countersunk steel screws tap-threaded for and including screw type chromium plated dome-headed caps and felt washers.				
12,1,3	Mirror size 450 x 600mm	No	15		
	CARRIED FORWARD				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
13.0	<u>SECTION 1</u> <u>BILL NO. 13</u> <u>PAINTWORK</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> <u>PREPARATORY WORK TO EXISTING WORK</u> Previously painted plastered surfaces Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth Previously painted plasterboard surfaces Surfaces shall be thoroughly cleaned before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth. Steel H-strips and nails to be reprimed with calcium plumbate primer. Previously painted metal surfaces Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal. Previously painted wood surfaces Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth. Existing wood surfaces to be stripped, neutralised, sanded and treated. Existing facebrick surfaces Surfaces shall be thoroughly cleaned down. Cracks and crevices shall be primed, filled with suitable filler and finished smooth.				
	CARRIED FORWARD				

13.1	<u>PAINT ON PLASTER, ETC..</u>				
	Prepare, stop and apply one coat alkali resistant pure acrylic filler coat and one full coat washable mat acrylic PVA paint				
13.1.1	On internal plastered walls	m ²	490		
	Prepare, stop and apply one coat alkali resistant primer and two full coats acrylic emulsion paint for exterior use				
13.1.2	On external fibre-cement fascias and barge boards including priming metal cover strips and screw heads with one coat zinc phosphate alkyd resin primer	m ²	20		
13.2	<u>PAINT ON METAL</u>				
	Prepare and apply one coat alkali resistant plaster primer, one coat universal undercoat and two coats low gloss alkyd eggshell paint				
13.2.1	On pressed steel door and frames	m ²	10		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
14.0	<u>SECTION 1</u> <u>BILL NO. 14</u> <u>STORMWATER DRAINAGE, SOIL DRAINAGE AND WATER SUPPLY (PROVISIONAL)</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) All excavations are measured as being in "earth" and/or filling compacted to 98% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking				
14.1	<u>STORMWATER DRAINAGE</u> Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days				
14.1.1	V-shaped channel 1000mm wide x 100mm thick with rounded salient edges and finished on exposed surfaces with (2:1) cement mortar, laid to falls in panels not exceeding 2000mm long with 12mm bitumen impregnated softboard movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavation and formwork	m	70		
	CARRIED FORWARD				

14.1.2	Extra over channel for angles, intersections, ends, etc.	No	6		
14.1.3	Movement joints Movement joint not exceeding 300mm high formed of 12mm bitumen impregnated softboard placed vertically in position between concrete stormwater channel and brick walls or concrete aprons, etc. including raking out top section 10mm deep and filling with bituminous compound	m	60		
14.2	<u>SOIL DRAINAGE</u> 110 diameter Class 34 uPVC pipe with compression couplings, including laying in ground to falls on and including 150mm selected compacted Class C granular bedding material, with compacted selected fill blanket hand compacted to 90% Mod. AASHTO density in 150mm layers with 300mm cover to top of pipe, and backfilling to 90% modified AASHTO density in 150mm layers, including all necessary excavations, working space, carting away surplus excavated material, risk of collapse, compaction, dewatering of trenches, etc.. all in accordance with specifications set out in SANS 1200 LB, LE and DB.				
14.2.1	110mm diameter pipe in and including trenches not exceeding 1m deep	m	160		
14.2.2	Extra on uPVC pipes for fittings 110mm Bend	No	10		
14.2.3	110mm Access bend	No	8		
14.2.4	110mm Junction	No	8		
14.2.5	110mm Access junction	No	15		
14.3	<u>SOAKAWAYS</u> Site clearance				
14.3.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m ²	420		
14.3.2	Stripping average 100mm thick layer of top soil and stockpiling on site	m ²	420		
	CARRIED FORWARD				

14.3.3	Excavation in earth not exceeding 2m deep Soakaway trenches	m ³	160		
14.3.4	Extra over all excavations for carting away Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m ³	120		
14.3.5	Extra over trench and hole excavations in earth for excavation in Intermediate Material	m ³	60		
14.3.6	Hard rock	m ³	20		
14.3.7	Selected filling with material from the excavations compacted to a density of at least 93% Mod. AASHTO maximum density: Backfilling to trenches, holes, etc.	m ³	50		
14.3.8	Back filling with material supplied by the contractor 19mm Crushed stones encasing to pipes	m ³	120		
14.3.9	50mm Layer of coarse sand or fine gravel	m ³	25		
14.3.10	Geofabric Bedim A4 geofabric filter blanket of 2,1mm thickness under 2kPa pressure wrapped around stone encasing with 150mm side and 300mm end laps including stitching	m ²	576		
14.3.11	uPVC pipes 110mm Perforated drain pipes laid between stones	m	160		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
15.0	<u>SECTION 1</u> <u>BILL No. 15</u> <u>WALKWAYS</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) All excavations are measured as being in "earth" and/or filling compacted to 98% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking.				
15.1	<u>WALKWAYS</u> Site clearance				
15.1.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m ²	456		
15.1.2	Stripping average 100mm thick layer of topsoil and stockpiling on site	m ²	456		
15.1.3	Excavate in earth not exceeding 2000mm deep Trenches	m ³	40		
15.1.4	Reducing levels under floors	m ³	23		
15.1.5	Extra over all excavations for carting away surplus material from excavations and/or from stockpiles on site to a dumping site to be located by the Contractor	m ³	60		
15.1.6	Extra over excavations in earth for trenches and holes for excavations in soft rock	m ³	22.50		
15.1.7	Extra over excavations in earth for trenches and holes for excavations in hard rock	m ³	10		
	CARRIED FORWARD				

15.1.9	Allow for keeping excavations free of all water other than subterranean water Filling, etc.	Item	1		
15.1.10	Backfilling from the excavations to trenches and holes compacted to 93% modified AASHTO density	m ³	45		
15.1.10	Earth filling supplied by the contractor of G7 quality material under floors in layers of 150mm thick compacted to 93% Mod AASHTO density	m ³	30		
15.1.11	Prepare ground surface by scarifying top 150mm layer of ground and re-compact to 93% modified AASHTO density Tests	m ²	152		
15.1.12	Tests to determine the degree of compaction, etc. of ground or filling Protection against termites	No	10		
15.1.13	Poisoning surface of ground in bottoms of trenches, bases, etc. Mesh reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days	m ²	200		
15.1.16	In surface beds cast in panels Sundries	m ³	20		
15.1.17	Finish top surface of concrete smooth and even non-slip wood floated surface including additional dry sand/cement mixture added as necessary whilst the concrete is still wet	m ²	200		
15.1.18	Finish edge of concrete surface beds, etc. not exceeding 300mm high to a smooth and even steel floated surface including additional dry sand/cement mixture added as necessary whilst the concrete is still wet including rounded corner along top edge Formwork to	m	80		
15.1.19	Edges, risers, ends, etc. not exceeding 300mm high or wide	m	80		
	CARRIED FORWARD				
15.1.20	Movement joints Movement joint not exceeding 300mm high formed of 12mm bitumen impregnated softboard placed vertically in position between concrete surface bed and brick walls, etc. including raking out top section 10mm deep and filling with bituminous compound	m	100		
	TOTAL TO SUMMARY				

TEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
16.0	<u>BILL No. 16</u> <u>SECURITY FENCING & ANCILLARY WORKS</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) All excavations are measured as being in "earth" and/or filling compacted to 93% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking.				
16.1	<u>SECURITY FENCING</u> Security fencing including site clearance and preparation of ground Sundries				
16.1.1	Mesh Welded Galvanized 1200 mm (100 mm X 100 mm) including wooden post casted on concrete at 1m deep from ground level	m	260		
16.1.2	Supply and Install wooden post	No	220		
	CARRIED FORWARD				

	Dry Stack Retaining wall				
16.1.8	Construction of precast concrete staircase on sloped banks	m	10		
16.1.9	Supply and install 110mm diameter kaytech flo-drain or equipment complete with geofabric lining and 19mm stone to manufacturers specification.	m ²	65		
16.1.10	Provide all materials, plant and labour to install L300 Loffelstein dry stack retaining blocks inclusive of excavation, 25MPa concrete footing and compacted backfill to suppliers specification	m ²	120		
16.1.11	Supply and place U14 geotextile fabric layer behind dry stack retaining wall	m ²	280		
	Erosion Protection and Run-off Control				
16.1.12	Erosion protection: supply and install concrete channel SWC4 from LG Green or equivalent	m	70		
	Grassing and Topsoiling				
16.1.13	Topsoiling areas required by an engineer	m ²	600		
16.1.14	Sodding and maintaining required by engineer	m ²	600		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>SECTION 1</u>				
	<u>BILL NO. 17</u>				
17.0	<u>PROVISIONAL SUMS</u>				
17.1	Allow Provisional Sum for all towel and soap dispensers and toilet roll holders	Prov Sum	1	10,000.00	R 10,000.00
17.2	Allow budgetary allowance for electrical works	Prov Sum	1	150,000.00	R 150,000.00
17.3	Allow to supply up to 23no. Of mobile toilets for scholar and teachers.	Prov Sum	1	120,000.00	R 120,000.00
17.4	Allow for repairs to damaged/ unknown services which could not have been reasonably foreseen	Prov Sum	1	20,000.00	R 20,000.00
17.6	Allow for the employment of the community liaison office	Prov Sum	1	80,000.00	R 80,000.00
17.7	Allow construction of septic tank.	Prov Sum	1	R 200,000.00	R 200,000.00
17.8	Contractors mark up on 17.1 -17.7	%	10%	580,000.00	R 58,000.00
17.9	Allow for as-built survey	Prov Sum	1	R 20,000.00	R 20,000.00
	TOTAL TO SUMMARY				

SUMMARY PAGE		
SECTION	DESCRIPTION	AMOUNT (ZAR)
1	PRELIMINARY AND GENERAL	
2	EARTHWORKS (PROVISIONAL)	
3	CONCRETE, FORMWORK AND REINFORCEMENT	
4	MASONRY	
5	WATERPROOFING	
6	ROOF COVERINGS	
7	CARPENTRY AND JOINERY	
8	IRONMONGERY	
9	METALWORK	
10	PLASTERING	
11	PLUMBING AND DRAINAGE	
12	GLAZING	
13	PAINTWORK	
14	STORMWATER DRAINAGE, ETC	
15	WALKWAYS	
16	SECURITY FENCING	
17	PROVISIONAL SUMS	
SUB-TOTAL		
Add : 15% Vat		
TOTAL		

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>SECTION 1</u>				
	<u>BILL NO. 1</u>				
1.0	<u>PRELIMINARIES</u>				
1.1	Fixed charged Items				
1.1.1	Contractual Requirements	Sum	1		
1.2	Establishment of Facilities on Site				
1.2.1	Facilities for the Engineer	Sum	1		
1.2.2	Furnished Office and Latrine Facilities for Engineers Representative	Sum	1		
1.2.3	Project Sign Board as Per Specification	Sum	1		
1.2.4	Survey Equipment and Material	Sum	1		
1.3	Facilities for The Contractor				
1.3.1	Office, storage sheds, fencing,etc	Sum	1		
1.3.2	Contractors ablution and latrine facilities	Sum	1		
1.3.3	Water supplies, electric power and communications, dealing with water and access	Sum	1		
1.3.4	Tools and equipment	Sum	1		
1.3.5	Construction plant	Sum	1		
1.3.6	Supervision for duration of construction	Sum	1		
1.3.7	All other fixed charges including contractual requirements	Sum	1		
1.3.8	Remove all site establishment on completion including equipment store	Sum	1		
1.4	General Safety, Safety Plan, Monitoring and review				
1.4.1	The sum shall include all costs necessary in complying with the occupational health and safety act (1998 as ammended) and the construction regulation 2014 and the eThekwini health and safety requirements.	Sum	1		
	CARRIED SUMMARY				

1.4.2	Compliance with environmental management plan (Note: Access plan to be developed in conjunction with the ECO and allowed for in rates)	sum	1		
1.5	Other time related charges				
1.5.1	Compliance with environmental management specification	Sum	1		
1.5.2	Compliance with occupational health and safety requirements (act 83 of 1994 and construction regulations)	Sum	1		
1.3.2	Security	Prov. Sum	1		
	Compliance with broad based black economic empowerment requirements	Sum	1		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2.0	SECTION 1 BILL NO. 2 EARTHWORKS For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) SUPPLEMENTARY PREAMBLES NOTE IN RESPECT OF REMEASUREMENT OF FOUNDATIONS Foundation brickwork and concrete walls have been measured to top of unfinished floor level Earth excavated All excavations are measured as being in "earth" and/or filling compacted to 93% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling, or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking Working space Working space for formwork to sides of all concrete, except columns, shall be measured only where the concrete face is less than 750mm from the face of the measured excavations Working space for formwork to sides of columns shall be measured for the width of the column face only where both: the top of the column base is more than 1500mm below the commencing level of the excavations and the column face is less than 500mm from the face of the measured excavations No claim shall be considered for any working space for formwork to concrete other than as above described or for working space beyond the sides of trench excavations for the building of brick or block walls Descriptions of excavations for working space shall be deemed to include for any additional risk of collapse so incurred and for the returning and compacting of the excavated material as described				
	CARRIED FORWARD				

	Carting away of excavated material Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stockpiles situated on the building site				
2.1	Site clearance				
2.1.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m ²	880		
2.1.2	Stripping average 150mm thick layer of topsoil and stockpiling on site	m ²	880		
	Taking out and removing, grubbing up roots and filling in holes				
2.1.3	Tree stump exceeding 200mm and not exceeding 1000mm girth	No	1		
2.1.4	Tree stump exceeding 500mm and not exceeding 1500mm girth	No	1		
	Excavation in earth not exceeding 2m deep				
2.1.5	Trenches	m ³	95		
2.1.6	Pits holes	m ³	140		
2.1.7	Reduced levels under floors	m ³	60		
2.1.8	Cut and fill platform material to meet platform level.	m ³	450		
	Extra over all excavations for carting away				
2.1.8	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m ³	150		
	Extra over trench and hole excavations in earth for excavation in				
2.1.9	Soft rock	m ³	25.00		
2.1.10	Intermediate Material	m ³	150.00		
2.1.11	Hard rock	m ³	50.00		
	Risk of collapse of excavations				
2.1.12	Sides of trench and hole excavations not exceeding 1,5m deep	m ²	255		
2.1.13	Sides of trench and hole excavations exceeding 1,5m deep	m ²	75.00		
	Keeping excavations free of water				
2.1.14	Keeping excavations free of all water other than subterranean water	Item	2		
	CARRIED FORWARD				

	Earth filling obtained from the excavations and/or prescribed stockpiles on site compacted to 93% Mod AASHTO density				
2.1.15	Backfilling to trenches, holes, etc.	m ³	90		
	Earth filling supplied by the contractor of G7 quality material in layers of 150mm thick compacted to 93% Mod AASHTO density				
2.1.16	Under floors, pavings, etc.	m ³	25		
	Coarse river sand filling supplied by the contractor				
	Compaction of surfaces				
2.1.18	Compaction of ground surface under floors etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m ²	225		
	Prescribed density tests on filling				
2.1.19	Modified AASHTO Density test	No	5		
2.2	<u>SOIL POISONING</u>				
	Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years				
2.2.1	Under floors etc. including forming and poisoning shallow furrows against foundation walls etc., filling in furrows and ramming	m ²	255		
2.2.2	To bottoms and sides of trenches etc.	m ²	310		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.0	SECTION 1 BILL NO. 3 CONCRETE, FORMWORK AND REINFORCEMENT For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) SUPPLEMENTARY PREAMBLES Type of cement All cement used in concrete work is to be OPC cement, no cement containing fly ash will be allowed Cost of tests The costs of making, storing and testing of concrete test cubes shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Representative/Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Representative/Agent. (Test cubes are measured separately) DEGREE OF ACCURACY Degree of accuracy shall be in accordance with SABS 0155 - 1980 : Grade 2Foundations, concrete on plan : 35mmElements above foundations on plan : 10mm vertical up to 3m : 15mmDoor, window opening on plan : 15mm plumpness of jamb each meter : 5mm Max : 15mmCeilings: Any point above a 3m straight edge placed level in any direction : 6mm				
3.1	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES Mesh reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days				
3.1.1	Surface bed slab	m ³	20		
3.1.2	Aprons	m ³	15.00		
3.1.2	Ramps	m ³	2		
3.1.3	Thickening's under surface bed	m ³	3		
3.2	REINFORCED CONCRETE Reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength at 28 days				
3.2.1	Top Slabs	m ³	10		
	CARRIED FORWARD				

3.3	<u>TEST BLOCKS</u>				
3.3.1	Prepare set of three 150 x 150 x 150mm concrete strength test cubes, label and send to an approved laboratory for testing, pay all charges and submit report to the Representative/Agent. Only successful tests will be paid for	No	16		
3.4	<u>CONCRETE SUNDRIES</u>				
	Finishing top surface of concrete smooth				
3.4.1	Power float Surface beds, slabs, ramps etc.	m ²	140		
3.4.2	Steel/wod Float Surface beds, slabs, ramps, apron etc.	m ²	200		
3.5	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>				
	Rough formwork to sides of				
3.5.1	Edges, risers, ends and reveals not exceeding 300 mm high or wide	m	198		
	Rough formwork to soffits				
3.5.2	Slab propped up exceeding 1,5m and not exceeding 3.5m high	m ²	70		
	Rough formwork to form:				
3.5.3	100-200mm Diameter opening through 170mm slab	No	22		
3.5.4	200-300mm Diameter opening through 170mm slab	No	22		
3.5.5	450 x 600mm Wide opening through 170mm slab	No	12		
	Permanent formwork to soffits:				
	CARRIED FORWARD				

3.6	<u>MOVEMENT JOINTS ETC.</u> Two layers of 375 micron damp proof course in slip joints between horizontal concrete and brick surfaces including cement mortar bed:				
3.6.1	Not exceeding 300mm wide. Horizontal joggle construction joints through concrete including applying bond breaker to mating face and finishing joint with a nosing tool	m	60		
3.6.2	Slabs not exceeding 300mmm thick	m	110		
3.7	<u>REINFORCEMENT</u> High tensile steel reinforcement				
3.7.1	10mm Diameter bars	t	0.50		
3.7.2	12mm Diameter bars	t	2.00		
3.7.3	Fabric reinforcement Type Ref 193 reinforcement in concrete surface beds, slabs, etc.	m ²	150		
3.7.4	Type Ref 395 reinforcement in concrete surface beds, slabs, etc.	m ²	50		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4.0	<u>SECTION 1</u> <u>BILL NO. 4</u> <u>MASONRY</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick Wall ties Descriptions of solid walls (except if built in English bond) and cavity walls shall be deemed to include metal wall ties complying with SABS 28 and of the butterfly or of the modified PWD type, of the required length with each end built at least 75mm deep into brickwork, spaced at not more than 1m centres alternatively to every third course of brickwork Cavity walls etc. Descriptions of cavity walls shall be deemed to include leaving every fifth prebends of the bottom course of the external skin open as a weep hole Face bricks Bricks shall be ordered timeously to obtain uniformity in size and colour Pointing Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc.				
	CARRIED FORWARD				

	Degree of accuracy Degree of accuracy shall be in accordance with SABS 0155 - 1980 : Grade 2 Foundations, concrete on plan : 35mm Elements above foundations on plan : 10mm vertical up to 3m : 15mm Door, window opening on plan : 15mm plumpness of jamb each meter : 5mm Max : 15mm Ceilings: Any point above a 3m straight edge placed level in any direction : 6mm				
4.1	<u>SUBSTRUCTURE & FOUNDATION WALLS</u> Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar				
4.1.1	Half brick wall in pit in honeycomb bond with openings <u>Brickwork in extra hard burnt clay bricks in (4:1) cement mortar with all joints grouted in solid with liquid cement mortar</u>	m ²			
4.1.2	Piers	m ²	15		
4.1.3	One brick wall in foundation	m ²	130		
4.1.4	One and half brick wall in pit	m ²	220		
4.1.5	Bagging of (3:1) sand cement mixture and sealing to brickwork Bagging and sealing the outer face of the inner skin of walls with 1:3 cement and sand mixture and seal with two coats 'Brixal' bitumen emulsion waterproofing coating	m ²	720		
4.2	<u>SUPERSTRUCTURE</u> Brickwork of NFX bricks (14MPa nominal compressive strength) in Class I mortar				
4.2.1	Piers	m ³	15		
4.2.2	Half brick wall	m ²	110		
4.2.3	Half brick wall in beam filling	m ²	70		
4.2.4	One brick wall	m ²	410		
4.2.5	<u>FACED BRICKWORK</u> External facings in approved face bricks (FBS) with a PC Amount of R6 500.00 (Six Thousand Five Hundred Rands) per thousand bricks delivered to site (excluding VAT) pointed with square recessed horizontal and vertical joints				
4.2.5	Extra over brickwork for face brick work	m ²	390		
	CARRIED FORWARD				

4.2.6	Extra over ordinary brickwork in piers for facing and pointing in stretcher bond	m ²	15		
4.2.7	Extra over brickwork in beam filling for face brickwork	m ²	70		
4.2.8	Face brick-on-edge coping on top of one brick wall in cement mortar and pointing on top and both sides	m	10		
4.2.10	Cut face brick-on-edge external window cill, 180mm wide, set sloping and slightly projecting in cement mortar and pointed on top, front edge and projecting soffit including all necessary fair raking cutting to facings under and fair and fitted ends	m	7		
4.2.11	Extra over sill for solid face brick on ends of sills	No	15		
4.2.14	Movement joints Movement joint formed of 20mm softboard built in vertically between brickwork	m	20		
4.2.15	Brickwork reinforcement 75mm Wide reinforcement built in horizontally	m	370		
4.2.16	150mm Wide reinforcement built in horizontally	m	2,300		
4.2.17	Galvanised hoop iron cramps, ties, etc. 40 x 2mm Diameter roof tie 1800mm girth bent double with one end fixed to timber and other end built into brickwork	No	60		
4.2.18	Prestressed fabricated lintels 110 x 76mm Lintels in lengths not exceeding 3m	m	30		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	SECTION 1				
	BILL NO. 5				
5.0	<u>WATERPROOFING</u>				
	For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC)				
	<u>SUPPLEMENTARY PREAMBLES</u>				
	Waterproofing				
	Waterproofing of roofs, basements, etc. shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc. with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
5.1	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
	One layer of 375 micron black embossed polyethylene damp-proof course				
5.1.1	In walls, under cills, etc.	m ²	20		
	250 Micron green medium density damp-proof membrane laid loose under solid floors with pressure sensitive tape jointing				
5.1.2	Under surface beds and ramps	m ²	170		
	<u>WATERPROOFING TO WALLS</u>				
	Prepare and apply ecofelt membrane with "Duraflex", two coats of "Duraflex" layer and one layer of Abecote SF356 or other equal and approved waterproof membrane in accordances to manufacturers instructions				
	On pit walls	m ²	149		
	<u>JOINT SEALANTS, ETC.</u>				
	Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc.				
	10 x 10mm In vertical isolation joints in brickwalls including raking out joint filler as necessary	m	160		
	For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC)				
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
6.0	SECTION 1 BILL NO. 6 ROOF COVERINGS For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC)				
	PREAMBLES				
	SUPPLEMENTARY PREAMBLES				
	PREAMBLES				
	Certificate for galvanised roof covering				
	The contractor is to submit a certificate signed by the merchant, stating that the galvanised roof covering supplied, complies with the required thickness specified				
6.1	CORRUGATED METAL SHEETING AND ACCESSORIES 0,6mm IBR-profile Z275 galvanised roof sheeting 0,8mm thick and accessories fixed to timber purlins				
6.1.1	Safintra Widedek or (rain clod sheeting) or similar approve or classicorr Roof covering with pitch not exceeding 17,5 degrees	m ²	160		
6.1.2	Ridge capping 460mm girth and three times bent along girth.	m	30		
6.1.3	Ridge closer or broad flute closer to suit profile	m	60		
6.1.4	Holes for 150mm diameter pipe including flashing around	No	15		
6.1.5	Isoboard High Density 32 - 36 kg/m ³ Rigid Extruded Polystyrene 100% Closed Cell Insulation Boards; 30mm Thick x 600mm Wide	m ²	145		
6.1.6	Translucent sheeting/ semi- transparent sheeting to allow light	m ²	35		
6.1.7	Roof cap around 110-160mm dia pipe for vents	No.	22		
6.1.8	Trouble sasilation laid under roof sheeting	m ²	145		
	TOTAL TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7	<u>SECTION 1</u> <u>BILL NO. 7</u> <u>CARPENTRY AND JOINERY</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> Joinery: Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc. Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes Fixing Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete Timber All softwood to be South African Pine <u>DESCRIPTIONS</u> Items described as "bolted" shall be deemed to exclude the bolts and include the holes unless otherwise described Where the fixing of members is not stated it shall mean the nailing of one timber member to another The term "planted on" shall mean the nailing of one timber member to another The term "screwed on" shall mean the countersunk screwing of one timber member to another The term "screwed on and pelleted" shall mean the screwing of one timber member to another with the heads of screws sunk and pelleted The term "plugged" shall mean the countersunk screwing of a timber member to and including plastic plugs in brickwork or concrete The term "plugged and pelleted" shall mean the screwing of a timber member to and including plastic plugs in brickwork or concrete with heads of screws sunk and pelleted Shelving, etc.. described as screwed to steel must be fixed from underside and prices are to include for countersunk drilling through the steel for screw fixing Descriptions of floors, ceilings, joinery, etc.. shall be deemed to include for all square cutting Descriptions of items given in lineal metre shall be deemed to include for mitres, stopped ends, fitted intersections, etc.. Descriptions of rounded angles, rebates, grooves, chamfers, moulded edges, etc.. shall be deemed to include for angles, ends, etc.				
	CARRIED FORWARD				

<u>PRE-FABRICATED TIMBER ROOF TRUSSES AND ASSOCIATED BRACING</u> NOTThe following is applicable in respect of roof trusses and bracing:Plate nailed timber trusses shall be of approved design and manufacture and constructed with softwood structural timber by a truss Fabricator holding a current Certificate of Competence awarded by the Institute of Timber ConstructionEach roof truss shall have all its members accurately cut and closely butted together and rigidly fixed by CSIR approved patented galvanised metal spiked connectors, precision pressed on both sides of each intersection by an approved method, all in accordance with the manufacturer's instructions. The design, manufacture and transportation of the trusses, bracing, etc.. shall be under the control of a registered Structural Engineer in accordance with SABS 0160 and SABS 0163, who shall, after erection, provide a certificate confirming that the design, manufacture, transportation, erection and bracing has been carried out in accordance with the specifications.The design shall include for all live loads, wind loads and dead loads imposed by roof covering, purlins, ceilings, etc..Fully detailed shop drawings of all trusses, etc., indicating sizes, bracing, loading, etc., shall be submitted to the Representative/Agent for approval prior to fabrication.Erection shall be carried out in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber Roof Trusses" published by the Institute for Timber Construction and the Council for Scientific and Industrial Research or as detailed by the designer.Prices for trusses and bracing shall include design and preparation of shop drawings.The following is applicable in respect of the general roof construction:Roof pitches are 7 degrees as per roof construction notes on the relevant drawings.Roof covering is ribbed sheet steel on 50 x 75mm purlins at maximum 1200mm centres nailed an tied with wire tiesCeilings are 6.4mm gypsum plasterboards on 38 x 50mm brandering.The dimensions in the description of the roof construction are nominal and actual measurements are to be obtained from the Representative/Agent and/or the site before design or fabrication of roof trusses commences.NOTThe roof construction is detailed on the drawings an details included at the back of these Bills of Quantities for tender purposes.				
CARRIED FORWARD				

7.1	<u>COMPLETE ROOF</u> Sawn softwood pre-fabricated plate nailed timber in roof construction to roofs complete with 38 x 114mm wall plates (elsewhere treated with carbolinium before fixing), trusses, jack rafters, additional supports for jack trusses and louvre frames, etc., all necessary permanent bracing, metal hangers, cleats, bolts, etc., purlins as described and one gang plank per roof layout over entire building length between fire walls (Roof covering, louveres to Dutch hips and fascias elsewhere) Double pitched truss construction to 17.5 degrees pitch at 4000mm- 7000mm wide block, comprising 38 x 114mm SAP grade 7 rafter 38x 114 SAP grade 7 webs and struts including all sprockets, bracing, gangnails, nails, nuts, washers, joints etc, with eaves and verge overhang as per details by engineer.	No	25		
7.1.1					
	CARRIED FORWARD				

7.2	WOOD PRESERVATIVES				
	Carbolinum protective wood coatings				
7.2.1	Two coats applied hot sawn timber before fixing	m²	60		
7.2.2	Two coats applied hot wrought exposed roof timbers	m²	50		
7.3	DOORS				
	Purpose made wrot Meranti door hung to timber frames				
7.3.1	40mm x 813 x 2032mm High TDM Hardwood doors SA Sub frame double top and bottom rail (D2)	No	12		
7.3.2	40mm x 813 x 1882mm High TDM Hardwood doors SA Sub frame double top and bottom rail (D1)	No	22		
7.3.3	1100mm Long single action purpose cut timber "meranti" frames 40 x 250mm Frame suitable for door size 850 x 2050mm high, with 1pair hinges	No	22		
7.4	FASCIAS AND BARGE BOARDS				
	Tempered fibre-cement				
7.4.1	12 x 225mm Fascia and barge boards countersunk screwed to roof timbers (elsewhere) with two brass screws at maximum 1200mm centres and jointed with and including standard aluminium halfround cover strips at all joints	m	96		
7.5	WINDOW SILLS				
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	SECTION 1				
	BILL NO. 8				
8.	IRONMONGERY				
	For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC)				
	Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish.				
8.1	IRONMONGERY FIXED TO DOORS, ETC.				
	Locks				
8.1.1	40mm Brass five pin tumbler padlock keyed alike with one pair of keys per every five padlocks	No	6		
8.1.2	75mm Three lever upright mortice lockset with satin chrome furniture	No	9		
8.1.3	Indicator locks	No	22		
	Handles				
8.1.3	100mm Chromium plated bow handle bolted through door with the bolt ends hammered to prevent the nuts being removed	No	9		
8.2	SUNDRIES				
8.2.1	38mm Rubber door stop plugged and screwed to wall or floor	No	7		
8.3	LETTERS, NAMEPLATES, ETC.				
	Indicator plates countersunk holed for and screwed to door or brickwork with chromium plated dome-headed screws				
8.3.1	75 x 150mm Aluminium international toilet sign with FEMALE figure screwed to door	No	2		
8.3.2	75 x 150mm Aluminium international toilet sign with MALE figure screwed to door	No	2		
8.3.3	75 x 150mm Aluminium international toilet sign with WHEELCHAIR figure screwed to door	No	3		
8.3.4	75 x 150mm Aluminium international toilet sign with Grade R figure screwed to door	No	2		
8.4	BATHROOM FITTINGS				
	Chairman Industries Grabrails or equal and approved				
8.4.1	32mm Diameter code DL2 side grab rail, plugged and screwed to the wall	No	1		
8.4.2	32mm Diameter code SR2 rear grab rail around cistern, plugged and screwed to the wall	No	1		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	QUANTITY
10	<u>SECTION 1</u> <u>BILL NO. 10</u> <u>PLASTERING</u> For preambles refer to "General Specification of Materials and Methods to be used for Building Contracts" (GP/ASC)				
10.1	<u>SCREEDS</u> 1 :3 Cement plaster screeds steel trowelled on concrete				
10.1.1	40mm Thick on floors and landings	m ²	150		
10.2	<u>EPOXY SCREED</u> 4mm Thick self leveling non-slip epoxy screed, no metallic additives, including primer applied to manufacturer's specification				
10.2.1	On screeds on floors and landings	m ²	150		
10.3	<u>INTERNAL PLASTER</u> One coat 1:4 cement plaster to brickwork				
10.3.1	On walls	m ²	460		
10.3.2	On narrow widths	m ²	67		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
11	SECTION 1 <u>BILL NO. 11</u> <u>PLUMBING AND DRAINAGE</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) <u>SUPPLEMENTARY PREAMBLES</u> UPVC pipes and fittings Soil, waste and vent pipes and fittings shall be solvent weld jointed uPVC pressure pipes and fittings Pipes for water supply shall be of the Class stated Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints Copper pipes Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be architect specification. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground Fixing of pipes Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc., casting in, building in or suspending not exceeding 1m below suspension level				
	CARRIED FORWARD				

	Reducing fittings Where fittings have reducing ends or branches, they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc. will be entertained Wire gratings Descriptions of gutter outlets, etc. shall be deemed to include wire balloon gratings Exposed concrete surfaces Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catch pits, inspection chambers, etc. shall be finished smooth with plaster Excavations No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling Soft rock and "Hard rock" shall be as defined in "Earthworks" Laying, backfilling, bedding, etc. of pipes Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L: Medium-pressure pipelines SABS 1200LD: Sewers SABS1200LE: Storm water drainagePipe trenches etc. shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : Earthworks (Pipe trenches)Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200LB : Bedding (Pipes)Unless otherwise described bedding of rigid pipes shall be Class B bedding Flush pans Flush pans shall have straight or side outlets and "P" or "S" traps as necessary				
	CARRIED FORWARD				

	Stainless steel basins, sinks, wash troughs, urinals, etc. Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable Waste unions Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings Petroleum anti-corrosion tape Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc. Prices for wrapping of pipes shall include for all work as described to couplings in the length				
11.1	<u>GUTTERS ETC.</u> PVC Rainwater Goods with Patented Flexible Elastomeric Joints Half round eaves gutter including union clips and fixing to falls on patent brackets spaced at maximum 1000mm centres fixed to fibre reinforced cement fascia with brass bolts with nuts and washers.				
11.1.1	Extra over gutter for stopped end.	m	60		
11.1.2	Extra over gutter for outlet for 90mm diameter pipe.	No	16		
11.1.3	90mm Diameter rainwater pipes.	No	12		
11.1.4	Extra over rainwater pipe for bend.	m	24		
11.1.5		No	12		
11.2	<u>SANITARY FITTINGS</u> NOTE: All sanitary fittings shall be sealed next to walls, fitting sides and shelves with an approved type non-fungal sustaining white silicon				
	CARRIED FORWARD				

	Polyethylene fittings				
11.2.1	Atlas Plastics rotomoulded polyethylene Christy wash hand basin (code: 382AP) 570 x 395mm wide, or equal approved, with two tapholes and 40mm waste outlet, plugged and screwed to the wall with galvanised screws and brackets	No	10		
11.2.2	Atlas Plastics (Code 222 AP) VIP 200 pit pedestal with lid, or equal approved, size 507 x 565 x 480mm high overall fitted into VIP Flange cast into concrete slab of pit.	No	18		
11.2.3	Atlas Granite bowl urinal (code: 507AP) or equal approved, size 320mm x 350 x 495mm high, coupled with Atlas waterless urinal waste fittings (code: 496 AP) complete plugged and screwed to the wall with galvanised screws and brackets	No	8		
11.2.4	Plastic Atlas bambey longdrop pedestal seat for grade R toddler	No	3		
11.2.5	Kimberly Clark professional or equal approved Roll dispenser (two rolls) code 405606 plugged to walls	No	22		
11.3	<u>TAPS, VALVES, ETC.</u>				
11.3.1	'Cobra-Watertech' or equally approved: 15mm Chromium plated elbow action pillar tap	No	10		
11.3.2	15 mm Chromium plated biptap with 3/4" BSP hose union with star tap handles	No	12		
11.3.3	15mm compression type angle regulating valve with 15mm x 10mm outlet compression nut and ring	No	15		
11.4	<u>WASTE UNIONS, TRAPS, ETC.</u>				
11.4.1	Rubber traps, etc. 38mm Deep seal "P" or "S" trap	No	10		
	CARRIED FORWARD				

11.5	<u>SANITARY PLUMBING</u> uPVC soil and vent pipes for above ground installations				
11.5.1	50mm Pipes	m	80		
11.5.1	110mm Pipes	m	30		
11.5.2	110 mm Black A/G pipes	m	20		
	Extra over uPVC soil and vent piping for above ground fittings				
11.5.3	50mm Bend	No	25		
11.5.4	110mm Bend	No	30		
11.5.5	50mm Junction	No	10		
11.5.6	50mm Access bend	No	20		
11.5.7	110mm Access bend	No	20		
	Ventilators 240mm Polycarbonate 'Turbo Ventura' ventilator with 150mm diameter throat fixed to top of 150mm vent pipe (vent pipe elsewhere measured).	No	27		
11.6	<u>WATER SUPPLIES</u> uPVC pipes fixed to walls, etc				
11.6.1	15mm Pipes	m	40		
11.6.2	22mm Pipes	m	120		
	Grating, covers, etc 450 x 600mm Type 9D Polymer manhole cover and frame cast into slab complying with SABS specification 558, including approved galvanised locking bar and padlock.	No	10		
11.8	<u>TANKS</u> Tanks and fittings, etc 2500 Litre plastic seamless horizontal water storage tank complete with fixing lugs and lid, fitted with and including 15mm brass bibtap with handle suitable for padlocking and setting in position on concrete tankstand (elsewhere measured) and tying down with 4mm diameter galvanised wire wrapped twice around centre of tank and secured to each corner of tank stand with a double strand of 4mm diameter galvanised wire embedded into concrete.				
11.8.1	Hole through top of tank lid for 75 x 100mm pipe.	No	4		
11.8.2		No	4		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
12	<u>SECTION 1</u> <u>BILL NO. 12</u> <u>GLAZING</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC)				
12.1	<u>GLAZING TO STEEL WITH PUTTY</u>				
	4mm Opaque laminated safety glass				
12.1.1	Panes exceeding 0,1m2 and not exceeding 0,5m2.	m ²	10		
12.1.2	Panes exceeding 0.5m2 and not exceeding 1m2	m ²	6		
12.1.2	Mirrors NOTE Mirrors shall be of 6mm thick silvered GG quality polished float glass with rounded and polished edges and splayed corners Unless otherwise described, mirrors shall have four holes for and be screwed to and including approved patent plugs in plastered or tiled wall with countersunk steel screws tap-threaded for and including screw type chromium plated dome-headed caps and felt washers				
12,1,3	Mirror size 450 x 600mm	No	9		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
13	SECTION 1 BILL NO. 13 PAINTWORK For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) SUPPLEMENTARY PREAMBLES PREPARATORY WORK TO EXISTING WORK Previously painted plastered surfaces Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth Previously painted plasterboard surfaces Surfaces shall be thoroughly cleaned before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth. Steel H-strips and nails to be reprimed with calcium plumbate primer. Previously painted metal surfaces Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal. Previously painted wood surfaces Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth. Existing wood surfaces to be stripped, neutralised, sanded and treated. Existing facebrick surfaces Surfaces shall be thoroughly cleaned down. Cracks and crevices shall be primed, filled with suitable filler and finished smooth.				
13.1	PAINT ON PLASTER, ETC.. Prepare, stop and apply one coat alkali resistant pure acrylic filler coat and one full coat washable mat acrylic PVA paint				
13.1.1	On internal plastered walls Prepare, stop and apply one coat alkali resistant primer and two full coats acrylic emulsion paint for exterior use	m ²	460		
13.1.2	On external fibre-cement fascias and barge boards including priming metal cover strips and screw heads with one coat zinc phosphate alkyd resin primer	m ²	20		
13.2	PAINT ON METAL Prepare and apply one coat alkali resistant plaster primer, one coat universal undercoat and two coats low gloss alkyd eggshell paint				
13.2.1	On pressed steel door and frames	m ²	10		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
14	SECTION 1 BILL NO. 14 STORMWATER DRAINAGE, SOIL DRAINAGE AND WATER SUPPLY (PROVISIONAL) For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) All excavations are measured as being in "earth" and/or filling compacted to 98% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking				
14.1	STORMWATER DRAINAGE Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days V-shaped channel 1000mm wide x 100mm thick with rounded salient edges and finished on exposed surfaces with (2:1) cement mortar, laid to falls in panels not exceeding 2000mm long				
14.1.1	with 12mm bitumen impregnated softboard movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavation and formwork	m	80		
14.1.2	Extra over channel for angles, intersections, ends, etc.	No	6		
14.1.3	Movement joints Movement joint not exceeding 300mm high formed of 12mm bitumen impregnated softboard placed vertically in position between concrete stormwater channel and brick walls or concrete aprons, etc. including raking out top section 10mm deep and filling with bituminous compound	m	60		
	CARRIED FORWARD				

14.2	<u>SOIL DRAINAGE</u> 110 diameter Class 34 uPVC pipe with compression couplings, including laying in ground to falls on and including 150mm selected compacted Class C granular bedding material, with compacted selected fill blanket hand compacted to 90% Mod. AASHTO density in 150mm layers with 300mm cover to top of pipe, and backfilling to 90% modified AASHTO density in 150mm layers, including all necessary excavations, working space, carting away surplus excavated material, risk of collapse, compaction, dewatering of trenches, etc.. all in accordance with specifications set out in SANS 1200 LB, LE and DB.				
14.2.1	110mm diameter pipe in and including trenches not exceeding 1m deep	m	160		
	Extra on uPVC pipes for fittings				
14.2.2	110mm Bend	No	10		
14.2.3	110mm Access bend	No	8		
14.2.4	110mm Junction	No	8		
14.2.5	110mm Access junction	No	15		
14.3	<u>SOAKAWAYS</u>				
	Site clearance				
14.3.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m ²	170		
14.3.2	Stripping average 100mm thick layer of top soil and stockpiling on site	m ²	170		
	Excavation in earth not exceeding 2m deep				
14.3.3	Soakaway trenches	m ³	70		
	Extra over all excavations for carting away				
14.3.4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m ³	40		
	Extra over trench and hole excavations in earth for excavation in				
14.3.5	Soft rock	m ³	15		
14.3.6	Hard rock	m ³	20		
	CARRIED FORWARD				

	Selected filling with material from the excavations compacted to a density of at least 93% Mod. AASHTO maximum density:				
14.3.7	Backfilling to trenches, holes, etc.	m ³	20		
	Back filling with material supplied by the contractor				
14.3.8	19mm Crushed stones encasing to pipes	m ³	45		
14.3.9	50mm Layer of coarse sand or fine gravel	m ³	25		
	Geofabric				
14.3.10	Bedim A4 geofabric filter blanket of 2,1mm thickness under 2kPa pressure wrapped around stone encasing with 150mm side and 300mm end laps including stitching	m ²	160		
	uPVC pipes				
14.3.11	110mm Perforated drainpipes laid between stones	m	60		
TOTAL TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	SECTION 1				
	BILL No. 15				
15	WALKWAYS For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) All excavations are measured as being in "earth" and/or filling compacted to 98% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking				
15.1	WALKWAYS				
	Site clearance				
15.1.1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m ²	250		
15.1.2	Stripping average 100mm thick layer of top soil and stockpiling on site	m ²	280		
	Excavate in earth not exceeding 2000mm deep				
15.1.3	Trenches	m ³	60		
15.1.5	Extra over all excavations for carting away surplus material from excavations and/or from stockpiles on site to a dumping site to be located by the Contractor	m ³	25		
15.1.6	Extra over excavations in earth for trenches and holes for excavations in soft rock	m ³	22.50		
15.1.7	Extra over excavations in earth for trenches and holes for excavations in hard rock	m ³	10		
15.1.8	Risk of collapse of sides of excavations for trenches and holes not exceeding 1500mm deep from natural, elevated or reduced ground level	m ²	10		
15.1.9	Allow for keeping excavations free of all water other than subterranean water	Item	1		
	CARRIED FORWARD				

	Filling, etc.				
15.1.10	Backfilling from the excavations to trenches and holes compacted to 93% modified AASHTO density	m ³	5		
15.1.10	Earth filling supplied by the contractor of G7 quality material under floors in layers of 150mm thick compacted to 93% Mod AASHTO density	m ³	20		
15.1.11	Prepare ground surface by scarifying top 150mm layer of ground and re-compact to 93% modified AASHTO density	m ²	200		
	Tests				
15.1.12	Tests to determine the degree of compaction, etc. of ground or filling	No	12		
	Protection against termites				
15.1.13	Poisoning surface of ground in bottoms of trenches, bases, etc.	m ²	250		
15.1.14	Poisoning surface of ground or filling under floors, steps, etc. including raking out 75mm deep V-shaped channels against the walls, etc. treating with poison solution, backfilling and ramming	m ²	20		
	Mass concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days				
15.1.15	In footings to walls cast against excavated surfaces, stepped and levelled	m ³	20		
	Mesh reinforced concrete with a coarse aggregate of 19mm and a minimum compressive strength of 25MPa at 28 days				
15.1.16	In surface beds cast in panels	m ³	20		
	Sundries				
15.1.17	Finish top surface of concrete smooth and even non-slip wood floated surface including additional dry sand/cement mixture added as necessary whilst the concrete is still wet	m ²	200		
15.1.18	Finish edge of concrete surface beds, etc. not exceeding 300mm high to a smooth and even steel floated surface including additional dry sand/cement mixture added as necessary whilst the concrete is still wet including rounded corner along top edge	m	80		
	Formwork to				
15.1.19	Edges, risers, ends, etc. not exceeding 300mm high or wide	m	80		
	CARRIED FORWARD				

15.1.20	Movement joints Movement joint not exceeding 300mm high formed of 12mm bitumen impregnated softboard placed vertically in position between concrete surface bed and brick walls, etc. including raking out top section 10mm deep and filling with bituminous compound	m	32		
	TOTAL TO SUMMARY				

16	<u>BILL No. 16</u> <u>SECURITY FENCING & ANCILLARY WORKS</u> For preambles refer to "General Specification of Materials and Methods to be used for BuildingContracts" (GP/ASC) All excavations are measured as being in "earth" and/or filling compacted to 93% modified AASHTO density Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking				
	CARRIED FORWARD				

	Dry Stack Retaining wall				
16.1.7	Construction of precast concrete staircase on sloped banks	m	10		
16.1.8	Supply and install 110mm diameter kaytech flow-drain or equipment complete with geofabric lining and 19mm stone to manufacturers specification.	m ²	65		
16.1.9	Provide all materials, plant and labour to install L300 Loffelstein dry stack retaining blocks inclusive of excavation, 25MPa concrete footing and compacted backfill to suppliers specification	m ²	95		
16.1.10	Supply and place U14 geotextile fabric layer behind dry stack retaining wall	m ²	95		
	Erosion Protection and Run-off Control				
16.1.11	Erosion protection: supply and install concrete channel SWC4 from LG Green or equivalent	m	70		
	Grassing and Topsoiling				
16.1.12	Topsoiling areas required by an engineer	m ²	320		
16.1.13	Sodding and maintaining required by engineer	m ²	320		
TOTAL TO SUMMARY					

PART C3: SCOPE OF WORK

	<u>PAGE</u>
C3.1 PROJECT DESCRIPTION AND SCOPE OF CONTRACT	143
C3.2 PROJECT SPECIFICATIONS	146
PS.1 Programme, Method of Work, and Accommodation of Traffic	
PS.2 Services	
PS.3 Watermains	
PS.4 Sewers	
PS.5 Stormwater	
PS.6 Electrical Plant	
PS.7 Telkom S.A. Limited / Neotel Plant	
PS.8 CCTV Plant	
PS.9 Management of the Environment	
PS.10 Occupational Health and Safety	
C3.3 STANDARD SPECIFICATIONS	156
C3.3.1 Listing of the Standard Specifications	
C3.3.2 Amendments to the Standard Specifications	
C3.4 PARTICULAR SPECIFICATIONS	158
C3.4.1 Part AH - OHSA 1993 Safety Specification (2014)	
C3.4.2 Standard Environmental Management Plan for Civil Engineering Construction Works	
C3.5 CONTRACT AND STANDARD DRAWINGS	159
C3.5.1 Contract Drawings / Details	
C3.5.2 Standard Drawings	
C3.6 ANNEXURES	160

C3.1: PROJECT DESCRIPTION AND SCOPE OF CONTRACT

C3.1.1 Description of Works

The Provision of Water and Sanitation in Schools (Cluster 1) Lambothi High School and Inhlanganiso Primary School (iLembe district)

The following typical scope of works are to be constructed under this contract:

- Earthworks for the establishment of a suitable site location/platform as required by the Design Consultant's design. Additional earthworks may be required to improve the site accessibility. This will be confirmed after receipt of a detailed geotechnical report.
- Strip existing ablution blocks being used by the senior and junior learners and convert to storage areas.
- Construction of brickwork ablution blocks as shown in the construction drawings.
- Fence off Grade R ablution block.
- Refurbish existing teachers' ablutions and convert sickrooms to disabled toilets.
- Structural rehabilitation of collapsing walls along classroom passageway.
- Installation of a water harvesting tank at each of the new ablution blocks.
- The construction of sewer lines and water lines as specified in the construction drawings, SANS 1200 and eThekweni Water and Sanitation Standard Drawings. This work will include the pipe and erosion protection where required.
- The installation of valves where required.
- The provision of ancillary works and connection of the sewer and water outlets and inlets from the ablution blocks to the municipal water lines and sewer lines.
- Construction of covered walkways to ablution blocks.
- Depending on the earthworks during construction, a retaining wall may be necessary.

C3.1.2 Description of Site and Access

Lambothi High School and Inhlanganiso Primary School (iLembe district).

C3.1.3 Nature of Ground and Subsoil Conditions

The site is predominantly underlain by red sand, subordinate white, yellow, brown, and purple sand, and basal conglomerate of the Berea Formation, according to the geotechnical examination.

The study also revealed that the location is supported by a mantle of transported and Berea Sands.

During the examination, no groundwater seepage was discovered in the inspection pits excavated across the site. However, during periods of extended rainfall, particularly during the summer season, the occurrence and quantity of groundwater seepage flow can be expected to increase significantly. Perched groundwater flows at the soil/rock interface are likely to increase in frequency throughout the rainy season.

In terms of transported materials and berea formation, the transported materials are primarily colluvial soils that occur from the surface to depths ranging from 0.12 to 0.25m below the existing ground level. They are classified as clayey silty sands that are normally dry to slightly damp, light brown, loose to medium dense, fine

grained, and unbroken. The Berea Formation was discovered beneath colluvial soils and extending to depths of more than 4.0m below existing ground level, as revealed by dynamic cone penetrometer testing. They are defined as brown, reddish brown, light yellowish brown, mottled light red, and occasionally light grey, very loose to medium-dense, intact, fine-grained silty sands.

Three Dynamic Cone Penetrometer, Light tests, identified as DPL1 through DPL3, were performed on site adjacent to inspection pits to offer an estimate of the depth of bedrock and the consistency of the soils underlying the site. The DPL tests were carried out at the approximate positions. These were advanced to depths ranging from 3.0 to 4.2m below the present ground level.

All earthworks should be carried out in line with SANS 1200D, as revised from time to time. At OMC, all fill shall be compacted in layers no thicker than 150mm and loose to at least 93% modified AASHTO density. To provide for free drainage, terrace surfaces should be slanted at 1:112. Terraces must be designed with care to ensure that rainwater runoff does not cause erosion.

C3.1.4 Employers Objectives

The primary objective of the eThekweni Municipality is to provide ablution facilities and water services for schools within the iLembe District. The eThekweni Municipality (Water and Sanitation Department) through DOE noted the need associated with provision of hygienic ablution facilities as well as water services in schools; therefore, a contractor is required to carry out all construction activities related to the improvements of ablutions

The secondary objectives of the employer are as follows:

- To provide employment opportunities during the construction of the infrastructure
- To promote economic development within the eThekweni Municipality
- To facilitate the participation and growth of local small to medium contractors

The employer's further objectives are to deliver public infrastructure using labour intensive methods. Employer expects the work to be undertaken safely, efficiently, and effectively with due attention paid to the environmental and social concerns, finally delivering a fit for the purpose trading solution.

C.3.1.5 Employer's Delivery Model

eThekweni Water and Sanitation will procure the services of:

- The employer as a Programme Manager to manage the deliverable of works, act as the Employer's agent in terms of the Design Consultants PSC3 contracts, act as the project manager in terms of the ECC3 Contract and provide cost consultancy services
- Design Consultant will design and develop the scope of work provide the drawings, bill of quantities, project specifications for the proposed ablution blocks in iLembe school. Also provide site monitoring, the quality of constructed works and certify quantities as well as act as the supervisor in terms of contractors ECC3 contract.
- The contractor to construct ablution facilities as per construction drawings using the NEC3 family of contract and the manner that fully satisfies the requirements of the CIBD's Standard for Uniformity in construction procurement

C.3.1.6 Description of Works (Scope of Works)

The project will involve the construction of new ablution facilities over a (6) months period

C.3.1.6.1 Lambothi High School and Inhlanganiso Primary School (Ward 00 & 00)

The scope of work required to adequately service the school consists of the following:

- There are 1107 learners and 31 teachers to be serviced,
- Use rainwater harvesting tanks to collect water to augment municipal water.
- Demolish existing ablutions and construct new ablution blocks except for teachers to be refurbished, (Female teachers - 3 toilets, 2 wash basins; Male teachers - 1 toilet, 2 urinals, 2 wash basins; Female learners - 12 toilets, 8 wash basins; Male learners - 4 toilets, 6 urinals, 3 wash basin; Grade R (Unisex) 5 toilets, 3 wash basins. 2 disabled toilets.
- Fence off Grade R ablution block and play area
- Allow for Water supply from existing meter
- The ablutions will be constructed as per NEIMS (National Education Infrastructure Management Systems) specifications.
- As per the new specifications from the department of Basic Education, all ablutions must have a concrete walkway linking them and the classrooms.
- Covered walkways to ablution blocks.
- Depending on the earthworks during construction, a retaining wall may be necessary

C3.2: PROJECT SPECIFICATION

PREAMBLE

In the event of any discrepancy between a part or parts of the Standard or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Employer's Agent before the execution of the work under the relevant item.

C3.2.1 GENERAL

PS.1 PROGRAMME, METHOD OF WORK, AND ACCOMMODATION OF TRAFFIC

This Clause is to be read in conjunction with the provisions and obligations as contained in **SANS 1921-1 and SANS 1921-2**.

PS.1.1 Preliminary Programme

The Contractor shall include with his tender a preliminary programme on the prescribed form (**see Part T2.2: Preliminary Programme**) to be completed by all Tenderers. The programme shall be in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

Tenderers may submit tenders for an alternative Time for Completion in addition to a tender based on the specified Time for Completion. Each such alternative tender shall include a preliminary programme similar to the programme above for the execution of the works, and shall motivate his proposal clearly by stating all the financial implications of the alternative completion time.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse **weather conditions** (**refer to Clause 5.12.2.2**) and special non-working days (**refer to Clause 5.1.1.1**) as specified in the in the Contract Data.

PS.1.2 Programme in Terms of Clause 5.6 of the General Conditions of Contract

It is essential that the construction programme, which shall conform in all respects to **Conditions of Contract (NEC 3 2013)**, be furnished within the time stated in the Contract Data.

The preliminary programme to be submitted with the tender shall be used as basis for this programme.

The Tenderer's attention is drawn to the fact that a number of factors will affect the programming of and method of carrying out the works. The more important of these are

- (1) **Time required for service relocations.**
- (2) **Time allowances to be made for the ordering of special items.**
- (3) **Notification required by service organisations.**

- (4) Any special sequence in which work must be carried out. Must certain areas of work be finished before work commences on others?
- (5) If delays are anticipated with service relocations the contractor should be asked to allow time.
- (6) Is work required out of normal hours? (eg. to accesses).
- (7) Vehicular access to private property is to be maintained.
- (8) Traffic restrictions.

Those known, existing services in the area of the works have been depicted on the contract drawings. It is evident, however, that the status of existing service records as far as can be ascertained might not reflect the actual situation in the field. As such, due allowance has been made in the Bill of Quantities for the proving of services where directed by the Engineer.

PS.1.3 Requirements for Accommodation of Traffic

PS.1.3.1 General

Accommodation of traffic, where applicable, shall comply with **SANS 1921-2: 2004: Construction and Management Requirements for Works Contracts, Part 2: Accommodation of Traffic on Public Roads occupied by the Contractor**. The Contractor shall obtain this specification from Standards South Africa if accommodation of traffic will be involved on any part of the construction works.

Clause 4.10.4 of SANS 1921-2: 2004 shall be replaced with the following:

“Road signs and markings shall comply with the requirements of **“The South African Road Traffic Signs Manual - Volume 2: Roadworks Signing”**”.

PS.1.3.2 Basic Requirements

The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

The Contractor shall ensure that all road signs, barricades, delineators, flagmen and speed controls are effective and that courtesy is extended to the public at all times.

Failure to maintain road signs, warning signs or flicker lights, etc, in a good condition shall constitute ample reason for the Employer's Agent to suspend the work until the road signs, etc, have been repaired to his satisfaction.

The Contractor may not commence constructional activities affecting existing roads before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.

The Contractor shall construct and maintain all temporary drainage works necessary for temporary deviations. The Contractor shall ensure that the existing property accesses are maintained at all times. Where necessary the Contractor shall make allowance in the rates for completing the work required to the accesses out of normal hours.

PS.1.3.3 Traffic Safety Officer

Where warranted by traffic conditions on or near the site, the Contractor shall nominate a suitable member of his staff as traffic safety officer to be responsible for the arrangement and maintenance of all the measures for the accommodation of traffic for the duration of the project. Duties of the traffic safety officer shall be in compliance with the Occupational Health and Safety Act 1993 and the Construction Regulations 2014.

PS.1.3.4 Payment

The Contractor's tendered rates for the relevant items in the Bill of Quantities shall include full compensation for all possible additional costs which may arise from this, and no claims for extra payment due to inconvenience as a result of the modus operandi will be considered.

PS.1.3.5 Pedestrian movement

The Contractor shall make provision for accommodating all pedestrian movements in the area of the works. Allowance shall be made in the relevant rates for any barricades and signs required.

PS.1.3.6 Temporary Reinstatement

Provided always that if in the course or for the purpose of the execution of the works or any part thereof any road or way shall have been broken up, then notwithstanding anything herein contained:

- (a) if the permanent reinstatement of such road or way is to be carried out by the appropriate authority or by some person other than the contractor (or any subcontractor to him), the contractor shall at his own cost and independently of any requirement of or notice from the Engineer be responsible for the making good of any subsidence or shrinkage or other defect, imperfection or fault in the temporary reinstatement of such road or way, and for the execution of any necessary repair or amendment thereof from whatever cause the necessity arises, until the end of the period of maintenance in respect of works beneath such road or way until the authority or other person as aforesaid shall have taken possession of the site for the purpose of carrying out permanent reinstatement (whichever is the earlier), and shall indemnify and save harmless that Council against and from any damage or injury to the Council or to third parties arising out of or in consequence of any neglect or failure of the Contractor to comply with the foregoing obligations or any of them and against and from all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto.
- (b) where the authority or person as aforesaid shall take possession of the site as aforesaid in sections or lengths, the responsibility of the contractor under paragraph (a) of this sub-clause shall cease in regard to any such section or length at the time possession thereof is so taken, but shall during the continuance of the said period of maintenance continue in regard to any length of which possession has not been taken and the indemnity given by the contractor under the said paragraph shall be construed and have effect accordingly.

PS.2 SERVICES

This Clause is to be read in conjunction with the provisions and obligations as contained in **SANS 1921-1 and SANS 1921-2**.

PS.2.1 Existing Services

The Tenderer's attention is drawn to the numerous existing services in the area. Although every effort has been made to depict these services accurately the positions shown must be regarded as approximate.

PS.2.2 Proving Underground Services

This clause must be read in conjunction with **Clause DB.5.1.2**, the requirements of which shall be extended to cover all earthworks operations whether for trenching or bulk earthworks, in the vicinity of underground services.

It is stressed that all services in a particular area must be proven before commencing work in that area.

Insofar as bulk earthworks are concerned, where services are indicated on the drawings or where from site observations can reasonably be expected that such services are likely to exist where excavations are to take place, the Contractor shall without instructions from the Employer's Agent carefully excavate by hand to expose and prove their positions.

The cost of the proving trenches is to be included in the work covered by **Clause DA.8.3**.

When a service is not located in its expected position the Contractor shall immediately report such circumstances to the Employer's Agent who will decide what further searching or other necessary action is to be carried out and shall instruct the Contractor accordingly. The cost of this additional searching shall be to the Council's cost and shall be paid for under **DB.8.19 - Proving Existing Services**.

Should any service be damaged by the Contractor in carrying out the works and should it be found that the procedure as laid down in this clause has not been followed then all costs in connection with the repair of the service will be to the Contractor's account.

When electrical cables are not in the positions shown on drawings of eThekweni Electricity and cannot be found after proving trenches have been put down, assistance may be obtained by calling an official of the **Works Branch on Telephone No. 311-1111** during office hours, or by contacting **Control on Telephone No. 305-7171** after hours.

It should be noted that 33,000 Volt and 132,000 Volt cables may only be exposed by the eThekweni Electricity's personnel. The cables are usually protected by concrete covering slabs, and therefore if the slabs are inadvertently exposed, excavation work must stop, and the eThekweni Electricity shall be contacted immediately on the above telephone numbers.

Proving of services shall be completed at least two weeks in advance of the actual programmed date for commencing work in the area. The position of these services located must be co-ordinated and levelled by the Contractor, and the information given in writing to the Employer's

Agent's Representative.

The requirements of this clause do not relieve the Contractor of any obligations as detailed in the Conditions of Contract or under **Clause 4.17 of SANS 1921-1**.

PS.2.3 New Services and Relocation of Existing

This clause shall be read in conjunction with **Clause PS.1**.

New services are either to be installed by the Contractor as part of the contract or by others during the contract period. In the latter case excavation and subsequent backfilling of the trench from the top of the bedding layer shall generally be carried out by the Contractor.

Relocation of services shall generally be carried out by the relevant services organisation. Generally their work shall include the excavating and bedding the service which will include backfilling to a depth of approximately 300 mm above the service. The remainder of the backfilling shall be carried out by the Contractor.

Generally work shall only commence on the installation of new services once the bulk earthworks have been completed and roughly trimmed to level along a substantial portion of the services route. In addition no sidewalk, verge, median or island shall be surfaced or topsoiled until all work on the services has been completed.

Services affected by the contract are described as follows:

- **PS.4: Watermains;**
- **PS.5: Sewers;**
- **PS.6: Stormwater;**
- **PS.7: Electrical Cables / Lighting;**
- **PS.8: Telkom / Neotel;**
- **PS.9: CCTV;**

Further to the above, tenderers are referred to the services drawing and are to note that several minor cables / pipes may be encountered during excavation works which may require to be relocated to some extent. It is anticipated that the two week period required under **PS.2.2** will allow sufficient time for these relocations.

PS.2.4 Accommodation of Services

Further to **Clauses PS.1 and PS.2** of this specification, tenderers are to note that allowance must be made under this item and / or the appropriate rates, for all costs incurred as a result of complying with these clauses. It shall also cover liaison with the services organisations and accommodation of their work gangs / contractors on site.

PS.3 WATERMAINS

PS.3.1 General

Tenderer's attention is drawn to the following points regarding the watermains to be installed as part of this contract.

Particular attention should be paid to tie-ins to the existing live mains which normally have to be done by the Water Supply Branch even if the installation of the new main is included in the contract.

PS.3.2 Water Main Valve Access

Due to the dangerous situation occurring when water main valves are covered over, the Contractor shall maintain access to all water main valves at all times. During asphalt layer work, after each pass by the paving machine, the valves shall be exposed and access maintained in a safe condition.

Whatever method the Contractor chooses to use for this work, the cost of raising the valves from existing level to ultimate level shall be paid only once, irrespective of the number of times the valve is uncovered. Spacer rings required for the height adjustment of valve covers shall be supplied by the Water and Sanitation Unit. Tolerances on valve cover levels shall be as specified in clause PH.6.5. Before final setting in position of valve covers the Contractor shall liaise with the Employer's Agent regarding the direction in which covers shall be placed.

PS.3.3 Restriction on Compactive Equipment

The Contractor is to note that existing watermains traverse the site of the works and special care is to be taken in close proximity to these mains and connections. The existing mains and connections shall be proved on site by the Contractor prior to any construction work commencing in the vicinity of the watermains.

Under no circumstances will heavy road-making equipment, other heavy plant or vibratory compaction equipment be permitted to operate within 800 mm vertically or horizontally of the existing mains or connections. The permissible compaction plant within this restricted area shall be the equivalent of a "Bomag 90" under static compaction, or similar approved plant. When the roadworks are far enough advanced to provide a minimum of 800 mm cover to the existing mains, the above restriction will fall away.

The Contractor is to take cognisance of the above requirements when entering rates in the Bill of Quantities and in the programming of the works. No claim for additional payment based on the inability to use plant as a result of the requirements of this clause will be accepted. The Contractor will be held liable for any costs should the watermain or electrical cables be damaged during construction of the road.

PS.4 SEWERS

No work to sewer is envisaged, but the tenderers attention is drawn to the fact that sewer reticulation system existing in the contract area, which may assist in tie-ins point.

PS.4.1 Blockage of Foul Water Sewers

The Contractor shall be responsible for ensuring that cementitious sludge, sand and rubble from the works do not enter the foul water reticulation system. The Contractor shall be liable for any costs incurred by the Council or others as a result of blockages in the reticulation system attributed to failure to comply with the above requirement.

PS.5 STORMWATER

No work to stormwater is envisaged, but the tenderers attention is drawn to the fact that stormwater reticulation system existing in the contract area, which may assist in tie-ins point.

PS.5.1 Blockage Stormwater Sewers

The Contractor shall be responsible for ensuring that cementitious sludge, sand and rubble from the works do not enter the stormwater reticulation system. The Contractor shall be liable for any costs incurred by the Council or others as a result of blockages in the reticulation system attributed to failure to comply with the above requirement.

PS.6 ELECTRICAL PLANT

No work to Electrical Plant is envisaged, but the tenderers attention is drawn to the fact that Electrical Plant cables are existing in the contract area.

PS.6.1 General

Various types of electrical cables including high voltage, low voltage, street lighting and domestic connection cables are affected by the contract. The laying, relocation and jointing of all cables will be carried out by eThekwini Electricity's work gangs, or agents appointed by them, whilst the excavation and backfilling forms part of this contract. Close liaison will therefore be necessary with eThekwini Electricity throughout the contract.

PS.6.2 Street Lighting

The existing lighting will be removed in stages and replaced in the centre median / intersection corners. Relocation will take place during this contract and be executed by eThekwini Electricity or their agents. It is a requirement that the street lighting be operational at all times.

PS.6.3 MV / LV Cables

Certain MV / LV cables are to be replaced within the contract area (see drg xxxxxxxxA0). The actual cable work associated with this relocation and / or replacement of these cables will be carried out by eThekwini Electricity and it is stressed that the two week period referred to in Clause PS.2 is the minimum period required to enable eThekwini Electricity to be on site timeously.

PS.6.4 Relocation of Existing Services

Should it be necessary to adjust the line, level and / or position of any service not catered for in the contract to enable the construction to proceed the Contractor shall on no account effect such adjustment himself but shall notify the Engineer who will arrange for the work to be carried out at no cost to the Contractor.

PS.7 TELKOM S.A. LIMITED / NEOTEL PLANT

No work to Telkom / Neotel Plant is envisaged, but the tenderers attention is drawn to the fact that Telkom / Neotel copper cables and fibre optic cables are existing in the contract area.

PS.8 CCTV PLANT

No work to CCTV Plant is envisaged, but the tenderers attention is drawn to the fact that CCTV cables and fibre optic cables are existing in the contract area.

PS.9 MANAGEMENT OF THE ENVIRONMENT

The Contractor shall pay special attention to the following:

PS.9.1 Natural Vegetation

The Contractor shall confine his operation to as small an area of the site as may be practical for the purpose of constructing the works.

Only those trees and shrubs directly affected by the works and such others as the Employer's Agent may direct in writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer.

PS.9.2 Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

PS.9.3 Environmental Management Plan

In addition to the above, all requirements according to the Environmental Management Plan as detailed in **C3.4: Particular Specifications**, will be adhered to.

PS.10 OCCUPATIONAL HEALTH AND SAFETY

PS.10.1 General Statement

When considering the safety on site the Contractor's attention is drawn to the following:

Describe issues relating to OH&S and the Regulations

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the OHSA 1993 Construction Regulations 2014 issued on 7 February 2014 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and

employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of Section 37(2) of the Occupational Health and Safety Act.

PS.10.2 Health and Safety Specifications and Plans to be submitted at tender stage

PS.10.2.1 Employer's Health and Safety Specification

The Employer's Health and Safety Specification is included in **Part C3.4: Particular Specifications**.

PS.10.2.2 Tenderer's Health and Safety Plan

At tender stage only a brief overview of the tenderers perception on the safety requirements for this contract will be adequate. This will be attached to **Part T2.2: Contractor's Health and Safety Plan**.

Only the successful Tenderer shall submit a separate Health and Safety Plan as required in terms of Regulation 7 of the Occupational Health and Safety Act 1993 Construction Regulations 2014, and referred to in **Part T2.2: Contractor's Health and Safety Plan**.

The detailed safety plan will take into consideration the **site specific risks as mentioned under PS.10.1** and must cover at least the following:

- (i) A proper risk assessment of the works, risk items, work methods and procedures in terms of Regulations 9 to 29;
- (ii) Pro-active identification of potential hazards and unsafe working conditions;
- (iii) Provision of a safe working environment and equipment;
- (iv) Statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 7*);
- (v) Monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;
- (vi) Details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 8 and other applicable regulations; and
- (vii) Details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2014.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan, shall not be used as a reason to claim for extension of time or standing time and related costs

A generic plan will not be acceptable.

PS.10.3 Cost of compliance with the OHSA Construction Regulations

The rates and prices tendered by the Contractor shall be deemed to include all costs for

conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract. Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

Items that may qualify for remuneration will be specified in the Employer's Health and Safety Specification.

PS.11 SITE SECURITY

The Contractor shall, for the duration of the contract, provide sufficient security and watchmen to adequately ensure the safety and protection of the works, the Contractor's staff, including local labour and subcontractors, and all site plant and construction equipment required for the works.

Site Security, in conjunction with the SAPS (where necessary), shall be responsible for removal of disruptive elements, that may interrupt the progress of the contract through acts such as, but not limited to, intimidation, threats of disruption, violent disruption, or criminal and illegal activity by the local community or independent organisations or entities that may result in slowing down or partial or total stoppage of the works.

Payment for this item shall be made under Section 1, Part AB of the Bill of Quantities.

C3.3: STANDARD SPECIFICATIONS

C3.3.1 The Specifications on which this contract is based are the eThekiwini Municipality's (City of Durban) Standard Engineering Specifications (hereafter referred to as the Standard Engineering Specifications). This document is obtainable separately, and Tenderers shall obtain their own copies of the applicable Sections.

Part	Description	Date of Issue	
AB	General Specifications	July	1992
B	Site Clearance	March	1990
C	Concrete Work	February	1987
DA	Earthworks: Bulk	January	1985
DB	Earthworks for Pipe Trenches	July	1992
DD	Earthworks for Structures		
F	Protection Works	July	1992
PF	Pressure Pipelines: Other Than Steel		
PG	Non Pressure Pipelines and Pc Culverts	July	1992
PH	Manholes and Appurtenant Drainage Works	July	1992
PG	Lateral Support Systems		
S	Reinstatement	March	1993

C3.3.2 AMENDMENTS TO THE STANDARD SPECIFICATIONS

INTRODUCTION

In certain clauses the standard, standardized and particular specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternative or additional requirements applicable to this contract are contained in this part of the project specifications. It also contains additional specifications required for this particular contract.

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 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, but followed by a new number which follows on the last clause or item number used in the relevant section of the standard specifications.

PS AB	General Specifications
PS B	Site Clearance
PS C	Concrete Work
PS DA	Earthworks: Bulk
PS DB	Earthworks for Pipe Trenches
PS DD	Earthworks for Structures
PS PG	Non Pressure Pipelines and Pc Culverts
PS PH	Manholes and Appurtenant Drainage Works
PS S	Reinstatement

C3.4: PARTICULAR SPECIFICATIONS

In addition to the Standardized and Project Specifications the following Particular Specifications / Policies shall apply to this contract and are available on web address:

<ftp://ftp.durban.gov.za/cesu/StdContractDocs/>:

- C3.4.1 Part AH - OHSA 1993 Safety Specification
(26 Pages)
- C3.4.2 Standard Environmental Management Plan for Civil Engineering Construction Works
(24 Pages)

C3.5: CONTRACT AND STANDARD DRAWINGS

C3.5.1 CONTRACT DRAWINGS / DETAILS

N/A

C3.5.2 STANDARD DRAWINGS

The Standard Drawings to which these Standard Engineering Specifications refer are listed below.

Dwg No	Description	Date of Issue	
38570	Ring Manholes	February	1990
38571	Brick Manhole Details	February	1990
38572	Stormwater Inlet Details	February	1990
38573	Stormwater Inlet Special Details	February	1990
38574	Sewer Manholes: Ramp, Backdrop and Channelling Details	February	1990
38575	Sub-Soil Drain, Pipe Bedding and Pipe Protection Details	February	1990
38576	Headwall Details	February	1990
38577	Kerbing Details	February	1990
38578	Concrete Median Barriers	February	1990
38579	Vehicular and Pedestrian Scoops	February	1990
38580	Concrete Bollard and Steel Guard Rail	February	1990
38581	Retaining Wall, PC Steps, Staircase, Cable Ducts and Headwalls	February	1990
38582	Precast Concrete Fencing and Aluminium Gates	February	1990
38583	Wire Mesh Fence and Gate Details	February	1990
38584	Standard Hydrant Thrust Blocks and Trenches	February	1990
38585	Water Connections, Pipework and Fittings	February	1990
38586	DP & TC Manholes - Rectangular	February	1990
38587	DP & TC Manholes - "L" Shaped	February	1990
38588	DP & TC Manholes - "T" Shaped	February	1990
38589	DP & TC Cable Ducts and Junction Box Details	February	1990
43120	Typical Details of Grid Inlets	February	1990

C3.6: ANNEXURES

C3.6.1 There are no Annexures

PART C4: SITE INFORMATION

C4.1 LOCALITY PLAN

There are no locality plans

C4.2 CONDITIONS ON SITE

N/A

C4.3 TEST RESULTS

N/A.