

CALL FOR BIDS

BID NO: ECDC ECDC/INFRA/37/052024

BID SUBJECT: CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE, AND KHIBA SHEARING SHED IN STERKSPRUIT

Consisting Of:

The Tender (Returnable) - This Document The Bills of Quantities - This Document Annexures – This Document

BIDDER NAME:

CSD No.:....

CRS No.:

CLOSING DATE:	05 JULY 2024
CLOSING TIME:	12h00

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www.ecdc.co.za

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SECTION A: ABBREVIATIONS AND ACRONYMS		
CIDB	Construction Industry Development Board	
DTI	Department of Trade and Industry	
ECDC	Eastern Cape Development Corporation	
EME	Exempt Micro Enterprise	
IRBA	Independent Regulatory Board of Auditors	
PCCA	Prevention and Combating of Corrupt Activities Act 12 of 2004	
PFMA	Public Finance Management Act (Act 1 of 1999)	
PPPFA	Preferential Procurement Policy Framework Act (Act 5 of 2000)	
QSE	Qualifying Small Enterprise	
SABS	South African Bureau of Standards	
SANAS	South African National Accreditation System	
SARS	South African Revenue Service	
SASAE	South African Standard on Assurance Engagements	
SCM	Supply Chain Management	
SMME	Small, Medium and Micro Enterprises	
ToR	Terms of Reference	
CSD	National Treasury Central Supplier Database for South African Government	
B: DEFINITIONS		
Acceptable tender	Means any tender which, in all respects, complies with the specifications and conditions of tender as set out in the tender document.	
Accreditation Body	Means the South African National Accreditation System or any other entity appointed by the Minister from time to time whose function it is to: Accrediting verification agencies	
	Developing, maintaining and enforcing of Verification Standards	
Affordable	Means (in terms of a PPP-Agreement) that the financial commitments to be incurred can be met by funds:	
	Designated within ECDC's existing budget for the function to which the	
	agreement relates; and Destined for ECDC in accordance with the relevant	
	Treasury's future budgetary projections.	
All applicable taxes	Includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.	
Bid	Means a written offer or proposal to supply goods and/or provide services, submitted in response to the ECDC's invitation to quote or submit proposals which includes advertised competitive bids, written price quotations or proposals.	
Bid Specification	A specification that lays down the characteristics of goods to be procured or their related processes and production methods, or the characteristics of services to be procured or their related operating methods, including the applicable administrative provisions, and a detailed requirement relating to conformity assessment procedures that an entity prescribes and shall	

	Include TOR for specialised services.
Black People	means 'African', 'Indian' and 'Coloured' people who are citizens of the Republic of South Africa by birth; or are citizens of the Republic of South Africa by naturalisation before the commencement date of the Constitution of South Africa Act (1993); or became citizens of the Republic of South Africa after the commencement of the of the Constitution of South Africa Act (1993), but who for the Apartheid policy that has been in place to that date, would have been entitled to acquire citizenship by naturalisation prior to that date.
Specific goal	2.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table in SBD 6.1 as may be supported by proof/ documentation stated in the conditions of this tender:
	 2.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of— (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
	(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
	then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.
Close Family Member	Shall mean: - member of the same household, parent (including adoptive parent), parent-in-law, son (including adoptive son), son-in-law, daughter (including adoptive daughter), daughter-in-law, step-parent, step-son, step-daughter, brother, sister, grandparent, grandchild, uncle, aunt, nephew, niece, the spouse or unmarried partner with relation to any of the person's above.
Code of Ethics	refer to the ECDC Code of Ethics for Management and Staff as may be amended from time to time.
Comparative Price	Means the price after the factors of a non-firm price and all the unconditional discounts that can be utilised have been taken into consideration.
Consortium or Joint Venture	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.
Contract	Means the agreement that results from the acceptance of a bid by ECDC.
Designated Sector	Means a sector, sub-sector or industry that has been designated by the DTI in line with national development and industrial policies for local production, where on local produced goods or locally manufactured goods meet the stipulated minimum threshold for local production and content.
Duly Sign	means a document 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).
Exempt Micro Enterprise (EME)	means an enterprise with a specified total annual revenue as per Department of Trade and Industry Codes of Good Practice on Broad Based Black Economic Empowerment

Family Member	Means a husband or wife, any partner in a customary union according to indigenous law or any partner in a relationship where the parties live together in a manner resembling a marital partnership or a customary union; and
	any person related to either one or both persons referred above within the second degree through a marriage, a customary union or a relationship or the third degree of consanguinity.
Firm Price	Means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract.
Fronting	Means a deliberate circumvention or attempted circumvention of the B-BBEE Act and the Codes. Fronting commonly involves reliance on data or claims of compliance based on misrepresentation of facts, whether made by the party claiming compliance or by any other person.
Functionality	Means the measurement according to predetermined norms, as set out in the tender documents, of a service or commodity that is designed to be practical or useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of the tenderer.
Imported Content	Means that portion of the tender price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the bidder or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour or intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African port of entry.
In the service of the state	means:
	municipality and is employed on a permanent, temporary or short-term basis.
	an employee or public servant of any national or provincial government as defined in terms of Public Services Act.
	a member who –
	is a councillor of any municipal council as defined in the Local Government Municipal Structures Act (Act No 117 of 1998);
	is a politician serving in any provincial legislature; or
	is a politician serving in the National Assembly or the National
	Council of Provinces; a member of the board of directors of any municipal entity;
	an employee and a member of a government owned entity as defined in the Public Finance Management Act (Act No 1 of 1999); and / or such other meaning ascribed to it by National Legislation from time to time.
Local content	Means a portion of the tender price which is not included in the imported content, provided that local manufacture does take place.
Non-firm prices	Means all prices other than "firm" prices
Person	Includes a juristic person.
Price Quotation	An estimate describing the product, stating its price, time of shipment, and specifies the terms of the sale and terms of the payment.
Property	Includes all movable and immovable property and intellectual property belonging to ECDC.

Public Private partnership	Means a commercial transaction between ECDC and a private party in terms of which:
	the private party either performs a function o.b.o. ECDC for a specified or indefinite period, or acquires the use of state property for its own commercial purposes for a specified or indefinite period;
	the private party receives a benefit for performing the function or by utilizing state property, either by way of:
	compensation from a revenue fund charges or fees collected by the private party from users or customers of a service provider to them; or a combination of such compensation and such charges or fees

Qualifying Small Entity	means an enterprise with a specified total annual revenue as per Department of Trade and Industry Codes of Good Practice on Broad Based Black Economic Empowerment
Rand value	means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties.
Related enterprise	Means an entity controlled by a measured entity whether directly or indirectly controlled by the natural persons who have direct or indirect control over that measured entity or the immediate family of those natural persons.
Service Level Agreement	Shall have the same meaning assigned as "Contract"
Shareholder	Means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.
State	Means:
	any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the PFMA
	any municipality or municipal entity
	national Assembly or the national Council of Provinces; or parliament
Stipulated minimum threshold	Means that portion of local production and content as determined by the DTI
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.
Tender	The same meaning is assigned as 'Bid" above.
Threshold	Shall mean the financial limits on the value of goods or services to be procured as set and prescribed in this policy which shall determine the manner in which these goods and services will be procured
Total revenue	Means the total income of an entity from its operations as determined under South African Generally Accepted Accounting Practice.
Trust	Means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person.
Trustee	Means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.
Value for Money	Means that the item (public-private partnership agreement) results in a net benefit to ECDC defined in terms of cost, price, quality, quantity, or risk transfer, or a combination thereof.

Part T1: Tendering procedures

T.1.1 TENDER NOTICE AND INVITATION TO BID

1. Invitation to Bid

Eastern Cape Development Corporation (ECDC) wishes to engage with a suitable contractor with a CIDB Grading of 3GB or higher for the construction of shearing sheds listed as follows:

Tsolo shearing shed, located about 40km from Mthatha with a 5km access road off the N2 at Sidwadweni.

Mt Frere shearing shed, located about 16 km from Mount Frere town. Access to site is via a 14km surfaced road which branches off the N2 on the Western side (R405 to Matatiele) and a 2km gravel road to the site.

Sterkspruit shearing shed, located about 33 km from the Sterkspruit town. Access to site is via the R392 road and an 8km gravel road that leads to the site.

Note: Bidders are to indicate which project in the Bid they are responding to (by ticking the boxes above). Bidders may respond to more than one project, should they wish to. However, they will only be appointed for one project.



GPS co-ordinates of the Tsolo site are 31°21.809' S and 28°46.227' E



GPS co-ordinates of the Mt Frere site are 30°51.667' S and 28°52.218' E



GPS co-ordinates of the Sterkspruit site are 30°33.115' S and 27°09.077' E

A Detailed scope of services is described in Scope of Work Section Below.

- 2. Eligibility to Bid
- a) Bidders should meet the Mandatory Requirements in in order be evaluated T2.1 (Mandatory List of Tender Returnables)
- b) It is estimated that bidders should have a CIDB grading of 3GB or higher.
- c) Only those tenderers who are registered with the CIDB prior to submissions of bid with a contractor grading equal 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 the above-mentioned grading classes of construction work, are eligible to have their tenders evaluated.
- 3. Payment of Bid Document No payment is due to obtain tender documents.
- 4. Collection /Availability of Documents Documents will be available for downloading from the ECDC website at <u>www.ecdc.co.za</u>.
- Queries on Bid Document
 Queries relating to the issue of these documents may be addressed to Ms P Casa,
 E- Mail at tenders@ecdc.co.za and cc pcasa@ecdc.co.za

6. Estimated Timeline

Activity		Date	Time
1.	Placing of Advert	07 June 2024 Daily Dispatch, E-Tender, Load on ECDC Website for 30 Days after Advert	N/A
2.	Compulsory Briefing Meeting	KHIBA SHEARING SHED	
		A compulsory briefing meeting to be he Village in Sterkspruit on the 19 June 2024	ld on site at Khiba at 12H00
		MABHOBHO SHEARING SHED	
		A compulsory briefing meeting to be held of Village in MT Frere on the 20 June 2024 a	on site at Mabhobho at 10H30
		GOQWANA SHEARING SHED	
		A compulsory briefing meeting to be held Village in Tsolo on the 20 June 2024 at 1 4	on site at Goqwana 4H30
3.	Last day of questions	5 days before closing date	16H00
4.	Final date of submission of bids	05 July 2024	12h00
5.	Bid Validity	90 days	

6.1. Briefing Session and Site Location

KHIBA SHEARING SHED

A compulsory briefing meeting to be held on site at Khiba Village in Sterkspruit on the 19th of June 2024 at 12H00 GPS co-ordinates to site are 30°33.115' S and 27°09.077' E

MABHOBHO SHEARING SHED

A compulsory briefing meeting to be held on site at Mabhobho Village in MT Frere on the **20th of June 2024 at 10H30 GPS co-ordinates to site are 30°51.667' S and 28°52.218' E**

GOQWANA SHEARING SHED

A compulsory briefing meeting to be held on site at Goqwana Village in Tsolo on the 20th of June 2024 at 14H30 GPS co-ordinates to site are 31°21.809' S and 28°46.227' E

For any enquiries relating to this Bid please email the procurement department at <u>tenders@ecdc.co.za</u>, attention Ms. P. Casa.

Communication with the Bidders and any clarity on Queries will be posted on the website at <u>www.ecdc.co.za</u> and will also be communicated to the bidders via email where the Bidder has indicated to ECDC that they are interested in submitting a bid.

NOTE:

- Bidders must visit the site to ensure that their proper assessment of the site is done and that the Bill of Quantities is Priced Correctly.
- Bidders must acquaint themselves of the current site conditions, works complexity and associated safety risks.
- ECDC will only consider bidders that have attended the briefing meeting.
- Bidders will only be appointed for one project; bidders are to indicate their order of preference (from 1st to 3rd choice between Goqwana, Mabhobho, and Khiba shearing shed) in the table below.

Order of preference	Project
1 st choice	
2 nd choice	
3 rd choice	

-

- Telephonic, emailed, telexed, facsimile, and late tenders will not be accepted.
- Tenders may only be submitted on the tender documentation that is issued.
- Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

T1.2 Tender Data

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (January 2019) as published in Government Gazette No 42622, Board Notice 423 of 2019 on the 8th of August 2019 (See www.cidb.org.za).

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

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

Tender Data
The employer is Eastern Cape Development Cooperation (ECDC)
The Tender Documents issued by the Employer comprise the following documents: THE TENDER Part T1: Tendering procedures T1.1 - Tender notice and invitation to tender T1.2 - Tender data Part T2 : Returnable documents T2.1 - List of returnable documents T2.2 - Returnable schedules THE CONTRACT Part C1: Agreements and Contract data C1.1 - Form of offer and acceptance C1.2 - Contract data
C1.3 - Performance Bond C1.4 - Adjudicator's contract Part C2: Pricing data C2.1 - Pricing instructions C2.2 - Bill of Quantities Part C3: Scope of work C3 - Scope of work Part C4: Specifications/Drawings PA - Health and Safety Specification PB - Labour Intensive Methods PE - Building Specification PI - Building Specification C4 - Drawings

C.1.4	During Tender stage all communication shall be through the Procurement Department for
	Name: Ms. P. Casa
	Address: ECDC Head Office at ECDC House Ocean Terrace Park
	Moore Street
	East London
	Tel: 043 704 5600
	E-mail: tenders@ecdc.co.za and cc pcasa@ecdc.co.za
C.2.1	Only those tenderers who are registered with the CIDB or are capable of being so prior to the evaluation of submissions, 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 CIDB Regulations are eligible to have their tenders evaluated.
	Joint ventures are eligible to submit tenders provided that:
	1. every member of the joint venture is registered with the CIDB.
	 the lead partner has a contractor grading designation in the GB (General Building) class of construction work; not lower than one level below the required grading designation in the class of works construction works under considerations and possess the required recognition status.
	3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 3GB or higher class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.
C.2.1	Not Applicable for this Bid
C.2.1	Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated:
C.2.1	 Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) contractors who have 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 or*. class of construction work; and
C.2.1	 Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) contractors who have 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 or*. class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria:
C.2.1 C.2.2	 Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) contractors who have 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 or*. class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria:
C.2.1 C.2.2	 Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) contractors who have 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 or*. class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria:
C.2.1 C.2.2 C.2.7	 Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) contractors who have 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 or*. class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria:
C.2.1 C.2.2 C.2.7	 Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) contractors who have 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 or*. class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria:
C.2.1 C.2.2 C.2.7 C.2.8	 Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) contractors who have 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 or*. class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria:
C.2.1 C.2.2 C.2.7 C.2.8	 Not Applicable for this Bid The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) contractors who have 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 or*. class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria:

C.2.12	Not Applicable for this Bid
	If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.
	Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.
	Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.
	The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs in confirming the acceptability of the detailed design.
C.2.13.3	One original duly signed (by authorised representative) and completed bid document (hardcopy) MUST be submitted inclusive of the terms and conditions of this bid document with any attachments/annexures /returnable required for this Bid.
	A PDF soft copy of the duly signed and completed original bid (e.g., PDF format in Flash drive/disc) should be submitted with the Original duly signed and completed hardcopy bid document however non-submission of a soft copy will not result in the Bid being disqualified.
	ECDC will not be responsible if your bid is not submitted on time.
	All bid documents are to be completed in permanent ink.
	No alterations of the Bid Document will be allowed.
	No correction fluid will be allowed. Corrections should be initialled.

A.2.13.5 A.2.15.1	Valid originally firmly bound signed complete tender document (by authorized representative) must be placed in the Bid Box on or before the final date and time of submission.				
	The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are:				
	a) Location of tender box:				
	Bid Reference Number:	ECDC/INFRA/37/052024			
	Project Name: CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT				
	Delivered at Physical Address: ECDC Head Office at ECDC House, Ocean Terrace Park, Moore Street, Quigney, East London,				
	Bids/Tender offers must be submitted on or be as indicated in the Tender Notice and invitation	efore the final date and time of submission of bids n to Tender.			
	It is the Bidders responsibility to ensure the	at all the documents are received on time.			
	The bid box is open on weekdays between	08h00 and 16h30			
A.2.13.6 A.3.5	Not Applicable for this Bid				
A.2.13.6 A.3.5	Not Applicable for this Bid A two-envelope procedure is required.				
A.2.13.6 A.3.5 A.2.13.9	Not Applicable for this Bid A two-envelope procedure is required. Telephonic, email, telegraphic, telex, email, or	facsimile tender offers will not be accepted.			
A.2.13.6 A.3.5 A.2.13.9 A.2.15	Not Applicable for this Bid A two-envelope procedure is required. Telephonic, email, telegraphic, telex, email, or The closing time for submission of tender offer Tender.	facsimile tender offers will not be accepted. s is as stated in the Tender Notice and Invitation to			
A.2.13.6 A.3.5 A.2.13.9 A.2.15 A.2.16	Not Applicable for this BidA two-envelope procedure is required.Telephonic, email, telegraphic, telex, email, orThe closing time for submission of tender offer Tender.The tender offer validity period is 90 days.	facsimile tender offers will not be accepted. s is as stated in the Tender Notice and Invitation to			
A.2.13.6 A.3.5 A.2.13.9 A.2.15 A.2.16 A.2.18	 Not Applicable for this Bid A two-envelope procedure is required. Telephonic, email, telegraphic, telex, email, or The closing time for submission of tender offer Tender. The tender offer validity period is 90 days. The tenderer shall, when requested by the management and supervisory staff that will be of the works together with satisfactory evider requirements. 	facsimile tender offers will not be accepted. s is as stated in the Tender Notice and Invitation to e Employer to do so, submit the names of all employed to supervise the Labour-Intensive portion nce that such staff members satisfy the eligibility			
A.2.13.6 A.3.5 A.2.13.9 A.2.15 A.2.16 A.2.18 A.2.19	 Not Applicable for this Bid A two-envelope procedure is required. Telephonic, email, telegraphic, telex, email, or The closing time for submission of tender offer Tender. The tender offer validity period is 90 days. The tenderer shall, when requested by the management and supervisory staff that will be of the works together with satisfactory evider requirements. Access shall be provided for the following insp 	facsimile tender offers will not be accepted. s is as stated in the Tender Notice and Invitation to e Employer to do so, submit the names of all employed to supervise the Labour-Intensive portion nce that such staff members satisfy the eligibility ections, tests, and analysis:			
A.2.13.6 A.3.5 A.2.13.9 A.2.15 A.2.16 A.2.18 A.2.19	 Not Applicable for this Bid A two-envelope procedure is required. Telephonic, email, telegraphic, telex, email, or The closing time for submission of tender offer Tender. The tender offer validity period is 90 days. The tenderer shall, when requested by the management and supervisory staff that will be a of the works together with satisfactory evider requirements. Access shall be provided for the following insp The site is available for viewing the location of 	facsimile tender offers will not be accepted. s is as stated in the Tender Notice and Invitation to e Employer to do so, submit the names of all employed to supervise the Labour-Intensive portion nce that such staff members satisfy the eligibility ections, tests, and analysis: the works.			
A.2.13.6 A.3.5 A.2.13.9 A.2.15 A.2.16 A.2.18 A.2.19 A.2.20	 Not Applicable for this Bid A two-envelope procedure is required. Telephonic, email, telegraphic, telex, email, or The closing time for submission of tender offer Tender. The tender offer validity period is 90 days. The tenderer shall, when requested by the management and supervisory staff that will be a of the works together with satisfactory evider requirements. Access shall be provided for the following insp The site is available for viewing the location of The tenderer is required to submit with his te undertaking to provide the Performance Bond this procurement document 	facsimile tender offers will not be accepted. s is as stated in the Tender Notice and Invitation to e Employer to do so, submit the names of all employed to supervise the Labour-Intensive portion nce that such staff members satisfy the eligibility ections, tests, and analysis: the works. ender a letter of intent from an approved insurer to the format included in Contract Data/Contract of			
 A.2.13.6 A.3.5 A.2.13.9 A.2.15 A.2.16 A.2.18 A.2.19 A.2.20 A.2.22 	 Not Applicable for this Bid A two-envelope procedure is required. Telephonic, email, telegraphic, telex, email, or The closing time for submission of tender offer Tender. The tender offer validity period is 90 days. The tenderer shall, when requested by the management and supervisory staff that will be of the works together with satisfactory evider requirements. Access shall be provided for the following insp. The site is available for viewing the location of The tenderer is required to submit with his to undertaking to provide the Performance Bond this procurement document Not Applicable for this Bid 	facsimile tender offers will not be accepted. s is as stated in the Tender Notice and Invitation to e Employer to do so, submit the names of all employed to supervise the Labour-Intensive portion nce that such staff members satisfy the eligibility ections, tests, and analysis: the works. ender a letter of intent from an approved insurer to the format included in Contract Data/Contract of			

A.2.23	The tenderer is required to submit with his tender:			
	1) Tax Compliance			
	Bidders must ensure compliance with their tax obligations.			
	In Bids where Consortia/Joint venture/Sub-Contractors are involved; each party must submit a separate proof of Tax Compliance Status.			
	The bidders' Tax status will be verified on the CSD prior to the bid award and where the preferred bidders is not compliant, 7 working days will be granted for remedy, failing which the bidder will be disqualified.			
A.3.1.1	The Employer will respond to requests for clarification received up to 7 working days before the tender closing time.			
A.3.4	Opening of the Bids			
	Tenders will be opened immediately after the closing time for tenders at 12h00 hrs			
	There will be NO PUBLIC OPENING of the Bids received; however, the list of bids received may be published on the ECDC website and will be sent to the Bidders that have submitted bids via email.			
	There will be no discussions with any Bidder/Interested Party that Submitted Proposals/ Bids until evaluation have been complete. Any subsequent discussions shall be at the discretion of ECDC.			
A.3.11.1	The financial offer will be reduced to a comparative basis.			
A.3.11.2	Not Applicable for this Bid			
	The procedure for the evaluation of responsive tenders is Method 1			

A.3.11.3 Evaluation Criteria

This bid is subject to the Preferential Procurement Policy Framework Act and the Preferential Procurement Regulations 2022 as applicable to provincial government business enterprises as listed under schedule 3(D) of the Public Finance Management Act and the ECDC Procurement Policy as amended from time to time.

The procedure for evaluation of tenders is as follows:

		Mandatory requirements			
Stage 1		Service Providers are to meet all the Mandatory Requirements in order to be evaluated further. Failure to submit the Mandatory Requirements as required will result in the bid being disqualified. Involves a valuation of local production and content (goods) only. At this stage Bidders must meet the minimum threshold for local production and content as determined by the DTI for local content before they will be evaluated in terms of preferential procurement points. Bidders to complete the Declaration for Local Production and Content for Designated Sectors and Local Content Declaration: Summary			
Store 2		Schedule (Annex C)			
Stage 2	Stage 2 Functionality: Involves an evaluation of Functionality only – At this stage Bidd score a minimum score of 60% for functionality (services) in or be evaluated for stage 3 (Preferential procurement points)			ers must er to	
Stage 3		Preferential Procurement points:			
		Price : Points will be calculated for price on the re	Price : Points will be calculated for price on the relevant prices in		
		accordance with the preference point system, 80/	20.		
A.3.11.3	The evaluation on Functionali	o criteria and maximum score in respect of each of the c ty Evaluation are on T2.1)	riteria are as fo	lows: (Details	
	Functionality Criteria		Maximum number of points		
	Completed Similar Projects (i.e. General Building Projects to a maximum of R1 million)		30		
		Experience and Qualifications of the Key Personnel			
	Submission of construction program		10		
		Maximum possible score for functionality (M _s)	70		
	Functionality shall be scored by not less than three evaluators in accordance with the Functionality Criteria Evaluation below. The minimum percentage to be achieved for functionality is 60%				

A.3.13	Tender offers will only be accepted if:		
	a)	the tenderer is Tax Compliant ✓ tenderers must ensure compliance with their tax obligations.	
		✓ in Bids where Consortia/Joint venture/Sub-Contractors are involved; each party must submit a separate proof of Tax Compliance Status.	
		 the tenderer Tax status will be verified on the CSD prior to the bid award and where the preferred bidders is not compliant, 7 working days will be granted for remedy, failing which the bidder will be disqualified 	
	b)	the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;	
	c)	is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;	
	d)	the tenderer has not:	
		i) abused the Employer's Supply Chain Management System; or	
		ii) failed to perform on any previous contract and has been given a written notice to this	
		effect.	
	e)	the tenderer is able, in the opinion of the employer, to perform the contract free of conflicts.	
	f)	the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.	
	g)	the tenderer can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract.	
	h)	the tenderer has the legal capacity to enter into the contract;	
	i)	the tenderer is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;	
	j)	the tenderer complies with the legal requirements, if any, stated in the tender data; and	
A.3.17	The	number of paper copies of the signed contract to be provided by the employer is one (1).	

Part T2: Returnable documents

- T2.1 List of returnable documents
 - T2.2 Returnable schedules

T2.1 - List of returnable documents

1. Evaluation Criteria

This bid is subject to the CIDB and Preferential Procurement Policy Framework Act and the Preferential Procurement Regulations 2022 as applicable to provincial government business enterprises as listed under schedule 3(d) of the Public Finance Management Act and the ECDC Procurement Policy as amended from time to time.

The procedure for evaluation of tenders is as follows:

	Mandatory Requirements		
	Service Providers are to meet all the Mandatory Requirements in order to be evaluated further. Failure to submit the Mandatory Requirements as required will result in the bid being disqualified.		
Stage 1	Involves an evaluation of local production and content (goods) only. At this stage Bidders must meet the minimum threshold for local production and content as determined by the DTI for local content before they will be evaluated in terms of preferential procurement points.		
	Service provider to complete the Declaration for Local Production and Content for Designated Sectors and Local Content Declaration: Summary Schedule (Annex C)		
Stage 2	Functionality: Involves an evaluation of Functionality only – At this stage Bidders must score a minimum score of 60% for functionality (services) in order to be evaluated for stage 3 (Preferential procurement points).		
Stage 3	Preferential Procurement points: Price: Points will be calculated for price on the relevant prices in accordance with the preference point system, 80/20.		

1.1. MANDATORY LIST OF TENDER RETURNABLES

Service Providers are to meet all the Mandatory Tender Requirements in order to be evaluated further for Stage 1. Failure to submit the Mandatory Requirements as required will result in this bid being disqualified.

Description		Disqualification if not submitted with Bid Document or Bidder is found to be Non- Compliant at the Time of Bid Close	Mandatory Requirement for Award
 Bidders must b Central Supplier will be verified o Database: Business Reand member Status will be and where deregistration remedy, failin ID Number, Government Tender Defa Tender be at they will be o Onus on the Serve Onus is on the Serve Service Provide closing of the bid t Directors in the Serve State, Bidder shou a. submit a Accounting Governme stating the business of Public Acon No.11 of 2 b. submit a granting p work outs does not a ECDC reserves t their AO/AA 	e registered on the National Treasury Database (CSD). The following information in the National Treasury Central Supplier egistration including details of directorship rship, - The bidders' Business Registration e verified on the CSD prior to the bid award the preferred bidder's status is under n, 7 working days will be granted for ng which the bidder will be disqualified. Employee aulting and Restriction Status. Should the restricted supplier or a defaulting supplier disqualified <u>vice Provider</u> rvice Provider to make sure that all these are and on the CSD at the time of bid closing and the Service Provider has been registered on vider to submit CSD Number as required in It is the responsibility of the Service sure that the correct CSD Number is er is not registered on CSD by the time of hey will not be considered for evaluation. Service of State ithin the Bidding Entity is an Employee of the Id. signed letter on a letter head from their g Officer/Accounting Authority (AO/AA of the ent Institution where they are employed) at they are not prohibited from conducting with the State in terms of Section 8 of the funinistration Management Act, 2012 (Act 2014- "The PFMA") signed letter on a letter from their AO/AA opermission to perform other remunerative ide of their employment where the PAMA apply to such an employee the right to verify such information from	Yes	Yes

	JV's and Consortium		
	Where the Bidder is a JV/Consortium, each firm must be registered on the CSD.		
2.	 Tax Compliance Requirements: Bidders must ensure compliance with their tax obligations. The bidders' Tax status will be verified on the CSD prior to the bid award and where the preferred bidders is not compliant, 7 working days will be granted for remedy, failing which the bidder will be disqualified. In Bids where Consortia/Joint venture/sub-contractors are involved, each party must submit a separate proof of Tax Compliance Status Certificate/SARS Pin Number/CSD Number. 	No	Yes
3.	 CIDB Requirements: Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, 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 GB (General Building) class of construction work, are eligible to have their tenders evaluated. Joint ventures are eligible to submit tenders provided that: every member of the joint venture is registered with the CIDB; the lead partner has a contractor grading designation in the GB (General Building) class of construction work; not lower than one level below the required grading designation in the class of works construction works under considerations and possess the required recognition status. the combined contractor grading designation Industry Development Regulations is equal to or higher than a contractor grading designation status. the combined contractor grading designation accordance with the sum tendered for a 6GB or higher class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. ECDC will verify whether the Bidders have an active and valid CIDB registration as required above. If the bidders CIDB registration has expired, or will expire before the closing date. The onus is on the bidder to submit proof of application for renewal. 	Yes (Evaluation Stage)	Yes 3GB or higher
4.	Annexure C – Supplier Information (Completed and Signed by the Delegated Authority) Attach Delegation of Authority	Yes	Yes

5.	Annexure L C.1.1 Form of Offer and Acceptance Offer;	Yes	Yes
	(Completed and Signed by the Delegated Authority) Attach		
	Delegation of Authority		
	Appayure G - (SBD 4): Declaration of interact (hidder):		
6.	Annexure G - (SBD 4). Declaration of interest (bluder),	Yes	Yes
	(Completed and Signed by the Delegated Authority) Attach		
	Delegation of Authority		
7.	Annexure H: Statement of Consent to data processing	No	Yes
	(Completed and Signed by the Delegated Authority) Attach		
	Delegation of Authority		
8.	Annexure I: (SBD6.1) Preference Point Claim in terms of the	No	No
	Preferential Procurement Regulations 2022 (Completed and		
	Signed by the Delegated Authority)		
	CCD report will be used to confirm other encodies goals		
	Listed in Table 1 of the SBD 6.1 document		
	insted in Table 1 of the 3DD 0.1 document.		
	Failure to submit the preference points claim and proof of		
	address may result in awarding of 0 (zero) points		
	preference points under Eastern Cape locality.		
0	ANNEYLIDE K. Declaration of Local Content (CDD C.0)	Ves	Ves
9.	including appex C template (Completed and Signed by the	165	165
	Delegated Authority) Attach Delegation of Authority		
	<i> </i>		
10			
10.	Declaration with regards to Company/Firm Location		
	Attach a proof of address to claim points for the Eastern Cape	No	Yes
	base locality as the specific goal as advised in the tender /		
	quotation qualifies the company/firm for the PPR of 2022		
	preference points claim.		
	To there is and with the device of an and we at the data of the		
	Failure to submit the declaration and proof of address for		
	each JV /Consortium member may result in awarding of 0		
	(zero) points preference points under Eastern Cape		
	Locality.		
	This information will be varified from the FICA documents		
	(Devoice) Address Litility Pill Telephone Tax Clearance losse		
	are a provide the submitted by the bidder		
11.	Duly signed letter of Authority MUOT be sub- 14		
	authorising the individual to sign on behalf of the hidder if:		
	authorising the marvidual to sign on behall of the bluder II.	Yes	Yes
	a) If there are more than one Owner/ Director / Shareholder /		
	Member / Trustee etc. OR		
	b) If there is only one Director / Shareholder / Member /		
	Trustee / Owner etc. and they are not the one completing		
	the bid document.		
	Note: The Letter of Authority MUST be signed by all directors		
	of the Bidder (or a signed Board Resolution authorising the		
	Signatory will be accepted).		
10		Voo	Voo
12.	Priced Bills of Quantities completed in black ink.	res	res
	•		

The following will be applicable to Joint Ventures/Consortium			
Consortium/Joint Venture Agreement to enter in a Consortium / Joint Venture signed by all Consortium Members who are Duly Authorized.	Yes	Yes	
Resolution of the Board of Directors to enter into a Consortium or Joint Venture from each member firm of the Consortium /Joint Venture for this Bid.	Yes	Yes	
Letter of Authority of Signatory (individual) authorizing the Signatory to sign on behalf of the Consortium/JV. The Letter of Authority should be from each member firm and must be signed by all directors of each member firm (or Board Resolution will be accepted).	Yes	Yes	
Annexure I: (SBD6.1) Preference Point Claim in terms of the Preferential Procurement Regulations 2022 (Completed and Signed by the Delegated Authority)	No	No	
CSD report will be used to confirm other specific goals listed in Table 1 of the SBD 6.1 document.			
Failure to submit the preference points claim and proof of address may result in awarding of 0 (zero) points preference points under Eastern Cape locality.			

KINDLY NOTE THAT, FAILURE TO SUBMIT THE REQUIRED MANDATORY DOCUMENTATION WITH THE BID WILL RESULT IN YOUR BID BEING DISQUALIFIED WITHOUT FURTHER CONSIDERATION.

Bidders shall take note of the following conditions:

- 1. The successful bidder will be required to submit a Letter of Good Standing from the Compensation Commission within 14 days after award and before the contract can be signed.
- 2. Performance Guarantee to be submitted within 14 days after award.
- 3. The Bid Validity period is 90 days.
- 4. An approved and project specific Health and Safety file within 14 days upon appointment.
- 5. An Approved Construction Programme with 14 days upon appointment.
- 6. No correction fluid to be used and all errors are to be initialled.
- 7. Bidders must clearly indicate which project in the Bid they are responding to. Bidders may respond to more than one project (T1.1).
- 8. Bidder will only be appointed for one project

Queries relating to the issue of these documents may be addressed in writing to: Ms. P. Casa

tenders@ecdc.co.za and cc pcasa@ecdc.co.za

1.2. Stage 1 - Local Production and Content for Designated Sectors and Local Content Declaration

This Standard Bidding Document (SBD) 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 , 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. General Conditions

1.1. The ECDC make provision for the promotion of local production and content.

1.2. The ECDC prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.

1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two-stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and specific goals.

1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.

1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

LC = [1 - x / y] * 100

Where

x is the imported content in Rand 27

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

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 South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated 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.

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid: Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in table 1 below.

Bidder that fails to meet the minimum stipulated threshold for local production and content will be unacceptable and will not proceed to stage 2.

3.3 Table 1 provides the stipulated minimum threshold for local content and production for steel products and components for construction (as described in 3.2)

Steel Construction Materials	Components	Local Content Threshold
Fabricated Structural Steel	Latticed steelwork, reinforcement steel, columns, beams, plate girders, rafters, bracing, cladding supports, stair stringers & treads, ladders, steel flooring, floor grating, handrailing and balustrading, scaffolding, ducting, gutters, launders, downpipes and trusses	100%
Joining/Connecting Components	Gussets, cleats, stiffeners, splices, cranks, kinks, doglegs, spacers, tabs, brackets	100%
Frames	Doors and Windows	100%
Roof and Cladding	Bare steel cladding, galvanised steel cladding, colour coated cladding	100%
Fasteners	Bolts, nuts, rivets and nails	100%
Wire Products	All fencing products: all barbed wire and mesh fencing, fabric/mesh reinforcing, gabions, wire rope/strand and chains, welding electrodes, nails/tacks, springs and screws	100%
Ducting and Structural Pipework	Non-conveyance tubing fabricated from steel sheeting and plate with structural supports	100%
Gutters, downpipes & launders	Fabricated materials made from sheeting associated with roof drainage systems	100%

Table 1a: Minimum local content for Steel Value-added Products

Table 1b: Minimum local content for Primary Steel Products

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Steel Construction Materials	Local Content Threshold
Plates (>4.5mm thick and supplied in flat pieces)	100%
Sheets (<4.5mm thick and supplied in coils)	100%
Galvanised and Colour Coated Coils	100%
Wire Rod and Drawn Wire	100%
Sections (Channels; Angles, I-Beams and H-Beams)	100%
Reinforcing bars	100%

3.1 The stipulated minimum threshold percentages for local production and content in respect of bagged and bulk cement produced using locally produced raw materials are as follows:

Cement type	Description	Application	Stipulated Minimum Threshold
Cem I	Pure portland cement with a 95-100% clinker.	All civil and building construction as appropriate	100%
Cem II	Portland cement containing varying additions of secondary materials, i.e. fly ash, pozzolana, slag, silica fume, or limestone	All civil and building construction as appropriate	100%
Cem III	blast furnace cement, 50% OPC, 50% blast furnace slag	All civil and building construction as appropriate	100%
Cem IV	pozzolanic cement, OPC and fly ash	All civil and building construction as appropriate	100%
Cem V	composite cement: slag and ash cement. Blended cements with more than one blending material	All civil and building construction as appropriate	100%
Masonry cement	Mixture of Portland cement and plasticizing materials such as limestone to improve setting time	use in mortar, brick, block, and stone masonry construction	100%

.....

SIGNATURE(S) OF BIDDERS(S)

DATE:

ADDRESS:

.....

.....

.....

WITNESSES:

1.

2.

1.3. STAGE 2 - FUNCTIONALITY

Involves an evaluation of Functionality only – At this stage Bidders must score a minimum score of **60%** for functionality (services) in order to be evaluated for stage 3 (Preferential procurement points).

Bidder to note the following for Functionality Evaluation:

a) Adequate proof supporting the points claimed must be provided. (e.g., *documents, agreements, qualifications, previous experience, certifications, etc.*)

b) Failure to submit relevant information with supporting document and adequate proof may result in ECDC not being able to allocate points for the Evaluation Criteria outlined below.

Table 1: Functionality Evaluation Criteria – Stage 2

COMPANY EXPERIENCE (Read with Schedule T.2.2.2(a) requirements) (30 points	Allocated
max)	Points
Reference letters for similar building or renovations of buildings to the value of R1 million as stipulated below:	
3 or more similar projects	30
2 similar projects	15
1 similar project	5
Less than 1 similar projects	0
(Bidder to submit a reference letter for each project completed. The reference letter should clearly indicate the scope of works completed as well as the value of the project)	
Document to be submitted for points allocation.	
The Bidder must demonstrate that they have the relevant experience in Building works when submitting completed T.2.2.2 (a) reference forms or reference letters of completed general building works (Read with Schedule T.2.2.2(a) requirements)	
Reference letter should indicate the following.	
Signature of the client	
Client's Letter head or Client Stamp	
 Company name, contact person, contact details (telephone number and email address) 	
Value of the project	
Description of Works carried out	
Works have been completed on time /within the stipulated contract period	
Good or better quality of workmanship	
Assessment of the quality of work performed	

EXPERIENCE AND QUALIFICATIONS OF KEY PERSONNEL - CVs of other Key Personnel to be included in Returnables (30 points max)			
Bidde indica	r must submit certificate of qualification (Built Environment) and CV's ting experience gained		
Const	ruction Manager		
-	NDip or higher with 10 years or more post graduate experience in building related projects	10	
-	NDip or higher with 5 years but less than 10 years' post graduate experience in building related projects	8	
-	NDip or higher with 3 years but less than 5 years post graduate experience in building related projects	5	
-	NDip or higher with less than 3 years' post graduate experience in building related projects	0	
Const	ruction Supervisor		
-	TVET N6 with 10 years or more post graduate experience in building related projects	10	
-	TVET N6 with 5 years but less than 10 years' post graduate experience in building related projects	8	
-	TVET N6 with 3 years but less than 5 years post graduate experience in building related projects	5	
-	TVET N6 with less than 3 years' post graduate experience in building related projects	0	
Health and Safety Officer			
-	10 years or more experience as a Health and Safety Officer in construction	10	
-	5 years but less than 10 years' experience as a Health and Safety Officer in construction	8	
-	3 years but less than 5 years' experience as a Health and Safety Officer in construction	5	
-	Less than 3 years' experience as a Health and Safety Officer in construction	0	
(To qualify for points above, bidder must submit a certificate of registration with the SACPCMP as a registered Construction Health and Safety Officer and CV indicating experience gained)			
CONS	TRUCTION PROGRAM (10 points max)		
Bidde	r needs to submit a construction program to claim full points (10 max).		
-	Project specific detailed program covering all construction aspects and realistic program with critical path and dependencies defined.	10	
-	No submission of project specific detailed program	0	
	L MAXIMUM ACHIEVABLE POINTS IUM POINTS REQUIRED	70 42	

- a) Only bids that have achieved the minimum qualifying score for functionality will be evaluated further in terms of preferential procurement points (stage 3).
- b) All bids that fail to achieve the minimum score will be disqualified.
- c) The minimum qualifying score (in a percentage) for functionality shall be calculated as follows:

$$Ps = \frac{So}{Ms} \times 100$$

Where:

Ps = percentage scored for functionality by bid under consideration

So = Total score for bid under consideration

Ms = Maximum possible score

The percentages of each panel member shall be added and divided by the number of panel members to establish the average percentage obtained by each bidder for functionality.

1.4. Stage 3 – Preference Procurement Point - Evaluation Criteria

Preference points for this bid shall be awarded for price and the specific goal. The maximum points for this bid are allocated as follows:

CRITERIA	POINTS
Price	80
Specific goal	20
TOTAL POINTS	100

- a) Points awarded for price based will be based on the 80/20 Preference point systems
- b) The points scored by the tenderer/bidder for Price will be added to the points scored for ECDC specific goal to obtain the bidder's total points scored out of 100 points.
- c) In the event that two or more bids have scored equal total points, the successful bid will be the one scoring the highest number of preference points for ECDC specific goal
- d) However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for specific goal, the successful bid must be the one scoring the highest score for functionality.
- e) Should two or more bidders/tenderers be equal in all respects, the award shall be decided by the drawing of lots.
- f) The bidder obtaining the highest number of total points will be awarded the contract.
- g) Points scored will be rounded off to the nearest 2 decimal places.

h) Price

- (i) The lowest acceptable bid will score 80 points for price.
- (ii) The following formula will be used to calculate the points out of 80 for price in respect of the bid/tender.

(iii) Preference points for price shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;

DETAILS	80/20 PREFERENCE POINT SYSTEM
Rand value (competitive bids or quotations) all applicable taxes included.	 Equal and above R30 000 to R50 million, inclusive of all applicable taxes. Below R30 000 if and when considered to be appropriate
Formulae	$Ps = 80 \left(1 - \frac{Pt - P\min}{P\min} \right)$
	Ps = Points scored for comparative price of bid / offer under consideration
	Pt = Comparative price of bid / offer under consideration
	Pmin = Comparative price of lowest acceptable bid / offer

Annex A

Standard Conditions of Tender

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (January 2019) as published in Government Gazette No 42622, Board Notice 423 of 2019 on the 8th of August 2019 (See www.cidb.org.za). Refer corresponding prefixes.

C.1 General

C.1.1 Actions

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

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

- Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.
 - 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

C.1.1.3 The employer shall not seek, and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

C.1.2 Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

C.1.3 Interpretation

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

C.1.3.2 These conditions of tender, the tender data and tender schedules which are required for tender evaluation purposes, shall form part of any contract arising from the invitation to tender.

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

a) conflict of interest means any situation in which:

- i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially.
- ii) an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or

- iii) in compatibility or contradictory interests exist between an employee and the tenderer who employs that employee.
- **b) comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration.
- c) corrupt practice means the offering, giving, receiving, or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process.
- **d) fraudulent practice** means the misrepresentation of the facts to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels.

C.1.4 Communication and employer's agent

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

C.1.5 Cancellation and Re-Invitation of Tenders

C.1.5.1 An employer may, prior to the award of the tender, cancel a tender if-

- a) due to changed circumstances, there is no longer a need for the engineering and construction works specified in the invitation.
- b) funds are no longer available to cover the total envisaged expenditure; or
- c) no acceptable tenders are received.
- d) there is a material irregularity in the tender process.
- C.1.5.2 The decision to cancel a tender invitation must be published in the same manner in which the

original tender invitation was advertised

C.1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

C.1.6 Procurement procedures C.1.6.1 General

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

C.1.6.2 Competitive negotiation procedure

C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

C.1.6.2.2 All responsive tenderers or at least a minimum of not less than three responsive tenderers that are highest ranked in terms of the evaluation criteria stated in the tender data shall be invited to enter into competitive negotiations based on the principle of equal treatment, keeping confidential the proposed solutions and associated information.

Notwithstanding the provisions of C.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

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

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

C.2Tenderer's obligations

C.2.1 Eligibility

C.2.1.1 Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.

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

C.2.2 Cost of tendering

C.2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

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

C.2.3 Check documents

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

C.2.4 Confidentiality and copyright of documents

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

C.2.5 Reference documents

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

C.2.6 Acknowledge addenda

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

C.2.7 Clarification meeting

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

C.2.8 Seek clarification

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

C.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

C.2.10 Pricing the tender offer

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

C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.

C.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

C.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

C.2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

C.2.12 Alternative tender offers

C.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

A.2.13 Submitting a tender offer

C.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

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

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

C.2.13.4 Sign (Signature by authorized personnel) the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

C.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

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

C.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.

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

C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

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

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

C.2.15 Closing time

C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

C.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

C.2.16 Tender offer validity

C.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

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

C.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer
evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).

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

C.2.17 Clarification of tender offer after submission

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

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

C.2.18 Provide other material

C.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment.

Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

C.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

C.2.19 Inspections, tests and analysis

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

C.2.20 Submit securities, bonds and policies

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

C.2.21 Check final draft

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

C.2.22 Return of other tender documents

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

C.2.23 Certificates

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

C.3The employer's undertakings

C.3.1 Respond to requests from the tenderer

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

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

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

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

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

C.3.2 Issue Addenda

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

C.3.3 Return late tender offers

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

C.3.4 Opening of tender submissions N/A

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

C.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points ECDC specific goal and time for completion for the main tender offer only.

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

A.3.5 Two-envelope system

C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more

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

C.3.6 Non-disclosure

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

C.3.7 Grounds for rejection and disqualification

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

C.3.8 Test for responsiveness

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

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

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

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

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

C.3.9 Arithmetical errors, omissions and discrepancies

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

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

- a) the gross misplacement of the decimal point in any unit rate.
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
- (i) line-item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
- (ii) the summation of the prices.

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

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

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

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

C.3.10 Clarification of a tender offer

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

C.3.11 Evaluation of tender offers

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.

Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:						
Requirement	Qualitative interpretation of goal					
Fair	The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.					
Transparent	The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.					
Competitive	The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.					
Cost effective	The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.					

The activities associated with evaluating tender offers are as follows:

- a) Open and record tender offers received.
- b) Determine whether or not tender offers are complete.
- c) Determine whether or not tender offers are responsive.
- d) Evaluate tender offers
- e) Determine if there are any grounds for disqualification.
- f) Determine acceptability of preferred tenderer
- g) Prepare a tender evaluation report.
- h) Confirm the recommendation contained in the tender evaluation report.

C.3.11.1 General

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

C.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

C.3.13 Acceptance of tender offer

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

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract.
- c) has the legal capacity to enter into the contract.
- d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
- e) complies with the legal requirements, if any, stated in the tender data; and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

C.3.14 Prepare contract documents

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

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents and other revisions agreed between the employer and the successful tenderer.
- C.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

C.3.15 Complete adjudicator's contract

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

C.3.16 Registration of the award

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the CIDB Register of Projects.

C.3.17 Provide copies of the contracts

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

C.3.18 Provide written reasons for actions taken

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

ANNEXURE B

ADDITIONAL CONDITIONS OF TENDER OF ECDC

Where the CIDB standard condition of tender does not address the following, clauses on the ECDC standard conditions of tender, the ECDC Standard condition of tender will be additional.

1.1 Alteration or withdrawal of Proposals

Bidders may withdraw their proposal by written notification on or before the date Specified for the evaluation of Bids.

1.2 Alternative Bid

Alternative Bids will not be accepted.

1.3 Costs for preparation of Proposals/presentations

The costs incurred by Bidders in respect of the attendance of any briefing or presentation meetings if necessary or costs incurred in preparing any proposal will be borne by the Bidder and the ECDC shall in no way be liable to reimburse such costs incurred.

1.4 Ownership of Proposals and presentations

The ECDC shall on receipt of any proposal relating to this request and submitted in accordance with the procedure set out herein, shall become the owner thereof and the ECDC shall not be obliged to return any proposal.

1.5 Tax Clearance Certificate requirement

It is a condition of all bids inclusive of foreign bidders / individuals) that the South African taxes of the successful bidder must be in order.

The bidders' Tax status will be verified on the CSD prior to the bid award and where the preferred bidders is not compliant, **7 working days** will be granted for remedy, failing which the bidder will be disqualified.

In Bids where Consortia/Joint venture/Sub-Contractors are involved; each party will be verified separately for proof of Tax Compliance Status.

In bids where Consortia / Joint Ventures / Sub-contractors are involved; each party must submit a separate Tax Clearance Certificate. 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

1.6 Confidentiality

The entire process of calling for Bids was initiated by the ECDC in terms of its procurement policy and is confidential. All deliberations in respect of the acceptability or otherwise of the proposals shall be conducted in closed sessions and members of the Evaluation and Procurement Committee and prospective service providers are bound to treat all discussions as highly confidential.

The service provider shall not divulge directly or indirectly to any other person than a person employed by ECDC, make copies or extracts of any of the information obtained during this assignment, while they may have access to ECDC's trade secrets, confidential information which may include, specifications, plans, drawings, pattern, samples, written instructions, notes, memoranda, technical information, know-how or process or method or any other records of whatsoever nature without the written consent of ECDC and shall surrender all these items to ECDC on termination of the assignment or on demand of ECDC.

The service provider shall not be entitled to make use of the information whether for its own benefit or that of others, to make available or derive any profit from any of the information or knowledge specifically related to the business or affairs of ECDC.

Any document shall remain the property of ECDC and shall be returned (all copies) to ECDC on completion of the contract if so required by ECDC.

1.7 Inventions Patent and Copy-Rights

The service provider cedes, assigns and transfers to ECDC all rights, title and interest in and to any and all copyright in all works and inventions which relates to the business of ECDC (which includes, but is not limited to, methodologies and products) which arises within the course and scope of this services will be assigned to ECDC.

The Service Provider shall Provide ECDC the sole and exclusive right to alter and adapt the work.

The service provider shall indemnify ECDC against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by ECDC.

1.8 Ethics

Any attempt by an interested Bidder to obtain confidential information or enter into unlawful agreements with competitors or influence the various ECDC Procurement Committee's or the ECDC during the process of examining, evaluating and comparing Bids/Proposals or Proposals will lead to the rejection of its bid/quotation/proposal in its entirety.

The Bidder must declare any business or other interests it has with the ECDC or any employee of the ECDC, as per the declaration of interest form annexed hereto marked in Section D; failing which the Bidder shall be automatically disqualified from further participation in the Bid or call for proposals. The disqualification will be applicable at any stage of the bidding and / or engagement process.

1.9 Competition

Bidders and their respective officers, employees and agents are prohibited from engaging in any collusive action with respect to the bidding process which serves to limit competition amongst bidders.

In general, the attention of bidders is drawn to Section 4(1) (b) (iii) of the Competition Act 1998 (Act No. 89 of 1998) (the Competition Act) that prohibits collusive biding.

An agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder/s is / are or a contractor(s) was / were involved in collusive bidding.

If bidders have reason to believe that competition issues may arise from any submission of a response to this bid invitation they may make, they are encouraged to discuss their position with the competition authorities before submitting response.

Any correspondence or process of any kind between bidders and the competition authorities must be documented in the responses to this invitation to bid.

In this regard bidders are required to complete the Certificate of Independence Bid Determination, failing which the Bidder shall be automatically disqualified from further participation in the Bid or call for proposals. The disqualification will be applicable at any stage of the bidding and / or engagement process.

If a bidder (s) or contractor (s), based on reasonable grounds or evidence obtained by ECDC, has /have engaged in the restrictive practice referred to above, ECDC may refer the matter to the Competition Commission for investigation and possible imposition of an administrative penalty as contemplated in Section 59 of the Competition Act 89 of 1998.

If a bidder(s) or contractor(s) has / have been found guilty by the Competition Commission of the restrictive practice referred to above, ECDC may in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such an item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) for conducting business with the public sector for a period of not exceeding 10 (ten) years and / or claim damages form the bidder(s) / contractor(s) concerned.

1.10 Cancellation of Bid Process

The ECDC shall be entitled, within its sole and entire discretion, to cancel this Bid/Call for Proposals and/or Quotations at any time and shall notify the interested service providers accordingly. The ECDC shall in no way be liable for any damages whatsoever, including, without limitation, damages for loss of profit, in any way connected with the cancellation of this bid. The publication of the bid does not commit the ECDC to appoint any of the qualifying Bidders.

1.11 Interviews

In terms of the bid evaluation process short listed bidders may be interviewed. This will entail the bidder being invited to a venue as determined by the bid committee. All transport and accommodation costs incurred by the bidder will be for the bidders account and will not be reimbursed in any way. Failure to attend a scheduled interview will lead to immediate disqualification from the bid process. The ECDC reserves the right to appoint a bidder without conducting interviews.

1.12 Contract award

The successful bidder will be notified of the bid award in writing by the Procurement Department.

The acceptance of any proposal shall only be confirmed with the conclusion of a final written signed service level agreement or any other appropriate agreement between the ECDC and the successful Bidder, in terms of which the rights and duties of the parties are recorded, which agreement shall regulate the relationship between the ECDC and the Successful Bidder.

As a guideline regarding the content of the service level agreement, the bidder is referred to the JBCC PBA (6.2 edition).

Until such time that an appropriate agreement has been concluded in writing between the ECDC and the successful Bidder, no rights shall be conferred, nor shall any legitimate expectations be conferred to the successful Bidder to carry out the works or services provided for in this Bid.

The ECDC, the Accounting Officer and the Bid Committee (as the case may be) does not bind itself to accept either the lowest (price), highest (points) or any other bid and reserves the right to accept the bid which it deems to be in the best interest of the Institution even if it implies a waiver by the ECDC, the Accounting Officer, or the Bid Committee, (as the case may be) of certain requirements which the ECDC, the Accounting Officer, the Bid Committee, (as the case may be) considers to be of minor importance and not complied with by the bidder.

The ECDC will not entertain any request of feedback before the final awarding of the contract.

1.13 Supplier Due Diligence

ECDC reserves the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include site visits and requests for additional information.

1.14 Disclaimer

This Bid document has been prepared for the purpose of providing information to interested Bidders. The provision of any additional information about the organization to Bidders, are disclosed and will be made available to enable the prospective Bidders to submit comprehensive proposals.

Interested Bidders are accordingly required to conduct their own due diligence in respect of the ECDC and its business operations and the nature and scope of the services required.

The ECDC accepts no responsibility for the fairness, accuracy or completeness of any information or opinions, for any errors, omissions or misstatements, negligent otherwise, made by any person in this Bid document or at any Compulsory briefing session

The ECDC accepts no liability for any loss incurred by any person(s) due to events or action taken as a consequence of the preparation and dissemination of this bid request.

Except in cases of criminal negligence or wilful misconduct, and in the case of infringement the bidder shall not be liable to ECDC, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the bidder to pay penalties and/or damages to ECDC; and

The aggregate liability of the bidder to ECDC, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

ETHICS & FRAUD HOTLINE REPORTING CHANNELS

HOTLINE DETAILS Advance Call

Ethics & Fraud Hotline

HOTLINE DETAILS	
Hotline Name:	ECDC Ethics & Fraud Hotline
Contact Number:	0800 116 665
WhatsApp Number:	0860 004 004
Dedicated Email Address:	ecdc@behonest.co.za aidc@behost.co.za
SMS Number:	48691
Free Post	BNT165, Advance Call Pty (Ltd), Brooklyn Square, 0075
Website Link	www.behonest.co.za
Chat	www.behonest.co.za

Whilst all due care has been taken in connection with the preparation of this bid, ECDC makes no representations or warranties that the content of the bid or any information communicated to or provided to Bidder(s) during the bidding process is, or will be, accurate, current or complete. ECDC, and its employees and advisors will not be liable with respect to any information communicated which may not be accurate, current or complete.

If Bidder(s) finds or reasonably believes it has found any discrepancy, ambiguity, error or inconsistency in this bid or any other information provided by ECDC (other than minor clerical matters), the Bidder(s) must promptly notify ECDC in writing of such discrepancy, ambiguity, error or inconsistency in order to give ECDC an opportunity to consider what corrective action is necessary (if any).

Any actual discrepancy, ambiguity, error or inconsistency in the bid or any other information provided by ECDC will, if possible, be corrected and provided to all Bidder(s) without attribution to the Bidder(s) who provided the written notice.

All persons (including Bidder(s)) obtaining or receiving the bid and any other information in connection with the Bid or the Tendering process must keep the contents of the Bid and other such information confidential, and not disclose or use the information except as required for the purpose of developing a proposal in response to this Bid All persons (including Bidder(s)) obtaining or receiving the bid and any other information in connection with the Bid or the Tendering process must keep the contents of the Bid and other such information confidential, and not disclose or use the information except as required for the purpose of developing a proposal in response to this Bid

T2.2. - Returnable schedules

T2.2.1 – Declarations

T2.2.2 – Functionality Evaluation Schedules

ANNEXURE C: SUPPLIER INFORMATION/COMPANY ENTERPRISE QUESTIONNAIRE

Note: Mandatory Requirement. Failure to complete and sign this document will result in the bid being non responsive.

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

Legal Name of Bidder: (Same as CSD)	
Trading Name of Bidder: (Same as CSD)	
Registration Number (Same as CSD)	
Physical Address	
Postal Address	
Contact Person (of the JV if the Bidder is a JV)	
Title/Position in the Firm	
Mobile Number (of the JV if the Bidder is a JV)	
Bidder Telephone Number (of the JV if the Bidder is a JV)	
Facsimile Number	
Email Address of Contact Person (of the JV if the Bidder is a JV)	
Email Address of Bidder (of the JV if a the Bidder is a JV)	
VAT Registration Number (Same as CSD)	

Central Supplier Database	Number	MAAA					
CIDB Registration Number							
Are the Accredited Representative in South Africa for the Goods/Services/Works Offered?	□ Yes (If Yes enclose	□ No e Proof)	Are you a foreign based supplier for the Goods/Services/Works Offered?	□ Yes (If Yes, a questionnai	□ No answer the ire Below)		
QUESTIONAIRE TO BIDDIN	IG FOREIGN S	UPPLIERS					
Is the Entity a resident of the	Republic of So	uth Africa (I	RSA)	□ Yes	□ No		
Does the Entity have a branc	h in the RSA?			□ Yes	□ No		
Does the Entity have a perm	anent establish	ment in the	RSA?	□ Yes	□ No		
Does the Entity have any sou	urce of income i	n the RSA		□ Yes	□ No		
If the answer is "No" to all Status system pin code fro	of the above, m the South A	then it is r frican Rev	ot a requirement to register enue (SARS) and if not regis	r for a Tax C ster	Compliance		
 Where a person within the Bidding Entity is an Employee of the State, Bidder should a. submit a signed letter on a letter head from their Accounting Officer/Accounting Authority (AO/AA of the Government Institution where they are employed) stating that they are not prohibited from conducting business with the State in terms of Section 8 of the Public Administration Management Act, 2012 (Act No.11 of 2014- "The PFMA") b. submit a signed letter on a letter from their AO/AA granting permission to perform other remunerative work outside of their employment where the PAMA does not apply to such an employee ECDC reserves the right to verify such information from their AO/AA 							
SERVICE PROVIDER ACKNOWLEDGEMENT OF REQUEST AND TERMS AND CONDITIONS: I (NAME) HEREBY ACCEPT THE TERMS OF THIS REQUEST FOR BID AND ACKNOWLEDGE THAT I AM APPROPRIATELY DELEGATED TO RESPOND ON BEHALF OF (ATTACH DELEGATION OF AUTHORITY)							
(NAME OF BIDDER).							
Print Name			Date				
Designation		Signature					

An	Annexure D: Location							
1	Where is the Bidder's main office?							
	Other offices:							

Annexure G: BIDDER'S DISCLOSURE (SBD4)

Note: Mandatory Requirement. Failure to complete and sign this document will result in the bid being non responsive.

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

- 2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state?
 - YES/NO
- 2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2. Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....

.....

- 2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**
- 2.3.1 If so, furnish particulars:

^{.....}

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 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 consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 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.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 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.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF

PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING

ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO

BE FALSE.

	•••	•••	•••	• •	•	 •	• •	•	•	 •	•	 •	•	•	•	•	•	
Sig	na	atu	re	,														

Date

.....

Position

SIGNATURE OF BIDDER OF DELEGATED	DATE	
AUTHORITY		

² 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.

In terms of the provisions of the Protection of Personal Information Act, 2013 (Act No. 4 of 2013)

1. I, _____(full names of the client/applicant),

Identitynumber ("the applicant") do hereby grant my consent to the Eastern Cape Development Corporation ("the ECDC") and its appointed processor to process my personal data for the purpose of any or all of the undermentioned actions, being the legitimate reasons for processing and/or using my personal data.

- 2. I accept that my personal information will only be utilized for the purposes it was collected, that the information will only be retained for as long as is necessary and required by law, and that I have the right to view such information at any time, as well as requested correction or deletion of my personal information held by the ECDC.
- 3. I am aware that I may withdraw my consent at any time by using the relevant Data Subject Consent Withdrawal Form.
- 4. I herewith consent to the ECDC official / staff member / employee or agent collecting and having access to my personal information.
- 5. I expressly consent to the ECDC official / staff member / employee or agent to collect and process this information for the purpose of **considering my application for funding / leasing / employment alternatively for considering our bid document**.
- 6. I expressly consent to the ECDC or its official / staff member / employee or agent having access to my personal information contained in my application for lease, employment, funding, my bid document or any other administrative document required by the ECDC for processing.
- 7. I expressly consent to the ECDC or its official / staff member / employee or agent using my personal information to communicate with me in person / via telephone / email / video call / fax / WhatsApp / any form of social media.
- 8. I expressly consent that the ECDC or its official / staff member / employee or agent may discuss any of my personal information with any of its officials / staff members / employees or agents that may at any stage of my application be involved in considering same and forward any such information to any ECDC relevant committee or forum.
- 9. I expressly consent to the ECDC or its official / staff member / employee or agent handing over any outstanding accounts to debt collection third parties (applicable to properties/development finance and business support unit).
- 10. I expressly consent to the ECDC or its official / staff member / employee or agent handing over my personal information for purposes of verification of my credit profile or record, references or any purpose required in terms of the law.

SIGNATURE	of	the	DATE	
DELEGATED A	UTHOF	RITY	DAIL	

Annexure I: Preference Point Claim in terms of the Preferential Procurement Regulations 2022

SBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

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

- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 Principle applicable for this tender /quotation is:

- a) The value of this bid is estimated not to exceed R50 000 000 (all applicable taxes included) and therefore, the applicable preference point system for this tender is the 80/20 preference point system.
- 1.3 Points for this tender shall be awarded for:
- (a) Price; and
- (b) Specific Goals.
- 1.4 The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	
51% and above black owned enterprise	10
Eastern Cape Based Supplier	05
51 % and above woman owned enterprises.	03
51 % and above youth owned enterprises	02
Total points for Price and SPECIFIC GOALS	100

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. **DEFINITIONS**

"tender" means a written offer in the form determined by an organ of state in response to an invitation to

- (a) provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **"price"** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **"tender for income-generating contracts"** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

2.3. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

80/20

$$Ps = 80 \left(1 - \frac{Pt - P\min \Box}{P\min \Box} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3. POINTS AWARDED FOR SPECIFIC GOALS

- 3.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 3.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (c) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- (d) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Numberofpointsclaimedclaimed(80/20 system)(Tobecompletedbythe tenderer)
SPECIFIC GOALS				
51% and above black owned enterprises		10	N/A	
Eastern Cape Based Supplier		05	N/A	
51 % and above woman owned enterprises.		03	N/A	
51 % and above youth owned enterprises		02	N/A	

DECLARATION WITH REGARD TO COMPANY/FIRM

- 3.3. Name of company/firm.....
- 3.4. Company registration number:
- 3.5. TYPE OF COMPANY/ FIRM
 - Dertnership/Joint Venture / Consortium
 - One-person business/sole propriety
 - Close corporation
 - Public Company
 - Personal Liability Company
 - (Pty) Limited
 - Non-Profit Company
 - State Owned Company

[TICK APPLICABLE BOX]

- 3.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:
- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make
 - less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the

shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary

SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:	
DATE:	
ADDRESS:	

ANNEXURE K: SBD 6.2 – Declaration Certificate for Local Production and Content for Designated Sector

Note: Mandatory Requirement. Failure to complete and sign this document will result in the bid being non responsive.

This Standard Bidding Document (SBD) 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, and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 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. General Conditions

1.1 The ECDC make provision for the promotion of local production and content.

1.2 The ECDC prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced/manufactured goods with a stipulated minimum threshold for local production and content will be considered.

1.3 Where necessary, for bids referred to in paragraphs 1.2, 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 specific goals.

1.4 A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.

1.5 The local content (LC) as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = 1 - \left(\frac{x}{y}\right)_{x \ 100}$$

Where

x imported content

y bid price 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 South African Reserve Bank (SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SATS 1268:2011 is accessible on http://www.thedti/industrialdevelopment/ip.jsp at no cost

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

2. Definitions

- 2.1 "bid" includes advertised competitive bids, written price quotations 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,

2.5 where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

2.6 "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).

2.7 "**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

2.8 which costs are inclusive of the costs abroad, 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;

2.9 "local content" means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;

2.10 "stipulated minimum threshold" means that portion of local production and content as determined by the Department of Trade and Industry; and

2.11 "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 contractor in the execution part of a project in terms of the contract.

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 1 (Refer to Annexure C for more details)

Designated Sector /Sub-sector/ Industries	Minimum threshold for local content
Steel products	100%
IBR sheeting	100%
Cement (All classes)	100%
Steel fencing	100%
Steel gates	100%

3. Does any portion of the services, works or goods offered have any imported content? (Tick Applicable Box)

YES NU

3.1. If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date, one week (7 calendar days) prior to the closing date 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:

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

4. Where, after the award of a Bid, challenges are experienced in the meeting the stipulated Minimum threshold for local content, the DTI must be informed accordingly in order for the DTI to verify and consultation with the AO/AA provide directive in this regard.

LOCAL CONTENT DECLARATION FOR GOQWANA (TSOLO) SHEARING SHED

LOCAL CONTENT DECLARATION BY THE CHIEF FINANCIAL OFFICER OR OT LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIB (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)	THER BILITY
IN RESPECT OF BID No.	
ISSUED BY: (Procurement Authority / Name of Institution):	
NB The obligation to complete, duly sign and submit this declaration cannot be transferrexternal authorized representative, auditor or any other third party acting on behalf of	red to an of the bidder.
Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thdti.gov.za/industial.dev	on velopment/ip.jsp
Bidders should first complete Declaration D After completing Declaration D, bidders complete Declaration E and then consolidate the information on Declaration C.	should
Declaration C should be submitted with the bid documentation at the closing of the bid in order to substantiate the declaration made in paragraph C below.	date and time
Declaration D and E should be kept by the Bidder for verification purposes for a period 5 years. The successful bidder is required to continuously update Declarations C, D the actual values for the duration of the contract.	iod of at least and E with
I, the undersigned, (full na	ames), do hereby
declare, in my capacity as	
of(name of bi the following:	idder entity),
The facts contained herein are within my own personal knowledge.	
(a) I have satisfied myself that	
 the goods/services/works to be delivered in terms of the above-specified bid the minimum local content requirements as specified in the bid, and as me of SATS 1286:2011 and 	d comply with easured in terms
 (b) The local content percentage (%) indicated below has been calculated using (c) given in clause 3 of SATS 1286:2011, the rates of exchange indicated in pa and information contained in Declaration D and E which has been consolidated Declaration C above : 	g the formula tragraph 4.1 ated in
Bid price, excluding VAT (y)	R
Imported content (x)	R
Stipulated minimum threshold for Local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

LOCAL CONTENT DECLARATION FOR MABHOBHO (MT FRERE) SHEARING SHED

LOCAL CONTENT DECLARATION BY THE CHIEF FINANCIAL OFFICER OR O LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONS (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)	THER IBILITY
IN RESPECT OF BID No.	
ISSUED BY: (Procurement Authority / Name of Institution):	
NB The obligation to complete, duly sign and submit this declaration cannot be transfe external authorized representative, auditor or any other third party acting on behalf	rred to an of the bidder.
Guidance on the Calculation of Local Content together with Local Content Declarat Templates (Annex C, D and E) is accessible on <u>http://www.thdti.gov.za/industial.de</u>	tion evelopment/ip.jsp
Bidders should first complete Declaration D After completing Declaration D, bidders complete Declaration E and then consolidate the information on Declaration C.	s should
Declaration C should be submitted with the bid documentation at the closing of the bid in order to substantiate the declaration made in paragraph C below	date and time
Declaration D and E should be kept by the Bidder for verification purposes for a pe 5 years. The successful bidder is required to continuously update Declarations C, I the actual values for the duration of the contract.	riod of at least D and E with
I, the undersigned, (full r	names), do hereby
declare, in my capacity as	
of(name of b the following:	bidder entity),
The facts contained herein are within my own personal knowledge.	
(d) I have satisfied myself that	
 the goods/services/works to be delivered in terms of the above-specified b the minimum local content requirements as specified in the bid, and as m of SATS 1286:2011 and 	id comply with easured in terms
 (e) The local content percentage (%) indicated below has been calculated usi (f) given in clause 3 of SATS 1286:2011, the rates of exchange indicated in p and information contained in Declaration D and E which has been consolid Declaration C above : 	ing the formula aragraph 4.1 ated in
Bid price, excluding VAT (y)	R
Imported content (x)	R
Stipulated minimum threshold for Local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

LOCAL CONTENT DECLARATION BY THE CHIEF FINANCIAL OFFICER OR O LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONS (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)	THER IBILITY
IN RESPECT OF BID No.	
ISSUED BY: (Procurement Authority / Name of Institution):	
NB The obligation to complete, duly sign and submit this declaration cannot be transfe external authorized representative, auditor or any other third party acting on behalf	rred to an of the bidder.
Guidance on the Calculation of Local Content together with Local Content Declarat Templates (Annex C, D and E) is accessible on <u>http://www.thdti.gov.za/industial.de</u>	tion evelopment/ip.jsp
Bidders should first complete Declaration D After completing Declaration D, bidders complete Declaration E and then consolidate the information on Declaration C.	s should
Declaration C should be submitted with the bid documentation at the closing of the bid in order to substantiate the declaration made in paragraph C below	date and time
Declaration D and E should be kept by the Bidder for verification purposes for a pe 5 years. The successful bidder is required to continuously update Declarations C, I the actual values for the duration of the contract.	riod of at least D and E with
I, the undersigned, (full r	names), do hereby
declare, in my capacity as	
of(name of b	bidder entity),
the following:	
The facts contained herein are within my own personal knowledge.	
(g) I have satisfied myself that	
 the goods/services/works to be delivered in terms of the above-specified b the minimum local content requirements as specified in the bid, and as m of SATS 1286:2011 and 	id comply with easured in terms
 (h) The local content percentage (%) indicated below has been calculated usi (i) given in clause 3 of SATS 1286:2011, the rates of exchange indicated in p and information contained in Declaration D and E which has been consolid Declaration C above : 	ng the formula aragraph 4.1 ated in
Bid price, excluding VAT (y)	R
Imported content (x)	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 / Institution 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 / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, promulgated under the Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE:	DATE:
WITNESS No. 1	DATE:
WITNESS No. 2	DATE:

The below listed declarations are attached in the next three pages that follow;

• Declaration C SATS 1286.2011

- Local Content Declaration Summary Schedule
- Declaration D SATS 1286.2011
- Imported Content Declaration Supporting Schedule to declaration C
- Declaration E SATS 1286.2011
- Local Content Declaration _- Supporting Schedule to declaration C
- Bidders should first complete annexure D, after completing annexure D, bidders should complete annexure E and then consolidate the information on annexure C.
- Annexure C should be submitted with the with the bid documentation on the closing date in order to substantiate the declaration made on annexure J.
- The successful bidder is required to continuously update annexures C, D and E with the actual for the duration of the contract.
- Bidders should obtain copies of certificates of trading the subject materials from manufactures/suppliers and attach them in the bid document in order to substantiate annexure J above.

Templates of Declarations C, D and E follow:

LOCAL CONTENT FOR: CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO BID NO: ECDC/INFRA/37A/052024

Templates of Declarations C, D and E follow:

													SATS 1286.2011
							Annex	k C					
					Local	Content De	claration	- Summar	v Schedu	le			
(C1)	Tender No.											Note: VAT to be ex	cluded from all
(C2)	Tender descrip	tion:										calculations	
(C3)	Designated pro	oduct(s)											
(C4)	Tender Authori	ity:											
(C5)	Tendering Entit	ty name:				r							
(C6)	Tender Exchan	ge Rate:	Pula		EU		GBP						
(C7)	Specified local	content %											
					Ca	Iculation of I	ocal content				Tend	er summary	
	Tender item no's	List of ite	ems	Tender price - each (excl VAT)	Exempted imported value	net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
	(C8)	(C9)		(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
	6,2,2,1	Steel products							100%	8No.			
	2,10,1	IBR sheeting	(oc)						100%	230m2			
	221	Foundation for o	ses)						100%	12m2			
	2,5,1	1.5m pre-stresse	d Lintels						100%	12/115 16 No.			
	2,6,7	1.2m pre-stresse	d Lintels						100%	3No.			
	2,6,8	2,6m pre-stresse	d Lintels						100%	2No.			
	3,3	Concrete for pit	base						100%	7m3			
	3,4	Concrete wall foundation for pit ablution							100%	43m3			
	3,5,3	VIP ablution con	crete slab						100%	10m3			
	2,6,9	1,0m pre-stresse	d Lintels						100%	6No.			
	6,2,3	Dipping tank con	icrete						100%	27m3			
	2,15	Steel rencing							100%	150m			
	2,10,5	Steel gates							100%	INO.			
									(C20) Total t	ender value			
	Signature of te	nderer from Anno	ex B						(C21) T	Total Exempt	imported content		
								(C22) Total Te	nder value n	et of exempt	imported content		
											(C23) Tota	I Imported content	
	Data:									100	(C24)	I otal local content	
	Date:									(C2	5/ Average local c	ontent % of tender	

													SATS 1286.2011
					А	nnex D							
					_								
			li	mported Co	ntent Declaratio	n - Suppo	rting Sche	dule to An	nex C				
(D1)	Tender No.								Note: VAT to be	excluded from			
(D2) (D3)	Tender descript	on: lucts:							all calculations	excluded nom			
(D3) (D4)	Tender Authorit	y:											
(D5)	Tendering Entity	name:	Pula		EII		CPC		1				
(00)	Tender Exchang	e nate.	ruia		EU		GBF						
	A. Exempte	ed imported co	ontent	1	1		1	Calculation of	imported conte	ent	1		Summary
	Tender item no's	Description of im	ported content	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value
	(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
			1							(010			
										(D19)	l lotal exempt l	This total m	ust correspond with
												Anı	nex C - C 21
			_										
	B. Importe	d directly by th	ne Tenderer			Forign		Calculation of	imported conte	ent			Summary
	Tender item no's	Description of im	ported content	Unit of measure	Overseas Supplier	currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value
	(D20)	(D2:	1)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
		•	1							(022) 7-			
										(D32)10	tai importeu vai	ue by tenderer	
	C. Importe	d by a 3rd part	y and supplie	ed to the Te	nderer		1	Calculation of	imported conte	ent	1		Summary
	Description of	f imported content	Unit of measure	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported value
		(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
										<i>(D45)</i> Tot	al imported valu	ie by 3rd party	
	D. Other fo	oreign currency	y payments		Calculation of forei payment	gn currency s							Summary of payments
	Туре	of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange							Local value of payments
		(D46)	(D47)	(D48)	(D49)	(D50)							(D51)
	Signature of ten	derer from Annex B					(D5	52) Total of for	eign currency pay	ments declared	d by tenderer an	d/or 3rd party	
							(<i>D53)</i> Total o	r imported cont	ent & toreign cur	rency payment	s - (<i>D32),</i> (D45)	& (D52) above	l
	Date:											This total m Anr	ust correspond with nex C - C 23

							SATS 1286.2011	
				Anne	хE			
		LOCAL	Content Decial	ration - S	supporting s	Schedule to Annex (
E1)	Tender No.					Note: VAT to be excluded	from all	
2) - 2)	Tender descrip	otion:				calculations	1	
:3) :4)	Tender Autho	rity:						
E5)	Tendering Ent	ity name:						
		Local Products	Description				Makas	
		(Goods, Services and Works)	Description	h of items pl	irchased	Local suppliers	value	
				(E6)		(E7)	(E8)	
				(50) To	tal local products	Goods Sarvisas and Warks	\ \	
				(23) 10	lai local products	(Goods, Services and works)	
	(E10)	Manpower costs	(Tenderer's manpow	er cost)				
	(110)		(renderer o manpon					
	(E11)	Factory overheads	(Rental, depreciation	& amortisat	ion, utility costs, c	onsumables etc.)		
	(E12)	Administration over	neads and mark-up	(Marketing,	insurance, financi	ng, interest etc.)		
								_
						(E13) Total local conten	t	
						This total must correspon C24	nd with Annex C -	
	Signature of t	enderer from Annex B						
	Date:							

LOCAL CONTENT FOR: CONSTRUCTION OF MABHOBHO SHEARING SHED IN MT FRERE BID NO: ECDC/INFRA/37B/052024

Templates of Declarations C, D and E follow:

													SATS 1286.2011
							Annex	кC					
					Local	Content De	eclaration	- Summa	rv Schedu	le			
(C1)	Tender No.											Note: VAT to be ex	cluded from all
(C2)	Tender descrip	tion:										calculations	
(C3)	Designated pro	oduct(s)											
(C4)	Tender Author	ity:											
(C5)	Tendering Entr	ty name:	Dula				CDD						
(0)	Specified local	ge Rate:	Pula		EU		GBP						
(07)	Specified local	content /8			Ca	lculation of l	local content				Tend	er summarv	
			l.			Tender value							
	Tender item no's	List of it	ems	Tender price - each (excl VAT)	Exempted imported value	net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
	(C8)	(C9)		(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
	6,2,2,1	Steel products							100%	8No.			
	2,10,1	IBR sheeting	coc)						100%	230m2			
	231	Foundation for c	ses)						100%	12m3			
	2,6,6	1.5m pre-stresse	d Lintels						100%	16 No.			
	2,6,7	1.2m pre-stresse	d Lintels						100%	3No.			
	2,6,8	2,6m pre-stresse	ed Lintels						100%	2No.			
	3,3	Concrete for pit	base						100%	7m3			
	3,4	Concrete wall foundation for pit ablution							100%	43m3			
	3,5,3	VIP ablution con	crete slab						100%	10m3			
	2,6,9	1,0m pre-stresse	ed Lintels						100%	6No.			
	6,2,3	Dipping tank con	icrete						100%	27m3			
	2,15	Steel gates							100%	200m			
	2,10,5	Steer gates							100%	1110.			
									(C20) Total t	ender value			
	Signature of te	nderer from Ann	ex B						(<i>C21</i>) 1	Fotal Exempt	imported content	:	
								(C22) Total Te	ender value ne	et of exempt	imported content	:	
											(C23) Tota	I Imported content	
	Data									100	(C24)	Iotal local content	
	Dale.									(12	Sy Average local C	ontent % of tender	

				Α	nnex D							
		-										
		lr	nported Co	ntent Declaratio	n - Suppo	rting Sche	dule to An	nex C				
Tender No.								Note: VAT to be	excluded from			
Tender description	on: lucts:							all calculations				
Tender Authority	y:											
Tendering Entity	name:	Pula		EU		CPD						
Tender Excitation	e nate.	ruid		LU		GBF						
A. Exempte	ed imported co	ontent					Calculation of	imported conte	nt			Summary
Tender item no's	Description of imp	ported content	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value
(D7)	(D8,)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
									(D19)	Total exempt i	imported value	
									(01)	enempt	This total mu	ust correspond with
											Anr	nex C - C 21
B. Importe	ed directly by the Tenderer			Forian		alculation of	imported conte	nt			Summary	
Tender item no's	Description of imp	ported content	Unit of measure	Overseas Supplier	currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported valu
(D20)	(D21	1)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
	`											
2.		1							<i>(D32)</i> Tot	al imported val	lue by tenderer	
C Imported	d by a 3rd part	y and supplic	d to the Te	ndoror			Calculation of	imported conte	nt			Summary
C. Imported	d by a 3rd part	y and supplie Unit of measure	to the Te	nderer Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Rate of Exchange	Calculation of Local value of imports	imported conte Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Summary Total imported valu
C. Imported	d by a 3rd part imported content	y and supplic Unit of measure (D34)	to the Te Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41)	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44)
C. Imported	d by a 3rd part imported content (D33)	y and supplie	Local supplier	Nderer Overseas Supplier (D36)	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41)	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44)
C. Importer	d by a 3rd part	y and supplie	Local supplier	Overseas Supplier (D36)	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41)	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44)
C. Importer	d by a 3rd part imported content (D33)	y and supplie	to the Te	Overseas Supplier (D36)	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41)	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44)
C. Imported	d by a 3rd part	y and supplie	to the Te	Overseas Supplier (D36)	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	imported conte	All locally incurred landing costs & duties (D41)	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44)
C. Imported Description of	d by a 3rd part	y and supplie	to the Te	nderer Overseas Supplier (D36)	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	imported conte Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41) (D45) Tota	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44)
C. Imported Description of	d by a 3rd part	y and supplie	to the Te	nderer Overseas Supplier (D36) Calculation of foreig payment	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41) (D45) Tota	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44) Summary of payments
C. Imported Description of	d by a 3rd part	y and supplie Unit of measure (D34) y payments Local supplier making the payment	to the Te	nderer Overseas Supplier (D36) Calculation of foreig payment Foreign currency value paid	Forign currency value as per Commercial Invoice (037)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	imported conte	All locally incurred landing costs & duties (D41) (D45) Tota	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44) Summary of payments Local value of payments
C. Importer	d by a 3rd part	y and supplie Unit of measure (D34) (D34) (D34) (D34) (D34) (D34) (D34) (D34) (D34) (D47)	Cocal supplier (D35) (D35) Overseas beneficiary (D48)	nderer Overseas Supplier (D36) Calculation of forein payment Foreign currency value paid (D49)	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Alculation of Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41) (D45) Tota	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44) (D44) Summary of payments Local value of payments (D51)
C. Imported Description of	d by a 3rd part	y and supplie Unit of measure (D34)	Colored to the Te	nderer Overseas Supplier (D36) Calculation of foreit payment Foreign currency value paid (D49)	Forign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41) (D45) Tota	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44) (D44) Summary of payments Local value of payments (D51)
C. Imported Description of	d by a 3rd part	y and supplie Unit of measure (D34) y payments Local supplier making the payment (D47)	Cotal supplier (D35) (D35) Overseas beneficiary (D48)	nderer Overseas Supplier (D36) Calculation of forei payment Foreign currency value paid (D49)	Forign currency value as per Commercial Invoice (D37) 	Tender Rate of Exchange (D38)	Calculation of Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41) (D45) Tota	Total landed cost excl VAT (D42)	Quantity imported (D43)	Summary Total imported valu (D44) (D44) Summary of payments Local value of payments (D51)
C. Imported	d by a 3rd part	y and supplie Unit of measure (D34) y payments Local supplier making the payment (D47)	ed to the Te	nderer Overseas Supplier (D36) Calculation of foreig payment Foreign currency value paid (D49)	Forign currency value as per Commercial Invoice (037) 	Tender Rate of Exchange (D38)	2) Total of fore	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41) (D45) Tota	Total landed cost excl VAT (D42) al imported value	Quantity imported (D43)	Summary Total imported valu (D44) Summary of payments Local value of payments (D51)
C. Importer	d by a 3rd part	y and supplie Unit of measure (D34) y payments Local supplier making the payment (D47)	ed to the Te	nderer Overseas Supplier (D36) Calculation of foreig payment Foreign currency value paid (D49)	Forign currency value as per Commercial Invoice (D37) 	Tender Rate of Exchange (D38)	2) Total of fore	imported conte Freight costs to port of entry (D40) 	All locally incurred landing costs & duties (D41) (D45) Tota	Total landed cost excl VAT (D42) al imported value by tenderer ar	Quantity imported (D43) ue by 3rd party	Summary Total imported valu (D44) Summary of payments Local value of payments (D51) 72 P a
C. Imported Description of Description of Description of Description of Description of Descripti	d by a 3rd part	y and supplie Unit of measure (D34) y payments Local supplier making the payment (D47)	ed to the Te Local supplier (D35) Coverseas beneficiary (D48) Coverseas	nderer Overseas Supplier (D36) Calculation of foreign payment Foreign currency value paid (D49)	Forign currency value as per Commercial Invoice (D37) 	Tender Rate of Exchange (D38)	2) Total of fore imported cont	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41) (D45) Tota (D45) Tota ments declared ency payments	Total landed cost excl VAT (D42)	Quantity imported (D43) ue by 3rd party ue by 3rd party d/or 3rd party & (D52) above	Summary Total imported valu (D44) (D44) Summary of payments Local value of payments (D51) T2 P a
							SATS 1286.2011					
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				Anne	хE							
		Local	Content Decla	ration - S	Supporting S	Schedule to Annex (C					
U 1	Tender No.					Note: VAT to be excluded	from all					
?) T	Tender descrip	tion:				calculations						
3) C	Designated pro	ducts:										
1) 1 5) 1	Tender Author Tendering Enti	ity: tv name:										
		Local Products (Goods, Services and Works)	Description	n of items pu	ırchased	Local suppliers	Value					
				(E6)		(E7)	(E8)					
				(<u> </u>							
				(<i>E9</i>) To	tal local products	(Goods, Services and Works)					
	(E10)	Manpower costs	(Tenderer's manpow	er cost)								
	(=)			2								
	(E11)	Factory overheads	(Rental, depreciation	& amortisat	ion, utility costs, c	onsumables etc.)						
	(E12)	Administration overh	eads and mark-up	(Marketing,	insurance, financi	ng, interest etc.)						
							_					
						(E13) Total local conten	t od with Annov C					
						C24	na with Annex C -					
s	Signature of te	nderer from Annex B										
r	Date:											
	Dutt.											

LOCAL CONTENT FOR: CONSTRUCTION OF KHIBA SHEARING SHED IN STERKSPRUIT BID NO: ECDC/INFRA/37C/052024

Templates of Declarations C, D and E follow:

													SATS 1286.2011
							Annez	хC					
					Local	Content D	eclaration	- Summa	rv Schedu	le			
(C1)	Tender No.											Note: VAT to be ex	cluded from all
(C2)	Tender descrip	tion:										calculations	
(C3)	Designated pro	oduct(s)											
(C4)	Tender Author	ity:											
(C5)	Tendering Enti	ty name:											
(C6)	Tender Exchan	ge Rate:	Pula		EU		GBP						
(C7)	Specified local	content %											
					Ca	alculation of	local content	t			Tend	er summary	
	Tender item no's	List of it	ems	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
	(C8)	(C9)		(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
	6,2,2,1	Steel products							100%	8No.			
	2,10,1	IBR sneeting	soc)						100%	230m2			
	221	Cement (An clas	ses)						100%	12m2			
	2,3,1	1 5m pre-stresse	d lintels						100%	121115 16 No			
	2,6,7	1.2m pre-stresse	d Lintels						100%	3No.			
	2,6,8	2,6m pre-stresse	d Lintels						100%	2No.			
	3,3	Concrete for pit	base						100%	7m3			
	3,4	Concrete wall foundation for pit ablution							100%	43m3			
	3,5,3	VIP ablution con	crete slab						100%	10m3			
	2,6,9	1,0m pre-stresse	ed Lintels						100%	6No.		ļ	
	6,2,3	Dipping tank cor	ocrete						100%	27m3			
	2,15	Steel fencing							100%	260m			
	2,16,5	Steel gates							100%	1N0.			
								+	+			+	
								<u> </u>					
		1	ĺ	l	L	1	1	l	(C20) Total t	ender value			
	Signature of te	nderer from Ann	ex B						(C21)	Total Exempt	imported content	:	
								(C22) Total Te	ender value no	et of exempt	imported content	:	
											(C23) Tota	I Imported content	
											(C24)	Total local content	
	Date:									(C2	25) Average local o	ontent % of tender	

					-								SATS 1286.201
					Α	nnex D							
			Ir	nported Co	ntent Declaratio	n - Suppoi	rting Sche	dule to An	nex C				
Tender	er No.												
Tender	er descriptio	on:							Note: VAT to be a all calculations	excluded from			
Design	nated Prod	ucts:											
Tender	ering Entity	name:											
Tender	er Exchange	e Rate:	Pula		EU		GBP						
A. Ex	xempte	d imported co	ontent					Calculation of	imported conte	nt			Summary
Tend n	der item no's	Description of imp	ported content	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value
(1	(D7)	(D8))	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
										(D19)	Total exempt i	imported value	
												This total mu	ust correspond with
												Anr	
B. In	mporter	d directly by th	ne Tenderer					Calculation of	impor <u>ted conte</u>	nt			Summary
Tend	der item no's	Description of imp	ported content	Unit of measure	Overseas Supplier	Forign currency value as per Commercial	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported valu
(D	(D20)	(D21	1)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
-		`											
										<i>(D32)</i> Tot	al imported val	lue by tenderer	
C Im	nnorter	hy a 3rd nart	v and sunnlie	d to the Te	nderer			Calculation of	imported conte	nt			Summary
Desc	scription of	imported content	Unit of measure	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported valu
	(D33)	(D34)	(D35)	(D36)	(227)							
					(====)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
						(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
						(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
, ,						(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
, ,						(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
, , D. O	Dther fo	reign currency	/ payments		Calculation of forei payment	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
D. O	Other fo	reign currency	/ payments	Overseas	Calculation of foreig payment Foreign currency value paid	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44) Summary of payments Local value of payments
D. O	Dther fo Type o	reign currency f payment D46)	y payments Local supplier making the payment (D47)	Overseas beneficiary (D48)	Calculation of forei payment Foreign currency value paid (D49)	(D37)		(D39)	(D40)	(D41)	(D42)	ue by 3rd party	(D44) Summary of payments Local value of payments (D51)
D. O	Dther fo Type o	reign currency If payment D46)	/ payments Local supplier making the payment (D47)	Overseas beneficiary (D48)	Calculation of foreig payment Foreign currency value paid (D49)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44) Summary of payments Local value of payments (D51)
D. O	Dther fo Type o (reign currency f payment D46)	/ payments Local supplier making the payment (D47)	Overseas beneficiary (D48)	Calculation of forei payment Foreign currency value paid (D49)	(D37)		(D39)	(D40)	(D41)	(D42)	ue by 3rd party	(D44) Summary of payments Local value of payments (D51)
D. O	Dther fo Type o	reign currency f payment	/ payments Local supplier making the payment (D47)	Overseas beneficiary (D48)	Calculation of foreig payment Foreign currency value paid (D49)	(D37)	(D38)	(D39)	(D40)	(D41) (D45) Tot:	(D42)	ue by 3rd party	(D44) Summary of payments Local value of payments (D51)
D. O	Dther fo Type o (. ture of tend	reign currency If payment D46) derer from Annex B	/ payments Local supplier making the payment (D47)	Overseas beneficiary (D48)	Calculation of foreig payment Foreign currency value paid (D49)	(D37)	(D38)	(D39)	(D40)	(D41) (D45) Tot: (D45) Tot: ency payments	(D42)	ue by 3rd party	(D44) Summary of payments Local value of payments (D51) 76 P a

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		LOCAL	Content Decial	ration - S	supporting s	Schedule to Annex (
E1)	Tender No.					Note: VAT to be excluded	from all	
2) - 2)	Tender descrip	otion:				calculations	1	
:3) :4)	Tender Autho	rity:						
E5)	Tendering Ent	ity name:						
		Local Products	Description				Makas	
		(Goods, Services and Works)	Description	h of items pl	irchased	Local suppliers	value	
				(E6)		(E7)	(E8)	
				(50) To	tal local products	Goods Sarvisas and Warks	\ \	
				(23) 10	lai local products	(Goods, Services and works)	
	(E10)	Manpower costs	(Tenderer's manpow	er cost)				
	(110)		(renderer o manpon					
	(E11)	Factory overheads	(Rental, depreciation	& amortisat	ion, utility costs, c	onsumables etc.)		
	(E12)	Administration over	neads and mark-up	(Marketing,	insurance, financi	ng, interest etc.)		
								_
						(E13) Total local conten	t	
						This total must correspon C24	nd with Annex C -	
	Signature of t	enderer from Annex B						
	Date:							



Private Bag X84, PRETORIA, 0001, **the dti** Campus, 77 Meintjies Street, Sunnyside, 0002, Tel: (012) 394 0000 **the dti** Customer Contact Centre local: 0861 843 384 International: +27 12 394 9500, www.thedti.gov.za

Guidance Document for the Calculation of Local Content

1. **DEFINITIONS**

Unless explicitly provided in this guideline, the definitions given in SATS 1286:2011 apply.

2. GENERAL

2.1. Introduction

This guideline provides tenderers with a detailed description of how to calculate local content of products (goods, services and works) by components/material/services and enables them to keep an updated record for verification requirements as per the SATS 1286:2011 Annexure A and B.

The guideline consists of two parts, namely:

- a written guideline; and
- three declarations that must be completed:
- Declaration C: "Local Content Declaration Summary Schedule" (see Annexure C);
- Declaration D: "Imported Content Declaration Supporting Schedule to Annex C" (see Annexure D); and
- Declaration E: "Local Content Declaration Supporting Schedule to Annex C" (see Annexure E).

The guidelines and declarations should be used by tenderers when preparing a tender. A tenderer must complete Declarations D and E, and consolidate the information on Declaration C.

Annexure C must be submitted with the tender by the closing date and time as determined by the Tender Authority. The Tender Authority reserves the right to request that Declarations D and E also be submitted.

If the tender is successful, the tenderer must continuously update Declarations C, D and E with actual values for the duration of the contract.

NOTE:

Annexure A is a note to the purchaser in SATS 1286:2011; and Annexure B is the Local Content Declaration IN SATS 1286:2011.

2.2. What is local content?

According to SATS 1286:2011, the local content of a product is the tender price less the value of imported content, expressed as a percentage. It is, therefore, necessary to first compute the imported value of a product to determine the local content of a product.

2.3. Categories: Imported and Local Content

The tenderer must differentiate between imported content and local content. Imported content of a product by components/material/services is separated into two categories, namely:

- products imported directly by the tenderer; and
- products imported by a third party and supplied to the tenderer.

2.3.1. Imported Content

Identify the imported content, if any, by value for products by component/material/services. In the case of components/materials/services sourced from a South African manufacturer, agent, supplier or subcontractor (i.e. third party), obtain that information and Declaration D from the third party.

Calculate the imported content of components/materials/services to be used in the manufacture of the total quantity of the products for which the tender is to be submitted.

As stated in clause 3.2.4 of SATS 1286:2011: "If information on the origin of components, parts or materials is not available, it will be deemed to be imported content."

2.3.1.1 Imported directly by the tenderer:

When the tenderer import products directly, the onus is on the tenderer to provide evidence of any components/materials/services that were procured from a non-domestic source. The evidence should be verifiable and pertain to the tender as a whole. Typical evidence will include commercial invoices, bills of entry, etc.

When the tenderer procures imported services such as project management, design, testing, marketing, etc. and makes royalty and lease payments, such payments relating to the tender must be included when calculating imported content.

2.3.1.2. Imported by a third party and supplied to the tenderer:

When the tenderer supplies components/material/services that are imported by any third party (for example, a domestic manufacturer, agent, supplier or subcontractor in the supply chain), the onus is on the tenderer to obtain verifiable evidence from the third party.

The tenderer must obtain Declaration D from all third parties for the related tender. The third party must be requested by the tenderer to continuously update Declaration D. Typical evidence of imported content will include commercial invoices, bills of entry etc.

When a third party procures imported services such as project management, design, testing, marketing etc. and makes royalty and lease payments, such payments relating to the tender must be included when calculating imported content.

2.3.1.3. Exempt Imported Content:

Exemptions, if any, are granted by the Department of Trade and Industry (**the dti**). Evidence of the exemptions must be provided and included in Annexure D.

2.3.2. Local Content

Identify and calculate the local content, by value for products by components/materials/services to be used in the manufacture of the total quantity of the products.

3. ANNEXURE C

3.1. Guidelines for completing Annexure C: Local Content Declaration -

Summary Schedule

Note: The paragraph numbers correspond to the numbers in Annexure C.

C1. Tender Number

Supply the tender number that is specified on the specific tender documentation.

C2. Tender description

Supply the tender description that is specified on the specific tender documentation.

C3. Designated products

Supply the details of the products that are designated in terms of this tender (i.e. buses).

C4. Tender Authority

Supply the name of the tender authority.

C5. Tendering Entity name

Provide the tendering entity name (for example, Anybody Bus Builders (Pty) Ltd).

C6. Tender Exchange Rate

Provide the exchange rate used for this tender, as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

C7. Specified local content %

Provide the specified minimum local content requirement for the tender (i.e. 80%), as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MDB) 6.2.

C8. Tender item number

Provide the tender item number(s) of the products that have a local content requirement as per the tender specification.

C9. List of items

Provide a list of the item(s) corresponding with the tender item number. This may be a short description or a brand name.

Calculation of local content

C10. Tender price

Provide the unit tender price of each item excluding VAT.

C11. Exempted imported content

Provide the ZAR value of the exempted imported content for each item, if applicable. These value(s) must correspond with the value(s) of column D16 on Annexure D.

C12. Tender value net of exempted imported content

Provide the net tender value of the item, if applicable, by deducting the exempted imported content (C11) from the tender price (C10).

C13. Imported value

Provide the ZAR value of the items' imported content.

C14. Local value

Provide the local value of the item by deducting the Imported value (C13) from the net tender value (C12).

C15. Local content percentage (per item)

Provide the local content percentage of the item(s) by dividing the local value (C14) by the net tender value (C12) as per the local content formula in SATS 1286.

Tender Summary

C16. Tender quantity

Provide the tender quantity for each item number as per the tender specification.

C17. Total tender value

Provide the total tender value by multiplying the tender quantity (C16) by the tender price (C10).

C18. Total exempted imported content

Provide the total exempted imported content by multiplying the tender quantity (C16) by the exempted imported content (C11). These values must correspond with the values of column D18 on Annexure D.

C19. Total imported content

Provide the total imported content of each item by multiplying the tender quantity (C16) by the imported value (C13).

C20. Total tender value

Total tender value is the sum of the values in column C17.

C21. Total exempted imported content

Total exempted imported content is the sum of the values in column C18. This value must correspond with the value of D19 on Annexure D.

C22. Total tender value net of exempted imported content

The total tender value net of exempt imported content is the total tender value (C20) less the total exempted imported content (C21).

C23. Total imported content

Total imported content is the sum of the values in column C19. This value must correspond with the value of D53 on Annexure D.

C24. Total local content

Total local content is the total tender value net of exempted imported content (C22) less the total imported content (C23). This value must correspond with the value of E13 on Annexure E.

C25. Average local content percentage of tender

The average local content percentage of tender is calculated by dividing total local content (C24) by the total tender value net of exempted imported content (C22).

4. ANNEXURE D

4.1. Guidelines for completing Annexure D: "Imported Content Declaration – Supporting Schedule to Annexure C"

Note: The paragraph numbers correspond to the numbers in Annexure D.

D1. Tender number

Supply the tender number that is specified on the specific tender documentation.

D2. Tender description

Supply the tender description that is specified on the specific tender documentation.

D3. Designated products

Supply the details of the products that are designated in terms of this tender (i.e. buses).

D4. Tender authority

Supply the name of the tender authority.

D5. Tendering entity name

Provide the tendering entity name (i.e. Anybody Bus Builders (Pty) Ltd).

D6. Tender exchange rate

Provide the exchange rate used for this tender, as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

Table A. Exempted Imported Content

D7. Tender item number

Provide the tender item number(s) of the product(s) that have imported content.

D8. Description of imported content

Provide a list of the exempted imported product(s), if any, as specified in the tender.

D9. Local supplier

Provide the name of the local supplier(s) supplying the imported product(s).

D10. Overseas supplier

Provide the name(s) of the overseas supplier(s) supplying the exempted imported product(s).

D11. Imported value as per commercial invoice

Provide the foreign currency value of the exempted imported product(s) disclosed in the commercial invoice accepted by the South African Revenue Service (SARS).

D12. Tender exchange rate

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

D13. Local value of imports

Convert the value of the exempted imported content as per commercial invoice (D11) into the ZAR value by using the tender exchange rate (D12) disclosed in the tender documentation.

D14. Freight costs to port of entry

Provide the freight costs to the South African Port of the exempted imported item.

D15. All locally incurred landing costs and duties

Provide all landing costs including customs and excise duty for the exempted imported product(s) as stipulated in the SATS 1286:2011.

D16. Total landed costs excluding VAT

Provide the total landed costs (excluding VAT) for each item imported by adding the corresponding item values in columns D13, D14 and D15. These values must be transferred to column C11 on Annexure C.

D17. Tender quantity

Provide the tender quantity of the exempted imported products as per the tender specification.

D18. Exempted imported value

Provide the imported value for each of the exempted imported product(s) by multiplying the total landed cost (excl. VAT) (D16) by the tender quantity (D17). The values in column D18 must correspond with the values of column C18 of Annexure C.

D19. Total exempted imported value

The total exempted imported value is the sum of the values in column D18. This total must correspond with the value of C21 on Annexure C.

Table B. Imported Directly by Tenderer

D20. Tender item numbers

Provide the tender item number(s) of the product(s) that have imported content.

D21. Description of imported content:

Provide a list of the product(s) imported directly by tender as specified in the tender documentation.

D22. Unit of measure

Provide the unit of measure for the product(s) imported directly by the tenderer.

D23. Overseas supplier

Provide the name(s) of the overseas supplier(s) supplying the imported product(s).

D24. Imported value as per commercial Invoice

Provide the foreign currency value of the product(s) imported directly by tenderer disclosed in the commercial invoice accepted by the South African Revenue Service (SARS).

D25. Tender rate of exchange

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

D26. Local value of imports

Convert the value of the product(s) imported directly by the tenderer as per commercial invoice (D24) into the ZAR value by using the tender exchange rate (D25) disclosed in the tender documentation.

D27. Freight costs to port of entry

Provide the freight costs to the South African Port of the product(s) imported directly by the tenderer.

D28. All locally incurred landing costs and duties

Provide all landing costs including customs and excise duty for the product(s) imported directly by the tenderer as stipulated in the SATS 1286:2011.

D29. Total landed costs excluding VAT

Provide the total landed costs (excluding VAT) for each item imported directly by the tenderer by adding the corresponding item values in columns D26, D27 and D28.

D30. Tender quantity

Provide the tender quantity of the product(s) imported directly by the tenderer as per the tender specification.

D31. Total imported value

Provide the total imported value for each of the product(s) imported directly by the tenderer by multiplying the total landed cost (excl. VAT) (D29) by the tender quantity (D30).

D32. Total imported value by tenderer

The total value of imports by the tenderer is the sum of the values in column D31.

Table C. Imported by Third Party and Supplied to the Tenderer

D33. Description of imported content

Provide a list of the product(s) imported by the third party and supplied to the tenderer as specified in the tender documentation.

D34. Unit of measure

Provide the unit of measure for the product(s) imported by the third party and supplied to tenderer as disclosed in the commercial invoice.

D35. Local supplier

Provide the name of the local supplier(s) supplying the imported product(s).

D36. Overseas supplier

Provide the name(s) of the overseas supplier(s) supplying the imported products.

D37. Imported value as per commercial invoice

Provide the foreign currency value of the product(s) imported by the third party and supplied to the tenderer disclosed in the commercial invoice accepted by SARS.

D38. Tender rate of exchange

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

D39. Local value of imports

Convert the value of the product(s) imported by the third party as per commercial invoice (D37) into the ZAR value by using the tender exchange rate (D38) disclosed in the tender documentation.

D40. Freight costs to port of entry

Provide the freight costs to the South African Port of the product(s) imported by third party and supplied to the tenderer.

D41. All locally incurred landing costs and duties

Provide all landing costs including customs and excise duty for the product(s) imported by third party and supplied to the tenderer as stipulated in the SATS 1286:2011.

D42. Total landed costs excluding VAT

Provide the total landed costs (excluding VAT) for each product imported by third party and supplied to the tenderer by adding the corresponding item values in columns D39, D40 and D41.

D43. Quantity imported

Provide the quantity of each product(s) imported by third party and supplied to the tenderer for the tender.

D44. Total imported value

Provide the total imported value of the product(s) imported by third party and supplied to the tenderer by multiplying the total landed cost (D42) by the quantity imported (D43).

D45. Total imported value by third party

The total imported value from the third party is the sum of the values in column D44.

Table D. Other Foreign Currency Payments

D46. Type of payment

Provide the type of foreign currency payment. (i.e. royalty payment for use of patent, annual licence fee, etc.).

D47. Local supplier making the payment

Provide the name of the local supplier making the payment.

D48. Overseas beneficiary

Provide the name of the overseas beneficiary.

D49. Foreign currency value paid

Provide the value of the listed payment(s) in their foreign currency.

D50. Tender rate of exchange

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

D51. Local value of payments

Provide the local value of each payment by multiplying the foreign currency value paid (D49) by the tender rate of exchange (D50).

D52. Total of foreign currency payments declared by tenderer and/or third party

The total of foreign currency payments declared by tenderer and/or a third party is the sum of the values in column D51.

D53. Total of imported content and foreign currency payment

The total imported content and foreign currency payment is the sum of the values in column D32, D45 and D52. This value must correspond with the value of C23 on Annexure C.

5. ANNEXURE E

5.1. Guidelines to completing Annexure E: "Local Content Declaration- Supporting Schedule to Annexure C"

The paragraph numbers correspond to the numbers in Annexure E

E1. Tender number

Supply the tender number that is specified on the specific tender documentation.

E2. Tender description

Supply the tender description that is specified on the specific tender documentation.

E3. Designated products

Supply the details of the products that are designated in terms of this tender (for example, buses/canned vegetables).

E4. Tender authority

Supply the name of the tender authority.

E5. Tendering entity name

Provide the tendering entity name (for example, Anybody Bus Builders (Pty) Ltd) Ltd).

Local Goods, Services and Works

E6. Description of items purchased

Provide a description of the items purchased locally in the space provided.

E7. Local supplier

Provide the name of the local supplier that corresponds to the item listed in column E6.

E8. Value

Provide the total value of the item purchased in column E6.

E9. Total local products (Goods, Services and Works)

Total local products (goods, services and works) is the sum of the values in E8.

E10. Manpower costs:

Provide the total of all the labour costs accruing only to the tenderer (i.e. not the suppliers to tenderer).

E11. Factory overheads:

Provide the total of all the factory overheads including rental, depreciation and amortisation for local and imported capital goods, utility costs and consumables. (Consumables are goods used by individuals and businesses that must be replaced regularly because they wear out or are used up. Consumables can also be defined as the components of an end product that are used up or permanently altered in the process of manufacturing, such as basic chemicals.)

E12. Administration overheads and mark-up:

Provide the total of all the administration overheads, including marketing, insurance, financing, interest and mark-up costs.

E13. Total local content:

The total local content is the sum of the values of E9, E10, E11 and E12. This total must correspond with C24 of Annexure C.

T2.2.2- Functionality Evaluation Schedules

T2.2.2a: SIMILAR PROJECTS COMPLETED SUCCESSFULLY WITH REFERENCE LETTERS

Note: Mandatory Returnable Schedule. Failure to submit as required will result in the bid being nonresponsive.

Project	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING
title:	SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

Bidders are required to provide a schedule of contactable references as per the attached f	<u>of similar work in complexity that was successfully completed with</u> forms below.
	OR
Submit a reference letter that indicates the j	following
Signature of the Client	
On Clients Letter Head or Client Stamp	
Company Name, contact person, contact det	tails (telephone number and email etc) Value of the
Project	
Scope of works carried out	
Works have been completed on time/within s	tipulated contract period
Good or better workmanship	

Project	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING
title:	SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

Sir/Madam,

We are in the process of evaluating

_____for the above project.

Tenderers Company Name

They have listed you as a reference. Please evaluate the contractor's performance on the criteria listed below by ticking the appropriate boxes. This form to be submitted with the bid. If you have any questions, please do not hesitate to contact us.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD	VALUE OF WORK

1. KNOWLEDGEABLE IN THE FIELD IN WHICH THIS BID RELATES TO

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

2. TIME PERFORMANCE

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

3. FINANCIAL PERFORMANCE

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

4. WAS THE WORKS COMPLETED SATISFACTORY?

YES / NO (please circle)

If no, please provide details below:

Project Manager/Principal Agent: Place company stamp below:

Tel:

E-mail Address _____

Signature:_____ Date: _____

Project	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING
title:	SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

Sir/Madam,

We are in the process of evaluating

Tenderers Company Name

They have listed you as a reference. Please evaluate the contractor's performance on the criteria listed below by ticking the appropriate boxes. This form to be submitted with the bid. If you have any questions, please do not hesitate to contact us.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD	VALUE OF WORK

1. KNOWLEDGEABLE IN THE FIELD IN WHICH THIS BID RELATES TO

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

2. TIME PERFORMANCE

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

3. FINANCIAL PERFORMANCE

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

_

4. WAS THE WORKS COMPLETED SATISFACTORY?

YES / NO (please circle)

If no, please provide details below:

Project Manager/Principal Agent: _____Place company stamp below:

_

_____for the above project.

Tel:	

E-mail Address _____

Signature:_____ Date: _____

Project	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO
title:	SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

Sir/Madam,

We are in the process of evaluating_____

_____for the above project.

Tenderers Company Name They have listed you as a reference. Please evaluate the contractor's performance on the criteria listed below by ticking the appropriate boxes. This form to be submitted with the bid. If you have any questions, please do not hesitate to contact us.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD	VALUE OF WORK

1. KNOWLEDGEABLE IN THE FIELD IN WHICH THIS BID RELATES TO

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

2. TIME PERFORMANCE

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1
2 ETNANCTAL DEDEC				

3. FINANCIAL PERFORMANCE

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

4. WAS THE WORKS COMPLETED SATISFACTORY?

YES / NO (please circle)

If no, please provide details below:

Project Manager/Principal Agent: _____ Place company stamp below:

Tel: _____

E-mail Address	

Signature:_____ Date: _____

T2.2.2 b – Construction Programme

Project title:	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

Project specific detailed programme covering all construction aspects

and realistic program with critical path and dependencies defined.

Bidder to provide a Detailed Gantt Chart (Works Breakdown

Structure Program) Showing:

- Summary tasks
- Indicating a Critical Path
- Timelines within the project period

Construction Programme to be attached here.

T2.2.2 c – Key Personnel Qualifications (Construction Manager)

Project title:	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

T2.2.2 d – Key Personnel Qualifications

(Construction Supervisor)

Project title:	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

T2.2.2 e – Key Personnel Qualifications

(OHS Safety Officer)

Project title:	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

T2.2.2 f – Other Key Personnel Qualifications

(Skilled Staff)

Project title:	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

T2.2.2 g – Other Key Personnel Experience

(Semi-Skilled Support Staff)

Project title:	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

Project title:	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

Provide a schedule of contactable references

Attach document here

Note: Mandatory Returnable Schedule. Failure to submit as required will result in the bid being nonresponsive.

Project title:	CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO, MABHOBHO SHEARING SHED IN MT FRERE AND KHIBA SHEARING SHED IN STERKSPRUIT
Bid No:	ECDC/INFRA/37/052024

<u>Tenderer herewith confirms by signing below that he has read and understand the full</u> <u>scope of works and associated detailed specifications of this contract.</u> <u>The client will not entertain any additional amount claimed due to a lack of understanding</u> <u>the full spectrum of the works.</u>

Company Name:		
Tenderer Name:	Signature	Date
Company Authorised/		
Accountable Person		
Name:	Signature	Date

Company Stamp:

THE CONTRACT

Part C1: Agreements and Contract data

- C1.1 Form of offer and acceptance
- C1.2 Contract data
- C1.3 Form of Guarantee

C1.1 - Form of offer and acceptance

PROJECT 1

CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO BID NO: ECDC/INFRA/37A/052024

Annexure L: CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO

C.1.1 FORM OF OFFER AND ACCEPTANCE OFFER

Note: Mandatory Requirement. Failure to complete and sign this document will result in the bid being non responsive.

OFFER

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

PROJECT: CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO

Bid No: ECDC/INFRA/37A/052024

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

R (in figures)

.....

.....

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the Tender data, whereupon the tenderer becomes the party named as the Service Provider in the conditions of Contract identified in the Contract Data.

THIS OFFER IS MADE BY THE FOLLOWING LEGAL ENTITY: (cross out block which is not applicable)

Company or close corporation:

And: whose registration number is:

And: whose income tax reference number is:

.....

Trading under the name and style of:			
AND WHO IS: Represented herein, and who is duly authorized to do so, by:		Note: A resolution/power of attorney, signed by all the directors/ members/ partners of the legal entity must accompany this offer, authorizing the representative to	
Mr/Mrs/Ms:		make this offer.	
In his/her capacity as:			
SIGNED FOR THE TENDERER:			
	<u> </u>		
Name of Representative	Signature		Date
SIGNED BY WITNESS:			
Name of Representative	Signature		Date
Name of Representative The tenderer elects as its <i>domicilliumcitand</i> and all legal notices may be served, as (phy	Signature li et executandi ysical address)	in the Republic of Sout	Date
Name of Representative The tenderer elects as its <i>domicilliumcitand</i> and all legal notices may be served, as (phy	Signature fi et executandi ysical address)	in the Republic of Sout	Date
Name of Representative The tenderer elects as its <i>domicilliumcitana</i> and all legal notices may be served, as (phy Other contact details of the tenderer are: Telephone no	Signature	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its <i>domicilliumcitano</i> and all legal notices may be served, as (phy Other contact details of the tenderer are: Telephone no Cellular phone no	Signature li et executandi ysical address)	in the Republic of Sout	Date
Name of Representative The tenderer elects as its domicilliumcitance and all legal notices may be served, as (phy) Other contact details of the tenderer are: Telephone no Cellular phone no Fax no	Signature di et executandi ysical address)	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its domicilliumcitand and all legal notices may be served, as (phy Other contact details of the tenderer are: Telephone no Cellular phone no Fax no Postal address	Signature di et executandi ysical address)	in the Republic of Sout	Date
Name of Representative The tenderer elects as its domicilliumcitance and all legal notices may be served, as (phy Other contact details of the tenderer are: Telephone no Cellular phone no Fax no Postal address Banker	Signature di et executandi ysical address)	in the Republic of Sout	Date
Name of Representative The tenderer elects as its domicilliumcitance and all legal notices may be served, as (phy Other contact details of the tenderer are: Telephone no Cellular phone no Fax no Postal address Banker Branch	Signature di et executandi ysical address)	in the Republic of Sout	Date h Africa, where any

ACCEPTANCE

By signing this part of this form of offer and acceptance, ECDC accepts the bidder's offer. Acceptance of the bidder's offer shall form an agreement between the ECDC and the bidder 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 the contract to be concluded.

- Agreements and Contract Data, (which includes this Agreement)
- Pricing data
- Scope of work.
- Site information and drawings

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

Deviations from and amendments to the documents listed in the bid data and any addenda thereto as listed in the bid schedules as well as any changes to the terms of the offer agreed by the bidder and ECDC 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 agreed by both parties.

The bidder shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the ECDC's Legal Department to arrange documentation to be provided in terms of the conditions of contract identified in the contract. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the bidder receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the bidder within five working 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.

Name of representative	Capacity	Date
Address	Signature	

Signed for the ECDC:

Witnessed by:

Name of witness	Signature	Date

Schedule of deviations

Notes:

- 1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
- 2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
- 3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender document and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
- 4. Any change or addition to the tender document arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1	Subject	
	Details	
2	Subject	
2	Details	
3	Subject	
	Details	

By the duly authorised representative signing this agreement, the Employer and the Bidder agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the bid data and addenda thereto as listed in the bid schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Bidder and the employer during this process of acceptance.

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

Signed for the ECDC

Name of Representative	Capacity	Signature

Signed by Bidder:

Name of Representative	Capacity	Signature

PROJECT 2

CONSTRUCTION OF MABHOBHO SHEARING SHED IN MT FRERE BID NO: ECDC/INFRA/37B/052024

Annexure L: CONSTRUCTION OF MABHOBHO SHEARING SHED IN MT FRERE

C.1.1 FORM OF OFFER AND ACCEPTANCE OFFER

Note: Mandatory Requirement. Failure to complete and sign this document will result in the bid being non responsive.

OFFER

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

PROJECT: CONSTRUCTION OF MABHOBHO SHEARING SHED IN MT FRERE

Bid No: ECDC/INFRA/37B/052024

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

R (in figures)

.....

.....

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the Tender data, whereupon the tenderer becomes the party named as the Service Provider in the conditions of Contract identified in the Contract Data.

THIS OFFER IS MADE BY THE FOLLOWING LEGAL ENTITY: (cross out block which is not applicable)

Company or close corporation:

And: whose registration number is:

And: whose income tax reference number is:

.....
Trading under the name and style of:			
AND WHO IS: Represented herein, and who is duly authorized to do so, by:		Note: A resolution/power of attorney, signed by all the directors/ members/ partners of the legal entity must accompany this offer authorizing the representative to	
Mr/Mrs/Ms:		make this offer.	
In his/her capacity as:			
SIGNED FOR THE TENDERER:			
Name of Representative	Signature		Date
SIGNED BY WITNESS:	<u> </u>		
	Signature		
Name of Representative	Signature		Date
Name of Representative The tenderer elects as its <i>domicilliumcitano</i> and all legal notices may be served, as (phy	Signature fi et executandi ysical address)	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its <i>domicilliumcitano</i> and all legal notices may be served, as (phy	Signature li et executandi ysical address)	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its <i>domicilliumcitana</i> and all legal notices may be served, as (phy 	Signature	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its domicilliumcitand and all legal notices may be served, as (phy) Other contact details of the tenderer are: Telephone no Cellular phone no	Signature li et executandi ysical address)	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its domicilliumcitance and all legal notices may be served, as (phy) Other contact details of the tenderer are: Telephone no Cellular phone no Fax no	Signature di et executandi ysical address)	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its domicilliumcitance and all legal notices may be served, as (phy Other contact details of the tenderer are: Telephone no Cellular phone no Fax no Postal address	Signature di et executandi ysical address)	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its domicilliumcitance and all legal notices may be served, as (phy Other contact details of the tenderer are: Telephone no Cellular phone no Fax no Postal address Banker	Signature	in the Republic of Sout	Date h Africa, where any
Name of Representative The tenderer elects as its domicilliumcitance and all legal notices may be served, as (phy Other contact details of the tenderer are: Telephone no Cellular phone no Fax no Postal address Banker Branch	Signature di et executandi ysical address)	in the Republic of Sout	Date h Africa, where any

ACCEPTANCE

By signing this part of this form of offer and acceptance, ECDC accepts the bidder's offer. Acceptance of the bidder's offer shall form an agreement between the ECDC and the bidder 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 the contract to be concluded.

- Agreements and Contract Data, (which includes this Agreement)
- Pricing data
- Scope of work.
- Site information and drawings

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

Deviations from and amendments to the documents listed in the bid data and any addenda thereto as listed in the bid schedules as well as any changes to the terms of the offer agreed by the bidder and ECDC 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 agreed by both parties.

The bidder shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the ECDC's Legal Department to arrange documentation to be provided in terms of the conditions of contract identified in the contract. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the bidder receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the bidder within five working 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.

Name of representative	Capacity	Date
Address	Signature	

Signed for the ECDC:

Witnessed by:

Name of witness	Signature	Date

Schedule of deviations

Notes:

- 5. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
- 6. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
- 7. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender document and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
- 8. Any change or addition to the tender document arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1	Subject	
•	Details	
2	Subject	
2	Details	
3	Subject	
5	Details	

By the duly authorised representative signing this agreement, the Employer and the Bidder agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the bid data and addenda thereto as listed in the bid schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Bidder and the employer during this process of acceptance.

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

Signed for the ECDC

Name of Representative	Capacity	Signature

Signed by Bidder:

Name of Representative	Capacity	Signature

PROJECT 3

CONSTRUCTION OF KHIBA SHEARING SHED IN STERKSPRUIT BID NO: ECDC/INFRA/37C/052024

Annexure L: CONSTRUCTION OF KHIBA SHEARING SHED IN STERKSPRUIT

C.1.1 FORM OF OFFER AND ACCEPTANCE OFFER

Note: Mandatory Requirement. Failure to complete and sign this document will result in the bid being non responsive.

OFFER

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

PROJECT: CONSTRUCTION OF KHIBA SHEARING SHED IN STERKSPRUIT

Bid No : ECDC/INFRA/37C/052024

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

R (in figures)

.....

.....

_____Rand (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 Service Provider in the conditions of Contract identified in the Contract Data.

THIS OFFER IS MADE BY THE FOLLOWING LEGAL ENTITY: (cross out block which is not applicable)

Company or close corporation:

And: whose registration number is:

.....

And: whose income tax reference number is:

Trading under the name and style of:			
AND WHO IS: Represented herein, and who is duly authorized to do so, by:		Note: A resolution/power of attorney, signed by all the directors/ members/ partners of the legal entity must accompany this offer outborizing the representative to	
Mr/Mrs/Ms:		make this offer.	
In his/her capacity as:			
	·····		
SIGNED FOR THE TENDERER:			
Name of Representative	Signature		Date
SIGNED BY WITNESS:	<u> </u>		
	1		
Name of Representative	Signature		Date
Name of Representative The tenderer elects as its <i>domicilliumcitano</i> and all legal notices may be served, as (phy	Signature li et executandi ysical address)	in the Republic of Sout	Date
Name of Representative The tenderer elects as its <i>domicilliumcitand</i> and all legal notices may be served, as (phy	Signature li et executandi ysical address)	in the Republic of Sout	Date
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ACCEPTANCE

By signing this part of this form of offer and acceptance, ECDC accepts the bidder's offer. Acceptance of the bidder's offer shall form an agreement between the ECDC and the bidder 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 the contract to be concluded.

- Agreements and Contract Data, (which includes this Agreement)
- Pricing data
- Scope of work.
- Site information and drawings

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

Deviations from and amendments to the documents listed in the bid data and any addenda thereto as listed in the bid schedules as well as any changes to the terms of the offer agreed by the bidder and ECDC 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 agreed by both parties.

The bidder shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the ECDC's Legal Department to arrange documentation to be provided in terms of the conditions of contract identified in the contract. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the bidder receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the bidder within five working 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.

Name of representative	Capacity	Date
Address	Signature	

Signed for the ECDC:

Witnessed by:

Name of witness	Signature	Date

Schedule of deviations

Notes:

- 9. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
- 10. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
- 11. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender document and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
- 12. Any change or addition to the tender document arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1	Subject	
•	Details	
2	Subject	
2	Details	
3	Subject	
3	Details	

By the duly authorised representative signing this agreement, the Employer and the Bidder agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the bid data and addenda thereto as listed in the bid schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Bidder and the employer during this process of acceptance.

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

Signed for the ECDC

Name of Representative	Capacity	Signature

Signed by Bidder:

Name of Representative	Capacity	Signature

C1.2 - Contract data

Part 1: Data provided by the Employer

CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works 3rd Edition (2015), published by the South African Institution of Civil Engineering, is applicable to this Contract and is incorporated herein by reference.

Copies of these Conditions of Contract may be obtained from the South African Institution of Civil Engineering, Tel. No. +27 11 805-5947 or www.saice.org.za.

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

The Contract Data and General Conditions of Contract shall have precedence over the Drawings, Scope of Work and Standardised Specifications in the interpretation of any ambiguity or inconsistency.

CONTRACT SPECIFIC DATA Clause Data 1.1.1.13 The Defects Liability Period is: Twelve (12) calendar months measured from the date of the Certificate of Completion separately applicable to each phase. 1.1.1.14 The time for achieving Practical Completion for this project is: (4) calendar months (for each project) from the Commencement Date. 1.1.1.15 The name of the Employer is: Eastern Cape Development Corporation (ECDC) 1.1.1.16 The name of the Employer's Agent is: CIBA Consortium The Employer's Agent means any Director, Associate or Professional Engineer appointed generally or specifically by the Management of CIBA Consortium to fulfil the functions of the Employer's Agent in terms of the Conditions of Contract. Wherever the name "Engineer" appears in the document, it shall be read to mean the "Employer's Agent". 1.1.1.26 The Pricing Strategy is: Re-measurement Contract 1.1.1.35 The following additional definition applies: -"Drawings": Means all drawings, calculations and technical information forming part of the Contract Documents and any modifications thereof or additions thereto from time to time approved in writing by the Employer's Agent or delivered to the Contractor by the Employer's Agent. 1.1.1.36 The following additional definition applies: -Letter of Notification": Means the letters of formal notification, signed by the Employer, of the decision of the Supply Chain Management Bid Adjudication Committee sent to all

The following contract specific data are applicable to this Contract:

	tenderers.		
1.2.1.2	Delivery of Notices		
	The following two additional sub-clauses, covering alternative methods of communication, apply: -		
1.2.1.2.1	Sent by facsimile or any like communication irrespective of it being during office hours or otherwise.		
1.2.1.2.2	Posted to the addressee for certified delivery by the postal Authorities		
1.2.1.2	The address of the Employer for receipt of communications is: Attention: Ms. P casa		
	Physical address:Postal address:Eastern Cape Development CorporationP.O Box 11197Ocean Terrace ParkSouthernwoodMoore Street5213Quigney, East London5201		
	Tel: +27 43 704 5600		
2.1.4	The following additional clause applies: -		
	"Without limiting the generality of the afore going, the Schedule of Rates and Prices shall include:		
	The provision and use of all labour, plant, tools instruments, templates, materials, transport and all other appliances that may be required for satisfactorily protecting and efficiently carrying out the works without interruption or delay.		
	The provision and housing of adequate staff and labour force and the provision of false work of every kind and description necessary for the due and proper performance of the Contract.		
	The execution of the Works in orderly and progressive manner until it has been completed. Time being of the essence of the Contract the progressive development of the Works shall be arranged so that the time from the start to the finish of the construction of the said Works shall not exceed the time laid down in the Tender.		
	The inclusion in the tendered rates for all and any of the general liabilities such as Establishment Charges, legal contingencies, regulations, risks or damage, Royalties and all other overhead charges.		
	The submission of a tender shall be considered prima facie evidence that the Contractor has complied with the requirements of this clause and has satisfied himself as to all circumstances and local conditions which may influence or affect his Tender."		

2.4.3	The following additional clause applies: -				
	In the event of any discrepancy or conflict between any parts of the Contract Documents, the order of precedence shall be as follows:				
	 Project Specifications Special Conditions of Contract General Conditions of Contract Conditions of Tender Standardised/Particular Specifications Contract Drawings Schedule of Quantities 				
2.5.2	The following additional clause applies: -				
	The Employer may make direct payments to suppliers on behalf of the Contractor subject to the receipt of a specific request from the Contractor and subject to the following conditions:				
	An original of the invoice together with a singed Cession Form is submitted together with a certificate approved by the Employer's Agent.				
	The Contractor cedes, transfers and assigns all the rights, title and interest in and to the materials and goods to the total value of the invoice.				
	The cession shall become effective as soon as payment is made by the Employer or on behalf of the Employer.				
	The Contractor indemnifies the Employer against any loss or damage whatsoever to the said material and goods whilst they are in the Contractors possession and in transit to the site and until such time as they are safely and properly stored on the site, and the Contractor undertakes to effect adequate insurance against these risks. Such insurance shall be for the full value of the materials and goods and goods certified for payment and the insurance policy ceded in full to the Employer.				
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:				
	Clause 3.3.1Nomination of Employer's Agent's RepresentativeClause 3.3.4Employer's Agent's authority to delegateClause 5.8.1Non-working timesClause 5.11.1Suspension of the WorksClause 5.12.4Acceleration instead of extension of time				
3.2.5	The following additional clause applies:-				
	The onus rests with the Contractor to raise any item about which the Contractor may be uncertain, with the Employer's Agent's Representative. Any advice given to the Contractor by the Employer's Agent's Representative in response to matters so raised shall not be construed as instructions and shall be held to have been given without prejudice.				
3.3.6	The following additional clause applies:-				
	The Employer or the Employer's Agent under delegated authority, reserves the right to obtain the services of consultants on any matter pertaining to this contract; the employment of such consultants forms no part of this contract; a consultant's advice and/or documentation is to be followed only if the Employer's Agent or the Employer's Agent's Representative so instructs.				

4.1	All references to "design" are deemed to be deleted and the Contractor shall bear no liability in respect of the Projects design, other than the temporary works and items clearly indicated to design on drawings.			
4.3.3	The following additional clause applies:-			
	The Employer and the Contractor shall enter into an agreement to complete the work required for the construction of the works in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act 85 of 1993) and the Construction Regulations promulgated thereunder.			
	An agreement is included in the Contract Document (C1.1 of Contract Data) and shall be completed and submitted to the Employer together with a letter of good standing from the Compensation Commissioner (if not insured with a Licenced Compensation Insurer) within fourteen (14) days after the Commencement Date. The Contractor shall ensure that any letter of good standing shall be timeously renewed in order that it remains in full force for the duration of the Contract.			
4.4.1	The total value of work executed by subcontractors shall be agreed on by the Client and awarded Bidder upon acceptance of appointment.			
5.3.1	The documentation required before commencing with the 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 8.6.1.3) Instrumed Clause 10 for the Component in Component in the Compon			
	Letter of Good Standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer)			
5.3.2	The time to submit the documentation required before commencement of the Works is: 14 calendar days			
5.4.2	Access and possession of site shall not be exclusive to the Contractor but will be shared by the Employers management / maintenance and operational staff on site.			
5.4.3	The Contractor shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the Site.			
5.1.1 & 5.8.1	The non-working days are: Saturdays and Sundays.			
	The special non-working days are:			
	 All gazetted public holidays falling outside the year end break. The year end break commencing on 13 December 2024 and ending on 06 January 2025 both days included. 			

5.8.3	The following additional clause shall apply:
	Should the Employer's Agent permit work outside of normal Employer working hours (viz Mondays to Fridays inclusive sunrise to sunset) and on Saturdays, Sundays or on any of the non-working days stated in the Appendix and if he deems the presence of the Employer's Agent's Representative or other duly authorised representative to be necessary, the Contractor will be liable for the cost of such supervision (calculated at a daily rate of 1/130 of the annual salary of such representative). Where the Employer's Agent has ordered such work, the salary of the representative will be to the account of the Employer.
	A minimum of 24 hours notification of intent to work outside normal working hours shall be regarded as sufficient notice as set out in 5.8.1"
5.13.1	The penalty for failing to complete the Works is: 8.5 cents per R100 of the contract value (excl. VAT)
5.14.1	The requirements for achieving Practical Completion shall mean: the commissioning and full operation as listed in the scope of works.
5.14.7	Different dates to achieve Practical Completion will not be permitted.
5.16.3	The latent defect period is: Twelve (12) months.
6.2.1	The security to be provided by the Contractor shall be a performance guarantee of 5% of the Contract Price plus retention of 5% of the value of the Works. The performance guarantee shall contain the wording of the document included in PART 3 (Pro-forma Forms).
6.5.1.2.3:	 The percentage allowances to cover overhead charges for day work are as follows: 15% of the gross remuneration of workmen and foremen actually engaged in the day work; 15% on the net cost of materials actually used
	No allowance will be made for work done, or for materials and equipment for which day work rates have been quoted at tender stage.
6.6.1	The provisional sums stated in the Schedule of Quantities are net amounts covering the actual expenditure which the Employer may incur.
6.7.6	The following additional clause shall apply: The Works are measured in accordance with the current SANS 1200 and the standard system of measurement of Civil Engineering quantities for South Africa, published by the South African Institution of Civil Engineers. No claims arising from the method of measurement will be entertained.
6.8.2	Contract Price Adjustment: Not Applicable
	The value of certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values:
	The value of $x = 0.15$ The value of coefficients are: $a = 0.30$ b = 0.30 c = 0.35 d = 0.05

	The	provin	ce wherein the larger part of the Site is located is the Eastern Cape.		
	The applicable industry for the Producer Price Index for materials is Civil Engineering.				
	The area for the Producer Price Index for fuel is Inland.				
	The	base r	nonth is the month prior to tender closing.		
6.8.3	Price	e adjus	stment for variations in the cost of special materials are: Not allowed		
6.10.1.5:	The % advance on materials not yet built into the Permanent Works is 80%. The percentage advance on Plant not yet supplied to site is not required.				
6.10.3:	The limit of retention money on amounts due to the contractor is 10% and the limit on retention is 5% of the contract sum.				
8.6.1.1.2:	The value of Plant and materials supplied by the Employer to be included in the insurance sum is: Nil .				
8.6.1.1.3:	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is 20% of the Contract Sum.				
8.6.1.3:	Publ	ic Liat	pility: R20 Million per incident		
10.5.3	The number of Adjudication Board Members to be appointed is: One.				
10.7.1:	Additional				
	Disputes are be settled in terms of paragraph 106 of the SCM Policy, which reads as follows:				
	(1)	The direc	accounting officer must appoint an independent and impartial person, not ctly involved in the supply chain management processes:		
		(a)	to assist in the resolution of disputes between the Municipality and other persons regarding:		
			 (i) any decisions or actions taken in the implementation of the supply chain management system; or 		
			 (ii) any matter arising from a contract awarded in the course of the supply chain management system; or 		
		(b)	To deal with objections, complaints or queries regarding any such decisions or actions or any matters arising from such contract.		
	(2)	The resp	accounting officer, or another official designated by the accounting officer, is onsible for assisting the appointed person to perform his or her functions		
		enec	cively.		
	(3)	The	person appointed must:		
	(3)	The (a)	person appointed must: strive to resolve promptly all disputes, objections, complaints or queries received; and		
	(3)	The (a) (b)	person appointed must: strive to resolve promptly all disputes, objections, complaints or queries received; and Submit monthly reports to the accounting officer on all disputes, objections, complaints or queries received, attended to or resolved.		

	(a) the dispute, objection, complaint or query is not resolved within 60 days; or
	(b) No response is forthcoming within 60 days.
(5)	If the provincial treasury does not or cannot resolve the matter, the dispute, objection, complaint or query may be referred to the National Treasury for resolution.
(6)	This section must not be read as affecting a person's rights to approach a court at any time.

The additional Conditions of Contract are:			
Clause			
4.13	Add new sub clause 4.13:		
	Applicable labour laws		
	The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No R63 of 25 January 2002, as reproduced below, shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled or semi-skilled workers.		
	1 Introduction		
	1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.		
	.2 In this document –		
	(a) "department" means any department of the State, implementing agent or contractor;		
	 (b) "employer" means any department, implementing agency or contractor that hires workers to work in elementary occupations on a SPWP; 		
	(c) "worker" means any person working in an elementary occupation on a SPWP;		
	 (d) "elementary occupation" means any occupation involving unskilled or semi-skilled work; 		
	 (e) "management" means any person employed by a department or implementing agency to administer or execute an SPWP; 		
	(f) "task" means a fixed quantity of work;		
	(g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;		
	 (h) "task-rated worker" means a worker paid on the basis of the number of tasks completed; 		
	(i) "time-rated worker" means a worker paid on the basis of the length of time worked.		
	2 Terms of work		
	2.1 Workers on a Special Public Works Programme (SPWP) are employed on a temporary basis.		
	2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.		
	2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.		

The additional Conditions of Contract are:		
	3	Normal hours of work
	3.1	An employer may not set tasks or hours of work that require a worker to work-
		(a) more than forty hours in any week;
		(b) on more than five days in any week; and
		(c) For more than eight hours on any day.
	3.2	An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
	3.3	A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker
	4	Meal breaks
	4.1	A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
	4.2	An employer and worker may agree on longer meal breaks.
	4.3	A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
	4.4	A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.
	5	Special conditions for security guards
	5.1	A security guard may work up to 55 hours per week and up to eleven hours per day.
	5.2	A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.
	6	Daily rest period
		Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.
	7	Weekly rest period
		Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").
	8	Work on Sundays and public holidays
	8.1	A worker may only work on a Sunday or public holiday to perform emergency or security work.
	8.2	Work on Sundays is paid at the ordinary rate of pay.
	8.3	A task-rated worker who works on a public holiday must be paid –
		(a) the worker's daily task rate, if the worker works for less than four hours; (b) Double the worker's daily task rate, if the worker works for more than four hours
	84	A time-rated worker who works on a public holiday must be paid –
		(a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
		(b) Double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.
	9	Sick leave
	9.1	Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.

The additiona	The additional Conditions of Contract are:		
9.	.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.		
9.	.3 A worker may accumulate a maximum of twelve days sick leave in a year.		
9.	.4 Accumulated sick leave may not be transferred from one contract to another contract.		
9.	.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.		
9.	.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.		
9.	.7 An employer must pay a worker sick pay on the worker's usual pay day.		
9.	.8 Before paying sick pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –		
	(a) absent from work for more than two consecutive days; or		
	(b) absent from work on more than two occasions in any eight-week period.8		
9.	 .9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity. .10 A worker is not entitled to be paid sick leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act. 		
10	0 Maternity leave		
10	0.1 A worker may take up to four consecutive month's unpaid maternity leave.0.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.		
10	U.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.		
10	0.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.		
10	0.5 A worker may begin maternity leave –		
	(a) four weeks before the expected date of birth; or		
	(b) on an earlier date –		
	 (i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or 		
	(ii) if agreed to between employer and worker; or		
	(c) On a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.		
1	0.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.		
10	0.7 A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.		

The additional Conditions of Contract are:		
	11 Family responsibility leave	
	11.1 Workers who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances:	
	 (a) when the employee's child is born; (b) when the employee's child is sick; (c) in the event of a death of 	
	(i) the employee's spouse or life partner;	
	(ii) The employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.	
	12 Statement of conditions	
	12.1 An employer must give a worker a statement containing the following details at the start of employment:	
	(a) the employer's name and address and the name of the SPWP;	
	(b) the tasks or job that the worker is to perform; and	
	(c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;	
	(d) the worker's rate of pay and how this is to be calculated;	
	(e) The training that the worker will receive during the SPWP.	
	12.2 An employer must supply each worker with a copy of these conditions of employment.	
	13 Keeping records	
	13.1 Every employer must keep a written record of at least the following:	
	(a) the worker's name and position;	
	(b) in the case of a task-rated worker, the number of tasks completed by the worker;	
	(c) in the case of a time-rated worker, the time worked by the worker;	
	(d) Payments made to each worker.	
	13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.	
	14 Payment	
	14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.	
	14.2 A task-rated worker will only be paid for tasks that have been completed.	
	14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.	
	14.4 A time-rated worker will be paid at the end of each month.	
	14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.	
	 14.6 Payment in cash or by cheque must take place – (a) at the workplace or at a place agreed to by the worker; (b) during the worker's working hours or within fifteen minutes of the start or finish of work; 	
	(c) In a sealed envelope which becomes the property of the worker.	
	14.7 An employer must give a worker the following information in writing:	
	(a) the period for which payment is made;	
	(b) the numbers of tasks completed or hours worked;	

The additional Conditions of Contract are:		
	(c) the worker's earnings;	
	(d) any money deducted from the payment;	
	(e) The actual amount paid to the worker.	
	14.8 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.	
	14.9 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.	
	15 Deductions	
	15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.	
	15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.	
	15.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.	
	15.4 An employer may not require or allow a worker to –	
	 (a) repay any payment except an overpayment previously made by the employer by mistake; 	
	(b) state that the worker received a greater amount of money than the employer actually paid to the worker; or	
	(c) Pay the employer or any other person for having been employed.	
	16 Health and safety	
	16.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.	
	(e) Report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.	
	16.2 A worker must –	
	(a) work in a way that does not endanger his/her health and safety or that of any other person;	
	(b) obey any health and safety instruction;	
	(c) obey all health and safety rules of the SPWP;	
	(d) use any personal protective equipment or clothing issued by the employer;	
	17 Compensation for injuries and diseases	
	17.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.	
	17.2 A worker must report any work-related injury or occupational disease to their employer or manager.	
	17.3 The employer must report the accident or disease to the Compensation Commissioner.	
	17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.	

The additional Conditions of Contract are:			
	18 Termination		
	18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.		
	18.2 A worker will not receive severance pay on termination.		
	18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.		
	18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.		
	18.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.		
	19 Certificate of service		
	19.1 On termination of employment, a worker is entitled to a certificate stating –		
	(a) the worker's full name;		
	(b) the name and address of the employer;		
	(c) the SPWP on which the worker worked;		
	(d) the work performed by the worker;		
	(e) any training received by the worker as part of the SPWP;		
	(f) the period for which the worker worked on the SPWP;		
	(g) Any other information agreed on by the employer and worker."		

PART 2: DATA PROVIDED BY THE CONTRACTOR

The Contractor is advised to read the General Conditions of Contract for Construction Works, Third Edition, 2015 published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685, in order to understand the implications of this data which is required to be completed.

Copies of these conditions of contract may be obtained from www.saice.org.za.

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

Clause	Data	
1.1.1.9	The name of the Contractor is:	
1.2.1.2	The address of the Contractor for receiving notices is:	
	Physical Address: Postal A	Address:
	1	
	Telephone:	
	Facsimile:	
6.2.1		Ι
	Type of Security	Contractor's
		Choice Indicate
		"Yes" or
		"No"
	The security to be provided by the Contractor shall be one of the following:	
	Cash deposit of 10% of the Contract Sum, incl. VAT	
	Performance guarantee of 10% of the Contract Sum, incl. VAT	
	Retention of 10% of the value of the works.	
	Cash deposit of 5% of the Contract Sum plus retention of 5% of the value of the works.	
	Performance Guarantee of 5% of the Contract Sum plus a retention of 5% of the value of the works.	
6.5.1.2.3	The percentage allowance to cover overhead charges is	%

C1.3 – Form of Guarantee

PERFORMANCE GUARANTEE PRO FORMA

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

Contract No: ECDC/INFRA/37A/052024

Project Name: CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO

WHEREAS: **Eastern Cape Development Corporation** (hereinafter referred to as the Employer")

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means	
Physical address:	
"Employer" means:	
"Contractor" means:	
"Guarantor" means:	
"Employers Agent" r	neans:
"Works" means:	
"Site" means:	
"Contract" means:	The agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.
"Contract Sum" mea	ins: The accepted amount inclusive of tax of R
Amount in words:	
"Guaranteed Sum" n	neans: The maximum aggregate amount of R
Amount in words:	
Type of Performance	e Guarantee: (Insert Variable or Fixed)
"Expiry Date" means:	

PERFORMANCE GUARANTEE PRO FORMA

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

Contract No: ECDC/INFRA/37B/052024

Project Name: CONSTRUCTION OF MABHOBHO SHEARING SHED IN MT FRERE

WHEREAS: Eastern Cape Development Corporation

(hereinafter referred to as the Employer")

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means	
Physical address:	
"Employer" means:	
"Contractor" means:	
"Guarantor" means:	
"Employers Agent" r	neans:
"Works" means:	
"Site" means:	
"Contract" means:	The agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.
"Contract Sum" mea	ins: The accepted amount inclusive of tax of R
Amount in words:	
"Guaranteed Sum" n	neans: The maximum aggregate amount of R
Amount in words:	
Type of Performance	e Guarantee: (Insert Variable or Fixed)
"Expiry Date" means: (Give date) or any other later date set by the Contractor and/or Employer provided such instruction is received prior to the Expiry Date as indicated here.	

PERFORMANCE GUARANTEE PRO FORMA

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

Contract No: ECDC/INFRA/37C/052024

Project Name: CONSTRUCTION OF KHIBA SHEARING SHED IN STERKSPRUIT

WHEREAS: **Eastern Cape Development Corporation** (hereinafter referred to as the Employer")

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means	
Physical address:	
"Employer" means:	
"Contractor" means:	
"Guarantor" means:	
"Employers Agent" n	neans:
"Works" means:	
"Site" means:	
"Contract" means:	The agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.
"Contract Sum" mea	ns: The accepted amount inclusive of tax of R
Amount in words:	
"Guaranteed Sum" n	neans: The maximum aggregate amount of R
Amount in words:	
Type of Performance	e Guarantee: (Insert Variable or Fixed)
"Expiry Date" means: (Give date) or any other later date set by the Contractor and/or Employer provided such instruction is received prior to the Expiry Date as indicated here.	

CONTRACT DETAILS

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

1. PERFORMANCE GUARANTEE

- 1.1 Where a Fixed Performance Guarantee has been selected, the Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
- 1.2 The Guarantor's period of liability shall be from and including the date on which the Performance Guarantee is signed, up to and including the Expiry Date, or the date of the issue by the Employer's Agent of the Certificate of Completion of the Works, or the date of payment in full of the Guaranteed Sum, whichever occurs first.
- 1.3 The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

2. CONDITIONS APPLICABLE TO VARIABLE AND FIXED PERFORMANCE GUARANTEES

- 2.1 The Guarantor hereby acknowledges that:
- 2.1.1 Any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be constructed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.
- 2.1.2 Its obligation under this Performance Guarantee is restricted to the payment of money.
- 2.2 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon the receipt of the documents identified in 3.2.1 to 3.2.3:
- 2.2.1 A copy of the first written demand issued by the Employer to the Contractor stating that the payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment with seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 3.2.2;
- 2.2.2 A first writing demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 3.2.1 and the sum certified has still not been paid;
- 2.2.3 A copy of the aforesaid payment certified which entitles the Employer to receive payment in terms of the Contract of the sum certified in 3.2.
- 2.3 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:

- 2.3.1 The Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 3.3; or
- 2.3.2 A provisional or final sequestration or liquidation court order has been granted against the Contractor and that a Performance Guarantee is called up in terms of 3.3; and
- 2.3.3 The aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
- 2.4 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 3.2 and 3.3 shall not exceed the Guarantor's maximum liability in terms of 1.1 or 2.1.
- 2.5 Where the Guarantor has made payment in terms of 3.3, the Employer shall upon the date of issue of the Final Payment Certificate submit and expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor and resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment made by the Guarantor to the Employer until the date of refund.
- 2.6 Payment by the Guarantor in terms of 3.2 and 3.3 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 2.7 Payment by the Guarantor in terms of 3.3 will only be made against the return of the original Performance Guarantee by the Employer.
- 2.8 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may consider fir and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
- 2.9 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 2.10 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 1.1.2 or 2.2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after is has expired.
- 2.11 The performance Guarantee, with the required demand notices in terms of 3.2 or 3.3, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 2.12 Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrates' Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of and district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at:		
Date:		
Guarantor's signa	atory (1): .	
Capacity:		
Guarantor's signa	atory (2):	
Capacity:		
Witness signatory	/ (1): .	
Witness signatory	(2):	

C1.4 - Agreement in Terms of Section 37(2) of the Occupational

Health & Safety Act (Act No 85 of 1993)

PART.4 AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT No. 85 OF 1993)

and has accepted a bid by the Mandatory for the construction, completion and defects correction of such works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act No 85 of 1993.

NOW THEREFORE THIS DOCUMENT WITNESSETH AS FOLLOWS:

- 1. The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this Contract.
- 2. This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Employer or Employers Agent requiring him to commence the execution of the Works, to either:
- a) The date of the Final Approval Certificate issued in terms of Clause 5.16.1 of the General Conditions Of Contract For Construction Works, Third Edition (2015) (hereinafter referred to as the "GCC").
- b) The date of termination of the Contract in terms of Clauses 9.2 or clause 9.3 of the GCC.
- 3. The Mandatory declares himself to be conversant with the following:
- All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1995), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act:
- i) Section 8: General duties of employers to their employees;
- ii) Section 9: General duties of employers and self-employed persons to persons other than employees;
- iii) Section 37: Acts or omissions by employees or mandatories, and
- iv) Subsection 37(2) relating to the purpose and meaning of this Agreement.

- b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his subcontractors.
- 4. In addition to the requirements of Clause 6.3 of the GCC and all relevant requirements of the abovementioned Volume 3, the Mandatory agrees to execute all the Works forming part of this Contract and to operate and utilise all machinery, plant and equipment in accordance with the Act.
- 5. The Mandatory is responsible for the compliance with the Act by all his subcontractors, whether or not selected and/or approved by the Employer.
- 6. The Mandatory warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act, 1995 which cover shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.
- 7. The Mandatory undertakes to ensure that he and/or subcontractors and/or their respective employers will at all times comply with the following conditions:
- a) The Mandatory shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
- b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
- c) The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Mandatory and/or his employees and/or his subcontractors

In witness thereof, the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

At		for and behalf of the
Employer on this the	day of	20
SIGNATURE:		
CAPACITY:		
WITNESSES:		
SIGNATURES:	(1)	
	(2)	

NAMES:	(1)	
	(2)	
At	for and behalf of the	
MANDATORY on this	the day of 20	
SIGNATURE: CAPACITY:		
<u>WITNESSES:</u> SIGNATURES:	(1)	
	(2)	
NAMES:	(1)	
	(2)	

Part C2: Pricing data

C2.1 - Pricing instructions

C2.1: Pricing Instructions

C2.1.1 PREAMBLE TO THE SCHEDULE OF PRICES

C2.1.1.1 **All** prices shall be quoted in the currency of the Republic of South Africa and will be held to be firm unless otherwise stated, in which case sufficient information must be afforded at the time of tendering to indicate the basis on which payment shall be adjusted.

C2.1.1.2 The Tenderer shall enter a price against each item in the schedule of prices. If the Tenderer fails to enter a price against any item in the schedule of prices the relevant cost for such item shall be regarded as being covered by other prices in the schedule of prices. Should an item specifically be excluded from the offer submitted, such tender will be regarded as non-responsive and not be considered.

C2.1.1.3 The prices quoted against each item of these schedules shall cover the full inclusive cost of everything required for the execution of the work under the item plus an apportionment of any cost involved in meeting the obligations and liabilities imposed by the conditions of contract and in complying with the specifications.

C2.1.1.4 The prices quoted for the supply of plant and equipment shall include for all handling, loading, transporting and of-loading required for the delivery of the plant and equipment to the site, including in the case of of-site storage for double handling at the store.

C2.1.1.5 The prices quoted for erection and installation shall include for all handling, loading, transporting and of-loading, to take plant and equipment to place on site where required, erection, installation, painting, commissioning, operating, testing, adjusting, handing over in proper working order and upholding for a period of 12 months, all as specified.

C2.1.1.6 Any additional charges in connection with of-site storage which there may be over and above the prices quoted in the various sections of these schedules of prices shall be set out in detail by the Tenderer.

C2.1.1.7 The tendered rates and amounts must exclude Value Added Tax (VAT) but must include all levies, other taxes and duties on items to which they apply. Separate provision has been made in the Tender Summary for the purpose of VAT.

C2.1.1.8 Amounts allowed for contingencies will be spent in part or as a whole at the sole discretion of the Principal Agent.

C2.1.1.9 Schedule of Prices shall be completed and signed in **black ink**. Corrections must be done by deleting, rewriting and initialling next to the amendment.

C2.1.1.10 The Bills of Quantities are not to be used for the purpose of ordering materials

C2.1.1.11 Bidders are to indicate which project in the Bid they are responding to (by ticking the boxes). Bidders may respond to more than one project, should they wish to, however they will only be appointed for one project.
DAYWORK SCHEDULE

This Day work Schedule shall be used at the discretion of the Employers Agent Agent for the valuation of extra work, which cannot conveniently be valued at the rates submitted in the Schedule of Quantities.

The rates entered for labour and materials shall not be inclusive of overhead charges and profit, site supervision of staff, insurance, holidays with pay, use and maintenance of small hand tools and non-mechanical plant, travelling allowances, other emoluments and allowances, provision being made for the insertion of percentage, to cover all these items which are henceforth termed "on-costs". The rate used in the deduction of the value of the day work being thus the basic rate plus the percentage "on-costs".

In the case of plant no "on-cost" item is provided. The rate entered shall include any of the above "on-costs" which are pertinent and shall include operator's costs, consumable stores, maintenance, etc.

The Tenderer must fill in each item listed below, or his tender may be rejected as being incomplete.

A LABOUR

- 1.Labourers per hour plus% "On-Cost"2.Gangers per hour plus% "On-Cost"3.Tradesmen per hour plus% "On-Cost"
- B EQUIPMENT (where not listed in scheduled items)

Description of Work

Rate per hour

.....

Rate for standing time: % of working rate

C MATERIAL

The Tenderer shall state here the percentage "On-Cost" he will add to the basic price of materials:

.....%

TENDERER'S NAME:COMPANY STAMP:

SIGNATURE:

DATE:

C2.2 - Bill of Quantities

CONSTRUCTION OF GOQWANA SHEARING SHED IN TSOLO BID NO: ECDC/INFRA/37A/052024

C2.2.1 – BILL OF QUANTITIES

Bidders are to indicate which project in the Bid they are responding to (by ticking the boxes).

SUMMARY OF SECTIONS

SCHEDULE NO.	DESCRIPTION	AMOUNT
1	PRELIMINARY AND GENERAL OBLIGATIONS	
2	SHEARING SHED	
3	VIP TOILET	
4	ROAD AND PARKING	
5	SOLAR	
6	DIPPING TANK	
	SUB TOTAL 1	
	CONTINGENCIES 5% OF SUB TOTAL 1	
	SUB TOTAL 2	
	ADD 15% VAT	
	PROJECT TOTAL	

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
1	SANS 1200 A	0	SECTION 1: PRELIMINARY AND GENERAL				
	8,3		FIXED-CHARGE ITEMS				
1,1	8.3.1		Contractual Requirements	Sum	1		
	8.3.2	0	Establish Facilities on the Site:				
1,2	PSAB 8.3.2.1	0	Facilities for the Engineer				
1.2.2		0	b) 2 contract name boards	Sum	1		
1,3	8.3.2.2		Facilities for Contractor				
1.3.1			a) Offices and storage sheds	Sum	1		
1.3.2			b) workshops	Sum	1		
1.3.3			c) Laboratories	Sum	1		
1.3.4			d) Living Acommodation	Sum	1		
1.3.5			e) Ablution and latrine facilities	Sum	1		
1.3.6			f) Tools and equipment	Sum	1		
1.3.7			g) water supplies, electric power and communication	Sum	1		
1.3.8			h) Dealing with water	Sum	1		
1.3.9			i) Access	Sum	1		
1.3.10			j) plant	Sum	1		
1,4	8.3.3		Other fixed-charge obligations	Sum	1		
1,5	8.3.4		Removal of Contractor's Site Establishment on completion	Sum	1		
1,6			The cost of Health & Safety meassures in terms of the Construction Regulations (2003) of the Occupational Health & Safety Act (From Health and Safety specification PA on page 171 of the document)	Sum	1		
	8,4		SCHEDULED TIME-RELATED ITEMS				
1,7	8.4.1		Contractual requirements	Sum	1		
	8.4.2		Operate and maintain facilities on the Site:				
1,8	8.4.2.1		Facilities for engineer				
1.8.1			a) furnished office, nameboards and survey assistants and materials and equipment and facilities.	Sum	1		
1,9	8.4.2.2		Facilities for contractor				
1.9.1			a) offices and storage sheds	Sum	1		
1.9.2			b) workshops	Sum	1		
1.9.3			c) laboratories	Sum	1		
1.9.4			d) Living acomodation	Sum	1		
CARRIED F		0 1	IEXT PAGE				

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	ROM PREVIOUS PAGE				
1.9.5		e) ablution and latrine facilities	Sum	1		
1.9.6		f) tools and equipment	Sum	1		
1.9.7		g) Water supplies, electric power and communication	Sum	1		
1.9.8		h) Dealing with water	Sum	1		
1.9.9		i) Access	Sum	1		
1.9.10		j) Plant	Sum	1		
1,10	8.4.3	Supervision for duration of the Contract	Sum	1		
1,11	8.4.4	Company and Head Office over-head costs	Sum	1		
1,12	8.4.5	Other time-related obligations	Sum	1		
1,13		Community Liaison Persons (Monthly Wage = R7180.80)	Man Months	4	8 000,00	R 32 000,00
1,14		Maintenance of Health & Safety Plan, including Risk Analysis, Safe Working Procedures and working methods.	Sum	1		
	8,7	DAYWORKS				
1,15		Labour	Prov Sum	1	10 000,00	
1,16		Percentage adjustment to Labour above	%	1		
1,17		Materials	Prov Sum	1	10 000,00	R 10 000,00
1,18		% adjustment to Materials above	%	1		
1,26		Plant	Prov Sum	1	10 000,00	R 10 000,00
1,27		Percentage adjustment to Plant above	%	1		
		NOTE: Other Provisional sums are stated in the appropriate Bill and Summary of Schedules				
TOTAL OF	SCHEDULE	I CARRIED FORWARD TO SUMMARY				

2 SANS 1200C SCHEDULE 2: SHEARING SHED Site Clearance Instance 2.1.1 SANS 1200DA Clearing the site m ³ 270 2.1 SANS 1200DA All excavations m ³ 270 2.1 8.3.1(a) Remove togooil to nominal depth of 150mm. Stockpile maintain and re-instate. m ³ 270 2.2.1 B.3.1(a) Remove togooil to nominal depth of 150mm. Stockpile maintain and re-instate. m ³ 15 2.2.3 8.3.1(a)(1) Intermediate material m ³ 15 2.3.4 8.3.1(a)(2) Hand material m ³ 10 2.3.1 Pundation concrete 15MPar19 T T 2.3.1 Outside walls - 300mm x 650mm m ³ 1 2.3.1 Pundation concrete 15MPar19 T T 2.3.1 Pundation concrete 500mm X 650mm m ³ 6 2.4.1 Pundation walls T T 2.4.1 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m ³ 60 2.5.1 SS19 Boulling rubble - well compacted. m ³ 10 1.5.1	ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
2.11 SANS 1200C Site Clearance m³ 270 2.1.1 Clearing the site m³ 270 2.2 SANS 1200DA 1200DA Stockpile maintain and re-instate. m³ 270 2.2.1 B.3.1(a) Remove topsoil to nominal depth of 150mm. m³ 270 2.2.2 Hand Excavation m³ 15 2.2.3 B.3.1(a)(1) Intermediate material m³ 15 2.2.4 B.3.1(a)(2) Hard material m³ 10 Rate Only 2.3.1 SANS 1200S Foundation concrete 15MPar19 T T 2.3.1 Inside walls - 300mm x 650mm m³ 12 2.3.1 Inside walls - 250mm x 450mm m³ 1 2.3.3 Foundation walls m³ 1 2.4.1 Double row standard concrete bricks floor level all walls m³ 50 2.4.2 Pounder standard concrete bricks floor level main walls. m³ 10 2.5.1 SS19 Building rubble - well compacted. m³ 10 2.5.1 SS19 Building rubble - well compacted. m³ 13	2			SCHEDULE 2 : SHEARING SHED				
2.1.1 Image: Clearing the site m ² 270 2.2 SANS 1200DA 1200DA 8.3.1(a) All eccavations Remove topsoil to nominal depth of 150mm. m ² 270 2.2.1 8.3.1(a) Remove topsoil to nominal depth of 150mm. m ² 270 2.2.2 Hand Excavation m ³ 15 2.3.1(a) Extra over item 2.2.2 for excavation in: m ³ 15 2.3.1(a) Intermediate material m ³ 15 2.4.4 8.3.1(a)(1) Intermediate material m ³ 10 2.3.1 Foundation concrete 15MPa/19 The comparison of the site of the si	2,1	SANS 1200C		Site Clearance				
2.2 SANS 1200DA 8.3.1(a) All excevations Remove topsoil to nominal depth of 150mm. Stockpile maintain and re-instate. m ² 270 2.2.2 Hand Excevation m ³ 15 2.2.3 8.3.1(a)(1) Extra over item 2.2.2 for excevation in: 15 2.2.3 8.3.1(a)(1) Intermediate material m ³ 15 2.2.4 8.3.1(a)(2) Hard material m ³ 10 Rate Only 2.3 SANS 1200S Foundation concrete 15MPa/19 1 Rate Only 2.3.1 Outside walls - 300mm x 650mm m ³ 12 2.3.3 ANS 1200S Retaining wall - 300mm x 650mm Concrete with a 15MPa strength at 28 days. m ³ 1 2.3.4 Eoundation walls Eoundation concrete bricks floor level inside walls. m ³ 1 2.4.1 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts and m ² 10 2.5.1 SS13 Floor E 1 2.5.2 SS3 250 Micron PVC sheet under all floors m ² 138 Concrete floor slab 30MPa/19 Io Io Io 2.5.3 S	2.1.1			Clearing the site	m²	270		
2.2.1 8.3.1(a) Remove topsoil to nominal depth of 150mm. m² 270 2.2.2 Hand Excavation m³ 15 2.2.4 8.3.1(c)(1) Extra over item 2.2.2 for excavation in: n³ 15 2.2.3 8.3.1(c)(1) Intermediate material m³ 15 2.2.4 8.3.1(c)(2) Hard material m³ 15 2.2.4 8.3.1(c)(2) Hard material m³ 16 2.3.1 Dutside walls - 300mm x 650mm m³ 12 2.3.1 Outside walls - 250mm x 450mm m³ 6 2.3.3 Retaining wall - 300mm x 650mm Concrete with a m³ 6 2.3.3 Retaining wall - 300mm x 650mm Concrete with a m³ 6 2.4.1 Double row standard concrete bricks floor level all walls. m³ 10 2.4.1 Double row standard concrete bricks floor level all walls. m³ 10 2.4.2 Double row standard concrete bricks floor level retaining walls. m³ 10 2.5.1 SS13 Floor m³ 10 2.5.2 SS3 250 Micron PVC sheet under all floors m³ <td>2,2</td> <td>SANS</td> <td></td> <td>All excavations</td> <td></td> <td></td> <td></td> <td></td>	2,2	SANS		All excavations				
2.2.2 Image:	2.2.1	8.3.1(a)		Remove topsoil to nominal depth of 150mm. Stockpile maintain and re-instate.	m²	270		
8.3.1(a)(1) I Extra over item 2.2.2 for excavation in: m³ 15 2.2.3 8.3.1(a)(1) Intermediate material m³ 15 2.2.4 8.3.1(a)(1) Hard material m³ 10 Rate Only. 2.3 SANS 1200S Foundation concrete 15MPa/19 1 10 12 2.3.1 J Outside walls - 300mm x 650mm m³ 1 12 2.3.2 Inside walls - 250mm x 450mm m³ 1 1 2.3.3 Retaining wall - 300mm x 650mm Concrete with a 15MPa strength at 28 days. m³ 6 1 2.4 Foundation walls Double row standard concrete bricks floor level walls. m³ 6 1 2.4.1 Double row standard concrete bricks floor level walls. m² 50 10 2.4.2 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m² 10 2.5.1 SS13 Floor Backfill to floor level m³ 45 2.5.2 SS3 250 Micron PVC sheet under all floors m³ 14 2.5.3 SANS 100mm thick slab with 30MPa/19 m	2.2.2			Hand Excavation	m³	15		
2.2.3 8.3.1(a)(1) Intermediate material m³ 15 2.2.4 8.3.1(a)(2) Hard material m³ 10 Rate Only 2.3 SANS 1200S Outside walls - 300mm x 650mm m³ 12 2.3.1 Inside walls - 300mm x 650mm m³ 12 2.3.2 Inside walls - 250mm x 450mm m³ 1 2.3.3 Retaining wall - 300mm x 650mm Concrete with a 15MPa strength at 28 days. m³ 6 2.4 Foundation walls m³ 6 1 2.4.1 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts and m² 50 2.4.2 Backfill to floor level retaining walls. Mortar mix 1 part cement : 4 parts and m² 10 2.5.1 SS13 Floor m² 138 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 2.5.3 SANS 1200G 100mm thick slab with 30MPa freqpth concrete caster is sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60		8.3.1(c)(1)		Extra over item 2.2.2 for excavation in:				
2.2.4 8.3.1(c)(2) Hard material m³ 10 Rate Only 2.3 SANS 1200S Foundation concrete 15MPa/19 n³ 12 2.3.1 Outside walls - 300mm x 650mm m³ 12 2.3.2 Inside walls - 250mm x 450mm m³ 1 2.3.3 Retaining wall - 300mm x 650mm m³ 6 2.4 Foundation concrete bricks floor level at 15MPa strength at 28 days. m³ 6 2.4.1 Double row standard concrete bricks floor level at walls. m² 50 2.4.2 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m² 10 2.5.1 SS13 Floor m² 10 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 Concrete floor slab 30MPa/19 m³ 14 14 2.5.3 SANS 1200G 100mm thick slab with 30MPa strength concrete_casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60	2.2.3	8.3.1(c)(1)		Intermediate material	m³	15		
2.3 SANS 1200S Foundation concrete 15MPa/19 Image: second s	2.2.4	8.3.1(c)(2)		Hard material	m³	10		Rate Only
2.3.1 A Outside walls - 300mm x 650mm m³ 12 2.3.2 Inside walls - 250mm x 450mm m³ 1 2.3.3 Retaining wall - 300mm x 650mm Concrete with a 15MPa strength at 28 days. m³ 6 2.4 Foundation walls m³ 6 2.4.1 Double row standard concrete bricks floor level all walls. m² 50 2.4.2 Double row standard concrete bricks floor level all walls. Mortar mix 1 part cement : 4 parts sand m² 10 2.4.2 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m² 10 2.5.1 SS13 Floor Sackfill to floor level m³ 45 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 138 Concrete floor slab 30MPa/19 Samp course sheet Samp course Samp course Samp course 2.5.3 SANS 100mm thick slab with 30MPa strength concrete, casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60	2,3	SANS 1200S		Foundation concrete 15MPa/19				
2.3.2 Inside walls - 250mm x 450mm m³ 1 2.3.3 Retaining wall - 300mm x 650mm Concrete with a 15MPa strength at 28 days. m³ 6 2.4 Foundation walls Double row standard concrete bricks floor level all walls. m² 50 2.4.1 Double row standard concrete bricks floor level all walls. m² 50 2.4.2 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m² 10 2.5 SS13 Floor m² 10 2.5.1 SS19 Building rubble - well compacted. m³ 45 Damp course sheet 250 m² 138 Concrete floor slab 30MPa/19 m³ 14 2.5.3 SANS 100mm thick slab with 30MPa strength concrete, casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60	2.3.1			Outside walls - 300mm x 650mm	m³	12		
2.3.3 Retaining wall - 300mm x 650mm Concrete with a m³ 6 2.4 Foundation walls - 2.4.1 Double row standard concrete bricks floor level all walls. m² 50 2.4.2 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m² 10 2.5 SS13 Floor - - Backfill to floor level m³ 45 - 2.5.1 SS19 Building rubble - well compacted. m³ 45 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 2.5.3 SANS 100mm thick slab with 30MPa strength concrete, casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60 -	2.3.2			Inside walls - 250mm x 450mm	m³	1		
2,4 Foundation walls m² 50 2.4.1 Double row standard concrete bricks floor level all walls. m² 50 2.4.2 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m² 10 2,5 SS13 Floor m² 10 2,5 SS13 Floor m² 10 2,5.1 SS19 Building rubble - well compacted. m³ 45 2,5.2 SS3 250 Micron PVC sheet under all floors m² 138 2,5.3 SANS 100mm thick slab with 30MPa strength concrete, casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2,6 Masonry work m 60 60 60	2.3.3			Retaining wall - 300mm x 650mm Concrete with a 15MPa strength at 28 days.	m³	6		
2.4.1 Double row standard concrete bricks floor level all walls. m² 50 2.4.2 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m² 10 2.5 SS13 Floor m² 10 2.5.1 SS19 Building rubble - well compacted. m³ 45 Damp course sheet Damp course sheet m² 138 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 Concrete floor slab 30MPa/19 Concrete floor slab 30MPa/19 m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60	2,4			Foundation walls				
2.4.2 Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand m² 10 2,5 SS13 Floor Backfill to floor level - 2.5.1 SS19 Building rubble - well compacted. m³ 45 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 2.5.3 SANS 100mm thick slab with 30MPa strength concrete, casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60	2.4.1			Double row standard concrete bricks floor level all walls.	m²	50		
2,5 SS13 Floor Backfill to floor level Backfill to floor level 2.5.1 SS19 Building rubble - well compacted. m³ 45 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 2.5.3 SANS 1200G 100mm thick slab with 30MPa strength concrete, casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60	2.4.2			Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand	m²	10		
2.5.1 SS19 Backfill to floor level m³ 45 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 2.5.3 SANS Concrete floor slab 30MPa/19 m³ 14 2.5.4 Masonry work m³ 14 2.6.1 SS3 375 Micron strips under all walls m 60	2,5	SS13		Floor				
2.5.1 SS19 Building rubble - well compacted. m³ 45 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 2.5.2 SS3 250 Micron PVC sheet under all floors m² 138 2.5.3 SANS 1200G 100mm thick slab with 30MPa strength concrete, casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2,6 Masonry work Image: Concrete floor strips under all walls m 60 2.6.1 SS3 375 Micron strips under all walls m 60				Backfill to floor level				
2.5.2 SS3 250 Micron PVC sheet under all floors m ² 138 2.5.3 SANS 1200G 100mm thick slab with 30MPa strength concrete,casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m ³ 14 2,6 Masonry work Damp course m 60 2.6.1 SS3 375 Micron strips under all walls m 60	2.5.1	SS19		Building rubble - well compacted.	m³	45		
2.5.2 SS3 250 Micron PVC sheet under all floors m ² 138 2.5.3 SANS 1200G 100mm thick slab 30MPa/19 m ³ 14 2.5.4 Masonry work expansion joints filled with softboard. m ³ 14 2.6.1 SS3 375 Micron strips under all walls m 60				Damp course sheet				
2.5.3 SANS 1200G 100mm thick slab with 30MPa strength concrete,casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2,6 Masonry work Damp course Masonry work n 2.6.1 SS3 375 Micron strips under all walls m 60	2.5.2	SS3		250 Micron PVC sheet under all floors	m²	138		
2.5.3 SANS 1200G 100mm thick slab with 30MPa strength concrete,casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard. m³ 14 2,6 Masonry work Image: Construct of the section of the softboard of the softboa				Concrete floor slab 30MPa/19				
2,6 Masonry work Damp course 2.6.1 SS3 375 Micron strips under all walls m 60	2.5.3	SANS 1200G		100mm thick slab with 30MPa strength concrete,casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard.	m³	14		
2.6.1 SS3 Damp course 375 Micron strips under all walls m 60	2,6			Masonry work				
2.6.1 SS3 375 Micron strips under all walls m 60 CARRIED FORWARD TO NEXT PAGE				Damp course				
CARRIED FORWARD TO NEXT PAGE	2.6.1	SS3		375 Micron strips under all walls	m	60		
	CARRIED F	ORWARD T	O NE		I			

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
BROUGHT	FORWARD	FROM	M PREVIOUS PAGE					
			Walls					
2.6.2			Outside walls - 190 mm (Standard No 8 building blocks)	m²	142			
2.6.3			Inside walls - 140mm thick (Standard No 6 building blocks)	m²	17			
2.6.4			Retaining wall - 190 mm (Standard No 8 building blocks) Mortar mixture 1 part cement : 4 parts sand	M2	30			
			Plaster					
2.6.5	SS16		All walls both sides x 15 mm (Plaster mixture = 1 part cement : 5 parts sand)	m²	318			
			Pre-stressed concrete Lintels					
2.6.6			1.5 m Pre-stressed concrete for windows	No	16			
2.6.7			1.2 m Pre-stressed concrete for doors	No	3			
2.6.8			2.6 m Pre-stressed concrete for garage door	No	2			
2.6.9			1.0 m Pre-stressed concrete for openings	No	6			
			Brick force wire					
2.6.10			2 mm dia wire between every third row of blocks in outer walls	m	300			
2.6.11			2 mm dia wire between every third row of blocks in inner walls	m	24			
			Ventilation					
2.6.12			Concrete ventilation bricks: Vermin proof	No	30			
2,7	SS9		Doors					
2.7.1			Industrial roll up garage door	No	1			
2.7.2			Standard steel frame and door combination	No	4			
2.7.3			Purpose made sliding door. (See plan for detail)	No	3			
2,8			Windows: Wispeco or similar					
2.8.1			SS33 steel window frames, glass fitted and painted.	No	8			
2,9	SS30		Paint					
			Wall paint: Inside and outside					
2.9.1			1 Coat plaster primer	m²	320			
2.9.2			1 Coat universal undercoat	m²	320			
2.9.3			2 Coats acrylic PVA	m²	640			
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ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD I	FROM	I PREVIOUS PAGE				
			Other paint : Doors, Windows, Fascia's				
2.9.4	SS30		1 Coat steel primer (5liter tin)	No	1		
2.9.5			2 Coats enemal paint (5 liter tin)	No	2		
2,10			Roof structure: Mitek approved Design and				
2.10.1			Roof structure complete, fitted and with certificate	No	1		
2.10.2			152 mm Halfround gutters to include brackets, joints and stops	m	36		
2.10.3			76 mm Downpipes to include brackets and joints	m	12		
2,11	SANS 1200G		Concrete ramp				
2.11.1	PPS 29		4m x 1,8 m concrete ramp at 20 Mpa strength with 1 in 4 slope	No	1		
2,12	SANS		Concrete apron				
2.12.1			50 x 800 mm around building at 15 Mpa strength	m	54		
2,13			Water tank 5 000 liter on concrete standx6				
2.13.1			Water tank : 5 000 liter plastic with 25mm tap	No	6		
2.13.2			Excavation : 8 x 0.45 x 0.65 m for foundation	m³	14,04		
2.13.3			Foundation : 8 x 0.45 x 0.65 m x 15 Mpa concrete	m³	14,04		
2.13.4			Walls : 8m x 0.6m x 3 rows x 55 Standard concrete bricks	No	4800		
2.13.5			Brick force every row of bricks	m	192		
2.13.6			Backfill : Building rubble / in situ material	m³	6,6		
2.13.7			Damp course : 250 Micron PVC sheeting	m²	10,8		
2.13.8			Floor : 1.32 x 1.32 m x 100mm concrete	m³	1,2		
2.13.9			Anchor bolts : M16 x 300mm eye bolts	No	24		
2.13.10			Tank anchors : Binding wire 2 x 4.0mm x 5 kg	No	6		
2,14			Animal Handling Facilities				
2.14.1			15MPa concrete x (4.5 x 10 x 0.05m)	m³	2,3		
2.14.2			Sheep kraal side long 900 x 2850 mm (Taltec TSK1 Long or similar of 0.9 x 2.85m)	No	10		
2.14.3			Sheep kraal side 900 x 1850 mm (Taltec TSK1 Kraal side or similar of 0.9 x 1.85m)	No	4		
2.14.4			Sheep kraal side with gate 900 x 1850 mm (TSK 3 Taltec kraal side with swing gate or similar 0.9 x 1 85m)	No	5		
CARRIED FORWARD TO NEXT PAGE							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FRO	I PREVIOUS PAGE				
	8.3.1(b)		Excavate in all materials for dip tank including all back filling and disposal of surplus materials				
2.14.5			Hand Excavation	m³	7,5		
	8.3.1(c)(1)		Extra over item 2.14.5 for excavation in:				
2.14.6	8.3.1(c)(1)		Intermediate material	m³	2,5		
2.14.7	8.3.1(c)(2)		Hard material	m³			Rate Only
2.14.8			High quality Aluminium paint. (5ł tins)	No	2		
2,15			Perimeter security fence Refer Dwg no. 34694.01 Shed-05				
2.15.1			Clearing the fence line, 2m wide strip	m	150		
2.15.2			Extra over on item B1 for the removal of trees and stumps exceeding 1 m diameter	No	rate		Rate Only
2,16			Corner and Gate posts				
2.16.1			Excavation of holes 450 x 450 x 600mm	No	6		
2.16.2			15MPa concrete x 0.12 cubm per hole	No	6		
2.16.3			Galv Steel posts (100mm x 2,4m x 2.5mm)	No	2		
2.16.4			Galv Steel Post Stays (75mm x 2.5mm x 2.4m)	No	10		
2.16.5			3,6m Security gate covered with welded mesh (50 x 25 x 2.5mm)	No	1		
2.16.6			400mm x 10mm Chain and 60mm lock	No	1		
2.16.7			Labour for assembly	No	6		
2,17			Erecting new security fence 1800mm high				
2.17.1			Galv Y-Section iron standards x 2,4m (Spacing 3m	No	50		
2.17.2			Fully Galv Barbed wire strands (2 x 2mm 50kg rolls)	No	1		
2.17.3			Security Fence mesh (50 x 25 x 2.5mm x 1.8m	No	5		
2.17.4			Binding wire 2.0mm x 5 kg	No	3		
2.17.5			Labour for stringing, straining, fastening the wires, setting the standards.	m	280		
2,18			Shearing shed - Equipment Refer Dwg no. 34694.01 Shed-04				
2.18.1			Wool sorting table (collapsible)	No	1		
2.18.2			Piece Picking table (collapsible)	No	1		
2.18.3			Wool Bins (collapsible)	No	8		
2.18.4			Wool Baskets	No	4		
2.18.5			Bale lifting hooks	No	8		
2.18.6			Shearing shed Scrapers	No	1		
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ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
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2.18.7			Shearing Boards	No	6		
2.18.8			Single base mechanical Wool Press	No	1		
2.18.9			Wool Scale (250kg)	No	1		
2.18.10			Demonstration & Training in use of equipment	No	1		
2.18.11			Sheep Shearers (hand)	No	4		
TOTAL OF							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
3			SCHEDULE 3 : VIP TOILET					
3.1	SANS 1200C		Site Clearance					
3.1.1			Leveling the site for building (Cutting & filling)	m³	10			
3.2	SANS 1200DA		All excavations					
	8.3.1(b)		Excavate in all materials for VIP toilet including all back filling and disposal of surplus materials					
	8.3.1(c)(1)		Extra over item 3.2.1 for excavation in:					
3.2.2	8.3.1(c)(1)		Intermediate material	m³	5			
3.2.3	8.3.1(c)(2)		Hard material	m³			Rate Only	
3.3			Foundation concrete 15/19MPa					
3.3.1			Pit base 4680x3240x200	m³	3			
3.3.2			200x700 strip footing	m³	4			
3.4			Foundation walls					
3.4.1			345 cavity wall filled with concrete	m²	31			
3.4.2			220 brick wall	m²	12			
3.5	SS13		Floor					
	SS19		Backfill to floor level					
3.5.1			Building rubble - well compacted.	m³	5			
	SS3		Damp course sheet					
3.5.2			250 Micron PVC sheet under all floors	m²	15			
	SANS 1200G		Concrete floor slab 30/19 Mpa					
3.5.3			170mm thick slab with 30MPa strength concrete.	m³	10			
			M4A manhole	No	1			
3.6			Masonry work					
	SS3		Damp course					
3.6.1			375 Micron strips under all walls	m	40			
			Walls					
3.6.2			Outside walls - 220 mm (Standard No 8 building blocks)	m²	65			
3.6.3			Inside walls - 110mm thick (Standard No 6 building blocks)	m²	15			
CARRIED F	CARRIED FORWARD TO NEXT PAGE							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FRO	M PREVIOUS PAGE				
			Plaster				
3.6.4	SS16		All walls both sides x 15 mm (Plaster mixture = 1 part cement : 5 parts sand)	m²	160		
			Brick force wire				
3.6.5			2 mm dia wire between every third row of blocks in outer walls	m	300		
3.6.6			2 mm dia wire between every third row of blocks in inner walls	m	24		
3.6.7			Mesh Ref 888	m²	100		
ſ			Ventilation				
3.6.8			110mm ventilation pipes complete with fly screen	No	1		
3.7	SS9		Doors				
3.7.1			Standard steel frame and door combination	No	3		
3.8			Windows:				
3.8.1			W01 window frames, glass fitted and painted.	No	1		
3.9			Paint				
			Wall paint: Inside and outside				
3.9.1			1 Coat plaster primer	m²	160		
3.9.2			1 Coat universal undercoat	m²	160		
3.9.3			2 Coats acrylic PVA	m²	320		
			Other paint : Doors, Windows, Fascia's				
3.9.4			1 Coat steel primer (5liter tin)	No	1		
3.9.5			2 Coats enemal paint (5 liter tin)	No	1		
3.10			Roof structure: Mitek approved Design and Installer				
3.10.1			Roof structure complete, fitted and with certificate	No	1		
3.10.2			152 mm Halfround gutters to include brackets, joints and stops	m	12		
3.10.3			76 mm Downpipes to include brackets and joints	m	2,1		
3.11			Concrete apron				
3.11.1			75 x 1200 mm around building at 15 Mpa strength	m	17		
3.12			Water tank 5 000 liter on concrete stand				
3.12.1			Water tank : 5 000 liter plastic with 25mm tap	No	1		
3.12.2			Excavation : 8 x 0.45 x 0.65 m for foundation	m³	2,34		
3.12.3			Foundation : 8 x 0.45 x 0.65 m x 15 Mpa concrete	m³	2,34		
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ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT		
BROUGHT	FORWARD	FROM	I PREVIOUS PAGE						
3.12.4			Walls : 8m x 0.6m x 3 rows x 55 Standard concrete bricks	No	800				
3.12.5			Brick force every row of bricks	m	32				
3.12.6			Backfill : Building rubble / in situ material	m³	1,1				
3.12.7			Damp course : 250 Micron PVC sheeting	m²	1,8				
3.12.8			Floor : 1.32 x 1.32 m x 100mm concrete	m³	0,2				
3.12.9			Anchor bolts : M16 x 300mm eye bolts	No	4				
3.12.10			Tank anchors : Binding wire 2 x 4.0mm x 5 kg	No	1				
TOTAL OF	TOTAL OF SCHEDULE 3 CARRIED FORWARD TO SUMMARY								

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
4	SANS 1200 DM	<u>SECTION 4: EARTHWORKS (ROADS, SUBGRADE)</u>				
4.1	8.3.2	PREPARATION OF SITE				
4.1.1	PSZB	Wooden stakes to demarcate work area. Spaced at 20m intervals and located on both sides of excavation. Rate inclusive of supply and placement				
4.1.1.1		Access Road and parking area to Tsolo shearing shed	No	4		
4.1.2		Prepare and strip site, remove 150mm of topsoil stockpile and maintain				
4.2	8.3.3	TREATMENT OF ROAD-BED				
		Road-bed preparation and compaction of material In Situ Material				
4.2.1		Compact to 93% Mod. AASHTO density				
4.2.1.1		Access Road and parking area to Tsolo shearing shed	m³	60		
4.3		EARTHWORKS				
4.3.1	8.3.4	Cut to fill, borrow to fill				
		i) Cut to fill				
		Compact to 93% Mod. AASHTO density				
4.3.1.1		Access Road and parking area to Tsolo shearing shed	m³	120		
		 Fill from borrow from other excavations on site or designated borrow 				
		Compact to 93% Mod AASHTO				
4.3.1.2		Access Road and parking area to Tsolo shearing shed	M3	10		
4.4	8.3.5	Selected layer compacted to 93% of modified AASHTO maximum density. G6 Material from Commercial source				
4.4.1		Access Road and parking area to Tsolo shearing shed	M3	160		
4.5	8.3.6	Extra over items 4.3 and 4.4 for excavating and breaking down material in				
4.5.1		i) class 2 excavation (Intermediate)				
4.5.1.1		Access Road and parking area to Tsolo shearing shed	m³	10		
	ORWARD TO	D NEXT PAGE			· · · · · · · · · · · · · · · · · · ·	

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FRO	OM PREVIOUS PAGE				
4,6	8.3.13		Surface Finishes				
4.6.1			i) Topsoiling 150 mm thick on embankments				
4.6.1.1		L	Access Road and parking area to Tsolo shearing shed	m²	30		
4.6.2	PD	L	ii) Fertiliser supplied, placed and mixed				
4.6.2.1			Access Road and parking area to Tsolo shearing shed	t	0,05		
4.6.3	PD	L	iii) Re-establish vegetation; hand-broadcasting with appropriate grass seed mix				
4.6.3.1			Access Road and parking area to Tsolo shearing shed	m²	105		
4.6.4		L	Control of alien vegetation and maintenance of re- vegetation.	Sum	1		
4,7	8.3.15		Catchwater berms and channels, mitre drains and channels Ref Dwg No. 34694.01 Civ-01				
4.7.1		L	Access Road and parking area to Tsolo shearing shed				
4.7.1.1			a) Berms	m	110		
4.7.1.2			b) Mitre drains	m	20		
4,8	8.3.16		<u>Gravel surface layer from Commercial Source,</u> 150mm thick, including haulage				
4.8.1			Access Road and parking area to Tsolo shearing shed	m³	160		
4,9	SANS 1200 MM		ANCILLARY ROADWORKS				
4.9.1	8.3.6		<u>Sign supports</u> Timber concreted into ground	No	2		
4.9.1.1	8.3.6		Statutory road signs				
4.9.1.1.1			i) Stop signs (R1) 600mm fixed to support	No	1		
4.9.1.1.2			ii) Warning signs fixed to support	No	1		
TOTAL OF	SCHEDULE	4 C	ARRIED FORWARD TO SUMMARY			1	

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
5		ELECTRICAL				
5,1		<u>Solar system</u>	provisional	1	130 000,00	R 130 000,00
5,2		Allow for Profit	sum %	1		
		Allow for Attendence	%	1		
TOTAL OF SCHEDULE 5 CARRIED FORWARD TO SUMMARY						

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
6	Enviro Spec		SCHEDULE 6 : DIPPING TANK				
6,1	SANS 1200DA PSDA		EARTHWORKS (SMALL WORKS)				
6,1,1			EXCAVATION				
6,1,1	8.3.1		a) Remove topsoil to a nominal depth of 150mm, stockpiple and maintain (area varies according to structure)	m²	80		
6,1,2			BULK EXCAVATION				
6,1,2,1			DIPPING TANK	m³	25		
			extra over for				
6,1,2,2			a) excavation in intermediate	m³	5		
6,1,2,3			b) excavation in hard rock	m³	5		
6,1,2,4			c) boulder excavation, Class A	m³			Rate only
6,1,2,5			d) boulder excavation, Class B	m³			Rate only
6,1,3	8.3.2 PSDA3 PSDA8	L	RESTRICTED EXCAVATION				
			Excavate for restricted areas , stockpile for backfill to separate embankment or dispose (backfill measured apart)				
			i) Stair				
6,1,3,1			Dipping tank	m³	10		
			<u>extra over pickable for</u>				
6,1,3,2			a) excavation in class 2 (intermediate)	m³	2		
			extra over pickable and machine class for				
6,1,3,3			b) excavation in Class 1 (hard rock)	m³	2		
		0 1	NEXT PAGE				

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	ROM PREVIOUS PAGE	-			
6,2	SANS 1200G PSG	<u>Dipping tank</u> SECTION: CONCRETE (STRUCTURAL) (Ref Dwg: 34694,01-07)				
6,2,1	8,2	SCHEDULED FORMWORK ITEMS				
	8.2.1	Rough Finish				
6,2,1,1		Floor Edge External	m²	3		
	8.2.2	<u>Smooth Finish</u>				
		Vertical walls:				
6,2,1,2		a) 150mm thick	m²	110		
	8.2.6	Box out holes / Form voids				
6,2,2	8.1.2	SCHEDULED REINFORCEMENT ITEMS				
		Mild steel bars				
6,2,2,1	8.1.2.3	(a) REF 395 Mesh	No	8		
CARRIED F	ORWARD TO	NEXT PAGE	•			

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	ROM PREVIOUS PAGE				
6,2,3	8.4 PSG3	SCHEDULED CONCRETE ITEMS				
	8.4.1	Prescribed Mix Concrete				
	8.4.3	Strength Concrete, Grade				
6,2,3,1		25 MPa Concrete - 20 mm coarse aggregate in :				
6,2,3,2		(a) 150mm thickWalls	m³	15		
6,2,3,3		(c) 200mm thick Floor	m³	6		
6,2,3,4		c) 75 mm floor slab	m³	6		
6,2,4	8.4.4	Unformed Surface Finishes				
		(a) Wood-floated finish for the following areas:				
6,2,4,1		1) Floor	m²	100		
6,2,5	8.4.6	<u>Screed</u>				
6,2,5,1		a) Screed (1:300 falls) on floor	m³	1		
CARRIED F	ORWARD TO	D NEXT PAGE				

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT			
BROUGHT	FORWARD F	ROM PREVIOUS PAGE							
6,3	8,8	MISCELLANEOUS METAL WORK							
6,3,1		Supply and install 70x70x10 angle irons	m	28					
6,3,2		Supply and install 30x5 flat bars	m	2					
6,4		MISCELLANEOUS WORK: UNDER- FLOOR/BEHIND WALLS DRAINAGE							
6,4,1		500 micron DPC	m²	75					
6,5		Animal Handling Facilities							
6,5,1		Sheep kraal side long 900 x 2850 mm (Taltec TSK1 Long or similar of 0.9 x 2.85m)	No	22					
6,5,2		Sheep kraal side 900 x 1850 mm (Taltec TSK1 Kraal side or similar of 0.9 x 1.85m)	No	8					
6,5,3		Sheep kraal tsk4 drop gate	No	2					
6,5,4		Sheep kraal TKS6 arch frame	No	2					
	FORWARD TO	NEXT PAGE							
BROUGHT	BROUGHT FORWARD FROM PREVIOUS PAGE								
TOTAL OF	OTAL OF SECTION 2: SCHEDULE 2 CARRIED FORWARD TO SUMMARY								

CONSTRUCTION OF MABHOBHO SHEARING SHED IN MT FRERE BID NO: ECDC/INFRA/37B/052024

C2.2.2 - BILL OF QUANTITIES

Bidders are to indicate which project in the Bid they are responding to (by ticking the boxes).

SUMMARY OF SECTIONS

SCHEDULE NO.	DESCRIPTION	AMOUNT					
1	PRELIMINARY AND GENERAL OBLIGATIONS						
2	SHEARING SHED						
3	3 VIP TOILET						
4							
5	5 SOLAR						
6	DIPPING TANK						
	SUB TOTAL 1						
	CONTINGENCIES 5% OF SUB TOTAL 1						
	SUB TOTAL 2						
	PROJECT TOTAL						

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
1	SANS 1200 A	0	SECTION 1: PRELIMINARY AND GENERAL				
	8,3		FIXED-CHARGE ITEMS				
1,1	8.3.1		Contractual Requirements	Sum	1		
	8.3.2	0	Establish Facilities on the Site:				
1,2	PSAB 8.3.2.1	0	Facilities for the Engineer				
1.2.2		0	b) 2 contract name boards	Sum	1		
1,3	8.3.2.2		Facilities for Contractor				
1.3.1			a) Offices and storage sheds	Sum	1		
1.3.2			b) workshops	Sum	1		
1.3.3			c) Laboratories	Sum	1		
1.3.4			d) Living Acommodation	Sum	1		
1.3.5			e) Ablution and latrine facilities	Sum	1		
1.3.6			f) Tools and equipment	Sum	1		
1.3.7			g) water supplies, electric power and communication	Sum	1		
1.3.8			h) Dealing with water	Sum	1		
1.3.9			i) Access	Sum	1		
1.3.10			j) plant	Sum	1		
1,4	8.3.3		Other fixed-charge obligations	Sum	1		
1,5	8.3.4		Removal of Contractor's Site Establishment on completion	Sum	1		
1,6			The cost of Health & Safety meassures in terms of the Construction Regulations (2003) of the Occupational Health & Safety Act (From Health and Safety specification PA on page 171 of the document)	Sum	1		
	8,4		SCHEDULED TIME-RELATED ITEMS				
1,7	8.4.1		Contractual requirements	Sum	1		
	8.4.2		Operate and maintain facilities on the Site:				
1,8	8.4.2.1		Facilities for engineer				
1.8.1			a) furnished office, nameboards and survey assistants and materials and equipment and facilities.	Sum	1		
1,9	8.4.2.2		Facilities for contractor				
1.9.1			a) offices and storage sheds	Sum	1		
1.9.2			b) workshops	Sum	1		
1.9.3			c) laboratories	Sum	1		
1.9.4			d) Living acomodation	Sum	1		
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ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	ROM PREVIOUS PAGE				
1.9.5		e) ablution and latrine facilities	Sum	1		
1.9.6		f) tools and equipment	Sum	1		
1.9.7		g) Water supplies, electric power and communication	Sum	1		
1.9.8		h) Dealing with water	Sum	1		
1.9.9		i) Access	Sum	1		
1.9.10		j) Plant	Sum	1		
1,10	8.4.3	Supervision for duration of the Contract	Sum	1		
1,11	8.4.4	Company and Head Office over-head costs	Sum	1		
1,12	8.4.5	Other time-related obligations	Sum	1		
1,13		Community Liaison Persons (Monthly Wage = R7180.80)	Man Months	4	8 000,00	R 32 000,00
1,14		Maintenance of Health & Safety Plan, including Risk Analysis, Safe Working Procedures and working methods.	Sum	1		
	8,7	DAYWORKS				
1,15		Labour	Prov Sum	1	10 000,00	
1,16		Percentage adjustment to Labour above	%	1		
1,17		Materials	Prov Sum	1	10 000,00	R 10 000,00
1,18		% adjustment to Materials above	%	1		
1,26		Plant	Prov Sum	1	10 000,00	R 10 000,00
1,27		Percentage adjustment to Plant above	%	1		
		NOTE: Other Provisional sums are stated in the appropriate Bill and Summary of Schedules				
TOTAL OF	SCHEDULE	1 CARRIED FORWARD TO SUMMARY	•	I		

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
2			SCHEDULE 2 : SHEARING SHED				
2,1	SANS 1200C		Site Clearance				
2.1.1			Clearing the site	m²	270		
2,2	SANS		All excavations				
2.2.1	8.3.1(a)		Remove topsoil to nominal depth of 150mm. Stockpile maintain and re-instate.	m²	270		
	8.3.1(b)		Excavate in all materials for Shearing Shed including all back filling and disposal of surplus materials				
2.2.2			Hand Excavation	m³	15		
	8.3.1(c)(1)		Extra over item 2.2.2 for excavation in:				
2.2.3	8.3.1(c)(1)		Intermediate material	m³	15		
2.2.4	8.3.1(c)(2)		Hard material	m³	10		Rate Only
2,3	SANS 1200S		Foundation concrete 15MPa/19				
2.3.1			Outside walls - 300mm x 650mm	m³	12		
2.3.2			Inside walls - 250mm x 450mm	m³	1		
2.3.3			Retaining wall - 300mm x 650mm Concrete with a 15MPa strength at 28 days.	m³	6		
2,4			Foundation walls				
2.4.1			Double row standard concrete bricks floor level all walls.	m²	50		
2.4.2			Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand	m²	10		
2,5	SS13		Floor				
			Backfill to floor level				
2.5.1	SS19		Building rubble - well compacted.	m³	45		
			Damp course sheet				
2.5.2	SS3		250 Micron PVC sheet under all floors	m²	138		
			Concrete floor slab 30MPa/19				
2.5.3	SANS 1200G		100mm thick slab with 30MPa strength concrete,casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard.	m³	14		
2,6			Masonry work				
			Damp course				
2.6.1	SS3		375 Micron strips under all walls	m	60		
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ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FROM	I PREVIOUS PAGE				
			Walls				
2.6.2			Outside walls - 190 mm (Standard No 8 building blocks)	m²	142		
2.6.3			Inside walls - 140mm thick (Standard No 6 building blocks)	m²	17		
2.6.4			Retaining wall - 190 mm (Standard No 8 building blocks) Mortar mixture 1 part cement : 4 parts sand	M2	30		
			Plaster				
2.6.5	SS16		All walls both sides x 15 mm (Plaster mixture = 1 part cement : 5 parts sand)	m²	318		
			Pre-stressed concrete Lintels				
2.6.6			1.5 m Pre-stressed concrete for windows	No	16		
2.6.7			1.2 m Pre-stressed concrete for doors	No	3		
2.6.8			2.6 m Pre-stressed concrete for garage door	No	2		
2.6.9			1.0 m Pre-stressed concrete for openings	No	6		
			Brick force wire				
2.6.10			2 mm dia wire between every third row of blocks in outer walls	m	300		
2.6.11			2 mm dia wire between every third row of blocks in inner walls	m	24		
			Ventilation				
2.6.12			Concrete ventilation bricks: Vermin proof	No	30		
2,7	SS9		Doors				
2.7.1			Industrial roll up garage door	No	1		
2.7.2			Standard steel frame and door combination	No	4		
2.7.3			Purpose made sliding door. (See plan for detail)	No	3		
2,8			Windows: Wispeco or similar				
2.8.1			SS33 steel window frames, glass fitted and painted.	No	8		
2,9	SS30		Paint				
			Wall paint: Inside and outside				
2.9.1			1 Coat plaster primer	m²	320		
2.9.2			1 Coat universal undercoat	m²	320		
2.9.3			2 Coats acrylic PVA	m²	640		
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ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FROM	I PREVIOUS PAGE				
			Other paint : Doors, Windows, Fascia's				
2.9.4	SS30		1 Coat steel primer (5liter tin)	No	1		
2.9.5			2 Coats enemal paint (5 liter tin)	No	2		
2,10			Roof structure: Mitek approved Design and				
2.10.1			Roof structure complete, fitted and with certificate	No	1		
2.10.2			152 mm Halfround gutters to include brackets, joints and stops	m	36		
2.10.3			76 mm Downpipes to include brackets and joints	m	12		
2,11	SANS 1200G		Concrete ramp				
2.11.1	PPS 29		4m x 1,8 m concrete ramp at 20 Mpa strength with 1 in 4 slope	No	1		
2,12	SANS		Concrete apron				
2.12.1			50 x 800 mm around building at 15 Mpa strength	m	54		
2,13			Water tank 5 000 liter on concrete standx4				
2.13.1			Water tank : 5 000 liter plastic with 25mm tap	No	6		
2.13.2			Excavation : 8 x 0.45 x 0.65 m for foundation	m³	14,04		
2.13.3			Foundation : 8 x 0.45 x 0.65 m x 15 Mpa concrete	m³	14,04		
2.13.4			Walls : 8m x 0.6m x 3 rows x 55 Standard concrete bricks	No	4800		
2.13.5			Brick force every row of bricks	m	192		
2.13.6			Backfill : Building rubble / in situ material	m³	6,6		
2.13.7			Damp course : 250 Micron PVC sheeting	m²	10,8		
2.13.8			Floor : 1.32 x 1.32 m x 100mm concrete	m³	1,2		
2.13.9			Anchor bolts : M16 x 300mm eye bolts	No	24		
2.13.10			Tank anchors : Binding wire 2 x 4.0mm x 5 kg	No	6		
2,14			Animal Handling Facilities				
2.14.1			15MPa concrete x (4.5 x 10 x 0.05m)	m³	2,3		
2.14.2			Sheep kraal side long 900 x 2850 mm (Taltec TSK1 Long or similar of 0.9 x 2.85m)	No	10		
2.14.3			Sheep kraal side 900 x 1850 mm (Taltec TSK1 Kraal side or similar of 0.9 x 1.85m)	No	4		
2.14.4			Sheep kraal side with gate 900 x 1850 mm (TSK 3 Taltec kraal side with swing gate or similar 0.9 x 1 85m)	No	5		
CARRIED F	ORWARD T	O NE	EXT PAGE	•	-		

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT							
	8.3.1(b)		Excavate in all materials for dip tank including all back filling and disposal of surplus materials				
2.14.5			Hand Excavation	m³	7,5		
	8.3.1(c)(1)		Extra over item 2.14.5 for excavation in:				
2.14.6	8.3.1(c)(1)		Intermediate material	m³	2,5		
2.14.7	8.3.1(c)(2)		Hard material	m³			Rate Only
2.14.8			High quality Aluminium paint. (5ł tins)	No	2		
2,15			Perimeter security fence Refer Dwg no. 34694.01 Shed-05				
2.15.1			Clearing the fence line, 2m wide strip	m	200		
2.15.2			Extra over on item B1 for the removal of trees and stumps exceeding 1 m diameter	No			Rate Only
2,16			Corner and Gate posts				
2.16.1			Excavation of holes 450 x 450 x 600mm	No	8		
2.16.2			15MPa concrete x 0.12 cubm per hole	No	8		
2.16.3			Galv Steel posts (100mm x 2,4m x 2.5mm)	No	2		
2.16.4			Galv Steel Post Stays (75mm x 2.5mm x 2.4m)	No	10		
2.16.5			3,6m Security gate covered with welded mesh (50 x 25 x 2.5mm)	No	1		
2.16.6			400mm x 10mm Chain and 60mm lock	No	1		
2.16.7			Labour for assembly	No	6		
2,17			Erecting new security fence 1800mm high				
2.17.1			Galv Y-Section iron standards x 2,4m (Spacing 3m	No	50		
2.17.2			Fully Galv Barbed wire strands (2 x 2mm 50kg rolls)	No	1		
2.17.3			Security Fence mesh (50 x 25 x 2.5mm x 1.8m	No	5		
2.17.4			Binding wire 2.0mm x 5 kg	No	3		
2.17.5			Labour for stringing, straining, fastening the wires, setting the standards.	m	280		
2,18			Shearing shed - Equipment Refer Dwg no. 34694.01 Shed-04				
2.18.1			Wool sorting table (collapsible)	No	1		
2.18.2			Piece Picking table (collapsible)	No	1		
2.18.3			Wool Bins (collapsible)	No	8		
2.18.4			Wool Baskets	No	4		
2.18.5			Bale lifting hooks	No	8		
2.18.6			Shearing shed Scrapers	No	1		
CARRIED FORWARD TO NEXT PAGE							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
BROUGHT FORWARD FROM PREVIOUS PAGE								
2.18.7			Shearing Boards	No	6			
2.18.8			Single base mechanical Wool Press	No	1			
2.18.9			Wool Scale (250kg)	No	1			
2.18.10			Demonstration & Training in use of equipment	No	1			
2.18.11			Sheep Shearers (hand)	No	4			
TOTAL OF								

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
3			SCHEDULE 3 : VIP TOILET				
3.1	SANS 1200C		Site Clearance				
3.1.1			Leveling the site for building (Cutting & filling)	m³	10		
3.2	SANS 1200DA		All excavations				
	8.3.1(b)		Excavate in all materials for VIP toilet including all back filling and disposal of surplus materials				
3.2.1			Hand Excavation	m³	35		
	8.3.1(c)(1)		Extra over item 3.2.1 for excavation in:				
3.2.2	8.3.1(c)(1)		Intermediate material	m³	5		
3.2.3	8.3.1(c)(2)		Hard material	m³			Rate Only
3.3			Foundation concrete 15/19MPa				
3.3.1			Pit base 4680x3240x200	m³	3		
3.3.2			200x700 strip footing	m³	4		
3.4			Foundation walls				
3.4.1			345 cavity wall filled with concrete	m²	31		
3.4.2			220 brick wall	m²	12		
3.5	SS13		Floor				
	SS19		Backfill to floor level				
3.5.1			Building rubble - well compacted.	m³	5		
	SS3		Damp course sheet				
3.5.2			250 Micron PVC sheet under all floors	m²	15		
	SANS 1200G		Concrete floor slab 30/19 Mpa				
3.5.3			170mm thick slab with 30MPa strength concrete.	m³	10		
			M4A manhole	No	1		
3.6			Masonry work				
	SS3		Damp course				
3.6.1			375 Micron strips under all walls	m	40		
			Walls				
3.6.2			Outside walls - 220 mm (Standard No 8 building blocks)	m²	65		
3.6.3			Inside walls - 110mm thick (Standard No 6 building blocks)	m²	15		
CARRIED F							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FROI					
			Plaster				
3.6.4	SS16		All walls both sides x 15 mm (Plaster mixture = 1 part cement : 5 parts sand)	m²	160		
			Brick force wire				
3.6.5			2 mm dia wire between every third row of blocks in outer walls	m	300		
3.6.6			2 mm dia wire between every third row of blocks in inner walls	m	24		
3.6.7			Mesh Ref 888	m²	100		
			Ventilation				
3.6.8			110mm ventilation pipes complete with fly screen	No	1		
3.7	SS9		Doors				
3.7.1			Standard steel frame and door combination	No	3		
3.8			Windows:				
3.8.1			W01 window frames, glass fitted and painted.	No	1		
3.9			Paint				
			Wall paint: Inside and outside				
3.9.1			1 Coat plaster primer	m²	160		
3.9.2			1 Coat universal undercoat	m²	160		
3.9.3			2 Coats acrylic PVA	m²	320		
			Other paint : Doors, Windows, Fascia's				
3.9.4			1 Coat steel primer (5liter tin)	No	1		
3.9.5			2 Coats enemal paint (5 liter tin)	No	1		
3.10			Roof structure: Mitek approved Design and Installer				
3.10.1			Roof structure complete, fitted and with certificate	No	1		
3.10.2			152 mm Halfround gutters to include brackets, joints and stops	m	12		
3.10.3			76 mm Downpipes to include brackets and joints	m	2,1		
3.11			Concrete apron				
3.11.1			75 x 1200 mm around building at 15 Mpa strength	m	17		
3.12			Water tank 5 000 liter on concrete stand				
3.12.1			Water tank : 5 000 liter plastic with 25mm tap	No	1		
3.12.2			Excavation : 8 x 0.45 x 0.65 m for foundation	m³	2,34		
3.12.3			Foundation : 8 x 0.45 x 0.65 m x 15 Mpa concrete	m³	2,34		
CARRIED FORWARD TO NEXT PAGE							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
BROUGHT FORWARD FROM PREVIOUS PAGE								
3.12.4			Walls : 8m x 0.6m x 3 rows x 55 Standard concrete bricks	No	800			
3.12.5			Brick force every row of bricks	m	32			
3.12.6			Backfill : Building rubble / in situ material	m³	1,1			
3.12.7			Damp course : 250 Micron PVC sheeting	m²	1,8			
3.12.8			Floor : 1.32 x 1.32 m x 100mm concrete	m³	0,2			
3.12.9			Anchor bolts : M16 x 300mm eye bolts	No	4			
3.12.10			Tank anchors : Binding wire 2 x 4.0mm x 5 kg	No	1			
TOTAL OF	TOTAL OF SCHEDULE 3 CARRIED FORWARD TO SUMMARY							

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
4	SANS 1200 DM		<u>SECTION 4: EARTHWORKS (ROADS, SUBGRADE)</u>					
4.1	8.3.2		PREPARATION OF SITE					
4.1.1	PSZB		Wooden stakes to demarcate work area. Spaced at 20m intervals and located on both sides of excavation. Rate inclusive of supply and placement					
4.1.1.1		L	Access Road and parking area to Tsolo shearing shed	No	4			
4.1.2			Prepare and strip site, remove 150mm of topsoil stockpile and maintain					
4.1.2.1		L	Access Road and parking area to Remote Pump station	m³	60			
4.2	8.3.3		TREATMENT OF ROAD-BED					
			Road-bed preparation and compaction of material In Situ Material					
4.2.1			Compact to 93% Mod. AASHTO density					
4.2.1.1			Access Road and parking area to Tsolo shearing shed	m³	60			
4.3			EARTHWORKS					
4.3.1	8.3.4		Cut to fill, borrow to fill					
			i) Cut to fill					
			Compact to 93% Mod. AASHTO density					
4.3.1.1			Access Road and parking area to Tsolo shearing shed	m³	120			
			 ii) Fill from borrow from other excavations on site or designated borrow 					
			Compact to 93% Mod AASHTO					
4.3.1.2			Access Road and parking area to Tsolo shearing shed	m³	10			
4.4	8.3.5		Selected layer compacted to 93% of modified AASHTO maximum density. G6 Material from Commercial source					
4.4.1			Access Road and parking area to Tsolo shearing shed	m³	160			
4.5	8.3.6		Extra over items 4.3 and 4.4 for excavating and breaking down material in					
4.5.1			i) class 2 excavation (Intermediate)					
4.5.1.1			Access Road and parking area to Tsolo shearing shed	M3	10			
CARRIED FORWARD TO NEXT PAGE								

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
BROUGHT	FORWARD F	RC	OM PREVIOUS PAGE					
4,6	8.3.13		Surface Finishes					
4.6.1			i) Topsoiling 150 mm thick on embankments					
4.6.1.1		L	Access Road and parking area to Tsolo shearing shed	m²	30			
4.6.2	PD	L	ii) Fertiliser supplied, placed and mixed					
4.6.2.1			Access Road and parking area to Tsolo shearing shed	t	0,05			
4.6.3	PD	L	iii) Re-establish vegetation; hand-broadcasting with appropriate grass seed mix					
4.6.3.1			Access Road and parking area to Tsolo shearing shed	m²	105			
4.6.4		L	Control of alien vegetation and maintenance of re- vegetation.	Sum	1			
4,7	8.3.15		Catchwater berms and channels, mitre drains and channels Ref Dwg No. 34694.01 Civ-01					
4.7.1		L	Access Road and parking area to Tsolo shearing shed					
4.7.1.1			a) Berms	m	110			
4.7.1.2			b) Mitre drains	m	20			
4,8	8.3.16		<u>Gravel surface layer from Commercial Source,</u> 150mm thick, including haulage					
4.8.1			Access Road and parking area to Tsolo shearing shed	m³	160			
4,9	SANS 1200 MM		ANCILLARY ROADWORKS					
4.9.1	8.3.6		<u>Sign supports</u> Timber concreted into ground	No	2			
4.9.1.1	8.3.6		Statutory road signs					
4.9.1.1.1			i) Stop signs (R1) 600mm fixed to support	No	1			
4.9.1.1.2			ii) Warning signs fixed to support	No	1			
TOTAL OF SCHEDULE 4 CARRIED FORWARD TO SUMMARY								

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
5		ELECTRICAL					
5,1		Solar system	prov. sum	1	130 000,00	R 130 000,00	
5,2		Allow for profit	%	1			
5,3		Allow for Attendence	%	1			
TOTAL OF							
ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
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6	Enviro Spec		SCHEDULE 6 : DIPPING TANK				
6,1	SANS 1200DA PSDA		EARTHWORKS (SMALL WORKS)				
6,1,1			EXCAVATION				
6,1,1	8.3.1	L	a) Remove topsoil to a nominal depth of 150mm, stockpiple and maintain (area varies according to structure)	M²	80		
6,1,2			BULK EXCAVATION				
	8.3.1		 b) Bulk excavation in all materials for embankment or stockpile for backfill or dispose (backfill measured separately) 				
6,1,2,1			DIPPING TANK	m³	25		
			extra over for				
6,1,2,2			a) excavation in intermediate	m³	5		
6,1,2,3			b) excavation in hard rock	m³	5		
6,1,2,4			c) boulder excavation, Class A	m³			Rate only
6,1,2,5			d) boulder excavation, Class B	m³			Rate only
6,1,3	8.3.2 PSDA3 PSDA8	L	RESTRICTED EXCAVATION				
			Excavate for restricted areas , stockpile for backfill to separate embankment or dispose (backfill measured apart)				
			i) Stair				
6,1,3,1			Dipping tank	m³	10		
			extra over pickable for				
6,1,3,2			a) excavation in class 2 (intermediate)	m³	2		
			extra over pickable and machine class for				
6,1,3,3			b) excavation in Class 1 (hard rock)	m³	2		
	FORWARD TO	0	NEXT PAGE				

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	ROM PREVIOUS PAGE				
6,2	SANS 1200G PSG	<u>Dipping tank</u> SECTION: CONCRETE (STRUCTURAL) (Ref Dwg: 34694,01-07)				
6,2,1	8,2	SCHEDULED FORMWORK ITEMS				
	8.2.1	Rough Finish				
6,2,1,1		Floor Edge External	m²	3		
	8.2.2	Smooth Finish				
		Vertical walls:				
6,2,1,2		a) 150mm thick	m²	110		
	8.2.6	Box out holes / Form voids				
6,2,2	8.1.2	SCHEDULED REINFORCEMENT ITEMS				
		Mild steel bars				
6,2,2,1	8.1.2.3	(a) REF 395 Mesh	No	8		
	ORWARD TO	NEXT PAGE				

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	ROM PREVIOUS PAGE				
6,2,3	8.4 PSG3	SCHEDULED CONCRETE ITEMS				
	8.4.1	Prescribed Mix Concrete				
	8.4.3	Strength Concrete, Grade				
6,2,3,1		25 MPa Concrete - 20 mm coarse aggregate in :				
6,2,3,2		(a) 150mm thickWalls	m³	15		
6,2,3,3		(c) 200mm thick Floor	m³	6		
6,2,3,4		c) 75 mm floor slab	m³	6		
6,2,4	8.4.4	Unformed Surface Finishes				
		(a) Wood-floated finish for the following areas:				
6,2,4,1		1) Floor	m²	100		
6,2,5	8.4.6	<u>Screed</u>				
6,2,5,1		a) Screed (1:300 falls) on floor	m³	1		
	FORWARD TO	NEXT PAGE				

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT			
BROUGHT	FORWARD F	ROM PREVIOUS PAGE							
6,3	8,8	MISCELLANEOUS METAL WORK							
6,3,1		Supply and install 70x70x10 angle irons	m	28					
6,3,2		Supply and install 30x5 flat bars	m	2					
6,4		MISCELLANEOUS WORK: UNDER- FLOOR/BEHIND WALLS DRAINAGE							
6,4,1		500 micron DPC	m²	75					
6,5		Animal Handling Facilities							
6,5,1		Sheep kraal side long 900 x 2850 mm (Taltec TSK1 Long or similar of 0.9 x 2.85m)	No	22					
6,5,2		Sheep kraal side 900 x 1850 mm (Taltec TSK1 Kraal side or similar of 0.9 x 1.85m)	No	8					
6,5,3		Sheep kraal tsk4 drop gate	No	2					
6,5,4		Sheep kraal TKS6 arch frame	No	2					
	FORWARD TO	NEXT PAGE							
BROUGHT	BROUGHT FORWARD FROM PREVIOUS PAGE								
TOTAL OF	OTAL OF SECTION 2: SCHEDULE 2 CARRIED FORWARD TO SUMMARY								

CONSTRUCTION OF MABHOBHO SHEARING SHED IN MT FRERE BID NO: ECDC/INFRA/37C/052024

C2.2.3 - BILL OF QUANTITIES

Bidders are to indicate which project in the Bid they are responding to (by ticking the boxes).

SUMMARY OF SECTIONS

SCHEDULE NO.	DESCRIPTION	AMOUNT				
1	PRELIMINARY AND GENERAL OBLIGATIONS					
2	2 SHEARING SHED					
3	3 VIP TOILET					
4	ROAD AND PARKING					
5	SOLAR					
6	DIPPING TANK					
	SUB TOTAL 1					
	CONTINGENCIES 5% OF SUB TOTAL 1					
	SUB TOTAL 2					
	ADD 15% VAT					
	PROJECT TOTAL					

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
1	SANS 1200 A	0	SECTION 1: PRELIMINARY AND GENERAL				
	8,3		FIXED-CHARGE ITEMS				
1,1	8.3.1		Contractual Requirements	Sum	1		
	8.3.2	0	Establish Facilities on the Site:				
1,2	PSAB 8.3.2.1	0	Facilities for the Engineer				
1.2.2		0	b) 2 contract name boards	Sum	1		
1,3	8.3.2.2		Facilities for Contractor				
1.3.1			a) Offices and storage sheds	Sum	1		
1.3.2			b) workshops	Sum	1		
1.3.3			c) Laboratories	Sum	1		
1.3.4			d) Living Acommodation	Sum	1		
1.3.5			e) Ablution and latrine facilities	Sum	1		
1.3.6			f) Tools and equipment	Sum	1		
1.3.7			g) water supplies, electric power and communication	Sum	1		
1.3.8			h) Dealing with water	Sum	1		
1.3.9			i) Access	Sum	1		
1.3.10			j) plant	Sum	1		
1,4	8.3.3		Other fixed-charge obligations	Sum	1		
1,5	8.3.4		Removal of Contractor's Site Establishment on completion	Sum	1		
1,6			The cost of Health & Safety meassures in terms of the Construction Regulations (2003) of the Occupational Health & Safety Act (From Health and Safety specification PA on page 171 of the document)	Sum	1		
	8,4		SCHEDULED TIME-RELATED ITEMS				
1,7	8.4.1		Contractual requirements	Sum	1		
	8.4.2		Operate and maintain facilities on the Site:				
1,8	8.4.2.1		Facilities for engineer				
1.8.1			a) furnished office, nameboards and survey assistants and materials and equipment and facilities.	Sum	1		
1,9	8.4.2.2		Facilities for contractor				
1.9.1			a) offices and storage sheds	Sum	1		
1.9.2			b) workshops	Sum	1		
1.9.3			c) laboratories	Sum	1		
1.9.4			d) Living acomodation	Sum	1		
CARRIED F							

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	ROM PREVIOUS PAGE				
1.9.5		e) ablution and latrine facilities	Sum	1		
1.9.6		f) tools and equipment	Sum	1		
1.9.7		g) Water supplies, electric power and communication	Sum	1		
1.9.8		h) Dealing with water	Sum	1		
1.9.9		i) Access	Sum	1		
1.9.10		j) Plant	Sum	1		
1,10	8.4.3	Supervision for duration of the Contract	Sum	1		
1,11	8.4.4	Company and Head Office over-head costs	Sum	1		
1,12	8.4.5	Other time-related obligations	Sum	1		
1,13		Community Liaison Persons (Monthly Wage = R7180.80)	Man Months	4	8 000,00	R 32 000,00
1,14		Maintenance of Health & Safety Plan, including Risk Analysis, Safe Working Procedures and working methods	Sum	1		
	8,7	DAYWORKS				
1,15		Labour	Prov Sum	1	10 000,00	
1,16		Percentage adjustment to Labour above	%	1		
1,17		Materials	Prov Sum	1	10 000,00	R 10 000,00
1,18		% adjustment to Materials above	%	1		
1,26		Plant	Prov Sum	1	10 000,00	R 10 000,00
1,27		Percentage adjustment to Plant above	%	1		
		NOTE: Other Provisional sums are stated in the appropriate Bill and Summary of Schedules				
TOTAL OF	SCHEDULE ²	CARRIED FORWARD TO SUMMARY		L		

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
2			SCHEDULE 2 : SHEARING SHED				
2,1	SANS 1200C		Site Clearance				
2.1.1			Clearing the site	m²	270		
2,2	SANS		All excavations				
2.2.1	8.3.1(a)		Remove topsoil to nominal depth of 150mm. Stockpile maintain and re-instate.	m²	270		
	8.3.1(b)		Excavate in all materials for Shearing Shed including all back filling and disposal of surplus materials				
2.2.2			Hand Excavation	m³	15		
	8.3.1(c)(1)		Extra over item 2.2.2 for excavation in:				
2.2.3	8.3.1(c)(1)		Intermediate material	m³	15		
2.2.4	8.3.1(c)(2)		Hard material	m³			Rate Only
2,3	SANS 1200S		Foundation concrete 15MPa/19				
2.3.1			Outside walls - 300mm x 650mm	m³	12		
2.3.2			Inside walls - 250mm x 450mm	m³	1		
2.3.3			Retaining wall - 300mm x 650mm Concrete with a 15MPa strength at 28 days.	m³	6		
2,4			Foundation walls				
2.4.1			Double row standard concrete bricks floor level all walls.	m²	50		
2.4.2			Double row standard concrete bricks floor level retaining walls. Mortar mix 1 part cement : 4 parts sand	m²	10		
2,5	SS13		Floor				
			Backfill to floor level				
2.5.1	SS19		Building rubble - well compacted.	m³	45		
			Damp course sheet				
2.5.2	SS3		250 Micron PVC sheet under all floors	m²	138		
			Concrete floor slab 30MPa/19				
2.5.3	SANS 1200G		100mm thick slab with 30MPa strength concrete,casted in sections of 2m x 4m, with 13mm expansion joints filled with softboard.	m³	14		
2,6			Masonry work				
			Damp course				
2.6.1	SS3		375 Micron strips under all walls	m	60		
CARRIED F		O NE	EXT PAGE	<u> </u>			

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
BROUGHT	FORWARD	FROM	VI PREVIOUS PAGE					
			Walls					
2.6.2			Outside walls - 190 mm (Standard No 8 building blocks)	m²	142			
2.6.3			Inside walls - 140mm thick (Standard No 6 building blocks)	m²	17			
2.6.4			Retaining wall - 190 mm (Standard No 8 building blocks) Mortar mixture 1 part cement : 4 parts sand	m²	30			
			Plaster					
2.6.5	SS16		All walls both sides x 15 mm (Plaster mixture = 1 part cement : 5 parts sand)	m²	318			
			Pre-stressed concrete Lintels					
2.6.6			1.5 m Pre-stressed concrete for windows	No	16			
2.6.7			1.2 m Pre-stressed concrete for doors	No	3			
2.6.8			2.6 m Pre-stressed concrete for garage door	No	2			
2.6.9			1.0 m Pre-stressed concrete for openings	No	6			
			Brick force wire					
2.6.10			2 mm dia wire between every third row of blocks in outer walls	m	300			
2.6.11			2 mm dia wire between every third row of blocks in inner walls	m	24			
			Ventilation					
2.6.12			Concrete ventilation bricks: Vermin proof	No	30			
2,7	SS9		Doors					
2.7.1			Industrial roll up garage door	No	1			
2.7.2			Standard steel frame and door combination	No	4			
2.7.3			Purpose made sliding door. (See plan for detail)	No	3			
2,8			Windows: Wispeco or similar					
2.8.1			SS33 steel window frames, glass fitted and painted.	No	8			
2,9	SS30		Paint					
			Wall paint: Inside and outside					
2.9.1			1 Coat plaster primer	m²	320			
2.9.2			1 Coat universal undercoat	m²	320			
2.9.3			2 Coats acrylic PVA	m²	640			
CARRIED F	CARRIED FORWARD TO NEXT PAGE							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FROM	I PREVIOUS PAGE				
			Other paint : Doors, Windows, Fascia's				
2.9.4	SS30		1 Coat steel primer (5liter tin)	No	1		
2.9.5			2 Coats enemal paint (5 liter tin)	No	2		
2,10			Roof structure: Mitek approved Design and				
2.10.1			Roof structure complete, fitted and with certificate	No	1		
2.10.2			152 mm Halfround gutters to include brackets, joints and stops	m	36		
2.10.3			76 mm Downpipes to include brackets and joints	m	12		
2,11	SANS 1200G		Concrete ramp				
2.11.1	PPS 29		4m x 1,8 m concrete ramp at 20 Mpa strength with 1 in 4 slope	No	1		
2,12	SANS		Concrete apron				
2.12.1			50 x 800 mm around building at 15 Mpa strength	m	54		
2,13			Water tank 5 000 liter on concrete standx4				
2.13.1			Water tank : 5 000 liter plastic with 25mm tap	No	6		
2.13.2			Excavation : 8 x 0.45 x 0.65 m for foundation	m³	14,04		
2.13.3			Foundation : 8 x 0.45 x 0.65 m x 15 Mpa concrete	m³	14,04		
2.13.4			Walls : 8m x 0.6m x 3 rows x 55 Standard concrete bricks	No	4800		
2.13.5			Brick force every row of bricks	m	192		
2.13.6			Backfill : Building rubble / in situ material	m³	6,6		
2.13.7			Damp course : 250 Micron PVC sheeting	m²	10,8		
2.13.8			Floor : 1.32 x 1.32 m x 100mm concrete	m³	1,2		
2.13.9			Anchor bolts : M16 x 300mm eye bolts	No	24		
2.13.10			Tank anchors : Binding wire 2 x 4.0mm x 5 kg	No	6		
2,14			Animal Handling Facilities				
2.14.1			15MPa concrete x (4.5 x 10 x 0.05m)	m³	2,3		
2.14.2			Sheep kraal side long 900 x 2850 mm (Taltec TSK1 Long or similar of 0.9 x 2.85m)	No	10		
2.14.3			Sheep kraal side 900 x 1850 mm (Taltec TSK1 Kraal side or similar of 0.9 x 1.85m)	No	4		
2.14.4			Sheep kraal side with gate 900 x 1850 mm (TSK 3 Taltec kraal side with swing gate or similar 0.9 x 1 85m)	No	5		
CARRIED FORWARD TO NEXT PAGE							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
BROUGHT	FORWARD	FRO	I PREVIOUS PAGE					
	8.3.1(b)		Excavate in all materials for dip tank including all back filling and disposal of surplus materials					
2.14.5			Hand Excavation	m³	7,5			
	8.3.1(c)(1)		Extra over item 2.14.5 for excavation in:					
2.14.6	8.3.1(c)(1)		Intermediate material	m³	2,5			
2.14.7	8.3.1(c)(2)		Hard material	m³			Rate Only	
2.14.8			High quality Aluminium paint. (5ť tins)	No	2			
2,15			Perimeter security fence Refer Dwg no. 34694.01 Shed-05					
2.15.1			Clearing the fence line, 2m wide strip	m	260			
2.15.2			Extra over on item B1 for the removal of trees and stumps exceeding 1 m diameter	No			Rate Only	
2,16			Corner and Gate posts					
2.16.1			Excavation of holes 450 x 450 x 600mm	No	16			
2.16.2			15MPa concrete x 0.12 cubm per hole	No	16			
2.16.3			Galv Steel posts (100mm x 2,4m x 2.5mm)	No	2			
2.16.4			Galv Steel Post Stays (75mm x 2.5mm x 2.4m)	No	20			
2.16.5			3,6m Security gate covered with welded mesh (50 x 25 x 2.5mm)	No	1			
2.16.6			400mm x 10mm Chain and 60mm lock	No	1			
2.16.7			Labour for assembly	No	6			
2,17			Erecting new security fence 1800mm high					
2.17.1			Galv Y-Section iron standards x 2,4m (Spacing 3m	No	100			
2.17.2			Fully Galv Barbed wire strands (2 x 2mm 50kg rolls)	No	1			
2.17.3			Security Fence mesh (50 x 25 x 2.5mm x 1.8m	No	10			
2.17.4			Binding wire 2.0mm x 5 kg	No	3			
2.17.5			Labour for stringing, straining, fastening the wires, setting the standards.	m	280			
2,18			Shearing shed - Equipment Refer Dwg no. 34694.01 Shed-04					
2.18.1			Wool sorting table (collapsible)	No	1			
2.18.2			Piece Picking table (collapsible)	No	1			
2.18.3			Wool Bins (collapsible)	No	8			
2.18.4			Wool Baskets	No	4			
2.18.5			Bale lifting hooks	No	8			
2.18.6			Shearing shed Scrapers	No	1			
CARRIED F	CARRIED FORWARD TO NEXT PAGE							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD I	FRON	I PREVIOUS PAGE				
2.18.7			Shearing Boards	No	6		
2.18.8			Single base mechanical Wool Press	No	1		
2.18.9			Wool Scale (250kg)	No	1		
2.18.10			Demonstration & Training in use of equipment	No	1		
2.18.11			Sheep Shearers (hand)	No	4		
TOTAL OF							

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
3			SCHEDULE 3 : VIP TOILET				
3.1	SANS 1200C		Site Clearance				
3.1.1			Leveling the site for building (Cutting & filling)	m³	10		
3.2	SANS 1200DA		All excavations				
	8.3.1(b)		Excavate in all materials for VIP toilet including all back filling and disposal of surplus materials				
3.2.1			Hand Excavation	m³	35		
	8.3.1(c)(1)		Extra over item 3.2.1 for excavation in:				
3.2.2	8.3.1(c)(1)		Intermediate material	m³	5		
3.2.3	8.3.1(c)(2)		Hard material	m³			Rate Only
3.3			Foundation concrete 15/19MPa				
3.3.1			Pit base 4680x3240x200	m³	3		
3.3.2			200x700 strip footing	m³	4		
3.4			Foundation walls				
3.4.1			345 cavity wall filled with concrete	m²	31		
3.4.2			220 brick wall	m²	12		
3.5	SS13		Floor				
	SS19		Backfill to floor level				
3.5.1			Building rubble - well compacted.	m³	5		
	SS3		Damp course sheet				
3.5.2			250 Micron PVC sheet under all floors	m²	15		
	SANS 1200G		Concrete floor slab 30/19 Mpa				
3.5.3			170mm thick slab with 30MPa strength concrete.	m³	10		
			M4A manhole	No	1		
3.6			Masonry work				
	SS3		Damp course				
3.6.1			375 Micron strips under all walls	m	40		
			Walls				
3.6.2			Outside walls - 220 mm (Standard No 8 building blocks)	m²	65		
3.6.3			Inside walls - 110mm thick (Standard No 6 building blocks)	m²	15		
CARRIED F		O NE		1			

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FRO					
			Plaster				
3.6.4	SS16		All walls both sides x 15 mm (Plaster mixture = 1 part cement : 5 parts sand)	m²	160		
			Brick force wire				
3.6.5			2 mm dia wire between every third row of blocks in outer walls	m	300		
3.6.6			2 mm dia wire between every third row of blocks in inner walls	m	24		
3.6.7			Mesh Ref 888	m²	100		
			Ventilation				
3.6.8			110mm ventilation pipes complete with fly screen	No	1		
3.7	SS9		Doors				
3.7.1			Standard steel frame and door combination	No	3		
3.8			Windows:				
3.8.1			W01 window frames, glass fitted and painted.	No	1		
3.9			Paint				
			Wall paint: Inside and outside				
3.9.1			1 Coat plaster primer	m²	160		
3.9.2			1 Coat universal undercoat	m²	160		
3.9.3			2 Coats acrylic PVA	m²	320		
			Other paint : Doors, Windows, Fascia's				
3.9.4			1 Coat steel primer (5liter tin)	No	1		
3.9.5			2 Coats enemal paint (5 liter tin)	No	1		
3.10			Roof structure: Mitek approved Design and Installer				
3.10.1			Roof structure complete, fitted and with certificate	No	1		
3.10.2			152 mm Halfround gutters to include brackets, joints and stops	m	12		
3.10.3			76 mm Downpipes to include brackets and joints	m	2,1		
3.11			Concrete apron				
3.11.1			75 x 1200 mm around building at 15 Mpa strength	m	17		
3.12			Water tank 5 000 liter on concrete stand				
3.12.1			Water tank : 5 000 liter plastic with 25mm tap	No	1		
3.12.2			Excavation : 8 x 0.45 x 0.65 m for foundation	m³	2,34		
3.12.3			Foundation : 8 x 0.45 x 0.65 m x 15 Mpa concrete	m³	2,34		
CARRIED F	ORWARD T	O NI	EXT PAGE		<u> </u>		

ITEM NO	PAY REFERS	LIC	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD	FROM	I PREVIOUS PAGE				
3.12.4			Walls : 8m x 0.6m x 3 rows x 55 Standard concrete bricks	No	800		
3.12.5			Brick force every row of bricks	m	32		
3.12.6			Backfill : Building rubble / in situ material	m³	1,1		
3.12.7			Damp course : 250 Micron PVC sheeting	m²	1,8		
3.12.8			Floor : 1.32 x 1.32 m x 100mm concrete	m³	0,2		
3.12.9			Anchor bolts : M16 x 300mm eye bolts	No	4		
3.12.10			Tank anchors : Binding wire 2 x 4.0mm x 5 kg	No	1		
TOTAL OF	TOTAL OF SCHEDULE 3 CARRIED FORWARD TO SUMMARY						

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
4	SANS 1200 DM		<u>SECTION 4: EARTHWORKS (ROADS, SUBGRADE)</u>				
4.1	8.3.2		PREPARATION OF SITE				
4.1.1	PSZB		Wooden stakes to demarcate work area. Spaced at 20m intervals and located on both sides of excavation. Rate inclusive of supply and placement				
4.1.1.1		L	Access Road and parking area to Tsolo shearing shed	No	4		
4.1.2			Prepare and strip site, remove 150mm of topsoil stockpile and maintain				
4.1.2.1		L	Access Road and parking area to Remote Pump station	m³	60		
4.2	8.3.3		TREATMENT OF ROAD-BED				
			Road-bed preparation and compaction of material In Situ Material				
4.2.1			Compact to 93% Mod. AASHTO density				
4.2.1.1			Access Road and parking area to Tsolo shearing shed	m³	60		
4.3			EARTHWORKS				
4.3.1	8.3.4		Cut to fill, borrow to fill				
			i) Cut to fill				
			Compact to 93% Mod. AASHTO density				
4.3.1.1			Access Road and parking area to Tsolo shearing shed	m³	120		
			ii) Fill from borrow from other excavations on site or designated borrow				
			Compact to 93% Mod AASHTO				
4.3.1.2			Access Road and parking area to Tsolo shearing shed	m³	10		
4.4	8.3.5		Selected layer compacted to 93% of modified AASHTO maximum density. G6 Material from Commercial source				
4.4.1			Access Road and parking area to Tsolo shearing shed	m³	160		
4.5	8.3.6		Extra over items 4.3 and 4.4 for excavating and breaking down material in				
4.5.1			i) class 2 excavation (Intermediate)				
4.5.1.1			Access Road and parking area to Tsolo shearing shed	M3	10		
		0	NEXT PAGE			I	

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	RC)M PREVIOUS PAGE				
4,6	8.3.13		Surface Finishes				
4.6.1			i) Topsoiling 150 mm thick on embankments				
4.6.1.1		L	Access Road and parking area to Tsolo shearing shed	m²	30		
4.6.2	PD	L	ii) Fertiliser supplied, placed and mixed				
4.6.2.1			Access Road and parking area to Tsolo shearing shed	t	0,05		
4.6.3	PD	L	iii) Re-establish vegetation; hand-broadcasting with appropriate grass seed mix				
4.6.3.1			Access Road and parking area to Tsolo shearing shed	m²	105		
4.6.4		L	Control of alien vegetation and maintenance of re- vegetation.	Sum	1		
4,7	8.3.15		Catchwater berms and channels, mitre drains and channels Ref Dwg No. 34694.01 Civ-01				
4.7.1		L	Access Road and parking area to Tsolo shearing shed				
4.7.1.1			a) Berms	m	110		
4.7.1.2			b) Mitre drains	m	20		
4,8	8.3.16		<u>Gravel surface layer from Commercial Source,</u> 150mm thick, including haulage				
4.8.1			Access Road and parking area to Tsolo shearing shed	m³	160		
4,9	SANS 1200 MM		ANCILLARY ROADWORKS				
4.9.1	8.3.6		<u>Sign supports</u> Timber concreted into ground	No	2		
4.9.1.1	8.3.6		Statutory road signs				
4.9.1.1.1			i) Stop signs (R1) 600mm fixed to support	No	1		
4.9.1.1.2			ii) Warning signs fixed to support	No	1		
TOTAL OF	SCHEDULE	4 C	ARRIED FORWARD TO SUMMARY				

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
5		ELECTRICAL				
5,1		Solar system	prov. sum	1	130 000,00	R 130 000,00
5,2		Allow for profit	%	1		
5,3		Allow for Attendence	%	1		
TOTAL OF	SCHEDULE 5	CARRIED FORWARD TO SUMMARY				

ITEM NO	PAY REFERS		DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
6	Enviro Spec		SCHEDULE 6 : DIPPING TANK				
6,1	SANS 1200DA PSDA		EARTHWORKS (SMALL WORKS)				
6,1,1			EXCAVATION				
6,1,1	8.3.1	L	a) Remove topsoil to a nominal depth of 150mm, stockpiple and maintain (area varies according to structure)	M²	80		
6,1,2			BULK EXCAVATION				
	8.3.1		 b) Bulk excavation in all materials for embankment or stockpile for backfill or dispose (backfill measured separately) 				
6,1,2,1			DIPPING TANK	m³	25		
			extra over for				
6,1,2,2			a) excavation in intermediate	m³	5		
6,1,2,3			b) excavation in hard rock	m³	5		
6,1,2,4			c) boulder excavation, Class A	m³			Rate only
6,1,2,5			d) boulder excavation, Class B	m³			Rate only
6,1,3	8.3.2 PSDA3 PSDA8	L	RESTRICTED EXCAVATION				
			Excavate for restricted areas , stockpile for backfill to separate embankment or dispose (backfill measured apart)				
			i) Stair				
6,1,3,1			Dipping tank	m³	10		
			extra over pickable for				
6,1,3,2			a) excavation in class 2 (intermediate)	m³	2		
			extra over pickable and machine class for				
6,1,3,3			b) excavation in Class 1 (hard rock)	m³	2		
CARRIED F	FORWARD TO	0 1	NEXT PAGE				

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD FI	ROM PREVIOUS PAGE				
6,2	SANS 1200G PSG	<u>Dipping tank</u> SECTION: CONCRETE (STRUCTURAL) (Ref Dwg: 34694,01-07)				
6,2,1	8,2	SCHEDULED FORMWORK ITEMS				
	8.2.1	Rough Finish				
6,2,1,1		Floor Edge External	m²	3		
	8.2.2	Smooth Finish				
		Vertical walls:				
6,2,1,2		a) 150mm thick	m²	110		
	8.2.6	Box out holes / Form voids				
6,2,2	8.1.2	SCHEDULED REINFORCEMENT ITEMS				
		Mild steel bars				
6,2,2,1	8.1.2.3	(a) REF 395 Mesh	No	8		
	ORWARD TO	NEXT PAGE	1			

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT	
BROUGHT FORWARD FROM PREVIOUS PAGE							
6,2,3	8.4 PSG3	SCHEDULED CONCRETE ITEMS					
	8.4.1	Prescribed Mix Concrete					
	8.4.3	Strength Concrete, Grade					
6,2,3,1		25 MPa Concrete - 20 mm coarse aggregate in :					
6,2,3,2		(a) 150mm thickWalls	m³	15			
6,2,3,3		(c) 200mm thick Floor	m³	6			
6,2,3,4		c) 75 mm floor slab	m³	6			
6,2,4	8.4.4	Unformed Surface Finishes					
		(a) Wood-floated finish for the following areas:					
6,2,4,1		1) Floor	m²	100			
6,2,5	8.4.6	<u>Screed</u>					
6,2,5,1		a) Screed (1:300 falls) on floor	m³	1			
	ORWARD TO	D NEXT PAGE	•	•			

ITEM NO	PAY REFERS	DESCRIPTION	UNIT	TOTAL QTY	RATE	AMOUNT
BROUGHT	FORWARD F	ROM PREVIOUS PAGE				
6,3	8,8	MISCELLANEOUS METAL WORK				
6,3,1		Supply and install 70x70x10 angle irons	m	28		
6,3,2		Supply and install 30x5 flat bars	m	2		
6,4		MISCELLANEOUS WORK: UNDER- FLOOR/BEHIND WALLS DRAINAGE				
6,4,1		500 micron DPC	m²	75		
6,5		Animal Handling Facilities				
6,5,1		Sheep kraal side long 900 x 2850 mm (Taltec TSK1 Long or similar of 0.9 x 2.85m)	No	22		
6,5,2		Sheep kraal side 900 x 1850 mm (Taltec TSK1 Kraal side or similar of 0.9 x 1.85m)	No	8		
6,5,3		Sheep kraal tsk4 drop gate	No	2		
6,5,4		Sheep kraal TKS6 arch frame	No	2		
	ORWARD TO	D NEXT PAGE				
BROUGHT	FORWARD F	ROM PREVIOUS PAGE				
TOTAL OF SECTION 2: SCHEDULE 2 CARRIED FORWARD TO SUMMARY						

Part C3: Scope of work C3 - Scope of work

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C3 – Scope of Works

Background To ECDC

Vision

To be an innovative leader in promoting sustainable economic growth and development of the Eastern Cape.

Mission

To promote sustainable economic development in the Eastern Cape through focused:

- a) Provision of innovative development finance
- b) Leveraging of resources, strategic alliances, investment and partnerships.

Legislative Mandate

ECDC draws its mandate directly from the Eastern Cape Development Corporation Act (Act 2 of 1997) and is led by the economic development priorities of the provincial government, as detailed in the Provincial Growth and Development Plan (PGDP), Eastern Cape Provincial Industrial Development Strategy (PIDS), the policy statement and budget speech of the Member of the Executive Council (MEC) of Economic Development, Environment Affairs and Tourism (DEDEAT)

Section 3 of the ECDC Act states that the Corporation shall "plan, finance, co-ordinate, market, promote and implement development of the Province and its people in the field of industry, commerce, agriculture, transport and finance".

PROJECT SPECIFICATIONS

STATUS

Should any requirement of the Project Specifications conflict with any requirement of the Standardised or Particular Specifications listed in clause PS10, the requirement of the Project Specification shall prevail.

PORTION 1: THE WORKS

PS1 DESCRIPTION OF THE WORKS

PS1.1 SCOPE

The works comprise the supply and construction of:

- All building materials for the construction of a shearing shed per the material specification and drawings issued with this document
- Gravel access road and parking area
- VIP ablution facility
- Establishment and removal
- Dipping tank
- Solar installation
- Perimeter fencing

PS1.2 DESCRIPTION OF SITE AND ACCESS

There is track access to all the three sites.

PS1.3 NATURE OF GROUND

The area is located in the Beaufort Sediments, with dolerite intrusions.

Trenching will be in soft, intermediate and hard material. Sheet rock will be encountered in places.

The above information is given in good faith and is approximate. Should the Contractor require further information in order to properly determine his rate, he shall have done so at his own expense and prior to submitting his tender.

PS1.4 DETAILS OF CONTRACT

The Contract shall comprise the supply of all management, labour, materials, workmanship, machinery, equipment, transport, attendance on others and everything stated or implied which is, or may be, necessary in and for the entire completion of all the following works:

- Construction of a single storey blocked structure
- New fencing
- Gravel access road and stormwater control measures
- Establishment and removal
- VIP ablution
- Dipping Tank
- Solar installation

PS2 ENGINEERING

PS2.1 WORKS DESIGNED BY (PER DESIGN STAGE)

- (i) Concept, feasibility and overall process Employer
- (ii) Basic Engineering and detail layouts to tender stage Employer
- (iii) Final design to construction stage Employer
- (a) Contractor to provide as-built information.

PS3 PROCUREMENT

PS3.1 METHOD

Tenders will be adjudicated on Method 2 – Price and Preferences.

PS3.2 TARGETED CONSTRUCTION: PARTICIPATION OF TARGETED LABOUR (SANS 1914-5) - NOT APPLICABLE

PS3.2.1 Definitions

PS3.2.1.1 Targeted Labour

Individuals, employed by the Contractor in the performance of the contract, who are defined as the target group in the contract and who permanently reside in the target area or who are recognized as being residents of the target area on the basis of identification and association with a recognition by the residents of the target area.

The Project Steering Committee will direct where labour is drawn from as a priority before drawing labour under their guidance from a wider area. A Community Liaison Officer shall be employed (see cl PS3.4). A project wage rate is set (cl PS3.5) and the work shall be labour intensive (Particular Specification PB).

PS3.2.1.2 Target Group

For this project the contract does not specify the target group based on gender, age or disability, but a broad representation from each group shall be employed according to the task needs and in consultation with the CLO. However, specifically excluded from the Target Group is the Contractor's own staff unless such staff are also from the Target Area.

PS3.2.1.3 Target Area

For this project, the target area is defined as the communities directly affected by the project and identified by the PSC.

PS3.5 COMMUNITY LIAISON OFFICER (CLO)

The Contractor shall, in his dealings with the communities affected by the project, work with the Project Steering Committee (PSC) which has been elected by the ISD Consultant / Social Facilitator appointed by the Employer. The PSC acts as a communication structure between the project and the community. The process of appointing the Community Liaison Officer (CLO is also facilitated by the Social Facilitator together with the PSC. The CLO acts as a link between the contractor and the labourers and the PSC, and attends to all labour related issues. The CLO facilitates labour recruitment through the PSC. The CLO and the Executive structure of the PSC (Chairperson, Vice-Chairperson and the Secretary) attend monthly project progress report meetings (site) besides the PSC meetings attended by the full PSC. The Contractor must include in his rates the costs of attending an average of one meeting each month. The

CLO is appointed for the period of physical construction, plus a period of 14 days prior to this period. The Contractor will provide office and stationery to the CLO to be able to perform his or her duties.

The ISD Consultant shall prepare and facilitate the signing of the contract between the CLO and the Contractor. Remuneration of the CLO is R8 000.00 per month and will be adjusted annually for the period of employment as per gazetted rates and will change in accordance with change in rates from the Department of Labour.

A CLO who fails in the responsibilities he/she is given will be replaced following the procedures as stipulated in his or her contract with the Contractor.

One CLO will be appointed.

The Terms of reference for the CLO shall be provided by the ISD Consultant.

The CLO will liaise with the following people in performing these activities:-

Contractor:

- Organise and assist the Contractor in explaining to all workers the labour-based construction model.
- Ensure labourers understand their task and the principles behind task work.
- Ensure labourers are informed of their conditions of temporal employment.
- Attend all site meetings and briefing for work procedures.
- Keep written record of interviews and community liaison which should be summarised and included in the monthly progress reports.
- Collect monthly welfare reports and submit to social facilitators.
- Ensure that Contractor's workers are paid what is due to them and in time.
- Assist in the recruitment of labour.
- Promote and maintain sound relations with community stakeholders and other role players.
- Screen the supplied labour by the community through Project Steering Committees to ensure compliance with the agreed upon recruitment policy and the government's labour employment targets.
- Inform local labour about their conditions of temporary employment, to ensure their timeous
 availability and inform them timeously when they would be relieved, where the rotation of labour is
 applicable.
- Keep the labour register of labour and manage records of project local labourers and be able to provide reports on employment statistics.
- Consult on all decisions regarding local problems and any matters of importance that, in any way will be of relevance to the Contract.
- To be on site on a daily basis.
- To register concerns / perceptions and raise them in the PSC meetings.
- Attend site and PSC meetings to present monthly report on the local community labour involvement and site matters.
- Identify possible labour dispute and any disciplinary matter and advise the site agent / foreman and

assist in the resolution, where necessary must call for the assistance of the Social Consultant for the resolution of the conflicts.

- Assist the Contractor in preparing records of project employees. Assist the Contractor in making task measurements and the records thereof.
- Monitor the production of individual task workers and arrange replacement of those workers who fail to produce a reasonable task output.
- Attend disciplinary proceedings to ensure that hearings are fair and reasonable.
- Communicate daily with the Contractor to determine additional labour requirements with regard to numbers and skills and pass this to the PSC.
- Attend weekly meetings with the Contractor and make a weekly written report which shall be a prerequisite to being paid.

Social Facilitators:

- Assist in convening of workshops.
- Disseminate information to PSC members.
- Articulate implementing agency policies to PSC members.
- Communicate labour requirements.
- Attend induction training programmes for workers and induct labourers.
- Submit monthly welfare reports to the social facilitators PSC.
- Communicate labour and skills requirements to the PSC.
- Assist in the recruitment and engagement of work force.
- Verify labour records and ensure all engaged qualify as per the Contract requirements.
- Investigate and report all labour dispute matters to the PSC, advise site agent on resolution.

PS3.6 CONDITIONS OF EMPLOYMENT OF LOCAL LABOUR

It is a requirement of this Contract that local labour is employed wherever possible, and that the Contractor limits the use of non-local employees to key personnel only. Local labour shall be given "on-the-job" training in the various skills required on this contract.

The minimum task rate will be in accordance with Government Notice: *R.* 872 Basic Conditions of Employment Act (75/1997): Amendment of Sectoral Determination 2: Civil Engineering Sector. A task is

taken to be then amount of work which would be performed by a person working at an average pace through a work day of approximately 8 hours.

The PSC or its substructure, the Labour Desk, will co-ordinate the recruitment of labour from the community.

Employment shall be in accordance with the following conditions.

LABOUR INTENSIVE COMPONENT AND EMPLOYMENT OF LOCAL LABOUR AND USE OF LOCAL RESOURCES

This project is being implemented as a labour intensive project.

Payment for the labour-intensive component of the works

Payment for works identified in the Scope of Work as being labour-intensive shall only be made if the works are constructed strictly in accordance with the provisions of the Labour Intensive Specification. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

PS4 CONSTRUCTION

PS4.1 WORKS SPECIFICATION

PORTION A

APPLICABLE SANS STANDARDS

The latest edition as at date of tender of the following Standardised Specifications for Civil Engineering Construction as published by the South African Bureau of Standards shall apply.

1200

1200 A	-	General
1200 AB	-	Engineer's Office
1200 C	-	Site Clearance
1200 DA	-	Earthworks (Small Works)
1200 DB	-	Earthworks (Pipe Trenches)
1200 DK	-	Gabions and Pitching
1200 G	-	Concrete
1200 GA	-	Concrete (Small Works)
1200 L	-	Medium Pressure Pipelines
1200 LB	-	Bedding (Pipes)
1200 M	-	Roads General
1200 MM	-	Ancillary Roadworks
1914-1: 2002	-	Targeted construction procurement Part 1: Participation of Targeted Enterprises
1914-5: 2002	-	Target construction procurement Part 5: Participation in Targeted Labour
Variations and the Project Sp	d additio becificati	ns to the following SANS 1200 Standardised Specifications are given in Portion 2 of ons.
1200 A	-	General
1200 AB	-	Engineer's Office

1200 C	-	Site Clearance
1200 D	-	Earthworks
1200 DA	-	Earthworks (Small Works)
1200 DB	-	Earthworks (Pipe Trenches)
1200 DM	-	Earthworks (Roads Sub-grade)
1200 DK	-	Gabions and Pitching
1200 GA	-	Concrete (Small Works)
1200 L	-	Medium Pressure Pipelines
1200 LB	-	Bedding (Pipes)
1914-1: 2002	-	Targeted construction procurement Part 1: Participation of Targeted Enterprises
1914-5: 2002	-	Participation in Targeted Labour

PORTION B

In addition the following Particular Specifications that are bound into this document shall apply:

- PA Health and Safety Specification
- PB Labour Intensive Methods
- PE Building Specification
- PI Building Specification

PS4.2 EXISTING SERVICES

PS4.2.1 Known Services

All above ground services, including manholes etc., are designated as known services.

Prior to construction the Contractor and Engineer shall consult the drawings and all Service Providers to ascertain the presence and position of all services.

PS4.2.2 Interruption of Local Activities

Where construction or associated activities are to interrupt any of the local activities, eg. breaking through stock fences, trenching through lands, interrupting water and/or other utility services, etc. the Contractor is to notify the responsible authority and the Engineer at least 14 days before the occurrence of such an event and are to abide by any conditions prescribed by such an authority or the Engineer.

Where individual properties are accessed, a sketch drawing showing the nature and extent of access and interference shall be prepared by the Contractor and signed by the occupant. Before and after photographs shall be taken.

PS4.2.3 Protection of Existing Works

The Contractor shall take all the necessary steps to ascertain the location of existing services before commencing any section of the Works and shall exercise the greatest care when working in the vicinity of

such services. No more than three weeks and no less than one week before commencing his operations in any particular area, the Contractor shall request from the Engineer the latest available drawings showing the location of services already installed.

The Contractor shall take all necessary steps to protect any existing works whatsoever against damage which may arise as a result of his operations on Site. The Contractor shall bear the cost of location, protection and repair of damage to any service, the possible existence of which could reasonable have been ascertained by him in good time.

Where the Contractor is responsible for the cost of repairs carried out by a Service Authority, the Contractor will be billed directly by the Service Authority concerned.

PS4.2.4 Access to Properties

The Contractor shall organize the work in such a manner as to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work included in the Contract.

Written authority and conditions of occupation would have to be agreed with the local headman.

PS4.3 COURTESY

In all dealings with the public the Contractor shall bear in mind their right to enjoy the use of the roads and services and access to their properties and that the Employer desires to interfere as little as possible with these rights.

At all points of contact with the public the Contractor and his staff are requested to handle discussions and disputes with deliberate courtesy and understanding. To assist the Contractor in his dealings with the public, use should be made by him of the Community Liaison Officers (CLO's) on site. On occasions where the Contractor liaises directly with the public, the CLO should be informed of the outcome to be able to maintain a coherent picture of developments in the area.

PS4.4 DRAWINGS AND SPECIFICATIONS TO BE PROVIDED

As provided for in the General Conditions of Contract, the Contractor shall be entitled to receive free of charge, the following:-

a)Three (3) paper copies of each drawing; and

b)One (1) copy of the signed Contract Document.

PS4.5 CERTIFICATES OF PAYMENT

The statement to be submitted by the Contractor in terms of the General Conditions of Contract shall be prepared in accordance with the standard payment certificate prescribed by the Engineer and shall consist of at least three sets of A4-size copies or electronic as agreed.

The contractor shall supply with his monthly claim, employment details in the format prescribed.

All costs resulting from the preparation and submission of the statements shall be borne by the Contractor.

PS4.6 CONSTRUCTION IN LIMITED AREAS

In certain cases working space may be limited. The method of construction in these restricted areas will depend largely on the Contractor's plant and methods. However, the Contractor must note that measurement and payment will be according to the specified cross-sections and dimensions irrespective of the method used to achieve these cross-sections and dimensions, and that the rates and prices tendered shall be deemed to include full compensation for any difficulty encountered while working in limited areas and narrow widths, and that no extra payment will be made, nor will any claim for payment due to these difficulties be considered.

The working space restrictions are scheduled on the drawings.

PS4.7 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

If during the time for completion of the Works or any extension thereof, abnormal rainfall or wet conditions occur, the Contractor may submit a claim for an extension of time in accordance with Clause 10.1 of the General Conditions of Contract. If an extension of time is granted, then any standing time costs of

construction machinery as a consequence of the abnormal rainfall shall be deemed to have been included in the Time related costs of the Schedule of Quantities.

The method whereby the amount of extension of time due to the effect of abnormal rainfall and the prevalence of wet conditions will be determined, is the actual number of days where delay occurs less the
number of days n in the table below which represents the average delays which the Contractor should allow for in his programming and costing.

For a delay claim to be valid, the work so delayed would have to fall on the critical path.

Rainfall data for the project is:

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Nn (Days)	3.0	3.5	3.0	1.5	1.0	0.5	0.5	0.5	1.0	1.5	2.5	2.5

The total extension of time shall be the algebraic sum of all monthly totals for the period under consideration, but if the total is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for part of a month shall be calculated using pro rata values of Nn.

PS4.8 EXCAVATION AND BACKFILL

Owing to labour intensive methods, the excavation and backfill of trenches are scheduled separately as per PSD – Labour Intensive Methods and the excavation methods are varied for trench excavation.

PS4.9 ACCOMMODATION OF TRAFFIC

The Contractor shall ensure the safe and expeditious passage of traffic at all times and shall provide all necessary temporary road traffic signs, barricades, flagmen, etc. to safeguard the travelling public. Any detours or by-passes constructed by the Contractor shall be adequately signposted, as per the South African Road Traffic Signs Manual, and maintained to provide safe and easy passage of traffic.

PS4.10 ACCESS ROAD

Access roads required by the Contractor for construction purposes are not scheduled separately and the Tenderer must make provision for these roads under other scheduled rates and items.

PS4.11 SITE FACILITIES AVAILABLE

PS4.11.1 Water Supply

The Contractor will have to make his own arrangements for the provision of potable water for human consumption and other uses and will enter into a consumer agreement with the local government should they obtain it from them. Water for construction purposes should be obtained from natural stream flow.

PS4.11.2 Power Supply

The Contractor will have to make his own arrangement for a temporary power supply to his camp, if so required, with Eskom.

PS4.11.3 Camp Sites

Arrangements have been made with the Local Municipality or community to locate the site camp as shown on the drawings. The Contractor may locate at other sites, but must obtain and submit appropriate rental documentation.

Will be indicated during the tender meeting and site inspection.

PS4.11.4 Telephone Facilities

The Contractor will have to make his own arrangements with this authority.

PS4.11.5 Rail Facilities

Rail facilities are available at Mthatha.

PS4.11.6 Housing

No housing is available for the Contractor's employees, and the Contractor shall make his own arrangements to house his permanent employees and to transport them to the site of the Works.

PS4.11.7 Crushed Stone

Crushed stone for concrete will have to be obtained from a commercial quarry operating from Komani or similar.

PS4.11.8 Sand for Concrete

Must be obtained from commercial sources

PS4.12 SITE FACILITIES REQUIRED

PS4.12.1 Engineer's Office

Offices are required as per specification.

PS4.12.3 Engineer's Survey Equipment

None required.

PS4.13 PERMITS AND WAYLEAVES

The project is exempt from the required Basic Assessment in terms of the Environmental Legislation.

PS5 MANAGEMENT

PS5.1 PROGRAMMING

The Contractor shall submit to the Engineer a detailed construction program within 14 days of the written instruction to commence work. The program shall be prepared on the basis that the works will be completed over a period not exceeding **4 months**. The program shall be supported by bar chart and or critical path network and shall also reflect the projected cash flows.

Hard copy and electronic program updates in MS Project shall be submitted 3 days prior to the monthly site meeting.

The program shall distinguish between the various work packages and sites.

Each work package will show the various main activities and manufacturing lead times.

PS5.2 SEQUENCE OF WORKS

The sequence shall be in accordance with good practice.

PS5.3 METHOD STATEMENTS

Attention is drawn to the method statements required in terms of the Environmental Management Plan.

Other method statements will be required. See also PS 5.5.

PS5.4 SITE RECORDS

Site records will be required. The nature and extent will be agreed with the Engineer.

PS5.5 QUALITY CONTROL PLAN

The Contractor will be required to submit a Quality Control Plan and Procedures for approval by the Engineer for the manufacture of items under the construction methods and sequences.

The Employer or his agent will carry out inspections (e.g. welding and final release certificate inspection) from time to time on all items fabricated off-site.

To avoid delays the Contractor shall give the Engineer/Employer prompt notice of such inspections. Such notice shall not be less than 48 hours.

Approval by the Employer at any stage of fabrication is merely an authorization for the Contactor to proceed with the next stage of fabrication/installation and does not in any way relieve the Contractor of his contractual responsibilities.

The Contractor will be required to work in accordance with a Quality Control Plan where the following "Hold Points" will apply:-

The Pipelines

- 1) Topsoil removed
- 2) Foundation Excavation
- 3) Completion of foundation brickworks
- 4) Installation of doors and windows
- 5) All water proofing activities
- 6) Wall plate installation
- 7) Roofing installation
- 8) Plaster and painting
- 9) Road and parking areas

The Engineer/Clients representative shall inspect production of materials in off-site factories and appropriate access shall be arranged by the Contractor.

PS5.6 OCCUPATIONAL HEALTH AND SAFETY ACT 1993 (OHSA)

The client will appoint an agent in his stead to perform the client's duties in respect of the regulations. The tenderer shall refer to the particular specification – PA Health and Safety.

The tenderer must allow, in the item provided under preliminary and general, for all costs relating to health in specification not covered in any of the rates tendered in the schedule of quantities.

PORTION 2A: VARIATIONS TO THE STANDARDISED SPECIFICATIONS

PSA GENERAL

PSA1 SCOPE

Replace Sub-clause 1.1 with the following:

"1.1 This specification covers requirements, principles and responsibilities of a general nature which are normally applicable to all civil engineering contracts as well as the requirements for the Contractor's establishment on Site."

PSA2 INTERPRETATIONS

PSA2.3 Definitions

General:-

Add the following definitions:

"General Conditions: The General Conditions of Contract specified for use with this Contract and the Special Conditions of Contract are applicable."

"Specified: As specified in the Standardised Specifications, the Drawings or the Project Specifications. Specifications shall have the corresponding meaning as provided for in Sub-sub-clause 1(1)(u) or the General Conditions of Contract."

PSA3 MATERIALS

PSA3.1 Quality

Add the following:-

"All manufactured materials supplied shall be new materials unless the contrary is specified. All materials specified in accordance with SANS Specifications shall bear the SANS mark, "or as specified herein".

Add the following Sub-Clause:

PSA3.3 Ordering of Materials

The quantities set out in the Schedule of Quantities have been determined from calculations based on data available at the time and should therefore be considered to be only approximate quantities. The liability shall rest entirely and solely with the Contractor to determine, before ordering, the required types and quantities of the various materials required for the completion of the Works in accordance with the Specifications and the Drawings issued to the Contractor for Construction purposes.

Any reliance placed by the Contractor on the estimated quantities stated in the Schedule of Quantities issued for tendering purposes, or measurements made by the Contractor from the drawings issued for tendering purposes, shall be entirely at the Contractor's risk and the Employer accepts no liability whatever in respect of materials ordered by the Contractor on the basis of Tender Documents."

PSA4 PLANT – CONSTRUCTION EQUIPMENT

PSA4.2 Contractor's Offices, Stores and Services

Add the following before the first paragraph:-

"The Contractor's construction camp shall be fenced off and shall contain all offices, stores, workshops, testing laboratories, toilet facilities, etc. The camp shall always be kept in a neat and tidy condition.

No personnel will be allowed to reside on the Site. The Contractor shall be responsible for the security of his construction camp and of the construction site, at his own cost. Only night-watchman may be on the Site after hours."

The camp site shall be rehabilitated.

PSA5 CONSTRUCTION

Add the following:

PSA5.9 Monthly Certificate Forms and Information

The Contractor shall be responsible for submitting the interim monthly statement to the Engineer in an approved format for the duration of the Contract. Such statements shall be printed in an approved format on acceptable quality A4 size sheets and submitted electronically.

Labour employment details as required in terms of the Expanded Public Works Program shall accompany the monthly statement.

PSA5.10 Access to Properties

Road crossings and access to properties must be provided by the Contractor at all times. The Contractor shall, at his own expense, provide suitable crossings for residents and other Contractors requiring access to the Site. Such temporary service trench crossings shall be in the form of portable bridges, temporary

backfill or other approved means and shall be capable of permitting the safe passage of vehicles of mass not exceeding 2 tons. The Contractor shall also be responsible for maintaining such crossings and for removing them when they are no longer required.

PSA8 ACCESS TO PROPERTIES

PSA8.1 Providing Access to Properties as Specified in PSA 5.10

(a) During the whole duration of the Contract..... Unit: Sum

Payment shall be lump sum for providing access to all erven and properties, which lump sum shall be full compensation for providing access to erven and properties at all times and shall include for any additional costs due to construction under traffic, for making arrangements with the occupiers of erven and properties to temporarily close off routes and for taking the necessary precautions to provide for the safe and easy passage of traffic through the areas under construction.

PSAB ENGINEER'S OFFICE

PSAB3 MATERIALS

PSAB3.1 Name Boards

The Contractor shall supply and erect at an approved site, one name board complying with the standard design of the South African Association of Consulting Engineers (SAACE). The Contractor is to remove the name board at the end of the contract.

PSC SITE CLEARANCE

PSC2 INTERPRETATIONS

PSC2.1 Supporting Specifications

Add the following:

"2.1 (d) – Particular Specification PB Labour Intensive Methods must be read in conjunction with this Standardised Specification as far as it is applicable."

PSC5 CONSTRUCTION

PSC5.3 Clearing

Add the following:

- 1. "Pipeline routes shall be hand cleared of vegetation for a maximum width of 10 metres but clearing of vegetation roots should be limited to the pipe trench width."
- 2. Boulders either on the surface or exposed to limit reasonable bakkie access shall be cleared for a width of 6 meters. The boulders shall be moved to the side of the cleared area in a manner so as to prevent the concentration of storm water run-off. Depressions exposed by the removal of the boulders shall be levelled off or refilled with soil and gravel.
- 3. Boulders larger than 0.15 m³ shall be paid for as an extra over the clearing price as the volume of the boulder moved.
- 4. Boulders larger than 0.15 m³ which require drilling and blasting shall be paid for as an extra over the clearing price as the volume of boulder, drilled and blasted, and moved.
- 5 In designated areas as described in the bill of quantities, where the presence of boulders is dense, this shall be separately measured as an extra over the clearing price and shall include boulders larger than 0.15 m³ in volume, but exclude drilling and blasting of boulders too large and difficult to move under this item. These shall be paid for under item 4 above.

None of the boulders shall be paid for under SABS D or DA. The items discussed above shall be accepted as full compensation for the clearing and making good.

PSDA EARTHWORKS (SMALL WORKS)

PSDA2 INTERPRETATIONS

PSDA2.2 Supporting Specifications

Add the following:

"PSDA2.2 (d): Particular Specification PB Labour Intensive Methods must be read in conjunction with the Standardised Specification as far as it is applicable."

PSDA3 MATERIALS

PSDA3.1.2 Classes of Excavation

The following classification shall apply for restricted excavation including pipe trenching.

a) Class 1 (Hard Rock) Material

Class 1 material shall be "hard rock" materials such as fresh, unfractured rock occurring in bulk or in solid ledges thicker than 200 mm or in boulders which would necessitate the use of explosives or the extensive use of pneumatic tools by splitting and wedging for practical excavation.

b) Class 2 (Intermediate) Material

Class 2 material shall be all material other than Class 1 and "Pickable material" and shall be material which requires loosening either by ripping or use of pneumatic tools and which cannot be removed by the energetic application of picking. This material may be removed by any means.

c) <u>Pickable Material</u>

Pickable material shall be material which can be removed by the energetic application of sharp pick and shovel hand tools. The depth of excavation shall not exceed 1.6 m.

d) Machine Class Material

Machine Class Material shall be all material other than Class 1 Material 'Hard Rock'. This material shall be removed by means of mechanical excavators, with power rating not less than a CAT 225 (108kW) excavator in the case of widths 600 mm and more and 70kW for widths less than 600 mm.

Prior to commencement of excavation in a particular area or pipeline sub-route, the Contractor shall dig trial holes at a rate of one per 200 m of trench/ restricted excavation to ascertain whether the material is suitable to make hand labour excavation a practical alternative. If the Engineer directs that hand labour methods shall be applied, then the excavation shall be paid for under items 'Pickable Material', 'Class 2 Material' and 'Class 1 Material'.

Tests must be carried out on these trial holes to check for suitable backfill and selected backfill materials. Payment for these tests are to be carried by the laboratory items in the P&G.

If the proportion of Class 2 and Class 1 material is too high, then the excavation shall be paid for under item 'Machine Class Material' and 'Class 1 Material' only. i.e. no pickable and or Class 2 materials will be measured.

Provisional quantities have been included in the schedules.

PSDA8 SCHEDULED ITEMS

This section shall be read with 1200 DB, making the necessary alterations.

The provision of a separate backfill item shall not detract from the required work activities. Machine class excavation shall cover all activities associated with the excavation in all materials and extra for intermediate excavation.

PSGA CONCRETE (SMALL WORKS)

PSGA1 MATERIALS (Sub-Clause 3)

PSGA1.1 Aggregates

No plums allowed.

PSGA2 FORMWORK (Sub-Clause 4)

PSGA2.1 Finish

All permanent exposed surfaces to be smooth finished.

PSGA3 CONSTRUCTION (Sub-Clause 5)

PSGA3.1 Fixing

Welding of reinforcement not allowed.

PSGA3.2 Blinding

All reinforced concrete structures shall receive a 50 mm blinding layer consisting of Class 15 concrete.

PSGA3.3 Prescribed Mix Concrete

Grade 25 concrete is allowed for all concrete works, unless scheduled or shown on the drawings differently. The maximum nominal size of aggregate shall be 19 mm.

The proportion of cement : sand : stone shall be 1:2:4 for grade 20 concrete.

The slump shall range between 70 and 120 mm.

PSGA3.4 Ready Mixed Concrete

The use of Ready-Mixed Concrete to be approved by the engineer.

PSGA3.5 Cement Screeding

Cement screed shall consist of three parts of sand to one part of cement. The final level shall be finished to the indicated slopes and thicknesses but in no case less than 15 mm.

All screed shall be protected from the elements against loss of moisture during the curing period of at least 14 days.

SCHEDULE OF PARTICULAR SPECIFICATIONS (PS)

- PA Health and Safety Specification
- PB Labour Intensive Methods
- PE Building Specification
- PI Building Specification

PARTICULAR SPECIFICATIONS

PA – Health and Safety Specification

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

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1. Introduction

This Health and Safety Specification has been prepared in terms of the Client's responsibility [Construction Regulation 5 (1) (b)] to provide the Principal Contractor and Contractors with a documented Specification of all Health and Safety requirements pertaining to the associated works on the proposed construction site/s, so as to ensure the Health and Safety of all persons affected by the construction activities. This Health and Safety Specification highlights, but in no way replaces, the legal requirements that the Principal Contractor and Contractors are bound to comply with in terms of the contract.

- The client has made provisions in the tender for the Principal Contractor to price for the **cost of Health and Safety Measures** before and during the construction process [Construction Regulation 5 (1)(g)]. The Principal Contractor, in turn, needs to make the same provision when Contractors (Sub-contractors) tender or quote on work [Construction Regulation 7 (1) (c) (ii)].
- The Principal Contractor and Contractors are required to prepare a Health and Safety Plan based on the Client's Health and Safety Specification including other legal requirements applicable to their business, which shall be applicable from the date of commencement of and for the duration of the work [Construction Regulation 7 (1)(a)]. This documented plan must be based on a Hazard Identification and Risk Assessment (HIRA) which will serve to identify the hazards, and their associated risks, anticipated for the scope of works [Construction Regulation 9].

Principal Contractors tendering must provide the Client with an appropriate Preliminary Health and Safety Plan (including a Preliminary Hazard Identification and Risk Assessment) as in Construction Regulation 7 and 9. This Plan must be submitted with the tender.

2. Purpose

The purpose of the Health & Safety Specification is to provide the Principal Contractor and Contractor's tendering for the proposed construction work, and/or appointed for the above mentioned construction work with the necessary detail of all the health and safety requirements pertaining to the associated scope of works, so as to enable the Principal Contractor and Contractors to develop their Health and Safety Plans to be implemented on site with a purpose of ensuring the health and safety of all persons, property, equipment and other persons that may be affected by construction activities.

3. Application

The H&S Specification contains clauses that are applicable to occupational health and safety in construction and the document is intended to impose pro-active controls associated with the activities, plant & machinery and other aspects of the proposed construction work that impact on health and safety of persons, by means of a documented H&S Plan prepared by the Principal Contractor and Contractors.

Compliance to the requirements of the OHSAct and relevant legislation is in addition to the requirements of the H&S Specification and forms part of the Principal Contractor's and Contractor's responsibility. The Client and Client's Agent will monitor the Principal Contractor to ensure that the Principal Contractor and Contractors comply with the requirements of the OHSAct & other legal requirements, and will not prescribe to the Principal Contractor how such compliance is to be achieved.

4. Definitions

The following definitions apply.

For the purpose of the General Health and Safety Specification, the abbreviations or definitions given

hereunder shall apply:

"CR" refers to the Construction Regulations, 2014

"GHSS" refers to this document (the General Health & Safety Specification) including any project - specific annexures that the engineers and designers could attach.

"OHSA" refers to the Occupational Health & Safety Act of 1993

"S" refers to a Section in the Occupational Health & Safety Act of 1993

"H&S" refers to Health and Safety

"Client" Alfred Nzo District Municipality

Incident: means any unplanned event that causes, or has the potential to cause, an injury or illness and/or damage to equipment, buildings, plant or the natural environment. Incidents range from nearmiss incidents to serious incidents and emergencies.

"Near Miss" means an incident which has the potential to cause an injury or illness or damage to company property.

"Regulations" means, specifically, the Construction Regulations, 2014 as issued on 7 February 2014,

under the Occupational Health & Safety Act of 1993, but not excluding the other applicable regulations existing under the Act.

"Site" means the lands and other places, made available by the Municipality or the Client for the purposes of the Contract, on under over in or through which the construction work is to be executed or carried out.

"Principal Contractor" and "Contractor" shall be as defined in the Regulations.

Construction Work [CR 1]: Means any work in connection with -

- a) The erection, maintenance, alteration, renovation, repair, demolition or dismantling of or an addition to a building or any similar structure;
- b) The installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- c) The construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- d) The moving of earth, clearing of land or making of an excavation or work on any similar type of work.

Hazard Identification, Risk Assessment and Risk Control (HIRA)

Means a documented plan, which identifies hazards, assesses the risks and detailing the control measures and safe working procedures, which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Site

Means the area in the possession of the Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Contractor, and approved for such use by the client.

Hazard

Means a source of or exposure to danger (source which may cause injury or damage to persons or property)

Risk

Means the probability or likelihood that a hazard can result in injury or damage.

Construction Manager [CR 8(1)]

Means a full time, competent employee appointed in writing by the Contractor to supervise construction work. The appointment, as required by the OHSA, shall stipulate health and safety responsibilities, area of responsibility and the proposed duration of the project.

Hazardous Chemical Substance (HCS)

Means any toxic, harmful, corrosive, irritant or asphyxiant substance, or a mixture or substances for which an occupational exposure limit is prescribed, or an occupational exposure limit is not prescribed, but which creates a hazard to health.

Construction Plant

Encompasses all types of plant including but not limiting to, cranes, piling frames, boring machines, excavators, dewatering equipment and road vehicles with or without lifting equipment.

Contractor [CR 1]

Means an employer [OHSA 1] who performs construction work and includes principal contractors and sub-contractors.

Health and Safety Plan (HSP) [CR 1]

Means a documented plan, which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.

The plan shall be applied from the date of commencement of and for the duration of construction work [CR 5(1)]

Health and Safety File (HSF) [CR 1]

The file holding all documentation and records on health and safety for the project, which shall be available at all, times for evaluation, and a copy of which will be forwarded to the client upon completion of the project.

Disabling Injury Frequency Rate (DIFR)

The number of disabling injuries (DI's) multiplied by a constant (man hours relative to period worked) divided by total man hours worked over a rolling period (usually 12 months, but can be less)

Disabling Injury Severity Rate (DISR)

The number of days lost due to DI's multiplied by a constant (man hours relative to period worked) divided by total man hours worked over a rolling period (usually 12 months, but can be less)

Confined Space

An enclosed, restricted or limited space in which, because of its construction, location or contents, or any work carried on therein, a hazardous substance may accumulate or an oxygen deficient atmosphere may occur, and includes any chamber, tunnel, pipe, pit, sewer, container, valve, machinery or object in which a dangerous liquid or dangerous concentration of gas, vapour, dust or fumes may be present

5. Compliance

- 5.1 The Principal Contractor and other contractors must establish, implement and maintain a system for identifying and accessing the legal and other health and safety requirements that are applicable to their organisation.
- 5.2 The Principal Contractor and other contractors shall ensure that these applicable legal and other requirements to which their organisation subscribes are complied with when establishing, implementing and maintaining their system, and when doing their construction activities. legal requirements referred to are legal requirements such as
 - a) Occupational Health and Safety Act, number 85 of 1993 and its regulations as amended,
 - b) Compensation for Occupational Diseases Act, number 61 of 1997
 - c) Including all legal and other requirements to which the organisation subscribes.
- 5.3 All information regarding legal and other requirements must be kept up to date all the time.
- 5.4 The Principal Contractor and other contractors must communicate relevant information on legal and other requirements to all stakeholders.

6. Site Rules for Contractors

The site rule for contractors is the minimum standard with regard to specifications for construction work on this site. Contractors may have existing standards for each specific trade, but where conflict may arise between the contractor's standards and these Site Rules for contractors, the more stringent shall apply.

6.1. Rules of Conduct

Contractors and all employees under their control, including any visitors brought onto site must adhere to the following Rules of Conduct on Site:

Conduct Not Permitted:-

- No persons shall partake of, possess or sell drugs or alcoholic beverages on Site. Any employee or visitor whose actions and demeanour show symptoms of possible narcosis or drunkenness shall be removed from site.
- Indulge in practical jokes, horseplay, fighting or gambling.
- Make use of water from fire hydrants
- Destroy or tamper with safety devices, symbolic signs or wilfully and unnecessarily discharge fire extinguishers.
- Bring onto site or have in your possession of a firearm, lethal weapon, camera, or any other recording device, unless authorised to do so.
- Assault, intimidate or abuse any other person.
- Operate construction equipment (vehicles or plant) without the necessary training/competency and authorisation.
- Display insubordination toward any supervisor, foreman or manager in respect to carrying out of properly issued instructions or orders for health and safety reasons.
- Enter into any areas where you have no business unless authorised to do so by the person in charge
- Negligently, carelessly or wilfully cause damage to property.
- Refuse to give evidence or deliberately make false statements during investigations
- Bring animals onto site.

Insubordination towards any foreman, supervisor or manager could lead to removal from site and/or dismissal and/or prosecution. Except insofar as the principles of common law, or conditions as determined by any relevant statutes are concerned, the decision of the Client or his Agent shall be final and binding in respect of any disputes that may arise from the interpretation of these rules.

7. Responsibilities of Contractors for Construction Work

7.1. Notification of Construction Work [CR 4]

Before construction work commences, the contractor shall notify the Provincial Director of the Department of Labour in writing if the construction work shall:-

- Include excavation work
- Include working at height
- Include demolition of a structure
- Include the use of explosives to perform construction work

The notification and submission to the local Department of Labour must be done on an Annexure **2** and a copy of the completed form kept in the health and safety file for inspection by an inspector, the client or an employee.

7.2. Duties of Principal Contractor's [CR 7]

The contractor must:-

7.2.1.Compile a suitable, sufficient, and coherent site specific health and safety plan [CR 7(1a)

7.2.2.Keep on site a Health and Safety File with all required documents (CR 7 1b).

- 7.2.3.Ensure sub-contractors are appointed in writing, registered with COIDA and have necessary competences and resources to perform construction work safely.
- 7.2.4.Ensure all employees have valid medical certificate of fitness specific to the construction work performed and issued by an occupational health practitioner in a form of Annexure 3.

7.2.5. Ensure co-operation between all contractors [CR 7(4)] to comply with the Act.

7.2.6. Ensure compliance with the Act in terms of [CR 5(3)]

- a. Provide relevant sections of these specifications to contractors as required
- b. Appoint each contractor in writing and only appoint contractors who have the necessary competencies and resources may be appointed [CR 7(1) (v)]
- c. Ensure each contractor's HSP is implemented and maintained throughout the duration of the project on site
- d. Stop any contractor from work which is not in accordance with HSP / law or which pose a threat to health and safety of persons.
- e. Sufficient information is provided to contractors where there are changes to design and construction.
- f. Ensure every contractor is registered and in good standing with the Compensation Commissioner

g. Ensure potential contractors have made provision for the cost of health and safety measures

7.2.7. Negotiate and approve the HSP of each contractor [CR 7(1) (vi)

7.2.8. All HSP's including the principal contractor's to be available on site [CR 7(1)]

7.2.9. All HSF's including the principal contractor's to be available on site [CR (7)]

7.2.10. A consolidated HSF to be handed over to the client on completion of construction including records of drawings, designs etc. [CR 7(1) (e)]

7.2.11. HSF to include updated list of all contractors, the agreements and their type of work [CR 7(1) (f)]

7.3. Contractor's Responsibilities [CR 7(2)] (including sub-contractors)

7.3.1. Provide their HSP to the principal contractor [CR 7(2)(a)]

7.3.2.Where a contractor appoints another contractor (sub-contractor) it is the responsibility of that contractor to apply sub regulation 1 (b) to(g) of CR 7 as if he were the principal contractor [CR 7(3)]
7.3.2.Where a contractor appoint on the contractor (sub-contractor) upleas the latter has the contractor (CR 7(3)]

- 7.3.3.No contractor to appoint another contractor (sub-contractor) unless the latter has the necessary competency and resources to perform the required work
- 7.3.4. To provide any information which affects the health and safety of any persons at work to the principal contractor [CR 7 (2) (e)]

7.4. Legal Appointments

The principal contractor shall ensure copies of the appointment letters of all responsible persons appointed on site will be kept in the HSF. All legal appointments shall be conducted in accordance with the requirements set out in the OHSA and as per this specification. The tables below set out the appointment protocols for CR and OHSA. It should be noted that these represent complete lists and not all these appointments may be required:

7.4.1. Construction Regulation Appointments

Reg.	Appointment	Appointee	Appointed by
CR 5 (1)(k)	Principal Contractor	16(2) for the company	Client

CR 7 (1)(v)	Contractor	Competent person	Principal Contractor
CR 8 (1)	Construction manager	Competent person	Principal Contractor
CR 8 (2)	Assistant Construction manager	Competent person	Principal Contractor
CR 8 (5)	Safety Officer	Competent person	Principal Contractor
CR 8 (7)	Construction Supervisor	Competent person	Principal Contractor
CR 8 (8)	Assistant Construction Supervisor	Competent person	Principal Contractor
CR 9(1)	Risk Assessor	Competent person	Principal Contractor
CR 11 (2a)	Structure Inspector	Competent person	Principal Contractor
CR 10 (a)	Temporary work designer and inspector	Competent person	Principal Contractor
CR 13 (1)	Excavation Work Inspector	Competent person	Principal Contractor
CR 14 (1)	Demolition Work Supervisor	Competent person	Principal Contractor
CR 20 (1)	Bulk mixing plant Supervisor	Competent person	Principal Contractor
CR 21	Explosive power tool Controller	Competent person	Principal Contractor
CR 21 (1k)	Construction Vehicle Inspector	Competent person	Principal Contractor
CR 24 (e)	Temporary Electrical Installation Inspector	Competent person	Principal Contractor
CR 28 (a)	Stacking and Storage Supervisor	Competent person	Principal Contractor
CR 29 (h)	Fire Equipment Inspector	Competent person	Principal Contractor
CR 29 (i) Fire Team Members		Competent person	Principal Contractor

OHS Act Appointments and other relevant Regulations

Reg.	Appointment	Appointee	Appointed by
OHSA 16 (2)	16 (2)	Contract Manager	16(1)
OHSA 17 (1)	Health & Safety Rep	Elected / Nominated	16(1)
GAR 9 (2)	Incident Investigator	Competent person	Principal Contractor
GSR 3 (4)	First Aider	Competent person	Principal Contractor
DMR 18 (11)	Lifting Equipment Operator	Competent person	Principal Contractor
DMR 18 (5)	Lifting Equipment Inspector	Competent person	Principal Contractor

The responsibilities of each appointment are detailed in the relevant form, which are signed by both the authorised person and the appointee and kept in the Health and Safety file.

8. Documentation and Procedures

All required HSE documentation for the construction work, shall be kept in the HSF, which shall be available on site. The Construction Supervisor shall be responsible for the file on site and the Project Manager shall ensure that documentation is valid and up to date. The procedures to be used for the project are to be in accordance with contractor policy and as per the outcome of the HIRA exercise.

It is required that the documentation is filed in an orderly fashion for easy access. The following sections are suggested:

- Policies, permits, notifications etc.
- Health & Safety plans, specifications
- Appointments
- Incident management
- Inspection checklists
- Risk assessments
- Training
- Safe Work Procedures
- Hazardous Chemical Substances
- Medicals
- Audit reports

9. Application of COIDA and OHSA to Construction Work [Items 8.11 to 8.15 only may not be applicable]

9.1. Compensation of Occupational Injuries and Diseases Act, Act No. 130 of 1993 (COIDA)

Every contractor shall provide proof of registration and a valid letter of good standing with the Compensation Commissioner.

9.2. Occupational Health and Safety Policy [OHSA 7]

The contractors must develop a Health and Safety Policy that:-

- Is appropriate to nature & scale of risks,
- Includes commitment to prevent injuries & ill health, and continual improvement of health and safety performance,
- Includes the commitment to comply with applicable legal and other requirements,
- Includes the setting of health and safety objectives and targets,
- Is documented, implemented and maintained,
- Is communicated to all stakeholders,
- Is reviewed periodically to ensure its relevant and appropriate to the construction company.

9.3. Health and Safety Training and Competency

A training needs analysis must be developed and training provided for all persons requiring training. Proof of training / competency must be made available on file.

9.3.1. Induction Training

The principal contractor shall be responsible for the induction of all personnel entering the site including visitors, inspectors etc. Contractors doing specific construction work shall be responsible for the induction of their employees with respect to that specific work. Records to be kept on file for all personnel that undergo induction training.

9.3.2. Awareness Training

In addition, the client would favour awareness training to be carried out such as weekly Toolbox Talks on relevant topics e.g. manual lifting, wearing PPE, safe use of portable electric tools etc.

9.3.3. Competency and CV's

Where applicable, valid copies of certificates of competency of appointed personnel to be provided and kept in the HSF. Other training requirements such as those identified through the HRA process, to be completed and proof of that training also kept in the HSF. Where competency is achieved through experience, a brief CV will be required.

9.3.4. Specific OH&S Training

Valid certificates of training from registered service providers preferably accredited by the appropriate SETA are required for First Aiders, H&S reps, Fire Marshals (CR21 Fire Equipment Inspectors) etc.

9.3.5. Medical Fitness

All employees doing construction work on site must have a valid medical certificate of fitness specific to construction work to be performed and this must be issued by an occupational health practitioner in the form of Annexure 3.

9.4. Hazards and Potentially Hazardous Situations [OHSA 13]

The principal contractor is responsible to ensure that all contractors and any visitors are warned of any hazardous or potentially hazardous situations, which may affect them on site and shall put any additional measures in place to assist in mitigating the risk of these hazards.

9.5. Health and Safety Reps [OHSA 17 and 18]

The principal contractor shall be responsible to ensure compliance to this section of the OHSA as required and to ensure similar compliance of all contractors. If a rep is not required, the appointed Safety Officer will be responsible for these functions

9.6. Health and Safety Committee [OHSA 19 and 20]

The principal contractor shall be responsible to ensure compliance to this section of the OHSA as required. If a committee is not convened, health and safety matters will need to be tabled and discussed at site meetings

9.7. General Documents / Record Keeping

The principal contractor shall ensure that all Health and Safety documents and records, required by OHSA and Regulations are kept on site for reference purposes and auditing.

9.7.1. Inspections

The principal contractor shall keep all records of inspections undertaken during the contract. An assessment will need to be made of what inspections are required and their frequency. The principal contractor is also responsible to ensure compliance to this requirement by all contractors

9.7.2. Audits [CR 5 (0) and 7 (1c)(vii)]

The client's agent shall carry out regular audits on the principal contractor at least once per month. Similarly, principal contractors shall be responsible for carrying out regular audits on their contractors at least once per month. The results shall be tabled for action and discussed at the Health and Safety Committee meetings or the site meetings, as appropriate.

9.8. Incident management and emergency plans

The principal contractor shall create an Emergency Plan for the construction site. The plan shall be clearly laid out for all types of emergencies including responsibilities, evacuation routes, siren, emergency no.'s etc. The plan shall be fully explained to all personnel during the induction training. All contractors will become completely familiar with the requirements of the plan and will participate in any evacuation drills that may take place.

9.8.1. First Aid [GSR 3]

The principal contractor shall be responsible to ensure compliance to this regulation as required. In particular, a first aid box with the minimum stock as specified in the regulation will be located at the site office and there will be signage to indicate the location of the box. Attention is drawn to GSR 3(4) for the requirement of trained first aiders. It is also suggested that a trained first aider be made responsible for the box in terms of the following:

- Security the box should not be left open but it must be accessible in case of emergency (spare key availability)
- Injuries a record of first aid box injuries treated and the stock issued
- Stock a regular inspection to maintain stock levels and check expiry dates

In addition, the first aid requirements should be noted for high risk substances or hazardous chemical substances and if these are to be used, then it should be addressed in the HIRA and the need for eye wash facilities assessed.

9.8.2. Incidents and Injuries – Investigation and Reporting

The Principal Contractor will ensure there is a management system to report and investigate all incidents. All incidents <u>including ALL near misses</u>, first aid box treatment, and all other serious incidents involving any form of disabling injury or fatality are to be reported to the Client and the Clients H&S Agent telephonically immediately. This shall be confirmed in writing as soon as possible after the incident. Failure to comply with these provisions will be considered a serious offence. "Recording and Investigation of Near Misses".

Incidents

The principal contractor shall provide evidence by means of a procedure or chart that he is fully aware of the "hierarchy" of incidents that can occur e.g. unsafe situations, near misses, first aid box injuries, medical cases, disabling injuries etc. He shall keep an incident register of all such incidents, investigate and implement corrective action where required. The client also reserves the right to request incident statistics from the principal contractor such as DI's, DIFR and DISR and it is advised that these are maintained.

<u>Injuries</u>

First aid box injuries have been addressed under 8.8.1 above. More serious injuries requiring transport of the injured person to the nearest hospital or doctor or the calling of an ambulance and paramedic personnel will be the responsibility of the principal contractor's appointed personnel such as the Construction Supervisor, First Aider and Safety Officer. It is advised that all required emergency numbers be on hand and prominently displayed.

As all contractors are registered and in Good Standing with the Compensation Commissioner, it will be the responsibility of the contractor whose employee has been injured, to make the necessary report and claims to the Commissioner.

9.8.3. Accident and Incident Reporting and Investigation [OHSA 24, GAR 8, 9 (1) & (2)]

Should an incident or accident investigation need to be conducted, a competent person shall be appointed to conduct the said investigation. The procedure to be followed will be in accordance with Annexure 1 of GAR 9 – "Recording and Investigation of incidents". Particular attention is also drawn to OHSA 24, the reporting of certain incidents to an

Particular attention is also drawn to OHSA 24, the reporting of certain incidents to an inspector of the department of labour.

The principal contractor shall ensure that the investigations are kept for record purposes and he shall ensure that the outcome of the investigation is communicated to all affected parties as required i.e. the Client, Clients H&S Agent and contractors.

The Client reserves the right to participate in all investigations into accidents or incidents and to conduct their own investigation if required.

9.9. Contractors and suppliers [OHSA 37(2)]

The client shall enter into an "Agreement with Mandatory" in terms of Section 37(2) of the Occupational Health and Safety Act, 85 of 1993, with all appointed principal contractors. Likewise all principal contractors shall enter into a similar agreement with all contractors, subcontracted to them for any period of the contract. Please note that if contractors hire any construction vehicles or mobile plant, the companies from which the equipment is hired must provide any maintenance and test certification as required. In addition, if operators are hired with the equipment, proof of competence and medical certification must be provided.

The principal contractor shall ensure that all contractors are issued with this safety specification where reasonable. The principal contractor shall assist and ensure that contractors engaged comply with all of these requirements and adhere to the requirements set out in the OHSA. Contractors will be stopped from working in the event of unsafe conditions and activities being observed.

All contractors shall be subject to the requirements specified in the HSP and will be issued with a copy of the plan. If the contractor is not able to comply with the requirements set out in the plan, he shall not be appointed as contractor.

9.10. Personal Protective Equipment, Intoxication, Signage and Access Control

9.10.1.1. Personal Protective Equipment (PPE) [GSR 2]

The principal contractor shall through the Risk Assessment process identify the specific PPE needs per activity. Contractors, as employers, will be responsible for the issue of the required PPE. Should PPE be lost or stolen, then the employee will be issued with new PPE. Should PPE be worn out or damaged, the user shall return the worn or damaged PPE and will be issued with a replacement. Training in the use of this shall be provided. Visitors shall be informed of PPE requirements prior to their visit so that they may enter the site.

9.10.2. Intoxication [GSR 2A]

The principal contractor shall ensure that no persons may enter or remain at the construction site if under or apparently under the influence of intoxicating liquor or drugs.

9.10.3. Display of signs [GSR 2B]

The principal contractor shall make use of signage to assist in enforcing compliance to any requirement specified in this document or as required by law. Standard symbolic signs are acceptable for conveying these requirements where applicable. Approved signs as per SABS standard approved colours must be used.

9.10.4. Access control [GSR 2C]

The principal contractor shall be responsible to ensure control of access to all persons entering the construction site. The reasons for this are as follows:

- The principal contractor is the 'employer' on the site and is responsible for section 8 of OHSA for employees and contractors and section 9 for any other person on site such as visitors and inspectors
- All persons entering the site must undergo induction training to inform them of the hazards present on the site. This includes contractors, visitors, inspectors etc.
- The construction supervisor will be aware of who is on site and their function
- The construction supervisor will be able to control tasks that may impact on other work being carried out on the site by a permit to work system
- The number of people and their purpose on the site must be known in case of emergency and evacuation
- Security reasons

The principal contractor shall post notices at the site informing all those entering the site of these requirements.

9.11. Portable Electrical Tools [EMR 9]

This regulation shall be complied with as a minimum requirement. Regular inspections of all Portable Electrical Tools such as drills, angle grinders etc., and shall be carried out. In particular:

- Only trained personnel shall operate such equipment.
- The Construction Supervisor shall ensure operation of the equipment is in accordance with the HRA requirements and Safe Working Procedure (SWP).
- All users shall undergo regular awareness training (toolbox talk) to ensure compliance.
- The Construction Supervisor shall ensure the required PPE is provided and properly used.

9.12. Permit to work (including hot work)

The principal contractor shall ensure that:

- All work being carried out on the site has been approved through the necessary project control system.
- Permits required from third parties such as town councils for utility and sewage services are in place.
- A permit system is operational so that work consisting of many tasks related to the construction on site, can be carried out without endangering the health and safety of personnel on site, neighbours and the public surrounding the site and/or causing damage to property.
- In particular, attention is drawn to GSR 9, which details the requirements for welding, flame cutting, soldering and similar operations (hot work).

9.13. Work in confined spaces [GSR 5]

The principal contractor shall ensure that no work is carried out in a confined space unless it is safe to do so. All the requirements of this regulation shall be met. Attention is drawn to the fact that further precautions are required if hot work is to be carried out in a confined space a per GSR 5(5) and GSR 9(2).

In addition, CR 13(2j) specifies that excavations are regarded as confined spaces and these precautions need to be applied.

9.14. ENVIRONMENTAL RULES

The Contractor shall give effect to and maintain all safeguards and standards and take such measures as may be necessary for the protection of the environment. Prevention of any type of pollution must be taken into consideration when performing all construction activities on site.

9.14.1 Clearing

The Contractor shall comply with the following conditions and requirements for clearing:

- Follow the Occupational Health and Safety Act, the Environmental Regulations for workplaces and Project EMP.
- Areas to be cleared will have boundaries clearly marked by tape, pegs or other means and will conform to limits on design drawings.
- Clearing will not commence until drainage control works are in place.
- Cleared vegetation should be windrowed along the contour to assist with erosion control.
- Any area which is not to be disturbed under requirements of the *Cultural Heritage Management Plan* will be clearly identified.
- Vegetation clearance will be restricted to that necessary for the works.
- The Engineer is to be notified immediately if contaminated soil is discovered.
- Traffic shall be confined to maintained tracks and roads.
- Particular care shall be taken to minimise disturbance to the bed and banks of watercourses.

9.14.2 Noise and Vibration

The Contractor shall ensure that the exposure of persons to noise is prevented by all means and where it is not possible to prevent it, to adequately control the noise. The noise-induced hearing loss regulations must be complied with.

Each of its mobile and fixed plant and that of its subcontractors' are fitted with appropriate noise suppression equipment to ensure that noise levels from such plant are contained within the relevant limits prescribed by relevant industrial safety and environmental legislation, regulations and site standards. If there is a noise problem with electric power generating equipment, compressors, or other facilities under the control of the Contractor, additional noise suppression shall be erected by the Contractor at the Contractor's cost around the offending unit(s). Any deviation from the above listed practices is to be rectified at the Contractor's cost.

9.14.3 Transport, Storage and Handling of Hazardous Substances and Dangerous Goods

The Contractor shall comply with the following conditions and requirements for storing and handling hazardous and dangerous goods:

- Comply with Hazardous Chemical Substance Regulations.
- Provide a list of hazardous substances and corresponding MSDS prior to bringing substances on Site.
- Substance register to be held at each storage facility.
- Corrosive materials to be stored and handled in accordance with HCS Regulations 14.

- Fuel, oils and substances in containers of 210 litres or more shall be stored in a bunded area with capacity of at least 110% of the total quantity of HCS.
- Fuel, oils and substances in less than 200 litre drums shall be stored as above or in a fenced and roofed compound.
- All fuel, oils and substances must be clearly labelled.
- Transfer of bulk fuel and handling of hazardous substances shall be conducted only by appropriately trained personnel.
- Spill clean-up kits including absorbent materials shall be kept at each storage facility.

9.14.4 Erosion and Oil Traps

The Contractor shall comply with the following conditions and requirements for erosion, sedimentation, silt and oil traps:

- Land disturbance will be restricted to that necessary for the works.
- Topsoil will be salvaged for use in rehabilitation.
- Storm water from upstream catchments will be diverted away from construction areas.
- Drains will be protected to prevent scouring if necessary.
- Sediment traps, silt fences or hay bales will be installed to control sediment where necessary and where directed by the Engineer.
- Sediment traps will be cleaned periodically.
- Hazardous materials will be bunded or stored such that contaminated run-off is not generated.
- Traffic will be confined to maintained tracks and roads.
- Particular care will be taken to minimise disturbance to the bed and banks of watercourses.
- Rehabilitation of disturbed areas will be carried out promptly.
- The Contractor shall maintain its specific work area so as to prevent erosion of adjacent soils by surface runoff. Temporary diversion drains shall be used to divert storm water away from the Contractor's work area, where necessary.
- The Contractor shall provide and maintain all silt traps and oil traps necessary for the execution of the work under the Contract and for the protection of the environment as required by the Specification and as directed by the Engineer.

9.14.5 Dust Prevention

The Contractor shall comply with the following conditions and requirements for air quality and dust:

- Dust generated by construction activities will be suppressed by water spraying, to levels that are safe for Site personnel.
- Speed limits on unsealed roads will be limited to a maximum speed consistent with the minimisation of dust generation.
- Earthworks Supervisors must pay particular attention to the management of topsoil stripping such that dust does not become a safety hazard or severe nuisance.
- All dust complaints will be investigated promptly and appropriate action initiated to reduce nuisance.

9.14.6 Waste Management

- The Contractor shall provide suitable rubbish receptacles at the Site and shall ensure that all litter is collected in them and properly disposed of off Site in accordance with the requirements of the relevant statutory requirements.
- The Contractor shall ensure proper collection and off-site disposal of all industrial wastes in accordance with relevant statutory requirements.

• The Contractor shall apply the principles of Waste Minimisation by reducing the amount of waste generated on Site by their operations and activities as much as possible. The Contractor shall provide for recycling of glass, metals, plastics and paper.

9.14.7 Weed Management

The Contractor shall comply with the following conditions and requirements for weed management:

- Contractors shall ensure that all machinery, equipment and vehicles are washed down at a wash facility before entering the Site and again when leaving the Site.
- Plants and soil shall not be removed from the Site without authorisation.
- Soil or other material shall not be brought onto Site if it has originated from an area known to contain environmental weeds or declared weeds under the Rural Lands Protection Act 1995.
- Areas disturbed or rehabilitated as part of a Contract will be inspected upon completion of the works. The Contractor shall eradicate any declared weeds found.
- Seed used in rehabilitation shall be free of declared weeds.
- Control measures (including use of herbicides) must be consistent with manufacture's recommendations, safe practice and recommendations in the Department of Natural Resources Pest Fact series.
- Include information on the importance of weed control in inductions.

9.14.8 Found Object

All fossils, coins, articles, minerals of commercial value and objects of antiquity and structures and other remains and things of archaeological interest discovered at the Project Site shall be deemed to be the absolute property of the Company. The Contractor shall take reasonable precautions to prevent the Contractor's employees, subcontractors and the employees of subcontractors and any other persons from removing and damaging any such article and thing and shall immediately upon discovery thereof, acquaint the Engineer of such discovery and carry out, at the expense of the Company and at the Engineer's direction, the protection and or disposal of same.

9.15 MONITORING, AUDIT AND REVIEW

- The Client's Agent shall have the right to conduct audits / inspections of the Contractor's
 operations, equipment and procedures at any time, and the Contractor shall fully cooperate with the Client's Agent during such audits / inspections.
- The Client's Agent rights under this clause shall not relieve the Contractor of its obligations to conduct audits and reviews of its own safety and health performance.
- Where such Client's Agent audits reveal deficiencies in the Contractor's procedures, equipment, training, drills, etc., the Contractor shall rectify such deficiencies as soon as practicable, and provide to the Client's Agent a status report on all outstanding corrective actions. Where such deficiencies include an unsafe practice or a breach of the Statutory or the Contract's requirements, the Client's Agent may in accordance with the General Conditions of Contract suspend the work associated with the unsafe practice or breach until the deficiency is rectified.

10. Application of the Construction Regulations, 2014

[Please note: this is the complete list. Item 10.1 is compulsory and the rest are applicable if relevant to the work being carried out]

10.1. Hazard Identification, Risk Assessment and Risk Control (HIRA) [CR 9]

The contractor shall prior to the commencement of any construction work perform a HIRA exercise, which will form part of the HSP and file for the project.

A copy of the HIRA shall be made available for viewing to the client's OHS agent and shall be kept in the Health and Safety File.

NB: The contractor shall ensure that the outcome of all HIRA exercises will be conveyed to all relevant employees with respect to the hazards and the related control measures before any work commences.

Below is a list of activities, which may be considered for HIRA if the activity is to be carried out on site. The list is not exhaustive but gives examples of activities for a construction site:

- Traffic Management– restrictions etc.
- Site security and access
- Existing services, overhead and underground
- Ground conditions
- Excavations
- Batching on site
- Brickwork
- Activities that affect adjacent sites
- Excavations in particular those adjacent to roads or sidewalks
- Lifting operations such as offloading and moving equipment
- Stacking, storage of equipment and materials, and good housekeeping
- Use of hand tools
- Use of portable electrical equipment (power tools)
- Use and storage of flammable and hazardous chemicals such as petrol, diesel, etc.
- Waste management including removal of hazardous waste
- Environmental restraints such as effluents, boundary noise and dust
- Temporary site accommodation
- General hazards to site personnel such as noise and dust.

The control of several of these risks may be specified in the OHSA or the CR but this does not mean that the HIRA exercise does not have to be carried out.

10.2.Fall Protection [CR 10]

Regulation 10(1)(a) of this regulation states that a contractor shall designate a competent person, to be responsible for the preparation of a fall protection plan.

10.3. Structures [CR 11]

The appointed contractor shall meet the requirements of this regulation. Attention is drawn to CR 11(2)(a) which requires the designer to inspect the structure at appropriate times when mandated by the Client and the record of these inspections to be available on site.

10.4. Temporary works [CR 12]

Section (a) of this regulation states that this work must be carried out under the supervision of a competent person who has been appointed in writing. All the requirements of CR 12 shall be met. For inspection again, attention is drawn to section (f), the records of which must be available on site.

10.5. Excavations [CR13]

Section 1 of this regulation states that this work must be carried out under the supervision of a competent person, who has been appointed in writing. All the requirements of CR 13 shall be

met. For inspection of excavations, attention is drawn to sub regulation 2(h), the records of which must be available on site.

10.6. Bulk mixing Plants [CR 20]

Section 1 of this regulation states that batch plants must be operated and supervised by a competent person, who has been appointed in writing. All the requirements of CR 20 shall be met.

10.7. Lifting machines and lifting tackle [DMR 18], Cranes [CR 22]

All the requirements as far as GMR 18 is concerned, compliance to these requirements will be the responsibility of contractors using any lifting equipment and lifting tackle.

The principal contractor must comply with the requirement of the Construction Regulations 22 and the requirements of the Driven Machinery Regulations 1988.

10.8. Construction vehicles and mobile plant [CR 23]

It will be the responsibility of each contractor on site to ensure compliance of their construction vehicles and mobile plant to these regulations.

This includes vehicles to be used for transporting personnel to and from site, which will be subject to relevant requirements such as licensing and roadworthiness checks. In addition the following will apply:

- Safe transport for personnel working on the project to and from the workplace, which shall include proper seating, side restraints and cover.
- Road safety principles shall be adhered to on and off site.

If a mobile crane or other mobile plant is hired, only approved hire companies shall be contracted to provide such equipment. The Construction Supervisor shall ensure compliance of the provider to these regulations. In particular attention is drawn to the competence and fitness of the operator [section 1(d)] and the inspection of the equipment [section 1(j)]

10.9. Electrical Installations [CR 24], including [EIR] and [EMR]

The requirements of these regulations shall be met as required, by the appointed electrical contractor. A competent person will be appointed for inspection and control of all temporary electrical installations as per CR 24(d) and (e) respectively.

10.10. Use and storage of flammable liquids [CR 25], and hazardous chemical substances [HCSR]

All the requirements of CR 25 shall be met

In terms of HCSR, contractors shall ensure that all hazardous chemicals brought to site have a Material Safety Data Sheet (MSDS) and the users are made aware of the important sections of the MSDS such as:

- Hazards
- First aid measures
- Firefighting measures
- Accidental release measures
- Handling and storage
- Exposure control especially PPE
- Disposal

First Aiders shall be made aware of the MSDS and how to treat HCS incidents appropriately. Copies of MSDS's will be available on site and in the HSF.

10.11. Water Environments [CR 26]

The requirements of this regulation shall be met.

10.12. Housekeeping [CR 27] including [ERW(6)]

All contractors shall ensure that housekeeping standards as per these regulations shall be maintained at all times.

10.13. Stacking of Materials [CR 26] including [GSR(8)]

All contractors shall ensure that materials are only stored in defined and allocated storage areas and that materials being stored are stacked in accordance with sound stacking principles as per these regulations.

10.14. Fire precautions [CR 29]

All contractors on site will comply fully with the requirements of this regulation. In particular, the principal contractor will be responsible for the evacuation plan (section (I)) the details of which will be imparted to contractors, visitors etc. through the site induction.

10.15. Construction welfare facilities [CR 30]

The principal contractor shall be responsible for implementing this regulation and shall ensure that adequate facilities are provided for the personnel on site in terms of the following:

- Change room facilities
- Adequate toilets.
- Hand wash facility.
- Potable water.

No food preparation shall be conducted on site. Eating and drinking will only be permitted in the designated eating areas, which must be provided with adequate seating.

Waste bins shall be strategically placed and cleared regularly.

11. Site Specific and Design Risks

[Please note: this is not a complete or exhaustive list. The principal contractor is expected to assess all risks to which his employees may be exposed during the construction process, as well as the hazards identified and listed below.]

11.1 Hazard Identification and Risk Assessment Methodology

11.1.1 Baseline Risk Assessment

A Baseline Hazard Identification and Risk Assessment must be carried out during the preliminary stages of the construction/demolition project for the purposes of attempting to reduce the possibility of accidents or ill health occurring.

Taking into account the constraints of time and resources, every effort must be made to identify the hazards and recommend possible solutions. It is not reasonably practicable to expect the baseline risk assessment to identify all hazards, which is why task risk assessments are carried out on site.

These are some of the risk the contractor may be exposed to,

	Hazard		Risk
•	Work around the		Injuring members of the community
	community		Children playing around the work area
			Drownings
۲	Excavations		Collapsing of excavation
			Community falling into excavation
			Flooding resulting to drownings
			Livestock falling into the excavations
•	Mobile plants	and	Air and ground pollution
	construction vehicles		Mobile plant hitting people around
			Mobile plant hitting other road users
			Mobile plant damaging services
	Steel fixing		Cut by steel
		- 1	Hit by steel resulting to body injuries
			Tripped by steel resulting to body injuries
•	Concrete work		Heat by concrete
			Ground pollution
			Water pollution
•	Rubble		Community exposed to rubble
			Ground pollution
9	Stacking of material		Material falling and hitting people around
			Ground pollution
•	Height work		Falling from height resulting to fatality
			Employees hit by falling material resulting to
			serious injuries

11.1.2. Task Risk Assessment

Once on site, every contractor shall perform task risk assessments, using the baseline risk assessment as a guide.

The Risk Assessment should be reviewed once on site and thereafter after any incident, change in design or every one-year period, whichever occurs first. Additional hazards highlighted or a change in the risk factor should have a separate risk assessment carried out and filed. The Risk Assessment is based on the combination of the CONSEQUENCE and PROBABILITY associated with each hazard.

ANNEXURE A (OHS REQUIREMENTS - SCHEDULE OF COSTS)

SCHEDULE OF OHS COSTS

ltem	Description	Quantity	Amount Rands
1.	Site Establishment & Facilities		
1.1	OHS File – Site Specific	1	
1.2	Temporary Site Office	1 per contractor	
1.3	Temporary Electrical Connection	1	
1.4	Temporary Water Connection	1	
1.5	Portable Chemical Toilets – Male/ Female	As per Risk Assmnt	
1.6	Change Room Facilities – Male/ Female	As per Risk Assmnt	
1.7	Eating area Facilities	1	
1.8	Notice Board	1	
1.9	Construction Site Signage Board	1	
1.10	Signage - PPE Required for Site	As per Risk Assmnt	
1.11	Hazardous Substance Store & Signage	1	
1.12	Fire Extinguisher 9kg DCP	As per Risk Assmnt	
1.13	Regulation 3 First Aid Box Complete	1	
1.14	Regulation 7 Blood Spill Kit	1	
1.15	Hazardous Substance Spill Kit	1	
1.16	Spare Protective Clothing – i.e. Hard Hats, hearing, respiratory, eye and hand protection and reflective vests.	As per risk assessment	
1.17	Perimeter hoarding/ shadecloth	All	
1.18	Waste Material Skips	As per Risk Assmnt	
2.	Administration and Documentation		
2.1	medical certificate/s of fitness	All	
2.2	Scaffold safe-to-use certificate	All	
2.4	Access Control – Security	As per Risk Assmnt	
2.7	First Aider/s	As per OHS Act	
2.8	Fire Marshalls	As per Risk Assmnt	
2.9	Full Time Safety Officer	1	
2.10	Safety Representatives	As per OHSAct	
3.	Other		
_	Total carried to item 1.6 in the BOQ		

PB – Labour Intensive Methods

PB LABOUR INTENSIVE METHODS

PB1 SCOPE

This Particular Specification covers the requirements wherever labour intensive methods of construction in accordance with the Bid Conditions are specified.

PB2 INTERPRETATIONS

PB2.1 Supporting Specifications

Where this Particular Specification is applicable, the following specifications shall, inter alia, form part of the contract document.

- a) SABS 1200C Site Clearance
- b) SABS 1200DA Earthworks (Small Works)
- c) SABS 1200DB Earthworks (Pipe Trenches)
- d) SABS 1200DK Gabions & Pitching
- e) SABS 1200DM Earthworks (Roads Sub grade)
- f) SABS 1200 G Concrete (Structural)
- g) SABS 1200GB Concrete (Ordinary Building)
- h) SABS 1200GA Concrete (Small Works)
- i) SABS 1200L Medium-Pressure Pipelines
- j) SABS 1200LB Bedding
- k) The Project Specifications

PB2.2 Application

This Particular Specification contains clauses that are applicable wherever labour intensive methods of construction are to be employed.

Machine applications shall only be allowed by the Engineer for the specific operations listed hereunder or, if so directed, by unforeseen or special circumstances on site.

Loss of contract time owing to unsatisfactory progress, poor contract management or whatsoever related reason will not be regarded as "unforeseen or special circumstances", unless ruled to the contrary by the Engineer on a motivation submitted by the Contractor.

The Contractor shall request permission from the Engineer in writing, at least fourteen calendar days in advance, (if possible), of his intention to use machine operations for work reserved for hand labour execution. The request is to be substantiated by a proper motivation.

No machine operations subject to the above request are to commence without the prior written approval of the Engineer and no additional payment of whatsoever nature shall be allowed should the Engineer

agree to the request submitted by the Contractor. The tendered rates and prices applicable to hand labour execution shall suffice.

PB2.3 Definitions

Labour Intensive – An activity that is undertaken by labour only, specifically excluding the use of any plant or mechanical equipment, except hand tools and related equipment.

Task – A quantified activity or operation.

Daily Rate – The remuneration of a day's work, regardless of output and only applicable when unable to define tasks.

Task Rate – The remuneration for a completed task.

Labour-Intensive Construction – The economically efficient employment of as great a portion of labour as is technically feasible to produce as high a standard of construction as demanded by the specifications; thus the effective substitution of labour for equipment. (Note: This definition is not Contract-specific, but applies to the project as a whole. This Contract is a part of such a project.)

Labour-Based Construction - see Labour-Intensive Construction

PB3 ACTIVITIES THAT MAY MAKE USE OF MACHINE INTENSIVE OPERATIONS

The activities listed hereunder may be executed by machine intensive means, if not listed hereunder the execution shall be labour intensive.

- i) Excavation in Classes 1 or 2 materials as for restricted excavations.
- ii) Excavations in Machine Class or Class 1 materials as for bulk excavations
- iii) Excavations in any Class materials as for bulk excavations in excess of 50 Cu m from a single position, subject to the Engineer's prior approval.
- iv) Excavations in Pickable material as for restricted excavations where the utilization of hand labour has been proved to be impracticable, subject to the Engineer's prior approval.
- v) Confined excavation with total depth in excess of 1.6 m.
- vi) Stripping and stockpiling of overburden at approved borrow areas.
- vii) Loosening and/or stockpiling of borrow material at approved borrow areas.
- viii) Hauling (including loading) of all materials beyond 150 m.
- ix) Pumping and transporting of water.
- x) Mixing of concrete for water retaining structures where strength and reinforced concrete is specified and the volume of a particular cast exceeds 5 Cu m.
- xi) Handling and laying of pipes with an individual mass exceeding 350 kg per pipe length.
- xii) Compaction of fill and in-situ material
- xiii) Construction of controlled road layers and maintenance of haul roads.

- xiv) Execution of major road crossings where time is of the essence.
- xv) Site clearance that requires breaking up of concrete and other permanent structures.
- xvi) Placing of bedding and backfill in trenches with collapsing sides
- xvii) Any operation as may be specified by the Engineer.

PB4 MATERIALS

The requirements of the applicable SABS specification and/or Project Specification shall apply except where superseded by this Particular Specification.

PB5 PLANT

Where plant is to be used, as authorised by this Particular Specification, the requirements of the applicable SABS 1200 Specification and/or Project Specification shall apply except where superseded by this Particular Specification.

PB6 CONSTRUCTION

The requirements of the applicable SABS 1200 Specification and/or Project Specification shall apply.

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

PB7 TOLERANCES

The requirements of the applicable SABS 1200 Specification and/or Project Specification shall apply.

PB8 TESTING

The requirements of the applicable SABS 1200 Specification and/or Project Specification shall apply.

PB9 MEASUREMENT AND PAYMENT

The requirements of the applicable SABS 1200 Specification and/or Project Specification shall apply except where superseded by this Particular Specification.

PB10 COMPOSITION OF LABOUR

See Clause 59 – Contract Data.

PB11 PENALTY FOR NON-COMPLIANCE

Should the Contractor during the execution of the Work reserved for labour intensive execution:

- a) use unspecified plant; or
- b) contravene the requirements of Particular Specification PA

then the Contractor shall pay to the Employer the penalty as set out hereunder and the Employer may without prejudice to any other method of recovery deduct the amount of such penalty from any monies in the hands due or which may become due to the Contractor.

- a) R1 000.00 per occurrence; plus
- b) 15% of the value of work so executed calculated as the product of the quantity (calculated by the Engineer) and the applicable bided rate.

PE – Building Specification
PE - BUILDING MATERIALS AND SPECIFICATION

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A. GENERAL

The following SANS 1200 Standardised Specifications apply to this contract:

SABS 1200 C	:	Site Clearance
SABS 1200 D	:	Earthworks
SABS 1200 DB	:	Earthworks (Pipe Trenches)
SABS 1200 DM	:	Earthworks (Roads, subgrade)
SABS 1200 GA	:	Concrete (Small Works)
SABS 1200 L	:	Medium-Pressure Pipelines
SABS 1200 LB	:	Bedding (Pipes)
SABS 1200 LC	:	Cable Ducts
SABS 1200 LD	:	Sewers
SABS 1200 LE	:	Stormwater Drainage
SABS 1200 M	:	Roads (General)
SABS 1200 ME	:	Subbase
SABS 1200 MF	:	Base
SABS 1200 MK	:	Kerbing and Channeling
SABS 1200 MM	:	Ancillary Roadworks
SABS 1200 MJ	:	Segmented Paving

- 1. These notes to be read in conjunction with the drawings and project specifications.
- 2. All structural drawings to be read in conjunction with the relevant architectural, civil, mechanical & electrical engineers' drawings, the specifications and the tender documentation. Any errors, omissions & discrepancies to be brought to the attention of the engineer immediately.
- 3. Where conflicting specifications between the drawings & bill of quantities occur, the drawing specifications will take preference over the specifications in the bill of quantities. The specifications on the drawings will also take preference over specifications in this document.
- 4. It is the contractor's responsibility to ensure that all material shall comply and all workmanship shall be executed in strict accordance with the details and specifications shown in the drawings, the latest revisions of SANS 10400, SANS 1200, the National Building Regulations (NBR) and the latest editions if the relevant SANS codes of practice and standard methods, irrespective whether the Engineer has inspected the works on site or not. Where a SABS code has been replaced by a SANS code it is deemed that the latest version of the relevant code is applicable.
- 5. The contractor shall check all project dimensions on site beforehand. All dimensions are also to be checked against the architect's drawings. Any discrepancies shall immediately be reported to the engineer immediately. No work shall commence nor any material ordered until the Engineer is notified accordingly.
- 6. All existing dimensions and levels are to be checked on site and correlated with the Engineer's and the Architect's drawings by the contractor. All bench mark levels to be correlated with each other for correctness. Any discrepancies or variations from the drawings shall be reported to the engineer immediately. No work shall commence nor any material ordered until the Engineer is notified accordingly.
- 7. No scaling of dimensions is permitted on these drawings. Only written dimensions which, unless noted otherwise (u.n.o.), are given in millimeters, may be deemed to be correct. If any dimension seems doubtful, the Engineer shall be consulted.
- 8. Where new construction tie into existing structures, the Contractor shall cross check and confirm all critical dimensions and levels related to existing structures, before any construction or manufacturing commences.

- 9. An isolation joint must be provided between all new and existing structures, unless noted otherwise (u.n.o.) on drawings. Stability requirements of elements over joints must be met.
- 10. All waterproofing to be according to architect's details and specifications unless noted otherwise (u.n.o.) on drawings.
- 11. The most recent version of the SABS/SANS specifications mentioned in the notes, on the drawings and in the project specifications shall be available on site at all times.
- 12. All instructions from the engineer shall be written in the triplicate site instruction book provided by the Contractor.
- 13. Products different to those specified may be used but only with the engineer's prior written approval.
- 14. The contractor shall ensure that waterproofing materials are not damaged during backfilling operations and fixing of steel. Any repair work for the contractor's account.
- 15. The contractor is responsible to control storm water and dewatering on the site to prevent damage to the structure, banks, excavations, or any other works for the duration of the contract period.
- 16. These designs and/or drawings are not sold, and are subject to recall. Reproduction or copying rights are reserved solely to BVi Consulting Engineers under copyright law. These drawings have been delivered and received on the following express conditions:
 - a) they are not to be used in any way which may be construed as being against the interests and/or benefits of BVi Consulting Engineers;
 - b) and all copies shall be returned to BVi Consulting Engineers immediately on demand;
 - c) all information disclosed by these drawings shall be deemed to be confidential and treated as such.
- 17. The "Engineer" means the director of BVi Consulting Engineers or duly authorized personnel appointed by BVi Consulting Engineers to supervise and take charge of the contract.
- 18. This document is not a legal document and must therefore be construed in the language of the construction industry.

B. FOUNDATIONS AND EARTHWORKS

- 1. All earthworks shall be in accordance with the latest SANS 1200 D specifications.
- 2. All excavations must be inspected and approved by the Geotechnical Engineer or Engineer before placing of any concrete foundation, blinding, waterproofing or geofabric membrane.
- 3. All excavations sides to be either sloped or shored unless otherwise instructed by the Geotechnical Engineer or the Engineer.
- 4. Levels of bases as shown are preliminary and have to be confirmed by the Geotechnical Engineer or Engineer on site to obtain the specified bearing pressure. Where excavation levels have to be lowered, the top level of the base should be kept as shown and the blinding layer thickened. Size and reinforcing may be altered by the engineer if required.
- 5. No foundation shall be cast on either non-engineered fill or backfill material. Portions that are over-excavated beyond the depth required by the geotechnical engineer, to be filled with mass concrete (10MPa / 38mm) at contractor's expense.

- 6. A 50mm thick blinding layer of 15 MPa/19mm shall be cast under all reinforced foundations. No blinding layer needs to be cast for unreinforced brickwork and mass concrete foundations.
- 7. All foundations are placed symmetrically below columns and brickwork unless otherwise shown.
- 8. Retaining wall and column foundations shall be cast directly against the vertical faces of the excavation, unless noted otherwise (u.n.o.) on drawings.
- 9. No backfilling behind retaining walls is to be done before concrete has reached it 28day strength. Where applicable, backfilling shall be done simultaneously on both sides of walls to minimize the relative height difference in soil levels.
- 10. Manual compaction of soil is to take place within 500mm of walls.

C. BRICKWORK & BLOCKWORK:

- 1. All brickwork / blockwork shown on engineer's drawings are load bearing u.n.o.
- 2. All loadbearing, hollow block work to be filled with grade 15 MPa/19mm mass concrete.
- 3. All setting out of brickwork / blockwork to be done from architect's drawings.
- 4. Refer to the architect's drawings for general layout of brickwork or blockwork and control joints in brickwork or blockwork.
- 5. Masonry units shall comply with the following specifications:
 - SANS 227: burnt clay masonry units
 - SANS 285: calcium silicate masonry units
 - SANS 1215:concrete masonry blocks
- 6. Brickwork and blockwork shall be built according to SANS 10164 and SANS 10400.
- 7. All brickwork, blockwork, anchors, wall ties and straps shall be in accordance with the latest SANS 10400 and SANS 10164 specifications.
- 8. The minimum crushing strength of all loadbearing brickwork/blockwork shall be 14MPa u.n.o.
- 9. The minimum crushing strength of all non-loadbearing brickwork/blockwork shall be 7MPa u.n.o.
- 10. The minimum crushing strength of mortar shall be as for Class II mortar in accordance with SANS 10164 Table 1 unless noted (u.n.o.) otherwise on drawings.
- 11. The contractor shall confirm the type of load-bearing bricks planned to use and get approval from the Engineer in writing prior to ordering.
- 12. The use thereof and type of maxi type brickwork; including data sheets specifying the crushing strength, shall be submitted to the engineer for approval prior to any building work being carried out.
- 13. Brickforce:
- 13.1. All brickforce shall be galvanized.
- 13.2. Load bearing brickwork shall be reinforced with an approved brickforce every second layer and all non-loadbearing brickwork every fourth layer, u.n.o. on drawings.
- 13.3. Load bearing blockwork shall be reinforced with an approved brickforce every layer and all non-loadbearing blockwork every second layer, u.n.o. on drawings.
- 13.4. In addition, continuous brickforce is required in every layer for the first four layers above and below the top of foundations & slabs, as well as windows and over door

openings, extending at least 1m beyond both sides of the opening. Minimum laps to be 300mm. Outside wire of brickforce to be continuous at corners.

- 14. All brick anchors, wall ties and straps shall be galvanized.
- 15. Where brickwork / blockwork and concrete join, V-joints are to be made through the total thickness of the plasterwork.
- 16. Non-load bearing brickwork / blockwork may not be built closer than 10mm from the soffits and sides of beams and slabs (unless otherwise shown) and only after all props have been removed. The joint shall be filled with "Jointex", or similar approved, and sealed on both sides with 2-part polysulphide. Any specific waterproofing requirements to architect's details.
- 17. Loadbearing brickwork over slabs is to be completed before the non-loadbearing brickwork under slabs.
- 18. Place 2 layers of 3-ply Malthoid between slab soffits and load bearing brickwork.
- 19. Refer to architect's drawings for positions of expansion joints in brickwork / blockwork.
- 20. Where joints are indicated in slabs and beams, corresponding joints shall also be constructed in brick/block walls.
- 21. All brick/blockwork shall be fixed to concrete & steel columns by means of hoop iron to line up with brickforce layer.
- 22. Provide 10mm Isolation joint around all concrete columns, steel columns and against brick and concrete walls. After concrete has set, Jointex to be raked out 10mm deep and sealed with an approved sealant (refer standard details.
- 23. In cavity walls, wall ties shall join the leaves uniformly spaced and shall be embedded in masonry joints at right angles to the leaves as the work progresses.
- 24. The number of wall ties per m2 of walling shall be:

• 75mm > Cavity: 3.7	ties/m ²
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- 75mm < Cavity < 100mm: 4.5 ties/m²
- 100mm < Cavity < 150mm: 5,0 ties/m²
- 25. Additional ties shall be provided at openings, discontinuities (e.g. control joints) spaced at intervals not exceeding 300mm vertically, or, where deemed necessary or as shown on the drawings such as at external angles.
- 26. Butterfly galvanized ties of 3,15mm diameter shall be used u.n.o.
- 27. For high-lift grouted walls, ties complying with the requirements of SANS 10164 Part 2 Annex A (14) shall be spaced at intervals not exceeding 900mm horizontally and not exceeding 300mm vertically, with each layer staggered by 450mm.
- 28. Ensure that each tie is embedded to a depth of at least 50mm in the mortar joint of each leaf.
- 29. For cavity widths not exceeding 75mm. Ensure that the wall ties used comply with the relevant requirements of SANS 28 subject to the provision that ties of the single wire type shall not be used.
- 30. For cavity widths exceeding 75mm but not exceeding 150mm. Ensure that wall ties used are of the vertical twist type (butterfly), or any similar type having at least the equivalent strength and stiffness.
- 31. Cavity openings shall be left open by omitting brick on the external side until all masonry work was completed. Cavities to be cleaned out properly prior to replacing the omitted brick and the slots to be kept un-grouted.
- 32. Clay bricks to be wetted before being used.

- 33. Concrete bricks and blocks to be kept dry before being used.
- 34. All chases shall be vertical and shall not be greater than 25mm deep by 40mm wide. A maximum of 750mm long horizontal chase will be accepted. No diagonal chases will be accepted.
- 35. For curved brick/block work construction, refer to the drawings for reinforcing details.
- 36. All clay brick for general building work below damp-proof course or under damp conditions or below ground level; plastered of un-plastered, shall be 14MPa NFX (Non-Facing Extra) bricks.

D. CONCRETE:

- 1. All concrete work shall be carried out strictly in accordance with SANS 1200 G (Structural).
- 2. All drawings to be read in conjunction with the relevant architectural, concrete drawings as well as the Bill of Quantities and any discrepancy to be brought to the attention of the engineer immediately.
- 3. No concrete shall be poured until the excavation, blinding formwork and/or reinforcement etc. has been inspected and approved in writing by the Engineer. Engineer to be given a minimum of 48-hours' notice of such an inspection.
- 4. All casting procedures, construction methods and positions of construction joints shall be submitted to the engineer prior to the commencement of the project.
- 5. Minimum concrete strength at 28 days shall be as listed below or as indicated on drawings or schedules.

Blinding	-	15 MPa / 19mm
Mass	-	10 MPa / 38 mm
Foundations	-	25 MPa / 26mm
Ground beams	-	30 MPa / 19mm
Columns	-	40 MPa / 19mm
Walls	-	30 MPa / 19mm
Cavity wall infill	-	20 MPa / 19mm
Beams	-	30 MPa / 19mm
Slabs (suspended)	-	30 MPa / 19mm
Surface beds	-	35 MPa / 19mm
External Hard stand	-	30 MPa / 38mm
Stairs	-	30 MPa / 19mm

- 6. Aggregate used for concrete shall comply with SANS 1083. Slag aggregate shall not be used unless approved in writing by the Engineer.
- 7. Curing of concrete shall be carried out strictly in accordance with SANS 1200 G clause 5.5.8. The Contractor to provide a method statement, to be approved by engineer, for the curing procedures of the various elements concerned but all surfaces to be kept continuously damp for at least 7 days after casting. Concrete slabs to be covered with moist sand or covered with plastic membrane during this period. Concrete columns to be wrapped in a plastic membrane during this period.
- 8. Stripping times of shuttering and propping shall be in accordance with SANS 1200 G clauses 5.2.5 and table 2 as reproduced in the table below. No loading shall commence or props removed before the concrete has reached 28-day strength.

	Type of cement used								
Type of structural member or	Portlan cement and PC	and t (PC) C 15 Rapid-hardening PC* and rapid hardening PC 15				Portland blast-furnace cement			
IOITIWOIK				١	Neathe	er			
	Hot or normal	Cool	Cold	Hot or normal	Cool	Cold	Hot or normal	Cool	Cold
 Beam sides, walls, and unloaded columns 	0.75	+	1.5	0.5	+	1	2	+	4
 b) Slabs with props left underneath 	4	+	7	2	+	4	6	+	10
 c) Beam soffits with props left underneath, and ribs of a fibbed-floor construction 	7	+	12	3	+	5	10	+	17
d) Slab props incl. cantilevers	10	+	17	5	+	9	10	+	17
e) Beam props incl. cantilevers	14	+	21	7	+	12	14	+	21

* Shorter periods may be used for sections of thickness 300mm or more

+ In cool weather stripping times shall be determined by interpolation between the periods specified for normal and cold weather

Cold weather: Weather conditions in which the ambient temperature is 5°C or less. Cool weather: Weather conditions in which the ambient temperature is higher than 5°C but less than 15°C.

Normal weather: Weather conditions in which the ambient temperature is higher than 15°C but not higher than 32°C.

Hot weather: Weather conditions in which the ambient temperature is higher than 32°C.

- 9. All suspended slabs and beams to be back-propped for two (2) completed levels below the propped level of the relevant beam or slab.
- 10. Propping underneath slabs and beams shall be completely removed before brickwork is built. All bricks required for brick walls on a specific slab panel should be stacked evenly onto that specific slab panel before walls are being built.
- 11. The contractor must co-ordinate all services drawings for details and positions of openings and sleeves required for stormwater, sewerage, drainage, electrical, mechanical and other services. Discrepancies to be brought to the attention of engineer and other relevant parties.
- 12. The contractor must co-ordinate concrete drawings with the architect's drawings, for details and positions of rain water pipes in concrete and other architectural cast-in items. Any discrepancy to be reported to the Engineer immediately.
- 13. The contractor must obtain permission from the engineer before any openings or services, which are not indicated on the drawings, may be introduced through any structural element or close to any column.
- 14. All pipes (conduiting, water piping, etc.) passing through expansion joints must be provided with an approved flexible joint.
- 15. All cast-in items to be hot-dipped galvanized, clean and free of oil, dirt or any other material which may impair the bond with concrete. Tolerance for placing according to SANS 1200 GB clause 6.2.

- 16. All stormwater down pipes cast into concrete to be minimum class 6 high pressure uPvC pipes.
- 17. The live loads for which the structures have been designed for are as follows:

Office area	live	300	kg/m²
	brickwork	2300	kg/m ³
	screed	2.3	kg/m ² /mm thickness
	special floor finishes	3.0	kg/m ² /mm thickness
Roof	live	30	kg/m²
	services	45	kg/m ²
Balconies	live	300	kg/m ²
	screed	2.3	kg/m ² /mm thickness
	special floor finishes	3.0	kg/m ² /mm thickness

- 18. Slagment is to be used in concrete mix only if approved in writing by the Engineer.
- 19. Concrete cube crushing tests per 50m³ (minimum of one set per day's casting) shall made as below and to SANS 5861 and tested by an approved, accredited laboratory:
 - a) No off cubes shall be crushed at 7-day strength
 - b) No off cubes shall be crushed at 28-day strength
- 20. The type, size and fixing method of spacers used shall be discussed in advance with and approved in writing by the Engineer. Spacer blocks made of concrete shall have the strength of at least equal to the strength of the element cast.
- 21. Downstand and upstand beam dimensions are given as a x b where:
 - a = total depth of beam including slab thickness
 - b = width of beam

100mm kickers for columns and walls have been allowed for in the reinforcing lengths. They shall be cast with the same strength as the concrete elements below them and thoroughly compacted and cured.

- 22. All exposed concrete work to be off shutter finish u.n.o.
- 23. Concrete finishes are to be as per Engineer's drawings with 20x20mm chamfers to all visible edges u.n.o.
- 24. Concrete poured in excess of three meters high will not be accepted without prior written approval of the Engineer.
- 25. All grouts and epoxies to be used strictly in accordance with the manufacturer's specification.
- 26. Concrete tolerance to be degree of accuracy No. II as specified in SANS 1200G as reproduced in table below.

Α.	Reinforcement			
		Perm	issible dev	/iation
1	Spacing between two adjacent bars	± 25	± 20	± 15
2	Longitudinal location of bends and ends of bars	± 40	± 30	± 20
3	Cover to reinforcement (see (e) below)	-0+20	-0+20	-0+10
В.	Formwork: Formwork shall be so constructed as to ensure th finished work will be as specified, subject to the relevant: per in (c) or (d) below, as applicable.	at the pos missible	sition of t deviation	he given

C.	Foundations: Mass and reinforced concrete			
1	Position on plan of any edge of surface measured from the nearest grid line or agreed centre line	± 50	± 35	± 20
2	Linear dimension on plan cast against excavation sides	± 60	± 40	± 20
3	Linear dimension on plan cast against formwork	± 30	± 20	± 10
4	Level of underside of concrete	-40+20	-30+15	-20+10
5	Surface level (i.e. top of foundation) (excluding floor slabs)	-30+15	-20+10	-10+5
D.	Elements or components above foundations (Administrative a Service Buildings)	nd		_
1	Position on plan of any edge or surface measured from the nearest grid line or agreed centre line	± 25	± 15	±5
2	Linear (other than cross section) dimensions	± 30	± 20	± 10
3	Cross section dimensions	-10+20	-5+15	±5
4	Level (deviation from designed level with reference to the nearest transferred datum (TD) of the upper or lower surface, as may be specified, of any slab or other element or component)	-20+10	-15+5	-10+0
5	Verticality, per meter of height Subject to a maximum of	5 70	5 50	2 30
6	Out of squareness of a corner or an opening or an element such as a column (see 6.1.2 c) for short side of length i) Up to and including 0.5m ii) Over 0.5m, up to and including 2m iii) Over 2m up to and including 4m	±10 ±20 ±25	±5 ±15 ±20	±3 ±10 ±15
7	Exposed concrete surface: i) Flatness of plane surface ii) Abrupt changes in a continuous surface	10 10	5 5	3 2
8	Exposed concrete surface to be plastered: i) Flatness of plane surface ii) Abrupt changes in a continuous surface	15 10	10 5	*
D1.	Elements and Components above foundations (factory floors))		
	FM3 Floor Finish			
E.	Cover to reinforcement			
	No deviation from the minimum cover of concrete over reinforcement specified in 5.1.3 (a) will be permitted.			
F.	Location of holding down bolts			
1	The centre line of a holding down bolt from its designated location in plan	*	+3	*
2	The top of the bolt from its designated elevation	*	-3+5	*
G.	Constituents in concrete mix (including water)	%	%	%
	PD of quantities from approved or designated or prescribed mix, as applicable.	±5	±5	±5

Tolerances not stated and those for bow, camber, and twist, and for slipform concrete and precast concrete will be staged in the project specification where applicable.

- 27. FAIR FACED CONCRETE:
- 27.1 Designation

Fair-faced concrete will be indicated as such with the code FF-Sxx-Fx, where:

- 27.1.1 FF Fair-faced finish
- 27.1.2 Sxx Structure class, see below for further details
- 27.1.3 F<u>x</u> Color Class, see below for further details
- 27.2 Formwork requirements:
 - 27.2.1 All formwork to have non-porous linings. Non-porous linings are deemed to be any of the following.
 - 27.2.1.1 Film coated or sealed plywood
 - 27.2.1.2 Coated boards
 - 27.2.1.3 Steel linings
 - 27.2.1.4 Plastic linings
 - 27.2.2 Joints in the formwork are to be sealed and rendered smooth.
 - 27.2.3 All formwork to be water tight to prevent grout loss.
 - 27.2.4 The formation and arrangement of the formwork on all visible areas (e.g. direction of the formwork boards, joints joint sealing, tie positions, formwork openings and blockouts) are to be shown systematically. The drawings are to be submitted to the engineer and architect for comment and/or approval in good time.
 - 27.2.5 All fair-faced formwork is to be provided to 300mm below ground level.
 - 27.2.6 Ties on concrete surfaces remaining visible are to be arranged to a regular grid pattern. Their number is to be restricted by suitable design of the formwork where possible.
 - 27.2.7 Tie holes are to be carefully plugged with fine concrete of a fitting color, cleanly inserted, or with deeply bonded plugs. The proposed type is to be agreed with the architect.
 - 27.2.8 Ties in cornices and mouldings are not permitted, unless specified otherwise.
 - 27.2.9 A form without longitudinal joints is to be used for cornices and mouldings.
 - 27.2.10 Board formwork:
 - 27.10.1 Prepared boards are to be at least 22mm thick.
 - 27.10.2 Board joints are to be staggered.
 - 27.10.3 Joints to be either (1) tongued and grooved, or (2) wedgeshaped rebated.

27.3 Panel formwork:

- 27.3.1 The joints of panel formwork must be adjusted in their grid pattern to the shape of the building and also cut to the slope where necessary.
- 27.3.2 Supplements through board strips or wedges are not permitted on visible surfaces.

- 27.3.3 Only stiff panels of the same type may be used as formwork panels.
- 27.3.4 Only thin panels of the same type may be used on stiff base formwork.

27.4 Release agents:

- 27.4.1 Only proven release agents that leave no spots on the concrete may be used.
- 27.4.2 All agents to be used strictly as specified by the relevant manufacturer.
- 27.4.3 Timber formwork is to be treated with release agent in such good time that it has penetrated into the timber when the reinforcement is fixed. Reinforcement and/or pre-stressing steel may not be soiled by the release agents.
- 27.4.4 New formwork not coated with plastic is to be treated with cement slurry before the first use and to be cleaned and sprayed / painted with release agent at least twice.
- 27.4.5 Concrete requirements:
 - 27.4.5.1 Only self compacting concrete (SCC) is to be used.
 - 27.4.5.2 Refer to the relevant drawings for the required minimum concrete strengths.
 - 27.4.5.3 All concrete mixes are to be designed by a specialist ready-mix supplier.
 - 27.4.5.4 Visible surface pores:
 - 27.4.5.6.1 The total area of open pores on the concrete surface measured within a test area of at least 500mm x 500mm, may amount to a maximum of 0.3 % of this area; pores below 1mm in diameter are not to be taken into account.
 - 27.4.5.6.2 The pores are to be determined on two test areas for each test.
 - 27.4.5.6.3 The test areas are to be decided by the architect and/or the engineer.
 - 27.4.5.6.4 At least one test is to be done for each representative pour.
 - 27.4.5.5 Concrete structure to be Class S2 (u.n.o. on drawings), where
 - 27.4.5.6.1 Concrete structure classes are:

Class S1

Smooth, plugged concrete surface

The joins between neighbouring formwork units must be tightly sealed, so that a maximum of 10mm wide nibs can occur on the surface of the otherwise smooth concrete, by means of the exit cement slurry and/or fine mortar.

Nibs caused by this are permitted.

Class S2

As Class S1, but joints are to be so tight between neighbouring units that practically no cement slurry and/or fine mortar can escape. Nibs are not permitted.

Class S1A

As S1, but using a specific type of formwork according to the information in the specification.

Class S2A

As Class S2, but using a specific type of formwork according to the information in the specification.

Class S3

Structured or plastically designed concrete surface according to the type demanded.

The joints are to be so tight between neighbouring units that practically no cement slurry and/or fine mortar can escape.

Any other special concrete surface finishes to architect's details & specification. Special finishes will be referred to as **Class S4**.

27.4.5.6 Concrete colour uniformity to be Class F1 (u.n.o on drawings), where

27.4.5.6.1 The concrete colour classes are:

Class F1

Discolouration over an area caused by: rust; different types and previous improper treatment of the form lining; improper subsequent treatment of the concrete; aggregates from different sources; as well as lines of discolouration (reinforcement marks) are not permitted.

Further demands on the uniformity are not made.

Class F2

In addition to the requirements of F1, discolourations that are to be attributed to cement of different types or origin, or to different aggregates are not permitted.

Unavoidable differences in the colour when maintaining these conditions and with careful concrete placement are permitted.

Special colouring / pigment requirements to be specified by the architect.

Special requirements will be referred to as Class F3.

27.5 Samples:

- 27.5.1 Representative sample panels of each required finish is to be identified on existing buildings in the region, or
- 27.5.2 If no suitable sample exists a sample panel is to be constructed on site. The panel should preferably form part of a normal concrete panel, i.e. not originally deemed fair-faced.
- 27.5.3 The distance of observation is to be agreed by all parties concerned, and documented.
- 27.5.4 Suitable digital photographic evidence of the sample panel is to be kept on record by the contractor.

- 27.6 Defective concrete & remedial works:
 - 27.6.1 Defective concrete to the engineer's immediate attention in writing.
 - 27.6.2 No remedial work may be done without written consent from the engineer.
 - 27.6.3 Visible honey combing will not be permitted.
 - 27.6.4 All concrete forming part of the pour containing visible honeycombing will be demolished and rebuilt at the contractor's expense.
 - 27.6.5 No protruding reinforcement will be permitted.
 - 27.6.6 All blows are to be filled using durarep FC (by abe Construction chemicals or similar approved), if deemed necessary by the architect and/or engineer.
- 28. Construction joints:
- 28.1. All horizontal and vertical construction joints shall be cleaned of all dirt and loose particles. All intersections of construction joints with concrete surfaces, which will be exposed to view, shall be made straight and level or plumb.
- 28.2. The surface of concrete to be prepared shall be between 6h and 12h old after completion of placing and shall be "blown off" using a high-pressure water jet until all dirt and laitance is removed, and particles of clean coarse aggregate are exposed sufficiently to produce a rough keyed surface. (The success of this method of preparation is dependent on selection of the correct time and equipment to suit the cement type and atmospheric conditions).
- 28.3. The prepared surfaces shall be saturated with fresh clean water for a period of 4 hours prior to the adjoining pour.
- 28.4. Prior to the placement of concrete, the surface condition shall be saturated, yet surface dry no ponding or standing of water.
- 29. Concrete surfaces
- 29.1 When a wood-floated / Mechanical Pan float finish is specified, the surface shall first be treated as follows:
 - 29.1.1 Immediately after placing and compaction, the concrete shall be levelled with true straight edged equipment working between forms or other guides set accurately to line and level.
 - 29.1.2 No mortar shall be added to depressions and proud aggregate shall be tamped level.
 - 29.1.3 After the concrete has hardened sufficiently, it shall be floated to a uniform surface, free from trowel marks with a wooden float.
 - 29.1.4 Within 2hrs of final set, curing of the concrete shall commence.
- 29.2 When a steel-floated finish is specified, the surface shall be treated as specified for a wood-floated finish above. In addition, the following is to be done:
 - 29.2.1 When the bleed water has disappeared and the concrete has hardened sufficiently to prevent the migration of laitance foam to the surface, the leveled surface shall be floated with a steel trowel.
 - 29.2.2 Firm uniform pressure shall be applied to provide a dense, smooth, uniform surface free from any irregularities.
- 29.3 When a power-floated finish is specified, the surface shall be treated as specified for a wood-floated finish above, in addition the following is to be done:
 - 29.3.1 The leveled concrete surface shall be power-floated to provide a dense surface.

- 29.3.2 After the bleed water has disappeared and the concrete has hardened sufficiently the float-blades shall be replaced with trowel-blades.
- 29.3.3 The Surface will be power-trowelled with a single pass to provide a dense, smooth, uniform surface free from irregularities.
- 29.4 When a power-trowelled finish is specified, the surface shall be treated as specified for power-floated finish above. In addition, the following is to be done:
 - 29.4.1 After fitting the trowelled-blades the surface shall be continually burnished to provide a dense, smooth, high quality polished surface free from all irregularities.

E. SURFACE BEDS:

- 1. Provide 10mm isolation joints (IJ) around all concrete columns, steel columns and against brick and concrete walls. After concrete has set, Jointex to be raked out 10mm deep and sealed with approved joint sealant refer to Standard Details.
- 2. Concrete class: Refer section D: Concrete to be 35/19 MPa to receive Micro Fibre at a rate of 600g 900g/m³.
- 3. Finishes: FM3 Finish with a Mechanical power pan floated finish followed by a mechanical grind to expose aggregate, in order to apply an impact and chemically resistant self- levelling, HACCP certified Polyurethane- urea cement screed min 4mm or as per the manufacturer's specification. u.n.o.
- 4. Damp proofing membrane to be installed under surface beds 250 Micron, u.n.o.
- 5. Saw-cut joints shall be done as soon as concrete is firm enough not to damage the edges, usually between 6 to 16 hours but not later than 48 hours. Joints to be repeated in finished surfaces in panels of 4m c/c.
- 6. Preparing and sealing of joint to be carried out by specialist.
- 7. Sealants: All sealants as per the drawings. The preparation, quantities used and application procedure to be in strict compliance with the manufacturers' recommendations and specifications.
- 8. Dowels: To be hot dip galvanized. Utmost care to be taken when dowels are placed, straight and true in position. Dowel ends at sliding end to be free of burrs.
- 9. Method statement for pouring of surface bed panels to be approved by the engineer.

F. REINFORCEMENT:

- 1. Reinforcement shall be manufactured and fixed to comply with the tolerances as specified in SANS 1200 G and/or the project specification.
- 2. Reinforcement tolerance to be degree of accuracy No. II as specified in SANS 1200 G (as reproduced in table in Section D: Concrete).
- 3. Bending of reinforcement shall be in accordance with SANS 282.
- 4. The contractor shall inspect and approve the fixed reinforcement with spacers and cover blocks, services and confirm that the shuttering is clean before the engineer is notified. All reinforcement shall be inspected and approved by the engineer before casting of concrete may commence. Engineer to be given a minimum of 48-hours' notice of such an inspection.
- 5. The Contractor is to maintain the reinforcing steel in position after placing and during concreting. If additional spacers and chairs are required, (other than those detailed) they are to be provided by the contractor at his expense.
- 6. Reinforcing must be thoroughly cleaned of all dirt, grease, bituminous material, scale and loose rust.

- 7. The lap lengths of reinforcing bars are to be as specified or a minimum of 40 bar diameters for mild steel and 50 bar diameters for high tensile deformed bars.
- 8. No heat treatment or cutting of steel without the written approval of the engineer shall be allowed.
- 9. Bend-out bars at construction joints shall be bent out with a suitable pipe so that no kink is formed in the bar.
- 10. Minimum concrete cover to reinforcing to be allowed for to be as follows (u.n.o.):

Foundations	-	75mm
Columns (under damp course)	-	30mm to stirrups
Columns (above damp course)	-	30mm to stirrups
Beams	-	30mm to stirrups
Slabs (internal)	-	30mm
Slabs and roof slabs (external)	-	30mm
Retaining walls (against soil)	-	40mm
Retaining walls (other faces)	-	40mm
Raft foundations	-	75mm

11. The following grouts may be used for dowel bars (or similar products prior approved by the Engineer) u.n.o. Grouts to be used strictly in accordance with the manufacturers' specifications:

Vertical dowels	-	Hilti HIT-HY 150 or Sika similar
	-	ABE Epidermix 395
	-	Sikadur 31
	-	Pro-Struct 618/632
Horizontal dowels	-	Hilti HIT-HY 150 or Sika similar
	-	ABE Epidermix 396
	-	Sikadur 31
	-	Pro-Struct 617
Vertical dowels upside	-	Sikadur 31
down		
	-	Pro-Struct 617

G. STRUCTURAL STEELWORK:

- 1. All structural steelwork shall be fabricated and erected in accordance with SANS 1200 H (Structural steelwork) and SANS 10162 (Structural use of Steel).
- 2. Steel surfaces of all steel shall be prepared to a preparation grade P3 (very thorough preparation) according to SANS 8501-3:2008 irrelevant of the type of corrosion protection specified.
- 3. All dimensions and levels shall be checked on site in order to confirm shop drawings. Any discrepancies shall be brought to the attention of the engineer.
- 4. All structural steel drawings to be read in conjunction with the relevant architectural, concrete drawings as well as the Tender Documents and any discrepancy to be brought to the attention of the engineer.
- 5. A complete set of shop drawings shall be submitted to the engineer for approval before fabrication commences. Shop drawings will only be checked for compliance with design intent. No dimensional checks, checks on cleats, bolts, welds and gussets will be done. Only sizes of structural members, connections and splices will

be checked also with regard to design intent. Final dimensions and the correct fitting of members shall remain the responsibility of the contractor.

- 6. Structural steelwork shall be completed by the manufacturer (i.e. cleaned and coated with the specified primer in the workshop or hot dip galvanized with/without a duplex) before transportation to site.
- 7. All hot rolled, plates, sections and CHS (Circular Hollow Sections) structural steelwork shall be grade S355JR or grade 350WA. Cold-formed steel sections used for girts and purlins, shall have a minimum yield stress of 240 MPa. Tensile strength testing results must be provided for each batch of steel.
- 8. No steel of grade Q345 shall be accepted.
- 9. All pre-hot dip galvanized sheeting shall be minimum grade Z275 to SANS 4998:2007 Continuous hot dip zinc coated carbon steel sheet or structural quality.
- 10. A certificate from the steel manufacturer in which the grade of the structural steel is verified shall be handed to the engineer for approval prior to any manufacturing commences.
- 11. The contractor is responsible for stabilizing the structure and maintaining it in the correct position during erection. Where temporary bracing or propping is required, the contractor shall be responsible for the design, erection, maintenance and removal (where necessary) of such supports. If splices in trusses are required for transport restrictions, proposals of this shall be submitted to the engineer at an early stage for written approval.
- 12. The contractor shall, at the commencement of the project, acquaint himself with the availability and delivery time of the products and steel profiles specified on the drawings so that such material can be ordered ahead of time.
- 13. Welds:
 - 13.1 Welding shall be done in accordance and comply with regulations set out in AWS D1.1 American Welding Society: Structural Welding Code Steel.
 - 13.2 The welding symbols used are in accordance with AWS D1.1 as reproduced in Table 6.32 & 6.33 of the Structural Steel Tables published by the SAISC (SA Institute of Steel Construction).
 - 13.3 Welds shall conform to SANS 10167 and AWS D1.1 specification.
 - 13.4 Where no weld sizes are shown, the minimum weld size (throat thickness) shall be that of the thickest plate of the connecting plates/elements or 6mm minimum. Unless otherwise shown the intention of connections are to transfer the full force that can be developed in connecting members through the connection.
 - 13.5 When using SMAW (Shielded metal arc welding), all electrodes shall be E7018. For any other welding process to be used, the contractor shall apply, in writing, for the approval from the engineer for the electrodes to be used.
 - 13.6 All butt welds shall develop the full strength of the elements joined.
 - 13.7 All splices shall develop the full strength of the elements joined.
 - 13.8 Welding shall only be performed by coded welders and certificates shall be supplied to the engineer.
 - 13.9 Suitably qualified and experienced welders using proper equipment in a good condition shall do all site welding.

- 13.10 The contractor shall design all welds and, where necessary, gussets of sufficient strength shall be provided to obtain the required weld length to ensure the full strength of the connection.
- 13.11 In joints with groove welds, the edges of the elements to be connected shall be cut ("prepared") to allow for the weld to penetrate into the groove and the elements.

Table 3.3 of the AWS D1.1 as reproduced in Table 6.25 of the Structural Steel Tables published by the SAISC, provides prequalified edge preparations for SMAW welding.

- 14. Quality control on welding shall be ensured as follows:
 - 14.1 Quality control of welding will be done by qualified external consultants; u.n.o.; and the cost associated therewith shall be included in the tendered amount for the project.
 - 14.2 The following methods shall be used during quality control:
 - 12.2.1 Visual Inspection: All welds shall be inspected using visual aid and individual weld passes shall be inspected for signs of arc strikes, spatter, porosity, slag inclusion, undercut, crater cross section and any welding cracks. Bead size, shape and sequences will also be observed, as well as possible signs that may point to lack of base metal fusion and incomplete penetration.
 - 12.2.2 100% of all butt welds shall be tested using ultrasonic non-destructive tests. The requirement; under the approval of the engineer and recommendation from the consultant; may be reduced when confidence in the quality provided by the welder(s) has been developed.
 - 12.2.3 10% of all fillet welds shall be tested using magnetic particle nondestructive tests. The requirement; under the approval of the engineer and recommendation from the consultant; may be reduced to 5% of all fillet welds when confidence in the quality provided by the welder(s) has been developed.
 - 12.2.4 100% of all welds on crane or crawl beams shall be tested using ultrasonic non-destructive tests.
- 13. All structural bolts shall be hot-dipped-galvanized grade 8.8 u.n.o.
- 14. Where HSFG bolts are specified, the following shall apply:
 - 14.1 All contact surfaces at HSFG bolt splices shall be free from oil, grease, rust, scale, paint or any other impurities at the time of bolting.
 - 14.2 The tightening of high strength friction-grip bolts shall be done according to the turnof-the-nut method as specified in clause 5.3.1(a) of SANS 10094

or

where HSFG bolts have been specified, the contractor shall use "coronet"type load indicating washers in conjunction with such bolts.

- 15. Fabricator to ensure that centers of gravity of members intersect at node points, except where eccentricities are specified on engineer's drawings. Where slotted holes for bolts occur, the nut shall be hand tightened and a lock-nut be provided (u.n.o.).
- 16. Paint and hot dip galvanizing specifications to be adhered to as specified by Section H and K of this document.

- 17. Allow for all bolts to be hot dip galvanized and be painted 3 days in advance of needing them for erection. Refer to hot dip galvanizing and paint specification of bolts in Section H and K of this document.
- 18. Where applicable, cementitious non-shrink grout shall be provided under base plates before any primary loads are applied to the structure. Hot-dip galvanized, laminated finger shaped packing to be provided under base plates. The following grouts, u.n.o., may be used (or similar products approved by the Engineer). Grouts to be used strictly in accordance with the manufacturers' specifications:

General application:

- SikaGrout 212
- Pro-Struct 618/22 Epoxy mortar & tile grouting compound

Dynamic load application (resin, self-leveling)

- Sikadur-42 ZA
- Pro-Struct 501 Five Star epoxy Grout
- Pro-Struct 638 Pourable Epoxy Grout

H. CORROSION PROTECTION: HOT DIP GALVANIZING:

H1: General

- 1. The hot dip galvanized coatings shall conform in every respect to the standards contained in the South African National Standards, SANS 121 (ISO 1461) Hot dip galvanizing coatings on fabricated iron and steel articles and SANS 32 (EN 10240) Internal and/or external protective coatings for steel tubes, Hot Dip Galvanizing specification for products other than continuously galvanized sheet and wire as well as the SANS1200HC or latest edition of the relevant specification.
- 2. All pre-hot dip galvanized sheeting shall be minimum grade Z275 to SANS 4998:2007 Continuous hot dip zinc coated carbon steel sheet or structural quality and all wire to SANS 675:2009: Specification for coated fencing wire.
- 3. The galvanizer shall be an accredited member of the Hot Dip Galvanizers Association Southern Africa (HDGASA) and shall issue a certificate of conformance to ISO 10474 or if registered as a South African Bureau of Standards (SABS) Mark Scheme Galvanizer, a SABS certificate of conformance. (A list of approved members is available on the Association web site, <u>www.hdgasa.org.za</u>.
- 4. All structural steel shall be minimum grade of S355JR (350WA) and shall be certified with a Silicon content between 0.15% and 0.23% and Phosphorus content <0.02%. The contractor to supply the certificate as proof of the above requirements prior to the manufacturing of any structures.
- 5. For this project all steelworks shall not be hot dip galvanized U.N.O. on drawings.
- 6. It is the contractor's responsibility to ensure that all steel to be hot dip galvanized shall be designed and fabricated in accordance with ISO 14713: 2011 Part 1: General principles of Hot dip Galvanizing and ISO 14713: 2011 Part 2: Design for hot dip galvanizing.
- 7. The hot dip galvanizer shall provide a quality management plan detailing inspection procedures, which will include inspection of steel prior to galvanizing, inline inspection during surface preparation and galvanizing and final inspection prior to dispatch. Where fabrication defects are identified prior to galvanizing, e.g. burrs, poor welding or excessive weld spatter, such components shall be placed on hold and a non-conformance report submitted to the fabricator.

- 8. Double end dipping shall be permitted provided that it will not result in distortion of the product and an acceptable surface finish of the coating is achieved.
- 9. Bolts and nuts of gr 4.8 and gr 8.8 shall be hot dip galvanized to SANS 121 (ISO 1461) and high tensile fasteners from grade 10.9 and above, shall be hot dip galvanized in conformance to ISO 10684. The hot dip galvanizer shall issue a certificate of compliance with this requirement. All fasteners shall be supplied by a SABS approved manufacturer.
- 10. Zinc electroplated (electro-galvanizing) bolts and nuts are unacceptable.
- 11. All welds to be full length seal weld.
- 12. Any coating repairs undertaken on the galvanizers premises or later on site, e.g. touch up of small-uncoated surfaces (black spots), shall be strictly limited both in dimension and quantity as stipulated in the relevant SANS 121 (ISO 1461) specification.
 - 12.1. Uncoated areas and defects shall be repaired according to the site repair instructions below of this. The repaired surface shall not be accepted or dispatched until the repaired surface coating has cured.
 - 12.2. Where coating defects exceed the specified permissible limit, which qualifies for touch-up repairs after galvanizing, affected items shall be rejected and regalvanized or, if applicable, a repair method may be approved in writing by the engineer.
 - 12.3. Final inspection: Following satisfactory completion of the final inspection and provided prior arrangements have been made as per clause 1, the galvanizers' inspectorate shall issue a certificate stating that the applied coating conforms to the requirements of SANS 121 (ISO 1461) or SANS 32 (EN 10240) as applicable.
- 13. <u>Quality surveillance:</u>
 - 13.1. For the purpose of carrying out quality surveillance, the engineer or its QA / QC Consultant shall be granted access to any part of the galvanizer's premises relevant to the work being carried out, at any reasonable time. The galvanizer shall provide, at his own cost, any equipment or labour necessary to gain access to surfaces which are coated, to be coated or are in the process of being coated.
 - 13.2. The Engineer may remove any reasonable samples of materials to be used in the coating application. Rejection of the sample will place a hold on the use of material of the same batch number and may lead to rejection of all that batch of material and the reworking of any components that have already been coated with rejected material.
 - 13.3. The Engineer may carry out reasonable destructive tests to ascertain compliance with the specification. The contractor, to the satisfaction of The Engineer and at no additional cost, shall repair areas thus damaged.
 - 13.4. The cost of quality surveillance will be borne by the Engineer, except where surveillance results in rejection of the work or when notice by the contractor results in a fruitless trip, in which case the contractor shall carry the cost of surveillance.
- 14. <u>Handling and storage:</u>
 - 14.1. Handling: All coated components shall be handled using soft slings or specially positioned lifting points provided for such handling.

- 14.2. Loading and off-loading: All hot dip galvanized and/or duplex coated components to be transported shall be loaded on suitable dunnage and lashed to avoid chafing and steel to steel contact. Plastic "Spaghetti strips" must be used to protect smaller items of steel and angles (5mm spaghetti plastic coil). Coated steel shall be secured on the truck preferably with nylon securing straps. Where chains must be used, suitable rubber insertion pads must be placed between the coated steel and chains at all contact points.
- 14.3. Cover: Coated items shall be stored under cover where possible. Items not stored under cover shall be stored in such a manner as to avoid retention of water and allow good circulation. Items shall be stored on timber or on trestles fitted with timber to raise the product to at least 100mm off the ground.
- 14.4. Stacking: Items shall be stacked using timber packaging or other approved means to avoid coating-to-coating contact. Sufficient bearing area of packing shall be used to avoid damage to coatings.
- 15. <u>Site repairs/defects/uncoated areas:</u>
 - 15.1. Any coating repairs undertaken on the galvanizers premises or later on site, e.g. touch up of small-uncoated surfaces (black spots), shall be strictly limited both in dimension and quantity as stipulated in the relevant SANS 121 (ISO 1461) specification.
 - 15.2. Any uncoated areas, modifications, transportation and erection damage, shall be repaired by abrading with 80 grit sand paper and painting with Zincfix, GalvPatch or equal and approved twin pack zinc rich epoxy paint, achieving an overlap of 5mm onto the surrounding sound zinc coating and to a minimum thickness of 100µm. When a duplex coating system has been specified the DFT of the repair coating shall be equal to that of the surrounding hot dip galvanized coating in terms of SANS 121 (ISO 1461). Steel shall not be accepted until the repaired surface has cured. Furthermore, in priority and as approved by the Engineer:
 - 15.2.1. Black steel utilized in modifications with hot dip galvanized steel shall be dispatched for hot dip galvanizing. Any areas that are to be subsequently welded should either be masked prior to hot dip galvanizing or suitably cleaned of zinc in order to prevent possible weld metal embrittlement or zinc residue inclusions, prior to welding on site.
 - 15.2.2. Alternatively, black steel utilized in modification with galvanized steel shall be abrasive blast cleaned to Standard SA 2½ to obtain a surface profile of 40 to 70 microns. Once the surface profile has been inspected and certified, apply zinc thermal sprayed coating to a minimum thickness of 120μm.
 - 15.2.3. Alternatively, black steel utilized in modifications with hot dip galvanized steel shall be abrasive blast cleaned to Standard SA 2½ per International Standard ISO 8501-1 1988 to obtain a surface profile of 40 to 70 microns. Once the surface preparation has been inspected and certified, apply one coat of Zincfix, GalvPatch or equal and approved twin pack zinc rich epoxy paint, achieving a overlap of 5mm onto existing sound hot dip galvanized coating where black steel is welded to hot dip galvanized components. Dry film thickness shall be 100μm. When a duplex coating system has been specified the DFT of the repair coating shall be equal to that of the surrounding hot dip galvanized coating.

15.3. Where site modifications by means of welding of a hot dip galvanized surface is required, all traces of the hot dip galvanized coating shall be ground-off prior to welding. Removal of the zinc coating from surfaces to be welded is necessary in order to prevent possible weld metal embrittlement or zinc residue inclusions. Repair to be done to all welds as per above instructions.

I. CORROSION PROTECTION: PAINT

I1: General

- 1. The preparation of the substrate and all paint work shall conform in every respect to the standards contained in the South African National Standards, the SANS1200HC or latest edition of the relevant specification.
- 2. All work to comply with the project specifications.
- 3. Carefully inspect each coat for misses and carry out dry film thickness (DFT) testing. No single DFT reading may be less than the minimum or greater than the maximum. The mean of the readings shall equal or exceed the nominal.
- 4. All critical areas, edges, welds, etc. to be given extra stripe coats. All coats to be in contrasting shades.
- 5. Surface preparation shall be done by sweep blasting to Sa2½ according to ISO 8501-1 for this project. Chemical cleaning shall only be done on written approval of the Engineer. (Sa2½ Very thorough blast-cleaning = When viewed without magnification, the surface shall be free from visible oil, grease, and dirt, and from mill scale, rust, paint coatings and foreign matter. Any remaining traces of contamination shall show only as slight stains in the form of spots ir stripes. The term "foreign matter" may include water soluble salts and welding residues. These contaminants cannot always be completely removed from the surface by dry-blast cleaning, hand tools and power tool cleaning or flame cleaning: wet blasting may be necessary)
- 6. *Warning*: Sweep blasting shall be undertaken strictly in accordance with the procedures as specified in the code, with particular reference to the selection of the appropriate abrasive, blasting nozzle pressure and angle of deflection of the blasting media.
- 7. A hold or witness point should be established after sweep blasting has taken place before painting is commenced where the contractor to give the Engineer 48 hours' notice for inspection.
- 8. Recoating intervals must be taken into account with transportation and erection times on site and the paint coats done at the place of manufacturing.

SPEC. SHEET NO	AREA	SCOPE OF WORK	PRODUCT & PRODUCT CODE	WATER/SOLVENT BASED TEXTURE/FINISH	MAINT. CYCLE (years)
1	INLAND	Mild, structural and industrial steel	Plascon Wall & All	Water based	5
2	COASTAL	Hot dip galvanized mild, structural and industrial steel	Plascon Wall & All	Water based	5
3	INLAND	Mild, structural and industrial steel going into the ground	Plascon Plascotuff Epoxy Coal Tar	Solvent based	5
4	INLAND & COASTAL	Insides of hot dip galvanized steel gutters	Plascon Plascotuff	Solvent based	5

INDEX / SCOPE OF PAINT SPECIFICATION

SPEC. SHEET NO	AREA	SCOPE OF WORK	PRODUCT & PRODUCT CODE	WATER/SOLVENT BASED TEXTURE/FINISH	MAINT. CYCLE (years)
		plus hot dip galvanized structural steel going into the ground	Epoxy Coal Tar		
5	INLAND &COASTAL: WATERPROOFING	Plastered parapet walls, around hot dip galvanized box gutters & tops of steel roof overlaps	Plascon Plascotuff Epoxy Coal Tar (EPD 100)	Solvent based	-
6	INLAND &COASTAL: WELDS ON GALVANIZED STEEL	Painting welds on hot dip galvanized steel.	GalvPatch or ZinkFix Plascon Wall & All	Zink rich epoxy Water based	6
7	INLAND/COASTAL: ALUMINIUM	Painting Aluminium	Plascon Wall & All	Water based	6
8	INLAND: BOLTS	Painting mild steel bolts	Plascon Wall & All	Water based	6
9	COASTAL: BOLTS	Painting hot dip galvanized bolts	Plascon Wall & All	Water based	6

SPECIFICATION SHEET NO: 1

INLAND: PAINTING MILD, STRUCTURAL AND INDUSTRIAL STEEL

(6-year life expectancy before first maintenance)

NEW WORK/REPAINT:	NEW WORK - INLAND			
SUBSTRATE:	Mild Steel			
PAINT FINISH:	Plascon Wall & All			
	PRODUCT CODE: WAA			
	(Smooth finish – water based, premium pure acrylic - sheen)			
COLOUR:	As per Architect's specification	on		
ENVIRONMENT:	As per ISO 12944 part 2:	Maintenance Cycle (Years)		
	C1 - Inland	6		

6

C3 - Industrial

Coating System	Application Method	Theoretical Spreading Rate / m ²	DFT / WFT µm Max –Min	Reducer/ Cleaner	Overcoating time, @ 25°C	Technical Data Sheet No:
1 st Coat: Plascon Epiwash Strontium Chromate Primer (AW255)	B or S	@ 25 μm Theo – 10 Prac – 5	WFT 109152 DFT 25 - 35	GP Epoxy Reducer (EPT 1)	4	E-17
2nd Coat: Plascon Wall & All (WAA)	B, R or S	@ 30 μm Theo – 13 Prac – 7	WFT 63 - 88 DFT 25 - 35	Water	2	L-19
3rd Coat: Plascon Wall & All (WAA)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 63 - 88 DFT 25 - 35	Water	2	L-19
			Minimum DI	FT 75 μm		

SPECIFICATION SHEET NO 1:

INLAND: PAINTING MILD, STRUCTURAL AND INDUSTRIAL STEEL SURFACE PREPARATION

Rust Free

Surfaces must be clean, dry and rust free. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1), scrubbing with bristle brush or broom, or using Scotch Brite pads. Rinse thoroughly with tap water while brushing or hydroblast to remove all traces of Plascon Aquasolv Degreaser (GR1) to achieve a water break-free surface. Dry surface rapidly to prevent flash rust formation. Cleaned surface must be painted within 4 hours.

Rusted

After degreasing sand off rust with coarse emery paper or wire brush to ISO 8501 - 01: 1988 - St3to attain a bright metal finish. Remove dust.

Millscale & Rust

Alternatively, remove millscale and rust by abrasive blast cleaning to ISO 8501 - 01: 1988 - Sa2½. Remove dust by vacuum cleaning. Prime within 4 hours.

APPLICATION FOR PRIMER: <u>PLEASE NOTE POWER MIXING IS ESSENTIAL BEFORE</u> <u>USE FOR PRODUCT CONSISTENCY</u>

Step 1: Primer

Apply one coat of Plascon Epiwash Strontium Chromate Primer (AW255) to achieve a continuous film. Allow 4 hours to dry.

APPLICATION FOR PRIMER AND FINAL COATS

Step 2: Final Coats

Apply two full coats of Plascon Wall & All (WAA) to achieve complete obliteration, allowing 2 hours drying between coats.

TABLE REFERENCES:

- Technical Data Sheet (TDS): User must always ensure that the latest issue is used.
- Power mixing using a variable speed mixer is preferable.
- All two component materials need to be mixed (Component A & B) as per data sheet or as per instructions on the packaging
- Pot life varies as per temperature gradient.
- Over coating intervals are critical for good inter coat adhesion

SPECIFICATION SHEET NO. 4:

INLAND AND COASTAL: PAINTING INSIDES OF HOT DIP GALVANISED BOX GUTTERS PLUS HOT DIP GALVANIZED STEEL GOING INTO THE GROUND

(5 year life expectancy before first maintenance)

NEW WORK/REPAINT:	NEW WORK – EXTERIOR – INLAND & MARINE AND COASTAL AREAS WITH HIGH SALINITY		
SUBSTRATE:	Hot dippes galvanizing (preferably non-passivated)		
PAINT FINISH:	Topcoats: Plascotuff Epoxy Coal Tar		
	PRODUCT CODE: EPD 100		
COLOUR:	Black		
ENVIRONMENT:	As per ISO 12944:	Maintenance Cycle (Years)	

C5 - Coastal/Marine

5

Coating System	Application Method	Theoretical Spreading Rate / m ²	DFT / WFT µm Max –Min	Reducer/ Cleaner	Overcoating time, @ 25°C	Technical Data Sheet No:
Stripe Coat & Full Primer Coat: Plascon Plascotuff 3000 (PEX 3000/PEH3	Spray Recommend	@150µm Theo – 5.3 Prac -	WFT125- 250 DFT 100- 200	Epoxy Reducer (EPT 2)	Min.16 hours Max 4 weeks	PC-4
1^{s⊤} Coat Plascotuff Epoxy Coal Tar (EPD100 black)	Apply first layer at 85µm dft.	@80µm Theo – 7.4 Prac-	WFT118- 152 DFT 70-90	G.P. Epoxy Reducer (EPT1)	3 -4 hrs.	PC-22
1^{s⊤} Coat Plascotuff Epoxy Coal Tar (EPD100 black)	Apply first layer at 85µm dft.	@80µm Theo – 7.4 Prac-	WFT118- 152 DFT 70-90	G.P. Epoxy Reducer (EPT1)	3 -4 hrs.	PC-22
			Minimum DFT 240 µm			

SPECIFICATION SHEET NO. 4:

INLAND AND COASTAL: PAINTING INSIDES OF HOT DIP GALVANISED BOX GUTTERS PLUS HOT DIP GALVANIZED STEEL GOING INTO THE GROUND

SURFACE PREPARATION: Also refer Section H: Corrosion protections: Hot dip Galvanizing

Step 1: Degreasing

Apply Plascon Galvanized Iron Cleaner (GIC1) to all bare galvanized areas by brush, broom or spray. Allow to react for 1 minute. Rinse off with tap water using "Scotch Brite" pads to remove all surface contaminants. Check if surface is water-break free. If not, repeat the cleaning process. Allow to dry completely.

OR PREFEREABLY

Sweep Blasting Hot Dipped Galvanizing.

Abrasive sweep blast at reduced pressure and using "Garnet Mica" as a blast media to achieve a blast profile of $20 - 30 \ \mu m$ (micrometres). Vacuum clean all debris from the substrate

Step 2: Soluble Salts / Chlorides Test

By means of the Wattman Paper, Weber Reilly or similar test method ensure that the Soluble Salts/ Chloride content to comply with SANS 5770.

APPLICATION FOR PRIMER: please note power mixing is essential before use for product consistency

Step 1 Primer

NOTE: Stripe coat all welds and edges prior to applying a full primer coat.

Premix both components of the Plascotuff 3000 (PEX 3004 Grey/PEH 3) using a power mixer for 3 minutes and then apply (preferably) by airless spray, conventional spray, roller or brush (small areas only) to a minimum DFT of 100 – 200 μ m or WFT of 125 – 250 μ m @ a theoretical spread rate of 5.3 m² / It.

Allow a minimum of 16 hours curing @ 25°C and a maximum of 4 weeks prior to over coating.

Dependent on the mode of application, multiple coats may be required to achieve specified DFT and or full obliteration.

APPLICATION FOR TOP COATS please note power mixing is essential before use for product consistency

Step 2: Apply top coat in multi -coat layers:

Mix base and hardener of Plascotuff Epoxy Coal Tar (EPD100) individually using a power mixer then add together the Base and Hardener and mix until homogeneous. The mixture must be allowed to stand for at least 20 minutes before use. Mix only sufficient material for the area to be coated within the next 3-4hrs. Material becomes unusable after about 8 hrs. at 25°C.

Note: Brush and roller application: The material once mixed and having stood for 20 minutes is ready for application.

Thinning is not recommended.

Spray: For application thin as required using Plascon G.P. Epoxy Reducer (EPT1).

Apply by brush or roller, in multicoated layers, Plascotuff Epoxy Coat Tar (EPD 100) to achieve a dry film thickness of 170um.

NOTE: Using a brush application, more than one coat may be required to achieve the specified dry film thickness (dft).

NOTE: EPOXY COAL TAR: do not overcoat with itself once fully cured

TABLE REFERENCES:

- Technical Data Sheet (TDS): User must always ensure that the latest issue is used.
- Power mixing using a variable speed mixer is preferable.
- All two component materials need to be mixed (Component A & B) as per data sheet or as per instructions on the packaging
- Pot life varies as per temperature gradient.
- Over coating intervals are critical for good inter coat adhesion

SPECIFICATION SHEET NO: 5

INLAND AND COASTAL: WATERPROOFING OF PAINTED PARAPET WALLS, AROUND HOT DIP GALVANIZED BOX GUTTES & STEEL ROOF OVERLAPS

NEW WORK/REPAINT: NEW WORK – EXTERIOR

SUBSTRATE: Metals – Hot dip galvanized Steel, Mild Steel, Chromadek Masonry – Plastered Parapet Walls

WATERPROOFING PRODUCT: Professional Waterproofing Compound

PRODUCT CODE: PWC 520

or Plascon Multiseal

PRODUCT CODE: WSS 2

COLOUR: As per Architect's specification

SURFACE PREPARATION: Also refer Section H: Corrosion protections: Hot dip Galvanizing

- **Step 1:** Ensure that the surfaces are clean, dry and sound.
- **Step 2:** Ensure that the substrate has been pre-primed with the appropriate primer as specified and allowed to dry.
- Step 3: APPLICATION OF WATERPROOFING COMPOUND

Masonry parapet walls and surrounds of box gutters to be sealed with Professional Waterproofing Compound (PWC520) or Plascon Multiseal (WSS2) including tops of Chromadek canopy overlaps.

Three coats must be applied at a wet film thickness of $650\mu m$ per coat to achieve the recommended dry film thickness of $1000\mu m$ (1mm thick). Allow 4 hours drying at $23^{\circ}C$ between coats. (1,7lt/m² for all three coats at $1000\mu m$ dry film thickness).

TABLE REFERENCES:

- Technical Data Sheet (TDS): User must always ensure that latest issue is used.
- B = Brush (ready for use), R = Roller (synthetic, min. 10mm pile) (ready for use), S = Airless spray (ready for use).
- Theoretical spreading rate quoted is for smooth non-porous substrates and does not include allowance for surface profile, porosity, wastage and uneven film application. Suitable allowance should be made according to type of work, method and skill of applicator. Practical spreading rate quoted is an average guide only - actual must be determined by user - see Preamble for formulation how to calculate.
- Overcoating times are at 23°C and 75% relative humidity. Longer times must be allowed under cooler and moist conditions. DO NOT paint during inclement weather and when temperature is below 10°C.
- Fading and chalking will occur to a greater or lesser degree depending on pigmentation and generic binder type.
- NB: Life expectancy may vary, depending on environmental conditions and stresses, within the macro/micro climate of the project.

SPECIFICATION SHEET NO: 9

COASTAL: PAINTING HOT DIP GALVANIZED BOLTS

(6 year life expectancy before first maintenance)

NEW WORK/REPAINT:	NEW WORK - COASTAL			
SUBSTRATE:	Hot dip galvanized			
PAINT FINISH:Plascon	Wall & All			
	(Smooth finish – water based, premium pure acrylic - sheen			
PRODUCT CODE:	WAA			
COLOUR:	As per Architect's specification			
ENVIRONMENT:	As per ISO 12944 part 2: Maintenance Cycle (Yea			
	C5 M	Coastal / Marine 6		

Coating System	Application Method	Theoretical Spreading Rate / m ²	DFT / WFT µm Max –Min	Reducer/ Cleaner	Overcoating time, @ 25°C	Technical Data Sheet No:
1st Coat: Plascotuff 3000 (PEX 3004 Grey / PEH 3 Hardener) Mixing Ratio: 4:1 by volume	Airless Spray, Conventional Pressure Pot Spray or Brush	6.4 m² / lit @ 125 μm	WFT:125 - 250 DFT:100 - 200	Epoxy Reducer (EPT 2)	Min 16hrs Max 4 weeks	PC - 4
2nd Coat: Plascon Wall & All (WAA)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 63 - 88 DFT 25 - 35	Water	2	L-19
3rd Coat: Plascon Wall & All (WAA)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 63 - 88 DFT 25 - 35	Water	2	L-19
			Minimum	DFT 150 μn	ı	

SPECIFICATION SHEET NO. 9:

COASTAL: PAINTING HOT DIP GALVANIZED BOLTS

SURFACE PREPARATION Also refer Section H: Corrosion protections: Hot dip Galvanizing

Step 1: Degreasing

Apply Plascon Galvanized Iron Cleaner (GIC1) to all bare galvanized areas by brush, broom or spray. Allow to react for 1 minute. Rinse off with tap water using "Scotch Brite" pads to remove all surface contaminants. Check if surface is water-break free. If not, repeat the cleaning process. Allow to dry completely.

APPLICATION FOR PRIMER please note power mixing is essential before use for product consistency

Step 1: Primer

Premix both components of the Plascotuff 3000 (PEX 3004 Grey/PEH 3) using a power mixer for 3 minutes and then apply (preferably) by airless spray, conventional spray, roller or brush (small areas only) to a minimum DFT of 100 – 200 μ m or WFT of 125 – 250 μ m @ a theoretical spread rate of 5.3 m² / It.

Allow a minimum of 16 hours curing @ 25°C and a maximum of 4 weeks prior to over coating.

Dependent on the mode of application, multiple coats may be required to achieve specified DFT and or full obliteration.

APPLICATION OF FINAL COATS

Step 2: Final Coats

Apply two full coats of Plascon Wall & All (WAA) to achieve complete obliteration, allowing 2 hours drying between coats.

TABLE REFERENCES:

- Technical Data Sheet (TDS): User must always ensure that the latest issue is used.
- Power mixing using a variable speed mixer is preferable.
- All two component materials need to be mixed (Component A & B) as per data sheet or as per instructions on the packaging
- Pot life varies as per temperature gradient.
- Over coating intervals are critical for good inter coat adhesion

PI – Building Specification

STANDARD SPECIFICATION

- SS 5 BUILDING WORKS
- 1 ABBREVIATIONS
- 2 MASONRY
- 3 WATERPROOFING
- 4 ROOF COVERINGS, ETC
- 5 CARPENTRY AND JOINERY
- 6 TONGUED AND GROOVED BOARDING
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- 21 RAINWATER PIPES

- 22 PIPES LAID IN GROUND
- 23 SUMPS, CATCHPITS, INSPECTION CHAMBERS
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- 25 INSTALLATION OF SANITARY FITTINGS
- 26 FIRE EXTINGUISHERS
- 27 TESTS
- 28 GLAZING
- 29 PUTTY
- 30 PAINTWORK

1. ABBREVIATIONS

The following abbreviations shall apply:

AASHTO: American Association of State Highway and Transportation Officials

- AISI: American Institute of Steel Industries
- BS: British Standard
- CKS: Co-ordinating Specifications issued by the Central Co-ordinating Committee under the auspices of the South African Bureau of Standards
- CSIR: Council for Scientific and Industrial Research
- SABS: South African Bureau of Standards and the number following shall refer to the relevant specification or code of practice as the case may be.

2. MASONRY

2.1 MATERIALS

Materials and workmanship shall comply with the following specifications and requirements:

requirements.		
Material	SABS	TYPE
Specifications		
Burnt clay masonry units	227	
Calcium silicate masonry units	285	
Lime for use in building	523	Hydrated
bedding		-
mortar lime		
Sand for plaster and mortar	1090	
Concrete masonry units	1215	
Prestressed concrete lintels	1504	
Burnt clay paving units	1575	
Metal ties for cavity walls	28	
Masonry cement	ENV 413-1	MC 12,5
CKS		
Specification		
Concrete flooring tiles	208	
SABS		
Code of Practice		
Concrete masonry construction	0145	
The structural use of masonry	0164	
Masonry walling	0249	

2.2 SANDS

Sand shall be washed where necessary and screened through a 2,4 mm mesh sieve.

2.3 BURNT CLAY BRICKS

Burnt clay bricks shall be of nominal size 222 x 106 x 73 mm unless otherwise stated. Common bricks shall be General Purpose bricks.

Extra hard burnt bricks shall be General Purpose (Special) bricks.

Facing bricks shall exhibit a liability to efflorescence not in excess of "Slight" and water absorption when tested in conformity with the requirements of SABS 227 shall not exceed 14%.

Particular care shall be taken to preserve arises and faces of facing and paving bricks during transit and handling.

2.4 CONCRETE BRICKS

Concrete bricks shall have a minimum compressive strength of 7 MPa.

2.5 QUARRY TILES, ETC

Quarry, cement and similar tiles shall be of approved manufacture, even in shape and size, free from cracks, twits, blemishes and uniform in colour.

2.6 WIRE TIES

Wire ties shall be of galvanized steel of the single wire type for solid walls and either the "Butterfly' or Modified PWD type for hollow walls. Ties shall be of sufficient length to allow not less 75 mm of each end to be built into brickwork or embedded in concrete.

2.7 BRICKWORK REINFORCEMENT

Brickwork reinforcement shall be manufactured from hard drawn steel wire conforming to BS 785 and shall consist of two 2,8 mm diameter main wires with 2,5 mm diameter cross wires at 300 mm centers welded at intersections.

Brickwork reinforcement shall be lapped not less than 300 mm at end joints and for a length equal to the width of the widest reinforcement at intersections.

2.8 MORTAR

Mortar shall comply with the following table:

1	2	3	4
Mortar Class	Masonry Cement kg	Lime liter	Sand (measured loose and damp) liter max
I	50	0 — 10	130
I	50	0 — 40	200
	50	0 — 80	300

Mortar shall be Class II unless otherwise specified.

Mortar plasticizers may only be used with the approval of the Principal Agent.

The materials shall be mixed dry until of uniform colour, water added and the mixture turned over until the ingredients are thoroughly incorporated.

Mortar shall be produced in such quantities as can be used before commencement of set and no mortar that has set shall be used.

2.9 COMPO MORTAR

Compo mortar shall be Class III mortar in accordance with clause F.8 but with a lime content of 80 liter.

The lime and sand shall be mixed dry until of uniform colour, water added and the mixture turned over until the ingredients are thoroughly incorporated.

Immediately before use, the cement shall be mixed in and the requisite amount of water added.

Compo mortar shall be produced in such quantities as can be used before commencement of set and no compo mortar that has set shall be used.

2.10 BRICKWORK

Wherever practicable, brickwork shall be built in stretcher bond. Unless legitimately required to form bond, no false headers shall be used. English bond shall only be used where specifically so indicated or where stretcher bond is not practicable.

Brickwork, unless otherwise described, shall be built in Class II mortar.

Bricks shall be laid on a solid bed of mortar and all joints shall be grouted up solid.

The brickwork shall be carried up in a uniform manner, no part being raised more than 1,2 m above adjoining work.

Where necessary, bricks shall be wetted before being laid and the course of bricks last laid shall be well wetted before laying a fresh course upon it.

Walls in thicknesses of more than one skin shall have at least five wire ties per square metre. Linings to concrete, unless otherwise specified, shall be tied to the concrete with at least five wire ties per square metre.

Hollow walls, unless otherwise specified, shall be built of two half brick skins with cavity between, tied together with at least five wire ties per square metre.

The cavities shall be kept free of all rubbish, mortar droppings and projecting mortar. Mortar joints to brickwork shall be not less than 8 mm or more than 12 mm thick.

2.11 BLOCKWORK

Unless otherwise described, all blockwork shall be built in stretcher bond. Whole blocks shall be used except where bats or closers are required to form bond.

Blockwork, unless otherwise described, shall be built in Class II mortar.

Solid blocks shall be laid on a solid bed of mortar and all joints shall be grouted up solid.

Hollow blocks shall be laid in shell bedding, i.e. only the inner and outer shells of the blocks shall be covered with mortar. Vertical joints shall be similarly formed.

The blockwork shall be carried up in a uniform manner, no part being raised more than 1,2 m above adjoining work.

Clay blocks shall be wetted before being laid and the course of blocks last laid shall be well wetted before laying a fresh course upon it.

2.12 CENTRES AND TURNING PIECES

Centres and turning pieces to soffits of arches and lintels shall be left in position for not less than 14 days.

2.13 FACE BRICKWORK

Face brickwork shall be built in stretcher bond, unless otherwise specified, to a true and fair face. Perpends shall be vertically aligned.

Facing bricks shall be mixed to ensure that the proper blending of bricks within the colour range of each facing brick being used is obtained.
2.14 PAVINGS, SILLS, COPINGS, ETC

Clay bricks and tiles shall be wetted before fixing and shall be solidly bedded and jointed in Class I mortar and pointed with slightly keyed joints.

3. WATERPROOFING

3.1 MATERIALS

Materials and workmanship shall comply with the following specifications and requirements:

Material	SABS Specifications	Type and/or Additional Requirements
Bituminous damp-proof courses	24B	Type FV
Polyolefin sheet in damp-proof courses to walls, sills, etc.	952	Type B
Ditto, to floors and basements	952	Type C
Mastic asphalt for roofing	297	71
Mastic asphalt for damp-proof	298	
courses and tanking		
Bituminous roofing felt	92	Type 60
Polyolefin sheet for the	952	Type A
waterproofing of flat roofs		
Chloroprene rubber sheet (for	580	At least 2,5
waterproofing)		mm thick
and 1200 mm wide		
Sealing compounds with two-	110	Type 2
component polysulphide base		Gun Grade
Sealing compounds with two-	1077	
component polyurethane base		
SABS		
Code of Practice		
The waterproofing of buildings	021	
The installation of profiled roof and	0237	
side cladding		

3.2 WATERPROOFING TO ROOFS, BASEMENTS, ETC

Waterproofing to roofs, basements, etc shall be carried out by workmen who are experienced in this type of work.

3.3 DAMP-PROOF COURSE TO WALLS

All joints in damp-proof course to walls shall be lapped a minimum of 150 mm except at junctions and corners where the lap shall equal the full thickness of the wall.

4. ROOF COVERINGS, ETC

4.1 MATERIALS

Materials and workmanship shall comply with the following specifications and requirements:

Material	SABS
Specifications	
Concrete roofing tiles	542
Clay roofing tiles	632
Softwood brandering and battens	653
Fibre-cement sheets: profiled and flat	685
Aluminium alloy and toughened	903
sheets	
Zinc coatings	934
Polyethylene sheeting for roof	952
underlay	
Metal roofing tiles	1022
Glass reinforced polyester laminated	1150
sheets (profiled or flat)	
Fasteners for roof and wall coverings	1273
in the form of sheeting	
Materials for thermal insulation of	1381
buildings	
BS Specification	
Sheet zinc	849
Sheet lead	1178
Sheet aluminium	1470
Sheet copper	2870
SABS	
Code of Practice	
Fixing of concrete interlocking roofing	062
tiles	

4.2 GALVANIZED STEEL PROFILED SHEETS, ETC

Galvanized steel profiled sheets, ridge and hip coverings, etc shall be coated with a minimum of 275 g zinc per m2 and shall be free of white rust.

4.3 GALVANIZED SHEET IRON

Galvanized sheet iron shall be rolled steel sheet coated on both sides with a minimum of 275 g of zinc per m2 and shall be free from white rust.

4.4 NAILING AND SCREWING

Where nailing and screwing is required:

galvanized iron nails and screws shall be used for galvanized sheet iron and sheet zinc copper or copper alloy nails and screws for sheet copper and sheet lead aluminium alloy or stainless steel nails and screws for sheet aluminium.

4.5 LAPS

Sheet metal flashings shall have 100 mm laps and linings to valleys, secret gutters, etc 225 mm laps.

4.6 GENERAL

Rates for profiled sheet roofing and rolled edges, ridge and hip coverings, flashing pieces, etc of metal, fibre-cement, plastic, etc shall include fixing accessories.

5. CARPENTRY AND JOINERY

5.1 MATERIALS

Materials shall comply with the following specifications and requirements:

Material Specifications	SABS	Grade or Class
Softwood general structural timber	563	Stress grade 4
Softwood engineering timber	1245	As specified
Softwood studs for timber frames in buildings	1146	
Softwood brandering and battens 629	653 Flooring	
grade Heavy flooring boards		
Softwood joinery timber	1359	
Hardwood joinery timber	1099	Knotty grade
Hardwood strip flooring	281	As specified
Wooden ceiling and panelling boards	1039	As specified
Laminated timber (glulam)	1460	As specified
Gypsum plasterboard	266	
Wood fibreboard	540	As specified
Wood-wool panels (cement 637		·
bonded)		
Fibre-cement sheets: profiled and flat	685	As specified
Fibre-cement boards	803	As specified
Plywood and composite board	929	As specified
Particle board: highly moisture-	1300	·
Particle board: interior type	1301	
Decorative laminates	1405	High
pressure	1100	i ngi
Wooden doors (flush)	545	Class 4
Dry interior quality		
Materials for thermal insulation of	1381	
buildings		As specified
Mild steel nails	820	As specified
Metal screws for wood	1171	
Creosote	538	

Softwood shall bear the relevant SABS mark and shall be ordered in the sizes in which it will be used as no scantlings of marked timber will be allowed. Should SABS marked timber be unavailable, the Principal Agent's prior permission shall be obtained before using unmarked timber.

5.2 NOMENCLATURE OF IMPORTED TIMBERS

The names used for imported timbers are those given in Supplement No.1 to SABS 02 namely "Nomenclature of Standards Trade Names of Imported Commercial Timber used in South Africa".

5.3 HARDWOODS

All hardwoods shall be specially selected, well seasoned, free from sapwood and well kiln dried. Meranti shall be Red or Medium Brown Meranti, even in grain and colour, selected from "Standard and Better" quality from Malaysia.

5.4 INFECTION AND PRETREATMENT OF TIMBER

All timber used on the site, whether for permanent or temporary work, shall be free or borer or other beetle and termite infection. If the work under this contract fails within an area designated under Government Notice R2577 of 1978-12-29, permanent softwood fixed in the building shall be treated against borer, etc in accordance with Government Notice R451 of 1969-03-28 using Class B or C preservative. The type of preservative used shall be appropriate to the use of the timber. Any prescribed treatment shall comply with SABS 05.

When treated timbers are cut, the cut surfaces shall be effectively brushed with at least two coats of preservative solution.

5.5 CONSTRUCTION IN GENERAL

Where applicable, construction methods shall comply with SABS 082. Boarded floors shall be laid in accordance with SABS 043. Roof trusses shall be manufactured, erected and braced in accordance with SABS 0243.

5.6 STRUCTURAL TIMBER

Timbers generally shall be in single lengths and joining of timbers will only be permitted when the required length is unobtainable. Only the absolute minimum of joints to obtain a particular length will be permitted and such joints are to be evenly spaced along the length of the timber.

Finger-jointing of structural timber will be permitted, in which case it shall be manufactured in accordance with SABS 096.

5.7 PLATE NAILED TIMBER ROOF TRUSSES

Plate nailed timber roof 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 roof 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 this specification.

The design shall include for all live loads, wind loads and for 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 Principal Agent for approval prior to fabrication.

Unless specific erection instructions are given, 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. Roof trusses and bracing shall include design and preparation of shop drawings.

6. TONGUED AND GROOVED BOARDING

Tongued and grooved boards for floors, paneling, etc shall be in long varying lengths with joints tightly cramped up and secret nailed. Flooring boarding shall be flush jointed with staggered heading joints and machine sanded after fixing.

7. JOINERY

Skirtings, cornices, rails, etc shall be in single lengths wherever practicable and shall have splayed heading joints where necessary. Skirtings shall be trenched at back. All horns of door frames shall be checked and splayed back where frames are fixed projecting or flush with surface and built in. Heads of screws in exposed faces of hardwood joinery shall be sunk and match pelleted.

Joinery shall have arris rounded angles and shall be blocked and planted on.

8. VENEERS

All face veneers shall be of kiln dried timber, free from knots, cracks, patchwork, sapwood and other defects, selected and glued, dried and machine-sanded to a smooth finish. All veneers shall be applied under hydraulic pressure.

9. DOORS

Flush doors shall have solid timber edge strips with concealed edges. Where doors are to be finished with a transparent finish, the veneer and the edge strips shall be timber of the same species and as far as possible of matching colour. Unless otherwise described all flush doors shall be of interior quality, but where exterior quality doors are specified the glue used shall be of the WBP type.

Framed and ledged batten doors described as filled in with V-jointed boarding shall be filled in flush on one side with tongued and grooved vertical boarding. V-jointed on one or both sides and of the thickness stated. The boarding shall be in narrow widths, closely cramped up, rebated or tongued on outer edges and housed to grooves in stiles and rails and twice countersunk brass screwed at each intersection with ledges and braces and the inner edges of the abutting stiles and rails shall be chamfered to form a V-joint at junction with the board.

Unless otherwise described double doors shall have rebated meeting stiles.

10. FIXING

All nails and screws shall be of the size, length and type appropriate to their respective uses. All screws for hardwood joinery work shall be brass. Items described as "plugged" shall be screwed to fibre, plastic or metal plugs at not exceeding 600 mm centers. Where items are described as "bolted", the bolts have been given separately.

11. ADHESIVES

Adhesives shall comply with BS 1204 and 4071 where applicable. Adhesives used in the manufacture of external joinery exposed to excessive moisture (e.g. kitchen and laboratory worktops) shall be of the WBP type.

12. CEILINGS, PARTITIONS AND ACCESS FLOORING

12.1 MATERIALS

Materials shall comply with the following specifications and requirements:

Material	SABS	Grade or
	Specifications	Class
Gypsum plasterboard	266	
Fibreboard	540	As specified
Gypsum cove cornice	622	
Wood-wool panels (cement- 637		
bonded)		
Softwood brandering and battens	653	
Fibre-cement boards	803	As specified
Plywood and composite board	929	As specified
Wooden ceiling and paneling	1039	As specified
boards		
Softwood studs for timber frames in	1146	
buildings		
Materials for thermal insulation of	1381	
buldings		
Expanded polystyrene thermal	1508	
insulation boards		
Raised access flooring	1549	

12.2 TONGUED AND GROOVED BOARDING

Tongued and grooved boarding for ceilings shall be in long varying lengths, V-jointed one side and with joints tightly cramped up and secret nailed.

12.3 BRANDERING

Brandering for ceilings and eaves soffit coverings shall be symmetrically arranged with necessary smaller panels. Main branders shall be at right angles to roof timbers, with cross branders cut in between and branders shall be fixed with galvanized wire nails driven in on skew alternately in opposite directions.

12.4 CEILING BOARDS

Ceiling boards shall be in long lengths symmetrically arranged with necessary smaller panels, closely butted and secured at 150 mm centers to brandering with galvanized or cadmium-plated clout-headed nails.

12.5 GYPSUM SKIM PLASTER

Gypsum skim plaster shall be pure gypsum plaster finished with a steel trowel.

12.6 EXPOSED TEE-SYSTEM SUSPENDED CEILINGS

The ceiling panels shall be as described in the items and the panels shall be stiffened at back as recommended by the manufacturer to prevent bowing or sagging.

The exposed surfaces of all ceiling panels and supporting members shall be uniform in colour and free from surface blemishes.

The suspension grid system shall be an approved patent suspension system comprising 38 mm galvanized steel main and cross tee bearers spaced in both directions at centers to suit sizes of ceiling panels used, with the cross bearers fitted between and notched to form flush fit with main bearers. The exposed flange of the tees shall be 25 mm wide, covered with a rolled aluminium cap painted a low sheen satin white. Cornices, etc shall be as described in the item and shall be finished to match the exposed tees.

The main tee bearers shall have holes for cross tees at 300 mm centers and holes for hangers at 50 mm centers. In addition, main and cross tee bearers shall be holed as necessary for and provided with timber wedges or steel clips where recommended by the manufacturer to prevent ceiling panels from lifting.

The web of the exposed cross tee bearers shall extend to form a positive interlock with the main tee bearers and the lower flange shall be cut back to provide a joint free appearance.

All hangers shall be galvanized and shall be at centers to meet the requirements of the specification with one end fixed to the suspension grid main bearers and the other end fitted with suitable galvanized fixing cleat securely fixed to the structure. Fixing points shall be agreed to by the Principal Agent before any power shot fixings are made. Hangers shall not be suspended from airconditioning ducts. Where recommended by the manufacturer, hangers shall be of the rigid type.

Component parts and fixings shall be non-corrosive and able to withstand atmospheric pollution. Surfaces of aluminium which are in contact with other materials when fixed, particularly metals, shall be suitably insulated to prevent electrolytic corrosion.

Ceilings shall comprise hangers, suspension grid system and ceiling panels, shall be constructed in a manner suitable for carrying airconditioning diffusers and light fittings in the positions required, shall be set out to layouts approved by the Principal Agent and shall have the standard suspension system modified as necessary to work around any pipes or light fittings.

12.7 FLUSH PLASTERED SUSPENDED CEILINGS

Gypsum plasterboard panels of the specified thickness generally in 1 200 mm width and in long lengths shall be fixed grey side down with self-tapping screws to the suspension system with the joints between boards loosely butt jointed and covered with 50 mm wide strips of self-adhesive fibre tape.

The plasterboard panels shall be finished with gypsum skim plaster trowelled to a smooth polished surface to the thickness, etc recommended by the manufacturer.

The suspension system shall be an approved patent concealed suspension system consisting of galvanized mild steel bearers suspended on approved non-rusting metal hangers spaced generally at 1200 mm centers or to suit layout of airconditioning ducts and other services, etc above ceiling with one end bolted to the bearer and the other end fitted with a galvanized fixing cleat securely fixed to the structure as required.

Fixing points shall be agreed to by the Principal Agent before any power shot fixings are made. Hangers shall not be suspended from airconditioning ducting.

Ceilings shall comprise hangers, suspension system, ceiling panels and plaster finish, shall be constructed in a manner suitable for carrying airconditioning diffusers and light fittings in the positions required, shall be set out to layouts approved by the Principal Agent and shall have the standard suspension system modified as necessary to work around any pipes or light fittings.

13. FLOOR COVERINGS, WALL LININGS, ETC.

13.1 MATERIALS

Materials and workmanship shall comply with the following specifications and requirements:

Material	SABS	Grade
Specifications		
Semi-flexible vinyl floor tiles	581	
Resin modified vinyl floor tiles	586	
(thermoplastic)		
Flexible vinyl flooring	786	
Hardwood block flooring	281	Clear
grade		
Wood mosaic flooring	978	
Textile floor coverings (pile	1375	
construction)		
Textile floor coverings (needle-	1415	
punched construction)		
Carpet underlays	1419	
BS Specification		
Sheet linoleum (calendered types),	810	
cork, carpet and linoleum tiles		
Solid rubber flooring	1711	
Felt backed linoleum	1863	
SABS		
Code of Practice		
The laying of wood floors	043	
The installation of resilient	070	
thermoplastic and similar flexible		
floor covering materials		

The installation of textile floor coverings

0186

13.2 LAYING OF MATERIAL

Floor tiles shall be laid with continuous joints in both directions. Patterned floor coverings shall be matched at joints.

13.3 GENERAL

Floor coverings, wall linings, skirtings, nosings, etc shall include all preparatory work to screeded or plastered surfaces, etc, priming coats and adhesives. Floor coverings and wall linings shall be dressed around and into corners. Wood block and wood mosaic flooring shall be sanded with a sanding machine and sealed with a coat of approved penetrating sealer. Plastic handrails shall have welded and polished butt joints.

14 IRONMONGERY

14.1 MATERIALS

Material shall comply with the following specifications and requirements:

Material	SABS Specifications	Туре
Locks, latches and associated furniture for doors	4	
Kitchen cupboards of steel, composite board and timber	1385	
Single action overhead door closers	1510	
Padlocks CKS	1533	
Vitreous enameled chalkboards	Specification	

14.2 KEYS

Locks shall have the minimum possible number of interchangeable keys. Cylinder locks and locks described as "ensuite" shall be clearly marked with consecutive numbers and each key shall be punched with the corresponding number of the relative lock.

14.3 FIXING

Unless otherwise described, ironmongery is to be fixed to wood. Items described as "plugged" shall be screwed to fibre, plastic or metal plugs. Screws, bolts, etc for fixing of ironmongery shall be of matching metal and finish, excepts for aluminium ironmongery or ironmongery fixed to aluminium in which cases stainless steel screws may be used.

All necessary preparation of pressed steel door frames for the fixing of ironmongery to the frames has been included with the pressed steel door frames.

15. KITCHEN CUPBOARDS

Steel cupboards shall be finished with baked enamel. Tops and floor cupboards shall have laminated plastic covering.

Cupboards shall be fitted with all necessary hinges, handles, catches, etc. Cupboards shall be securely fixed with all necessary screws and fibre, plastic or metal plugs. Where cupboards are described as a "series", tops shall be continuous and cupboards shall be bolted or screwed together, including bolts, screws, holes, etc.

16. PLASTERING

16.1 MATERIALS

Materials and workmanship shall comply with the following specifications and requirements:

Material	SABS Specifications	Туре
Masonry cement	ENV	MC12,5
413-1 Lime for use in buildings	523	A2P
Sand for plaster and mortar	1090	

16.2 PREPARATORY WORK

Surfaces shall be clean and free of oil and thoroughly wetted directly before any plastering or other in situ finishes are commenced. Concrete surfaces shall be slushed with a mixture of one part cement and one part coarse sand or otherwise treated to form a proper key. Preparatory coats shall be thoroughly scored and roughened to form a proper key.

16.3 CONSTITUENTS OF MIXES

All constituents shall be mixed by volume.

16.4 FINISH

All coats of paving and plastering shall be executed in one operation without any blemishes.

16.5 SCREEDS

Screeds shall be composed of one part cement and four parts sand.

16.6 CEMENT RENDER

Cement render shall be composed of one part cement and three parts sand finished with a steel trowel to a smooth polished surface and cured for at least seven days after laying.

Cement render finish shall be divided into panels not exceeding 6 m2 with V-joints and deep trowel cuts.

16.7 GRANOLITHIC

Granolithic shall be composed of one part cement, one part fine sand, two parts coarse sand and one part granite or other approved stone aggregate that will pass through a 5 mm sieve, finished with a steel trowel to a smooth polished surface and cured for at least seven days after laying.

Coloured granolithic shall be carried out in two coats in one operation and shall be tinted to the required colour with approved colouring pigment mixed into the finishing coat. Under no circumstances is the pigment to be sprinkled on and toweled in after the granolithic is laid.

Granolithic shall be divided into panels not exceeding 6 m2 with V-joints and deep trowel cuts.

16.8 TERRAZZO

Terrazzo shall be applied in two coats. The undercoat shall be composed of one part cement and three parts sand and shall be finished with a wooden float. The finishing coat shall be composed of one part cement and two parts marble or stone aggregate of a colour and size to obtain the required colour and texture and shall be at least 12 mm thick, and applied before the undercoat has dried out. The finishing coat shall be compacted by tamping or rolling until superfluous water has been expelled, finished with a steel trowel and cured for at least seven days after laying. The finished surface shall show at least 80% of the aggregate.

Surfaces described as "polished" shall be polished by machine using various grades of abrasive and grouting with tinted cement as necessary between polishings.

Surfaces described as "brushed" shall be brushed with a steel wire brush on the day the terrazzo has been laid to expose the aggregate as required.

Where required, brass or other dividing strips shall be embedded in the undercoat to finish flush with the finished surface.

Sample blocks, each size 300 x 300 mm, as separately measured shall be prepared for approval by the Principal Agent and kept in an accessible place on the site until the completion of the contract.

16.9 SKIRTINGS

Skirtings shall not exceed 25 mm thick and shall have a fair edge with arris or rounded external angle at top edge or V-joint to finish flush with plaster and coved or square junction with floor finish.

16.10 THICKNESS OF PLASTER

All plaster, other than skim plaster, shall be not less than 10 mm and not more than 20 mm thick.

16.11 CEMENT PLASTER

Cement plaster shall be composed of one part cement and five parts sand.

16.12 COMPO PLASTER

Compo plaster shall be composed of one part cement, two parts lime and nine parts sand.

16.13 GYPSUM SKIM PLASTER

Gypsum skim plaster shall be pure gypsum plaster finished with a steel trowel.

16.14 TWO-COAT PLASTER WITH GYPSUM FINISH

Two coat plaster with gypsum finish shall comprise an undercoat composed of one part cement and five parts sand finished with a wooden float. The finishing coat shall be composed of one part cement and three parts stone aggregate that will pass through a 4 mm sieve. The finishing coat shall be flicked on with a machine before the undercoat has set to obtain an even texture.

16.15 FINE ROUGH-CAST PLASTER

Fine rough-cast plaster shall be as for rough-cast plaster but the finishing coat shall be composed of one part cement and three parts coarse sand.

16.16 GENERAL

Rates for plastering described as being on vertical surfaces of brickwork or blockwork shall include concrete columns, beams and lintels flush with the face of the wall.

17. TILING

17.1 MATERIALS

Materials and workmanship shall comply with the following specifications and requirements:

Material	SABS Specifications	Туре
Glazed ceramic wall tiles and fittings	22	
Glazed and unglazed ceramic wall and floor tiles, fittings and bedding	1449	
Masonry cement 413-1	ENV	MC 12,5
Sand for plaster and mortar	1090 SABS	
	Code of Bractico	
The installation of ceramic tiling	0107	

17.2 TILES, MOSAICS, ETC.

Tiles, mosaics, etc shall be even in shape and size, free from cracks, twists or blemishes and uniform in colour.

17.3 PREPARATORY WORK

Surfaces shall be clean and free of oil and thoroughly wetted directly before any tiling is commenced. Concrete surfaces shall be slushed with a mixture of one part cement and one part coarse sand or otherwise treated to form a proper key.

17.4 CERAMIC WALL AND FLOOR TILING

Where tiles are fixed to plaster or screeds with an adhesive, the adhesive shall be as recommended by the manufacturer of the tiles. Joints shall be straight, continuous and flush pointed with an approved grouting compound.

17.5 GENERAL

Tiling described as "on walls" is on brick walls or block walls unless otherwise stated and shall include concrete columns, beams and lintels flush with the face of the wall.

18. PLUMBING AND DRAINAGE

18.1 MATERIALS

Materials and workmanship shall comply with the following specifications and requirements:

BS Specifications	
849	
1470	
2870	
SABS	
Specifications	
11	
SABS	Class or type
Specifications	
62	Medium
	class,
100	galvanized
460	Class 1 —
	above
460	
400	class 0 —
	abuve
509	Galvanized
533	Garvariizea
000	
546	
559	
676	
677	SC Type;
677	SC Type; Class B
677 746	SC Type; Class B Type B pipes
	BS Specifications 849 1470 2870 SABS Specifications 11 SABS Specifications 62 460 460 509 533 546 559 676

Unplasticized polyvinyl chloride (UPVC) sewer and drain pipes and	791	Normal duty, with socket
pipe fittings		and rubber ring type
Fibre-cement pipes and fittings for drains	819	Class 3
Pipes and fittings	SABS	Class or type
Pitch-impregnated fibre pipes and fittings	Specification 921	Fittings shall be polypropylene
Unplasticized polyvinyl chloride (UPVC) pressure pipes and fittings for cold water supply	966	-
Unplasticized polyvinyl chloride (UPVC) soil, waste and vent pipes and pipe fittings for use above ground in drainage installation	967	
Pipes and fittings	SABS	Class or
	Specification	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Rubber joint (non-cellular) rings for pipes	974	
Rubber joint (non-cellular) rings for pipes Compression and capillary solder fittings for copper tubes	974 1067	
Rubber joint (non-cellular) rings for pipes Compression and capillary solder fittings for copper tubes Fibre-cement pressure pipes and couplings (constant internal diameter type)	974 1067 1223	
Rubber joint (non-cellular) rings for pipes Compression and capillary solder fittings for copper tubes Fibre-cement pressure pipes and couplings (constant internal diameter type) Polypropylene pressure pipes Plastic and rubber traps Vent valves for drainage 1532 installations	974 1067 1223 1315 1321	
Rubber joint (non-cellular) rings for pipes Compression and capillary solder fittings for copper tubes Fibre-cement pressure pipes and couplings (constant internal diameter type) Polypropylene pressure pipes Plastic and rubber traps Vent valves for drainage 1532 installations Pipes and fittings Heavy duty cast iron pipe fittings for drainage and gas and water supplies	974 1067 1223 1315 1321 BS Specification 78	
Rubber joint (non-cellular) rings for pipes Compression and capillary solder fittings for copper tubes Fibre-cement pressure pipes and couplings (constant internal diameter type) Polypropylene pressure pipes Plastic and rubber traps Vent valves for drainage 1532 installations Pipes and fittings Heavy duty cast iron pipe fittings for drainage and gas and water supplies Lead pipes Cast iron pressure pipes for use in drainage and gas and water supplies	974 1067 1223 1315 1321 BS Specification 78 602 1211	
Rubber joint (non-cellular) rings for pipes Compression and capillary solder fittings for copper tubes Fibre-cement pressure pipes and couplings (constant internal diameter type) Polypropylene pressure pipes Plastic and rubber traps Vent valves for drainage 1532 installations Pipes and fittings Heavy duty cast iron pipe fittings for drainage and gas and water supplies Lead pipes Cast iron pressure pipes for use in drainage and gas and water supplies Stainless steel pipes for use with compression fittings	974 1067 1223 1315 1321 BS Specification 78 602 1211 4127	
Rubber joint (non-cellular) rings for pipes Compression and capillary solder fittings for copper tubes Fibre-cement pressure pipes and couplings (constant internal diameter type) Polypropylene pressure pipes Plastic and rubber traps Vent valves for drainage 1532 installations Pipes and fittings Vent valves for drainage 1532 installations Pipes and fittings for drainage and gas and water supplies Lead pipes Cast iron pressure pipes for use in drainage and gas and water supplies Stainless steel pipes for use with compression fittings, etc.	974 1067 1223 1315 1321 BS Specification 78 602 1211 4127 SABS Specification	Remarks

Stainless steel wash hand basins	906	Each with two soap recesses
Stainless steel wash troughs	906	For installation
Stainless steel sinks for institutional use	907	against waiis
Stainless steel stall urinals	924	
Sanitary fittings, etc	SABS	Remarks
Acrylic resinous baths Glazed ceramic wash hand basins, sinks, washdown closet pans, urinals, cisterns and block channels	1402 497	
Hand operated W.C. flushing	821	
Flushing devices for W.C. flushing cisterns	1509	
Flush pipes for high level cisterns Flush pipes for low level cisterns	821 821	
Taps, valves, etc.	SABS Specification	Class
Taps (metallic)	226	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps	1021 1480	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps Float valves	1021 1480 752	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps Float valves Plastic ball floats for ball valves Functional control and safety	1021 1480 752 1006 198	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps Float valves Plastic ball floats for ball valves Functional control and safety valves Cast iron gate valves	1021 1480 752 1006 198 664	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps Float valves Plastic ball floats for ball valves Functional control and safety valves Cast iron gate valves Automatic shut-off flush valves for water closets and urinals	1021 1480 752 1006 198 664 1240	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps Float valves Plastic ball floats for ball valves Functional control and safety valves Cast iron gate valves Automatic shut-off flush valves for water closets and urinals Check valves	1021 1480 752 1006 198 664 1240 1 5 5 1	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps Float valves Plastic ball floats for ball valves Functional control and safety valves Cast iron gate valves Automatic shut-off flush valves for water closets and urinals C h e c k valves Portable rechargeable fire extinguishers Dry powder Water Halogenated hydrocarbon	1021 1480 752 1006 198 664 1240 1 5 5 1 S A B S Specification 810 889 1151	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps Float valves Plastic ball floats for ball valves Functional control and safety valves Cast iron gate valves Automatic shut-off flush valves for water closets and urinals C h e c k valves Portable rechargeable fire extinguishers Dry powder Water Halogenated hydrocarbon Other	1021 1480 752 1006 198 664 1240 1 5 5 1 S A B S Specification 810 889 1151 SABS	Pillar taps, mixer taps and stoptaps shall be Class 2
Taps (metallic) Plastic water taps Single control mixer taps Float valves Plastic ball floats for ball valves Functional control and safety valves Cast iron gate valves Automatic shut-off flush valves for water closets and urinals C h e c k valves Portable rechargeable fire extinguishers Dry powder Water Halogenated hydrocarbon Other Fixed electric storage water bastore	1021 1480 752 1006 198 664 1240 1 5 5 1 S A B S Specification 810 889 1151 SABS Specification 151	Pillar taps, mixer taps and stoptaps shall be Class 2

Drainage covers, gratings, etc	SABS Specification
Cast iron surface boxes and manhole and inspection covers and frames	558
Cast iron gratings for gullies and stormwater drains	1115
Cast iron step irons	BS Specifications 1247 SABS Code of Practice
The installation of polyethylene and unplasticized polyvinyl chloride pipes	0112
Water supply and drainage for buildings	0252

19. EXCAVATIONS AND BACKFILLING

Earthworks will be done according to SABS 1200D, 1200DB and 1200LB and according to the drawings.

19.1 CONCRETE

Concrete will be according to SABS 1200G and according to the drawings.

19.2 BRICKWORK

Brickwork shall be of extra hard burnt bricks built in Class I mortar.

19.3 PLASTER

Plaster shall be 1:3 cement plaster finished smooth with a steel trowel. All angles shall be rounded.

19.4 DIAMETERS OF PIPES, ETC

Diameters stated for pipes, traps, valves, etc are internal diameters except PVC, polyethylene, stainless steel and copper pipes and traps for which external diameters are stated.

20. SHEET METAL WORK AND GUTTERS

20.1 GALVANIZED SHEET IRON

Galvanized sheet iron shall be rolled steel sheet coated on both sides with Class C zinc coating complying with SABS 934, Sheets shall be free from white rust.

20.2 GALVANIZED SHEET IRON GUTTERS

Galvanized sheet iron gutters shall have beaded edges and all joints shall be riveted and soldered. Angles shall be strengthened with 50 x 0,6 mm galvanized sheet iron strips soldered on over the internal faces of mitres.

Gutters shall be fixed with falls to outlets on 30 x 3 mm galvanized mild steel brackets, bent to the shape of gutters, with front ends taken up to the underside of beaded edge of gutter and each screwed to roof timbers or bolted to fibre-cement fascias with 6 mm galvanized gutter bolts. Gutters shall be bolted to brackets at front with 6 mm galvanized gutter bolts, one to each bracket.

Brackets shall be positioned at joints of gutters and intermediately at non exceeding 1,25 m centres.

20.3 FIBRE-CEMENT GUTTERS

Fibre-cement gutters shall have spigot and socket joints. Gutters shall be fixed with falls to outlets on standard aluminium alloy brackets, screwed or bolted to roof timbers or fascias.

20.4 UNPLASTICIZED POLYVINAL CHLORIDE (UPVC) GUTTERS

Gutters shall be fixed with falls to outlets on brackets as supplied by the manufacturer, screwed or bolted to roof timbers or fascias.

20.5 ALUMINIUM GUTTERS

Aluminium gutters shall be roll formed on site to required lengths and profiles from 3003H14-3SH4 alloy strip not less than 0,7 mm thick factory coated on both sides with baked enamel and two coats of silicone modified polyester to a total minimum thickness of 20 micrometres. Angles, stopped ends, etc shall be prefabricated units pop riveted to gutters with joints sealed with mastic. The guttering shall be in continuous lengths between angles, stopped ends, etc.

21. RAINWATER PIPES

21.1 GALVANIZED SHEET IRON PIPES

Galvanized sheet iron pipes shall have seams at the back and shall be jointed with soldered slip joints. Pipes shall be fixed to walls, etc with galvanized mild steel holderbats spaced at not

exceeding 2 m centers with tails driven in or cut and pinned in 1:3 cement mortar.

21.2 FIBRE-CEMENT PIPES

Fibre-cement pipes shall have spigot and socket joints. Pipes shall be fixed to walls, etc with standard aluminium alloy holderbats with tails driven in or cut and pinned in 1:3 cement mortar.

21.3 UNPLASTICIZED POLYVINYL CHLORIDE (UPVC) PIPES

Pipes shall be fixed to walls, etc with patented UPVC or aluminium clips and holderbats as supplied by the manufacturer of the pipe.

21.4 ALUMINIUM PIPES

Aluminium pipes and fixing straps shall be formed from 3003H14-3SH4 alloy strip not less than 0,7 mm thick factory coated on both sides as described for aluminium gutters. Pipes shall be in continuous lengths with formed angles, offsets, shoes, etc. Pipes shall be fixed to walls, etc with 20 x 0,6 mm straps at not exceeding 1,5 m centers screwed to 25 x 75 x 100 mm hardwood chamfered and oiled blocks plugged to walls.

21.5 STORMWATER CHANNELS

In-situ concrete stormwater channels shall be constructed of unreinforced concrete with segmental channel formed in top. Channels shall be laid to falls on a well rammed earth bottom and finished smooth on exposed surfaces. Precast concrete channels shall be of 25 MPa concrete, generally in 1m length, finished smooth from the mould on exposed surfaces, laid to falls on a well rammed earth bottom, jointed in 1:3 cement mortar and pointed with keyed joints.

21.6 JOINTS

Joints of pipes not covered in SABS Specifications shall be as follows:

Pipes Fibre-cement, concrete, pitch- impregnated fibre and vitrified clay pipes for use under ground in non- pressure pipe lines.	Joints Flexible joints in accordance with the manufacturer's instructions
Cast iron for use above ground	materials shall be as follows: Between cast iron and mild steel
Cast iron for use below ground	Spigot and socket joints with tarred rope yarn and caulking compound Or Plain ended joints with stainless steel couplings with neoprene rubber
Galvanized mild steel	sleeves. Spigot and socket joints with tarred rope yarn and caulking compound. Joints of screwed galvanized steel sockets or bolted galvanized iron flanges. Screwed joints with plastic jointing tape or hemp. Flanged joints which shall be bolted and provided with rubber gaskets and with flanges screwed to pipes

Joints between pipes of different materials shall be as follows:

Between cast iron and mild steel

Between cast iron and clay

Spigot and socket joints with tarred rope yarn and caulking compound Spigot and socket joint with semi-dry cement caulking and 1:2 cement mortar fillet

21.7 FIXING OF PIPES

Pipes shall be fixed as follows: Galvanised mild steel (except those stated in 8.3)

Copper and stainless

Cast iron and galvanized mild steel for soil, waste and vent pipes

Polyethylene, polypropylene and patented UPVC or unplasticized polyvinyl chloride

Fibre-cement

Pipes fixed to ceilings

To walls with galvanized mild steel brackets for pipes not exceeding 80 mm diameter and with galvanized <u>cast iron hinged holderbats with</u> brass pins or bolts for pipes exceeding 80 mm diameter, both types with tails cut and pinned in 1:3 cement mortar

To walls with brass holderbats or screwon type two-piece spacing clips for pipes not exceeding 75 mm diameter and with purpose made holderbats for pipes exceeding 75 mm diameter; both types with tails cut and pinned in 1:3 cement mortar. To woodwork with screw-on type brass holderbats

To walls with hinged cast iron holderbats with brass bolts and with tails cut and pinned in 1:3 cement mortar

To woodwork with screw-on type galvanized mild steel holderbats

To walls, woodwork, etc with aluminium clips and holderbats as supplied by the manufacturer of the pipes

To walls with aluminium alloy holderbats with tails cut and pinned in 1:3 cement mortar

Fixed with holderbats and standard or purpose made hangers, with extended hangers for pipes to falls

22. PIPES LAID IN GROUND

22.1 WATER PIPES

Water pipes, gas pipes, etc laid in ground shall be at least 600 mm deep from the crown of the pipe to the finished surface.

22.2 DRAIN PIPES

Excavations taken out too deep shall be filled in with selected soil and compacted. Backfilling to sides and up to 300 mm above plastic pipes shall be free from stone or hard substances which will not pass a 10 mm mesh.

22.3 CLEANING EYE LIDS

Cleaning eye lids for drain pipe fittings shall be fixed and sealed as follows:

Pipe fittings	Method of sealing and fixing
Fibre-cement	Sealed with synthetic rubber or
	bituminous mastic packing and fixed
	with screws
Vitrified clay	Polypropylene lid sealed with
synthetic rubber packing and pressed	into position
Polypropylene and unplasticized	Sealed with synthetic rubber packing
polyvinyl chloride	and screwed on or pressed into
position	
Cast iron	Sealed with tallow or putty and fixed
with non-ferrous metal screws	
Galvanized malleable cast iron and	Sealed with synthetic rubber packing
cast brass	and screwed in

22.4 CLEANING EYES

Cleaning eyes shall consist of cast iron frames and lids with letters "CE" (or "SO") cast in lids. The lids shall be secured with non-ferrous metal screws. Frames shall be jointed to vertical drain pipes. Cleaning eyes shall be encased in unreinforced concrete taken up to ground level and plastered on exposed surfaces.

22.5 INSPECTION EYE MARKER SLABS

Inspection eye marker slabs shall be $350 \times 350 \times 50$ mm thick precast concrete finished smooth from the mould, with letters "IE" (or "10") formed in top and placed flush in ground or paving.

22.6 GULLEYS

Gulleys shall be built up of traps, vertical piping and gulley heads with loose gratings, all encased in unreinforced concrete to finish flush with gulley head top and taken up to at least 50 mm above surrounding finished surfaces. The outer top edge of the concrete encasing shall be splayed and the exposed surfaces plastered.

22.7 DISHED GULLEYS

Dished gulleys shall be built up of traps, vertical piping and gulley heads with loose gratings, all encased in unreinforced concrete and with dished unreinforced concrete hopper size 450 x 450 mm overall around gulley head with rounded kerb 50 mm wide to front and sides and 25 mm wide at back, 100 mm high above top of dishing and

the hopper plastered on exposed surfaces. Top of hopper shall be taken up to at least 50 mm above surrounding finished surfaces.

23. SUMPS, CATCHPITS, INSPECTION CHAMBERS

23.1 RAINWATER SUMPS

Rainwater sumps shall be built with half-brick sides on 100 mm thick unreinforced concrete bottom, plastered internally on walls and with 80 mm high unreinforced concrete kerb at top rebated for grating or cover and plastered on exposed surfaces.

23.2 STORMWATER CATCHPITS AND INSPECTION CHAMBERS

Brick catchpits and inspection chambers shall be built with one-brick sides on 150 mm thick unreinforced concrete bottom projecting 100 mm beyond walls all round, plastered internally on walls and with 100 mm thick reinforced concrete cover slab with opening rebated for frame of grating or cover and plastered on exposed surfaces. Precast concrete catchpits and inspection chambers shall be constructed in accordance with the applicable details shown on Drawing LE-1 of SABS 1200LE. Precast concrete manhole sections and slabs shall comply with SABS 1294 and the requirements for pipes of SC type and Class A of SABS 677.

23.3 SEWER INSPECTION CHAMBERS

Brick inspection chambers shall be built as for brick stormwater inspection chambers and with the bottom of the chamber well benched around half round channels, bends, junctions, etc up to sides of chamber in unreinforced concrete finished smooth. Precast concrete inspection chambers shall be constructed in accordance with the applicable details shown on Drawing LD-5 of SABS 1200LD. Precast concrete manhole sections and slabs shall comply with SABS 1294 and the requirements for pipes of SC type and Class A of SABS 677.

23.4 STORMWATER DRAIN JUNCTION BOXES

Junction boxes shall be formed of 150 mm thick unreinforced concrete bottom and sides to suit the various sizes of the drain pipes and built after the pipes have been laid, with the sides taken up slightly higher than the highest pipe and finished level on top for and covered with a 75 mm thick loose precast concrete slab.

23.5 STEP IRONS

Where inspection Chambers exceed 1,2 m deep, cast iron step irons shall be provided, built into the wall at 300 mm centers and staggered regularly in vertical rows spaced at 200 mm centers horizontally.

23.6 STOPCOCK AND METER BOXES

Stopcock and meter boxes shall be built with half-brick sides with a cast iron box and lid complying with SABS 558 set in 75 mm wide unreinforced concrete kerb for the full depth of the cast iron box and plastered on exposed surfaces.

23.7 VALVE CHAMBERS

Valve chambers shall be built with half-brick sides with 100 mm thick unreinforced concrete kerb to top with rebate for cover and frame to finish flush with adjacent

paving or finished ground level and plastered on exposed surfaces.

23.8 CAST IRON COVERS, GRATINGS, ETC.

All cast iron covers, gratings, frames and surface boxes shall be coated with preservative solution. Frames shall be cast into concrete. Covers, except covers to stormwater drainage or electrical cable inspection chambers, shall be set in grease.

23.9 CONCRETE ENCASING

Concrete encasing for pipes, bends, traps, gulleys, grease traps, etc shall be unreinforced concrete not less than 100 mm thick all round.

24. SANITARY FITTINGS

24.1 GENERAL

Glazed ceramic, acrylic and porcelain enameled sanitary fittings and component parts shall be white. Accessories for sanitary fittings shall be chromium plated brass. Waste outlets for baths, basins, etc shall comprise chromium plates brass waste union with grating, rubber washers and locknut, fitted with rubber or vulcanite plug on a chromium plated brass chain and stay.

24.2 STAINLESS STEEL SANITARY FITTINGS

Stainless steel sinks and draining boards, basins, wash troughs and urinals shall be AISI Type 304 satin finished stainless steel.

All stainless steel fittings shall be treated on the back with a vermin proof sound deadening coated.

Sinks, basins and wash troughs shall be provided with 40 mm diameter screwed waste outlets.

24.3 PRECAST CONCRETE WASH TROUGHS

Reinforced precast concrete wash troughs shall have a sloping front with ribbed rubbing surface and shall be finished smooth on exposed faces with top edges and inner angles rounded. Each compartment shall be fitted with a 40 mm diameter waste outlet. Wash troughs shall each be supported on two reinforced precast concrete pedestals finished smooth on exposed faces.

24.4 STEEL BATHS

Steel baths shall be porcelain enamelled internally and painted externally and fitted with waste outlet and overflow grating with coupling.

24.5 ACRYLIC RESINOUS BATHS

Acrylic resinous baths shall be fitted with waste outlet and overflow grating with coupling.

24.6 ACRYLIC RESINOUS WASH HAND BASINS

Acrylic resinous wash hand basins and vanity units shall have a smooth high gloss finish, with outlet openings, soap recesses, tap-holes and integral overflow and shall be fitted with waste outlet and overflow grating with coupling.

24.7 GLAZED CERAMIC SANITARY FITTINGS

Sinks shall be provided with integral weir overflows. Washdown closet pans shall have washdown action and be provided with smooth finished injection moulded polypropylene heavy duty double flap seats fixed with nonferrous bolts.

Urinal channels shall be provided with outlet gratings fitted in bitumen.

24.8 FLUSH AND SPARGE PIPES

Flush pipes for high level cisterns shall be of plastic or drawn galvanized steel. Flushpipes for low level cisterns shall be of plastic. Flush and sparge pipes for urinals with high level cisterns shall be of chromium plated copper piping and of the sizes recommended by the manufacturer of the urinal.

25. INSTALLATION OF SANITARY FITTINGS

Sanitary fittings shall be installed as follows:

25.1 PRECAST CONCRETE WASH TROUGHS

Precast concrete wash troughs shall be bedded on top of pedestals which shall be bedded on floors in 1:3 cement mortar.

25.2 STAINLESS STEEL WASH TROUGHS AND WASH HAND BASINS

Stainless steel wash troughs and wash hand basins shall be fixed to walls on a pair of galvanized mild steel gallows brackets bolted to wall with 6 mm diameter expanding bolts.

25.3 ACRYLIC RESINOUS WASH HAND BASINS

Acrylic resinous wash hand basins shall be fixed to walls on a pair of standard painted cast iron brackets screwed to underside of basin and bolted to wall with 6 mm diameter expanding bolts.

25.4 CERAMIC WASH HAND BASINS

Ceramic wash hand basins shall be fixed to walls on a pair of standard painted steel or cast iron brackets bolted to wall with 6 mm diameter expanding bolts.

25.5 ACRYLIC RESINOUS BATHS

Acrylic resinous baths shall be bedded in 1:5 cement mortar on three cross rows of bricks or bedded solid on a layer of dry river sand and fixed to wall with galvanized steel brackets under edges (in the middle of the sides against walls) bolted to wall with 6mm diameter expanding bolts and sealed along top against wall finishes with patent mildew resistant silicone rubber.

25.6 WASHDOWN CLOSET PANS AND CISTERNS

Washdown closet pans shall be bedded on floors in 1:3 cement mortar. Cisterns shall be fixed to walls with 6 mm diameter expanding bolts.

25.7 CERAMIC URINALS

Ceramic stall and slab urinals shall be bedded on floors and against walls in 1:3 cement mortar. Slabs, channels, treads, etc shall be jointed in 1:3 cement mortar and pointed in white cement.

Ceramic bowl urinals shall be fixed to walls on standard steel brackets bolted to wall with 6 mm diameter expanding bolts. Cisterns shall be fixed to walls on standard brackets bolted to wall with 6 mm diameter expanding bolts.

25.8 STAINLESS STEEL URINALS

Stainless steel stall and slab urinals shall be bedded on floors in 1:3 cement mortar and with backs and sides against walls filled in with fine unreinforced concrete. Cisterns shall be fixed as cisterns for ceramic urinals.

25.9 FIRE HOSE REELS

Fire hose reels shall each be fitted with a 30m long hose of internal diameter not less than 19 mm with a 4,8 mm internal diameter chromium plated brass nozzle.

26. FIRE EXTINGUISHERS

All fire extinguishers shall be fully charged.

27. TESTS

Sewerage pipe lines, sanitary plumbing including fittings and hot and cold water supply and fire service shall be tested to the approval of the Principal Agent and Local Authority.

The Contractor shall provide all testing apparatus, material and labour required for the tests and inspections.

28. GLAZING

28.1 MATERIALS

Materials and workmanship shall comply with the following specifications and requirements:

MATERIAL		SABS Specifications	Class
Glazing putty		680	
Silvered glass mirrors		1236	А
Safety and security glazing materials		1263	
Silicone-rubber-base compounds	sealing	1305	
		CKS Specifications	
Glass for glazing		55 BS Specifications	
Glass		952 SABS	
		Practice	
Installation of glazing mate buildings	rials in	0137	

29. PUTTY

Glazing putty shall be Type I for wooden sashes and Type II for steel sashes. Putty for glazing to unpainted hardwood shall be tinted to match the colour of the wood. Back putty shall not exceed 3 mm thick. Putty shall not be painted until it has formed a surface crust, and if the putty does not form a surface crust it shall be replaced. Butyl putty shall be used where glass is to be fixed in aluminium sashes with glazing beads.

Non-setting compounds shall be used where laminated glass is fixed in sashes with glazing beads.

30. PAINTWORK

30.1 MATERIALS

Materials shall comply with the following specifications and requirements:

MATERIAL	SABS Specifications	Grade or Type
Matt or eggshell decorative paint for internal work	515	
Decorative high gloss enamel paint for internal and exterior work	630	Grade I
Primers for wood for external work	678	Туре І
Primers for wood for internal work	678	Type III
Zinc chromate primers for steel	679	Type I
Undercoats for paints (except emulsion paint)	681	Type I
Aluminium paint	682	Grade II
Roof paints	683	Туре В
Structural steel paint	684	Туре В
Wash primer (metal etch primer)	723	-
Varnish for interior use	887	Type I
Calcium plumbate primer	912	
Emulsion paints	1586	

Materials for paintwork shall be delivered to the site in unopened containers and applied in accordance with the manufacturer's instructions. Materials shall be suitable for application to the surfaces concerned. Undercoats shall be as recommended by the manufacturer of the finishing coats.

30.2 PREPARATORY WORK

30.2.1 Plastered surfaces

Plastered surfaces shall be thoroughly inspected and, if necessary, washed down and brushed in order to remove any traces of efflorescence and allowed to dry completely before any paint finish is applied. Before any paint is applied, holes, cracks and irregularities in plaster and other surfaces shall be filled with a suitable filler and finished

smooth. Unfinished concrete surfaces shall have all projections rubbed off and shall be thoroughly cleaned with a spirits-of-salts solution (1 part concentrated spirits-of-salts to 4 parts water).

30.2.2 Metal surfaces

Metal surfaces shall be sanded, where necessary, washed with a suitable cleaning agent and left smooth.

Protective coatings applied by manufacturers to galvanized metal surfaces shall be removed with a suitable agent and the surfaces washed down.

Rust, grease and defective factory primers on metal surfaces, as well as pitch on cast iron pipes, shall be removed.

30.2.3 Wood surfaces

Knots in woodwork shall be treated with knotting. Minor blemishes shall be filled with a suitable filler. Wood surfaces shall be sanded smooth.

30.3 APPLICATION OF PAINT

Primers to wood surfaces shall be applied by brush. Primers to other surfaces may be applied by roller with the approval of the Principal Agent. Undercoats and finishing coats may be applied by brush or roller.

Paint shall not be sprayed on except in the case of cellulose and other special paints where spray painting is the accepted method of application.

Before subsequent coats of paints are applied the previous coat shall be properly dry and shall be sanded down where necessary.

30.4 COLOUR SCHEME

A colour scheme comprising colours and the blending of colours approved by the Principal Agent shall be used for the paintwork. The tints of the undercoats shall closely match the finishing coat but nevertheless differ sufficiently to indicate the number of undercoats. Colour samples of the finishing coats shall be provided in all cases.

30.5 GENERAL

Paintwork shall include the preparation of surfaces, filling, stopping, sanding and priming of nail heads and screws.

Where windows, sashes, etc are to be painted, the rebates of the openings to be glazed shall be primed.

31. FURNITURE TO HOUSES

Supply and fit the following furniture in a quality equivalent to "economic housing."

Furniture required for <u>each</u> house:

1 x double bed

- 1 x single bed
- 1 x three door wardrobe (built-in)
- 1 x two door wardrobe (built-in)
- 1 x small table and four chairs (kitchen type)
- 1 x twin set couch
- 1 x medium fridge
- 1 x stove/oven with two plates

Curtain rails and curtains

Part C4: Drawings 4.1. Drawings for Goqwana shearing shed in Tsolo

	TENDER DRAWING REGISTER				P.O. BOX 11015	
DATE:	Wednesday, 05 June 2024					
PROJECT No.:	: 34694.01		ENGINEERING	5213		
PROJECT NAME:	DALRRD - TSOLO SHEERING SHED				Tel.No:(043) 722-2738	
					e-mail: els@bvi.co.za	
ISSUED TO:	CLIENT					
DRAWING NO.	DRAWING DESCRIPTION	NO.OF COPIES	REV.	PAPER SIZE	DATE	
	LAYOUT & DETAIL DRAWINGS					
34694.01-CIV-01	SURVEY LAYOUT PLAN	1	1	A1	05 June 2024	
34694.01-SHED-01	SHEARING SHED LAYOUT & ELEVATIONS	1	0	A1	05 June 2024	
34694.01-SHED-02	SHEARING SHED SECTION A - A & ELEVATIONS	1	0	A1	05 June 2024	
34694.01-SHED-03	ROOF & FOUNDATION LAYOUT	1	0	A1	05 June 2024	
34694.01-SHED-04	SHEARING SHED EQUIPMENT	1	0	A1	05 June 2024	
34694.01-SHED-05	DETAIL OF VERMIN-PROOF FENCING	1	0	A1	05 June 2024	
34694.01-SHED-06	MALE & FEMALE ABLUTION LAYOUT, SECTION & DETAILS	1	0	A1	05 June 2024	
34694.01-SHED-07-1	DIPPING TANK DETAIL	1	0	A1	05 June 2024	
34694.01-SHED-07-2	DIPPING TANK DETAIL	1	0	A1	05 June 2024	
RECEIVED BY (NAME):		DATE RECEIVED				
ON BEHALF OF(NAME OF THE ORGANIZATION)		RECEIVED BY (SIGNATURE):				



general notes The contractor is to keep of the building on site wi dimensions on site and Figured dimensions to b available, errors, discrep clarification before work	a full set of drawings on site, contractor is responsible for the correct setting out th reference to boundaries and building lines, contractor to verify all levels and check same against architects and engineers drawings before commencing work. e used in preference to scaled dimensions, large scale details to be used were ancies or omissions are to be reported to the architect immediately for is undertaken.
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Clarification before work is undertaken. Clarification before work is undertaken. These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer's or plumbing consultant's drawings were specified. All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS
ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority. All new construction HEALTH AND SAFETY Regulations to be strictly complied with.
MIXTURE NOTES: CONCRETE FOR FOUNDATION (15 MPA)
1 Part Cement: 4 Parts Sand: 4 Parts Stone (20 mm)
CONCRETE FOR FLOOR (30 MPa) 1 Part Cement:
2 Parts Sand: 3 Parts Stone (20mm)
MORTAR MIX 1 Part Cement: 4 Parts Sand:
PLASTER MIX 1 Part Cement:
5 Parts Sand: WALLS (15 MPa)
External is No 8 blocks - 190 mm Internal is No 6 blocks - 140 mm Standard concrete bricks
WATER Clean water for all mixtures
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CONSULTANT
SOUTHERN WOOD EAST LONDON 5213
CALL CONTRACT SECONDAY
TEL: (043) 722 2738 FAX: (043) 743 7698
Email: els@bvi.co.za
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General Notes




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	These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer's or plumbing consultant's drawings were specified. All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority. All new construction HEALTH AND SAFETY Regulations to be strictly complied with.
	GENERAL NOTES: 1. THESE STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE
	CONTRACT. ANY DISCREPANCIES SHALL BE REFERRED TO THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE WORK. 2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT CURRENT SOUTH AFRICAN NATIONAL STANDADES AND WITH THE COLUMA DEPICAN NATIONAL
	STANDARUS AND WITH THE SOUTH AFRICAN WATTUNAL BUILDING REGULATIONS. 3. ALL SET OUT DIMENSIONS SHOWN ON THESE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE DO NOT SCALE THESES STRUCTURAL DRAWINGS FOR DIMENSIONS
	A THE METHOD OF CONSTRUCTION AND THE MAINTENANCE OF SAFETY DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. IF ANY STRUCTURAL ELEMENT PRESENTS
	DIFFICULTY IN RESPECT OF CONSTRUCTABILITY OR SAFETY, THE MATTER SHALL BE REFERED TO THE STRUCTURAL ENGINEER FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK. 5. DURING CONSTRUCTION, THE STRUCTURE SHALL BE MAINTAINED
	IN A STABLE CONDITION AND NO PART SHALL BE OVERLOADED. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, SHORING AND PROPPING IN ORDER TO KEEP THE BUILDING WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
	6. THE CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF ALL TEMPORARY WORKS INCLUDING SHORING, PROPPING AND BRACING AND WHERE NECESSARY IS TO ENGAGE A STRUCTURAL ENGINEER TO DESIGN AND CERTIFY HIS TEMPORARY WORKS.
	 UNLESS AGREED OR SPECIFIED OTHERWISE, THE CONTRACTOR IS REQUIRED TO NOTIFY AND ALLOW TIME FOR THE STRUCTURAL ENGINEER TO INSPECT AT THE FOLLOWING POINTS: * COMPLETED EXCAVATION, FORMWORK, REINFORCEMENT,
	MEMBRANES AND EMBEDMENTS PRIOR TO PLACING OF CONCRETE. * COMPLETED ERECTED STRUCTURAL ELEMENTS PRIOR TO COVERING.
	8. AT LEAST 48 HOURS NOTICE IS REQUIRED FOR INSPECTION. ALL WORK TO BE INSPECTED MUST BE COMPLETED PRIOR TO THE TIME OF INSPECTION. 9. SITE INSPECTIONS DO NOT RELIEVE THE CONTRACTOR OF
	RESPONSIBILITY FOR THE COMPLETENESS AND CORRECTNESS OF HIS WORK.
	1. FOOTINGS SHALL BE PLACED CENTRALLY UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.
	1. CONCRETE QUALITY 1.1 ALL CONCRETE SHALL COMPLY WITH SANS 1200G.
WALL PLATE	1.2 COMPRESSIVE STRENGTH GRADES: * UNREINFORCED STRIP FOOTINGS - 15/19 * REINFORCED STRIP FOOTINGS - 20/19
152mm HALE ROUND PVC	* RETAINING WALL FOOTINGS - 25/19 * BASES - 25/19 * SURFACE BED - 30/19 * COLUMNS - 30/19 * SLABS AND BEAMS - 25/19
	2. CONCRETE PROFILES 2.1 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
	2.2 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN THE CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE FORINFER
	2.3 CONSTRUCTION JOINTS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE TO THE WRITTEN APPROVAL OF THE ENGINEER.
	 COMPACT ALL CONCRETE, INCLUDING FOOTINGS AND SURFACE SLABS, WITH MECHANICAL VIBRATORS. ALL CONCRETE TO BE CURED.
	 5. SLIP JOINTS TO BE USED ON ALL LOAD-BEARING MASONRY WALLS BENEATH CONCRETE SLABS. 6. BRICKS USED IN LOAD-BEARING CONSTRUCTION SHOULD HAVE
	A MINIMUM COMPRESSIVE STRENGTH OF 14MPa. 7. MASONRY WALLS MUST NOT BE CONSTRUCTED ON SUSPENDED CONCRETE UNTIL ALL TEMPORARY SUPPORTS ARE REMOVED.
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	PROJECT TEAM
75mm THK CONC. APRON — WITH 20mm FALL ON WELL	
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200mm RC STRIP	SOUTHERN WOOD EAST LONDON 5213
ING WITH MESH 888 RIPS OF 620mm WIDE	CONSTRUCTION OF THE PROCUREMENT SE BONZA BAY ROAD BEACON BAY
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	MALE & FEMALE ABLUTION LAYOUT, SECTION & DETAILS
	REF NO. 34694 DESIGNED W. DE LANGE
	Scale AS SHOWN DRAWN J.A.JONKER DATE 2023/09 CHECKED M.STEYN
	DPW DRAWING NUMBER: 34694_01-SHFD-06

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SLABS /	AND BEAMS - 25/19 TE PROFILES	
2.1 SIZE OF A	S OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS PPLIED FINISHES.	
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SECTION B-B SCALE 1:20

- 3. A double layer of Ref Mesh 395 steel reinforcement sheets to be placed in centre of dip tank walls and floor. Sheets to be bind together in such a manner that the spacing between members are
- maximum aggregate size of 19m, well vibrated and and

Tr Cia	ilication before	work in undertaken		o be reported	to the architect im	mediately for
All All	e drawings an ineer's or plum work and mater T 103 of 1977 a new constructio	e to be read in conj bing consultant's di ial used to comply and amendments th on HEALTH AND S/	unction with struc awings were spea with SABS standa ereto as well as the AFETY Regulation	tural engineer cified. ards and NATI he by-laws of t	s, civil engineers, ONAL BUILDING he relevant local a complied with.	mechanical REGULATION authority.
	MIXTURI	E NOTES:				
	<u>CONCRE</u> 1 Part Ce 4 Parts S	<u>ETE FOR F</u> ment: Sand:		<u>ION (15</u>	MPA)	
-	<u>CONCRE</u> 1 Part Ce	<u>ETE FOR F</u> ement:	<u>-LOOR (30</u>	<u>) MPa)</u>		
	2 Parts S 3 Parts S	and: tone (20m	m)			
	MORTAF 1 Part Ce 4 Parts S	ement: Sand:				
-	PLASTEI 1 Part Ce 5 Parts S	<u>R MIX</u> ement: Sand:				
	WALLS (External Internal is	<u>15 MPa)</u> is No 8 blo s No 6 bloc	cks - 190 i ks - 140 n	mm nm		
	Standard <u>WATER</u> Clean wa	concrete t	pricks			
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T	EL: (043) 72	22 2738	MANA	GEMENT	BEACON B	AY
F/ Ei	אי: (043) 74 mail: els@t	+3 / 698)vi.co.za				
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4.2. Drawings for Mabhobho shearing shed in Mt Frere

	TENDER DRAWING REGISTER			_	P.O. BOX 11015
DATE:	Wednesday, 05 June 2024				SOUTHERNWOOD
PROJECT No.:	34694.25			ENGINEERING	5213
PROJECT NAME:	DALRRD - MT FRERE SHEERING SHED		bvi	PROCUREMENT	Tel.No:(043) 722-2738
			•••	MHNHGEMENT	e-mail: els@bvi.co.za
ISSUED TO:	CLIENT				
DRAWING NO.	DRAWING DESCRIPTION	NO.OF COPIES	REV.	PAPER SIZE	DATE
	LAYOUT & DETAIL DRAWINGS				
34694.25-CIV-01	SURVEY LAYOUT PLAN	1	1	A1	05 June 2024
34694.25-SHED-01	SHEARING SHED LAYOUT & ELEVATIONS	1	0	A1	05 June 2024
34694.25-SHED-02	SHEARING SHED SECTION A - A & ELEVATIONS	1	0	A1	05 June 2024
34694.25-SHED-03	ROOF & FOUNDATION LAYOUT	1	0	A1	05 June 2024
34694.25-SHED-04	SHEARING SHED EQUIPMENT	1	0	A1	05 June 2024
34694.25-SHED-05	DETAIL OF VERMIN-PROOF FENCING	1	0	A1	05 June 2024
34694.25-SHED-06	MALE & FEMALE ABLUTION LAYOUT, SECTION & DETAILS	1	0	A1	05 June 2024
34694.25-SHED-07-01	DIPPING TANK DETAIL	1	0	A1	05 June 2024
34694.25-SHED-07-02	DIPPING TANK DETAIL	1	0	A1	05 June 2024
RECEIVED BY (NAME):		DA	ATE RECEIV	ED	
ON BEHALF OF (NAME OF THE ORGANIZATION)		RECEIVI	ED BY (SIGN	IATURE):	





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General Notes

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting









The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architects and engineers drawings before commencing work. Figured dimensions to be used in preference to scaled dimensions, large scale details to be used were available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken. These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer's or plumbing consultant's drawings were specified. All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority. All new construction HEALTH AND SAFETY Regulations to be strictly complied with. MIXTURE NOTES: <u>CONCRETE FOR FOUNDATION (15 MPA)</u> 1 Part Cement: 4 Parts Sand: 4 Parts Stone (20 mm) CONCRETE FOR FLOOR (30 MPa) 1 Part Cement: 2 Parts Sand: 3 Parts Stone (20mm) MORTAR MIX 1 Part Cement: 4 Parts Sand: PLASTER MIX 1 Part Cement: 5 Parts Sand: <u>WALLS (15 MPa)</u> External is No 8 blocks - 190 mm Internal is No 6 blocks - 140 mm Standard concrete bricks <u>WATER</u> Clean water for all mixtures Amendment DPW ISSUED FOR MEASUREMENT Copyright vests in the Department of Public Works PROJECT TEAM CIBA C agriculture, land reform & rural development Appulator South Approximation CONSORTIUM Architecte a BISIWE VAN NIEKERK INC. Quantity Surveyors & Project Managers ENGINEERING PROCUREMENT MANAGEMENT ONSULTANT P.O BOX 11015 SOUTHERN WOOD EAST LONDON CINGINEERING PROCUREMENT MANAGEMENT 56 BONZA BAY ROAD BEACON BAY 5213 TEL: (043) 722 2738 FAX: (043) 743 7698 Email: els@bvi.co.za ISSUED FOR MEASUREMENT agriculture, land reform & rural development Department: Agriculture, land Reform and Rural Development REPUBLIC OF SOUTH AFRICA Department: Agriculture, Land Reform and Rural Development REPUBLIC OF SOUTH AFRICA DISCIPLINE **CIVIL ENGINEERS** MT FRERE-MABOBO SHEARING SHED WCS NUMBER: DRAWING TITLE **ROOF & FOUNDATION LAYOUT** REF NO. DESIGNED W. DE LANGE 34694 AS SHOWN DRAWN J.A.JONKER 2023/09 CHECKED M.STEYN SCALE DATE

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5. DURING C IN A STAE THE CON	ITION BEFORE PROCEEDING WITH THE WORK. CONSTRUCTION, THE STRUCTURE SHALL BE MAINTAINED BLE CONDITION AND NO PART SHALL BE OVERLOADED. NTRACTOR SHALL PROVIDE TEMPORARY BRACING, C MOR DROPARTE, INCORDE TEMPORARY BRACING,	
6. THE CON TEMPOR BRACING	AND EXCAVATIONS STABLE AT ALL TIMES. NTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF ALL RARY WORKS INCLUDING SHORING, PROPPING AND G AND WHERE NECESSARY IS TO ENGAGE A STRUCTURAL	
ENGINEE 7. UNLESS / IS REQUI ENGINEE * COM MEM CON	LER TO DESIGN AND CERTIFY HIS TEMPORARY WORKS. AGREED OR SPECIFIED OTHERWISE, THE CONTRACTOR IRED TO NOTIFY AND ALLOW TIME FOR THE STRUCTURAL ER TO INSPECT AT THE FOLLOWING POINTS: PALETED EXCAVATION, FORWOORK, REINFORCEMENT, WBRANES AND EMBEDMENTS PRIOR TO PLACING OF VCRETE.	
* COMI COVI 8. AT LEAST ALL WOR	IPLETED ERECTED STRUCTURAL ELEMENTS PRIOR TO VERING. IT 48 HOURS NOTICE IS REQUIRED FOR INSPECTION. RK TO BE INSPECTED MUST BE COMPLETED PRIOR TO THE	
9. SITE INSF RESPON OF HIS W	INSPECTIONS DO NOT RELIEVE THE CONTRACTOR OF SUBILITY FOR THE COMPLETENESS AND CORRECTNESS WORK.	
FOUNDATIO 1. FOOTING COLUMNS CONCRETE	ON NOTES: GS SHALL BE PLACED CENTRALLY UNDER WALLS AND IS UNLESS NOTED OTHERWISE. E NOTES:	
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2.3 CONS DRAV ENGI	ROVAL OF THE ENGINEER. STRUCTION JOINTS NOT SHOWN ON THE STRUCTURAL WINGS SHALL BE TO THE WRITTEN APPROVAL OF THE INFER.	
3. COMPAC SLABS, W 4. ALL CONC	2T ALL CONCRETE, INCLUDING FOOTINGS AND SURFACE WITH MECHANICAL VIBRATORS. ICRETE TO BE CURED.	
 SLIP JOIN BENEATH BRICKS U A MINIMU 	NTS TO BE USED ON ALL LOAD-BEARING MASONRY WALLS H CONCRETE SLABS. USED IN LOAD-BEARING CONSTRUCTION SHOULD HAVE IM COMPRESSIVE STREMATH OF 14MPa	
7. MASONR' CONCRET	Y WALLS MUST NOT BE CONSTRUCTED ON SUSPENDED TE UNTIL ALL TEMPORARY SUPPORTS ARE REMOVED.	
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SECTION B-B SCALE 1:20

- 3. A double layer of Ref Mesh 395 steel reinforcement sheets to be placed in centre of dip tank walls and floor. Sheets to be bind together in such a manner that the spacing between members are
- maximum aggregate size of 19m, well vibrated and and

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General Notes The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels
and dimensions on site and check same against architects and engineers drawings before commencing work. Figured dimensions to be used in preference to scaled dimensions, large scale details to be used were available, errors, discrepancies or omissions are to be reported to the architect immediately for
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All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority. All new construction HEALTH AND SAFETY Regulations to be strictly complied with.
MIXTURE NOTES:
CONCRETE FOR FOUNDATION (15 MPA)
4 Parts Sand: 4 Parts Stone (20 mm)
CONCRETE FOR FLOOR (30 MPa)
1 Part Cement: 2 Parts Sand: 3 Parts Stone (20mm)
MORTAR MIX
1 Part Cement: 4 Parts Sand:
PLASTER MIX
5 Parts Sand:
<u>WALLS (15 MPa)</u> External is No 8 blocks - 190 mm
Internal is No 6 blocks - 140 mm Standard concrete bricks
WATER Clean water for all mixtures
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EAST LONDON 5213
PROCUREMENT MANAGEMENT BEACON BAY
TEL: (043) 722 2738
FAX: (043) 743 7698 Email: els@bvi.co.za
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4.1. Drawings for Khiba shearing shed in Sterkspruit

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DATE:	Wednesday, 05 June 2024				SOUTHERNWOOD
PROJECT No.:	34694.26			ENGINEERING	5213
PROJECT NAME:	DALRRD - STERKSPRUIT-KHIBA SHEERING SHED		bvi	PROCUREMENT	Tel.No:(043) 722-2738
			•••	MANAGEMENT	e-mail: els@bvi.co.za
ISSUED TO:	CLIENT				
DRAWING NO.	DRAWING DESCRIPTION	NO.OF COPIES	REV.	PAPER SIZE	DATE
	LAYOUT & DETAIL DRAWINGS				
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34694.26-SHED-01	SHEARING SHED LAYOUT & ELEVATIONS	1	0	A1	05 June 2024
34694.26-SHED-02	SHEARING SHED SECTION A - A & ELEVATIONS	1	0	A1	05 June 2024
34694.26-SHED-03	ROOF & FOUNDATION LAYOUT	1	0	A1	05 June 2024
34694.26-SHED-04	SHEARING SHED EQUIPMENT	1	0	A1	05 June 2024
34694.26-SHED-05	DETAIL OF VERMIN-PROOF FENCING	1	0	A1	05 June 2024
34694.26-SHED-06	MALE & FEMALE ABLUTION LAYOUT, SECTION & DETAILS	1	0	A1	05 June 2024
34694.26-SHED-07-01	DIPPING TANK DETAIL	1	0	A1	05 June 2024
34694.26-SHED-07-02	DIPPING TANK DETAIL	1	0	A1	05 June 2024
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	<u>CONCF</u> 1 Part C 4 Parts 4 Parts	RETE FOR FOUNDATION (15 MPA) Cement: Sand: Stone (20 mm)	
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	3 Parts <u>MORTA</u> 1 Part C	Stone (20mm) A <u>R MIX</u> Cement:	
ļ	4 Parts	Sand: <u>ER MIX</u>	
	1 Part C 5 Parts WALLS	Sement: Sand: (15 MPa)	
	Externa Internal Standar	l is No 8 blocks - 190 mm is No 6 blocks - 140 mm rd concrete bricks	
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General Notes

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PLASTER MIX 1 Part Cement:						
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External is No 8 blocks - 190 mm Internal is No 6 blocks - 140 mm Standard concrete bricks						
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General Notes

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All new construction HEALTH AND SAFETY Regulations to be strictly complied with.	onty.
GENERAL NOTES: 1. THESE STRUCTURAL DRAWINGS SHALL BE BEAD IN CONJUNCTION	
WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE	
CONTRACT. ANY DISCREPANCIES SHALL BE REFERRED TO THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE WORK.	
WITH THE RELEVANT CURRENT SOUTH AFRICAN NATIONAL STANDARDS AND WITH THE SOUTH AFRICAN NATIONAL BUILDING REGULATIONS.	
3. ALL SET OUT DIMENSIONS SHOWN ON THESE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE.	
DO NOT SCALE THESE STRUCTURAL DRAWINGS FOR DIMENSIONS. 4. THE METHOD OF CONSTRUCTION AND THE MAINTENANCE OF SALETY DURING CONSTRUCTION ADE THE DESODAIDUITY OF THE	
SATET DOMING CONTRACTOR AND THE RESONSIBILIT OF THE CONTRACTOR. IF ANY STRUCTURAL ELEMENT PRESENTS DIFFICULTY IN RESPECT OF CONSTRUCTABILITY OR SAFETY, THE MATTER SHALL BE REFERED TO THE STRUCTURAL ENGINEER FOR	
RESOLUTION BEFORE PROCEEDING WITH THE WORK.	
IN A STABLE CONDITION AND NO PART SHALL BE OVERLOADED. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, SHORING AND PROPPING IN ORDER TO KEEP THE BUILDING WORDER OF AUXIMATION FOR A TABLE THESE	
6. THE CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF ALL TEMPORARY WORKS INCLUDING SHORING, PROPPING AND	
BRACING AND WHERE NECESSARY IS TO ENGAGE A STRUCTURAL ENGINEER TO DESIGN AND CERTIFY HIS TEMPORARY WORKS.	
UNLESS AGREED OR SPECIFIED OT INFRWISE, THE CONTRACTOR IS REQUIRED TO NOTIFY AND ALLOW TIME FOR THE STRUCTURAL ENGINEER TO INSPECT AT THE FOLLOWING POINTS: * COMPLETED EXCANATION EORM/WORK DEINEOPCEMENT	
MEMBRANES AND EMBEDMENTS PRIOR TO PLACING OF CONCRETE. * COMPLETED ERECTED STRUCTURAL ELEMENTS PRIOR TO	
COVERING. 8. AT LEAST 48 HOURS NOTICE IS REQUIRED FOR INSPECTION. ALL WORK TO BE INSPECTED MILES OF COMPLETED DOIDO TO THE	
TIME OF INSPECTION. 9. SITE INSPECTIONS DO NOT RELIEVE THE CONTRACTOR OF	
RESPONSIBILITY FOR THE COMPLETENESS AND CORRECTNESS OF HIS WORK.	
FOUNDATION NOTES: 1. FOOTINGS SHALL BE PLACED CENTRALLY UNDER WALLS AND COLUMNS LINE SES NOTED OTHERWISE	
CONCRETE NOTES:	
 CONCRETE QUALITY 1.1 ALL CONCRETE SHALL COMPLY WITH SANS 1200G. 	
1.2 COMPRESSIVE STRENGTH GRADES:	
* REINFORCED STRIP FOOTINGS - 15/19 * REINFORCED STRIP FOOTINGS - 20/19 * RETAINING WALL FOOTINGS - 25/19 * BASES - 25/19	
* SURFACE BED - 30/19 * COLUMNS - 30/19 * SLABS AND BEAMS - 25/19	
2. CONCRETE PROFILES	
OF APPLIED FINISHES. 2.2 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN	
SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN THE CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.	
2.3 CONSTRUCTION JOINTS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE TO THE WRITTEN APPROVAL OF THE ENGINEER.	
 COMPACT ALL CONCRETE, INCLUDING FOOTINGS AND SURFACE SLABS, WITH MECHANICAL VIBRATORS. 	
4. ALL CONCRETE TO BE CURED. 5. SLIP JOINTS TO BE USED ON ALL LOAD-REARING MASONRY WALLS	
6. BRICKS USED IN LOAD-BEARING CONSTRUCTION SHOULD HAVE	
A MINIMUM COMPRESSIVE STRENGTH OF 14MPa. 7. MASONRY WALLS MUST NOT BE CONSTRUCTED ON SUSPENDED CONSTRUCTED NOT AUX TEMPORARY SUPPORTS AND REMOVED	
CONCRETE UNTIL ALL TEMPORARY SUPPORTS ARE REMOVED.	
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SECTION B-B SCALE 1:20

- 3. A double layer of Ref Mesh 395 steel reinforcement sheets to be placed in centre of dip tank walls and floor. Sheets to be bind together in such a manner that the spacing between members are
- maximum aggregate size of 19m, well vibrated and and

General Notes The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels
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Standard concrete bricks
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