land reform & rural development

Department:
Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

Tender/Contract No.: CONMP0006 (2026/2027)
A Tender for Category 3CE OR higher CIDB Registered Contractors

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

Name of Tenderer (Bidding Entity) _____

Provide full name i.e. (CC, Pty Ltd, JV, Sole Proprietor): _____

Name of duly authorised person: _____

Address of Tenderer: _____

_____

Tel. Number: _____

Cell number: _____

Fax number: _____

E-mail: _____

Receipt number: _____

National Treasury CSD Registration Number: _____

ISSUED BY:
Director: Supply Chain and Facilities Management Services
Department Agriculture Land Reform and Rural Development
17 Van Rensburg Street, Bateleur Building
6th Floor, Block E
Nelspruit
1200
Tel: (013) 754 8000/8066

PREPARED BY:
Directorate: Rural Infrastructure Development
17 Van Rensburg Street, Bateleur Building
Nelspruit 1200
Tel: (013) 754 8134/8122

land reform & rural development

Department:
Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

Tender/Contract No.: CONMP0006 (2026/2027)
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APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

land reform & rural development

Department:
Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

Tender/Contract No.: CONMP0006 (2026/2027)
A Tender for Category 3CE OR higher CIDB Registered Contractors

THE TENDER

For the

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

CLOSING DATE: THURSDAY, 26 NOVEMBER 2026
CLOSING TIME: 11:00AM

ISSUED BY:

Director: Supply Chain and Facilities Management Services
Department Agriculture Land Reform and Rural Development
17 Van Rensburg Street, Bateleur Building
6th Floor, Block E
Nelspruit
1200
Tel: (013) 762 8000/8038/8066

PREPARED BY:

Directorate: Rural Infrastructure Development
17 Van Rensburg Street, Bateleur Building
Nelspruit 1200
Tel: (013) 762 8000/22

CHECKLIST WHEN SUBMITTING BID PROPOSAL/DOCUMENT

Tender/Contract No.: CONMP0006 (2026/2027)

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

A TENDER FOR CATEGORY 3CE OR HIGHER REGISTERED CONTRACTORS

Bids were only considered for acceptance (regarded as being responsive) if the below mentioned requirements were met:

Please indicate **YES** or **NO** ✓ Place a Tick in the appropriate column	**YES**	**NO**
(a) Preferential Procurement Policy Framework Act (PPPFA), Act no. 5 of 2000 and Preferential Procurement Regulation, 2022 will be applied. The 80/20 Preference Point system will be applied where a maximum of Eighty (80) tender adjudication points will be awarded for price and Twenty (20) points will be awarded for specific goals. **To claim maximum points bidder to provide proof for each point claimed as guided below:** • Historically Disadvantaged Individuals (HDI) – Attach copy of Identity Document (ID) and company registration document • Who is female- Attach copy of Identity Document (ID) and company registration document • Who has a disability – Attach a certified copy or original doctor's letter confirming the disability • Who is youth (A person that is not older than 35 years on the closing date of a bid) Attach copy of Identity Document (ID) and company registration document • Specific goal: Locality – promotion of enterprises located in a specific district) Nkangala District Mpumalanga (a) a valid municipal services account (water, sanitation, rates and electricity) in the name of the bidder/s or active director/s or (b) a valid lease agreement from the lessor or (c) a letter on the letterhead of the ward councilor/traditional authority/council that must be signed, stamped and dated. **The Department will use the Central Supplier Database and documents submitted by the tenderer to verify the points claimed for specific goals.**		
(b) <u>Evaluation for mandatory criteria</u> 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 for an **3CE or Higher** class of construction work, are eligible to submit tenders; Joint Ventures are eligible to submit tenders provided that they comply with all three of the following conditions:		

Every member of a joint venture is registered with the CIDB. **The lead partner** has a contractor grading designation of not lower than one level below the required grading designation of **3CE or Higher** or higher class of construction work. **The Combined contractor** grading designation calculated in accordance with the Construction Industry Development Board Regulations is equal to or higher than a Contractor designation determined in accordance with the sum tendered for a **3CE or Higher** or higher class of construction work, is eligible to submit tenders. **Tenderers are also requested to indicate their CRS number/s of the registered contractor/s as well as their Joint Venture partner/s (if applicable) in the tender document.**		
Form of Offer must be **fully** completed and signed by duly authorised person.		
Letter of authorisation to sign the Form of Offer and where required in tender document. In the case of a **one-person** concern submitting a tender, this shall be clearly stated on the letter head. In the case of a **JOINT VENTURE** submitting a tender, include a resolution of **each company** of the Joint Venture **together** with a resolution by its members authorising a member of the Joint Venture to sign the documents on behalf of the Joint Venture." **i.e.,** the **Joint Venture must submit three Letters** of Authority as per the aforesaid Joint Venture requirement.		
In the event of mistakes having been made on the Form of Offer, it must be crossed out in ink at each and every price alteration on the form of offer and be accompanied by an initial at each and every price alteration.		
Letter of good standing from Department of Labour (COIDA) The Tenderer is registered and in good standing with respect to Compensation for Occupational Injuries and Diseases Act (COIDA) with Department of Labour or with a licensed compensation insurer. The Tenderer must submit the letter of good standing for Building Construction related projects. In the event of the Tenderer being a joint venture/consortium, the letter of good standing for **Building Construction** related projects of the individual members must also be provided.		
Are all addenda issued complete and returned (if applicable)		
Non mandatory Bidders must ensure compliance with their tax obligations. Bidders may submit printed TCS/CSD/SARS PIN together with their bid. In bids where a consortia/Joint Venture/sub-contractors are involved each party must submit a separate valid tax clearance certificate, SARS Pin, TCS or CSD printout.		
No late submissions will be considered. Telegraphic, telexed, facsimiled submissions will not be accepted.		
Tenderers are requested to adhere with colour identification of component documents must be undertaken in accordance with the provisions of SANS 10403 when binding the document for submission. SANS 10403 suggests that for ease of identification of the various sections, **each section may be printed on different coloured paper or be separated with coloured paper**. Where this is done, the colours for each subcomponent should be as indicated below (Document) layout.		

land reform & rural development
Department:
Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

DOCUMENT LAYOUT

SECTION	HEADING	COLOUR
PART 1: THE TENDER		
PART T1	**TENDERING PROCEDURES**	
	SECTION T1.1: TENDER NOTICE AND INVITATION TO TENDER	WHITE
	SECTION T1.2: TENDER DATA	PINK
	SECTION T1.2.1: CONDITIONS OF TENDER	PINK
	SECTION T1.2.2: TENDER DATA	PINK
	SECTION T1.2.3: CIDB STANDARD CONDITIONS OF TENDER	WHITE
PART T2	**RETURNABLE DOCUMENTS**	
	SECTION T2.1: LIST OF RETURNABLE DOCUMENTS	YELLOW
	SECTION T2.2: RETURNABLE SCHEDULES	YELLOW
PART 2: THE CONTRACT		
PART C1:	**AGREEMENT AND CONTRACT DATA**	
	SECTION C1.1: FORM OF OFFER AND ACCEPTANCE	YELLOW
	SECTION C1.2: CONDITIONS OF CONTRACT	YELLOW
	SECTION C1.3: AMPLIFICATIONS OF GCC (3RD EDITION 2015)	YELLOW
	SECTION C1.4: DATA PROVIDED BY CONTRACTOR	YELLOW
	SECTION C1.5: PRIORITY OF DCOUMENTS	YELLOW
	SECTION C1.6 PERFORMANCE GUARANTEE (PRO-FORMA)	YELLOW
	SECTION C1.7 RETENTION MONEY GUARANTEE	YELLOW
PART C2:	**PRICING DATA**	
	SECTION C2.1: PRICING INSTRUCTIONS	YELLOW
	SECTION C2.2: BILLS OF QUANTITIES	YELLOW
PART C3:	**SCOPE OF WORKS**	BLUE
	SECTION C3.1: DESCRIPTION OF WORKS	BLUE
	SECTION C3.2: ENGINEERING	BLUE
	SECTION C3.3: PROCUREMENT	BLUE
	SECTION C3.4: CONSTRUCTION	BLUE
	SECTION C3.5: MANAGEMENT	BLUE
	SECTION C3.6: ANNEXURES TO SCOPE OF WORK	BLUE
	ANNEXURE A: VARIATIONS TO STANDARDIZED SPECIFICATIONS	BLUE
	ANNEXURE B: PARTICULAR SPECIFRICATIONS	BLUE
	ANNEXURE C: STANDARD FORMS TO BE USED DURING THE CONTRACT	WHITE
	ANNEXURE D: DRAWINGS	
PART C4:	**SITE INFORMATION**	GREEN

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THE TENDER			**1**
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	Section T1.1: Tender Notice and Invitation to Tender	White	4-7
	Section T1.2: Tender Data	Pink	8
	Section T1.2.1: Conditions of Tender	Pink	8
	Section T1.2.2: Tender Data	Pink	8-21
	Section T1.2.3: CIDB Standard Conditions of Tender	White	22-38
PART T2:	**RETURNABLE DOCUMENTS**		39
	Section T2.2: Returnable Documents	Yellow	40-44
PART C1:	**AGREEMENT AND CONTRACT DATA**		45
	Section C1.1: Form of Offer & Acceptance	Yellow	46-49
	Section C1.2: Contract Data	Yellow	50-64
PART C2:	**PRICING DATA**		65
	Section C2.1: Pricing Instructions	Yellow	66 -70
	Section C2.2: Bills of Quantities	Yellow	71-87
PART C3:	**SCOPE OF WORKS**		88-126
PART C4:	**SITE INFORMATION**		124

PART T1: TENDERING PROCEDURES

For a proposed contract between

Department of Land Reform and Rural Development
(the Employer)

and

_____
(the Contractor)

for

Documentation prepared by: | **Department of Land Reform and Rural Development**

SECTION T1.1: TENDER NOTICE AND INVITATION TO TENDER

FOR:

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

TENDER/CONTRACT NO.: CONMP0006 (2026/2027)

INVITATION AND SCOPE OF WORK:

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

CONDITIONS:

Bidders shall be registered with the Construction Industry Development Board **(CIDB)** and should have a minimum CIDB Contractor grading of **3CE or higher**.

Preferential Procurement Policy Framework Act (PPPFA), Act no. 5 of 2000 and Preferential Procurement Regulation, 2022 will be applied. The **80/20** Preference Point system will be applied where a maximum of **Eighty (80)** tender adjudication points will be awarded for price and **Twenty (20)** points will be awarded for specific goals.

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 of SBD 6.1 form as may be supported by proof/ documentation stated in the conditions of this tender

A COMPULSORY TENDER CLARIFICATION MEETING will be held on:

Date: 11 NOVEMBER 2026 (WEDNESDAY)
Venue: Emakhazeni Local Municipality, 25 Scheepers Street, Emakhazeni
Time: 13:00
GPS Coordinates: Latitude 25°34'59.99"
Longitude S 30°04'60.00" E

The lowest or any **TENDER WILL NOT NECESSARILY BE ACCEPTED, AND THE DEPARTMENT RESERVES THE RIGHT to accept the tender as a whole or in part.**

The closing date and time for the receipt of completed bid documents are **THURSDAY, 26 NOVEMBER 2026 at 11h00.**

This tender is advertised on the National Treasury e-Tender Portal, the CIDB i-Tender system and on the Departmental website. Bid documents may be downloaded free of charge from the National Treasury e-Tender Portal; www.etenders.gov.za and the Department's website; www.dlrrd.gov.za .No physical documents will be sold by the department.

NB: For the site clarification meeting the following officials can be contacted:

Charlotte N Machete
Tel: (013) 7548134
Email: nolubabalo.machete@dlrrd.gov.za

Tenders must remain valid for a period of **90 days** after the closing date for the submission of tenders, during which period a tender may not be amended or withdrawn and may be accepted at any time by the Department.

The original and completed bid document shall be placed in a sealed envelope clearly marked:

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

Tenders will be received on the closing date and time shown above. All tenders must be enclosed in sealed envelopes bearing the applicable tender heading and contract number, as well as the closing time and due date, and must be addressed to the **DIRECTOR: FINANCE AND SUPPLY CHAIN MANAGEMENT SERVICES, DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT** and must be submitted in the tender box situated at:

Department Land Reform and Rural Development
17 Van Rensburg Street, Bateleur Building
6th Floor, Block E
Nelspruit
1200

SUBMITTING OF TENDERS – PLEASE NOTE: Tenders can be submitted in the Tender Box in NELSPRUIT

No telephonic or any other form of communication relating to this bid will be permitted with any other staff by bidders other than with the named individuals stated below.

All enquiries regarding this bid must be directed to:

ENQUIRIES – TECHNICAL RELATED:

Ms Charlotte N. Machete
Tel: (013) 754 8134
Email: nolubabalo.machete@dlrrd.gov.za

ENQUIRIES – SUPPLY CHAIN MANAGEMENT RELATED:

Mr. A Nkuna
Email address: Alpheus.Nkuna@dlrrd.gov.za
Contact number: 013 754 8066

Ms. B Ramanyimi
Email address: Banele.Ramanyimi@dlrrd.gov.za
Contact number: 013 754 8066

No late submissions will be considered. Telegraphic, telexed, facsimiled submissions will not be accepted. Failure to meet the mandatory requirements required in this Bid will result in the submissions being deemed null and void and shall be considered non-responsive.

MAP TO TENDER BOX

TENDER/CONTRACT NO. CONMP0006 (2026/2027)

CLOSING DATE: THURSDAY, 26 NOVEMBER 2026 at 11:00AM

YOU ARE HEREBY INVITED TO TENDER TO THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA (DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT)

TENDERS RECEIVED LATE AFTER THE CLOSING TIME AND DATE WILL NOT BE ACCEPTED FOR CONSIDERATION.

SUBMIT ALL TENDERS ON THE OFFICIAL FORMS – DO NOT RETYPE.

The Tender documents **must** be deposited in the box which is identified as the tender box of the:

Department Land Reform and Rural Development
17 Van Rensburg Street, Bateleur Building
6th Floor, Block E
Nelspruit
1200

SUBMITTING OF TENDERS – PLEASE NOTE:

THE TENDER BOX OF THE OFFICE OF THE DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT IS OPEN 24 HOURS A DAY, 7 DAYS A WEEK. THE TENDER BOX WILL BE CLOSED AT 11H00 ON THURSDAY, 26 NOVEMBER 2026, WHICH IS THE CLOSING TIME OF THE TENDER.

TENDERERS SHOULD ENSURE THAT TENDERS ARE DELIVERED TIMEOUSLY TO THE CORRECT ADDRESS

SUBMIT EACH TENDER IN A SEPARATE SEALED ENVELOPE

TENDER DATA

SECTION T1.2.1: CONDITIONS OF TENDER

The conditions of tender are the **Standard Conditions of Tender – August 2019** as contained in **Section T.1.2.3**.

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 August 2019** to which it mainly applies.

SECTION T1.2.2: TENDER DATA

The clause numbers in the Tender Data refer to the corresponding clause numbers in the Conditions of Tender.
The additional Conditions of Tender are:

Item		Data
C.1	**GENERAL**	**ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER**
C.1.1	**Actions**	The Employer is the "Department of **Department of Land Reform and Rural Development**". The term "bid" in the context of this standard is synonymous with term "tender".
C.1.2	**Tender Documents**	This document **(Volume 1)** in which are bound the Tendering Procedures, Returnable Documents, Agreements and Contract Data, Pricing Data, Scope of Works, Site Information, Tender Data and Drawings
C.1.3	**Interpretation**	Add the following new clause: "1.3.3" The tender documents have been drafted in English. The contract arising from the invitation of tender shall be interpreted and construed in English.
C.1.4	**Communication and Employer's Agent:**	
	The *Employer's Agent* is:	Contact : Mr MA Mamabolo Address : 17 Van Rensburg Street, Bateleur Building Cell : 013 754 8122 E-mail : mahlatse.mamabolo@dlrrd.gov.za

Item	Data

C.2	TENDERER'S OBLIGATIONS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER	
C.2.1	**Eligibility:**	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 **3CE or Higher** Classes of construction work, are eligible to submit tenders. **Joint ventures are eligible to submit tenders provided that:** 1. Every member of a joint venture is registered with the CIDB; 2. The lead partner has a contractor grading designation in the **3CE or Higher** class of construction work; or **not lower than one level below** the required grading designation in the class of works construction works under consideration and posses 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 **3CE 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 is eligible to submit tenders.
C.2.2	**Cost of Tendering:**	Add the following to the clause: "Accept that the Employer will not compensate the tenderer for any costs incurred in attending interviews in the office of the Employer or the Employer's Agent."
C.2.5	**Reference documents:**	The document "**General Conditions of Contract Third Edition 2015** published by the South African Institute of Civil Engineering. This document is obtainable separately, and Tenderers shall obtain their own copies." Tenderers, Contractors and Subcontractors shall obtain their own copies of this document for tendering purposes and for use for the duration of the Contract from the South African Institution of Civil Engineering, Private Bag X200, Halfway House, Midrand, 1685 and shall bear all expenses in this regard. **Occupational Health and Safety Act no. 85 and amendment act no. 181 of 1993** **Construction Regulations 2014** This document is obtainable separately and tenderers shall obtain their own copies. Standard Specification for Civil Engineering Construction (SANS 1200) This document is available separately from the South African Bureau of Standards and tenderers shall obtain their own copies.

Item		Data
C.2.7	**Clarification meeting:**	**A COMPULSORY CLARIFICATION MEETING WILL BE CONDUCTED AT 13H00 AM ON WEDNESDAY, 11 NOVEMBER 2026 :** **VENUE : EMAKHAZEN LOCAL MUNICIPALITY, 25 SCHEEPERS STREET** **DISTRICT : NKANGALA DISTRICT MUNICIPALITY** **Directions to the project is as follows:** **GPS Coordinates: Latitude: -25° 34' 59.99" S** **Longitude: 30° 04' 60.00" E** Tenderers must sign the attendance list in the name of the tendering entity.
C.2	**TENDERER'S OBLIGATIONS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER**	
C.2.8	**Seek clarification:**	"Request clarification of the tender documents, if necessary, by notifying the Employer's Official or the Employer's Agent indicated in the Tender Notice and Invitation to Tender in writing at least **10 (Ten) working days** before the closing time stated in the foregoing notice and clause 2.15."
C.2.9	**Insurance:**	Add the following to the clause: "Accept that the submission of a Tender shall be construed as an acknowledgement by the Employer that he/she is satisfied with the insurance cover that the Contractor will have to effect Contract Works Insurance to be limited to the the Tender amount including VAT, and Public Liability to be limited to **R 2 000 000.00** under the contract **The Employer will not provide for any insurance as it will be provided for by the Contractor.**
C.2.11	**Alterations to documents:**	**Add the following to the clause:** **"In the event of mistakes having been made on the prices inclusive of VAT it must be crossed out in ink at each and every price alteration on the FORM OF OFFER and be accompanied by an initial.** Corrections in terms of price must not be made by means of a correction fluid such as Tipp-Ex or similar product.If correction fluid has been used on any specific item price, such item will not be considered. No correction fluid must be used in a Bill of Quantities where prices are calculated to arrive at a total amount. If correction fluid has been used the Tender as a whole will not be considered. **The Department will reject the bid if the above conditions are not adhered to.**
C.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. Each Tenderer is required to return the complete set of documents as listed in the Tender Data with all the required information supplied and completed in all respects.

Item		Data
	C.2.13.2	Return all returnable documents to the employer after completing them in their entirety, by writing legibly in non-erasable ink. Failure to adhere to this the bid will be disqualified.
	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.
C.2	**TENDERER'S OBLIGATIONS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER**	
	C.2.13.4	Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorised signatories liable on behalf of the tenderer. Add the following to the clause: "Only duly authorised signatories must sign the original and all copies of the tender offer where required in terms of 2.13.3. In the case of a **ONE-PERSON CONCERN** submitting a tender, this shall be clearly stated on the company letter head. In case of a **COMPANY** submitting a tender, include a copy of a resolution by its board of directors authorising a director or any other official of the company to sign the documents on behalf of the company. In the case of a **CLOSED CORPORATION** submitting a tender, include a copy of a resolution by its members authorising a member or any other official of the corporation to sign the documents on each member's behalf. In the case of a **PARTNERSHIP** submitting a tender, all the partners shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case proof of such an authorisation shall be included in the Tender. In the case of a **JOINT VENTURE** submitting a tender, include a resolution of **each company** of the Joint Venture **together** with a resolution by its members authorising a member of the Joint Venture to sign the documents on behalf of the Joint Venture." **i.e.** the **Joint Venture must submit three Letters** of Authority as per the aforesaid Joint Venture requirement. **Accept that failure to submit proof of Authorisation to sign the tender shall result in a Tender Offer being regarded as non-responsive.**
	C.2.13.5	Seal the tender offer and submit **ONLY** to the below mentioned address: The Employer's address for delivery of tender offers: **Department of Land Reform and Rural Development** **17 Van Rensburg Street, Bateleur Building** **6th Floor, Block E** **Nelspruit** **Sixth Floor Tender Box** **<u>SUBMITTING OF TENDERS – PLEASE NOTE</u>: Tenders can only be submitted in the Tender Box in Nelspruit**

Item		Data
	C.2.13.6	A two-envelope procedure will NOT be followed.
	C.2.13.9	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
C.2	**TENDERER'S OBLIGATIONS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER**	
C.2.14	**Information and Data to be completed in all respects:**	Add the following to the clause: "Accept that the Employer shall in the evaluation of tenders take due account of the Tenderer's past performance in executing for similar works of comparable magnitude, and the degree to which he possesses the necessary technical, financial and other resources to enable him to complete the Works successfully within the contract period. Satisfy the Employer and Principal Agent as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, by furnishing details in **Section T2.2.8.** Accept that the Employer is restricted in accordance with clause 4.(4) of the **Construction Regulations, 2014,** to only appoint a contractor whom he is satisfied has the necessary competencies and resources to carry out the work safely.
C.2.15	**Closing time:**	The closing date and time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.
C.2.16	**Tender offer validity:**	The tender offer validity period is **90** days. Add the following to the clause: "If the tender validity expires on a Saturday, Sunday or public holiday, the Tender Offer shall remain valid and open for acceptance until the closure of business on the following working day."
C.2.17	**Clarification of tender offer after submission**	The Tenderer shall provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of arithmetical errors by the adjustment of certain rates or items prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought,offered, or permitted.
C.2.18	**Provide other material**	The Tenderer shall provide, on request by the employer , any other materilal 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.2.19	**Inspections, tests and analysis:**	The Tenderer must provide access during working hours to his premises for inspections on request.

Item		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	**TENDERER'S OBLIGATIONS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER**	
C.2.23	**Certificates:**	The following certificates/ information may be provided with the tender offer: a) Copy of Certificate of Incorporation (if tenderer is a Company), e.g. CM1, CM29, or CM44 b) Copy of Founding Statement (if tenderer is a Closed Corporation), e.g. CK1, or CK2 c) Copy of Partnership Agreement (if tenderer is a Partnership) d) Copy of Identity Document (if tenderer is a One-man concern) e) Copy of Deed of Trust (If a trust is involved). In cases where the tenderer has failed to submit any of the documents above with the tender, the Department reserves the right to, at any time after the closure of the tender, but before the award of the tender, request the tenderer to provide the outstanding documents within 7 (seven) working days from the date of notification.
ADD THE FOLLOWING NEW CLAUSES:		
"2.24	**Canvassing and obtaining of additional information by tenderers:**	Accept that no Tenderer shall make any attempt either directly or indirectly to canvass any of the Employers officials or the Employer's agent in respect of his tender, after the opening of the tenders, but prior to the Employer arriving at a decision thereon. No Tenderer shall make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders."
"2.25	**Awards to close family members of persons in the service of the state**	In order to adjudicate fairness or eligibility, the questionnaire for the declaration of interests in the tender of persons in service of state in **Section T2.2.6 – Form F** must be completed."
C.2	**TENDERER'S OBLIGATIONS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER**	

Item		Data
"2.26	**TAX**	Bidders must ensure compliance with their tax obligations. Bidders are required to submit their unique personal identification number (PIN) issued by sars to enable the organ of state to view the taxpayer's profile and tax status. Application for tax compliance status (TCS) or pin may also be made via e-filing. in order to use this provision, taxpayers will need to register with sars as e-filers through the website www.sars.gov.za. Bidders may also submit a printed TCS together with the bid. In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate proof of TCS / PIN / CSD number. Where no tcs is available but the bidder is registered on the central supplier database (CSD), a csd number must be provided. **Bids received from bidders with a non-compliant tax status may be disqualified in the event of failing to update the Tax Status within 7 days.**
"2.27	**CSD –National Treasury Central Supplier Database (CSD) Registration**	Bidders must register on the central supplier database (CSD) to upload mandatory information namely: (business registration/ directorship/ membership/identity numbers; tax compliance status; and banking information for verification purposes)..
"2.28	**Local Labour**	It is a requirement of this contract that work be executed in such a manner so as to maximize the use of at least **80%** local unskilled labour intensive construction methods. It is mandatory for the contractor to allocate skilled labour to 40% of NARYSEC youth in skilled labour if available in the local area.

Item		Data
"2.29"	**Specific Goals**	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 the table below as may be supported by proof/ documentation stated in the conditions of this tender: 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. Specific goals for the tender and points claimed are indicated per the table below. (Note to organs of state: Where either the 90/10 or 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 (80/20 system)**	**Percentage ownership equity (To be completed by the tenderer)**	**Number of point claimed (80/20 system) (To be complete by the tenderer)**
I. Historically Disadvantaged Individuals (HDI)	8		
II. Who is female	5		
III. Who has a disability	2		
IV. Specific goal: Youth	2		
V. Specific goal: Locality (promotion of enterprises located **in Nkangala District, Mpumalanga Province)**	3		

Item		Data
		• Historically Disadvantaged Individuals (HDI) – Attach copy of Identity Document (ID) and company registration document • Who is female- Attach copy of Identity Document (ID) and company registration document • Who has a disability – Attach a certified copy or original doctor's letter confirming the disability • Who is youth (A person that is not older than 35 years on the closing date of a bid) Attach copy of Identity Document (ID) and company registration document • Specific goal: Locality – promotion of enterprises located in a specific district) **Nkangala District, Mpumalanga** (a) a valid municipal services account (water, sanitation, rates and electricity) in the name of the bidder/s or active director/s or (b) a valid lease agreement from the lessor or (c) a letter on the letterhead of the ward councilor/traditional authority/council that must be signed, stamped and dated. **The Department will use the Central Supplier Database and documents submitted by the tenderer to verify the points claimed for specific goals.**
C.3	**THE EMPLOYER'S UNDERTAKINGS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER**	
C.3.1	**Respond to requests from the Tenderer:**	Replace the contents of the clause with the following: "Respond to a request for clarification received up to **ten (10) working days** before the tender closing time stated in the tender data and notify all Tenderers who drew procurement documents"
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 **ten (10) 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 drew 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	**THE EMPLOYER'S UNDERTAKINGS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER**	

Item		Data
C.3.4	**Opening of tender submissions:**	A two-envelope procedure will **NOT** be followed. The closing date and time for receipt of tenders is: **26 November 2026 at 11h00.** Tenders will be received on the closing date and time shown, must be enclosed in a sealed envelope bearing the applicable tender heading and contract number, as well as the closing time and due date, and must be addressed to the: **DIRECTOR: SUPPLY CHAIN MANAGEMENT SERVICES:** **DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT**. Tenders **must** be submitted in the tender box situated **in NELSPRUIT:** **Department of Land Reform and Rural Development** **17 Van Rensburg Street, Bateleur Building** **6th Floor, Block E** **Nelspruit** **Sixth Floor Tender Box** **Only tenders submitted to this tender box will be opened/ considered.** **SUBMITTING OF TENDERS – PLEASE NOTE: Tenders can only be submitted in the Tender Box in NELSPRUIT.** **Clause 3.6, 3.7 and 3,8 from standard conditions of tender**
C3.6	**Non-disclosure**	Not to disclose 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.
C3.7	**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.

Item		Data
C3.8	**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.
C3.9.1	**Arithmetical errors, omissions and discrepancies**	a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in ***figures*** shall govern.

Item		DATA
C.3	THE EMPLOYER'S UNDERTAKINGS ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER	
C.3.11	**Evaluation of Tender offers:**	Tenders will be evaluated in terms of the evaluation criteria stipulated below: **(a) Evaluation for Mandatory criteria** **(b) Evaluation in terms of Functionality** **(c) Evaluation in terms of 80/20 specific goals point system as prescribed in the Preferential Procurement Regulations 2022.** **(a) Evaluation for mandatory criteria** • **Refer to Part T2 returnable schedule**

ITEM		DATA
C.3	THE EMPLOYER'S UNDERTAKINGS	ADDITION OR VARIATION TO STANDARD CONDITION OF TENDER

C.3.11 **Evaluation of Tenders:**

(b) Evaluation in terms of Functionality

Each of the evaluation criteria will be assessed in terms of the indicators/ values being:

0= No Information, 1 = Poor, 2 = Average, 3 = Good, 4 = Very good and 5 = Excellent.

Quality (functionality) will be scored on those tenders regarded as being responsive.

The **CRITERIA** to be applied in evaluating the proposal is set out in the table below:

Criterion	**Weight**	**Value**	**Comment / Remarks**
Relevant experience in **Borehole drilling and equpping** projects similar in nature, scope and value (Section T2.2.8, Form H)	**40**		
Relevant plant and equipment resources (Section T2.2.8,Form G)	**20**		
Experience of key personnel Geohydrologist , (Section T2.2.10, Form J)	**20**		
Experience of key personnel Foreman, (Section T2.2.10, Form J)	**10**		
Experience of key personnel OHS Officer NQF level 6 in Health and Safety Qualification with 5 years experience (Section T2.2.10, Form J)	**10**		
TOTAL	**100**		

The proposal will be evaluated individually on score sheets, by a representative evaluation panel according to the evaluation criteria indicated above. All service providers who scored less than **60 out of 100 points** for functionality will not be considered further.

EVALUATION SCHEDULE

1. RELEVANT EXPERIENCE OF SIMILAR PROJECTS – (40 points)

Tenderers are required to demonstrate relevant past experience and competency and provide the **appointment letters with corresponding completion certificates and corresponding completed and completed Form S as reference signed by previous employer/ clients.**
In the case of subcontract appointments, tenderers must attach the Appointment Letters and Completion Certificates issued to them by the respective Main Contractor(s) as well as the corresponding Appointment Letters and Completion Certificates of the respective Main Contractor(s) issued by the respective Client(s) or principal agent and reference letters (As per form S) signed by previous employer/ clients.

Tenderers should have completed Borehole drilling and equpping projects of similar nature, with minimum value of R 250 000.00 each in the last 9 years.

The employer reserves the right to verify projects before considering them.

NB: (No score will be awarded if the required appointment letters, corresponding completion certificates and completed Form S are not attached).

No	Functionality Criteria – Tender Rating Matrix		A **Tenderer rating (score 0-5)**	B **Weighting**
1	Successful completion of projects of a similar nature within the past **10 years.**	**Five (5) or more** similar nature projects executed by the contractor **in the past 09 years**	5	**40**
		Four (4) similar nature projects executed by the contractor **in the past 09 years**	4	
		Three (3) similar nature projects executed by the contractor **in the past 09 years**	3	
		Two (2) similar nature projects executed by the contractor **in the past 09 years**	2	
		One (1) similar nature project executed by the contractor **in the past 09 years**	1	
		No similar nature projects executed by the contractor **in the past 09 years**	0	

2. RELEVANT PLANT AND EQUIPMENT RESOURCES - (20 points)

Tenderers are required to demonstrate that they have necessary relevant equipment, facilities and plant to be used during construction and project implementation.

Up to maximum of 20 Points shall be awarded to the tenderers for these criteria.

Signed letter of commitment for the required Plant resources to complete the project, proof that such plant is owned or equipment will be hired.

Failure to provide proof of resources as indicated on section T2.2.7, form G, proof of ownership and/or letter to hire, will result in the tenderer being scored 0.

The plant/ equipment/ resources required are:

1. Drill Rig

	Relevant plant and equipment	No plant or equipment listed and proof attached	**No Submission (Score 0)**	**20**
		Provide Drill Rig 1 (proof of ownership and/or letter to hire)	Average (score 2)	

		Provide Drill Rig 2 (proof of ownership and/or letter to hire)	Good (score 3)	
		Provide Drill Rig 3 (proof of ownership and/or letter to hire)	Very Good (score 4)	
		Provide Drill Rig 4 or more (proof of ownership and/or letter to hire)	Excellent (score 5)	
	3. GEOHYDROLOGIST - Pr.Scientist SACNASP (20) **The candidate must have a minimum of NQF Level 6 or higher post experience and a minimum 4-5 years' experience in Geohydrology/ Geology/ Hydrology qualification (20 POINTS) registered as Pr.Scientist SACNASP.** **Tenderers are required to submit signed curriculum vitae and certified copies of qualifications for the key personnel proposed to be employed on the project. Failure to provide signed CV by the owner of the CV's of key personnel indicated on form J, copies of qualifications, experience will not be considered. These curriculum vitae are to include specific details of these individuals including past experience and competence in delivering key similar relevant project. This evaluation is based on the following weighting:**			
3	No. of Years of Experience of Site Agent **(Section T2.2.10, Form J)**	**NQF Level 6 or higher qualification** in the **Geohydrology/ Geology/ Hydrology** with **more than 7 years' post qualification experience.**	5	**20**
		NQF Level 6 or higher qualification in the **Geohydrology/ Geology/ Hydrology** with **more than 5 up to 7 years' post qualification experience.**	4	
		NQF Level 6 or higher qualification in **Geohydrology/ Geology/ Hydrology** with **more than 4 up to 5 years' post qualification experience.**	3	
		NQF Level 6 or higher qualification in the **Geohydrology/ Geology/ Hydrology** with **more than 2 up to 4 years' post qualification experience.**	2	
		NQF Level 6 or higher qualification in the **Geohydrology/ Geology/ Hydrology** with **1 to 2 years post qualification experience.**	1	
		No CV/information submitted No minimum qualification **Less than 1 year post qualification experience.**	0	
		NB: The candidate must submit a detailed signed CV. <u>The information of the candidate must be completed on Form J.</u> Failure to attach the aforesaid will result in the bidder not being awarded points. Information must be completed on Form J.		
	4. FOREMAN (10 POINTS) **This Sub Criteria covers the general average experience of the proposed for Foreman dealing with siting and drilling of boreholes projects. The candidate must have a minimum of NQF Level 5 or higher in Built environment qualifications and minimum of 3-5 years' experience.** Tenderers are required to submit signed curriculum vitae and certified copies of qualifications for the key personnel proposed to be employed on the project. Failure to provide signed CV by the owner of the CV's of key personnel indicated on form J, copies of qualifications, experience will not be considered. These curriculum vitae are to include specific details of these individuals including past experience and competence in delivering key similar relevant project. This evaluation is based on the following weighting:			**10**
	No. of Years of Expe	**NQF Level 5 or higher qualification** in the Built Environment with more than 7 years' post qualification experience.	5	

	NQF Level 5 or higher qualification in the Built Environment with more than 5 up to 7 years' post qualification experience.	4	
	NQF Level 5 or higher qualification in the Built Environment with more than 4 up to 5 years' post qualification experience.	3	
	NQF Level 5 or higher qualification in the Built Environment with more than 2 up to 4 years' post qualification experience.	2	
	NQF Level 5 or higher qualification in the Built Environment with 1 to 2 years post qualification experience.	1	
	No CV/information submitted	0	
	NB: The candidate must submit a detailed signed CV. <u>The information of the candidate must be completed on Form J.</u> Failure to attach the aforesaid will result in the bidder not being awarded points. Information must be completed on Form J.		

5. SAFETY OFFICER (PrCHSO/ PrCSHM) (10) — **10**

This Sub Criteria covers the general average experience of the proposed Safety Officer

Tenderers are required to submit curriculum vitae for the key personnel proposed to be employed on the project. The proposed Safety Officer must have an minimum NQF 6 qualification in **Occupational Health & Safety registered with SACPCPM (CHSO/ CHSM)**. These curriculum vitae are to include specific details of these individuals including past experience and competence in delivering key similar relevant construction projects and NQF 6 Qualification.

Failure to provide signed CV by the owner of the CV's of key personnel indicated on form J, copies of qualifications, experience will not be considered.

	Description	**Score**
No. of Years of Experience of Safety Officer (Section T2.2.10, Form J)	No signed CV Submitted, no copies of qualifications Submitted	**Not attached (score 0)**
	1 to 2 years of **post qualification experience**	**Poor (score 1)**
	More than 2 to 4 years of **post qualification experience**	**Average (score 2)**
	More than 4 to 6 years of **post qualification experience**	**Good (score 3)**
	More than 6 to 8 years of **post qualification experience**	**Very Good (score 4)**
	More than 8 years of experience **post qualification experience**	**Excellent (score 5)**

c) Evaluation in terms of 80/20 preference point system as prescribed in the Preferential Procurement Regulations 2022.

Apply the **80/20 Preference Point system** where a maximum of **Eighty (80**) tender adjudication points will be awarded for **price**. **Twenty (20) points** will be awarded for **specific goals** in terms of the Preferential Procurement Policy Framework Act (Act 5 of 2000) for and Preferential Procurement Regulation, 2022. See section **T2.2.2, Form B** for the Preference model.

Specific Goals

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 section C2.29 above as may be supported by proof/ documentation stated in the conditions of this tender:

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

(Note to organs of state: Where either the 90/10 or 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 (80/20 system)	Percentage ownership equity (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
I. Historically Disadvantaged Individuals (HDI)	8		
II. Who is female	5		
III. Who has a disability	2		
IV. Specific goal: Youth	2		
V. Specific goal: Locality promotion of enterprises located in **Nkangala District,Mpumalanga Province**)	3		

Bidders who wish to claim points in terms of table 2.12 below need to provide proof for each point claimed as guided below:

- .
  - Historically Disadvantaged Individuals (HDI) – **Attach copy of Identity Document (ID) and company registration document**
  - Who is female- Attach copy of Identity Document (ID) and company registration document
  - Who has a disability – **Attach a certified copy or original doctor's letter confirming the disability**
  - Who is youth (A person that is not older than 35 years on the closing date of a bid) **Attach copy of Identity Document (ID) and company registration document**
  - Specific goal: **Locality – promotion of enterprises located in a Nkangala District, Mpumalanga Province**
    a) a valid municipal services account (water, sanitation, rates and electricity) in the name of the bidder/s or active director/s **or**
    b) a valid lease agreement from the lessor **or**
    c) a letter on the letterhead of the ward councillor/traditional authority/council that must be signed, stamped and dated.

C.3.13	**Acceptance of tender offer:**	A Tender Offer will only be accepted on condition that such acceptance is not prohibited in terms of Clause 44 of the Supply Chain Management Regulations published in terms of the Public Finance Management Act, 2003.
C.3.17	**Provide copies of the contract**	One signed copy of the contract shall be provided by the Employer to the successful Tenderer.

	ADDITIONAL CONDITIONS OF TENDER
The additional conditions of Tender are:	
	Compliance with Occupational Health and Safety Act 1993 Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 issued in terms of Section 43 of the Act. The Tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith. In this regard the **Contractor** shall submit, a detailed Health and Safety Plan in respect of the Works in order to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act and Regulations.

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

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

The Contractor is required to submit to the Employer the Occupational Health and Safety Agreement (included **in Part C1.4** of the Contract Document) and a letter of good standing from the Compensation Commissioner, or a licensed compensation insurer, within 14 days after the Commencement Date of the Contract.

CIDB STANDARD CONDITIONS OF TENDER

SECTION T1.2.3: CIDB STANDARD CONDITIONS OF TENDER

The conditions of tender are the Standard Conditions of Tender (August 2019) as contained in Annex C of the Construction Industry Development Board (CIDB) Standard for Uniformity in Engineering and Construction Works Contracts

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Annex C

Standard Conditions of Tender

C.1 General

Part T1. 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 C.2 and C.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.

Part T2. 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 fulfill 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) incompatibility 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 in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;

Part T3. 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.

Part T4. 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.

Part T5. C.1.6 Procurement procedures

1. 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.

2. 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.

3. C.1.6.3 Proposal procedure using the two stage-system

A. C.1.6.3.1 Option 1

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

B. C.1.6.3.2 Option 2

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

C.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

C.2 Tenderer's obligations

Part T6. 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.

Part T7. 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.

Part T8. C.2.3 Check documents

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

Part T9. 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.

Part T10. 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.

Part T11. 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.

Part T12. 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.

Part T13. C.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least Ten(10) working days before the closing time stated in the tender data.

Part T14. 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.

Part T15. 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.

Part T16. 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.

Part T17. 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.

Part T18. C.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 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.

Part T19. 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.

Part T20. 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.

Part T21. 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".

Part T22. 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.*

Part T23. 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.

Part T24. 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.

Part T25. 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.

Part T26. 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.

Part T27. 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.

Part T28. C.2.23 Certificates

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

C.3 The employer's undertakings

Part T29. 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 as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

Part T30. 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 Ten (10) 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.

Part T31. 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.

Part T32. C.3.4 Opening of tender submissions

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 claimed for its BBBEE status level 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.

Part T33. C.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.

Part T34. 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.

Part T35. 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.

Part T36. 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.

Part T37. 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.

Part T38. 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.

Part T39. 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.
Equitable	Terms and conditions for performing the work do not unfairly prejudice the interests of the parties.
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

4. 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.

Part T40. 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.

Part T41. 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.

Part T42. 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
c) 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.

Part T43. 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.

Part T44. 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.

Part T45. 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.

Part T46. 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.

PART T2: RETURNABLE DOCUMENTS

SECTION T2.1:
SECTION T2.2: LIST OF RETURNABLE DOCUMENTS

THE TENDERER MUST SUBMIT THE FOLLOWING DOCUMENTS WITH THIS TENDER. THE MANDATORY DOCUMENTS LISTED BELOW MUST BE SUBMITTED WITH THE TENDER; A TENDER OMITTING ANY OF THEM WILL BE REGARDED AS NON-RESPONSIVE.

Clause referred to in Standard Conditions of Tender	Document
C.2.1	Tenderers shall provide their CRS Number of registered Contractor as well as JV Partner*. Recent printout from CIDB website indicating the CRS number will also be accepted. **NB: In cases where a bidder intends to form a Joint Venture, the CRS number/s must be filled in below i.e. the Lead partner and Joint Venture partner/s:** **<u>Tenderer/Leading JV Partner</u>** CRS Number: _____ Name of Company: _____ **<u>JV Partner</u>** CRS Number: _____ Name of Company: _____ **<u>JV Partner</u>** CRS Number: _____ Name of Company: _____ All contractors, even tendering in JV, must be registered with CIDB. The lead partner has a contractor grading designation not lower than one level below the required grading designation in the GB class of construction work. ***NB: Recent printout from CIDB website indicating the CRS number will also be accepted.**
C.2.7	Attendance of the Compulsory Tender Clarification meeting as stipulated.
C.2.11	"In the event of mistakes having been made on prices inclusive of VAT on the **FORM OF OFFER** it must be crossed out in ink at each and every price alteration and be accompanied by an initial". Corrections in terms of price must not be made by means of a correction fluid such as Tipp-Ex or similar product. If correction fluid has been used on any specific item price, such item will not be considered. No correction fluid must be used in a Bill of Quantities where prices are calculated to arrive at a total amount. If correction fluid has been used on the tendered total carried to the Form of Offer, the tender will not be considered. **<u>The Department will reject the bid if the above conditions are not adhered to</u>**
C.2.13.4	Only duly authorised signatories must sign the original and all copies of the tender offer where required in terms of 2.13.3.

	In the case of a **ONE-PERSON CONCERN** submitting a tender, this shall be clearly stated on the company letter head. In case of a **COMPANY** submitting a tender, include a copy of a resolution by its board of directors authorising a director or any other official of the company to sign the documents on behalf of the company. In the case of a **CLOSED CORPORATION** submitting a tender, include a copy of a resolution by its members authorising a member or any other official of the corporation to sign the documents on each member's behalf. In the case of a **PARTNERSHIP** submitting a tender, all the partners shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case proof of such an authorisation shall be included in the Tender. In the case of a **JOINT VENTURE** submitting a tender, include a resolution of each company of the Joint Venture together with a resolution by its members authorising a member of the Joint Venture to sign the documents on behalf of the Joint Venture." **i.e. the Joint Venture must submit a resolution from each member of the Joint Venture plus a resolution of the Joint Venture authorising the signatory, and must identify the lead partner.** **Accept that failure to submit proof of Authorisation to sign the tender shall result in a Tender Offer being regarded as non-responsive.**
C3.8	Form of offer must be fully completed and signed by duly authorized person.
Additional mandatory requirement	**Letter of good standing from the Compensation Fund, Department of Employment and Labour (COIDA)** The Tenderer is registered and in good standing with respect to Compensation for Occupational Injuries and Diseases Act (COIDA) with the Compensation Fund (Department of Employment and Labour) or with a licensed compensation insurer. The Tenderer must submit a valid letter of good standing for building construction related work with the tender. The successful tenderer must provide a current letter of good standing before site handover (Construction Regulations, 2014, regulation 5(1)(j)). In the event of the **Tenderer being a joint venture/consortium**, the letter of good standing for **building and construction related projects of <u>individual members</u>** of the joint venture/consortium **must** be provided.

PART A
INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT					
BID NUMBER:	**CONMP0006 (2026/2027)**	**CLOSING DATE:**	**26 NOVEMBER 2026**	**CLOSING TIME:**	**11:00 am**
DESCRIPTION	**APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE**				

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT:

Department of Land Reform and Rural Development.
17 Van Rensburg Street, Bateleur Building Block E
6th Floor
Nelspruit
1200

SUBMITTING OF TENDERS – PLEASE NOTE: Tenders can only be submitted in the Sixth Floor Tender Box in Nelspruit– MPUMALANGA.

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO		**TECHNICAL ENQUIRIES MAY BE DIRECTED TO:**	
CONTACT PERSON	**Ms. B Ramanyimi**	CONTACT PERSON	**Ms. C Machete / Mr. MA Mamabolo**
TELEPHONE NUMBER	**013 754 8066**	TELEPHONE NUMBER	**071 931 8201 / 083 565 2461**
FACSIMILE NUMBER		FACSIMILE NUMBER	
E-MAIL ADDRESS	**Banele.Ramanyimi@dlrrd.gov.za**	E-MAIL ADDRESS	**nolubabalo.machete@dlrrd.gov.za** **mahlatse.mamabolo@dlrrd.gov.za**

SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		**OR**	CENTRAL SUPPLIER DATABASE No:	MAAA

A. ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES OFFERED?	☐Yes ☐No [IF YES ENCLOSE PROOF]	**B.** ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES OFFERED?	☐Yes ☐No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]

QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐ YES ☐ NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	☐ YES ☐ NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐ YES ☐ NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐ YES ☐ NO
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐ YES ☐ NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVIAND, IF NOT, REGISTER ON THE CENTRAL SUPPLIER DATABASE AS STATED UNDER TAX COMPLIANCE REQUIREMENTS BELOW.

PART B
TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE JBCC PRINCIPAL BUILDING AGREEMENT (EDITION 6.3 - JUNE 2024) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. **THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN THE FORM OF OFFER AND ACCEPTANCE (PART C1.1).**
1.5. BID VALIDITY PERIOD IS 90 DAYS
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER: ……

CAPACITY UNDER WHICH THIS BID IS SIGNED: ……
(Proof of authority must be submitted e.g. company resolution)

DATE: ……

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SECTION T2.2.1: FORM A: SCHEDULE OF PROPOSED SUBCONTRACTORS

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us. The contractor is to obtain approval if he/she intends to change the submitted list of Subcontractors.

In Bids where subcontractors are involved each party must submit a separate proof of TCS / PIN / CSD number together with the bid. Where no TCS is available but the subcontractor is registered on the Central Supplier Database (CSD), a CSD number must be provided.

1. Will any portion of the contract be sub-contracted? Yes ☐ / No ☐

2. If yes, indicate:

   (i) The name of the proposed sub-contractor, the nature and extent of the work to be sub-contracted and the previous experience with the sub-contractor in the table below.

Name and address of proposed Sub-contractor		Nature and extent of work	Previous experience with Sub-contractor
1.			
2.			
3.			
4.			

SUB-CONTRACTING

1. Will any portion of the contract be sub-contracted? Yes ☐ / No ☐

2. If yes, indicate:

   (i) What percentage of the contract will be Sub-contracted? ……%

   (ii) The name/s of the sub-contractor(s)? (1) ……

   (2) ……

   (3) ……

   (4) ……

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

(iii) The CIDB grading, CSD number and specific-goal status (HDI / female / youth / disability / locality) of the sub-contractor(s)? ……..

Signature of person authorised to sign the tender: …….

Date: …….

SECTION T2.2.2: FORM B: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022 (SBD6.1)

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 JBCC PRINCIPAL BUILDING AGREEMENT (EDITION 6.3 - JUNE 2024), DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

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1. DEFINITIONS

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

(e) **"the Act"** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000); and

(f) "Historically Disadvantaged individuals" means a person historically disadvantaged by unfair discrimination on the basis of race: Provided that a person historically disadvantaged on the basis of race refers to Africans, Coloureds, Indians and people of Chinese descent who are South African citizens by birth or descent; or who became citizens of the Republic of South Africa by Naturalisation -

- Before 27 April 1994; or
- On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date.

2. GENERAL CONDITIONS

2.1 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).

2.2 To be completed by the organ of state

a) The applicable preference point system for this tender is the 80/20 preference point system.

2.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

(a) Price; and

(b) Specific Goals.

2.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	**100**

2.5 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.

2.6 Tenderers that fail to claim points for specific goals or that fail to fully complete the table in paragraph 2.12 below, will not be awarded points for specific goals.

2.7 The Department will verify each claim for specific goals against the proof submitted and will award the points so verified. Please take note of the examples on how to calculate points for specific goals as per paragraph 2.12 below.

2.8 Tenderers that fail to submit the correct SBD 6.1 form as issued by the Department of Land Reform and Rural Development, will not be awarded points for specific goals.

2.9 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.

2.10 Tenderers who wish to claim points in terms of the table in paragraph 2.12 below need to provide proof for each point claimed as guided below:

2.10.1 Historically Disadvantaged individuals (HDI):

- **Attach a copy of Identity Document (ID) and company registration document.**

2.10.2 Who is female:

- **Attach a copy of Identity Document (ID) and company registration document.**

2.10.3 Who has a disability:

- **Attach a certified copy or original doctor's letter confirming the disability.**

2.10.4 Who is youth (a person that is not older than 35 years on the closing date of a bid):

- **Attach a copy of Identity Document (ID) and company registration document.**

2.10.5 Locality

(a) a **valid** municipal services account (water, sanitation, rates and electricity) in the name of the bidder/s or active director/s **or**
(b) a valid lease agreement from the lessor **or**
(c) a letter on the letterhead of the ward councillor/traditional authority/council that must be signed, stamped and dated.

2.11 The Department will use the Central Supplier Database and documents submitted by the tenderer to verify the points claimed for specific goals.

2.12 Specific goals for the tender and points claimed are indicated per the table below.

The specific goals allocated pointsin terms of this tender	**Number of points allocated (80/20 system)**	**Percentage ownership equity (To be completed by the tenderer)**	**Number of points claimed(80/20 system) (To be completed by the tenderer)**
I. HDI	**8**		
II. Who is female	**5**		
III. Who has a disability	**2**		
IV. Specific goal: Who is youth	**2**		
V. Specific goal: Locality **(Promotion of enterprises located in Nkangala District , Mpumalanga Province.)**	**3**		

The number of points claimed for specific goals, are calculated as follow:

(I) A maximum of 8 points may be allocated to tenderers who are Historically Disadvantaged individuals (HDI): on the following basis:

• **Percentage ownership equity** x 8 ÷ 100 = number of points claimed.

(II) A maximum of 5 points may be allocated for to tenderers who is female, on the following basis:
• **Percentage ownership equity** x 5 ÷ 100 = number of points claimed.

(III) A maximum of 2 points may be allocated to tenderers who has a disability, on the following basis:
• **Percentage ownership equity** x 2 ÷ 100 = number of points claimed.

(IV) A maximum of 2 points may be allocated to tenderers who are youth, on the following basis:
• **Percentage ownership equity** x 2 ÷ 100 = number of points claimed.

(V) A maximum of 3 points may be allocated to tenderers for locality, on the following basis: **3 points where the proof listed below shows that the tenderer has its principal place of business in Nkangala District Municipality; otherwise 0 points**.

(d) a **valid** municipal services account (water, sanitation, rates and electricity) in the name of the bidder/s or active director/s **or**
(e) a valid lease agreement from the lessor **or**
(f) a letter on the letterhead of the ward councillor/traditional authority/council that must be signed, stamped and dated.

2.13 It is important to note that failure by a tenderer to complete the table in paragraph 2.12 in full, will result in points for specific goals not to be allocated.

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. 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:

$$Ps = 80\left(1 - \frac{Pt - P\,min}{P\min}\right)$$ **80/20**

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. 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 the table in paragraph 2.12 above as may be supported by proof/ documentation stated in the conditions of this tender.

5. SUB-CONTRACTING

5.1 Will any portion of the contract be sub-contracted? (***Tick applicable box***)

YES		NO	

5.1.1 If yes, indicate:

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

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

iii) Points claimed for HDI by the sub-contractor: .....……..

6. DECLARATION WITH REGARD TO COMPANY/FIRM

6.1. Name of company/firm: ……...

6.2. Company registration number: …….....

6.3. TYPE OF COMPANY/ FIRM

- □ Partnership/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]

6.4. 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**: …… …… ……

SECTION T2.2.3: C: RECORD OF ADDENDA TO TENDER DOCUMENTS

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

Date		Title of Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signature of person authorised to sign the tender: .....

Date:

SECTION T2.2.4: FORM D: AUTHORITY OF SIGNATORY- EXAMPLE ONLY

Signatories for companies, closed corporations and partnerships must establish their authority **BY ATTACHING TO THIS FORM, ON THEIR ORGANISATIONS'S LETTERHEAD S T A T I O N E R Y** , a copy of the relevant resolution by their Board of Directors, Members or Partners, duly signed and dated. **PLEASE DO NOT COMPLETE THE BELOW EXAMPLE (TEMPLATE)**

An **EXAMPLE** is shown below for a COMPANY:

MABEL HOUSE (Pty) Ltd

By resolution of the Board of Directors taken on *20 May 2000, MR A.F JONES*

has been duly authorised to sign all documents in connection with Contract no CON 0005, and any contract which may arise therefrom, on behalf of *Mabel House (Pty) Ltd.*

SIGNED ON BEHALF OF THE COMPANY:	(Signature of Managing Director)
IN HIS CAPACITY AS:	Managing Director
DATE:	20 May 2000
SIGNATURE OF SIGNATORY:	Signature of *A.F Jones)*

Example

As witnesses:

1. .....

2. .....

Signature of person authorised to sign the tender: .....

Date: .....

N.B. A Joint Venture must submit a resolution from each member plus a resolution of the Joint Venture, in line with clause C.2.13.4 – Tender Data

SECTION T2.2.5: FORM E: STATUS OF CONCERN SUBMITTING TENDER

1. GENERAL

State whether the tenderer is a company, a closed corporation, a partnership or a one-man concern. (Make an X in the appropriate space below)

Company ☐ Closed Corporation ☐ Partnership ☐

One-man concern ☐ Joint Venture ☐

2. INFORMATION TO BE PROVIDED

(Block letters)

2.1 If the tenderer is a Company:

(a) Affix a certified copy of the CIPC registration certificate (CoR14.3) and CIPC disclosure of directors to this page.
(b) List the Directors.

2.2 If the tenderer is a Closed Corporation:

(a) Affix a certified copy of the Founding Statement to this page.
(b) List the Members.

2.3 If the tenderer is a Partnership:

List the partners.

2.4 If the tenderer is a One-man concern:

Provide the full name and ID number of the person.

2.5 If the tenderer is a Joint Venture:

(a) Affix certified copies of the CIPC registration documents (CoR14.3 / CK1 / CK2) of each member of the JV to this page.
(b) Affix the signed JV agreement naming the lead partner and each member's participation (%).

3. REGISTERED FOR VAT PURPOSES IN TERMS OF THE VALUE-ADDED TAX ACT, (Act Nr. 89 of 1991) (Make an X in the appropriate space below)

Yes ☐ / No ☐ Registration nr.: .....

Signature of person authorised to sign the tender: .....

Date: .....

SECTION T2.2.6: FORM F: BIDDER'S DISCLOSURE (SBD 4)

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 interest[1] 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**

[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.

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:
……
……

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 consortium 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.

3.5 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.

3.6 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.

…… ……
Signature Date

…… ……
Position Name of bidder

SECTION T2.2.7: FORM G: SCHEDULE OF PLANT AND EQUIPMENT

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

(a) Details of major equipment that is owned by and immediately available for this contract.
Proof of ownership (e.g. registration papers or purchase invoices) must be attached.

Quantity	Description, size, capacity, etc.
1	

Attach additional pages if more space is required.

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

Proof of lease agreement must be attached or a letter of intent from a hiring company.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signature of person authorised to sign the tender: .....

Date: .....

SECTION T2.2.8: FORM H: SCHEDULE OF WORK CARRIED OUT BY THE TENDERER

The tenderer shall list in the spaces provided below the last **TEN YEARS (10)** similar nature contracts of similar scope, nature and size awarded to the contractor. This information shall be deemed to be material to the award of this tender.

NB Tenderers should have completed Borehole drilling and equipping projects of similar nature, with minimum value of R 250 000.00 each in the last 9 years, bidders are required to attach the appointment letter, the completion certificate and Form S signed and stamped by the previous client. Failure to attach these documents will result in the project not being scored.

Employer (Name, Tel No, Fax No)	Principal Agent / Client Representative (Name, Tel No, Fax No)	Nature Of Work (Type of building works) Example steel frame structure, brickwork etc	Value of Work (incl. VAT) Work	Year Completed
LIST COMPLETED PROJECTS IN THE LAST TEN YEARS				

Signature of person authorised to sign the tender: ....

Date: .....

SECTION T2.2.9: FORM I: CERTIFICATE OF TENDERER'S VISIT TO THE SITE

This is to certify that I, ...

Representative of (Tenderer) .....

Of (address) .....

.....

.....

Telephone No: .....

Fax No: .....

Visited and carefully examined the Site on the ..... day of ..... 20 .....

In the company of (Principal Agents' representative) .....

Signature (Tenderer's Representative) .....

Signature (Principal Agents' Representative) .....

SECTION T2.2.10: FORM J: KEY-PERSONNEL/ SUPERVISORY AND MANAGEMENT STAFF

The Tenderer shall, submit the names of all management and supervisory staff that will be employed to supervise the Contract. **Please attach signed CV's and copies of qualification of the proposed key personnel.** The Tenderer shall also include an organogram of the project team and the company structure.

FAILURE TO ATTACH SIGNED CV'S AND COPIES OF QUALIFICATIONS WILL RESULT IN THE BIDDER NOT BEING AWARDED POINTS

		Weight
1. POSITION	**Geohydrologist**	**20**
Name and Surname		
Indicate the No. of Years of Experience post qualification		
Formal Geohydrology/ Geology/ Hydrology Qualifications: (NQF Level 6) or higher		
Registered as Pr.Scientist SACNASP		
Currently Employed by Tenderer (Y/N)		
Signature		
2. POSITION	**Foreman**	**10**
Name and Surname		
Indicate the No. of Years of Experience in the Built Environment		
Formal Built Environment Qualification (NQF Level 5 or higher)		
Post-qualification years of experience		
Currently Employed by Tenderer (Y/N)		
Signature		
3. POSITION	**CONSTRUCTION HEALTH & SAFETY OFFICER**	**10**
Name and Surname		
Is the proposed Construction Health and Safety Officer registered **with SACPCMP. Indicate registration number**	**YES / NO:** **SACPCMP REGISTRATION NUMBER:**	
Construction Health and Safety Officer registered with **SACPCMP post registration years of experience**.		
Currently Employed by Tenderer (Y/N)		
Signature		

Signature of person authorised to sign the tender: . …. .....

Date: .....

SECTION T2.2.11: FORM K: QUALITY MANAGEMENT SYSTEMS

Briefly describe the construction quality system incorporated by the tenderer in his organisation and which will be applicable to this Contract.

Description	Internal	External	Name of responsible Company /or Person (In case of Person give years' experience and qualification)

Signature of person authorised to sign the tender: ....

Date: .....

SECTION T2.2.12: FORM L: COMPLIANCE WITH OHSA (ACT 85 OF 1993)

Tenderers are required to satisfy the Employer and the Principal Agent as to their ability and available resources to comply with the above by answering the following questions and providing the relevant information required below.

1. Is the Contractor familiar with the OHSA (ACT 85 of 1993) and its Regulations? Yes ☐ / No ☐

2. Who will prepare the Contractor's Health and Safety Plan? (refer to the Health and Safety Specification in Part C3) (Provide a copy of the person/s curriculum vitae/s or company profile). Yes ☐ / No ☐

3. Does the Contractor have a health and safety policy? (if yes, provide a copy). How is this policy communicated to all employees? Yes ☐ / No ☐

4. Does the Contractor keep records of safety aspects of each construction site? If yes, what records are kept? Yes ☐ / No ☐

5. Does the Contractor conduct monthly safety meetings? If yes, who is the chairperson of the meeting, and who attend these meetings? Yes ☐ / No ☐

6. Does the Contractor have a safety officer in his employment, responsible for the overall safety of his company?
   If yes, please explain his duties and provide a copy of his CV. Yes ☐ / No ☐

7. Does the Contractor have trained first aid employees? If yes, indicate, who. Yes ☐ / No ☐

8. Does the Contractor have a safety induction training programme in place? (If yes, provide a copy) Yes ☐ / No ☐

Signature of person authorised to sign the tender: ....

Date: .....

SECTION T2.2.13: FORM M: CSD SUPPLIER NUMBER AND TAX COMPLIANCE PIN

Bidders registered on the **National Treasury Central Supplier Database (CSD**) are required to submit their unique **Personal Identification Number (PIN)** issued by SARS in the space provided below as stipulated in clauses 2.26 and 2.27 of the Tender Data.

Bidders may also submit a **printed TCS** together with the bid.

In bids where Consortia / Joint Ventures / Sub-contractors are involved; each party **must** submit a separate proof of **TCS / PIN / CSD** number.

Where no TCS is available but the bidder is registered on the Central Supplier Database (CSD), a **CSD number** must be provided

The certificates may be stapled into the tender document without taking the tender document apart or may be attached in a separate file to the tender document.

Tax compliance status will be verified on the CSD. A tenderer whose tax matters are not in order will be given 7 working days to rectify its tax status before award; failure to do so will result in the tender being disregarded.

Tenderer/Leading JV Partner

Name of Company:	
CSD Supplier Number: (Master Registration Number)	
Tax Compliance PIN number:	

JV Partner 1

Name of Company:	
CSD Supplier Number: (Master Registration Number)	
Tax Compliance PIN number:	

JV Partner 2

Name of Company:	
CSD Supplier Number: (Master Registration Number)	
Tax Compliance PIN number:	

***NB: All contractors, even tendering in JV, must be registered with National Treasury Central Suppler Database**

SECTION T2.2.14: FORM N: PRELIMINARY PROGRAMME

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

Note: The programme must be based on the completion period as specified in the Contract Data.

SECTION T2.2.15: FORM O: ESTIMATED MONTHLY EXPENDITURE

The tenderer shall, in the table below, state the estimated cash flow on the contract based on his preliminary programme, his tendered unit rates and his submission of payment certificates to the Employer. Amounts for Contract Price Adjustment shall not be included.

Payment Certificate No.	**Amount (VAT Included)**					
	a	**B**	**a-b**			**Cumulative cash flow**
	Payments Received	**Expenditure**		**Net cash flow**		
1	None		d		**j=d**	
2			e		k=j+e	
3			f		l=k+f	
4			g		m=l+g	
5			h		n=m+h	
6			etc		etc	
7						
8						
9						
10						
Etc						
Maximum negative cash flow: take the largest negative number in the last column and write it here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>						

From what sources will you fund the above amount (e.g. funds internally available, bank overdraft, loan, partner (his source), etc.)

....

....

....

Signature of person authorised to sign the tender: ....

Date: ....

SECTION T2.2.16: FORM P: ALTERATIONS BY TENDERER

Should the Tenderer desire to have any departures from, or modifications to the JBCC Principal Building Agreement (Edition 6.3 - June 2024), Specifications, Bill of Quantities or Drawings considered, or to qualify his tender in any way, he shall set out his proposals clearly hereunder or alternatively state them in a covering letter attached to his tender and referred to hereunder.

PAGE	DESCRIPTION

Signature of person authorised to sign the tender: ....

Date: .....

SECTION T2.2.17: FORM Q: SUPPLIER MAINTENANCE FORM

SUPPLIER MAINTENANCE

BAS ☐ **LOGIS** ☐

OFFICE ☐

System User Only			
Captured By:			
Captured Date:			
Authorised By:			
Date Authorised:			
Safety Web Verification			
	YES		NO

The Director General: Department of Land Reform and Rural Development

I/We hereby request and authorise you to pay any amounts, which may accrue to me/us to the credit of my/our account with the mentioned bank.
I/we understand that the credit transfers hereby authorised will be processed by computer through a system known as "ACB - Electronic Fund Transfer Service", and I/we understand that not additional advice of payment will be provided by my/our bank, but that the details of each payment will be printed on my/our bank statement or any accompanying voucher. (This does not apply where it is not customary for banks to furnish bank statements).
I/we understand that the department will supply a payment advice in the normal way, and that it will indicate the date on which the funds will be made available on my/our account.
This authority may be cancelled by me/us by giving thirty days' notice by prepaid registered post.
Please ensure information is valid as per required bank screens.
I/We understand that bank details provided should be exactly as per the records held by the bank.
I/We understand that the department will not assume responsibly for any delayed payments, as a result of incorrect information supplied.

Company / Personal Details	
Registered name	
Trading name	
Tax number	
Vat number	
Title	
Initials	
First name	
Surname	

Address Details	
Postal Address Line 1	
Postal Address Line 2	
Physical Address Line 1	
Physical Address Line 2	
Postal Code	

New Detail	
☐ New Supplier Information	☐ Update Supplier Information

Supplier type

☐ Individual
☐ Company
☐ CC
☐ Partnership
☐ Department
☐ Trust
☐ Other

Department number ☐

Other Specify ☐

Supplier Account Details			
(This field is compulsory and should be completed by a bank official from the relevant bank.)			
Account name			
Account number			
Branch name			
Branch number			
Account type		Cheque Account	
		Savings Account	
		Transmission Account	
		Bond Account	
		Other (Please Specify)	
ID Number			
Passport Number			
Company Registration Number			
*CC Registration			
*Please include CC/ CK where applicable			
Practise Number			
When the bank stamps this entity maintenance form, they confirm that all the information completed by the entity is correct.	Bank stamp It is hereby confirmed that these details have been verified against the following screens: **ABSA** – CIF screen **FNB** – Hogans system on the CIS4 **STD** Bank – Look-up-screen **Nedbank** – Banking Platform under the Client Details tab		

Contact Details			
Business			
	Area Code	*Telephone Number*	*Extension*
Home			
	Area Code	*Telephone Number*	*Extension*
Fax			
	Area Code	*Telephone Number*	
Cell			
	Cell Code	*Cell Number*	
E-mail Address			
Contact Person			

	Supplier details	Departmental sender details
Signature		
Print Name		
Rank		
Date (dd/mm/yyyy)		

Address of Land Reform and Rural Development where form is submitted from:

SECTION T2.2.18: FORM R: DECLARATION CERTIFICATE FOR LOCAL LABOUR PARTICIPATION

1. Definitions

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 and recognition by the residents of the target area

1.2 Target Group

For this project, the employment targets are 55% women and 40% youth (persons up to and including 35 years), as stated in clause 2.28 of the Tender Data. Specifically excluded from the Target Group is the contractor's own staff unless such staff are also from the Target Area.

1.3 Target Area

FOR THIS PROJECT, THE TARGET AREA IS DEFINED AS PALMIETFONTEIN 104 JT, BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS AND DRIEFONTEIN FARMS IN THE EMAKHAZENI LOCAL MUNICIPALITY, NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE.

1.4 Labour Maximisation

Labour maximisation shall contribute a minimum of 80%.

2. Conditions associated with the Contract Participation Goal (contract condition)

The tenderer undertakes to:

1) engage one or more targeted labour in accordance with the provisions of the SANS 1914-4 as varied in section 3 hereunder;
2) accept the sanctions set out under "Sanctions" below, should such conditions be breached;
3) complete the Targeted Labour (CPG) calculation form contained below; and
4) complete the Supporting Contract Participation Goal Calculation contained below.

3. Variation to the targeted construction procurement specification SANS 1914-4

The variations to SANS 1914-4 are set out below. Should any requirements of the variations conflict with requirements of SANS 1914-4 the requirements of the variations shall prevail

Calculations shall be based as a % of targeted labour costs of the Tender Sum (excluding VAT) and not calculated in accordance with methods 1 or 2 in Annexure A of SANS 1914-4.

4. Sanctions

In the event that the Tenderer fails to substantiate that any failure to achieve the Contract Participation Goal was due to quantitative under runs, the elimination of items, or any other reasons beyond the Contractor's control which may be acceptable to the Employer, it shall be liable to pay to the Employer a financial penalty calculated in the following manner:

$$P = 0{,}50 \times \frac{(D - D_o)}{(100)} \times N_A$$

Where D = tendered Contract Participation Goal percentage.

D_o = the Contract Participation Goal which the Employer's representative based on the credits passed, certifies as being achieved upon completion of the contract.

N_A = Net Amount (Actual contract expenditure, excluding VAT)

P = Rand value of penalty payable

Tender Contract Participation Goal in respect of targeted labour

I/We hereby tender a Contract Participation Goal of ……% in compliance with the Employer's Socio-Economic Requirements.

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the firm or sole proprietor confirms that he/she understands the conditions attached to the Contract Participation Goal.

Signature: .....

Name: .....

Duly authorized to sign on behalf of: .....

Telephone: .....

Fax: .....

5. Supporting Targeted Labour (CPG) calculation

TYPE OF TARGETED LABOUR	TOTAL ESTIMATED WORKING HOURS	RATE	TOTAL ESTIMATED WAGE COST
Permanent labour*			
Temporary labour			
SMME labour			
		Total	

*Note: A tenderer may only claim permanent staff towards the Contract Participation Goal if said staff are also from the Target Area. Permanent staffs are those who have been continuously employed by the tenderer for at least three months prior to the commencement of this project.

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

SECTION T2.2.19: FORM S: TENDERERS' PERFORMANCE EVALUATION FORM

Form S must be signed and stamped by the previous client. Failure to attach these documents will result in the project not being scored.

PROJECT PERFORMANCE EVALUATION FORM

Project Name of Tenderer: _____

Project name: _____

Project location: _____

Construction period: _____

Completion date: _____

Contract value: _____

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting a score rate of **0** to **5** with **0 No information submitted/unacceptable performance, 1 Poor ,2 Average, 3 Good,4 Very Good, 5 Excellent** rate in the relevant box below:

	REMARKS BY CONSULTANT/COMPANY LISTED BY THE CONTRACTOR AS REFERANCE
1. Project performance/ time management/ programming	
2. Quality of Workmanship	
3. Resources Personnel	
4. Resources Plant	
5.Financial management/ payment of subcontractors/ cash flows etc	

B. Would you consider / recommend this tenderer again:

YES	NO

C. Any other comments:

_____

_____

D. My contact details are:

Telephone: _____ Cellphone: _____

Fax: _____E-mail: _____

Thus, signed at _____ on this _____ day of _____ 20____

_____
Signature of principal agent

COMPANY STAMP

NOTE:

If reference cannot be verified due to the inability to contact the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points

SECTION T2.2.20: FORM T: COMPULSORY ENTERPRISE QUESTIONARE

Compulsory Enterprise questionnaire

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

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 3: CIDB registration number, if any:

Section 4: CSD number:

Section 5: Particulars of sole proprietors and partners in partnerships:

Name*	**Identity number***	**Personal income tax number***

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

Section 6: Particulars of companies and close corporations

Company registration number:

Close corporation number:

Tax reference number:

Section 7: SBD4 issued by National Treasury must be completed for each tender and be attached as a tender requirement.

Section 8: SBD 6.1 issued by National Treasury must be completed for each tender and be attached as a tender requirement.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise:
i) authorizes the employer to verify the tenderer's tax compliance status from the South African Revenue Services that it is in order;
ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004, or on the National Treasury Database of Restricted Suppliers;
iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed		Date	
Name		Position	
Enterprise name			

PART C1: AGREEMENT AND CONTRACT DATA

C1.1 - FORM OF OFFER AND ACCEPTANCE

FORM OF OFFER AND ACCEPTANCE
(AGREEMENT)

OFFER

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

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

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

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

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

Rand (in words);
R (in figures),

*(**Should there be a discrepancy between the amount in words and the amount in figures then the amount in figures shall govern**.)*

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

Signature(s) of duly authorised				
Name(s)				
Capacity				
THE TENDERER (Name of tenderer/Bidder)				
Address of tenderer/Bidder				
WITNESS: Name and signature of witness			Date	

ACCEPTANCE

By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's offer. In consideration thereof, the employer shall pay the contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1 Agreements and contract data, (which includes this agreement)

Part C2 Pricing data

Part C3 Scope of work

Part C4 Site information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the returnable schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this form of offer and acceptance. No amendments to or deviations from said documents are valid unless contained in this schedule.

The tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor) within five (5) working days of the date of such receipt notifies the employer in writing of any reason why he/she cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Signature(s)				
Name(s)				
Capacity				
for the Employer				
	(Name and address of employer)			
Name and signature of witness			Date	

SCHEDULE OF DEVIATIONS

Notes:

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

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

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

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

1 **Subject** _____

Details _____

2 **Subject** _____

Details _____

Subject _____

Details _____

4 **Subject** _____

By the duly authorised representatives signing this Schedule of Deviations, 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 change to the terms of the offer agreed by the Bidder and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the 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.

FOR THE TENDERER:

Signature(s) _____ _____

Name(s) _____ _____

Capacity _____ _____

_____
(Name and address of organisation)

Name and Signature
of Witness _____

Date _____

FOR THE EMPLOYER:

Signature(s) _____

Name(s) _____

Capacity _____

_____
(Name and address of organisation)

Name and Signature
of Witness _____

Date _____

C1.2 - CONTRACT DATA

CONTENTS

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1. CONDITIONS OF CONTRACT

The conditions of contract are the General Conditions of Contract for Construction Works (3rd Edition 2015) published by the South African Institute of Civil Engineering, Private Bag X200, Halfway House, 1685, tel 011 805 5947.

The General Conditions of Contract make several references to the Contract Data. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract.

Where applicable, items of data given here below are cross-referenced to the sub clause in the General Conditions of Contract to which they apply.

2. AMPLIFICATIONS OF THE GENERAL CONDITIONS OF CONTRACT

2.1 General

The following clauses amplify the General Conditions of Contract and highlight areas in this document that require specific attention.

2.2 Data Provided by the Employer

2.2.1 Defects Liability Period (CL 1.1.1.13)

The Defects Liability Period is **12 months** calculated from the date of the Certificate of Completion.

2.2.2 Due Completion Date (CL1.1.1.14)

This clause shall apply *mutatis mutandis* to any portion or phase of the Works that may be described in the scope of Works or in the Contract Data or agreed subsequently between the Contractor and the Employer, and committed to writing.

The time for achieving Practical Completion is **2 months** calculated from the Commencement Date, excluding special non-working days.

2.2.3 Employer (CL 1.1.1.15)

The Employer is: "**Department of Land Reform and Rural Development**
"

2.2.5 Delivery of Notices to the Employer (CL1.2.1.2)

The Employer's address for receipt of communications is:

Postal: 17 Van Rensburg, Bateleur Building, 6th Floor, Block E, Nelspruit, 1200
Telephone: (013) 754 8129/8038/8000

2.2.6 Employer's Agent (CL. 1.1.1.16)

'Employer's Agent' means any person with specialized engineering skills who is appointed by the Employer

2.2.7 Delivery of Notice to Employer's Agent (CL 1.2.1.2)

See clause 2.2.5

2.2.4 Pricing Strategy (CL 1.1.1.26)

The pricing strategy is the **Re-measurement Contract**.

2.2.8 Subcontracting (CL 4.4)

Delete the contents of Clause 4.4.1 and insert:

"The Contractor shall not subcontract more than 30 percent of the value of the Contract."

2.2.9 Prohibition of removal of Construction Equipment (CL 4.9.1)

Add the following sub-clause 4.9.2 to Clause 4.9:

"The Contractor shall deliver to the Employer's Agent, on a monthly basis, a detailed inventory of Construction Equipment kept on Site, full particulars given for each day of the month. Distinction shall be made between Owned Equipment and Hired Equipment as well as Equipment in working order and Equipment out of order. Such inventory shall be submitted by the seventh day of the month following the month to be reported."

2.2.10 Information in respect of Employees (CL 4.10.2)

Add the following to sub-clause 4.10.2:

"The Contractor shall deliver to the Employer's Agent, on a monthly basis, a return in detail of supervisory staff and the number of categorized classes of labour employed each day for the said period by the Contractor for execution of the Contract. Such return shall be submitted by the seventh day of the month following the month to be reported."

2.1.11 Contractor's Superintendence (CL 4.12)

Add the following sub-clause 4.12.4 to Clause 4.12:

"Where a form is included in the Appendix to the Contract Data for this purpose, the Bidder shall fill in the name of the person he proposes to entrust with the post of Construction Manager on this Contract in the space provided therefor. Previous experience of this person on work of a similar nature during the past five (5) years is to be entered in the list.

The Construction Manager shall be on Site at all times when work is being performed.

The person as approved of by the Employer's Agent in writing shall not be replaced or removed from Site without the written approval of the Employer's Agent."

2.2.12 Documentation required before Commencement with Works Execution (CL 5.3.1)

The documentation required before commencement with Works execution is:
a) Health and Safety Plan (refer to CL 4.3)
b) Initial Programme (Refer to CL 5.6)
c) Security (Refer to CL 6.2.1 and CL 6.2.3)
d) Insurance (Refer to CL 8.6)

2.2.13 Time to Submit the Documentation (CL 5.3.2)

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

2.2.14 Access Not Exclusive (CL 5.4.2)

Where access and possession of the Site is not exclusive to the Contractor as other construction activities might be executed concurrently by independent Contractors or bodies under separate Contracts entered into with the Employer, this Clause shall apply.

The Contractor shall ensure that neither his operations nor his employees shall interfere with or hinder the operations of the Employer or of other Contractors and he shall indemnify the Employer against all claims arising through default of this requirement.

The Contractor shall hand over portions of the Site of Works (whether completed or not), or completed portions of Works, to these Contractors when required by the Employer. The Contractor shall cause no interference with or delays in the execution of these Contracts.

No discount or commission for the Contractor is allowed on these contracts and it will be assumed that he has fully allowed in the Contract Price for the presence of these contractors on Site. Any service rendered or assistance given by the Contractor to these contractors save as are contained in the Works Specifications, shall be for their accounts only and the Employer shall in no way be responsible to the Contractor for any payments in this respect.

The Contractor shall protect all existing services and all work being carried out and structures being erected on the Site by other contractors. Any damage caused to these services or structures or any obstructions or hindrance caused to other contractors by the Contractor and claims arising there from will be the sole responsibility of the Contractor.

Any repair work shall be carried out at the Contractor's expense, in conformity with the Works Specifications.

The same obligations shall be imposed on the Employer and on other Contractors in respect of the Works being executed under this Contract.

2.2.15 Programme (CL 5.6)

Add the following sub-clause 5.6.6 to Clause 5.6:

"Failure on the part of the Contractor to deliver to the Employer's Agent, the

- programme of the Works in terms of Clause 5.6.1 and
- supporting documents in terms of Clause 5.6.2

within the period stated in the Contract Data, shall be sufficient cause for the Employer's Agent to retain 25 percent of the value of the Fixed Charge and Value-related items in assessment of amounts due to the Contractor, until the Contractor has submitted aforementioned first Programme of the Works and Supporting Documents".

2.2.16 Non-working Days (CL 5.8.1)

a) The non-working days are Sundays.

b) The special non-working days are statutory public holidays and the year-end break commencing on 10 December 2023 and ending on 10 January 2024.

2.1.17 Contractor's Designs and Drawings (CL 5.9.7)

Add to Clause 5.9.7 the following:
"All designs, calculations, drawings and operation and maintenance manuals shall be fully endorsed by a third party registered engineer, accomplished in such specific field of practice and the cost thereof shall be borne solely by the Contractor.

Once the alternative design has been approved, the Contractor shall indemnify and hold harmless the Employer's Agent, the Employer, their agents and assigns, against all claims howsoever arising out of the said design, whether in contract or delict".

2.2.18 Extension of Time Arising from Abnormal Rainfall (CL 5.12)

Add the following to sub-clause 5.12.2.2:

"The extension of time to be allowed due to abnormal rainfall shall be calculated separately for each calendar month or part thereof in accordance with the following formula :

$$V = (Nw - Nn) + \left(\frac{Rw - Rn}{X}\right)$$

V = Extension of time in calendar days for the calendar month under consideration

Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded

Nn = Average number of days for the calendar month on which a rainfall of 10 mm or more has been recorded, as derived from existing rainfall records

Rw = Actual recorded rainfall for the calendar month

Rn = Average rainfall for the calendar month, as derived from existing rainfall records

x = 20

Average number of days per year with rainfall exceeding:

Y = 10mm

X = 15mm

The factor (Nw - Nn) shall be considered to represent a fair allowance for days during which rainfall exceeds 10 mm and the factor (Rw - Rn)/x shall be considered to represent a fair allowance for those days when rainfall does not exceed 10 mm but wet conditions prevent or disrupt work.

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

2.2.19 Penalty for Delay (CL 5.13.1)

The penalty for failing to complete the Works is: R 3 800.00 of the offered total of prices excluding VAT per calendar day.

2.2.20 Latent Defect Period (Cl 5.16.3)

The latent defect period is **5 years**.

2.2.21 Delivery of Security (CL 6.2.1)

The type of security required for the due performance of the Contract shall be restricted to one of the following:

Performance Guarantee of **10 (ten) percent of the Contract Sum**, issued by a Commercial Bank registered in the Republic of South Africa,

or

Performance Guarantee of 10 (Ten) percent of the Contract Sum, issued by an Insurance Company registered in terms of the Short-term Insurance Act (Act 53 of 1998).

Whenever a Joint Venture constitutes the contracting party (Contractor) to this Contract, the Performance Guarantee shall be issued on behalf of the Joint Venture.

2.2.22 Contractor Failing to Select or Provide Security (CL 6.2.2)

Delete the entire contents of Clause 6.2.2 and replace with:

"Failure to deliver an acceptable security as selected in the Contract Data within the stipulated period is a fundamental breach of Contract".

2.2.23 Variations (CL 6.3)

Omit the words "Provided that" under Clause 6.3.2 and omit Clause 6.3.2.1.

Add the following to the existing clause

Any Contract Variations must be approved by the Department in line with the Departmental Approved Supply Chain Management Delegation of Authority.

Contingencies: Contingencies are under the sole control of the Department and upon approval in line with the Departmental Approved Supply Chain Management Delegation of Authority.

2.2.24 Dayworks (CL 6.5.1.2.3)

The percentage allowance to cover overhead charges is **15 (fifteen) percent**.

2.2.25 Contract Price Adjustment (CL 6.8.2)

CPA not allowed.

2.2.26 Variation in Cost of Special Materials (CL 6.8.3)

Price adjustments for variations in the costs of special materials **are not permitted**.

2.2.27 Interim Payments (CL 6.10)

Add to the end of Clause 6.10.1 the following paragraph:

"The Contractor shall complete the 'Contractor's Monthly Report Schedule', which pro forma documentation is obtainable from the Employer's Agent. Pursuant to Sub-Clause 6.10.1.8, these, duly signed by all concerned, together with the Contractor's statement and a VAT invoice in original format are to be submitted to the Employer's Agent. Issue by the Employer's Agent to the Employer and Contractor of any signed payment certificate is conditional to this information being fully endorsed, accurately and timeously submitted to the Employer's Agent".

Add to the end of Clause 6.10.2 the following paragraph:

"All documentary evidence of such materials shall be unambiguous with respect to ownership having fully passed to the Contractor on or before the date of submittal of the Contractor's monthly statement.
Should the Contractor fail to supply unambiguous documentary evidence, he shall, prior to submittal of his monthly statement, deliver to the Employer a Guarantor Guarantee in the form contained in the Appendices to the Contract Data."

2.2.28 Percentage Limit on Plant and Materials (CL 6.10.1.5)

The percentage limit on Plant and Materials not yet built into the Permanent Works is **80 (eighty) percent**.

2.2.29 Retention Money (CL 6.10.3)

The percentage retention on amounts due to the Contractor is **10 (ten) percent**.

The limit of retention money is **5 (FIVE) percent** of the Contract Sum.

Add the following sub-clause 6.10.3.1:

A Retention Money Guarantee is **not permitted**.

2.2.30 Insurances (CL 8.6)

Delete sub-clause 8.6.7) and substitute with:

"Failure on the part of the Contractor to effect and keep in force any of the insurances referred to in Clause 8.6.1 and its sub-clauses, is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2."

2.2.31 Special Risks Insurance (CL 8.6.1.2)

A Coupon Policy for Special Risks **is required**.

2.2.32 Liability Insurance (CL 8.6.1.3)

The limit of indemnity for liability insurance required is **R2 000 000.00**.

2.2.33 Insurance of Materials Supplied by the Employer (CL 8.6.1.1.2)

The insurance amount to cover the value of Plant and Materials, supplied by the Employer for incorporation in the Works and not included in the Contract Sum, is **NIL**.

2.2.34 Insurance to Cover Professional Fees (CL 8.6.1.1.3)

The insurance amount to cover professional fees, not included in the Contract Sum, payable in respect of the repair or reinstatement of damage to the Works, is **NIL**.

2.2.35 Cancellation of the Contract (CL9)

Insert the following new clause 9.1.7.

"The Employer shall be entitled to cancel the Contract, at any time for the Employer's convenience, by giving written notice of such cancellation to the Contractor. The termination shall take effect 28 days after the later of the dates which the Contractor receives this written notice or the Employer returns the Demand Guarantee.

The Employer shall not cancel the Contract under this sub-clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor.

This restriction on the Employer shall lapse 18 months after the date of receipt by the Contractor of cancellation in terms of this sub-clause".

2.2.36 Dispute Resolution (CL 10.5.2)

Dispute resolution shall be referred to **ad-hoc adjudication**.

2.2.37 Disagreement with ad-hoc Adjudicator's Decision (CL 10.6.1)

Should either of the contracting parties disagree with any decision of the ad-hoc adjudicator, such matter shall be referred to litigation for **court judgement**.

2.2.38 Claims Procedure (Clause 10.1)

In sub-clause 10.1.1.1 omit the words, "within 28 days" and replace with the words "as soon as possible but no later than 7 days".

In sub-clause 10.1.1.2, 10.1.1.2.1, 10.1.1.3, 10.1.2 and 10.1.4 omit the words "28 days" and replace with the words "7 days".

3. DATA PROVIDED BY THE CONTRACTOR

3.1 Contractor (CL 1.1.1.9)

The legal name of the Contractor is _____

3.2 Delivery of Notices to the Contractor (CL 1.2.1.2)

The Contractor's address for receipt of communication is:

Postal: _____

_____

Telephone: _____

Facsimile: _____

E-mail: _____

Important Note

Paragraphs 3.3.1 and 3.3.2 hereabove to be duly completed by the **Tenderer before submitting the tender**.

4. PRIORITY OF DOCUMENTS

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

a) The Form of Offer and Acceptance.
b) Amplifications of the General Conditions of Contract within the Contract Data.
c) Additional special conditions or amendments to the General Conditions of Contract within the Contract Data.
d) The General Conditions of Contract.
e) The Specifications, Drawings, Schedules and other documents forming part of the Contract (in that order) contained in the Scope of Work and the Site Information.

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

APPENDIX TO CONTRACT DATA

PERFORMANCE GUARANTEE

(not to be completed at bid stage)

To: ..... (whom the Contract defines as the Employer)

Address: .....

.....

.....

DEFINITIONS AND DETAILS

"Guarantor" means: ……

Physical address: ……

"Employer: means: ……

"Contractor" means: ……

"Engineer" means: ……

"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.

The description of the Contract is: ……

……

……

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

Amount in words: ……

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

Amount in words: ……

PERFORMANCE GUARANTEE

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

2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to the date of 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. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

3. The Guarantor hereby acknowledges that:

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

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

4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor 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:

   4.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 4; or

   4.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 4; and

   4.3 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.

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

6. Payment by the Guarantor in terms of 4 shall be made within seven (7) calendar days upon receipt of the first written demand by the Employer.

7. Payment by the Guarantor in terms of 4 will only be made against the return of the original Performance Guarantee by the Employer.

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

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

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

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

12. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said

Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at ……..

Date ……..

Guarantor's signatory (1) ……..

……. ……
Print Name Capacity

Guarantor's signatory (2) ……..

……. ……
Print Name Capacity

……. ……
Witness signatory (1) Print Name

……. ……
Witness signatory (2) Print Name

PERFORMANCE GUARANTEE FOR MATERIALS AND EQUIPMENT NOT YET BUILT INTO THE WORKS
(not to be completed at bid stage)

To: .....

.....

.....
(hereinafter referred to as the Employer)

re: Demand Guarantee in respect of the project : …….

Contract No. : …….

For construction of : …….

Contractor : …….

I/We, the undersigned,

…….

and

…….

of

…….
(hereinafter referred to as the "Bank")

address:

…….

…….

and acting on behalf of the Bank have been informed that ……
(hereinafter called "the Contractor") is your contractor under such Contract and wishes to receive payment in respect of manufacture or partial manufacture of equipment and/or materials brought in a ready state for despatch to the construction site, whether temporarily stored in the warehouse of the Contractor or on the Construction Site, for which the Contract requires him to obtain a guarantee.

We hereby irrevocably undertake to pay you, the Employer, any sum or sums not exceeding in total the amount of R..... (in words …… only) the "Guaranteed Amount"
upon receipt by us of your demand in writing and your written statement stating:

- that the Contractor has failed to deliver such equipment and/or materials when required or instructed to do so.

The Bank's liability under this guarantee is principal in nature and is not subject to the Contract. The Bank's liability shall not be reduced, or in any way be affected by any alteration of the terms of the Contract, or any other arrangements made between the Employer and Contractor.

The Bank will pay on demand and will not determine the validity of the demand or the correctness of the amount demanded, or become party to any claim or dispute of any nature which any party may allege.
The Bank will pay the amount demanded into the bank account to be notified by the Employer.

This guarantee is neither negotiable nor transferable, is restricted to the payment of a sum of money only and is limited to the Guaranteed Amount.

This guarantee will lapse sixty (60) days after all the said equipment and/or materials have been built into the Works unless the Bank is, before the expiration date, advised in writing by the Employer of his intention to demand payment for such equipment and/or materials.

This original guarantee must be returned to the Bank by the Employer or the Employer's duly authorised agent either:

- on expiry of the guarantee; or
- against payment of the Guaranteed Amount.

This guarantee shall be governed by the law of the Republic of South Africa.

The Bank chooses as its domicilium citandi et executandi for the purpose of the service of all notices and legal processes the following address:

THUS DONE AND SIGNED AT ..... ON ..... 20.....

In the presence of the following:

AS WITNESSES:

1. .....

.....
Print Name

2. .....

.....
Print Name

on behalf of the Bank and duly authorised thereto

1. .....

.....
Print Name

and

on behalf of the Bank and duly authorised thereto

2. .....

.....
Print Name

PART C2: PRICING DATA

C2.1 – PRICING INSTRUCTIONS

CONTENTS

Item	Heading	Colour	Page
C2.1	Pricing Instructions	Yellow	99
C2.2	Bills of Quantities	Yellow	104

1. GENERAL

The pricing instructions describe the criteria and assumptions for which in the Contract it will be assumed the Tenderer has taken into account when developing his prices. The schedules of quantities record the Contractor's rates for providing supplies, services, engineering and construction works in accordance with the Scope of Work.

The terms of payment and the provisions for price adjustment, if applicable, are established in the Contract Data. These items are not described in the Pricing Data.

The Tenderer's obligations in pricing the tender offer and the Employer's undertakings in the checking and correction of arithmetical errors are dealt with in the Standard Conditions of Tender contained in Annexure F of SANS 294, as amended in and read in conjunction with the Tender Data.

2. DOCUMENTS MUTUALLY EXPLANATORY

The documents forming the Contract are to be taken as mutually explanatory of one another. The schedule of quantities forms an integral part of the Contract Documents and shall be read in conjunction with the Tender Data, Contract Data, Scope of Work, Site Information, General and Special Conditions of Contract, the Specifications and the Drawings.

3. DEFINITIONS

For the purpose of this schedule of quantities, the following words shall have the meanings hereby assigned to them:

Unit	:	The unit of measurement for each item of work as defined in the Scope of Work and Site Information.
Quantity	:	The number of units of work for each item.
Rate	:	The payment per unit of measurement at which the Contractor contracts to do the work.
Amount	:	The product of the quantity and the rate tendered for an item.
Sum	:	An amount contracted for an item, the extent of which is described in the schedule of quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.

4. DESCRIPTIONS

Descriptions in the schedule of quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the schedule, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.

5. REFERENCES

The clauses in a specification in which further information regarding the schedule item can be obtained appear under “Reference clause” in the Schedule. The reference clauses indicated are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the letter or letters which follow SABS in the SABS 1200 series of specifications, e.g. G for SABS 1200G.

6. UNITS OF MEASUREMENT

The units of measurement indicated in the schedule of quantities are metric units.

The following abbreviations are used in the schedule of quantities:

%	=	percent
H	=	hour
Ha	=	hectare
Kg	=	kilogram
Kl	=	kilolitre
Km	=	kilometre
kW	=	kilowatt
L	=	litre
M	=	metre
Mm	=	millimetre
l/min	=	Litre per minute
m/s	=	Meter per second
kPa	=	kilopascal
MPa	=	megapascal
m²	=	square metre
m³	=	cubic metre
m³-km	=	cubic metre-kilometre
No	=	number
PC sum	=	Prime Cost sum
Prov Sum	=	Provisional Sum
Sum	=	lump sum
T	=	ton (1 000 kg)

7. NET MEASUREMENTS

Unless otherwise stated, items are measured nett in accordance with the drawings, and no allowance is made for off-cuts and waste.

8. QUANTITIES

The quantities set out in the schedule of quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Engineer from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work accepted and certified for payment.

9. CURRENCY

All rates and sums of money quoted in the schedule of quantities shall be in Rand and whole cents. Fractions of a cent shall be discounted.

10. VALUE ADDED TAX

Value Added Tax shall be excluded from the rates and sums contracted for the various items of work included in the schedule of quantities. VAT will be added as a single entry to the summary.

11. RATES AND PRICES

11.1 General

1) The Contractor must price each item in the schedule of quantities in BLACK INK. Reproduced computer printouts of the schedules of quantities will not be acceptable.

2) The rates and prices to be inserted in the schedule of quantities shall cover all the services and incidentals for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted, as these will be used as a basis for assessment of payment for additional work that may have to be carried out.

3) Where the Contractor is required to furnish detailed drawings and designs or other information in terms of the Contract Data, all costs thereof shall be deemed to have been provided for and included in the unit rates and sum amounts contracted for the items scheduled in the schedule of quantities. Separate additional payments will not be made.

4) A price or rate is to be entered against each item in the schedule of quantities, whether the quantities are stated or not. An item against which a NIL price is entered will be considered to be covered by the other prices or rates in the schedule. The Contractor will not be paid for items against which no rate or lump sum has been entered in the schedule of quantities.

5) Should the Contractor group a number of items and contract one lump sum for such group of items, this single lump sum shall apply to that group of items and not to each individual item.

6) Should the Contractor indicate against any item that compensation for such item is included in another item, the rate for the item included in another item shall be deemed nil.

7) A submission may be regarded as non-responsive if any rates or lump sums in the schedule of quantities are, in the opinion of the Employer, unreasonable or out of proportion.

11.2 "Rate only" items

The Contractor shall fill in a rate (in the rate column) against all items where the words "rate only" appear in the Amount column, which rate will constitute payment for work which may be done in terms of this item. Such "rate-only" items are used where it is estimated that little or no work will be required under the item or where the item is to be considered as an alternative to another item for which a quantity is given.

11.3 Arithmetic

Excepting where Sum Amounts are required or where Provisional Sums have been indicated, the Contractor shall enter an applicable rate in the Rate Column of the schedule of quantities for each scheduled item. He shall also enter an appropriate sum in the Amount column for each scheduled item, by determining in the applicable line item the product of the Quantity and the Unit Rate.

12. VARIATION IN TEXT

No alteration, erasure or addition is to be made in the text of the schedule of quantities. Should any alteration, erasure or addition be made, it will not be recognised; the original wording of the schedule of quantities will be adhered to.

PROJECT NAME : **APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE**

CONTRACT NUMBER **CONMP0006 (2026/2027)**

CLIENT: DLRRD

FINAL SUMMARY

DESCRIPTION	**BILL SUMMARY FOR EACH FARM**
TOTAL BROUGHT FORWARD FROM SUMMARY OF SECTIONS FOR DRIEFONTEIN FARM	
TOTAL BROUGHT FORWARD FROM SUMMARY OF SECTIONS FOR PALMIETFONTEIN FARM	
TOTAL BROUGHT FORWARD FROM SUMMARY OF SECTIONS FOR RONDEBOCH FARM	
TOTAL BROUGHT FORWARD FROM SUMMARY OF SECTIONS FOR BLOEMFONTEIN FARM	
FINAL SUMMARY FOR THE SIX OREOLES INCLUSIVE OF VAT (FINAL OFFER)	

SITING, DRILLING, CLEANING AND TESTING OF A BOREHOLE IN PORTION 7 & 8 OF FARM BLOEMFONTEIN 399 JT IN
PROJECT: EMAKHAZENI

CONTRACT NO: CONMP0006 (2026/2027)

CLIENT: DLRRD

ITEM No.	PAY REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	**SABS 1200A**	**SECTION 1: GENERAL REQUIREMENTS AND PROVISIONS**				
	8.3	**FIXED CHARGE AND VALUE-RELATED ITEMS**				
1.1	**8.3.2**	**Establishment of facilities on site**				
1.1.1	**8.3.2.2**	Establishment of all equipment to site	Sum	1		
1.1.2		Inter-borehole site move below 10km	km	1		
1.1.3	**8.3.4**	De-establishment from last borehole site	Sum	1		
1.2		**Occupational Health and Safety**				
1.2.1		Preparation of Health and Safety Plan	Sum	1		
1.2.2		Health and Safety induction of Employees	Sum	1		
1.2.3		Provision of safety clothing as per OHS Act, including Covid-19 requirements	Sum	1		
1.2.4		Provision of First Aid Kit at each borehole site	Sum	1		
1.3		**Geohydrological assessment and Geophysical investigations**				
1.3.1		Review and evaluation of existing data and conduct of a desktop study	Sum	1		
1.3.2		Geophysical and Geological investigation	p/bh	1		
1.3.3		Geohydrological data analysis and reporting	p/hb	1		
		TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	**SECTION 2 : SITING, DRILLING, CLEANING AND TESTING BOREHOLE**				
2.1	**Drilling (In all formations)**				
2.1.1	165mm (0 - 150 m)	m	150		
2.2	**Reaming**				
2.2.1	165mm - 215mm	m	150		
2.3	**Plain steel casing (Supply, deliver, install and weld)**				
2.3.1	165mm ID (Wall thickness 4mm)	m	45		
2.4	**Borehole finishing**				
2.4.1	Formation stabilizer, 5-7mm well rounded silica gravel (Supply, deliver and install)	40kg	1		
2.4.2	Sanitary seal 3-6 m deep (Supply, deliver and install)	Each	1		
2.4.3	Concrete collar (2m x 2m x 0.5m)	Each	1		
2.4.4	Borehole disinfection	Each	1		
2.4.5	Borehole cap	Each	1		
2.4.6	Stone cap (For unsuccessful boreholes, 3m casing installed and concrete block constructed around casing. Must be marked clearly dry on casing lid)	Each	1		
2.4.7	Development time	Hrs	1		
2.4.8	Finishing and cleaning	Each	1		
2.4.9	Standing time	Hrs	1		
2.5	**Borehole Marking**				
2.5.1	300 mm x 200 mm x 3 mm thick rectangular steel plate (complete with concrete embedment)	Each	1		
2.6	**Borehole testing**				
2.6.1	3 x 1 hr steps, recovery, 24 Hr cd and recovery	Each	1		
2.6.2	Chemical and potability analysis	Each	1		
2.6.3	Data recording and issuing of report by a Geohydrologist. The report must include GPS coordinates, penetration rates, logs, etc	Each	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3	**SECTION 3 : SUBMERSIBLE PUMPS ASSEMBLY, GENERATORS AND PUMP HOUSE**				
3,1	**Submersble pumps and motor with correct 4 core electric cable and capacity of indicated discharge and head**				
3,1,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	1		
3,2	**Control units suitable for each submersible borehole pump sizes given under Sub-section 3,**				
3,2,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	1		
3,3	**Submersable cable to the control box in subsection 3.2 above complete with cable joints and fittings allow fir a maximum 0f 5% voltage drop for each sumersible borehole pup sizes given under sub-section 3.1**				
3,3,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4	**SECTION 4 : FITTINGS**				
4,1	**Supply and Install SABS approved fittings**				
4,1,1	Ø50mm Adaptor Compression male	No	1		
4,1,2	Ø50mm Galvanised T-piece Equal	No	1		
4,1,3	50mm non Return ball valve	No	1		
4,1,4	Ø50mm x 30mm Galvanised Bush Reducing	No	1		
4,1,5	50mm galvanised Elbow	No	1		
4,1,6	50mm compression coupling equal	No	1		
4,1,7	50mm compression elbow	No	2		
4,1,8	40mm compression elbow	No	2		
4,1,9	50mm Galvanised Barrel Nipple	No	1		
4,1,10	50mm Aluminium base plate	No	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	**SECTION 5 : PIPES AND RESERVOIRS**				
5,1	**Supply, deliver, install, test and commission pipelines (PE63, PE80, PE100)**				
5,1,1	50mm Diameter HDPE	m	1		
5,1,2	5 000 Litre Plastic water storage tank	No	1		
5,1,3	3m galvanised iron support bolted structure for each storage tank, painted green	No	1		
5,1,4	50mm Diameter Galvanised inlet	No	1		
5,1,5	50mm Diameter Galvanised outlet	No	1		
5,1,6	50mm diameter HDPE overflow	No	1		
5,1,7	Anchorage of Tank to stand (4mm dia galvanized binding wire)	m	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	**SECTION 2 : WINDMILL**				
6,1	**Supply, and install galvanised windmill**				
6,1,1	Complete 5m diametre Windmill with 9m tower, head, wheel, tail and brake system with four(4) legs	Each	1		
6,1,2	Fork rod	Each	1		
6,1,3	Wooden rod	Each	1		
6,1,4	40mm daimeter X 3.0m galvanized meadium screwed/socket pipe	Each	1		
6,1,5	12mm diameter x 3.0m electro plated pump rods with socks and protectors	Each	1		
6,1,6	**Stainless steel borehole cylinder with the following duty point**				
	(0-1.5) m3/hr & TDH (Total Dynamic Head) (0-200)M	Sum	1		
6,1,7	Air chamber (150mm diametre x 900mm steel pipe (2mm think) with 20mm brass gate valve)	Sum	1		
6,1,9	4 x 12mm galvanized bolts and nuts	Sum	1		
	TOTAL CARRIED TO SUMMARY				

CONTRACT NUMBER: **CONMP0006 (2026/2027)**

CLIENT: **DLRRD**

SITING, DRILLING, CLEANING AND TESTING OF A BOREHOLE IN PORTION 7 & 8 OF FARM BLOEMFONTEIN 399 JT IN EMAKHAZENI

SUMMARY OF SECTIONS	
SECTION	**TOTAL AMOUNT**
SECTION 1: PRELIMINARY AND GENERAL	
SECTION 2: DRILLING, CLEANING AND TESTING BOREHOLE	
SECTION 3: SUBMERSIBLE PUMPS ASSEMBLY, GENERATORS AND PUMP HOUSE	
SECTION 4: FITTINGS	
SECTION 5: PIPES & RESERVORS	
SECTION 6: WINDMILL	
SUBTOTAL 1	
10% CONTIGENCIES	
SUBTOTAL 2	
VAT @ 15%	
TOTAL (to be carried to the final summary page)	

PROJECT: Appointment of a contractor for siting, drilling, equipping and testing of 2 borehole with windmill pump in Portion 5 & 10 of the Farm Palmietfontein 104 JT.

CONTRACT NO: CONMP0006 (2026/2027)

CLIENT: DLRRD

ITEM No.	PAY REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	**SABS 1200A**	**SECTION 1: GENERAL REQUIREMENTS AND PROVISIONS**				
	8.3	**FIXED CHARGE AND VALUE-RELATED ITEMS**				
1.1	**8.3.2**	**Establishment of facilities on site**				
1.1.1	**8.3.2.2**	Establishment of all equipment to site	Sum	1		
1.1.2		Inter-borehole site move below 10km	km	1		
1.1.3	**8.3.4**	De-establishment from last borehole site	Sum	1		
1.2		**Occupational Health and Safety**				
1.2.1		Preparation of Health and Safety Plan	Sum	1		
1.2.2		Health and Safety induction of Employees	Sum	1		
1.2.3		Provision of safety clothing as per OHS Act, including Covid-19 requirements	Sum	1		
1.2.4		Provision of First Aid Kit at each borehole site	Sum	1		
1.3		**Geohydrological assessment and Geophysical investigations**				
1.3.1		Review and evaluation of existing data and conduct of a desktop study	Sum	1		
1.3.2		Geophysical and Geological investigation	p/bh	1		
1.3.3		Geohydrological data analysis and reporting with close out report	p/hb	1		
		TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	**SECTION 2 : SITING, DRILLING, CLEANING AND TESTING BOREHOLE**				
2.1	**Drilling (In all formations)**				
2.1.1	165mm (0 - 150 m)	m	300		
2.2	**Reaming**				
2.2.1	165mm - 215mm	m	300		
2.3	**Plain steel casing (Supply, deliver, install and weld)**				
2.3.1	165mm ID (Wall thickness 4mm)	m	90		
2.4	**Borehole finishing**				
2.4.1	Formation stabilizer, 5-7mm well rounded silica gravel (Supply, deliver and install)	40kg	2		
2.4.2	Sanitary seal 3-6 m deep (Supply, deliver and install)	Each	2		
2.4.3	Concrete collar (2m x 2m x 0.5m)	Each	2		
2.4.4	Borehole disinfection	Each	2		
2.4.5	Borehole cap	Each	2		
2.4.6	Stone cap (For unsuccessful boreholes, 3m casing installed and concrete block constructed around casing. Must be marked clearly dry on casing lid)	Each	2		
2.4.7	Development time	Hrs	2		
2.4.8	Finishing and cleaning	Each	2		
2.4.9	Standing time	Hrs	2		
2.5	**Borehole Marking**				
2.5.1	300 mm x 200 mm x 3 mm thick rectangular steel plate (complete with concrete embedment)	Each	2		
2.6	**Borehole testing**				
2.6.1	3 x 1 hr steps, recovery, 24 Hr cd and recovery	Each	2		
2.6.2	Chemical and potability analysis	Each	2		
2.6.3	Data recording and issuing of report by a Geohydrologist. The report must include GPS coordinates, penetration rates, logs, etc	Each	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3	**SECTION 3 : SUBMERSIBLE PUMPS ASSEMBLY, GENERATORS AND PUMP HOUSE**				
3,1	**Submersble pumps and motor with correct 4 core electric cable and capacity of indicated discharge and head**				
3,1,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	2		
3,2	**Control units suitable for each submersible borehole pump sizes given under Sub-section 3,**				
3,2,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	2		
3,3	**Submersable cable to the control box in subsection 3.2 above complete with cable joints and fittings allow fir a maximum 0f 5% voltage drop for each sumersible borehole pup sizes given under sub-section 3.1**				
3,3,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4	**SECTION 4 : FITTINGS**				
4,1	**Supply and Install SABS approved fittings**				
4,1,1	Ø50mm Adaptor Compression male	No	2		
4,1,2	Ø50mm Galvanised T-piece Equal	No	2		
4,1,3	50mm non Return ball valve	No	2		
4,1,4	Ø50mm x 30mm Galvanised Bush Reducing	No	2		
4,1,5	50mm galvanised Elbow	No	2		
4,1,6	50mm compression coupling equal	No	2		
4,1,7	50mm compression elbow	No	4		
4,1,8	40mm compression elbow	No	4		
4,1,9	50mm Galvanised Barrel Nipple	No	2		
4,1,10	50mm Aluminium base plate	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	**SECTION 5 : PIPES AND RESERVOIRS**				
5,1	**Supply, deliver, install, test and commission pipelines (PE63, PE80, PE100)**				
5,1,1	50mm Diameter HDPE	m	2		
5,1,2	5 000 Litre Plastic water storage tank	No	2		
5.1.3	10 000 Litre Plastic water storage tank	no	2		
5,1,4	3m galvanised iron support bolted structure for each storage tank, painted green	No	2		
5,1,5	50mm Diameter Galvanised inlet	No	2		
5,1,6	50mm Diameter Galvanised outlet	No	2		
5,1,7	50mm diameter HDPE overflow	No	2		
5,1,8	Anchorage of Tank to stand (4mm dia galvanized binding wire)	m	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	**SECTION 2 : WINDMILL**				
6,1	**Supply, and install galvanised windmill**				
6,1,1	Complete 5m diametre Windmill with 9m tower, head, wheel, tail and brake system with four(4) legs	Each	2		
6,1,2	Fork rod	Each	2		
6,1,3	Wooden rod	Each	2		
6,1,4	40mm daimeter X 3.0m galvanized meadium screwed/socket pipe	Each	2		
6,1,5	12mm diameter x 3.0m electro plated pump rods with socks and protectors	Each	2		
6,1,6	**Stainless steel borehole cylinder with the following duty point**				
	(0-1.5) m3/hr & TDH (Total Dynamic Head) (0-200)M	Sum	2		
6,1,7	Air chamber (150mm diametre x 900mm steel pipe (2mm think) with 20mm brass gate valve)	Sum	2		
6,1,9	4 x 12mm galvanized bolts and nuts	Sum	2		
	TOTAL CARRIED TO SUMMARY				

CONTRACT NUMBER: **CONMP0006 (2026/2027)**

CLIENT: **DLRRD**

Appointment of a contractor for siting, drilling, equipping and testing of 2 borehole with windmill pump in Portion 5 & 10 of the Farm Palmietfontein 104 JT.

SUMMARY OF SECTIONS	
SECTION	**TOTAL AMOUNT**
SECTION 1: PRELIMINARY AND GENERAL	
SECTION 2: DRILLING, CLEANING AND TESTING BOREHOLE	
SECTION 3: SUBMERSIBLE PUMPS ASSEMBLY, GENERATORS AND PUMP HOUSE	
SECTION 4: FITTINGS	
SECTION 5: PIPES & RESERVORS	
SECTION 6: WINDMILL	
SUBTOTAL 1	
5% CONTIGENCIES	
SUBTOTAL 2	
VAT @ 15%	
TOTAL (to be carried to the final summary page)	

PROJECT: **SITING, DRILLING, EQUIPPING AND TESTING OF TWO BOREHOLES IN PORTION 189 (A PORTION OF PORTION 14) OF THE FARM RONDEBOSCH 403 JS IN EMAKHAZENI**

CONTRACT NO:

CLIENT: **DALRRD**

ITEM No.	PAY REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	**SABS 1200A**	**SECTION 1: GENERAL REQUIREMENTS AND PROVISIONS**				
	8.3	**FIXED CHARGE AND VALUE-RELATED ITEMS**				
1.1	**8.3.2**	**Establishment of facilities on site**				
1.1.1	**8.3.2.2**	Establishment of all equipment to site	Sum	1		
1.1.2		Inter-borehole site move below 10km	km	1		
1.1.3	**8.3.4**	De-establishment from last borehole site	Sum	1		
1.2		**Occupational Health and Safety**				
1.2.1		Preparation of Health and Safety Plan	Sum	1		
1.2.2		Health and Safety induction of Employees	Sum	1		
1.2.3		Provision of safety clothing as per OHS Act, including Covid-19 requirements	Sum	1		
1.2.4		Provision of First Aid Kit at each borehole site	Sum	1		
1.3		**Geohydrological assessment and Geophysical investigations**				
1.3.1		Review and evaluation of existing data and conduct of a desktop study	Sum	1		
1.3.2		Geophysical and Geological investigation	p/bh	1		
1.3.3		Geohydrological data analysis and reporting	p/hb	1		
		TOTAL CARRIED TO SUMMARY				**R -**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	**SECTION 2 : SITING, DRILLING, CLEANING AND TESTING BOREHOLE**				
2.1	**Drilling (In all formations)**				
2.1.1	165mm (0 - 150 m)	m	300		
2.2	**Reaming**				
2.2.1	165mm - 215mm	m	300		
2.3	**Plain steel casing (Supply, deliver, install and weld)**				
2.3.1	165mm ID (Wall thickness 4mm)	m	90		
2.4	**Borehole finishing**				
2.4.1	Formation stabilizer, 5-7mm well rounded silica gravel (Supply, deliver and install)	40kg	2		
2.4.2	Sanitary seal 3-6 m deep (Supply, deliver and install)	Each	2		
2.4.3	Concrete collar (2m x 2m x 0.5m)	Each	2		
2.4.4	Borehole disinfection	Each	2		
2.4.5	Borehole cap	Each	2		
2.4.6	Stone cap (For unsuccessful boreholes, 3m casing installed and concrete block constructed around casing. Must be marked clearly dry on casing lid)	Each	2		
2.4.7	Development time	Hrs	2		
2.4.8	Finishing and cleaning	Each	2		
2.4.9	Standing time	Hrs	2		
2.5	**Borehole Marking**				
2.5.1	300 mm x 200 mm x 3 mm thick rectangular steel plate (complete with concrete embedment)	Each	2		
2.6	**Borehole testing**				
2.6.1	3 x 1 hr steps, recovery, 24 Hr cd and recovery	Each	2		
2.6.2	Chemical and potability analysis	Each	2		
2.6.3	Data recording and issuing of report by a Geohydrologist. The report must include GPS coordinates, penetration rates, logs, etc	Each	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3	**SECTION 3 : SUBMERSIBLE PUMPS ASSEMBLY, GENERATORS AND PUMP HOUSE**				
3,1	**Submersble pumps and motor with correct 4 core electric cable and capacity of indicated discharge and head**				
3,1,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	2		
3,2	**Control units suitable for each submersible borehole pump sizes given under Sub-section 3,**				
3,2,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	2		
3,3	**Submersable cable to the control box in subsection 3.2 above complete with cable joints and fittings allow fir a maximum 0f 5% voltage drop for each sumersible borehole pup sizes given under sub-section 3.1**				
3,3,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4	**SECTION 4 : FITTINGS**				
4,1	**Supply and Install SABS approved fittings**				
4,1,1	Ø50mm Adaptor Compression male	No	2		
4,1,2	Ø50mm Galvanised T-piece Equal	No	2		
4,1,3	50mm non Return ball valve	No	2		
4,1,4	Ø50mm x 30mm Galvanised Bush Reducing	No	2		
4,1,5	50mm galvanised Elbow	No	2		
4,1,6	50mm compression coupling equal	No	2		
4,1,7	50mm compression elbow	No	4		
4,1,8	40mm compression elbow	No	4		
4,1,9	50mm Galvanised Barrel Nipple	No	2		
4,1,10	50mm Aluminium base plate	No	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	**SECTION 5 : PIPES AND RESERVOIRS**				
5,1	**Supply, deliver, install, test and commission pipelines (PE63, PE80, PE100)**				
5,1,1	50mm Diameter HDPE	m	2		
5,1,2	5 000 Litre Plastic water storage tank	No	2		
5,1,3	3m galvanised iron support bolted structure for each storage tank, painted green	No	2		
5,1,4	50mm Diameter Galvanised inlet	No	2		
5,1,5	50mm Diameter Galvanised outlet	No	2		
5,1,6	50mm diameter HDPE overflow	No	2		
5,1,7	Anchorage of Tank to stand (4mm dia galvanized binding wire)	m	2		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	**SECTION 2 : WINDMILL**				
6,1	**Supply, and install galvanised windmill**				
6,1,1	Complete 5m diametre Windmill with 9m tower, head, wheel, tail and brake system with four(4) legs	Each	2		
6,1,2	Fork rod	Each	2		
6,1,3	Wooden rod	Each	2		
6,1,4	40mm daimeter X 3.0m galvanized meadium screwed/socket pipe	Each	2		
6,1,5	12mm diameter x 3.0m electro plated pump rods with socks and protectors	Each	2		
6,1,6	**Stainless steel borehole cylinder with the following duty point**				
	(0-1.5) m3/hr & TDH (Total Dynamic Head) (0-200)M	Sum	2		
6,1,7	Air chamber (150mm diametre x 900mm steel pipe (2mm think) with 20mm brass gate valve)	Sum	2		
6,1,9	4 x 12mm galvanized bolts and nuts	Sum	2		
	TOTAL CARRIED TO SUMMARY				**R -**

CONTRACT NUMBER: **CONMP0006 (2026/2027)**

CLIENT: **DLRRD**

SITING, DRILLING, EQUIPPING AND TESTING OF TWO BOREHOLES IN PORTION 189 (A PORTION OF PORTION 14) OF THE FARM RONDEBOSCH 403 JS IN EMAKHAZENI

SUMMARY OF SECTIONS	
SECTION	**TOTAL AMOUNT**
SECTION 1: PRELIMINARY AND GENERAL	
SECTION 2: DRILLING, CLEANING AND TESTING BOREHOLE	
SECTION 3: SUBMERSIBLE PUMPS ASSEMBLY, GENERATORS AND PUMP HOUSE	
SECTION 4: FITTINGS	
SECTION 5: PIPES & RESERVORS	
SECTION 6: WINDMILL	
SUBTOTAL 1	
5% CONTIGENCIES	
SUBTOTAL 2	
VAT @ 15%	
TOTAL (to be carried to the final summary page)	

PROJECT: **SITING, DRILLING, EQUIPPING AND TESTING OF A BOREHOLE IN PORTION 4 OF THE R/E OF THE FARM DRIEFONTEIN 377 JT IN EMAKHAZENI.**

CONTRACT NO:

CLIENT: **DLRRD**

ITEM No.	PAY REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	**SABS 1200A**	**SECTION 1: GENERAL REQUIREMENTS AND PROVISIONS**				
	8.3	**FIXED CHARGE AND VALUE-RELATED ITEMS**				
1.1	**8.3.2**	**Establishment of facilities on site**				
1.1.1	**8.3.2.2**	Establishment of all equipment to site	Sum	1		
1.1.2		Inter-borehole site move below 10km	km	1		
1.1.3	**8.3.4**	De-establishment from last borehole site	Sum	1		
1.2		**Occupational Health and Safety**				
1.2.1		Preparation of Health and Safety Plan	Sum	1		
1.2.2		Health and Safety induction of Employees	Sum	1		
1.2.3		Provision of safety clothing as per OHS Act, including Covid-19 requirements	Sum	1		
1.2.4		Provision of First Aid Kit at each borehole site	Sum	1		
1.3		**Geohydrological assessment and Geophysical investigations**				
1.3.1		Review and evaluation of existing data and conduct of a desktop study	Sum	1		
1.3.2		Geophysical and Geological investigation	p/bh	1		
1.3.3		Geohydrological data analysis and reporting	p/hb	1		
		TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	**SECTION 2 : SITING, DRILLING, CLEANING AND TESTING BOREHOLE**				
2.1	**Drilling (In all formations)**				
2.1.1	165mm (0 - 150 m)	m	150		
2.2	**Reaming**				
2.2.1	165mm - 215mm	m	150		
2.3	**Plain steel casing (Supply, deliver, install and weld)**				
2.3.1	165mm ID (Wall thickness 4mm)	m	45		
2.4	**Borehole finishing**				
2.4.1	Formation stabilizer, 5-7mm well rounded silica gravel (Supply, deliver and install)	40kg	1		
2.4.2	Sanitary seal 3-6 m deep (Supply, deliver and install)	Each	1		
2.4.3	Concrete collar (2m x 2m x 0.5m)	Each	1		
2.4.4	Borehole disinfection	Each	1		
2.4.5	Borehole cap	Each	1		
2.4.6	Stone cap (For unsuccessful boreholes, 3m casing installed and concrete block constructed around casing. Must be marked clearly dry on casing lid)	Each	1		
2.4.7	Development time	Hrs	1		
2.4.8	Finishing and cleaning	Each	1		
2.4.9	Standing time	Hrs	1		
2.5	**Borehole Marking**				
2.5.1	300 mm x 200 mm x 3 mm thick rectangular steel plate (complete with concrete embedment)	Each	1		
2.6	**Borehole testing**				
2.6.1	3 x 1 hr steps, recovery, 24 Hr cd and recovery	Each	1		
2.6.2	Chemical and potability analysis	Each	1		
2.6.3	Data recording and issuing of report by a Geohydrologist. The report must include GPS coordinates, penetration rates, logs, etc	Each	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3	**SECTION 3 : SUBMERSIBLE PUMPS ASSEMBLY, GENERATORS AND PUMP HOUSE**				
3,1	**Submersble pumps and motor with correct 4 core electric cable and capacity of indicated discharge and head**				
3,1,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	1		
3,2	**Control units suitable for each submersible borehole pump sizes given under Sub-section 3,**				
3,2,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	1		
3,3	**Submersable cable to the control box in subsection 3.2 above complete with cable joints and fittings allow fir a maximum 0f 5% voltage drop for each sumersible borehole pup sizes given under sub-section 3.1**				
3,3,1	(0-1,5)m3/hr TDH (Total Dynamic Head) (0-200)m	No	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4	**SECTION 4 : FITTINGS**				
4,1	**Supply and Install SABS approved fittings**				
4,1,1	Ø50mm Adaptor Compression male	No	1		
4,1,2	Ø50mm Galvanised T-piece Equal	No	1		
4,1,3	50mm non Return ball valve	No	1		
4,1,4	Ø50mm x 30mm Galvanised Bush Reducing	No	1		
4,1,5	50mm galvanised Elbow	No	1		
4,1,6	50mm compression coupling equal	No	1		
4,1,7	50mm compression elbow	No	2		
4,1,8	40mm compression elbow	No	2		
4,1,9	50mm Galvanised Barrel Nipple	No	1		
4,1,10	50mm Aluminium base plate	No	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	**SECTION 5 : PIPES AND RESERVOIRS**				
5,1	**Supply, deliver, install, test and commission pipelines (PE63, PE80, PE100)**				
5,1,1	50mm Diameter HDPE	m	1		
5,1,2	5 000 Litre Plastic water storage tank	No	1		
5,1,3	3m galvanised iron support bolted structure for each storage tank, painted green	No	1		
5,1,4	50mm Diameter Galvanised inlet	No	1		
5,1,5	50mm Diameter Galvanised outlet	No	1		
5,1,6	50mm diameter HDPE overflow	No	1		
5,1,7	Anchorage of Tank to stand (4mm dia galvanized binding wire)	m	1		
	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	**SECTION 2 : WINDMILL**				
6,1	**Supply, and install galvanised windmill**				
6,1,1	Complete 5m diametre Windmill with 9m tower, head, wheel, tail and brake system with four(4) legs	Each	1		
6,1,2	Fork rod	Each	1		
6,1,3	Wooden rod	Each	1		
6,1,4	40mm daimeter X 3.0m galvanized meadium screwed/socket pipe	Each	1		
6,1,5	12mm diameter x 3.0m electro plated pump rods with socks and protectors	Each	1		
6,1,6	**Stainless steel borehole cylinder with the following duty point**				
	(0-1.5) m3/hr & TDH (Total Dynamic Head) (0-200)M	Sum	1		
6,1,7	Air chamber (150mm diametre x 900mm steel pipe (2mm think) with 20mm brass gate valve)	Sum	1		
6,1,9	4 x 12mm galvanized bolts and nuts	Sum	1		
	TOTAL CARRIED TO SUMMARY				

CONTRACT NUMBER:

CLIENT: **DLRRD**

SITING, DRILLING, EQUIPPING AND TESTING OF A BOREHOLE IN PORTION 4 OF THE R/E OF THE FARM DRIEFONTEIN 377 JT IN EMAKHAZENI.

SUMMARY OF SECTIONS	
SECTION	**TOTAL AMOUNT**
SECTION 1: PRELIMINARY AND GENERAL	
SECTION 2: DRILLING, CLEANING AND TESTING BOREHOLE	
SECTION 3: SUBMERSIBLE PUMPS ASSEMBLY, GENERATORS AND PUMP HOUSE	
SECTION 4: FITTINGS	
SECTION 5: PIPES & RESERVORS	
SECTION 6: WINDMILL	
SUBTOTAL 1	
5% CONTIGENCIES	
SUBTOTAL 2	
VAT @ 15%	
TOTAL (to be carried to the final summary page)	

PART C3: SCOPE OF WORKS

CONTENTS

Item		Description	Page
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1. BACKGROUND

The Department of Land Reform and Rural Development (DALRRD) wishes to appoint a suitably qualified, experienced and competent service provider for the purpose of **SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE**

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2. OBJECTIVE

1. The objective of the project is to improve accessibility to sustainable, safe water for rural communities.
2. To appoint a suitably qualified contractor who will site, drill, test and equip six boreholes in the following farms:

- (2) Portion 5 & 10 of the Farm Palmietfontein 104 JT.
- (1) Portion 7 & 8 of farm Bloemfontein 399 JT.
- (1) Portion 4 of the R/E of the farm Driefontein 377 JT
- (2) Portion 189 (A Portion of Portion 14) of the Farm Rondebosch

3. **Install 5 windmills with all accessories.**

3.CONTRACT

The built environment contract that will be used is the General Conditions of Contract Edition 2015. Such document must be made available to the employer at no additional cost.

4.PROJECT LOCATION

Province: Mpumalanga Province
District Municipality: Nkangala District Municipality
Municipality: Emakhazeni Local Municipality
Locality:

- (2) Portion 5 & 10 of the Farm Palmietfontein 104 JT.
- (1) Portion 7 & 8 of farm Bloemfontein 399 JT.
- (1) Portion 4 of the R/E of the farm Driefontein 377 JT
- (2) Portion 189 (A Portion of Portion 14) of the Farm Rondebosch

5.DESCRIPTION OF THE WORKS

The scope of work for the project includes the following:

Scope of works:

SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

Drilling site

The Contractor shall site possible locations for drilling. The Contractor shall drill the borehole(s) at the exact location(s) designated by the Employer or the Supervisor.

Environmental protection of the site

Care must be taken in the handling and storage of all drilling fluids, oils greases and fuel on site, to avoid any environmental degradation. The Contractor shall dispose of any toxic materials, drilling fluids and other additives, cuttings and discharged water in a manner approved by the Supervisor so as not to create damage to public and private property.

Workmanship

The Contractor is expected to carry out all works as instructed by the Supervisor in a thorough and workmanlike manner, and up to today's professional standards. The Contractor shall carry out operations with due efficiency and dispatch in accordance with the terms of the contract and to the satisfaction of the Supervisor. For this purpose, the Contractor shall use suitable equipment, and supply efficient and experienced staff.

Equipment and materials

All necessary machinery, equipment and materials to carry out the drilling, test pumping, headwork construction, etc. as specified are to be mobilized for the works. Test pumping equipment should be independent from the drilling rig(s). Prior to mobilization the Supervisor will verify the specifications and state of repair of all major items of plant and transport and shall have the right to order the removal and/or replacement of any items which in his opinion is insufficient or in unsatisfactory condition. Acceptance by the Supervisor of the Contractor's proposed plant and transport does not, however, relieve the Contractor of his obligations under this Contract, in case such plant and transport accepted by the Supervisor fails to successfully complete the required Works. All machinery, equipment and materials to carry out the said Works shall be handled, transported and stored in accordance with the manufacturers' recommendations to minimize deterioration.

Supervision of the works

The execution of the Works is to be supervised by the Employer's appointed Supervisor.

Borehole depth and diameter

The Contractor shall drill to the total appropriate depth depending on the geological formation and to a diameter that shall allow minimum borehole nominal diameter bore of (45m) at the completion of the borehole, including casing installation. In any case the minimum drilled depth should be 45 meters and maximum 150 meters on average 60 meters' depth.

Drilling method

The Contractor may use any rotary drilling technique that he feels applicable to achieve the depth and diameter required, provided that the techniques used are those specified in his proposal or are approved by the Supervisor.

Water supply for drilling

The Contractor shall make his own arrangements for obtaining, storing, transporting and pumping of

water, required for drilling purposes and for use by the drilling crew at their campsite.

Borehole design

The final design of the borehole shall be confirmed by the Supervisor in consultation with the Contractor during the drilling process, or immediately after drilling is completed.

Yield estimates during drilling

Yield estimates shall be made during drilling using a method agreed upon by the Contractor and Supervisor. Average yields shall be read as directed by the Supervisor, and recorded in the Daily Record

Development and cleaning of boreholes

The Contractor shall develop and clean the boreholes upon completion of the drilling and installation of casing, screens, grouting and filter pack are installed, to remove native silts, clays, loose rock particles and drilling fluid residues deposited on the borehole wall during the drilling process, if organic drilling fluids are used, they shall be broken down chemically according to manufacturer's recommendations before or during development. Cleaning may be carried out by airlift pumping, surging, backwashing or jetting, to the approval of the Supervisor.

Test pumping

The Contractor shall perform test pumping to establish the performance and yield of the borehole, and shall provide a suitable, self-contained, mobile test pumping unit, approved by the Supervisor, for this purpose. The method for varying the discharge rate of the pumps will depend on the type of pump used, but the Contractor shall ensure the provision of a suitable means of achieving the range of constant flow rates specified by the Supervisor. Test pumping will be undertaken in each productive borehole, as assessed by the Supervisor from the yields indicated during drilling. The minimum daily sustainable yield from each borehole must be at least 5000 litres per day.

Requirements for the programme

The programme must allow completion within 8 weeks of the contract coming into effect.

Project Timelines and Deliverables

The table contains the expected projects timelines and deliverables :

Project Phase	Key Deliverable & POE	Timeframe
1	• Site established • All contractual requirements and obligations met and fulfilled • Appointment of workers	3 days
2	• Siting, drilling and equipping of borehole	6 weeks
3	• Close out and final account (Practical completion)	1 week

DESCRIPTION OF THE WORKS

1.1 Employer's Objectives

The objective of the project is to improve accessibility to sustainable, safe water for rural communities.
To appoint a suitably qualified contractor who will site, drill, test and equip five boreholes in the following farms:
(1) Portion 5 & 10 of the Farm Palmietfontein 104 JT.
(1) Portion 7 & 8 of farm Bloemfontein 399 JT.
(1) Portion 4 of the R/E of the farm Driefontein 377 JT

(2) Portion 189 (A Portion of Portion 14) of the Farm Rondebosch
Install 5 windmills with all accessories.

1.2 Overview of the Works

The work to be carried out entails:
The contractor shall also undertake the siting, drilling and equipping of five boreholes in the following farms:

(1) Portion 5 & 10 of the Farm Palmietfontein 104 JT.
(1) Portion 7 & 8 of farm Bloemfontein 399 JT.
(1) Portion 4 of the R/E of the farm Driefontein 377 JT
(2) Portion 189 (A Portion of Portion 14) of the Farm Rondebosch

The project entails the siting, drilling, equipping and testing of five boreholes. The following is a summary (or description) of the Works included in the contract (construction phase) (Schedule A):

1. Site Establishment: Establishment of camps, plant and materials on site,

2. The work consists of drilling 5 windmill powered boreholes. The work includes siting; drilling; cleaning; testing and equipping of 5 boreholes.

The description of the works is not necessarily complete and shall not limit the work to be carried out by the Contractor in this contract. Approximate quantities of each type of work are given in the schedule of quantities.

1.3 Extent of the Works

The contract comprises the supply of labour, materials, plant, equipment, transport and management for the completion of the following Works.

b) Location Data
See layout plans

1.5 Employment of Labour

It is the intention that this Contract should make the maximum possible use of the local labour force available from within the target community and which is at present underemployed.

The targets for employment are as follows:

- Women: 55%
- Youth: 40%

To this end it will be expected of the Contractor to employ and train labour on this Contract.

The Contractor shall fill in the forms relating to Key Personnel and state how many key personnel he intends to employ in the various categories. The numbers stated in the above mentioned form will be strictly controlled during the contract period and any changes in numbers shall be subject to the approval of the Consultant.

It is a condition of contract that the data sheets detailing the employment of human resources, expenditure and employment of SMMES as detailed in the tables below be submitted together with the monthly certificate timorously to the Consultant by the 10th of each month.

The definition of youth being determined by age up to and including 35 years.

The unit of measurement is person days being the total number of persons in that category multiplied by the number of days worked by each person respectively.

2. DRAWINGS

2.1 General

N/A Refer to specification.

4 DESIGN PROCEDURES

The Contractor shall be responsible for the design and specifications for the following aspects of the Works.

- Any temporary works requirements,
- Design integration before and during construction
- The requirements of the relevant Performance Specifications
- Procedures for all necessary approvals
- Environmental Management
- Design change procedures, and
- Record keeping and tracking of documents

5 PROCUREMENT

5.1 PREFERENTIAL PROCUREMENT PROCEDURES AND REQUIREMENTS

The system of measurement of preferential procurement points shall be as defined in the Section T1.3: Tender Data.

5.2 USE OF LOCAL LABOUR

It is a requirement of the Employer that the maximum possible use is made of local labour.

The Contractor is therefore required to limit the use of non-local labour to key personnel only and to employ only local labour on this Contract.

The Contractor shall fill in the relevant forms regarding “Key Personnel” and state how many non-local key personnel he intends to employ in the various categories.

The numbers stated in the “Key Personnel” forms shall be strictly controlled during the Contract Period and any increase in numbers shall be subject to the approval of the Engineer.”

6 CONSTRUCTION

A1 CONSTRUCTION PROGRAMME

The successful Tenderer shall submit a detailed, comprehensive/ Works programme within 5 days after the award of the contract showing the order of construction and method by which he proposes to carry out the Works. The format of the programme shall be to the Engineer's approval, but shall be in the form of a bar chart showing the critical path. In addition, the Contractor shall provide a schedule of the forecast value of completed work, month by month.

The programme shall include the critical construction path and an estimate of the anticipated cash flow.

The successful Tenderer shall complete the Works within the stipulated times in order to avoid the payment of penalties as provided for in Clause 42 of the General Conditions of Contract.

The Contractor shall not depart from the order in which the various items of work have been agreed without the prior written consent of the Engineer. If the programme is to be revised by reason of the Contractor falling behind he shall produce a revised version showing the modifications to the original programme necessary to ensure completion of the Works or any part thereof within the time for completion as defined, or any extended time granted, as well as a revised schedule of the forecast value of completed work, month by month.

Failure on the part of the Contractor to submit or to work according to the programme or revised programmes shall be sufficient reason for the Employer to take steps as provided for in the Conditions of Contract.

The approval by the Engineer of any programme shall have no Contractual significance other than that the Engineer would be satisfied if the Work is carried out according to such programme and that the Contractor undertakes to carry out the Work in accordance with the programme. It shall not limit the right of the Engineer to instruct the Contractor to vary the programme should circumstances make this necessary.

Cognisance shall be taken of the frequency of rain days, inclement weather and material delivery delays when formulating a programme of works.

A3 SITE FACILITIES AVAILABLE

A3.1 Water Supply

The Contractor will have to make his own arrangements for the provision of potable water for human consumption as well as water required for construction.

A3.2 Power Supply

The Contractor will have to make his own arrangement for power supply to his construction camp and construction site and his tender will be deemed to include for all costs in this regard.

A3.3 Camp Sites

The Contractor will be allocated an area for his use in the establishment of a yard, storage, offices, etc. The Contractor shall be responsible for fencing and securing his own area. On completion of the Works and removal of the depot, the site shall be cleaned and restored to its natural condition immediately it is vacated.

A3.4 Housing

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

A4 SITE FACILITIES REQUIRED

A4.1 Engineer's Office

Not required.

A4.2 Engineer's Accommodation

Not required.

A4.3 Engineer's Laboratory

Not required.

A4.4 Sanitary Facilities

The Contractor shall provide adequate ablution and toilet facilities for all workmen on site.

All latrines shall comply with the requirements of the Local Authorities and shall be placed where directed by the Engineer. All sanitary fees and costs payable shall be paid by the Contractor. All latrines must, for the duration of the contract, be kept continuously in a clean and hygienic condition by the contractor to the satisfaction of the Engineer.

If at any time the Contractor neglects to comply with the abovementioned requirements and after he has been requested to do so by the Engineer, fails to rectify the matter about which the Engineer has complained, the Engineer shall have the right to immediately order such material, employ such workmen and take such measures as he regards necessary to ensure clean and hygienic conditions all at the expense of the contractor.

A 4.5 Disposal of Waste

The Contractor shall be responsible for disposal of refuse and waste generated by his staff on a daily basis. The site is to be kept clean, neat and tidy to the Engineer's satisfaction. Refuse and waste shall not under any circumstance be buried on the site, but shall rather be collected in suitable skips and disposed of at the nearest suitable landfill site.

The disposal of waste shall be carried out in accordance with the requirements of the relevant Local Authority.

A4.6 Engineer’s Survey Equipment

The Contractor shall provide on request from the Engineer or his Representative, survey equipment for temporary use such as an automatic level, tachometer, level staff, 100 m tape, ranging rods, pegs, etc and any labour required for this purpose. Instruments provided shall be in a good state of repair and accuracy.

The Contractor shall maintain the equipment in good working order and keep it clean until the completion of the Works.

The Contractor shall keep the equipment continuously insured against any loss, damage or breakage, and he shall indemnify the Engineer and the Employer against any claims in this regard. Upon completion of the Works the survey equipment as listed above shall revert to the Contractor.

A5 FEATURES REQUIRING SPECIAL ATTENTION

A5.1 Use of Explosives

Prior to the use of explosives at any specific location, the Contractor shall obtain permission for blasting from the Engineer. The safety of existing Works and services, and of persons, etc., shall remain the responsibility of the Contractor, who shall abide by all the relevant laws and regulations.

A5.2 Existing Services and Buildings

Although the plans may show the approximate position of existing services and buildings, neither the Employer nor the Engineer will accept the responsibility for the accuracy thereof.

Where the Contractor anticipates that it will be impossible for him to carry out the work without causing damage to existing services, Works or buildings he shall forward a proposal on the method of construction for approval by the Engineer.

Where any existing services are crossed or temporarily removed, the Contractor shall be responsible for the repair and / or reinstatement of the crossings to the satisfaction of the Engineer.

Any damage done to existing Works or buildings shall be immediately notified to the owners concerned and to the Engineer.

Unless it is established by the Engineer that the Contractor exercised reasonable care and damage was unavoidable, the Contractor shall be held responsible for the damage to any existing Works or buildings and for the costs of repair, including any claims which may arise as a result thereof.

A5.3 Compliance with Statutory Requirements

The Contractor shall allow for all costs necessary to ensure that all work is undertaken in a safe manner and in compliance with the Occupational Health and Safety Act, Act No. 85 of 1993 and all statutory and local regulations and requirements.

The cost of complying with the requirements of this clause shall be deemed to be included in the rates.

A5.4 Permits

The Contractor shall be responsible for obtaining all necessary permits to transport materials to the area.

A5.5 Facilities to Other Contractors

In addition to the requirements of the General Conditions of Contract, the Contractor must make allowance for the presence of other Contractors on Site, which may involve, *inter alia*, the adaptation of his programme to fit in with work to be done by the other Contractor, as well as assuring other Contractors access to the site. The Contractor will be advised at tender stage of any other Contractors who will be engaged on other Works during the course of the Contract.

A5.6 Security of Contractor's Site

The provision and sustainment of security for the Contractor's Site Establishment shall be his own responsibility, and no claims for additional security measures taken during the currency of the Contract will be considered other than as provided for in the General Conditions of Contract.

A5.7 Contractor's Site Agent

a. Within 14 days of the award of Contract, the Contractor shall advise the Employer in writing of the name of the responsible person in charge of this Contract.

b. In amplification of Clause 25 of the General Conditions of Contract :-

It shall be noted that the Contractor shall be required to strictly observe his obligations regarding adequate full time superintendence of the Works, with particular reference to accuracy of setting out, excavations, correct steel fixing, properly constructed formwork, positioning of foundation bolts, and / or bolt pockets, placing of concrete, etc. in order to achieve the high standard of workmanship required of him.

Adequate facilities for superintendence of his work shall be provided by the Contractor and the Engineers engineering staff must under no circumstances be expected to act in this capacity on his behalf.

A5.8 Attendance at Site Meetings

The Contractor will be required to attend site meetings as and when these are required by the Engineer. The objectives of such meetings will be to review progress and ensure compliance with the programme, discuss and where possible solve any problems that may arise, and generally to liaise with all parties concerned with the Works.

The cost of attending such meetings shall be deemed to be included in the rates. Instructions given by the Engineer or agreement reached at such meetings and confirmed in the minutes shall be considered as a "written instruction by the Engineer" as referred to in the General Conditions of Contract.

Site meetings will generally be held every two weeks; however this will be confirmed as the contract progresses.

A5.9 Liaison Officer

If required in terms of the contract, the Contractor shall employ a Liaison Officer for the full duration of the contract. In the event that a Liaison Officer is required, a provisional sum will be provided in the Schedule of Quantities to cover the cost of the CLO.

A5.10 Courtesy

In all dealing 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 Liaison Officer and the Engineer's Representative on site. On occasions where the Contractor liaises directly with the public, the Liaison Officer and the Engineer's Representative should be informed of the outcome to be able to maintain a coherent picture of developments in the area.

A5.11 Dealing with Landowners

It is of paramount importance that good relations be maintained at all times between the Contractor and the landowners in the area. In order to preserve these good relations, the following routine shall be observed throughout the works:

(a) At least one week's notice shall be given by the Contractor to the Engineer before entering upon any property along the route for the purpose of commencing construction.

(b) On receipt of such notice, the Engineer will, as far as possible, arrange for a meeting between the Engineer, Contractor and the landowner concerned during which the programme of construction will be discussed. The landowners will be advised of the times of commencement and completion of work on their land and will be acquainted with the Contractor's intentions with regard to the cutting down of trees, temporary lowering of fences, temporary access roads, and all other matters affecting the owners' land and farming operations.

Any requests from owners which are reasonable and which will not affect the economical construction of the works in accordance with the Specification shall be met if at all possible.

(c) The Contractor shall negotiate directly with the landowners with regard to alternative access over private property to the site of the works, borrow pits and any dumping site for surplus excavation. All such sites shall be subject to the approval of the Engineer and the Engineer shall also be kept fully informed of all negotiations that are in progress between the Contractor and the landowners. The Contractor shall make prompt payment to the landowners for any royalties for borrow pits and for any agreed amounts to be paid to the farmer for the use of borrow pits, dumping sites, access roads, etc. No separate payment shall be made to cover royalties and all costs in this regard shall be deemed to be included in the tendered rates.

The Contractor shall, within a period of 3 months of completing the construction work on any private property produce to the Engineer a certificate, signed by the landowner in question, that all the Contractor's obligations to the landowner have been completely discharged in terms of the servitude agreements and any private agreements that may have been arranged between the Contractor and the landowners.

If such evidence is not produced within the stipulated period, the Employer reserves the right to investigate any agreement entered into between the landowner in question and the Contractor and any claims made by the landowner. If the Employer is then satisfied that the Contractor is in default in terms of the contract and any private agreements made, all justifiable claims shall be paid to the landowner by the Employer from retention money held and shall be deducted from the amount payable to the Contractor.

A5.12 Working within the Road Reserve and Landowners' Property

The Contractor shall observe the following when operating within private property, roads and road reserve:

(a) The Employer will acquire servitudes from the owners of all properties crossed by new services, or has permission to occupy where the servitudes will not be obtained.

(b) At all times the Contractor shall confine his operations to the area of the servitude unless he has made prior arrangements with adjoining land owners to the Engineer's approval.

(c) No damage shall be done to buildings, dwellings, crops, cultivated lands, dams, watercourses, roads, fences and the like outside the servitude.

(d) When working within existing road reserves the Contractor shall ensure that as little inconvenience as possible is caused to residents and traffic. Extra care shall be taken with regard to the siting of the excavated material and materials to be built in to the Works so that disturbances will be minimised.

(e) The area within the road reserves and servitudes shall be restored to the same standard and state as it was before construction at the Contractor's expense.

(f) Every precaution must be taken by the Contractor to prevent any flooding and erosion damage to adjoining property resulting from uncontrolled run-off during construction.

A5.13 Drawings and Specifications to be Provided

The Contractor shall be entitled to receive free of charge, the following :-

- Three (3) paper copies of each drawing, and
- Two (2) copies of the signed Contract Document

Any information in the possession of the Contractor which is necessary for the Engineer's Representative to complete his "As Built" or "Record" drawings must be submitted to the Engineer's Representative in accordance with the General Conditions of Contract.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Engineer. The Engineer will supply any figured dimensions which may have been omitted from the drawings.

A5.14 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 certificates prescribed by the Employer and shall consist of at least **two** sets of A4-sized paper copies.

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

A5.15 Extension of Time Arising from Abnormal Rainfall and Weather

No extensions of the time for completion shall be granted on the grounds of normal rainfall conditions, but extension of time in terms of clause 5.12.2.2 of the General Conditions of contract on the grounds of abnormal rainfall or wet conditions shall be calculated separately for each calendar month or part thereof, according to the following formula. It shall be calculated as follows for the time for completion, including any extension thereof:

$$V = (Nw - Nn) + \frac{(Rw - Rn)}{X}$$

V = Extension of time for calendar days of the calendar month concerned. If the value of V is negative and the absolute value thereof is greater than Nn, V is taken as negative Nn.

Nw = Actual number of days during calendar month on which a rainfall of Y mm or more is recorded.

Nn = Average number of days in the calendar month concerned on which a rainfall of Y mm or more is recorded in terms of existing rainfall data.

Rw = Actual rainfall for the calendar month concerned in mm

Rn = Average rainfall for the calendar month in mm deduced from existing rainfall data.

For the purposes of the contract Nn, Rn, X and Y shall have the values as stipulated below.

The total extension of time is the algebraic sum of the monthly totals for the period concerned; extension of time for parts of a month shall be calculated by using pro rata values of Nn and Rn. If the algebraic sum of the monthly totals is negative, no reduction of the time for completion as a result of rainfall shall be applicable.

This formula does not take any delays as a result of flood damage, which may cause further or simultaneous delays, into consideration and flood damage shall be treated separately for purposes of extension of time for completion.

The factor (Nw – Nn) is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall exceeds Y mm. The factor (Rw – Rn)/X is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall does not exceed Y mm, but on which wet conditions will hamper or disrupt work.

The Contractor shall keep daily rainfall records and submit it to the Engineer at every site meeting. No additional payment shall be made for the supply and installation of the rain gauge or for the keeping of the rainfall records and all costs must be included in the scheduled items:

Average number of days per year with rainfall exceeding:

Y	=	10mm
X	=	15mm

A6 APPLICABLE STANDARD AND PARTICULAR SPECIFICATIONS

PART 2 : APPICABLE PROJECT SPECIFICATIONS

C 3.4.1 STANDARD SPECIFICATIONS

The latest edition as at date of tender of the following Standardised Specifications for Civil Engineering Construction as published by the Committee of Land and Transport Officials (COLTO) shall apply.

The following specifications shall apply for the construction of the Works.

(a) The COLTO Standard Specifications for Road and Bridge Works for State Road Authorities (1998).
The contractor may purchase copies of Volume (i) from the South African Institution of Civil Engineers.

SAICE	Tel : (011) 805-5947	
Waterfall Park	/ Postnet Suite 81	Fax : (011) 805-5971
Howick Gardens	/ Private Bag X65	
Vorna Valley	/ Halfwayhouse	Contact Person : Angeline Aylward
Becker Street	/ 1685	
Midrand		

(b) SANS or BS Specifications and Codes of Practice
Wherever any reference is made to the South African Bureau of Standards (SANS) and the British Standards Specification (BSS) in either these Bill of Quantities or the Specification of Materials and Methods to be Used (OOG-001E), this reference shall be deemed to read “SABS or equivalent standard” and BS or equivalent standard” respectively.

(c) Various other specifications specified in the COLTO Standard Specifications or the Project Specifications.

C3.4.2 PROJECT SPECIFICATIONS RELATING TO STANDARD SPECIFICATIONS

C3.4.2.1 General Conditions of Contract Referred to in the Standard Specifications
The references to the General Conditions of Contract appearing in the COLTO Standard Specifications refer to the COLTO General Conditions of Contract which is superseded in this contract by the General Conditions of Contract for Construction Works 2010. The corresponding clause in the latter document pertaining to the reference in the COLTO Standard Specifications is listed in the table below.

Clause No. in the Standard Specifications	Clause No. in COLTO General Conditions	Equivalent Clause No. in General Conditions of Contract 2015
1202	15	5.6.1
1206	14	Deleted
1209	52	6.10.2
1210	54	51.1
1212(1)	49	6.10.1
1215	45	5.12.1
1217	35	8.2.1
1303	49	6.8
1303	53	6.11
1303	12	5.6
1303	45	5.12.1
1403	40(1)	6.4.1
1505	40	6.4
31.03	40	6.4
3204(b)	40	6.4
3303(b)	2	3
5803(c)	40	6.4
5805(d)	40	6.4
6103(c)	40	6.4
Item 83.03	22	5.15
ALL SECTIONS	48	6.6

C3.4.2.2 Amendments to the Standard Specifications

There are no amendments to the Standard Specifications as issued by the Committee of Land Transport Officials (COLTO).

C3.4.2.3 Project Specifications Relating to Standard Specifications

This part of the project specifications deals with matters relating to the standard specifications. Where reference is made in the standard specifications to the project specifications this part shall also contain the relevant information e.g. the requirements where a choice of materials or construction methods are provided for the standard specifications.

In certain clauses the standard specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular

contract. Details of such alternatives or additional requirements applicable to this contract are contained in this part of the project specifications. It also contains some additional specifications and amendments of the standard specifications required for this particular contract.

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

Clauses and pay items referring to labour intensive methods are prefixed by L in the project specifications.

Clauses and pay items referring to emerging contractors are prefixed by E in the project specifications.

MATTERS RELATING TO THE STANDARD SPECIFICATIONS

SECTION 1100 : DEFINITIONS AND TERMS 110
SECTION 1200 : general requirements and provisions 110
SECTION 1300 : contractor's establishment on site and general obligations 119
SECTION 1400 : HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL 119
SECTION 1500 : ACCOMMODATION OF TRAFFIC 123
SECTION 1700 : CLEARING AND GRUBBING 132
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SECTION 4100 : prime coat **Error! Bookmark not defined.**
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SECTION 1100 : DEFINITIONS AND TERMS

B1115 GENERAL CONDITIONS OF CONTRACT

Replace Clause 1115 with the following:

The General Conditions applicable to this Contract are the General Conditions of the Contract for Construction Works (GCC15), 3rd Edition 2015, issued by the South African Institute of Civil Engineering (SAICE).

Accordingly, all reference in the Standard Specifications to any other General Conditions of Contract (GCC) has to be amended (see Table 3.4.2 in this document)

Whereas every effort has been made to include all of the affected clauses in Table 3.3.2.1, there may be some omissions. In every case, however, the General Conditions of the Contract for Construction Works (GCC15), 3rd Edition 2015, shall apply and the Contractor shall be responsible for interpretation of the equivalent clause.

B1155 WORK IN RESTRICTED AREAS

Replace the contents of this clause with the following:

"No additional or extra over payment will be made for work in restricted areas."

Add the following Clause:

B1156 COMMERCIAL SOURCE

A source of supply of materials chosen by the Contractor. The Contractor shall take full responsibility for the quality of all materials and services supplied from commercial sources.

SECTION 1200 : GENERAL REQUIREMENTS AND PROVISIONS

B1202 SERVICES

Add the following to the fifth paragraph:

"Provision is made in the bill of quantities for payment for searching and exposing of known or unknown services as well as the relocation and/or protection of existing services. Any moving of existing services which may be required within the proclaimed road reserve will be undertaken by the relevant service authorities or by a selected subcontractor if so ordered by the engineer."

B1204 PROGRAMME OF WORK

(a) General requirements

Amend the word "network" in the fourth line of the first paragraph to read as "bar (Gantt) chart".

Add the following after the third paragraph:

"The bar-chart programme to be provided by the contractor shall show the various activities in such detail as may be required by the engineer. Progress in terms of the programme shall be updated monthly by the contractor in accordance with the progress made by the contractor.

In compiling the programme of work, the contractor shall indicate and make due allowance for the following, as specified elsewhere in the contract documents:

- The requirements regarding the accommodation of traffic and areas that may be occupied at any time for construction purposes (as indicated on the drawings and specified in Section 1500 of the specifications)
- Requirements regarding the training of labourers and Emerging Contractors (EC's).
- The requirements for work to be undertaken by labourers and work to be undertaken by EC's.
- Final surface treatment on any section, only to be undertaken after all pavement rehabilitation, pre-treatment, shoulder reconstruction, crack sealing, patching and all other work within the road reserve are completed, and not between 1 May and 1 September, unless authorised by the Engineer.

B1205 WORKMANSHIP AND QUALITY CONTROL

Add the following to the third paragraph:

"The engineer shall, however, undertake acceptance control tests for the judgement of workmanship and quality, without accepting any obligations vested with the contractor in terms of the contract with specific reference to quality of materials and workmanship. Such acceptance control test done by the engineer shall not relieve the contractor of his obligations to maintaining his own quality control system."

Add the following at the end of this clause:

"The engineer shall, for the purpose of acceptance control on products and workmanship, assess test results and measurements in accordance with the provisions of section 8300 of the standard specifications. Where small quantities of work are involved, a lot shall mean a full day's production for a specific item of work subject to acceptance control testing."

B1206 THE SETTING-OUT OF THE WORK AND PROTECTION OF BEACONS

Add the following:

"The contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith."

The Contractor shall take care that property beacons, trigonometrical survey beacons or setting-out beacons are not displaced or destroyed without the consent of the Engineer. Property beacons and trigonometrical survey beacons that have been displaced or destroyed shall be replaced by a registered land surveyor, who shall certify such replacement.

The cost of replacing all beacons displaced or destroyed during the course of the Contract without the consent of the Engineer shall be borne by the Contractor."

B1209 PAYMENT

(b) Rates to be inclusive

Add the following:

"VAT shall be excluded from the rates and provided for as a lump sum in the Summary of Bill of Quantities".

(e) Materials on the site

Add the following:

"In addition, the engineer may at his sole discretion also allow payments under "Materials on Site" in respect of any construction materials if stored off-site providing that:

(a) The site selected for this purpose is approved by the engineer.
(b) Such land is physically separated from any production plant or operation.
(c) Only materials for use under this contract is stockpiled on such land.
(d) The contractor has provided proof of an agreement with the owner of such land that the owner has no claim whatsoever on any materials stockpiled on such land.
(e) Materials obtained by the contractor for or on behalf of emerging subcontractors (SMME's) shall remain the responsibility of the contractor after payment has been made in respect of materials on site."

(g) Work in confined areas

No extra payment shall be made nor shall any claim for additional payment be considered for construction in restricted or confined areas. The omission of standard pay items from the Bill of Quantities shall be taken to be deliberate and any additional costs incurred shall be included in the tendered rates."

B1210 CERTIFICATE OF PRACTICAL COMPLETION OF THE WORKS

Add the following to subclause (e) before the semicolon:

"(including road studs)"

Add the following new paragraphs after subclause (h):

"Notwithstanding that there might be natural or programmed sections of the works that will result in them being completed in their entirety before other sections, no consideration shall be given to the issuing of practical completion certificates for portions of the works. The use of any completed roadway or portions of the work, whether for unhindered use by the public or for accommodation of traffic while other portions are being constructed, shall not constitute use or occupation by the employer.

In addition to the listed specified items of work and regardless of the degree of beneficial occupation by the employer, the works shall be considered for practical completion only if the following criteria also have been met:

(i) The estimated cost to complete the outstanding work is less than 2% of the tendered value of work plus the cost of any variation or extra work orders, but excluding CPA and VAT.

(ii) The written list of outstanding items of work can be completed within 28 days of the list having been accepted in writing by the Contractor.

(iii) Any information in the Contractor's possession, which is required by the Engineer and has been requested in writing, has been supplied."

B1214 CONTRACTOR'S ACTIVITIES IN RESPECT OF PROPERTY OUTSIDE THE ROAD RESERVE AND OF SERVICES MOVED, DAMAGED OR ALTERED

Add the following:

"(f) Where applicable, the Contractor shall put in writing all his agreements with owners of property outside the road reserve in respect of his use of private land for:

(i) Contractor's offices and laboratories,
(ii) Contractor's workshops and plant parking areas.
(iii) Offices and laboratories for the Engineer.
(iv) Temporary stockpile sites and all other areas outside the road reserve used for the works.
(v) Permanent spoil sites outside the road reserve used for disposal of unsuitable materials.

He shall enter into a contract of lease or leases with the owner or owners of such land in respect of the full period for which such lands shall be used. The lease shall define the boundaries of the land and shall contain provision, where the owner agrees, for an extension of the lease during any extended period for completion of the Contract, as well as for provision for the lease to be taken over by the Engineer or another Contractor in the event of default by or insolvency of the Contractor.
The lease or leases shall be signed by all parties and copies provided to the Engineer. Notwithstanding the Engineer's approval of the conditions of the lease the Contractor shall be solely responsible for providing the facilities for the full period required and for suitable substitutes should the property be no longer available."

B1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

Add the following after the first paragraph of this clause:

"For the purposes of this contract, extension of time resulting from abnormal rainfall or other forms of inclement weather shall be determined according to the requirements of Method ii (critical-path method)."

Method (ii) (Critical path method)

Delete "(based on a five-day working week)" in the fifth and sixth lines of the second paragraph of the description of this method.

Delete the last sentence of the second paragraph of the description of this method and replace with the following:

"The value of "n" shall be taken as three (03) working days per calendar month.
If normal rainy or inclement weather, resulting in delays, occurs for less than three (03) working days in any calendar month, the difference between the three (03) working days and the actual number of working days on which normal rainy or inclement weather occurred, shall be ignored and not accumulated for the duration of the contract period for the purposes of determining an extension of time due to normal rainy weather, nor due to any other reason.
Items of work on the critical path of the programme of work which are subject to climatic limitations shall also be considered for extension of time if such items of work are delayed by e.g. cold weather, high winds or other inclement weather conditions.
In this regard, reference shall be made to weather limitations specified for the application of various bituminous products. However, for months during which seal-work cannot be undertaken in terms of the specifications, no extension of time shall be claimed for.
Rainfall records for Lydenburg Rainfall Station (Station 0554816A7)

MONTH	**AVERAGE RAINFALL (mm)**	**RAIN DAYS (with more than 10mm per month)**
JANUARY	**132**	**5.4**
FEBRUARY	**85**	**3.2**
MARCH	**73**	**3.0**
APRIL	**52**	**2.2**
MAY	**17**	**0.5**
JUNE	**7**	**0.2**
JULY	**5**	**0.2**
AUGUST	**9**	**0.3**
SEPTEMBER	**25**	**0.7**
OCTOBER	**73**	**2.9**
NOVEMBER	**136**	**5.5**
DECEMBER	**123**	**5.0**

B1217 PROTECTION OF THE WORKS AND REQUIREMENTS TO BE MET BEFORE CONSTRUCTION OF NEW WORK ON TOP OF COMPLETED WORK IS COMMENCED

Add the following subclause:

"(h) No concrete kerbing or concrete drains directly adjoining the bituminous surfacing shall be constructed prior to the completion of the bituminous surfacing."

B1222 USE OF EXPLOSIVES

Add the following subclause:

"(h) Where blasting operations are undertaken in close proximity of temporary deviations, private property, housing, buildings, schools, etc, the contractor shall implement all such safeguarding measures as may be required and instructed by the engineer."

Also, all the property, buildings and structure information as required in Item B12.08 by the Engineer will be submitted to the Engineering team before any works, blasting or compaction may commence.

B1224 THE HANDING-OVER OF THE ROAD RESERVE

Add the following:

"The total length of the road reserve between the specified limits of construction will be handed over to the contractor on the commencement date. Reference shall, however, be made to the requirements of section 1500 of these specifications where limitations in respect of work-areas are specified. In the event of the non-adherence by the contractor in terms of the mentioned specifications, the engineer shall withdraw such sections of the road reserve as may be justified to ensure suitable progress of the works or safe passage of traffic."

Add the following paragraph:

"In addition to the specified repairs, the Contractor shall also carry out any maintenance work within the road reserve that the Engineer may require. Such maintenance shall typically comprise the clearing and repair of drainage systems, any structural damage caused by traffic during the contract period and the maintenance of existing road signs."

B1229 SABS CEMENT SPECIFICATIONS

Replace the last paragraph of this clause with the following:

"Where reference is made in this specification or the standard specifications to the cement specifications, eg. SABS 471: Portland cement and rapid hardening

Portland cement, it shall be replaced with the new specification:

SABS ENV 197-1: Cement-composition, specifications and conformity criteria.

Part 1: Common cements.

Furthermore, where reference is made in this specification or the standard specifications to the different cement types, the following new names/types shall apply:

Typical new product nomenclature	
Cement type	**Cement strength class**
CEM I	32,5
CEM I	32,5R
CEM I	42,5
CEM I	42,5R
No provision made	No provision made
CEM II/A-S	32,5
CEM II/A-S	32,5R
CEM II/A-S	42,5
CEM II/A-V	32,5
CEM II/A-V	32,5R
CEM II/A-W	32,5
CEM II/A-W	32,5R
CEM II/A-V	42,5
CEM II/A-V	42,5R
CEM II/A-W	42,5
CEM II/A-W	42,5R
CEM III/A	32,5
CEM III/A	32,5R
CEM II/B-V	32,5

Typical new product nomenclature		
Cement type		**Cement strength class**
CEM II/B-W		32,5
	CEM II/B-S	32,5R
	CEM II/B-S	42,5
	CEM III/A	32,5R
	CEM III/A	42,5

CEM I 32,5, CEM II A-S 32,5, CEM II/A-V 32,5, or CEM III A may be used for the manufacture of reinforced concrete members."

Add the following new clauses:

"B1230 IN-SERVICE AND STRUCTURED TRAINING

The contractor shall in addition to the structured (accredited) training as provided for in Part C of this document implement an in-service training programme, from the commencement of the contract, in which the various skills required for the execution and completion of the works are imparted to the labourers engaged thereon, in a programmed and progressive manner. Labourers shall be trained progressively throughout the duration of the contract, in the various stages of a particular type of work.

(a) Details of in-service and structured training

(i) The in-service training programme shall be submitted with the initial works programme. The progress in relation to this programme will be recorded monthly and attached to the site meeting minutes and payment certificate.

(ii) The contractor shall provide on-site, sufficient skilled and competent trainers to train all labourers engaged on the contract, in the various skills required for the execution and completion of the works.

(iii) All labourers shall be remunerated in respect of all time spent undergoing training.

(iv) Every worker engaged on the contract shall on the termination of his participation on the contract, be entitled to receive from the contractor, a certificate of service in which the following information shall be recorded:

- the name of the contractor
- the name of the employee
- the name of the project/contract
- the nature of the work satisfactorily executed by the worker and the time spent thereon
- the nature and extent of training provided to the worker
- the dates of service.

The cost of the above obligations shall be deemed to be covered by the sums and rates tendered for items B13.01(a), (b) and (c) in the bill of quantities. The performance of the contractor in providing in-service training, shall be taken into consideration should the contractor fail to reach his CPG (Community Participation Goals) at the completion of the project.

(b) Lead time for training

The training of labour as specified shall, as far as possible, take place before commencement of each activity and the contractor shall take into account in his programme the lead-time he requires for such training. All

training herein specified shall be deemed to be a construction activity and a non-negotiable condition of the contract".

B1231 COMMUNITY LIAISON OFFICER (CLO)

The contractor or his appointed agent will appoint a Community Liaison Officer (CLO) after consultation with the local communities, the engineer and the employer. The contractor shall direct all his liaison efforts with the local communities through the appointed officer. The contractor shall, however, accept the appointed as part of his management personnel.

(a) Duties of the Community Liaison Officer

The Community Liaison Officer's duties will be:

(i) To be available on site daily between the hours of 07:00 and 17:00 and at other times as the need arises. His normal working day will extend from 07:00 in the morning until 17:00 in the afternoon.

(ii) To determine, in consultation with the contractor, the needs of the temporary labour for relevant skills training. He will be responsible for the identification of suitable trainees and will attend one of each of the training sessions.
(iii) To communicate daily with the contractor and the engineer to determine the labour requirements with regard to numbers and skill, to facilitate in labour disputes and to assist in their resolution.
(iv) To assist in and facilitate in the recruitment of suitable temporary labour and the establishment of a "labour desk".
(v) To attend all meetings in which the community and/or labour are present or are required to be represented.
(vi) To assist in the identification, and screening of labourers from the community in accordance with the contractor's requirements.
(vii) To inform temporary labour of their conditions of temporary employment and to inform temporary labourers as early as possible when their period of employment will be terminated.
(viii) To attend disciplinary proceedings to ensure that hearings are fair and reasonable.
(ix) To keep a daily written record of his interviews and community liaison.
(x) To attend monthly site meetings to report on labour and RDP matters.
(xi) All such other duties as agreed upon between all parties concerned.
(xii) To submit monthly returns regarding community liaison as illustrated in Part C5.1 of this document (form RDP 12(E)).

(b) Payment for the community liaison officer

A special pay item is incorporated in section 1200 of the bill of quantities relating to payment of the liaison officer on a prime cost sum basis. This payment shall only be made for the period for which the duties of the liaison officer are required. The remuneration of the CLO shall be determined by the Employer in terms of the Sectorial determination 2: Civil Engineering Sector (Task grade 3).

(c) Period of employment of the community liaison officer

The period of employment of the community liaison officer shall be as decided upon jointly by the contractor, engineer and employer at a maximum period of a six months basis, but with the option of renewal.

B1232 SUBCONTRACTORS

Over and above the stipulations of clause 4.4 of the General Conditions of Contract 2010, regarding subletting of part of the works, it is a condition of the contract that an approved subcontractor shall not sublet part of his work, covered in his appointment by the main contractor, to another subcontractor without the consent and approval of the engineer.

Subletting shall in all cases be critically considered by the engineer.

In addition to the provisions of clause 4.4 of the general conditions of contract regarding subcontracting of the works, it is a requirement of this contract that an approved subcontractor shall not further subcontract work subcontracted to him by the main contractor, to another subcontractor without the consent and approval of the engineer. Subcontracting shall in all cases be critically considered by the engineer. The engineer reserves the right to limit the extent or the volume of work subcontracted by the contractor, should he deem it necessary in terms of progress or quality of workmanship.

B1233 WORKMEN'S COMPENSATION ACT

All labour employed on the site shall be covered by the Compensation for Occupational Injuries and Deceases Act (COIDA). The contractor shall pay in full, including the payment of the necessary levies, such amounts, as are due in terms of the Act. The contractor at the commencement of the contract shall resolve the manner in which Workmen's Compensation will be handled. Amounts paid by the contractor shall not be included in the wage rates but shall be covered by the Contractor to be deemed as included in his General Obligations rates in Section 1300 of the Bill of Quantities.

Add the following clause:

"B1234 MINE HEALTH AND SAFETY ACT 1996, ACT 29 OF 1996

(a) Introduction

The main objective of this Act is to protect the health and safety of persons at mines. This specification is therefore aimed at promoting health and safety specifically at borrow pits. Borrow pits are classified as mines.

(b) General Provisions

The contractor shall be responsible for controlling his operations at every borrow pit where material is being excavated to ensure compliance with all the requirements of the Mine Health and Safety Act, 1996. The contractor shall also ensure that the works, shaping and finishing off of the borrow pit are done in accordance with the provisions as specified in section 3100 of the COLTO Standard Specifications and this Act. The contractor shall also comply to the requirements as set out in C3.4.3.2 Environmental Management Plan.

The minimum requirements for operations at borrow pits are:

- Borrow pits are worked in such a way that the health and safety of employees and the public will not be endangered.
- A monthly report shall be submitted to the engineer on health and safety aspects at the borrow pits.
- The contractor shall appoint a manager to manage the borrow pits in accordance with the Mine Health and Safety Act.
- The contractor shall take the necessary steps to ensure that the work area of the borrow pits are safe at all times. This shall include items such as the provision of fencing and security guards.

(c) Duties of the Manager

The minimum duties of the manager supervising the activities at borrow pits shall be:

- Maintain a healthy and safe borrow pit environment.
- Identify hazards and related risks to which persons and employees are exposed.
- Establish a health and safety policy that:
  - Describes the organisation of work.
  - Contains aspects concerning the protection of the employees and other persons' health and safety.
  - Contains a risk analysis.
- Supply and erect the necessary safety and warning signs."

Add the following pay items and change the clause number.

B1235 MEASUREMENT AND PAYMENT

Add the following items:

"ITEM **UNIT**

B12.01 Excavation

Excavating material within the following depth ranges below ground level for the exposing of/or searching for services

(a) 0m to 2m
  (i) soft material — cubic metre (m³)
  ii) hard material — cubic metre (m³)

(b) Extra over item B12.01(a) for excavation by means of hand tools such as picks, crowbars and pneumatic tools or mechanical breakers in close vicinity of services where no machine excavation is permitted
  (i) soft material — cubic metre (m³)
  (ii) hard material — cubic metre (m³)

Measurement and payment shall be as specified for item 22.01 in the standard specifications.

ITEM **UNIT**

B12.02 Backfilling

(a) Using the excavated material — cubic metre (m³)
(b) Using imported selected material — cubic metre (m³)

Measurement and payment shall be as specified for item 22.02 in the standard specifications.

ITEM		UNIT
B12.03	(a) Allow a provisional sum for existing services to be relocated and/or protected as ordered by the engineer	provisional sum
	(b) Handling costs and profit in respect of subitem B12.03(a) above	percentage (%)

Measurement and payment shall be in accordance with the general conditions of contract."

ITEM		UNIT
B12.04	**Provision for a Community Liaison Officer**	
	(a) Provisional sum for the payment of the Community Liaison Officer	Provisional Sum
	(b) Handling costs and profit in respect of sub-item B12.04(a)	Percentage (%)

Expenditure of the above item shall be made in accordance with the general conditions of contract.

The tendered percentage is a percentage of the amount actually spent under the sub-item B12.04 (a), which shall include full compensation for the handling costs of the contractor, and the profit in connection with providing the community liaison officer."

ITEM		UNIT
B12.05	(a) Mine Health and Safety obligations	Month
	(b) Special information signs	Prime Cost Sum (PC Sum)
	(c) Provision of security guards	Prime Cost Sum (PC Sum)
	(d) Handling cost and profit in respect of sub-item B12.05(b) and (c)	Percentage (%)

Payment of the rate per month for sub-item B12.05(a) shall include full compensation for all the contractors obligations relevant to the Mine Health and Safety Act.

The prime cost sums shall be paid in accordance with the provisions of the General Conditions of Contract. The tendered percentage is a percentage of the amount actually spent under the prime cost items, which shall include full compensation for the profit in connection with providing the specified service.

ITEM		UNIT
B12.06	**Survey and placement of beacons, survey, staking and recording of new road and resurveying if required**	
	(i) Salaries, wages, survey, establish beacons, process data etc for areas being recycled	km
	(ii) Handling costs and profit in respect of B12.06(i)	Percentage (%)

The tendered rate shall include for all costs associated with surveying, staking and referencing/recording of the new road, and for the survey control required for the construction of the new road to the levels specified as well as maintaining the above mentioned.

All data shall be presented to the Engineer in electronic format together with a strip plan indicating the location and X, Y, Z values of the referencing beacons.

ITEM		UNIT
B12.07	**Supply and Install Contract Notice boards by the Engineer (as per drawings …….)**	**Number (No.)**

The tendered rate shall be measured as the number of boards instructed by the Engineer to be installed and shall include all costs associated with the supply and installation, procurement, transport, materials, labour and maintenance etc. of Contract Notice boards.

ITEM		UNIT
B12.08	**Condition survey of existing houses and property's adjacent to the road**	**Number (No.)**

The tendered rate shall include for all costs associated with surveying, staking and referencing/recording of the houses, property's and structures adjacent to the road. Te survey shall include a video recording, photo portfolio and coordinates of all the mentioned structures and properties. The contractor shall submit the required information before any work commence in close proximity of the works.

ITEM **UNIT**

B12.09 Allowance for rebuilding of structures demolished within the road reserve Prov Sum

The tendered rate shall include for all costs associated with the reconstruction or rebuilding of structures demolished during the construction period within the road reserve.

SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B1302 GENERAL REQUIREMENTS

(a) Camps, constructional plant and testing facilities

Add the following:

"The contractor shall, at each area where work is being undertaken, provide on a daily basis at least one (1) portable chemical latrine unit per fifteen (15) for use by construction workers employed on the project. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the satisfaction of the engineer. No separate payment shall be made for this requirement and shall be deemed to be included in the rates tendered for the contractor's time-related obligations."

B1303 PAYMENT

ITEM **UNIT**

B13.01 The contractor's general obligations (As specified)

Add the following after the fifth paragraph:

"The combined total tendered for sub-items (a), (b) and (c) shall not exceed 15% of the tender sum, excluding VAT."

SECTION 1400: HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

B1402 OFFICES AND LABORATORIES

(a) General

Add the following:

"The facilities to be provided for the engineer in terms of these specifications shall be fenced off by a two metre high veranda type security fence with diamond mesh on the vertical portion and barbed wire on the overhang. A security gate shall be provided in the fence which shall be guarded at all times by an acceptable watchman provided by the contractor.

The engineer's establishment may be incorporated within the contractor's establishment provided that the preceding requirements are met to the satisfaction of the engineer.

Separate payment shall be made for the provision and erecting of the security fence and gate as indicated on the drawings, but the cost in respect of the provision of a watchman at all times by the contractor shall be deemed to be included in the contractor's tendered rate for item B13.01(c)."

(b) Offices

Add the following new sub-sub-clause:

"(xviii) The engineer's site supervisory staff shall be provided with cellular telephones by the contractor for site communication purposes. Provision is made in the bill of quantities for separate payment of the supply and operating costs of such cellular phones."

B1403 HOUSING

(c) Rented accommodation

Add the following:

"The engineer may arrange for the obtaining of rented accommodation for his supervisory personnel on site. Payment of such rent shall be made under the

provisional sum in sub-item 14.07(a) and shall be expended on a monthly basis by the contractor as ordered by the engineer."

B1406 MEASUREMENT AND PAYMENT

Add the following sub-item:

"ITEM		**UNIT**
B14.03	**Office and laboratory fittings, installations and equipment**	

a) Items measured by number

Amend subsubitem (xvi) of this subitem to read:

ITEM		**UNIT**
(xvi)	Refrigerators (200 *l* min.)	number (No)"

Add the following sub-sub-item to this subitem:

ITEM		**UNIT**
"(xix)	Rain gauge	number (No)
(xx)	Maximum and minimum thermometer	number (No)

b) Prime-cost items and items paid for in a lump sum

Add the following sub-items:

ITEM		**UNIT**
(ix)	The provision of a cellular phone including the provisional sum cost of the connection	Number (No)
(x)	Provisional sum for the cost of cellular calls and other charges	Provisional Sum
(xii)	Handling costs in respect of sub-item B14.03(b)(x)	percentage (%)

The unit of measurement for subsubitem B14.03(b)(ix) shall be the number of cellular telephones supplied to the Engineer's site supervisory staff. The tendered rate shall include full compensation for the purchasing of the cellular telephones inclusive of any fixed contract costs with the service provider.

Measurement and payment in respect of the provisional sum item shall be made in accordance with the provisions of the General Conditions of Contract.

The tendered percentage is a percentage of the amount actually spent under sub-item B14.03 (b)(ix and x), which shall include full compensation for handling costs of the Contractor, and profit in connection with the payment of the cost of calls and other charges relating to the use by the Engineer's site staff of the supplied cellular telephones.

Items measured by area

Amend subsubitem (viii) of this subitem to read:

ITEM		**UNIT**
(viii)	Softboard notice board	square meter (m^2)

Add the following subsubitems:

ITEM		**UNIT**
(ix)	Whiteboard	square meter (m^2**)**

Add the following subitems:

(d) Provisional sum items

ITEM		UNIT
	(i) Provision for the use of an independent Laboratory for the engineer	provisional sum
	(ii) Handling costs in respect of sub-item B14.03(d)(i)	percentage (%)

"The tendered percentage is a percentage of the amount actually spent under subitem B14.03(d)(i), which shall include full compensation for the handling costs of the Contractor, and the profit in connection with the testing."

ITEM		UNIT
B14.11	**Provision and erection of security fencing (Including gate)**	metre (m)

The unit of measurement shall be the metre of security fence supplied and erected as indicated on the drawings and/or ordered by the engineer. The tendered rate shall include full compensation for procuring and furnishing of all material, including one vehicle gate, labour and equipment required to erect the specified security fence and maintain it for the duration of the contract."

General: Method of payment

Add the following:

"The tendered rates under this section of the bill of quantities shall also include full compensation for the dismantling and removal from site of all offices, laboratories and other facilities provided for the engineer's supervisory staff at the completion of the contract."

Add the following pay items:

ITEM		UNIT
B14.12	**Provision of two-way radio facilities**	
	(i) Provision of two-way radio facilities	number (No)
	(ii) Maintenance of portable radios	number (No)

The unit of measurement for the provision of portable radios shall be the number of radios installed in the vehicles of the Engineer and his staff.
The tendered rate for the provision of portable radios shall include full compensation for the provision, procurement of permission, licensing, installation and commissioning and final removal of the two-way radio system in the Engineer's vehicles.
The unit of measurement for the maintenance of portable radios shall be per month.
The tendered rate for the maintenance of portable radios shall include full compensation for all work to maintain the radio in good working condition including the removal of the radio from the vehicle, all repairs and replacement of the radio in the vehicle as may be required.

ITEM		UNIT
B14.13	**Provision and maintenance of facsimile facilities**	**sum per month**

The tendered sum shall include full provision for providing access to and maintaining an approved facsimile machine and its use, including all accessories such as paper, ink cartridges (e.g. refills) etc., for providing a maximum number of 1000 A4 pages per month. The cost of the telephone charges for outgoing facsimiles shall be paid under item B14.03(b)(iii and v).

ITEM		UNIT
B14.14	**Provision of computers and printers**	
	(a) Computers & Software	Provisional Sum
	(b) A4 printers	Provisional Sum
	(c) A3 printers	Provisional Sum
	(d) Modems	Provisional Sum

The unit of measurement is the number of approved new computers and printers complete with the specified software, supplied and installed as instructed by the Engineer.

The tendered rate shall include full compensation for supplying the computers and their software (including the cost of the Uninterrupted Power Supply Units) and printers, for their installation and maintenance during the full contract period, and for their removal at the end of the contract period. The cost of the telephone charges and the monthly cost for the provision of the Internet facility shall be paid under item B14.03 (b)(iii)."

SECTION 1500: ACCOMMODATION OF TRAFFIC

B1501 SCOPE

Add the following:
"It is a condition of this contract that traffic is accommodated taking into account the provisions of the latest edition of the South African Roads Traffic Signs Manual (SARTSM). The latest version for use in the accommodation of traffic is Chapter 13, Volume 2 of the June 1999 edition. Copies of this publication are available from the South African National Roads Agency Limited, PO Box 415, Pretoria, 0001.
This section also covers the provision of additional information signs for motorists and the release of any notices to the media and public."
Add the following:
"The temporary use of road signs and barriers required to control traffic during road marking operations shall not be measured and paid for under this section, but shall be included in the various items in Section 5700, with the exception that the provision of the traffic control facilities shall be made under this Section 1500."

B1502 GENERAL REQUIREMENTS

(a) Safety

Add the following after the last paragraph:
The Contractor shall take all precautions necessary to programme and conduct his construction operations in such a manner that inconvenience and annoyance to public traffic, property owners and road users is kept to a minimum. The Contractor shall also ensure that safety requirements are strictly enforced at all times.
The Contractor shall be responsible for temporary localized repair work on the existing road that forms part of the site of works (if required). The date from which the site safety will be the responsibility of the Contractor, shall be as stated in the letter of acceptance.
The Engineer may instruct the Contractor to carry out minor works at isolated positions outside the limits of the site. The Contractor shall be responsible for the safety of the travelling public at those positions during the contract period.
The Contractor, before starting work on any part of the site or at any position, shall submit to the Engineer a method statement and programme for accommodating traffic on that section for his approval.
The Contractor's programme for the accommodation of traffic and any proposed deviation from the approved programme must be approved by the Engineer.
All construction workers shall wear high visibility clothing when working alongside public traffic. The jackets shall be of an approved type, orange, red-orange or yellow in colour with retro-reflective strips as indicated in the – Roadworks, Figure 24.
"The contractor shall ensure that the temporary deviations are kept dust free by watering the bypass / deviations regularly to the satisfaction of the Engineer"

(b) Providing temporary deviations

Add the following:
"The following will be regarded as bypasses:

(i) Bypasses constructed within or outside the road reserve, away from the existing road,

(ii) Existing roads,

(iii) Road shoulders,

(iv) Half of the existing or new carriageway, including one shoulder. One way traffic shall be controlled either by STOP/GO control or by traffic lights."

(e) Access to properties

Add the following:

"Where the alignment of the new road coincides with the alignment of the existing road, a number of accesses to private properties will have to be operational and maintained during the constructional period. No separate payment will be made for providing acceptable and safe access across the new road at all times during construction of the road."

(i) Traffic safety officer

Add the following after subclause (viii):

"(ix) be responsible for contacting all the relevant authorities in the event of an accident on the site of the Works

(vi) arrange for the removal of broken down vehicles that obstruct the normal traffic flow

The Contractor shall provide the traffic safety officer with all the necessary resources to carry out his duties as specified, inter alia, light delivery van (LDV), personnel, warning signs and revolving amber flashing lights. A warning sign with the words "CONTRACTOR TRAFFIC CONTROL" and/or "AANNEMER VERKEERSBEHEER" in clearly legible letters shall be mounted on the vehicle at least 1,5m above ground level to be clearly visible. The vehicle shall be equipped with two revolving amber-coloured flashing lights with a minimum intensity of 55W. The flashing lights shall be switched on and the warning sign be displayed at all times when the vehicle is used on the site.

No separate payment will be made for the traffic safety officer, his vehicle, personnel and equipment and the cost thereof shall be included in the Contractor's cost for his establishment and general obligations (Section 1300)."

The Traffic Safety Officer shall be made available to discuss road safety and traffic accommodation matters whenever required by the Engineer.

The Traffic Safety Officer shall be directly responsible to the Contractor's Site Agent/Manager. If at any time the Traffic Safety Officer will not be available, the Site Manager shall inform the Engineer in advance and appoint a responsible, able substitute who shall have the same powers as vested in the Traffic Safety Officer. This substitute must beforehand be approved by the Engineer.

The Traffic Safety Officer shall be equipped with a two-way radio unit or cellular phone and shall have a vehicle and 2 assistants at his disposal 24 hours a day and he shall be directly answerable to the Contractors Site Agent. The traffic safety vehicle shall be a truck with a capacity of 3 tons and shall be equipped with a high visibility rear panel as shown on Figure 24 of Road Signs Note No. 13. The Traffic Safety Officer shall have a direct line of communication at all times with the police and traffic officersresponsible for the area within limits of the contract. The provision of the traffic safety vehicle, driver, two assistants and the cost of the two-way radio unit or cellular phone shall be deemed to be included in the rates tendered."

Add the following after the end of the last paragraph:

"He shall also be responsible for contacting the traffic authority and South African Police in the event of an accident on the section of road under construction, give assistance to injured persons and animals, irrespective whether they are in the employ of the Contractor or not, and the public, whether they are in the employ of the Contractor or not, remove vehicles that block the road, irrespective of whether it is a result of an accident or normal breakdown."

Replace subsubclauses (ii) and (iii) with the following:

"(ii) record on neat and dimensioned sketches and submit to the Engineer the position and sign reference number where applicable of each sign, barricade, delineator, cone, amber flicker light, guardrail and permanent or temporary painted road marking feature. The position of each shall be adequately referenced to identifiable permanent features located along the site of the works.

These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the Traffic Safety Officer, and shall be signed by the Traffic Safety Officer before being submitted to the Engineer.

The records shall be amended whenever changes are made in the field and the revised detailed sketches shall be submitted to the Engineer. This shall include the recording of the position of flagmen and STOP/GO control men

and their associated traffic accommodation equipment wherever they are used.

(iii) personally inspect the position and condition of each traffic accommodation feature on the whole site of works twice each day by 09h30 and by 16h30, to record all irregularities discovered and the remedial action taken, and to sign off as correct and submit to the Engineer such record sheets by 10h00 and by 17h00 each day. The Traffic Safety Officer shall keep a duplicate book for this specific purpose.

Inspection and a record of traffic signs shall also be done twice daily on non-working days.

The Traffic Safety Officer shall also submit to the Engineer by 10h00 each morning, a record of all matter pertinent to site safety and traffic accommodation throughout the site of works the previous day. He shall also record the daily labour returns of flagmen, STOP/GO and traffic signal control men employed."

Add the following subsubclauses:

(ix) ensure that all obstructions related to the Contractors activities be removed before nightfall where applicable and instructed by the Engineer and that the roads are safe for night traffic."

(x) also be responsible for removal of broken down vehicles off the roadway and implementing actions requested by the traffic authorities with regard to the erection and maintenance of all traffic signs necessary for the accommodation of traffic if necessary, at accident scenes."

(xi) also be responsible for the identification and the remedial actions taken with regard to temporary repair work.

Add the following new subclauses:

"(j) Handing over the site

The total extent of the site between the limits of construction as described in this document and indicated on the drawings will be handed over to the contractor at the commencement of the contract period. The engineer however reserves the right to adjust this arrangement should progress or safe passage of traffic warrant such a change.

(k) Use of explosives in close proximity of temporary deviations

The contractor shall arrange all necessary traffic control and other requirements to safeguard the traffic on temporary deviations during blasting operations.

(l) Land taken up for deviations

Negotiations with landowners to obtain the land taken up by temporary deviations will be undertaken by the employer. A prime cost sum is allowed in the bill of quantities for payment of compensation to affected landowners. All other negotiations regarding temporary access to properties, land-use, fencing requirements etc. shall be dealt with by the contractor in conjunction with the engineer and be confirmed in writing and be kept on record by the contractor.

"(m) Maximum lengths of construction areas

A temporary deviation, where the proposed road follows the existing route shall be constructed along the length of existing road. Traffic shall generally be accommodated as follows:

On a two-way two lane gravel deviation (Class 1) constructed partially outside or adjacent to the existing road reserve boundaries of road.

(i) On one-way single lane gravel deviation (Class 2) constructed inside the existing road reserve boundaries and on either side of road. In this instance special cognisance shall be taken to accommodate traffic to private properties.

A maximum length of one section of approximately 5,0km or two sections of 3,0 km each of deviation (Class 1 or 2) shall be permitted at a time and no relieve of this limitation shall be considered by the engineer except where the programme necessitates such at the construction of bridges."

(n) Crossing the road

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

(o) Site personnel

The Contractor shall ensure that all his personnel, excluding those who are permanently office bound, are equipped with polyester full-length safety jackets, colour orange/lime with Reflexite or similar approved bands, 2 no. horizontal and 2

no. vertical, complying with Level 3 clothing specification of Fig 13.30 of Chapter 13 of Volume 2 of the SARTSM and that these are worn at all times when working on or near to the travelled way. Any person found not wearing a reflective jacket under these circumstances shall be removed from the site until such time as he is in possession of and wearing a reflective jacket. Reflective safety jackets shall be kept in good condition and any jackets that are, in the opinion of the Engineer, ineffective shall be immediately replaced by the Contractor.

The above requirements shall apply equally to the staff of all sub-Contractors employed by the Contractor, as well as to the drivers of all trucks delivering material to, and/or removing material from, any construction zone.

Add the following subclause:

(p) Failure to comply with provisions for the accommodation of traffic

The failure of or refusal by the Contractor to construct and/or maintain diversions, barricades, traffic signs or road markings at the proper time, or to take the necessary precautions for safety and convenience of public traffic as specified or instructed by the Engineer, shall be sufficient cause to suspend payment on this contract until the required construction or maintenance has been completed to the satisfaction of the Engineer. Further, the Engineer will have the right to stop any operation where the traffic accommodation measures are not to specification or as ordered and the Engineer considers that there is a risk to the public. Such stoppage of the work will not be acceptable as a reason for extension of time or additional compensation.

B1503 TEMPORARY TRAFFIC CONTROL FACILITIES

Add the following after the first paragraph:

"All temporary road signs, devices, sequences, layouts and spacing shall comply with the requirements of the Road Traffic Act, 1996 (Act 93 of 1996), the National Road Traffic Regulations, 2000, the South African Road Traffic Signs Manual, the requirements of the relevant road authority and the drawings. All temporary traffic control facilities shall comply with the guidelines set in SA Road Traffic Signs Manual, Volume 2, Chapter 13: Roadworks Signing, (SARTSM, June 1999, obtainable from the Government Pinter, Pretoria)."

The Contractor shall be responsible for traffic control over the entire length of the site on a 24 hour basis throughout the entire contract period and any extensions thereto authorized or otherwise, including non-working days and annual shutdowns.

The Contractor shall be responsible for the design of the layout of traffic control facilities in accordance with the above. He shall present neat layout plans showing the proposed positions of all facilities to the Engineer for his comments and approval at least one week prior to instituting such layouts.

The Contractor shall keep sufficient surplus barricades, signs, delineators and cones on and around the site to allow for the replacement of damaged or missing items within a period of three hours of the deficiency being discovered.

Prior to moving traffic on to a diversion, or to instituting any accommodation of traffic, the Contractor shall ensure that all traffic control facilities, details of which were previously submitted to the Engineer are in position. At least one hour prior to his intention of diverting the traffic the Contractor shall present the completely erected road signs for the diversion to the Engineer for inspection.

When drawing up his programme of work the Contractor shall allow time for such inspection, as well as the time required to correct any faults discovered during the inspection.

No STOP/GO operations shall be carried out before sunrise or after sunset. Closing of any section of road shall only start at or after sunrise and such a section opened in full for traffic before sunset. No work or equipment shall be allowed on the road during night-time where traffic is not controlled by traffic lights.

With regard to the number of road signs, provision is being made in the Bill of Quantities for two sections of road of a certain length to be closed as well as one section of road with work alongside the road lanes, simultaneously at any given time, subject to the restrictions set out in Clause B1513 for one-way directional traffic flow. If envisaged by the Contractor that more than these sections of road, or longer sections will be closed at any given time, he shall provide the extra road signs and personnel necessary, over and above those provided for in the Bill of Quantities, to fully comply with specifications, at his own cost."

Delete the third paragraph and replace with the following:
"The type of construction, spacing and placement of traffic-control devices shall be in accordance with the latest edition of the South African Roads Traffic Sign Manual (SARTSM) Volume II Chapter 13, Road works, these special provisions and the drawings. The recommended arrangements of the traffic control devices illustrated in Appendices 1 to 6 of Road Signs Note No. 13 and/or the drawings shall not be departed from without prior approval of the Engineer. The arrangements expected to be most commonly used in the contract are given on the tender drawings.
The details shown for spacing and placement of traffic-control facilities may however, be revised at the discretion of the Engineer where deemed necessary to accommodate local site geometry and traffic conditions.
Sufficient staff, equipped with two-way radios in good order and with additional batteries, shall be provided to operate the traffic-control signal system, in shifts of not more than eight hours. The same personnel shall not be on duty throughout an entire night.
All traffic signal operations, irrespective, shall be under constant 24 hour supervision of at least two operators to ensure that any malfunction of the traffic signal equipment is instantly detected and the safety of the travelling public ensured by the manual operation of the traffic control operations.
No separate payment will be made for operators controlling the traffic lights. The tendered rate for such work will deem to be incorporated in the tendered rates provided under B15.03 which will include full compensation for such operators, irrespective whether they are employed during daylight hours or during night time. No separate payment will be made for relocating the traffic lights, maintenance, the number of signal systems used, etc. or any other cost associated with the traffic signals."

(a) Traffic control devices

Add the following:

"Flagmen shall be provided at all access and exit points to the working areas alongside public traffic. Flagmen equipped with red flags, STOP/GO signs and two-way radios shall be stationed at each end of the road section to ensure an orderly flow of traffic past the work area. All signals must be clear and the flagmen shall be intelligent and responsible personnel. In areas of high traffic density, the assistance of the relevant traffic authorities officials shall be solicited. All flagmen shall be equipped with reflectorized clothing while operating on the road."

(b) Road signs and barricades

Add the following:

"All the temporary road signs are to be mounted on posts as specified in section 5600 of the specifications. Provision shall be made for the supply and erection of the signs and the maintenance of the signs during the construction period. Provisions shall also be made for the removal of the temporary road signs on completion of the construction work when such signs are no longer required. Temporary road signs and channelization devices shall be manufactured in accordance with the latest edition of the South African Road Traffic Signs Manual (June 1999) and placed as shown on the drawings and in Road Signs Note 13. Delineators shall be manufactured from a non-metal material and shall be mounted on a base section also manufactured of non-metal material. Single as well as back-to-back mounted delineators are required.
No work may proceed where accommodation of traffic is required until such time as the relevant requirements with regard to signposting are met.
The supports for temporary signs shall be capable of withstanding a wind from passing traffic travelling at 100 km/h without the sign overturning, rotating or moving from the designed position.
All temporary road signs are to be mounted on portable supports to facilitate the moving of the signs. Only sandbags will be permitted for the ballasting of the sign supports. The sandbags shall consist of durable material and have adequate mass to prevent signs from being blown over by wind. The cost of the sandbag and the replacement thereof if damaged, shall be allowed for in the tendered rates for the various types of temporary road signs.
The covering of permanent road signs, if applicable, shall be by utilising a Hessian bag which shall be pulled over the sign in the form of a hood and fastened to the sign posts. Plastic bags or other materials fastened by means of adhesive tape shall not be permitted. The cost of covering of permanent road signs shall be deemed to be covered by the tendered rates of pay item B15.01."

The obligation to arrange safe passage of traffic shall always be vested with the contractor regardless what is indicated on the drawings of the engineer."

(c) Channelization devices and barricades

Add the following:

"Drums shall not be used as channelization devices.

TW 401 and TW 402 delineators shall comply with the following requirements:

i) It shall be manufactured from a flexible material and shall comply with SABS 1555. The blade portion of the delineator shall be positively affixed to a base unit which in turn shall be stable on its own or be stabilized by means of sandbags when used on the road.

ii) The blade shall be retro-reflectorised, with class 1 yellow sheeting on the side facing oncoming traffic.

iii) It shall nominally be 1000mm high x 250mm wide and the bottom edge of the delineator shall not be more than 200mm above the road surface.

iv) It shall be subject to the approval of the Engineer.

The maximum spacing between centres of delineators shall be as shown on the drawings or as directed by the Engineer."

(e) Warning devices

Delete the second and third paragraphs and replace with the following:

"All vehicles, other than LDV's and cars, and items of plant working on the site shall be fitted with a yellow sign carrying the legend "CONSTRUCTION VEHICLE" in clear bold black lettering and an amber rotating beacon.

The yellow signs shall be visible from the rear, and shall have minimum dimensions of 2000mm x 800mm. The lettering shall be in two rows and shall be a minimum of 250mm high.

Rotating beacons shall have an amber lens of minimum height 200mm (Dorman Trafi BEACON, with 12 Volt, 55 Watt or 24 Volt, 70 Watt bulb or similar approved) and shall be mounted above the yellow signs and be clearly visible from all directions. The beacons on construction vehicles shall not be switched on while vehicles are being operated on unrestricted sections of public road, but shall be switched on while construction vehicles are operating within the accommodation of traffic areas, as the vehicles decelerate to enter a construction area, and as the vehicles accelerate to the general speed of traffic when entering the road from a construction area. Beacons on items of plant shall operate continuously while the plant is working alongside sections of open road to public traffic. The beacons shall be so placed as to be clearly seen from all directions."

Add the following:

"It is a requirement of this contract that all construction vehicles and plant used on the works will be equipped with rotating amber flashing lights and warning boards as specified in the standard specifications. Construction vehicles travelling outside the limits of construction areas shall however, not operate the warning lights.

The warning lights shall have a base diameter of at least 170mm and the amber bulb cover a height of a least 150mm high. It shall be a requirement that the contractor also provides the engineer's site personnel with warning lights for their vehicles (a maximum of two lights are required) without any payment applicable.

All LDV's and cars operating on site shall be equipped with amber rotating beacons which shall be fitted on a clearly visible portion and operated continuously while the vehicle is maneuvering in or out of traffic or is travelling or parked alongside roads open to public traffic.

Rotating beacons and the yellow "Construction Vehicle" signs on the vehicles and plant shall not be paid for separately but shall be included in the rates covering the use of the vehicles.

The Contractor shall provide the Engineer for his own use with the number of rotating amber flicker lights specified in the Bill of Quantities and these shall have a magnetic base, flexible cable and a connection suitable for insertion into a standard 12V automobile cigarette lighter socket. He shall also provide the Engineer with highly visible safety jackets. The provision and maintenance of rotating beacons and highly visible safety jackets for the use of the Resident Engineer and his staff shall be paid respectively for under Items B15.03 and B15.16 of the Bill of Quantities.

Also, where instructed by the Engineer, the Contractor shall mount rotating beacons onto certain accommodation of traffic signs to draw attention to the sign. They shall be mounted in linked pairs or in linked fours depending on the size of

the signs and are to be maintained in position throughout the hours of darkness during the entire period of operation of the traffic accommodation at any point. These rotating beacons shall be portable battery operated lamps emitting a rapid intermittently flashing, lens directed, amber light.
The safety jackets shall be of an approved type, as shown in Figure 24 in Road Signs Note 13. The Contractor shall obtain the approval of the Engineer before the proceeding with the purchase of such jackets.
Where flicker lights are used on the Contract they shall be bi-directional, amber warning lights of the Zenon type with a lens diameter not less than 170 mm and a flashing frequency of 75 to 95 flashes per minute."

Add the following new subclauses:

"(g) Other signs or facilities

The Engineer may instruct the Contractor to provide any other road sign, reflective tape, etc not measured in standard pay items. The road signs shall conform with the requirements of the South African Roads Traffic Signs Manual (SARTSM), Volume II Chapter 13 or specification provided by the Engineer.

(h) Maintenance

All temporary traffic control facilities shall be kept clean and maintained in good order at all times.

(i) Penalties

Penalties shall be applied when the accommodation of traffic is not done according to the specified standards, and if maintenance of temporary road signs is not done timeously.

(i) A penalty of R5 000-00 per offence shall be applied if the signs layout is not according to the standards in the specifications, or as instructed by the Engineer in writing from time to time.

(ii) Replacement of damaged signs forms part of the responsibilities of the traffic safety officers. If, however, this duty is neglected, and the Contractor (site agent or safety officers) is instructed by the resident Engineer to replace damaged signs, or correct the signs layout as described in paragraph (i), this shall be done within 45 minutes after having received such instruction. A penalty of R 250-00 per sign per 15 minutes shall be applied if the specified reaction time is exceeded. Traffic cones and delineators shall be regarded as road signs.

Verbal instructions in this regard shall be binding, and such instructions shall, with complete detail on times, number of signs, positions and delays, be confirmed in writing in the official site diary. Penalties shall be recorded in the minutes of the site meetings."

B1504 WIDTH AND LENGTH OF TEMPORARY DEVIATIONS

Delete the contents of this Clause and replace with the following:

"(i) Where two-way traffic is accommodated in two adjacent lanes, with works on one or both sides, the width shall be adequate (not be less than 6 m), in the opinion of the Engineer, to safely allow traffic flow, bearing in mind the available width of the existing road, traffic volume, terrain and speed. If necessary, flagmen shall be placed at strategic points to assist traffic.

(ii) Where one-way traffic is accommodated in a single lane, adequate width (no single lane of traffic shall be accommodated on carriageways less than 3.1 m wide), in the opinion of the Engineer shall be provided for safe traffic flow, also taking into account the restraints mentioned in B1504(i) above.

(iii) Where STOP/GO operations are carried out during day-time, that is, the roadway is open during night-time, the length of road closed shall not be more than one (1) kilometre for any section, and a length of open road without deviations/obstructions of not less than one (1) kilometres shall be provided between any two sections closed for construction.

(iv) Where traffic is controlled by traffic lights, the length of road closed shall also not be more than one (1) kilometre for any one section."

B1513 ACCOMMODATION OF TRAFFIC WHERE THE ROAD IS CONSTRUCTED IN HALF-WIDTHS

Add the following after the second paragraph:

Traffic to be regulated 24 hours per day and may include the use of traffic lights during the night and bad weather conditions.

The effective carriageway width for any two-lane traffic, accommodated either fully or partially on an existing bituminous surfaced road, shall not be less than 6,0m. No single lane traffic shall be accommodated on carriageways less than 3,1m wide."

Delete paragraph four, and replace with the following:

"The number of sections closed for construction at any given time so that only one-way directional flow of traffic can be accommodated, shall not exceed two. This can be any combination of STOP/GO and/or traffic light controlled sections. The lengths of road on which the entire road width is open for traffic between construction areas, as described in Clause 1504 shall be adhered to."

Add the following:

"For the purpose of this contract the words "half-widths" or "half roadway widths" shall not necessarily mean the geometric half width of the road but shall also be held to mean a geometric partial width of the road."

B1514 TEMPORARY FENCING AND GATES

Replace the contents of this clause with the following:

"Where temporary fencing is ordered by the engineer, it shall be paid for under item 55.06 of the standard specifications. The temporary fencing shall be new fencing material, which shall subsequently be dismantled and removed and erected at an alternative position as directed by the engineer. When ordered by the engineer, temporary fences and gates shall be moved to new locations or either left in place or when no longer required be dismantled and removed from site if so directed. Allowance is made in the bill of quantities for moving existing fences and gates."

B1517 RETRO-REFLECTIVE MATERIAL

"Retro-reflective material for temporary signs shall comply with the requirements of SABS 1519-1 for weathered material. Tests shall be carried out with a field retro-reflectometer and the testing procedure and classification are described in Clause B 8118. The value of the coefficient of Retro-Reflection shall be at least 60% of the values indicated in Table B 8118/1."

B1518 MEASUREMENT AND PAYMENT

Renumber item 15.01 as B15.01 and add the following:

"The tendered rate shall also include for all measures necessary to safeguard traffic on temporary deviations during blasting operations as well as all temporary traffic-control facilities for temporary deviations."

Delete all references to half width construction under payment item 15.01. Half width construction will be measured under payment item 15.10.

Renumber item 15.03 as B15.03 and add the following:

"This sections provides only for additional traffic-control facilities as and when required on instruction by the Engineer and does not provide for facilities already included under payment item B15.01"

Delete Item 15.01 and substitute the following:

"ITEM UNIT

B15.01 Accommodation of traffic (including construction), maintaining temporary deviations and re-use or removal of temporary traffic control facilities km

The unit of measurement shall be kilometres (km), measured for the period that accommodation of traffic is required for the specified section.

The tendered rate shall include full compensation for accommodating traffic (which shall include full compensation for the construction of the temporary deviations (i.e. mass earthworks (cut & borrow to fill), pavement layer works (gravel wearing base course, upper selected layer and fill layer where required), all drainage related work (e.g. culverts required), material obtained from commercial sources and/or borrow pits, overhaul, using of existing roads and/or shoulders (/pavement layers), maintaining the temporary deviation (all cost included – which inter alias will include the regravelling and repair, watering and blading), treatment of old road/temporary deviations, provision of communication equipment if

required, complying with the legal requirements of the authorities concerned, all general requirements and all incidental items of costs which are required under the provisions of Section 1500 and which are not specifically paid for under other pay items provided in Section 1500.
The tendered rate shall also include full compensation for roads constructed in full and/or half widths and existing roads used as temporary deviations during construction. The temporary deviation (where applicable – new construction thereof) shall at all times have a gravel base wearing course of at least 150mm G6 gravel providing good riding quality to the road users. An indication of applicable standards for the gravel deviations can be assessed in the tender drawings.

Where the pavement layers of the deviation will form part of the pavement layers for the newly aligned or reconstructed road, it needs to be constructed as such that the pavement structure will be adequate to carry the respective future design traffic loading for the specific sections of road, as designed. Any widening which are to be temporary used by the traffic should confirm to minimum pavement design standards. The tendered rate shall also include all costs and incidental items of costs related to for the earthworks and pavement layer works for the temporary deviations. Item 15.02 will not be measured and paid for in this contract.
The tendered rate shall also include for watering of bypasses and temporary deviations twice a day for the purpose of dust control in the neighbouring community.
The tendered rate shall also include for all re-use or removal of traffic control facilities. Item 15.04 will not be measured and paid for in this contract.
The tendered rate shall also include accommodation of traffic where traffic is restricted to half roadway widths and/or the usage of existing roads.
Item 15.10 will not be measured and paid for in this contract except if so instructed by the Engineer in writing.
The rate tendered shall also include the provision of a Traffic Safety Officer, his staff, transport, two-way radio unit or cellular phone and equipment necessary to comply with all his duties according to this Section 1500.
Payment will be subjected to the regular admittance of satisfactory reports by the Traffic Safety Officer, as specified in this Section 1500, to the Engineer."

Renumber item 15.03 as B15.03
Add the following sub-item:

"ITEM

		UNIT
B15.03	**Temporary traffic control facilities**	
	(n) Provision of high visibility safety jackets and safety hats	number (No)

The unit of measurement shall be the number of safety jackets supplied to the supervisory staff.
The tendered rate shall include full compensation for providing and maintaining hats and the jackets equipped with high visibility retro-reflective and/or fluorescent panels in red, yellow and white for the duration of the contract".

Add the following items:

"ITEM

		UNIT
B15.14	**Allow provisional sum for:**	
	(a) repair of damaged temporary road signs and delineators	provisional sum
	(b) replacement of damaged temporary road signs and delineators	provisional sum

The provisional sums allowed under sub-items (a) and (b) shall be expended on a daywork basis in terms of the provisions of the general conditions of contract.
Payment shall only be made in respect of repair work or replacement of such temporary traffic-control facilities arising from damage or loss

occasioned by the travelling public and which did not arise from negligence or non-compliance with the requirements of the specifications on the part of the contractor.

ITEM		UNIT
B15.15	**Prime cost sum for:**	
	(a) Compensation to landowners for land taken up by deviations	prime cost (PC) sum
	(b) Handling cost and profit in respect of sub-item B15.15(a) above	percentage (%)

The prime cost sum shall be expended in accordance with the provisions of the general conditions of contract. Payment to the landowner shall be made within fourteen (14) days after such order has been given by the engineer. The contractor shall provide detailed proof of payment before payment shall be certified to the contractor.

The tendered percentage in item B15.15(b) is an extra over percentage on the amount actually spent under sub-item B15.15(a) which shall include full compensation for the handling costs and profit of the contractor."

ITEM		UNIT
B15.16	**The provision and maintenance of rotating lights etc. for the use of the Engineer and his staff**	
	(a) Rotating amber flashing lights	Number (No)

The unit of measurement shall be the number of each item provided as specified and approved by the Engineer. The tendered rates for the supply of rotating lights shall include full compensation for the provision and maintenance thereof.

ITEM		UNIT
B15.17	**Penalty to be conducted for non-compliance with requirements for accommodation of traffic**	
	(a) Fixed penalty for occurrence	Number (No)
	(b) Tine related penalty	15 min

A fixed penalty of R5,000-00 per occurrence shall be deducted for each and every occurrence of non-compliance with any of the requirements of Section 1500 of the standard Specifications and Section B1500 of the Project Specifications.

A time-related penalty of R250-00 per 15 minutes over and above the fixed penalty shall be deducted for non-compliance to rectify any defects in the accommodation of traffic within reasonable time after an instruction to this effect has been given by the Engineer. The Engineer's instruction shall state the time in hours for reinstatement of the defects. Should the Contractor fail to adhere to the instruction, the time-related penalty shall be applied from the time the instruction was given.

SECTION 1700: CLEARING AND GRUBBING

B1702 DESCRIPTION OF WORK

a) Clearing

Add the following:

"Clearing shall include the removal of material to a thickness of up to 150mm in-situ material as ordered by the engineer. No payment shall be made for temporary stockpiling of topsoil material in the case where this material is applied as topsoil after completion of road side slopes.

Should the required depth exceed 150mm, the total volume of material removed shall either be classified as "temporary stockpiling of topsoil" or "unsuitable roadbed material" or "cut to spoil" whichever is applicable as allowed for in the standard specifications. In these cases no payment shall be made for clearing and grubbing.

Clearing as described shall in all cases be undertaken in such a manner that the topsoil is preserved and not contaminated with other debris or rubbish. Cross-sections for the determination of earthworks quantities shall be taken after clearing (topsoil or unsuitable roadbed material) and roadbed preparation if applicable.

Payment for gabion boxes and mattresses which have to be removed and the material sorted and stacked shall be made under section 5200”

B1703 EXECUTION OF WORK

(a) Areas to be cleared and grubbed

Add the following:

“Apart from normal clearing and grubbing, the fill embankments of the existing roads are also to be cleared and grubbed over the areas where the new horizontal alignment coincides with the alignment of the existing road, or where repairs are required to the fill embankments of the approaches of bridges. Provision is made for separate payment for clearing and grubbing of the existing fill embankments where conventional machinery might be suitable to undertake the work due to the steep side slopes of the embankments. An additional pay-item is allowed for in the bill of quantities for this type of clearing and grubbing which may have to be undertaken by hand or similar manner.”

B1704 MEASUREMENT AND PAYMENT

Change item 17.01 to read as follows:

“ITEM			**UNIT**
B17.01	**Clearing and grubbing of:**		
	a)	Normal areas:	
		i) Within the road reserve	hectare (ha)
		ii) In borrow pits	hectare (ha)
	b)	Existing fill embankments with slopes steeper that 1:4	hectare (ha)

Measurement and payment for sub-items (a) and (b) shall be as specified for item 17.01 of the standard specifications. Where distinction is made for clearing and grubbing existing fill embankments with slopes steeper than 1:4 (vertical : horizontal), payment shall be made under item B17.01.”

SECTION 1800: DAYWORK SCHEDULE

Note: This is a new section added to the Standard Specifications.

Add the following:

B1801 SCOPE

This section covers the listing of daywork items for use in determining payment for work which cannot be quantified in specific pay item "units" in the bill of quantities or work ordered by the engineer during the construction period which was not foreseen at tender stage for which no applicable rate exists in the schedule or for work of a special or different character warranting special payment as decided by the engineer.

B1802 ORDERING OF DAYWORK

No daywork shall be undertaken unless specific written authorisation is obtained from the engineer.

B1803 MEASUREMENT AND PAYMENT

The engineer may order the following daywork items:

ITEM	DESCRIPTION	UNIT
B18.01	Labourers:	
	(i) Unskilled	Hour (h)
	(ii) Semi-skilled	Hour (h)
	(iii) Skilled	Hour (h)
B18.02	Foreman	Hour (h)
B18.03	Tipper trucks:	
	(i) 3 – 5 ton	Hour (h)
	(ii) 5,1 – 10 ton	Hour (h)
B18.04	Loader (0,5m^3)	Hour (h)
B18.05	Grader (CAT 140G or similar)	Hour (h)
B18.06	LDV	Hour (h)
B18.07	Compaction Rollers:	
	(i) Vibrator roller	Hour(h)
	(ii) Tamping roller	Hour (h)
	(iii) Grid roller	Hour(h)
B18.08	Hand Controlled Compactors	
	(i) Pedestrian roller (Bomag BW90)	Hour(h)
	(ii) Vibratory plate	Hour(h)
	(iii) Rammers	Hour(h)
B18.09	Water truck (min 10000 l)	Hour(h)
B18.10	Dozer (D7 or similar)	Hour(h)

The unit of measurement shall be the actual number of hours worked by labourers or foremen or an item of plant.

The tendered rates shall include full compensation for all cost items including overheads, head-office expenses and profits as described in subclause 6.5 of the general conditions of contract and shall be subject to contract price adjustment as provided for in the contract.

The mark-ups on daywork items in accordance with the Appendix to the Tender shall not be applicable on daywork items listed in the bill of quantities in terms of the above specifications. In the event of new daywork rates being requested for items not appearing in the bill of quantities, then the provisions of the general conditions of contract and the Appendix to the Tender shall apply.

Prior to the commencement of any work by the labourers described under item B18.01, the contractor must obtain written consent from the engineer regarding the classification

and composition of all labourers in terms of “unskilled” and “skilled” labourers required for the work as ordered by the engineer.”

SECTION 2100: DRAINS

B2103 BANKS AND DYKES

Add the following:

“Mitre banks at culvert inlets should be considered at such a skew angle that it guides the water into the inlet with a minimum loss of velocity (energy).”

B2104 SUBSOIL DRAINAGE

(a) Materials

(i) Pipes

Delete the last sentence of the fifth paragraph and substitute it with the following:

“Perforation for 100mm pipes shall be spaced in two rows, one on each side of the vertical centre line of the pipe, and at one third of the circumference. The perforation for the 150mm pipes shall be spaced in four rows, two as described for 100mm pipes, and the other two rows at two thirds of the circumference.”

(ii) Synthetic-fibre filter fabric

Add the following:

“All filter fabric shall be a non-woven needle punched type material and must be approved by the engineer. Filter fabrics shall have a minimum co-efficient of permeability of 3 x 10-3 m per second.”

B2107 MEASUREMENT AND PAYMENT

Change item 21.09 to read as follows:

ITEM		UNIT
B21.09	**Polyethylene sheeting, 0,25mm thick, or similar approved material, for lining subsoil draining systems**	square metre (m²)

Measurement and payment shall be as specified for item 21.09 in the standard specifications.”

Add the following new items:

“ITEM		UNIT
B21.21	**Subsoil drainage markers**	Number (No)

Measurement and payment shall be as specified for item 22.24 in the standard specifications.”

SECTION 2200: PREFABRICATED CULVERTS

B2201 SCOPE

Add the following:

“All rectangular culverts with spans from 0,9m up to and including 2,4m shall be constructed with precast units.

The attention of the contractor is drawn to the fact that information given on the plans, longitudinal sections or drainage schedules may have to be altered to suit actual site conditions and, therefore, the contractor shall only construct these culverts after the engineer has verified the information on the drawings from detail surveys taken on site by the contractor as directed by the engineer.

Precast units shall be ordered by the contractor from actual measurements of length acquired on the site and not from lengths stated in the drainage schedule or from the bill of quantities.

No precast units shall be ordered until the engineer has satisfied himself that the proposed units have been manufactured to the required tolerances and loading standards. The engineer must be given the opportunity to load test units if he considers this necessary”.

B2203 MATERIALS

(f) Skewed Ends

Delete the second and third paragraphs and substitute with the following:

"Precast portal and rectangular culverts placed on a skew shall be supplied with cast in situ skewed ends as shown on the drawings. In situ skew ends are to be constructed simultaneously with the wingwalls and headwalls".

B2204 CONSTRUCTION METHODS

Add the following:

"In all cases where soft founding materials is classified as suitable for culvert bedding construction, the in situ material shall be ripped, moistened and compacted to 90% or 93% modified AASHTO density. The depth of preparation and compaction of founding material shall be as indicated on the drawings or as specified by the engineer. Allowance for measurement and payment for this work is made in the bill of quantities under this section."

(c) Excavation by hand

Where circumstances prevent the use of mechanical excavators and material can be removed only by hand tools, the engineer shall authorise the supplementary payment to the contractor for such work at the tendered

rates for excavation by hand should he be satisfied that the contractor had been unable to prevent the necessity for excavation by hand by proper planning and precautionary measures. The supplementary rate for excavation by hand shall not apply to minor finishing or clearing jobs in excavations which are otherwise being done by mass excavation plant.

Payment for hand excavation shall be an "extra over" payment to normal excavation as allowed for in item 22.01."

B2205 EXCAVATION FOR CONSTRUCTION BY TRENCH METHOD

Add the following subclauses:

"(c) Excavation by hand

Where circumstances prevent the use of mechanical excavators and material can be removed only by hand tools, the engineer shall authorise the supplementary payment to the contractor for such work at the tendered rates for excavation by hand should he be satisfied that the contractor had been unable to prevent the necessity for excavation by hand by proper planning and precautionary measures. The supplementary rate for excavation by hand shall not apply to minor finishing or clearing jobs in excavations which are otherwise being done by mass excavation plant.

Payment for hand excavation shall be an "extra over" payment to normal excavation as allowed for in item 22.01.

(d) Drainage of excavations

The contractor shall apply suitable, effective drainage and dewatering methods for preventing the ingress of water into the excavation and to keep them dry. Drainage measures, with the exception of pumping, shall be maintained until the backfilling has been completed. Between various construction stages, pumping may be interrupted in consultation with the engineer.

Any draining or pumping of water shall be done in a manner as will preclude the concrete or materials or any part thereof from being carried away.

Allowance for measurement and payment for dewatering and keeping dry of culvert excavations is made in the schedule in this section".

B2210 LAYING AND BEDDING OF PREFABRICATED CULVERTS

B2210(b)(i) Cast in situ invert & floor slabs

Replace with the following:

"In accordance with the drawings, transverse construction joints are required in cast in situ concrete invert and floor slabs for portal culverts. In addition, longitudinal construction joints as shown on the drawings between the invert

slabs of each of the barrels of multiple culverts are required. Allowance for measurement and payment for a Class F1 surface finish and soft board in these joints is made in the bill of quantities. No payment shall be made for formwork on the outside edges of invert slabs (closest to excavated face).

All culverts (precast as well as in situ) shall be constructed with an in situ reinforced concrete floor as per the Engineers drawings".

Delete subclause B2210(b)(ii) : "Prefabricated floor slabs."

B2211 BACKFILLING OF PREFABRICATED CULVERTS

Change the last sentence in the fourth paragraph to read "90% or 93% as shown on the drawings or as directed by the engineer."

Add the following paragraph:

"Concrete backfill shall be measured to the actual dimensions of the precast units, i.e. actual volumes between ribs and haunches shall be taken into account. For the purpose of calculating concrete backfill quantities, the horizontal dimensions of the concrete backfill on the outside of the culvert(s) (closest to excavated face), shall be taken as 100mm maximum irrespective of what type or make of precast portal is used or the actual width of the excavation.

The width of the concrete backfill between portals in the case of multiple culverts, shall be taken as 80mm for precast units with a leg height of 1500mm and 100mm for precast units with a leg height exceeding 1500mm. The vertical dimensions, in both cases, shall be equal to the height of the portal".

B2212 INLET AND OUTLET STRUCTURES, CATCHPITS AND MANHOLES

(b) Concrete work

Add the following:

"The type of surface finish for in situ concrete in the culverts shall be as indicated on the drawings. Generally all exposed faces shall be of Class F2 formwork and faces covered by backfill shall be Class F1. The top of parapet walls and wingwalls shall be finished to a Class U2 surface finish."

(h) Prefabricated inlet and outlet structures

Add the following:

"The use of precast concrete inlets and outlets as described in clause 2212(h), shall not be allowed under any circumstances. Cast in situ concrete wingwall type inlets and outlets shall be constructed as indicated on the drawings and shall be in accordance with section 6000 of the Standard Specifications. Allowance for measurement and payment for wingwall type inlets and outlets is made in the schedule in this section."

B2218 MEASUREMENTS AND PAYMENT

Add the following:

"ITEM			**UNIT**
B22.01	(c)	Extra over subitem B22.01(a) for excavation by hand using hand tool	cubic metre (m^3)

Measurement shall be as specified for pay item 22.01 of the standard specifications.

The tendered rate shall include full compensation for carrying out the excavations by hand where circumstances prevent the use of mechanical excavators.

ITEM			**UNIT**
B22.30	a)	Preparation and compaction of in-situ bedding material to 90% of Mod. AASHTO density (depth indicated)	cubic metre (m^3)
	b)	Extra over sub-item B22:30(a) for compaction to 93% of Mod. AASHTO density (depth indicate)	cubic metre (m^3)

The unit of measurement shall be the cubic metre of material ripped and compacted as specified.

The tendered rate shall include full compensation for the ripping of the in-situ material to the specified width and depth, wetting of the material to such an extent that the specified density can be achieved.

ITEM		**UNIT**
		UNIT
B22.31	**Dewatering and keeping dry of culvert excavations**	**Lump Sum**

The unit of measurement shall be the number of culverts constructed. The tendered rate shall be full compensation for dewatering and keeping dry of the culvert excavations until the backfill is completed.

Payment shall be as follows:

(i) 80% of the payment shall be made after the barrel of the culvert has been constructed and backfilled.

(ii) Remaining 20% of the payment shall be made after the wingwalls have been constructed and backfilled.

SECTION 2300: CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES AND CONCRETE LININGS FOR OPEN DRAINS

B2301 SCOPE

Add the following:

"The position and length of the following types of concrete kerbs and channels are indicated on the geometric layout plans, typical drawings and on the drainage plans.

Type A	:	In situ concrete channel, 0,8m wide on fills
Type B	:	Precast concrete kerbing, semi-mountable (SABS 927-1969)
Type C	:	In situ concrete kerbing at intersections
Edge beam	:	In situ concrete kerbing at farm access and bus stops
Type E, F1 & F2	:	In situ concrete "V"-shaped channels in side drains and open drains."

B2302 MATERIAL

Add the following new subclauses:

(e) Metal pipes

"Metal pipes down side slopes shall comply with the requirements of clause 2203 of the standard specifications."

B2304 CONSTRUCTION

(d) Slip form kerbing

Add the following:

"Slip-form kerbing shall under no circumstances be allowed."

(e) Cast in situ kerbs and channels

Add the following:

"Forming and templates used to form joints between alternate sections shall be of steel plate of which the thickness shall not be less than 5mm."

Add the following new subclauses:

(i) Construction sequence

Replace paragraphs (i), (ii) and (iii) with the following:

"In all cases where kerbing and/or channelling adjoin the bituminous surface of the road, the kerbing and/or channelling may only be constructed after the bituminous surface has been completed.

Before commencing with the kerbing and/or channelling, the surfacing and the base, shall be accurately cut to line with a mechanical saw to a minimum depth of 75mm. After excavation the concrete shall then be cast against the cut surface without formwork. All material outside the cut line must be carefully removed to the required thickness of concrete without damaging the edge before commencing with the casting of the concrete. No payment shall be made for repair work as instructed by the engineer to damage caused by the cutting/excavating process of surfacing and base layers. Any concrete spilt onto the surfacing shall immediately be removed and cleaned. Where so required by the engineer, the contractor shall, without any additional compensation, paint emulsion over the stained surface.

Add the following subclause:

"(k) Formwork and finish

Formwork and finish of concrete kerbs shall comply with the requirements of section 6200. All visible edges on the sides or at joints of cast in situ concrete kerbs or channels shall be rounded with a rounding tool."

SECTION 3100: BORROW MATERIALS

B3102 NEGOTIATIONS WITH OWNERS AND AUTHORITIES

Add the following to sub-clause 3102(a):

“Arrangements regarding to access to borrow pits and the alignment of haul roads shall be made between the contractor and the owners of the land on which borrow pits are situated. The engineer’s representative on site shall be present at all such negotiations, which shall be confirmed in writing by the contractor. All costs involved with such negotiations as well as the requirements contained in clause 3102 and clause 1225 of the specifications shall be borne entirely by the contractor.”

B3103 OBTAINING BORROW MATERIALS

(a) General

Add the following:

“The expropriation and compensation for land from which borrow materials is obtained shall be negotiated and paid for by the employer.”

(b) Use of borrow materials

Add the following to the second paragraph of this subclause:

“Compensation to owners (only on private land) and arrangements with owners for taking material from alternative borrow pits proposed by the contractor shall be the contractor’s responsibility and entirely at his own expenses.”

B3104 OPENING AND WORKING BORROW PITS AND HAUL ROADS

(c) Excess overburden

Add the following:

“All excess overburden removed at borrow pits shall be replaced over the entire area of the borrow pit after initial shaping has been undertaken in an even layer. Payment for this requirement shall be deemed to be included in pay item 31.01.”

(f) Protecting borrow pits

Add the following:

"It is a requirement of the contract that each borrow pit or pits shall be provided with fencing around the perimeters, including a access gate, of the borrow areas, including the supply of danger warning signage fixed to the fencing, visible at all sides approaching the borrow pit area. The fencing shall be erected prior to entering the land for borrowing purposes and shall on final finishing of the borrow areas as specified by the employer, be dismantled and removed or left in-place as instructed by the

employer. Payment for fencing around borrow pits shall be made in accordance with the stipulations of section 5500 in these specifications."

In addition to fencing, Security Guards shall be supply on a 24 hour, 7 days a week basis, with full time communication to the Site Manager or site camp for the duration of the contract and activities at the borrow pits.”

Add the following new subclause:

“(h) Haul roads

Haul roads to designated borrow pits along the road shall be constructed along alignments as instructed by the engineer and shall be maintained at the contractor’s own cost to the satisfaction of the engineer."

B3105 FINISHING-OFF BORROW AREAS AND HAUL ROADS

Add the following to this clause:

"Should the employer, engineer or any other authority approved by the engineer, require a higher standard of shaping and finishing off of borrow pits than specified in the standard specifications, measurement and payment for such extra work shall be made using daywork items as scheduled under this section."

B3108 MEASUREMENT AND PAYMENT

Change item 31.01 to read as follows:

"ITEM		**UNIT**
B31.01	**Excess overburden**	
	(a) Depth up to and including 0,5m	cubic meter (m^3)
	(b) Depth exceeding 0,5m and up to 1,0m	cubic meter (m^3)

Measurement and payment shall be as specified for item 31.01 of the standard specifications with the abovementioned depth ranges applicable."

Add the following new item:

“ITEM		**UNIT**
B31.04	**Compensation to landowners:**	

(a) Prime cost sum for compensation to landowners — prime cost (PC) sum

(b) Handling cost and profit in respect of sub-item B31.04(a) above — percentage (%)

Measurement and payment shall be in accordance with the provisions of clause 6.6 of the general conditions of contract. Payment to the landowner shall be made within fourteen (14) days after such order has been given by the engineer. The contractor shall provide detailed proof of payment before payment shall be certified to the contractor.
The tendered percentage is an extra over percentage on the amount actually spent under sub-item B31.04(a) which shall include full compensation for the handling costs and profit of the contractor."

SECTION 3200: SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS

B3204 BREAKING-DOWN THE MATERIAL

(a) Initial breaking-down of the material in cuttings, borrow pits and existing pavement layers

Add the following to the table in the second paragraph of this subclause:
"Pioneer layers - 500mm maximum dimension
Not more than 20% of pioneer layer material shall pass through the 2,0mm sieve."

(b) Further breaking-down of pavement material

Add the following:
"Material used for the construction of selected, and wearing course layers shall be broken down by means of normal grid-rolling or additional normal grid-rolling to such an extent that the compacted pavement layer shall contain material of which 95% of the aggregate size shall not exceed 65mm. All oversize material, after breaking-down, shall be removed".

B3209 PLACING AND COMPACTING THE MATERIALS IN LAYER THICKNESSES IN EXCESS OF 200mm AFTER COMPACTION

Add the following new subclause:

(d) Pioneer layer

"The maximum size rock used in pioneer layers shall be 500mm and the layer thickness before compaction shall not be more than one-and-a-half times the maximum actual size of the rock. Not more than 20% of pioneer layer material shall pass through the 2,0mm sieve. Pioneer layer processing and compaction shall be as specified in subclause 3307(c) of the standard specifications".3300: MASS EARTHWORKS

B3305 TREATING THE ROADBED

(a) Removing unsuitable material

Add the following to the third paragraph:
"For the purpose of this contract, excavation and removal of in-situ clayey material over areas where the road is in a fill condition, shall be classified as removal of unsuitable material, irrespective of the stability or moisture condition of the in-situ material".

(c) Preparing and compacting the roadbed

Delete the last sentence of the first paragraph "If necessary, roadbed…….depth of compaction" and replace as follows:
"Where demarcated by the engineer, prior to the roadbed being scarified, the excess in situ material forming part of the present roadway, and within the limits of the roadbed, and in close proximity of the layer works, but falling within the limits of the layerworks, shall be bladed to controlled level in order to achieve the required level and necessary depth of compaction."

B3306 CUT AND BORROW

(e) The temporary stockpiling of materials

Delete the first paragraph and replace with:
"The Contractor shall plan his activities so that materials excavated from the existing pavements borrow areas and cuttings or imported from commercial sources can be directly transported to and placed at the designated points. The

rate for importing material from commercial sources will be included in the tendered rate inclusive of haulage, and all associated costs."
The temporary stockpiling of material shall not be paid for separately and full compensation shall be deemed to have been included in the rates tendered for the various payment items for work for which the material is to be used."

B3307 FILLS

(c) Constructing a pioneer layer

Add the following to the first paragraph:
"For the purpose of this contract, pioneer layers shall be completed by means of eight-pass roller compaction using vibratory rollers as specified in subclause 3304(b) of the standard specifications."

(d) Benching

Add the following:
"Benching of fill and pavement layer material is required to be undertaken into the existing fill embankments and pavement layers. No additional payment shall be made over and above the normal pay items applicable to earthworks and pavement layers where benching is required for widening of the existing road formation. Benching shall be undertaken as shown on the drawings.
It is a requirement that benching shall always be started at the bottom of the existing fill progressing to the top of the formation. The dimensions and details of benching are shown on the drawings."

(i) Widening of fills

Replace the last sentence in paragraph 6:
"Spoil material from the benches will be paid for as specified in item 33.17"
with:
"The spoil of material from the benches shall not be paid for separately and full compensation shall be deemed to have been included in the rates tendered for the various payment items for work for which the material is to be used."
Replace the first sentence in paragraph 8:
"An extra over payment for the widening of existing fills will apply as specified under item 33.16."
with
"The extra over payment for the widening of fills shall not be paid for separately and full compensation shall be deemed to have been included in the rates tendered for the various payment items for work for which the material is to be used."

B3308 FINISHING THE SLOPES

(d) General

Add the following:
"Where existing cut and fill slopes are excessively eroded or where slippages occurred in slopes, the slopes are to be reinstated by means of backfilling with suitable gravel material. All loose material and vegetation shall first be removed from the eroded cut and fill slopes before backfilling may commence from the bottom of the cut or fill. The backfill material shall be benched into the existing slopes and compacted to 90% of modified AASHTO density, using suitable small compaction equipment e.g. Bomag walk-behind rollers or hand-held compaction tools. Benching shall be

executed to the dimensions shown on the drawings. Upon completion of the backfilling operation the cut and fill slopes shall be neatly finished as specified."

B3312 MEASUREMENT AND PAYMENT

(3) Work in restricted areas

Delete the first paragraph and replace it with the following:
"Note: No additional or extra over payment shall be made for work in restricted or confined areas".
Add the following paragraph:
Note: No overhaul shall be measured and paid for any pavement layer materials (earthworks) to be transported to and from the site (including materials obtained from borrow pits and/or commercial sources), irrespective of whether the Contractor intends

to utilise the material for reworking (stockpiling – Item 32.06) or whether the material is transported to site and/or to a dump site (cut to spoil). The Contractor shall include for overhaul in the rates tendered. No overhaul will be payable for importing and/or exporting material (Items 16.01 and 16.02), transporting material to the designated spoil site or to transport material, equipment and workers. Compensation for haulage will be deemed to be included in the tendered rates for the respective work items.

Amend the following pay item:

ITEM		UNIT
B33.01	**Cut and borrow to fill, including overhaul**	**m^3**

Add the following:

Where required, the tendered rate shall also include full compensation for construction of materials recovered from existing pavement layers in part as well as mixed with imported import materials, used breaking up the existing pavement layer, excavating the material in the existing pavement, procuring, breaking down, placing and compacting the material, including overhaul. No additional payment under item 33.14 (extra over item) will be considered.

The tendered rates for all items under 33.01 and B33.01 shall also include the transporting of materials from borrow areas, existing pavement layers and/or commercial sources, or a source identified by the contractor, transporting the material to site (including all haulage costs – Items 16.01 and 16.02)), breaking down, placing and compacting the material, finishing to the correct levels and the disposal of excess material. No overhaul will be measured and paid for under Items 16.01 and/or 16.02.

ITEM		UNIT
B33.01(c)	**Rock fill (as specified in subclause 3209 (c))**	**cubic metre (m^3)**

Add the following:

"Where applicable, this pay item may also include, coarse rock (material) obtained from existing borrow pits and/or from cuttings."

ITEM		UNIT
B33.03	**Extra over item B33.01 for excavating and breaking down material in:**	**m^3**

Add the following:

The tendered rates for items 33.03 (b) to (d) shall include the overbreak in hard and builder class A excavation materials as described under Item 33.05. No overbreak will be measured and paid for under Item 33.05.

Amend and add the following pay items:

ITEM		UNIT
B33.04	**Cut to spoil, including overhaul. Material obtained from:**	**m^3**

Add the following:

The tendered rates for all items under 33.04 and B33.04 shall also include the transporting of materials from borrow pit - and/or commercial sources, or a source identified by the contractor, transporting the material to site (including all haulage costs – Items 16.01 and 16.02)), breaking down, placing and compacting the material, finishing to the correct levels and the disposal of excess material. No overhaul will be measured and paid for under Items 16.01 and/or 16.02.

ITEM		UNIT
B33.07	**Removal of unsuitable material, including overhaul**	**m^3**

Add the following:

The tendered rates for all items under B33.07 shall include the transporting of materials from borrow pit - and/or commercial sources, or a source identified by the contractor, transporting the material to site (including all haulage costs – Items 16.01 and 16.02)), breaking down, placing and compacting the material, finishing to the correct levels and the disposal of excess material. No overhaul will be measured and paid for under Items 16.01 and/or 16.02.

SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

B3401 SCOPE

Add the following:

"This Section also covers the reconstruction of existing pavement layers, with or without the addition of stabilizing agents. These sections to be reconstructed vary in length and occur at random over the entire length of the roads."

B3402 MATERIALS

(a) General

Add the following:

"Material requirements for gravel pavement layers are in accordance with TRH14 and shall be indicated on the drawings."

Replace the last sentence of the fifth paragraph with the following:

"Crushed stone reclaimed from existing pavements and processed as gravel material, or crushed stone reworked or recycled in situ and stabilized, will be paid for as gravel material and not as crushed stone."

Add the following:

"Where applicable, the existing material in the respective various layers shall be in situ reworked and compacted. Where there is a deficiency or the material does not comply with specifications, suitable material shall be added, and/or stabilizing with appropriate stabilizing agents shall be done. Where applicable (stabilized subbase materials), the material shall comply with the requirements as specified, with the modification of specification that the minimum unconfined compressive strength of C4 stabilised material shall be 1000 kPa at 100% modified AASHTO density."

B3403 CONSTRUCTION

(b) Placing and compacting

Add the following subclause:

"(f) Reparation or improvement of existing layers where/if a following layer has to be constructed on top thereof:

Where applicable, during reconstruction of existing layers, where underlying layers are not acceptable for whatever reason, or these layers are damaged by removal of layers on top of it, the Contractor shall repair or improve it to the required density, level tolerances and surface finishing.

(g) Temporary stockpiling of material

The Contractor shall plan his activities so that materials excavated from the existing pavement, borrow areas and cuttings or imported from commercial sources can be directly transported to and placed at the designated points.
The temporary stockpiling of material shall not be paid for separately and full compensation shall be deemed to have been included in the rates tendered for the various payment items for work for which the material is to be used."

B3405 CONSTRUCTION TOLERANCES

(e) Cross-section

Delete the second paragraph and replace with the following:

"The normal crossfall of the road wearing course where the road is in a straight horizontal alignment, is specified as 3% as shown on the drawings.
At any cross-section the measured crossfall between any two points shall at least be 2,8% and not more than 3,5%. At any cross-section the actual level at any point shall not be higher than 10mm above the computed level from the cross-section as specified and the actual level, if lower than the computed level, shall not be lower by more than that derived from the specifications for longitudinal grade and crossfall deviations."

(f) Surface regularity

Add the following:

"Where transverse construction joints in base layers are made between newly and previously constructed sections, the contractor shall exercise level control at such joints by installing level poles at 5m intervals on either side of the joint of the layer covering at least a 30m length into the newly constructed section."

B3406 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following:
"Test results and measurements shall be assessed by the engineer according to the provisions of Section 8300 of the standard specifications".

B3407 MEASUREMENT AND PAYMENT

Delete the first paragraph and replace it with the following:

"Note: No additional or extra over payment shall be made for work in restricted or confined areas".

Add the following paragraph:

"Note: No overhaul shall be measured and paid for any pavement layer materials to be transported to and from the site (including materials obtained from borrow pits and/or commercial sources), irrespective of whether the Contractor intends to utilise the material for reworking (stockpiling – Item 32.06) or whether the material is transported to a dump site (cut to spoil). The Contractor shall include for overhaul in the rates tendered. No overhaul will be payable for importing and/or exporting material, transporting material to the designated spoil site or to transport material, equipment and workers. Compensation for haulage will be deemed to be included in the tendered rates for the respective work items."

Amend and add the following pay items:

ITEM		UNIT
B34.01	**Pavement layers constructed from gravel taken from cut or borrow and commercial sources, including overhaul:**	
	(a) Gravel selected layer (unstabilized gravel) compacted to:	
	(i) 93% of modified AASHTO density (150mm G6/G7)	m^3
	(b) Gravel selected layer C4 (chemically stabilized gravel) compacted to:	
	(i) 95% of modified AASHTO density (150mm)	m^3
	(d) Gravel subbase C4 (chemically stabilized material) compacted to:	
	(i) 95% of modified AASHTO density (150mm G5/G6 (material to be stabilised))	m^3
	(f) Gravel base C3 (chemically stabilized gravel) compacted to:	
	(i) 97% of modified AASHTO density (150mm G5/G6 (Commercial material to be stabilised))	m^3

Add the following to the payment description:

Where required, the tendered rate shall also include full compensation for construction of materials recovered from existing pavement layers in part as well as mixed with imported import materials, used breaking up the existing pavement layer, excavating the material in the existing pavement, procuring, breaking down, placing and compacting the material, including overhaul. No additional payment under item 34.05 (extra over item) will be considered.

All the above tendered rates shall also include for obtaining the material from borrow pit areas, existing pavement layers and/or commercial sources, or a source identified by the contractor, transporting the material to site (including all haulage costs), breaking down, placing and compacting the material, finishing to the correct levels and the disposal of excess material. No overhaul will be measured and paid for under Item 16.02.

ITEM		UNIT
B34.14	**Removal of excess material from pavement layers in Re-constructed areas**	**cubic metre (m^3)**

The unit of measurement is the cubic metre of excess material removed in accordance with the Engineer's instructions, and the volume shall be taken as 85% of the loose material in the hauling vehicles.

The tendered rate shall include full compensation for loading the excess material, transport to stockpiles or transporting the material for the full haul distance (overhaul) to approved dumping sites (spoil areas) provided by the Contractor, off-loading and disposing of the material, including shaping and levelling-off any stockpiles.

SECTION 3500: STABILISATION

B3502 MATERIALS

(a) Chemical stabilising agents

Delete Sub-Clauses (ii) Ordinary Portland cement and (iii) Portland blast-furnace cement and replace with the following:

"Cement shall comply with the relevant requirements of SABS EN 197. The use of strength classes greater than 32,5 shall not be permitted."

B3503 CHEMICAL STABILISATION

(h) Curing the Stabilised work

Add the following to paragraph (i):

"Method (iii) and (iv) shall not be applicable for emulsion treated base layers."

(i) Construction limitations

Add the following:

"No Stabilisation shall be done with falling air temperatures when the air temperature falls to below 7 ^{o}C, or during rising air temperatures, when the air temperature is below 3 ^{o}C. No mixing shall be commenced if the threat of rain is present.

Moisture content tests shall not be undertaken more than one day in advance of in-situ Stabilisation operations. Care shall be taken to ensure that samples are representative of the in-situ material. Checks shall be conducted when wet weather occurs between initial testing and work commencing on any section."

In Table 3503/1, delete 8 hours for ordinary Portland cements and cement blends and replace with:

"6 hours"

B3506 TOLERANCES

(b) Uniformity of mix (chemical Stabilisation)

The test methods to be used shall be as described in sub-clause 3506(b)(i).

B3509 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following after the second paragraph:

"The test results and measurements will be judged in accordance with the provisions of Section 8300."

B3510 MEASUREMENT AND PAYMENT

Delete the first paragraph and replace it with the following:

"Note: No additional or extra over payment shall be made for work in restricted or confined areas".

Add the following:

ITEM		UNIT
B35.02	**Chemical Stabilising Agent:**	
	"(g)(i) CEM II A-L (32.5) cement	ton (t)
	(g)(ii) CEM II A-S (32.5) cement	ton (t)"

The unit of measurement shall be the ton of additive applied in accordance with the specification or as instructed by the engineer. The tendered rate shall include full compensation for supplying the cement and lime additive, for transport to site, for spreading the additive in an even layer to ensure a uniform content, and for all other incidentals required for mixing the additive into the recycled material. The tendered rate shall apply irrespective of the percentage of additive prescribed. This shall be nominally 1.5% by mass for each of cement and road lime.

SECTION 3600: CRUSHED–STONE BASE OR SUBBASE

B3602 MATERIALS

(a) Requirements for crushed aggregate

Delete the third sentence and replace with:

"The use of aggregate derived from the argillaceous, carbonate, metalliferous and pedogenic rock group will not be permitted.

Amendments to Table 3602/1:

ATTERBERG LIMITS

Delete the entire sentence and add the following to Table 3602/1, column 3, row 8 (-0.075mm fraction):

"The PI shall not exceed 8. When the plasticity index of the minus 0,075mm fraction exceeds 8, the aggregate shall be washed and or chemically treated to reduce it to below 6."

Amendments to Table 3602/2:

DURABILITY REQUIREMENTS

Add a sixth column to Table 3602/2 to include the Ethylene glycol wet/dry relationship % Min.

Table B 3602/2 : 10% Fines Aggregate Crushing Value

Rock Type	*** Ethylene glycol wet / dry relationship % Min**
Arenaceous rock	-
Diamictite (Tillite)	-
Other rock types	70

* 24 hours immersion in ethylene glycol followed by draining and crushing.

In addition, for aggregates derived from rock belonging to the basic crystalline group, the Durability Index as determined in accordance with the method given in B8105, shall not exceed 4.

COMPACTION REQUIREMENTS

In Table 3602/1 replace compaction requirements for G2 materials with: "Minimum of 88% of bulk relative density. This density may be reduced by the Engineer after thorough testing of the available material to a minimum of 85% of bulk relative density".

B3604 CONSTRUCTION

(b) Compaction

Add the following at the end of the first paragraph:

"The specified density shall also be obtained in the upper 50mm of the layer."

B3605 PROTECTION AND MAINTENANCE

Add the following to the end of the second sentence:

"as determined according to TMH 1 method A7."

B3608 MEASUREMENT AND PAYMENT

Delete the first paragraph and replace it with the following:

"Note: No additional or extra over payment shall be made for work in restricted or confined areas".

No overhaul shall be measured and paid for any materials to be transported to and from the site (including materials obtained from borrow pits and/or commercial sources), irrespective of whether the Contractor intends to utilise the material for reworking (stockpiling – Item 32.06) or whether the material is transported to a dump site (cut to spoil). The Contractor shall include for overhaul in the rates tendered. No overhaul will be payable for importing and/or exporting material, transporting material to the designated spoil site or to transport material, equipment and workers. Compensation for haulage will be deemed to be included in the tendered rates for the respective work items. No overhaul will be measured or paid for under Item 16.02.

SECTION 5200: GABIONS

B5201 SCOPE

Add the following paragraph

"This section also covers the removal, dismantling and stacking of existing gabion work, and the reuse of these materials where authorised by the engineer."

B5203 CONSTRUCTION OF GABION CAGES

(a) General

Add the following new sub-clause:

"(iii) Reno mattresses or similar may be used as alternative to gabion boxes. These Reno mattresses are to be manufactured of 80mm x 100mm mesh (2,5mm diameter wires, diaphragm spacing 0,6m)."

B5204 CONSTRUCTING GABIONS

(c) Assembly

Delete and substitute with:

"(c) Assembly, erection and stretching

(i) Assembly

"Prior to assembly, the gabion material shall be opened out flat on the ground and stretched to remove any kinks and bends. The gabion boxes shall then be assembled individually by raising the sides, ends and diaphragms ensuring that all creases are in the correct position and that the tops of all four sides are even. The four corners of the gabion boxes shall be laced first followed by the edges of internal diaphragms to the sides. In all cases lacing shall commence at the top of the box by twisting the end of the lacing wire around the selvages. It shall then be passed round two edges being joined, through each mesh in turn and securely tied off at the bottom. The ends of all lacing wire shall be turned to the inside of the box on completion of each lacing operation.

(ii) Erection

Only assembled boxes, or groups of boxes, shall be positioned in the structure. The side, or end, from which work is to proceed, shall be secured to either completed work or by rods or stakes driven into the ground at the corners. These must be secured and reach at least to the top of the gabion box. Further gabions shall then be positioned in the structure as required, each being securely laced to the preceding one at all corners and diaphragm points.

(iii) Stretching

On completion of erection of a suitable length of gabion, the gabion boxes shall be stretched using a wire strainer or winch of at least one ton capacity firmly secured to the free end of the assembled gabion boxes.

Whilst under tension the gabion boxes shall be securely laced along edges (top, bottom and sides) and at diaphragm points, to all adjacent boxes and shall thereafter be filled."

(d) Rock filling

Add the following new sub-sub-clause:

"(iii) General

Filling shall be carried out only whilst gabion boxes are under tension.

Filling material shall consist of rock of size not less than 120mm and not greater than 250mm so placed to produce a neat face and line with a minimum of voids.

Internal horizontal bracing wire shall be provided at 500mm vertical centres or such spacing to ensure a ratio of four to every 1m³ of filling. These bracing wires shall be wrapped around two mesh wires and extended from front to back so positioned to ensure a neat face and line free of excessive bulges and depressions. Gabion boxes shall be filled in stages and horizontal bracing wires inserted as filling is brought up.

Similar bracing wires used vertically shall be provided in 0,5mm deep gabions at 330mm horizontal centres where water falls directly onto gabions or where a neat face is required.

Tension on the gabion boxes shall be released only when sufficiently full to prevent the mesh from slackening.

Gabion boxes shall be overfilled by 20 to 50mm above their tops to allow subsequent settlement of the filling."

Add the following new sub-clauses:

"(e) Final wiring

Closing and wiring down of lids shall proceed as soon as possible after filling operations and certainly in the likelihood of storms or floods during construction. The wiring down shall consist of wrapping around wire at such intervals as required or specified.
Lids shall be stretched tight over the filling with bars and wired down securely through each mesh along all edges, ends and diaphragms. The ends of all tying and bracing wires shall be turned into the gabion box on completion of all lacing operations.
Tightness of mesh, well packed filling and secure lacing is essential in all structures.

(f) Removal, dismantling and stacking of gabions

Existing gabions, either damaged or not, that require to be removed or moved to a new location shall be dismantled. Material not required for re-assembly or unsuitable for re-use shall be neatly stacked at approved locations in accordance with the engineer's instructions. Payment will be made only for gabions removed in accordance with the written instruction of the engineer.
Where gabions require moving, or as declared suitable by the engineer are re-usable, the contractor shall re-use all the material, plus supply such new materials as may be required to re-assemble the gabion again to the standard specification for new gabions."

SECTION 5600: ROAD SIGNS

B5601 SCOPE

"This section also covers the supply and erection of permanent danger plates at culverts and bridges at the locations indicated on the drawings or as directed by the engineer."

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road signboards

Add the following:

"The contractor shall make every effort to ensure that signboards are correct in all respect and before dispatching the boards from the manufacturer's factory shall provide the Engineer with a 100mm x 150mm colour photograph of each sign face for approval of the correctness of the legend. Such approval will not imply final acceptance of the board. If the Contractor is in any doubt as to the correctness of the sign detail, the sign designer shall be contacted for verification."

(a) (ii) Steel profile road signboards

Add the following:

"Where the letter or legends cross the horizontal joints of the sign panels, the letter shall be cut on the joint and both ends folded around the radius. Retro-reflective material to adjoining Chromadek panels on a sign shall be practical visual match of the specified colour."

B5604 ROAD SIGN FACES AND PAINTING

Add the following new subclause:

"(e) Application of retro-reflective material

All sign faces shall be faced with class 1 grade retro-reflective material. Painted front sign faces shall not be used.
Where applied to Chromadek sections, retro-reflective material shall be applied as specified for aluminium section in Clause 5603(d) of the Standard Specification, and of Clause B5603(a)(ii) of this project Specification. All sign lettering and symbols are to be class 1 retro-reflective material with the exception of direction signs which is to be Class III retro-reflective material.
For W405, W406, R1 and W409 signs, the sign faces shall be Class III retro-reflective material and the lettering and symbols shall be Class III retro-reflective material."

B5605 STORAGE AND HANDLING

Add the following:

"The following shall not be allowed on the sign face:

Drilling of holes, except for the fastening of overlays
Application of any form of adhesive
Cleaning with any chemicals that are not specifically approved by the manufacturer of the retro-reflective material
Covering the sign face with an impermeable material that does not allow free circulation of air."

B5606 ERECTING ROAD SIGNS

(c) Erection

Add the following:

"After erection the signboard shall be thoroughly cleaned with a cleaning agent approved by the retro-reflective material's manufacturer.
All vegetation obstructing the new or replaced sign board shall be removed and disposed of as instructed by the Engineer."

B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

Add the following:

"Existing overhead and ground mounted road signs that are being replaced by new signs shall be dismantled and disposed of by the Contractor. Where possible the dismantling of the signs shall not be before the replacement sign is erected and displayed. Where dismantling of the sign is required before erection of the replacement sign, the dismantling shall not take place until immediately before work is to commence on the replacement, and the replacement shall be completed and the new sign displayed as soon as possible thereafter (within 72 hours).
Dismantling shall include sign panels and ground mounted sign supports.
Ground mounted sign supports shall be cut off just below ground level. Material excavated for removal of buried poles shall be replaced, and any depression made good using excess material from excavation for new signs.
Pay items are provided in the Bill of Quantities. Payment will differentiate between different types of sign panels."

B5609 MEASUREMENT AND PAYMENT

ITEM		UNIT
B56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering, and borders in diamond grade retro-reflective material, where the sign board is constructed from:	

Amend the last two lines of the second paragraph to read:

"completion, delivery, installation of the road sign board complete as specified, and the removal and disposal of all vegetation obstructing the motorists' view of the new or replaced sign board.

Add the following pay items:

"ITEM		UNIT
B56.10	**Danger plates at culverts/structures**	
	(a) Type A at stormwater culverts (size indicated)	number (No.)
	(b) Type B at bridges (size indicated)	number (No.)

The unit of measurement shall be the number of danger plates provided and erected in accordance with the drawings.
The tendered rate shall include full compensation for all labour and material, painting, posts, excavation, backfilling with soil etc., as may be necessary for completing the work in accordance with the details shown on the drawings."

"ITEM		UNIT
B56.11	**Replace marker boards on existing kilometre posts**	number (No)

The unit of measurement shall be the number of reference marker boards provided and attached to existing kilometer posts in accordance with the drawings.
The tendered rate shall include full compensation for the manufacturing and supplying of the completed marker boards, for attaching the marker board to existing posts along the route and for all materials equipment, labour, nuts and bolts necessary for attaching the marker board as specified."
The tendered rate shall include full compensation for all the labour and material, painting, retro-reflective material, posts, excavation, backfilling,

etc. as may be necessary for completing the work in accordance with the details shown on the drawings."

SECTION 5700: ROAD MARKINGS

B5701 SCOPE

Add the following:

"This section also covers the painting of temporary road markings."

B5702 MATERIALS

(a) Paint

(i) Road marking paint

Add the following:

"The commercial product supplied shall be subject to the approval by the Engineer on the submission of a certificate of the SABS permitting the manufacturer to apply the SABS standardization work to the supplied product."

(ii) Retro-reflective road-marking paint

Add the following:

"If so ordered by the Engineer, the Contractor shall supply sealed samples of the paint used during actual painting to the Engineer, together with details of the paint batch numbers and testing carried out on these particular batches by the paint manufacturer, to prove compliance with the specification. These samples shall either be tested by the Engineer, and/or kept until the end of the period of maintenance."

Add the following subsubclause:

"(v) Retro-reflective beads

Retro-reflective beads shall be glass beads that comply with the requirements for glass beads specified in CKS 192.

The beads shall be delivered to the site in sealed bags, marked with the name of the manufacturer, the batch number and an inspection seal of the SABS, confirming that the beads form part of CKS 192. Alternatively, the Contractor shall at all times have a SABS certificate on the site, identifying the batches to which the inspection seals apply and certifying that they have been tested by the SABS, and comply with the requirements of CKS 192."

B5705 SURFACE PREPARATION

Add the following after the first paragraph:

"The white broken and barrier lines shall be painted as soon as slurry and/or asphalt surfacing of a section are completed. In cases where the lines are obliterated by these operations, no separate payment shall be made for this. The Contractor needs to make provision for this in the rates tendered for road marking."

In case of temporary painting, only every second piece of the white broken line shall be painted, and a single solid white line where a double barrier line is required. In the case where a single solid line is required, the solid line shall be painted with every second piece of broken line adjacent.

In particular, within 25 metres from any intersection, lines and markings shall be painted as directed by the Engineer."

B5706 SETTING OUT THE ROAD MARKINGS

Add the following:

"Where road markings are to be replaced after milling/overlay seal, it is essential that all existing barrier lines and other road marking lines be accurately referenced before commencement of milling or other operations which will obliterate the existing road markings. The position of barrier lines shall be re-assessed on site by the Engineer before the Contractor commences with the road marking."

After completion of the surfacing/seal or rehabilitation measures, the positions of the permanent road markings shall be set out and re-established as directed by the Engineer from the established reference beacons or control markers placed along both sides of the road.

Payment for the referencing of road markings is allowed for under this Section of the Bill of Quantities."

B5707 APPLYING THE PAINT

Replace the first sentence of the last paragraph with the following:
"Temporary road markings shall be applied on all completed repair work within a particular construction zone before work commence in a new construction zone. Temporary markings shall also be applied on all completed stone seal within a particular construction zone in the same position as the final road markings as shown on the drawings, or as directed by the Engineer, prior to the Contractor occupying a new road. Final road markings on completed asphalt within a particular construction zone shall be applied as shown on the drawings, or as directed by the Engineer, prior to the Contractor occupying a new construction zone. Final road markings on stone seal shall be applied as a single operation over all areas of seal, at an appropriate time which shall not be earlier than 3 weeks, and not later than 4 weeks, after completion of the last portion of seal.
The Contractor shall not occupy a new construction zone before the road markings have been applied as specified above.

The Contractor's establishment on site and general obligation shall be deemed to fully include the establishment of the road-marking team, irrespective of the number of times the road-marking team is required to be onsite or is required to move within the site."
No separate payment shall be made for establishing the road-marking team on site during the construction period, irrespective of the number of times the road-marking team is required on the site or is required to move within the site, and full compensation shall be included in the rates tendered for road marking."

B5710 TOLERANCES

(a) Alignment of markings
Add the following:
"When an unbroken line and a broken line are painted alongside each other, the beginning and the end of the unbroken line shall coincide with the beginning of one broken line and the end of another broken line.
When existing lines are repainted, the new markings shall not deviate more than 100 mm in the longitudinal direction nor 10mm in the traverse direction from the existing markings."

B5711 GENERAL

Replace the last sentence of the last paragraph with the following:
"The use of black paint, bituminous emulsion, slurry or chemical paint remover to obliterate existing road markings shall not be permitted."
Add the following to the last paragraph:
"If instructed and permitted by the Engineer, where black paint is used, it shall be matt."
Add the following:
If ordered by the Engineer, the Contractor shall apply a further application of paint to all road marking on the site of works within the maintenance period."

B5712 FAULTY WORKMANSHIP OR MATERIALS

Add the following:
"While work is in progress, tests shall be carried out on materials and/or the quality of work to ensure compliance with the specified requirements. The sampling methods are specified in SABS 731-1:2001 under the appropriate sampling and testing methods. The sampling methods described in TMH5 shall be followed where applicable

The Contractor shall give the Engineer at least 24 hours notice of his intention to apply road markings so that the actual application rates can be recorded and/or verified by the Engineer. Unless otherwise agreed in advance the Contractor shall only apply road markings when the Engineer or his representative is present. Records, in the form of a daily log sheet (provided by the Engineer) completed and signed by the Contractor and the Engineer, shall be kept of the quantities of paint and glass beads and the actual application rates used on road markings."

B5713 PROTECTION

Add the following:
"Traffic cones shall not be smaller than 750mm in height and shall be placed on the road not further than 48 metres apart. Cones shall not be removed before the paint on the road has dried to such an extent that it will not be damaged by traffic and the adhesive of the roadstuds has hardened to such an extent that the studs will not turn or become

loose. All marks on the road caused by traffic driving over wet paint shall be removed by the Contractor at his own cost, to the satisfaction of the Engineer."

SECTION 5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

B5901 SCOPE

In the first line of the second paragraph, insert the following after 'this section'

"…distinguishes between new construction and renewal construction. When construction is new, as in the case of new alignments for example, then this section….."

Add the following paragraphs:

"The Contractor shall be liable for finishing and cleaning up of work areas in the contract and for the removal of material resulting from his construction activities, including the reinstatement of any grassed areas damaged by construction activities."

B5902 FINISHING THE ROAD AND ROAD RESERVE

Add the following to the first paragraph:

"The contractor shall pay special attention to the collection and removal of all waste materials originating from the construction activities. All materials trimmed or excavated from the road shall be collected and removed from the road reserve to the satisfaction of the engineer.

This requirement shall be deemed to be incorporated in the tendered rates for item 59.01 of the bill of quantities or such other items as the contractor may decide upon.

The engineer may order additional finishing of the road reserve and previously constructed section 0.00km to 6.1.4KM, which will entail the collection and disposal of loose rocks, cleaning of inlet and outlet structures etc. Payment for this work must be included in section 5900 of the bill of quantities."

Retain the existing paragraphs as new sub-clause-

"(a) New Construction"

Replace the sixth paragraph with:

"All materials resulting from the finishing operations shall be disposed of at approved spoil sites."

Add the following:

"(b) Renewal Construction

After completing construction work within the site, the contractor shall ensure that all construction generated or related material that may have been swept, windrowed, stockpiled, stored or spread beyond the road surface is removed. This shall be done before any other rehabilitation work is undertaken, including shaping, topsoiling and grassing. Should, during the removal of construction generated or related material, existing vegetation or topsoil be disturbed or destroyed, the contractor shall, at his own cost, re-instate the road reserve to its original state. This shall include ripping, should the construction material have compacted the existing surface.

Culvert in lets and outlets, culvert barrels, and open drains shall be cleared of debris, soil, silt and other material generated from the construction activities.

The surfacing shall be cleared of all dirt, mud and foreign objects. Dragging, pushing or scraping material across the finished surfacing shall not be permitted.

All junctions, intersections, islands, kerbing and other elements making up the completed works shall be neatly finished off.

The contractor shall ensure that all undesirable plants have been removed from the road reserve and borrow pit areas.

All materials resulting from the finishing operations shall be disposed of at approved spoil sites.

SECTION 7100: CONCRETE PAVEMENTS

B7101 SCOPE

Add the following paragraph at the end:

"This section covers the construction of concrete pavements. The Engineer envisages constructing the approximate 1.5km of concrete pavement by labour intensive methods. All requirements according to COLTO Section 7100 will be complied with, but the placement of the concrete will be by hand as per extra over payment item 71.03."

B7111 PLACING, COMPACTING AND FINISHING WITH HAND EQUIPMENT

Add the following paragraph at the end of (a) General.

"Special reference should be given to the above mentioned section for the construction of the approximate 1500m of concrete pavement. The contactor will be obliged to construct the section by means of labour intensive methods."

SECTION 8300: QUALITY CONTROL (SCHEME 2)

B8301 SCOPE

Add the following:

For the purpose of this contract, Quality Control (Scheme 2) shall be used to approve or reject materials and work delivered.

C3.4.2.4 SPECIAL SPECIFICATIONS TO COLTO SPECIFICATIONS FOR LABOUR INTENSIVE CONSTRUCTION

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SPECIAL SPECIFICATIONS TO COLTO SPECIFICATIONS FOR LABOUR INTENSIVE WORK

1.5.1.1.1.1

1.5.1.1.1.2 **INTRODUCTION**

These Special Specifications contain amendments and additions to and are to be read in conjunction with the "Standard Specifications for Road and Bridge works for State Road Authorities (1998)".
The Special Specifications shall form an integral part of the contract documents.
Where there are any discrepancies between these Special Specifications, the Project Specification and the "Standard Specification for Road and Bridge works for State Road Authorities (1998)" these special specifications shall have precedence. This shall be brought to the Engineer's attention immediately.
Note:
Where reference is made to "engineer" in the Standard Specifications it shall be replaced with Employer's Representative (ER).

1.5.1.1.1.3 **SERIES 1000: GENERAL**

1.5.1.1.1.4 **SECTION 1700: CLEARING AND GRUBBING**

CONTENTS

B1701Li SCOPE
B1702Li DESCRIPTION OF THE WORK
B1703Li EXECUTION OF THE WORK
B1704Li MEASUREMENT AND PAYMENT

B1701L SCOPE

Add "by labour and light plant" at the end of the first paragraph.

B1702L DESCRIPTION OF WORK

(a) Clearing

Replace the second paragraph with:
"The breaking down, removal and disposal of structures will be paid for separately as determined in the project specifications."

(a) Grubbing

Retain as is

(b) Conservation of topsoil

Retain as is except to replace the reference to section 5800 with section 3100 and 3400 and "engineer" with "Employer's Representative (ER)".

(c) Conservation of vegetation

Retain as is

B1703L EXECUTION OF THE WORK

(a) Areas to be cleared and grubbed

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

(b) Cutting of trees

Retain as is

(c) Disposal of material

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

(d) Re-clearing of vegetation

Retain as is except to replace “engineer” with “Employer’s Representative (ER)”.

(e) Cleaning out of hydraulic structures

Retain as is

B1704L MEASUREMENT AND PAYMENT

Item		Unit
B17.01L	**Clearing and grubbing** *Replace with:*	
	(a) Borrow areas	square meters (m^2)
	(b) Roadbed	square meters (m^2)

The unit of measurement for clearing and grubbing is the square meter. The quantity shall be taken as the area in square meters designated by the Employer’s Representative (ER) and cleared and grubbed in accordance with these specifications.
The tendered rate shall include full compensation for all work necessary for the clearing of the surface, the removal and grubbing of trees and tree stumps (except large trees and stumps as defined below), cutting the branches, and the removal, transporting by wheelbarrow (specify average distance) and stockpiling (if necessary) in the designated area of the borrow area and the final disposal in the finished borrow pit as directed by the Employers’ Representative (ER).
Fifty percent (50%) of the tendered rate shall be paid on placing of the material in the stockpile/s and the remaining fifty percent (50%) on disposal of the material in the finished borrow pit as directed and authorised by the ER.

Item		Unit
B17.02L	**Removal and grubbing of large trees and tree stumps** Retain as is.	

Item		Unit
B17.03L	**Re-clearing of surfaces (on written instructions of the engineer only)** Retain as is except to replace “engineer” with “Employer’s Representative (ER)” and hectare (ha) with square meters (m^2).	

Item		Unit
B17.04L to B17.06L	Retain as is except that where applicable the average distance over which the material is to be transported and the mode of transport is to be defined and replace “engineer” with “Employer’s Representative (ER)”.	

1.5.1.1.1.5 **SERIES 2000: DRAINAGE**

1.5.1.1.1.6

1.5.1.1.1.7 **SECTION 2100: DRAINS**

CONTENTS

B2101L SCOPE
B2103L BANKS AND DYKES
B2107L CLASSIFICATION FOR EXCAVATION BY HAND
B2108L COMPACTION OF OUTLET CHANNEL SURFACE
B2105L MEASUREMENT AND PAYMENT

B2101L SCOPE

All work under this section in connection with the excavation and construction of open drains as inlets and outlets to culverts and the construction of mitre banks and catch water berms, where shown on the layout drawings, shall be carried out using labour intensive hand methods. Construction under this section may extend outside the road reserve and in places beyond the limits of the layout drawings.

B2103L BANKS AND DYKES

Add the following before the first paragraph of this clause:

"The construction of banks and dykes is to form part of the labour intensive works and all construction of these works is to be undertaken using only hand tools and pedestrian rollers. Should it be necessary to moisten the material before compaction, use of a water cart will be allowed. Payment for this work shall be made under pay item B21.05L."

B2107L CLASSIFICATION FOR EXCAVATION BY HAND

The classification of material for execution by hand shall be in accordance with clause B3107L.

B2108L COMPACTION OF OUTLET CHANNEL SURFACE

Compaction of the shaped surface to outlet channels shall be carried out where instructed using the following procedure. The material shall be thoroughly mixed with water to a depth of 150mm using a rotovator or other suitable equipment. Once sufficient water has been mixed in to ensure maximum compaction, the trimmed surface shall be compacted by means of a Bomag 90 (or equivalent) pedestrian roller until the specified density (90% of modified AASHTO density minimum) is achieved.

B2105L MEASUREMENT AND PAYMENT

Item		**Unit**
B21.05L	Banks and dykes	cubic metre (m^3)

The unit of measurement shall be the cubic metre of material placed in accordance with the construction method specified under B2103 L to the authorised dimensions, measured in place in the banks or dykes.

The tendered rate shall include full compensation for procuring, furnishing, placing, watering, compacting, shaping and trimming the material in banks and dykes.

Item		**Unit**
B21.16LI	Excavation for open drains by hand to heaps or along drain	
	(a) Soft class 2	cubic metre (m^3)
	(b) Soft class 3	cubic metre (m^3)
Item		**Unit**
B21.17L	Compaction of outlet channel surface	square metre (m^2)

The unit of measurement shall be the square metre of outlet channel surface trimmed and compacted.

The tendered rates shall include full compensation for all scarifying, mixing of in situ and imported materials, if required, adding water, trimming and compacting the surface as specified.

SERIES 2000: DRAINAGE

1.5.1.1.1.8 **SECTION 2200: PREFABRICATED CULVERTS**

CONTENTS

B2201L SCOPE
B2219L CLASSIFICATION FOR EXCAVATION BY HAND
B2220L CLEANING PIPE CULVERTS AND INLET/ OUTLET STRUCTURES OF DEBRIS

B2201L SCOPE

The work under this section shall also include for all excavation and backfilling to be carried out using labour intensive hand methods. The cleaning out of existing pipes and the cleaning and trimming of certain culvert inlets and outlets using labour intensive methods shall also be covered by this section.

B2219L CLASSIFICATION FOR EXCAVATION BY HAND

The classification of material for excavation by hand shall be in accordance with Clause B3107L.

B2220L CLEANING PIPE CULVERTS AND INLET/ OUTLET STRUCTURES OF DEBRIS

Where instructed by the engineer, the contractor shall clean all existing pipe culverts and inlet and outlet structures of silt, rocks, growth and other foreign debris. Payment for this work shall be made under item B22.27L.

B2218L MEASUREMENT AND PAYMENT

B22.18L Brickwork

Amend the second paragraph to read:

The tendered rates per square metre shall include full compensation for the brickwork complete as specified including brickforce and pointing.

Item		Unit
B22.26L	**Excavation by hand from road formation to heaps**	
(a)	Soft class 2	cubic metre (m^3)
(b)	Soft class 3	cubic metre (m^3)
(c)	Intermediate	cubic metre (m^3)

The unit of measurement shall be the cubic metre of material excavated within the specified widths over the lengths and depths authorized by the engineer in each case. Excavation in excess of the widths specified or authorized by the engineer shall not be measured for payment.

Irrespective of the total depth of the excavation, the quantity of material in each depth range shall be measured and paid for separately.

When measuring excavation for the removal of existing culverts, the volume occupied by the culvert shall not be subtracted from the calculated volume of excavation.

In the case of manholes and catchpits, the dimensions for determining the volume of excavation shall be the neat outside dimensions of the structure, plus an allowance of 0,5m of working space around the structure.

The tendered rates shall include full compensation for all excavation, temporary timbering, shoring and strutting, for preparing the bottom of the excavation for the culvert beds, the disposal of excavated material unsuitable for backfilling, keeping excavations safe, dealing with any surface or subsurface water, and for any other operations necessary for completing the work as specified.

The tendered rates shall include full compensation for transporting the excavated material for a free-haul distance of 1,0km.

Item		Unit
B22.27L	**Clearing of debris**	
(a)	Pipe culverts	cubic metre (m^3)

The unit of measurement shall be the cubic metre of debris cleared as directed by the engineer and shall be measured loose in a truck, trailer or similar container of predetermined size.

The tendered rate shall include full compensation for the excavation and clearing of debris and the loading and disposal thereof.

1.5.1.1.1.9 **SERIES 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**

1.5.1.1.1.10 **SECTION 3100: BORROW MATERIALS**

CONTENTS

B3101L SCOPE
B3102L NEGOTIATIONS WITH OWNERS AND AUTHORITIES
B3103L OBTAINING BORROW MATERIALS
B3104L OPENING AND WORKING BORROW PITS AND HAUL ROADS
B3105L FINISHING-OFF BORROW AREAS AND HAUL ROADS
B3106L DISPOSAL OF BORROW MATERIALS
B3107L CLASSIFICATION OF BORROW PITS FOR GRAVEL MATERIALS FOR PAVEMENT LAYERS
B3108L MEASUREMENT AND PAYMENT

B3101L SCOPE

Add "by labour and hand tools in borrow pits of limited size suitable for developing by hand" at the end of the paragraph.

B3102L NEGOTIATIONS WITH OWNERS AND AUTHORITIES

Add the following to sub-clause 3102(a):

"Arrangements regarding to access to borrow pits and the alignment of haul roads shall be made between the contractor and the owners of the land on which borrow pits are situated. The engineer's representative on site shall be present at all such negotiations, which shall be confirmed in writing by the contractor. All costs involved with such negotiations as well as the requirements contained in clause 3102 and clause 1225 of the specifications shall be borne entirely by the contractor."

B3103L OBTAINING BORROW MATERIALS

Replace "engineer" with "Employer's Representative (ER)".

(b) Use of borrow materials

Add the following to the second paragraph of this subclause:

"Compensation to owners and arrangements with owners for taking material from alternative borrow pits proposed by the contractor shall be the contractor's responsibility and entirely at his own expenses."

B3104L OPENING AND WORKING BORROW PITS AND HAUL ROADS

(a) Retain as is except to replace "engineer" with "Employer's Representative (ER)"

(b) Retain as is except to replace "engineer" with "Employer's Representative (ER)"

(c) Replace "engineer" with "Employer's Representative (ER)"

Add the following:

"All excess overburden removed at borrow pits shall be replaced over the entire area of the borrow pit after initial shaping has been undertaken in an even layer. Payment for this requirement shall be deemed to be included in pay item 31.01"

(d) Omit the last paragraph and replace "engineer" with "Employer's Representative (ER)"

(e) Retain as is except to replace "engineer" with "Employer's Representative (ER)"

(f) *Add the following:*

"It is a requirement of the contract that borrow pits shall be provided with temporary fencing around the perimeters of the borrow areas. The temporary fencing shall be erected prior to entering the land for borrowing purposes and shall on final finishing of the borrow areas as specified, be dismantled and removed and discarded as decided upon by the contractor. Payment for temporary fencing around borrow pits shall be made in accordance with the stipulations of section 5500 in these specifications."

(g) Retain as is except to replace “engineer” with “Employer’s Representative (ER)”

B3105L FINISHING-OFF BORROW AREAS AND HAUL ROADS

Retain as is except to replace “engineer” with “Employer’s Representative (ER)”
Add the following to this clause:
"Should the employer, engineer or any other authority approved by the engineer, require a higher standard of shaping and finishing off of borrow pits than specified in the standard specifications, measurement and payment for such extra work shall be made using daywork items as scheduled under this section."

B3106L DISPOSAL OF BORROW MATERIAL

Retain as is

B3107L CLASSIFICATION OF BORROW PITS FOR GRAVEL MATERIALS FOR PAVEMENT LAYERS

Replace with:
“The Employer’s Representative (ER) shall classify excavated materials as soft Class 1, soft Class 2, soft Class 3, intermediate or rock.
The classification shall be based on the descriptions given in Tables 3107/1 and 3107/2 from the CIDB Best Practice Guideline #2.
The Contractor shall notify the Employer’s Representative (ER) of the presence of what he considers to be rock or intermediate material immediately upon discovery thereof.
The ER will inspect the material and decide whether the material shall indeed be classified as suggested by the Contractor or not. The decision of the Employer’s Representative (ER) shall be final and binding, subject to the provisions of the Contract.”

Table 3107/1: Classification of excavated materials

CLASSIFICATION	DESCRIPTION
Soft Class 1	Material which can be excavated by means of a suitable shovel without the use of a pick or other hand swung tool.
Soft Class 2	Material which can be readily excavated with the aid of a pick or other hand swung tool.
Soft Class 3	Material which can be excavated with difficulty with the aid of a hand swung tool.
Intermediate	Material which is difficult to excavate by hand even with the aid of a crow bar and requires the assistance of pneumatic tools for economic removal.
Rock	Material which cannot be economically fragmented and loosened by hand implements and pneumatic tools except by drilling and blasting or the use of rock breaking equipment.

Table 3107/2: Classification of materials in terms of consistency and shear strength

MATERIALS CLASSIFICATION	CONSISTENCY (as defined in Table 3107/3) Granular soil Cohesive soil	NUMBER OF DCP BLOWS TO PENETRATE 100mm* Granular soil Cohesive soil**
SOFT Class 1	Very loose to loose. Very soft to soft	≤ 2 ≤ 1
SOFT Class 2	Loose to medium dense. Soft to stiff	2 – 6 1 – 5
SOFT Class 3	Dense. Stiff to very stiff	7 – 15 6 – 8
INTERMEDIATE	Very dense. Very stiff	> 8 > 8
ROCK	Very dense. Very stiff	> 8 > 8

* Only applicable to materials comprising not more than 10% gravel (particles having dimensions > 2mm) of size less than 10mm and materials containing no isolated small boulders.

** This could be subjective depending on the moisture content of the cohesive material.

Table 3107/3: Consistency of materials

GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	**DESCRIPTION**	**CONSISTENCY**	**DESCRIPTION**
Very loose	Crumbles very easily when Scraped with a geological pick	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle
Loose	Small resistance to penetration by sharp end of geological pick	Soft	Easily indented by thumb; sharp end of geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure
Medium dense	Considerable resistance to penetration by sharp end of geological pick	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade

Dense	Very high resistance to penetration by sharp end of geological pick; requires many blows for excavation	Stiff	Can be indented by thumb-nail with difficulty; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers
Very dense	High resistance to repeated blows of geological pick	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of geological pick

B3108L MEASUREMENT AND PAYMENT

Replace with the following:

Item **Unit**

B31.01L Stripping of topsoil and wheelbarrow haul (specify average haul distance) to designated area in borrow area cubic meter (m^3)

The unit of measurement shall be the cubic meter of material measured in cut, The tendered rate shall include full compensation for excavating the material, loading the material into wheelbarrows, transporting and placing the material in the designated area in the borrow area as instructed by the Employers Representative (ER).

Item **Unit**

B31.02L Excavation of and wheelbarrow haul (specify average haul distance) of excess overburden to outer limits of borrow area

(a) Soft Class 2 cubic meter (m^3)

(b) Soft Class 3 cubic meter (m^3)

(c) Intermediate material cubic meter (m^3)

The unit of measurement shall be the cubic meter of material measured in cut. The tendered rate shall include full compensation for excavating the material, loading the material into wheelbarrows, transporting and placing the material long the outer limits of the borrow area as instructed by the Employers Representative (ER).

Item **Unit**

B31.03L Excavate borrow material and load onto trucks

(a) SSoft Class 2 cubic meter (m^3)

(b) SSoft Class 3 cubic meter (m^3)

(c) Intermediate material cubic meter (m^3)

The unit of measurement shall be the cubic meter of material measured in cut. The tendered rate shall include full compensation for excavating the material in the borrow pit, and loading the material into the trucks.

Item **Unit**

B31.04L Finishing–off borrow areas

(a) Disposing of overburden in Item 3.02 in borrow pit cubic meter (m^3)

The unit of measurement shall be the cubic meter of material that was measured in cut under 31.02.
The tendered rate shall include full compensation for loading the material placed long the outer limits of the borrow area, loading into wheelbarrows, transporting and placing the material in the borrow pit as instructed by the Employers Representative (ER).

(b) Spreading of topsoil in Item 31.01 cubic meter (m^3)

The unit of measurement shall be the cubic meter of topsoil material that was measured in cut under Item 31.01 spread in a layer of approximately 100mmm thick over the area of the borrow pit being finished-off.

The tendered rate shall include full compensation for loading the material placed in the designated area of the borrow area under Item 31.01, loading into wheelbarrows, transporting and spreading the topsoil material over the area as instructed by the Employers Representative (ER).

Item		Unit
B31.05L	**Compensation to landowners:**	
	(a) Prime cost sum for compensation to land-owners	prime cost (PC) sum
	(b) Handling cost and profit in respect of sub-item B31.05L(a) above	percentage (%)

Measurement and payment shall be in accordance with the provisions of clause 48(2) of the general conditions of contract. Payment to the landowner shall be made within fourteen (14) days after such order has been given by the engineer. The contractor shall provide detailed proof of payment before payment shall be certified to the contractor.
The tendered percentage is an extra over percentage on the amount actually spent under sub-item B31.05L(a) which shall include full compensation for the handling costs and profit of the contractor."

SERIES 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE

1.5.1.1.1.11 **SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL**

1.5.1.1.1.12

CONTENTS

B3401L SCOPE
B3402L MATERIALS
B3403L CONSTRUCTION
B3404L PROTECTION AND MAINTENANCE
B3405L CONSTRUCTION TOLERANCES
B3406L QUALITYOF MATERIALS AND WORKMANSHIP
B3407L MEASUREMENT AND PAYMENT

B3401L SCOPE

Replace with the following:

:This section covers the preparation of the roadbed/subgrade on the existing alignment, the construction of selected layers (where applicable), subbase, bases (unstabilised and treated/stabilised in accordance with Section 3500: Stabilisation), wearing courses and shoulders with natural gravel and also gravel wearing courses by labour and light plant."

B3402L MATERIALS

Delete and replace with the following:

"B3402L MATERIALS AND PLANT

(a) General

(i) Materials required for the construction of the layer.

- Gravel/soil – approved from *in situ* sources or sources in borrow areas (gravel pit/quarry).
- Water.

(ii) Construction plant and equipment

The following specialised plant and equipment shall be used to promote the construction of the layer by labour intensive methods:

- Suitably sized (approx. 1 ton) tandem vibratory pedestrian rollers having two equally sized drums in tandem - both drums driven, each drum to have a separate eccentric shaft.
- Steel angle formwork (shutters), 150mm x 100mm x 6mm thick (1m, 2m and 3m lengths).
- Steel spacer plates (bulking rails), 75mm x 6mm and 50mm x 6mm capable of slotting onto the steel angle formwork to form a continuous shutter for levelling the loose material (1m, 2m and 3m lengths).
- 75mm x 75mm and 50mm x 50mm steel box sections for tying in levels of new work with previously constructed work (1m, 2m, and 3m lengths)
- Steel squeegees.
- Screeding boards comprising steel or aluminium straight edge of suitable length for screeding loose material.
- Plastic sheeting.
- Cross fall templates of 2% or 3% as specified.
- Steel pegs of various lengths (Y10).
- String or sisal, 3mm white.

- Water tank on LDV or mounted on trailer with pump, 1000 litres.
- Wheelbarrows
- Shovels
- Brooms
- Steel tape, 50m

(b) Compaction requirements

Delete - refer to subclauses 3403(b)(i) and 3403(f)(vii)

(c) Classification of excavation

The Employer's Representative (ER) shall classify excavated materials as soft Class 1, soft Class 2, soft Class 3, intermediate or rock.
The classification shall be based on the descriptions given in Tables 3402/1 and 3402/2 from the CIDB Best Practice Guideline #2.
The Contractor shall notify the Employer's Representative (ER) of the presence of what he considers to be rock or intermediate material immediately upon discovery thereof. The ER will inspect the material and decide whether the material shall indeed be classified as suggested by the Contractor or not. The decision of the Employer's Representative (ER) shall be final and binding, subject to the provisions of the Contract.

Table 3402/1: Classification of excavated materials

CLASSIFICATION	DESCRIPTION
Soft Class 1	Material which can be excavated by means of a suitable shovel without the use of a pick or other hand swung tool.
Soft Class 2	Material which can be readily excavated with the aid of a pick or other hand swung tool.
Soft Class 3	Material which can be excavated with difficulty with the aid of a hand swung tool.
Intermediate	Material which is difficult to excavate by hand even with the aid of a crow bar and requires the assistance of pneumatic tools for economic removal.
Rock	Material which cannot be economically fragmented and loosened by hand implements and pneumatic tools except by drilling and blasting or the use of rock breaking equipment.

Table 3402/2: Classification of materials in terms of consistency and shear strength

MATERIALS CLASSIFICATION	CONSISTENCY (as defined in Table 3302/3) Granular soil Cohesive soil	NUMBER OF DCP BLOWS TO PENETRATE 100mm* Granular soil Cohesive soil**
SOFT Class 1	Very loose to loose. Very soft to soft	≤ 2 ≤ 1
SOFT Class 2	Loose to medium dense. Soft to stiff	2 – 6 1 – 5
SOFT Class 3	Dense. Stiff to very stiff	7 – 15 6 – 8
INTERMEDIATE	Very dense. Very stiff	> 8 > 8
ROCK	Very dense. Very stiff	> 8 > 8

* Only applicable to materials comprising not more than 10% gravel (particles having dimensions > 2mm) of size less than 10mm and materials containing no isolated small boulders.

** This could be subjective depending on the moisture content of the cohesive material.

Table 3402/3: Consistency of materials

GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	**DESCRIPTION**	**CONSISTENCY**	**DESCRIPTION**
Very loose	Crumbles very easily when Scraped with a geological pick	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle
Loose	Small resistance to penetration by sharp end of geological pick	Soft	Easily indented by thumb; sharp end of geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure
Medium dense	Considerable resistance to penetration by sharp end of geological pick	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade
Dense	Very high resistance to penetration by sharp end of	Stiff	Can be indented by thumb-nail with difficulty; slight indentation

	geological pick; requires many blows for excavation		produced by pushing geological pick point into soil; cannot be moulded by fingers
Very dense	High resistance to repeated blows of geological pick	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of geological pick

B3403L CONSTRUCTION

(a) Requirements applying prior to construction of the layer

Replace with the following:

"(i) General

Pavement layers shall be constructed only where the underlying layer meets all the specified requirements and has been approved by the Employer's Representative (ER).

(ii) Preparation of roadbed (sub-grade)

Existing alignment: Once the horizontal and vertical alignment and cross fall of the road have been set out and before the pavement layer gravel is placed, the existing subgrade (roadbed) shall be prepared.

Pegs at the centre line and edge of the riding surface to the left and right of the centre line shall determine the levels of the top of the subgrade (roadbed). The type and quality of the materials shall govern the most practical treatment of the road.

Before any layer construction can proceed, whether for surfaced or un-surfaced roads, the rutting/unevenness shall be rectified. For this purpose the *in situ* material within the road reserve shall be considered (if suitable depending laboratory test results) before importing suitable material is considered. Any material excavated from the subgrade to achieve the required levels shall also be considered for this purpose. The non-plastic coarse gravel intended for the layer work shall not be used for this purpose.

The amount of material required for filling of the ruts/unevenness shall be determined by using a string/ line and tape and placed in suitably sized heaps along the side of the road at a pre-determined spacing to suit the need.

New alignment (based on two *in situ* subgrade layers being required to obtain the required controlled compaction depth)**:**

The area below and immediately adjacent to the edge of the road shall be cleared and grubbed, including the removal of topsoil which shall be stockpiled for later use as directed by the Employer's Representative (ER).

The subgrade shall be excavated and exposed to the required depth below final road level to a width of 600mm wider than the final subbase width. The excavated material shall be stockpiled along the edge of the road.

The exposed subgrade shall be excavated to a depth equal to that of the lower subgrade (i.e. 150mm) for half the width of the road over a length of 12m in the longitudinal direction of the road, and the material stockpiled on the open half of the road.

The excavated material stockpiled on the open half of the road shall be brought to OMC and covered with a plastic sheet to minimise evaporation of the water.

(iii) Controlling the moisture content of the heaped materials on or next to road

Untreated/unstabilised layers: It is important that the material in the pavement layers is compacted at Optimum Moisture Content (OMC)as determined in the laboratory.

The following procedure is recommended for consideration where labour and light plant is used for ensuring that the material placed on the road for the

construction of the untreated/unstabilised layer, is properly mixed with the water and compacted at Optimum Moisture Content (OMC):

- Form a depression (dam) at the top of the heap.
- Pour the predetermined required amount of water slowly into the dam.
- Cover the dam/heap with plastic sheeting.
- Allow the water to soak through the material for approximately 24 to 36 hours.
- Draw off in wheelbarrows only the damp material and cover the wheelbarrow with a plastic sheet too (some limited addition of water and mixing by hand may be required).
- Only dump material from wheelbarrows when labour is ready to spread and screed the material.

Treated/stabilised layers: For treated/stabilised layers, including the unstabilised portion of composite layers, the correct moisture content shall be obtained by first mixing the dry materials thoroughly in a concrete mixer and then adding the liquids to the dry material in the concrete mixer and mixing it to a uniform consistency (Refer to section 3500: Clause 3505).
This method is proposed to achieve uniform distribution of the small amounts of stabilising/ treatment agent with the gravel and thereafter the uniform mixing of the liquids with the dry ingredients.
(In view of the small amounts of stabilising/treatment agent mixing by hand is not advocated.)

(b) Placing and compacting

Replace with the following:
(i) Roadbed

Existing alignment: No spreading of the material or compaction shall be done on dry material. The heaped material shall be brought to its laboratory determined OMC prior to usage and protected from drying out until labour is ready to spread and screed the material as directed under subclause 3403(a)(iii).
The surface onto which the material is to be placed shall be dampened with water immediately prior to dumping the heaped material onto it.
After spreading and screeding the damp material, the surface shall be covered with plastic sheeting (which is rolled up systematically ahead of the roller as compaction progresses) to reduce evaporation of water from the material.
The fill material shall be placed approximately 50% higher than the required compacted thickness and compacted and trimmed back to the required level.
Compaction (in vibratory mode) shall commence only once approximately 12m of the subgrade (roadbed) has been completed and covered with plastic sheeting.
The plastic sheeting shall be rolled back ahead of the roller as it progresses.
The levels shall be checked and trimmed back or have excess material removed after one complete half-wheel pass of the roller. Rolling shall then be completed and the final trimming done.
Rolling shall be stopped immediately when the roller drums tend to “bounce” on the layer. (Generally on thin layers, that is <50mm, 2 to 3 half-wheel passes prove sufficient.)
Any differential settlement during compaction shall be corrected by adding extra material or by cutting away of high spots to achieve a smooth longitudinal surface between the reference pegs. This shall be checked for acceptance with boning rods and string lines.

(The wearing course is constructed on the surface of this completed and approved subgrade layer.)
New alignment: No spreading of the material or compaction shall be done on dry material. The heaped material shall be brought to its laboratory determined OMC prior to usage and protected from drying out until labour is ready to spread and screed the material as directed under subclause 3403(a)(iii).
The lower subgrade shall be constructed to specified compacted thickness (i.e. 150mm) over half the width of the road in 12m sections in the longitudinal direction of the road, using 150mm x 1000mm steel shutters, with the material at OMC stockpiled on the open half of the road.
The gaps left by the steel shutters shall be similarly back-filled and compacted.
The same process shall be followed for construction of the second half of the lower subgrade of the road.
The material previously stockpiled along the edge of the road shall be used to construct the second (upper) subgrade in exactly the same manner. Material of an equal quality may be added to make up for any shortage of material, subject to the direction and approval of the Employer's Representative (ER).
The subbase, if specified, shall be constructed on the surface of this completed and approved second subgrade layer as stipulated under subclause 3403(f))

(ii) Gravel pavement layers
A subbase and base course, as required, shall be constructed on the surface of the completed and approved subgrade layer, as stipulated under 3403(f).

(iii) Gravel wearing course
A gravel wearing course, as required, shall be also be constructed as stipulated under subclause 3403(f) and the requirements of TRH 20..

(c) Crushing and screening

Delete

(d) Stabilisation

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

(e) Classification of layers for pavement purposes

Retain as is except to delete the last paragraph.

(f) Construction of a gravel pavement layer

(i) General

Steel side forms shall be used for the placing of the pavement layer. The steel angle formwork shall have dimensions conforming to 150mm x 100mm x 6mm thick and be available in 3m, 2m and 1m lengths or as specified in the project specifications and approved by the Employer's Representative (ER). (The shorter lengths to be used for smaller curves.)
Sufficient steel forms for one day's work shall be available.

(ii) Control of gravel heaps along the side of the road

The distance over which the material is to be carted from the gravel heaps to be placed on the road shall be minimised.
To facilitate the achievement of this objective where material is hauled by trucks from borrow pits to the work area, it should be strived to use trucks of the same measured and known capacity (e.g. $6m^3$, $7m^3$ or $6m^3$, etc.).
The spacing of the gravel heaps delivered by the truck/s shall be established from Employer's Representative (ER) approved tables or calculations, based on the loose thickness to which the material shall be placed.
The spacing for each truck shall be demarcated and controlled by means of stop blocks on the surface of the road.

(iii) Addition of compaction water

No compaction shall be attempted on dry material.
The heaped gravel material shall be brought to and maintained at optimum moisture content (OMC) as described in subclause 3403(a)(iii) prior to placement on the road, and the material shall be protected against drying out during the construction process using plastic sheets.

(iv) Placing of steel side forms (shutters)

Care shall be taken when fixing the steel formwork to ensure that no bumps are built into the surface and that a smooth vertical and horizontal alignment is obtained.
The steel formwork shall be firmly and correctly placed so as to comply with the specified dimensions, lines and levels of the road or section to be constructed and be subject to the approval of the Employer's Representative (ER).
Once the steel side forms have been placed, the levels shall again be checked (by string lining across the tops of the side forms) and the surfaced trimmed to ensure that the correct thickness of pavement layer is laid.

(v) Mixing of the components for treated/ stabilised layers

Refer to section 3500: Stabilisation
Placing of the layer
Before placing the layer, the lower layer shall be lightly watered.
The material for the layer being constructed shall be wheelbarrow placed between the steel side forms at a uniform spacing to achieve a minimum amount of material relocation when the loose material is screeded/levelled to the required depth of 1,5 times the compacted depth.
Calculation of the spacing of the wheelbarrow loads shall be done subject to the approval of the Employer's Representative (ER).
A steel spacer plate (bulking rail) shall be placed on top of the 150mm or 100mm flange of the steel side forms to obtain a height of 225mm or 150mm (depending on the required compacted thickness of the layer – 100mm or 150mm. Using the steel squeegees and steel screed bar the material shall be spread level with the top of the spacer plate to obtain a 225mm or 150mm thick loose layer. No pedestrian traffic shall be allowed onto the loose layer before screening or compaction.
Where the layer is constructed adjacent to previously constructed work a suitably sized spacer shall be placed on top of the existing work to obtain the correct loose thickness for the new work.
When using coarse material over-sized fractions shall be removed from the surface and replaced with finer material to achieve the required smooth finish.
A plastic sheet shall be rolled out over the layer as the work progresses in order to inhibit the material drying out.
Composite layers: The same process as above shall be followed except that the lower unstabilised material shall be placed, spread and levelled flush with the vertical flange of the shutter, after which the steel spacer plate shall be placed on top of the vertical flange of the shutter and the upper stabilised material placed, spread and levelled flush with the top edge of the spacer plate.

(vi) Compaction of the layer

Once 8m to 10m in length of the layer has been completed, the plastic sheet may be rolled up and compaction may commence.
Compaction with an approved pedestrian roller in vibratory mode shall be executed until the loose layer, as determined by the spacer plate, has been compacted to the top edge of the vertical flange of the steel side form.
Rolling shall commence at a 45^{o} angle to the edge line of the shutters and shall thereafter continue in such a manner that the roller is always supported over approximately a half of its width initially either on an existing surface or the steel side forms.

Compaction shall be done in vibratory mode, parallel to the shutter lines, moving from both sides inward towards the middle of the layer in increments of slightly less than half the width of the roller, after each pass of the roller. The composite layer shall be compacted as a single layer.

(g) Construction of gravel shoulder

The gravel shoulder, as required, shall be also be constructed as stipulated under subclause 3403(f).

B3404L PROTECTION AND MAINTENANCE

Retain as is except to replace “engineer” with “Employer’s Representative (ER)”.

B3405L CONSTRUCTION TOLERANCES

Retain as is except that the tolerances given shall apply to the placement and position of the steel shutters themselves, prior to construction of the soil/gravel layers inside the shutters. If for any reason the steel shutters should become in-operative during construction regarding correct guidance as to level, layer thickness or grade, these tolerances shall apply to the so constructed layer itself, subject to the discretion and directive of the Employer's Representative (ER).

B3406L QUALITY OF MATERIALS AND WORKMANSHIP

Replace with the following:

(a) General

The Employer's Representative (ER) will do routine inspections and conduct routine tests to determine whether the quality of material and workmanship provided comply with the requirements of this section as well as the project specification.

(b) Trial section

An eight metre long trial section shall be constructed on a suitably prepared and located position as directed by the Employer's Representative (ER) and inspected by the ER for compliance to the specification. Only when passed by the ER and subject to the direction of the ER, may the contractor proceed to construct the specific layer in its proper location on the road under construction.
This procedure shall be followed each time the material to be used for the construction of a pavement layer changes substantially in quality and/or grading, or the contractor has difficulty in attaining the specified level of workmanship, subject to the discretion and direction of the ER.
While no density specification is given for layers constructed by labour and light plant in these special specifications, the integrity and workmanship of each trail section shall be assessed by Dynamic Cone Penetrometer (DCP) and shall comply with the following *in situ* readings:
The average of 4 DCP readings randomly chosen to cover the entire trial section and expressed in mm/blow, shall not exceed the following figures:

(i)	ETB layer:	3
(ii)	Gravel Base/Wearing course:	4
(iii)	Gravel Subbase layer:	9
(iv)	Gravel Upper Subgrade:	18
(v)	Gravel Lower Subgrade:	25

No separate payment (unless specifically provided for in the bill of quantities) will be done for trial sections. This work is deemed to be included in the tendered rates for the various layerworks.

B3407L MEASUREMENT AND PAYMENT

Replace with the following:

Item		**Unit**
B34.01L	**Preparation of road bed (subgrade) (existing alignment)**	cubic meter (m^3)

The unit of measurement shall be the cubic meter of compacted roadbed. The quantity shall be calculated by taking dippings and calculating the volume of the compacted layer based on the dipping.
The tendered rate shall include full compensation for obtaining the material from heaps along the road, windrows or surplus loose material on the road, bringing the material to OMC, placing, spreading, levelling and compacting.

Item	**Unit**

B34.02L **Stripping of topsoil and wheelbarrow haul (specify average haul distance) to designated area in road reserve** cubic meter (m^3)

The unit of measurement shall be the cubic meter of material measured in cut, The tendered rate shall include full compensation for excavating the topsoil material, loading the material into wheelbarrows, transporting, placing and spreading the material in the designated area in the road reserve as instructed by the Employers Representative (ER)

Item		Unit
B34.03L	**Excavation of material from road formation to heaps on or along road**	
(a)	Soft Class 2	cubic meter (m^3)
(b)	Soft Class 3	cubic meter (m^3)
(c)	Intermediate material	cubic meter (m^3)

The unit of measurement shall be the cubic meter of material measured in cut. The tendered rate shall include full compensation for excavating the material, placing the material in heaps along the road and bringing the material to OMC

Item		Unit
B34.04L	**Load from stockpile in borrow pit**	cubic meter (m^3)

The unit of measurement shall be the cubic meter of material measured loose. The tendered rate shall include full compensation for loading the material by hand from stockpiles in the borrow pit onto trucks.

Item		Unit
B34.05L	**Haul from borrow pit (specify borrow pit number and average haul distance) to heap on or along road.**	
(a)	$8m^3$ heap	cubic meter(m^3)
(b)	$6m^3$ heap	cubic meter(m^3)
(c)	Other	cubic meter(m^3)

The unit of measurement shall be the cubic meter of material measured loose. The tendered rate shall include full compensation for transporting the material from the borrow pit (designated by the engineer) and depositing in heaps of the tendered size at the specified spacing on or along the road.

Item		Unit
B34.06L	**Construction of untreated/unstabilised gravel pavement layer from heaped material beside or on road**	
(i)	Lower subgrade (specify compacted layer thickness)	cubic metre (m^3)
(ii)	Upper subgrade (specify compacted layer thickness)	cubic metre (m^3)
(iii)	Gravel subbase (specify compacted layer thickness)	cubic metre (m^3)
(iv)	Gravel wearing course (specify compacted layer thickness)	cubic metre (m^3)
(v)	Gravel shoulders (specify compacted layer thickness)	cubic metre (m^3)

The unit of measurement shall be the cubic meter of compacted pavement layer of the specified thickness. The quantity shall be calculated from the authorised dimensions of the compacted layer.
The tendered rate shall include full compensation for treatment of the heaps on or along the road to Optimum Moisture Content, loading the material into wheel

barrows and hauling the material from these heaps, erecting the shuttering, placing, spreading, screeding/levelling the material, covering with plastic sheet and compacting the layer at OMC to the specified width and thickness.

SERIES 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE

1.5.1.1.1.13 **SECTION 3500: STABILISATION**

CONTENTS

B3501L SCOPE
B3502L MATERIALS
B3503L CHEMICAL STABILISATION
B3504L MECHANICAL STABILISATION
B3505L BITUMINOUS STABILISATION
B3506L TOLERANCES
B3507L CONSTRUCTION OF TRIAL SECTION
B3508L STABILISATION WORK IN RESTRICTED AREAS
B3509L QUALITY OF MATERIALS AND WORKMAN- SHIP
B3510L MEASUREMENT AND PAYMENT

B3501L SCOPE

Retain as is and add ".with labour and light plant"

B3502L MATERIALS

(a) Chemical stabilizing agents

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

(i) Road lime

Retain as is

(ii) Ordinary Portland cement

Retain as is

(iii) Portland blast-furnace cement

Delete

(iv) Ground granulated blast-furnace slag

Delete

(v) Portland fly ash cement

Delete

(vi) Other chemical stabilizing agents

Replace with the following:
"Other chemical stabilizing agents may be used if specified in the project specifications or if approved or so instructed by the Employer's Representative (ER)."

(b) Soil binder

Retain as is except to replace “engineer” with “Employer’s Representative (ER)”.

(c) Material for bituminous stabilisation

(i) Bituminous stabilizing agents
Retain as is except to replace “engineer” with “Employer’s Representative (ER)” and delete reference to cationic emulsion.

(ii) Fillers
Retain except to delete reference to “ground granulated blast-furnace slag”:

(iii) Aggregate
Delete and replace with the following:
“Material for bituminous stabilisation shall be subject to the requirements prescribed in the project specifications as well as subject to the approval of the Employer’s Representative (ER).”

(d) General

Retain as is except to replace “engineer” with “Employer’s Representative (ER)”.

(e) Water

Retain as is except to replace “engineer” with “Employer’s Representative (ER)”.

B3503L CHEMICAL STABILISATION

(a) Preparing the layer

Retain as is except to replace “flat wheel roller” with “suitably sized (approx. 1 ton) tandem vibratory pedestrian roller” and to insert “labour and light plant” wherever motorised plant and/or a mechanised process is referred to.

(b) Applying the stabilizing agent

Retain as is except to replace any reference to motorised plant and/or a mechanised process with “labour and light plant” and to replace “engineer” with “Employer’s Representative (ER)”.

(c) Slaking and applying unslaked lime

Delete

(d) Mixing the stabilizing agent

Retain as is except to replace any reference to motorised plant and/or a mechanised process with “labour and light plant” and to replace “engineer” with “Employer’s Representative (ER)”.

(e) Watering

Retain as is except to replace any reference to motorised plant and/or a mechanised process with “labour and light plant” and to replace “engineer” with “Employer’s Representative (ER)”.

(f) Compaction

Retain as is except to replace any reference to motorised plant and/or a mechanised process with “labour and light plant” and to replace “engineer” with “Employer’s Representative (ER)”.

(g) Finishing at junctions

Retain as is.

(h) Curing the stabilised work

Retain as is except to replace any reference to motorised plant and/or a mechanised process with “labour and light plant” and to replace “engineer” with “Employer’s Representative (ER)”.

(i) Construction limitations

Retain only the last paragraph, replace “engineer” with “Employer’s Representative (ER)” and add the following:
The stabilizing agent shall be applied only to a surface or volume of material the size of which will permit all processing, watering, compacting and finish to be completed as specified in the project specifications, with due respect for the manufacturer’s guidelines, and subject to the orders and approval of the Employer’s Representative (ER).

B3504L MECHANICAL MODIFICATION

Retain as is.

(a) Modifying soil and gravel by addition of a soil binder

Retain as is except to replace any reference to motorised plant and/or a mechanised process with “labour and light plant” and to replace “engineer” with “Employer’s Representative (ER)”.

(b) Mixing materials from various sources

Delete and refer to subclause 3504(a).

(c) Recombining recovered material

Retain as is except to replace “engineer” with “Employer’s Representative (ER)”.

B3505L BITUMINOUS STABILISING

Delete and replace with the following:

“B3505L BITUMINOUS TREATMENT

(a) Preparing the material

Delete and replace with the following:

The materials required are the following:

- Gravel – approved from in situ source or gravel pit (quarry)
- 60% Anionic stable grade emulsion (Vinzyl resin emulsifier)
- Cement - in pockets
- Lime – in pockets (if required to adjust PI)

(b) Mixing in the additive

Delete and replace with the following:

(a) Mixing of material for Emulsion Treated Base (ETB)

(i) General

Mixing of the ETB shall be done in appropriately sized concrete mixers.
The material to be used shall be stockpiled as closely as possible to the work area.
Before using the drums of emulsion they shall be rolled backwards and forwards to ensure that the emulsion is properly mixed.
The mix proportions shall be according to the project specifications, subject to the approval and direction of the Employer’s Representative (ER).
For tender purposes the following proportions may be used per cubic metre of compacted material:

- Cement: 7 litre (22 kg)

- Emulsion: 45 litres
- Water: 120 litres (approx.)

(The amount of liquid to be added must be approximately 1 to 1½% over the optimum moisture content required for Mod. AASHTO density).
Note that the actual amount of emulsion and cement (or lime) to be used on the project shall be determined by an approved materials laboratory.

(ii) Mixing process

ETB layer: The mixing process shall take place in the following sequence:

- The dry material, aggregate, cement and lime (if required) shall be added together and mixed well;
- Followed by adding one third of the water and mixing it well;
- Lastly the emulsion, diluted with the remaining two thirds of the water shall be added to the contents of the mixer and mixed to a uniform consistency.
- There shall be no evidence of binder/aggregate "balling" or segregation.

Composite ETB layer: Note that the composite ETB layer consists of a 67mm (100mm loose) lower gravel layer, which is mixed and placed, to which a 33mm (50mm loose) upper layer of ETB is added and the composite layer compacted as one layer.
To facilitate accurate quality control, the material for the lower gravel layer shall also be mixed in a concrete mixer at OMC.
Mixing of the materials for the upper ETB layer shall be executed as specified for ETB layer.

(b) Heating and diluting the bituminous stabilising agent

Delete

(c) Applying the stabilising agent

Delete

(d) Compaction

Delete and replace with the following:
"Compaction with the roller in vibratory mode is continued, in accordance with subclause 3403(f)(vii), until the 150mm thick loose layer has been compacted to the top edge of the 100mm flange of the side form.
Sufficient time shall be allowed for the emulsion to fully break before construction of the surfacing is commenced or traffic is allowed onto the layer.
Where the layer is being constructed adjacent to previous work (e.g. half width construction) a 50mm x 50mm spacer shall be placed on top of the existing work to obtain the correct loose thickness for the new work."

(e) Finishing at junctions

Delete

(f) Construction limitations

Delete and replace with the following:

- When gravel is being stabilised with a bituminous emulsion, the material shall be mixed, placed and compacted in a continuous process.
- This process shall not be executed rainy weather or when rain is eminent.
- No seal shall be applied to an ETB layer before the emulsion has broken.

- No traffic shall be allowed on an ETB layer before the emulsion has broken.

B3506L TOLERANCES

(a) Rate of application

(i) Chemical stabilising agents
Delete and replace with the following:
The average rate of application of a chemical stabilising agent shall be in accordance with the project specifications and subject to the approval of the Employer's Representative (ER).

(ii) Bituminous stabilising agents
Delete and refer to subclause 3505(b) and subclause 3507.

(b) Uniformity of mix

Retain as is except to replace any reference to motorised plant and/or a mechanised process with "labour and light plant" and to replace "engineer" with "Employer's Representative (ER)".
Also add the following:
"refer to subclause 3505(b) for bitumen emulsion modification".

B3507L CONSTRCUTION OF TRIAL SECTION
Delete and refer to subclause 3406(b)

B3508L STABILISATION WORK IN RESTRICTED AREAS
Delete

B3509L QUALITY OF MATERIALS AND WORKMANSHIP
Replace with the following:
"The Employer's Representative (ER) will do routine inspections and conduct routine tests to determine whether the quality of material and workmanship provided comply with the requirements of this section as well as the project specification."

B3510L MEASUREMENT AND PAYMENT

Item **Unit**

B35.01L **Chemical stabilisation** (layer thickness indicated) **extra over unstabilised compacted layers** (layer to be stabilised indicated):
Retain as is except to replace "engineer" with "Employer's Representative (ER)".

Item **Unit**

B35.02L **Chemical stabilising agent:**
Retain only items 35.02(a), (c) and (g) plus text following item 35.02(g), except to delete the second paragraph and reference made to unslaked lime and ground granulated blast-furnace slag. Also replace "engineer" with "Employer's Representative (ER)".

Item **Unit**

B35.03L **Mechanical modification (extra over untreated layer):**
Retain as is except to delete reference to haul distance of 1,0 km as well as the last paragraph.

Item **Unit**

B35.04L **Provision and application of water for curing**
Retain as is, except to refer to subclause 3503(h) and to replace "engineer" with "Employer's Representative (ER)".

Item **Unit**

B35.05L **Curing by covering with the subsequent layer**
Retain as is, except to refer to subclause 3503(h).

Item **Unit**

B35.06L **Curing with bituminous membrane**

Delete

Item		Unit
B35.13L	**Extra over items 35.01, 35.07 and 35.10 for trial sections** Retain as is, except to replace “engineer” with “Employer’s Representative (ER)”.	

DEPARTMENT AGRICULTURE LAND REFORM AND RURAL DEVELOPMENT
CONTRACT NO.: CON-MP 000 (2022/2023)

APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF THE 1.4KM ACCESS ROAD TO SURFACED ROAD FOR THE HUTTINGTON PACKHOUSE SITUATED IN IN HUTTINGTON VILLAGE IN THE BUSHBUCKRIDGE LOCAL MUNICIPALITY, EHLANZENI DISTRICT IN THE MPUMALANGA PROVINCE

A7 Construction Management

C3.5 MANAGEMENT

C3.5.1 PLANNING AND PROGRAMMING

1. Planning and Programming

The Contractor is required to commence with execution of the Works within 14 days from the date of handover.

The programme shall include details of anticipated monthly expenditures based on the programme and shall be in the form of a bar chart with a calendar week as the time scale. The programme shall itemise key construction activities and indicate their duration, weekly production rates and their relation to other activities thereby defining a critical path to the Due Completion Date. The monthly expenditures shall be the net value of construction and shall not include contingencies and VAT.

The programme shall make allowance for all gazetted holidays, builder's break and rain. The Contractor shall table an updated copy of the approved programme at each site meeting clearly indicating the actual progress versus the scheduled progress.

2. Payment Certificates

Measurements will be done continuously between the Client's Representatives and the Contractor on dates and time agreed on. These parties must arrange dates.

The progress of the following items will be recorded hereunder:

The contractor will provide a concept with quantities to the Client. If any material on site is claimed, proof of ownership must be provided either by means of the necessary receipts or a letter from the supplier stating that ownership has been transferred to the contractor upon delivery.

After the payment certificate has been approved by the Client, the contractor must issue a VAT invoice. The certificate will then be ready for handing in.

Payment certificates must be completed monthly and submitted before each site meeting, to ensure that percentage progress can be ready for the site meeting each month.

C.3.5.2 HEALTH AND SAFETY

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REFERENCES TO THE SCOPE OF WORKS IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS: HEALTH AND SAFETY SPECIFICATION

1. SCOPE

1.1 Scope of Specification

This specification covers the principles, duties, responsibilities, liabilities, and requirements applicable in respect of health and safety in the work place on construction work.

This document constitutes the Employers' Health and Safety Specification as defined in the Construction Regulations, 2003 of the Occupational Health and Safety Act (Act 85 of 1993).

This specification applies to tunnelling although the minimum requirements for tunnelling are contained in the Mines Health and Safety Act. This specification however does not apply to underground construction at this point in time as covered by the Mines Health and Safety Act, 1996 (Act 29 of 1996) as amended.

1.2 Philosophy

Some of the terms and requirements of the Occupational Health and Safety Act and its Regulations may be novel to Contractors. This specification has therefore been prepared as an instructive guideline without being prescriptive, constraining the competitive advantage or interfering with the legal obligations of the responding parties.

The Health and Safety Plan required in terms of this specification may also be novel to Contractors. This specification has therefore been prepared in such a way to allow Contractors to employ the services of specialist consultants for the preparation and implementation of the same during the construction of the Works.

Health and safety can only be assured on construction works if all stakeholders buy into the Health and Safety plan and when the health and safety of all is an integrated line accountability of all management staff and workers on site. The management systems that are provided for in this specification is to enable the performance statistics of health and safety to be regularly captured, the intention of these systems is not to achieve health and safety by policing the conduct of the Contractor's employees.

In addition to ensuring health and safety, the intention of the management system is rather to commercially exploit the benefit of doing things right the first time that goes hand in hand with top health and safety performance. Accidents and injuries never pay. The loss of production and the cost of injuries, however, relatively infrequent they may be, far outweigh the effort required to maintain top health and safety on construction.

The specification accordingly provides for:

a) Independent periodic audits to ensure an unbiased pursuit of health and safety,
b) Follow-up audits to ensure the implementation of prescribed remedial actions,
c) The review of the efficiency and effectiveness of the Contractor's Health and Safety Plan,
d) The preparation of regular reports of inspections and accidents to enable the tracking of changes in health and safety performance,
e) The monitoring of conditions on a continuously pro-active basis to ensure that hazards are without delay identified, assessed and remedied should it threaten the health and safety of persons and property,

f) Ad hoc inspections to ensure that health and safety is pursued with dedication and not out of intimidation or coercion, and
g) Development of all aspects of the Contractor's Health and Safety Plan.

The fundamental intention of this specification is that the preservation of health and safety will become a core value of all involved during the construction of the Works.

This Specification does not require the preparation of an unduly extensive or complex risk assessment. The Contractor should rather prepare a risk assessment which takes the size of the project, the size of the Contractor's organization, the conditions of the workplace and the nature, complexity and significance of the hazards likely to be encountered during the execution of the Works into account.

2. INTERPRETATIONS

2.1 Supporting specifications

Where this specification is required for a project, the following specifications (as amended) shall, inter alia, form part of the contract document:

a) Occupational Health and Safety Act, 1993, and its regulations which shall include, but shall not be limited to the following:

Construction Regulations, 2003,
General Safety Regulations,
General Administrative Regulations, 1996,
Driven Machinery Regulations, 1988,
Electrical Installation Regulations, 1992,
Electrical Machinery Regulations, 1988,
Environmental Regulations for Workplaces, 1987, and
Facilities Regulations, 1990.

b) Clauses 4.5.2, 4.6, 4.7 and 4.8 of the Contract Data.

2.2 Application

This specification contains clauses that are applicable to the occupational health and safety requirements of the Occupational Health and Safety Act, 1993 and its Regulations, in particular the Construction Regulations, 2003 promulgated on 18 July 2003 in terms of Section 43 of the Act.

2.3 Definitions

In the Contract (as defined in clause 1.(1)(e) of the Conditions of Contract) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

(a) "Assistant Construction Supervisor" means a competent person appointed in accordance with regulation 6.(2) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.
(b) "Batch Plant Supervisor" means a competent person appointed in accordance with regulation 18.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.
(c) "Construction Health and Safety Officer" means a competent person appointed in accordance with regulation 6.(6) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(d) "Construction Supervisor" means a competent person appointed on a full-time basis in accordance with regulation 6.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(e) "Construction Vehicles & Mobile Plant Inspector" means a competent person appointed in accordance with regulation 21.(1)(j) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(f) "Contractor" means the natural or juristic person or partnership whose tender has been accepted by or on behalf of the Employer and, who is defined as the Principal Contractor in the Construction Regulations, 2003.

(g) "Demolition Work Supervisor" means a competent person appointed in accordance with regulation 12.(1) of the Construction Regulations, 2003, in writing by the Contractor with written notification to the Engineer.

(h) "Employer's Designer" means the natural or juristic person or partnership named in the Appendix to Tender or any other natural or juristic person or partnership appointed from time to time by the Employer for the design of the portion of the Permanent Works which the Employer is responsible to design in terms of this Contract.

(i) "Contractor's Designer" means the natural or juristic person or partnership appointed from time to time by the Contractor and notified in writing to the Engineer and Employer for the design of the portion of the Permanent Works which the Contractor is responsible to design in terms of this Contract, and for the design of the Temporary Works.

(j) "Electrical Temporary Installation Inspector" means a competent person appointed in accordance with regulation 22.(d) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(k) "Employer" means the natural or juristic person or partnership for whom the Works are to be executed, who is named as the Employer in the Conditions of Contract and who is known as the "Client", in the Occupational Health and Safety Act, 1993 and its regulations.

(l) "Engineer" means the natural or juristic person or partnership named as the Engineer in the Conditions of Contract and appointed by the Employer to act as the Engineer in terms of this Contract.

(m) "Engineer's Representative" means the person appointed by the Engineer in terms of Clause2 of the Conditions of Contract.

(n) "Excavation Work Supervisor" means a competent person appointed in accordance with regulation 11.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(o) "Explosive Powered Tools Issuer" means a competent person appointed in accordance with regulation 19.(2)(g)(i) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(p) "Fall Protection Developer" means a competent person appointed in accordance with regulation 8.(1)(a) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(q) "Fire Extinguisher Inspector" means a competent person appointed in accordance with regulation 27.(h) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(r) "Formwork and Support Work Supervisor" means a competent person appointed in accordance with regulation 15.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(s) "Hazard" means any object, action or condition that can potentially harm the health and safety of persons or property.

(t) "Hazard Identification" means the identification and documenting of existing or expected hazards.

(u) "Health and Safety Consultant" means the natural or juristic person or partnership appointed by the Contractor to assist in any matters related to health and safety on the construction site.

(v) "Health and Safety Plan" means a documented plan, prepared by the Contractor, of work procedures to mitigate, reduce or control hazards identified.

(w) "Health and Safety Specification" means a documented specification of all health and safety requirements and criteria to mitigate, reduce or control hazards identified.

(x) "Health and Safety Representative" means the person/s designated in accordance with section 17 of the Occupational Health and Safety Act.

(y) "Ladder Inspector" means a competent person appointed in accordance with regulation 13 of the General Safety Regulations, in writing by the Contractor, with written notification to the Engineer.

(z) "Material Hoist Inspector" means a competent person appointed in accordance with regulation 17.(8)(a) of the Construction Regulations, 2003 in writing by the Contractor, with written notification to the Engineer.

(aa) "Method Statement" means a document detailing the key activities to mitigate, reduce or control hazards identified.

(bb) "Professional Engineer" means any person employed from time to time by either the Employer or Contractor who holds registration as either a Professional Engineer or Professional Certificated Engineer under the Engineering Profession Act, 2000 (Act No. 46 of 2000).

(cc) "Professional Technologist" means any person employed from time to time by either the Employer or Contractor who holds registration as a Professional Technologist under the Engineering Profession Act, 2000 (Act No. 46 of 2000).

(dd) "Risk" means the likely occurrence and impact of a hazard.

(ee) "Risk Assessment" means a programme carried out to identify and evaluate the likely occurrence and impact of all hazards.

(ff) "Risk Assessor" means a competent person appointed in accordance with regulation 7.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(gg) "Safety Agent" means a competent natural or juristic person or partnership named in the Appendix to Tender or any other person appointed from time to time by the Employer and notified in writing to the Contractor to act on behalf of the Employer for the purposes of this specification.

(hh) "Scaffolding Supervisor" means a competent person appointed in accordance with regulation 14.(2) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(ii) "Stacking Supervisor" means a competent person appointed in accordance with regulation 26.(a) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(jj) "Subcontractor" means the natural or juristic person or partnership who is appointed by the Contractor with prior consent of the Engineer to execute certain tasks associated with the Works and who is also an employer as defined in section 1 of the Occupational Health and Safety Act.

(kk) "Suspended Platforms Supervisor" means a competent person appointed in accordance with regulation 15.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

2.4 Duties, responsibilities and liabilities

2.4.1 Principal Parties

This section covers the duties, responsibilities and liabilities of the following principal parties:

Employer
Employer's Safety Agent
Contractor
Subcontractor
Employer's Designer
Contractor's Designer

The duties and responsibilities of the various principal parties are briefly summarized below (the numbers indicated correspond to the applicable regulation number in the Construction Regulations, 2003). The intention of the summary is not to replace the Regulations, but is included for indicative purposes. The liabilities of each party are also shown.

a) Employer

In addition to the duties, responsibilities and liabilities specified in the Conditions of Contract, the Employer shall have the following duties and responsibilities to ensure compliance with the Construction Regulations, 2003:

4.(1)(a) Prepare health and safety specifications for the Works.
4.(1)(a) Provide copies of the specifications to Tenderers or to the appointed Contractor.
4.(1)(b) Provide any information to the Contractor that may affect the health and safety of his employees.
4.(1)(c) Appoint the Contractor in writing for the Works.
4.(1)(d) Take reasonable steps to ensure that the Contractor's Health and Safety Plan is implemented and maintained on the Works (which shall include monthly audits).
4.(1)(e) Stop the Contractor from executing work, not in accordance with, his Health and Safety Plan or which poses a threat to the health and safety of persons.
4.(1)(f) Ensure that sufficient health and safety information and appropriate resources are made available to the Contractor when changes are brought about to the design.
4.(1)(g) Ensure that the Contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works.
4.(1)(h) Ensure that Tenderers have made provision in their tenders for the cost of health and safety measures during the construction of the Works.
4.(2) Discuss and negotiate the contents of the Contractor's Health and Safety Plan.
4.(2) Approve the Contractor's Health and Safety Plan for implementation.
4.(3) On request, make available copies of the Contractor's Health and Safety Plan to his employees, his Subcontractors and inspectors.
4.(4) Satisfy himself on the competencies and resources of the Contractor he intends appointing.
4.(6) Satisfy himself on the competencies and resources of his Safety Agent should he decide to appoint one.

In terms of Clause 4.6 of the Contract Data, the Contractor accepts sole liability as mandatory for due compliance with the Occupational Health and Safety Act, 1993 and all its regulations including the Construction Regulations, 2003. The Employer will only be responsible for the duties imposed on the Employer in terms of the Construction Regulations, 2003 as listed above.

b) Employer's Safety Agent

Where the Employer decides to appoint an agent in accordance with regulation 4.(5) of the Construction Regulations, 2003, the duties and responsibilities as imposed by these regulations upon the Employer shall as far as reasonably practicable apply to his Safety Agent.

c) Contractor

In addition to the duties, responsibilities and liabilities specified in the Conditions of Contract, the Contractor shall have the following duties and responsibilities to ensure compliance with the Construction Regulations, 2003:

3.(1)(a) Notify the provincial director in writing of the commencement of the construction works.

3.(3) Ensure that a copy of the notification letter is kept on site for inspection on request as well as proof of its receipt by the Department of Labour.

5.(1) Demonstrate a Health and Safety Plan, based on the Employer's health and safety specifications.

5.(1) Apply the Health and Safety Plan from the Commencement Date until completion of the Works.

5.(2) Ensure co-operation between all contractors to enable each to comply with the provisions of Construction Regulations.

5.(3)(a) Provide any Tenderer or Subcontractor with copies of the Employer's health and safety specifications.

5.(3)(b) Appoint Subcontractors in writing.

5.(3)(c) Ensure that each Subcontractor's Health and Safety Management Plan is implemented and maintained on their portion of the Works.

5.(3)(d) Stop any Subcontractor from executing Works, not in accordance with, the Contractor's Health and Safety Plan or which poses a threat to the health and safety of persons.

5.(3)(e) Ensure that sufficient health and safety information and appropriate resources are made available where applicable, to the Subcontractor when changes are brought about to the design of the Works.

5.(3)(f) Ensure that his Subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works.

5.(3)(g) Ensure that his Tenderers have made provision in their tenders for the cost of health and safety measures during the construction of the Works in line with the requirements of the Employers Health and Safety Specification and his Health and Safety Management Plan.

5.(5) Discuss and negotiate the contents of his Subcontractor's Health and Safety Plan, to ensure compliance with the Employer's Health and Safety Specification and consistent with the Contractors Health and Safety Management Plan.

5.(5) Approve his Subcontractor's Health and Safety Plan for implementation and to keep records of all such approvals on site for auditing purposes.

5.(6) On request, make available a copy of his and his Subcontractor's Health and Safety Plan to an employee, inspector, contractor, the Employer or the Employer's Safety Agent.

5.(7) Open and maintain a record management system regarding health and safety for the Contractors own and Subcontractors' Health and Safety Documentation on the construction site.

5.(7) Upon request, make available his health and safety record management system to an inspector, Employer, the Employer's Safety Agent or the Contractor.

5.(8) Deliver the health and safety record management system to the Employer upon completion of the Works.

5.(9) Ensure that a comprehensive and updated list of all his Subcontractors (including their respective subcontracting agreements) are included in the health and safety record management system.

5. (10) Satisfy himself on the competencies and resources of the Subcontractor he intends appointing.

6. (1) Appoint a construction supervisor.

6. (3) Appoint assistant construction supervisors if required by an inspector.

6. (5) Appoint individual construction supervisors for individual construction sites.

6.(6) The Contractor shall after due consideration of the complexity, size and potential hazards and associated risks as well as controls towards the mitigation of risks, appoint a safety officer in writing. The contractor shall submit a detailed CV of the envisaged Safety Officer appointment for final acceptance thereof by the Employer or his Safety Agent.

6.(7) Provide opportunities to the construction safety officer to provide inputs into the Health and Safety Plan.

6.(8) Satisfy himself with the competencies and resources of the construction safety officer he intends appointing.
7. (1) Perform a risk assessment prior to the commencement of any construction work.
7. (2) On request, make available copies of the his/her risk assessment.
7. (3) Consult with the health and safety committee on the development, monitoring and review of the risk assessment.
7. (4) Ensure that all employees are informed, instructed and trained regarding any hazard and the related work procedures before any work commences. The contractor shall ensure that proof of such is available on site for auditing purposes.
7. (5) Ensure that all Subcontractors are informed regarding any hazard as stipulated in the risk assessment. Further that Subcontractors conduct their own risk assessments as and when required
7. (6) Analyse ergonomic related hazards and address the same in the risk assessment.
7. (7) Ensure that all employees undergo health and safety induction prior to permitting each employee access to the Works. The Contractor shall ensure that proof of such is available on site for auditing purposes.
7. (8) Ensure that all visitors undergo health and safety induction and are provided with the necessary personal protective equipment. The Contractor shall ensure that proof of such is available on site for auditing purposes.
7. (9) Ensure that every employee is in possession and carries at all times his proof of health and safety induction training.
9. (1) (a) Prevent the uncontrolled collapse of any structure which may become unstable due to the carrying out of construction work.
9. (1) (b) Ensure that no structure is loaded in an unsafe manner.
9. (3) Ensure that all construction drawings are on site and available on request by an inspector, contractors, Employer, the Employer's Safety Agent or employee.

In terms of Clause 4.6 of the Contract Data, it shall be deemed that the parties to this Contract have agreed in writing in terms of Section 37(2) of the Occupational Health and Safety Act, 1993 that the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 and all its regulations, including the Constructions Regulations, 2003, for which he is liable as mandatory.

d) Subcontractor

To ensure compliance with the Construction Regulations, the Subcontractor shall:

5.(4) Demonstrate a Health and Safety Plan, based on the Employer's health and safety specification.
5.(4) Apply his Health and Safety Plan from the Commencement Date and until completion of the Works.
5.(12) Satisfy himself on the competencies and resources of any Subcontractor he intends appointing.
5.(14) Provide the Contractor with any information which might affect the health and safety of any person or which might justify a review of the Health and Safety Plan.

In addition to the above items, the Subcontractor shall, to ensure compliance with the Construction Regulations, comply with regulations 5.7, 6.(1), 6.(3), 6.(5), 6.(6), 6.(7), 6.(8), 7.(1), 7.(2), 7.(3), 7.(4), 7.(6), 7.(7), 7.(8), 7.(9), 9.(1)(a), 9.(1)(b) and 9.(3), summarized in Section 2.4.1(c) above.

e) Designer (Employer's Designer or Contractor's Designer)

To ensure compliance with the Construction Regulations, 2003, the Designer (as defined in the Construction Regulations, 2003) shall:

9.(2) Make available to the Employer all relevant information affecting the pricing of the Works.
9.(b) Inform the Contractor of any hazards relating to the Works.
9.2(b) Make available all information required for the safe execution of the Works.
9.2(c) Ensure that information relating to geo-sciences, designs loads, and the methods and sequencing of construction processes are made available to the Contractor in a report.
9.2(d) Not include dangerous procedures or hazardous materials in the structure's design which could be avoided.
9.2(e) Make provision in the design of the Works for hazards likely to be encountered during its subsequent maintenance.
9.(2)(f) Carry out inspections of the construction work during the construction period to ensure compliance with the designs.
9.2(f) Keep records of the inspections carried out on the construction site.
9.2(g) Stop any contractor from executing works not in accordance with the designs.
9.2(h) Conduct a final inspection of the completed Works prior to its commissioning.
9.2(h) Issue a completion certificate to the Contractor subsequent to a successful final inspection.
9.(2)(i) Ensure that cognizance is taken of ergonomic design principles in order to minimize related hazards.

The Employer's Designer shall only accept responsibility to comply with the Construction Regulations, 2003 for that portion of the Permanent Works which the Employer is responsible to design in terms of the Contract.

The Contractor's Designer shall accept sole responsibility and liability to comply with the Construction Regulations, 2003 for that portion of the Permanent Works for which the Contractor is responsible to design in terms of the Contract as well as the design of the Temporary Works.

2.4.2 Secondary Parties

This section covers the duties, responsibilities and liabilities of the following secondary parties:

Construction Health and Safety Officer
Contractor's Employees Fall Protection Developer
Health and Safety Consultant
Health and Safety Representative
Risk Assessor

a) Construction Health and Safety Officer

The Construction Health and Safety Officer will act as Health and Safety advisor to the site management staff, ensuring the integrity of the Safety management System and Plan and its implementation. The Construction Health and Safety Officer can therefore never take over the line management responsibilities for safe work practices.

The Contractor is responsible for the development of the position outcomes descriptors for the Construction Health and Safety Officer. This documentation shall be available on site for auditing purposes.

The Construction Health and Safety Officer shall if given an opportunity, provide an input into the Contractor's Health and Safety Plan.

b) Contractor's Employees

All employees will be responsible for safety on the construction site and the work place as prescribed in section 14 of the Occupational Health and Safety Act, 1993 and briefly summarized as follows:

Take reasonable care for the health and safety of himself and of other persons who may be affected by his acts,
Co-operate with his employer with regards to health and safety to ensure that his employer complies with requirements imposed on him,
Obey the health and safety rules and procedures laid down by his employer,
Report any unsafe or unhealthy situation to his employer or to the health and safety representative for his workplace,
Immediately report any incident in which he was involved which has caused an injury to himself or others, and
Assist in inquiries and incident investigations.

No employee shall intentionally or recklessly interfere with, damage or misuse anything which is in the interest of health and safety

c) Fall Protection Developer

The Fall Protection Developer will be responsible for the preparation and maintenance of a fall protection plan to be implemented by the Contractor, in such a manner to ensure compliance with regulation 8 of the Construction Regulations, 2003.

d) Health and Safety Consultant

The Health and Safety Consultant shall assist the Contractor in any health and safety matters on the Works for which he is appointed.

e) Health and Safety Representative

The Health and Safety Representative shall fulfil the duties as set out in section 18 of the Occupational Health and Safety Act, (Act 85 of 1993). A health and safety representative shall not incur any civil liability by reason of the fact only that he failed to do anything which he may do or is required to do in terms of the Act.

f) Risk Assessor

The Risk Assessor shall facilitate the risk assessment process of the Contractor or Subcontractor. The Risk Assessor shall be responsible for the compilation and implementation of a management plan towards the continuous mitigation of identified risks to as low as is reasonable practicable.

2.4.3 Supervisors, Inspectors and Issuers

This section covers the duties, responsibilities and liabilities of the following Supervisors, Inspectors and Issuers likely to be found on the Works:

a) Batch Plant Supervisor

The Batch Plant Supervisor shall be required to ensure compliance with regulation 18 of the Construction Regulations, 2003. In addition, he shall fulfil the following duties and responsibilities:

Manage the day to day operation of a batch plant,
Be responsible for the maintenance of the batch plant,

Be able to identify developing defects and hazardous situations,
Act as the Occupational Health and Safety Representative at the batch plant, and
Take responsibility for the safety of the personnel at the batch Plant.

The Batch Plant Supervisor will have the authority to stop operation of the plant should any hazardous situation require it.

b) Construction Supervisor

The Construction Supervisor shall be responsible for supervising the construction work inclusive of the implementation and maintenance of safe work practices.

c) Construction Vehicle & Mobile Plant Inspector

The Construction Vehicle and Mobile Plant Inspector will ensure the safety of all construction vehicles and plant in such a manner to ensure compliance with regulation 21 of the Construction Regulations, 2003. The inspector will also be responsible for the regular inspection of all vehicles and plant and the recording of his findings. The Contractor shall ensure that proof of such is available on site for auditing purposes.

d) Demolition Work Supervisor

The Demolition Work Supervisor will supervise and control all demolition work on the Works in such a matter to ensure compliance with regulation 12 of the Construction Regulations, 2003. The supervisor will be responsible for all administration related to the demolition works. The Contractor shall ensure that proof of such is available on site for auditing purposes.

e) Electrical Temporary Installation Inspector

The Electrical Temporary Installation Inspector will control all temporary electrical installations on the Works to ensure compliance with regulation 22 of the Construction Regulations, 2003, the Electrical Installations Regulations, 1992 and SANS 0142. The Contractor shall ensure that proof of such is available on site for auditing purposes.

f) Excavation Work Supervisor

The Excavation Work Supervisor will supervise all excavation work on the Works in such a matter to ensure compliance with regulation 11 of the Construction Regulations, 2003 and shall in particular ensure that every excavation is inspected:

On a daily basis before each shift,
After every blasting operation,
After an unexpected fall of ground,
After substantial damage to supports, and
After rains.

The Contractor shall ensure that proof of such is available on site for auditing purposes.

g) Explosive Power Tools Issuer

The Explosives Power Tools issuer will control the issuing and collection of explosive tools, cartridges and nails or studs to ensure compliance with regulation 19 of the Construction Regulations, 2003. The Contractor shall ensure that proof of such is available on site for auditing purposes.

h) Fire Extinguisher Inspector

The Fire Extinguisher Inspector will be responsible for the operation and inspection of all firefighting equipment on the Works to ensure compliance with regulation 27 of the Construction Regulations, 2003. The Contractor shall ensure that proof of such is available on site for auditing purposes.

i) Formwork and Support Work Supervisor

The Formwork and Support Work Supervisor will supervise all formwork and support work operations and will see to it that formwork and support work erectors, operators and inspectors are competent to carry out their work Works to ensure compliance with regulation 10 of the Construction Regulations, 2003. The Contractor shall ensure that proof of such is available on site for auditing purposes.

j) Ladder Inspector

The Ladder Inspector will be responsible for the regular inspection and recording of his/her findings of all ladders on the Works and to ensure compliance with regulation 13 of the General Safety Regulations. The Contractor shall ensure that proof of such is available on site for auditing purposes.

k) Material Hoist Inspector

The Material Hoist Inspector will be responsible for the daily inspection of material hoists or similar machinery and to ensure Works to ensure compliance with regulation 17 of the Construction Regulations, 2003. The inspector must have experience pertaining to the erection and maintenance of all hoists on the Works. The inspector must be able to determine the serviceability of the entire material hoist including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices. The Contractor shall ensure that proof of such is available on site for auditing purposes.

l) Scaffolding Supervisor

The Scaffold Supervisor will be required to supervise all scaffolding work operations carried out on the Works and to ensure compliance with regulation 14 of the Construction Regulations, 2003 as well as ensure compliance with applicable SABS 085 specifications. The Contractor shall ensure that proof of such is available on site for auditing purposes.

m) Stacking Supervisor

The Stacking Supervisor shall supervise the stacking and storage of all articles on site and shall be responsible to ensure compliance with regulation 26 of the Construction Regulations, 2003.

n) Suspended Platform Supervisor

The Suspended Platform Supervisor will supervise all suspended platform work operations carried out on the Works and to ensure compliance with regulation 15 of the Construction Regulations, 2003. The supervisor will also see to it that all suspended platform erectors, operators and inspectors are competent to carry out their work. The Contractor shall ensure that proof of such is available on site for auditing purposes.

3. GENERAL REQUIREMENTS OF HEALTH AND SAFETY PLAN

3.1 General

It will be expected from the Contractor to include in his safety plan method statements on how to accomplish the requirements relating to the Construction Regulations, 2003 and related incorporated standards and regulations.

Contractors should describe how their safety management systems will work and what control procedures they plan on using to ensure safety on the construction site

The following generic aspects should be covered in their safety plan

What administrative procedures the Contractor envisages to use in the implementation and maintenance of the safety plan with reference to the construction site
How continuous assessment of the safety plan will be assessed and implemented with respect to construction site
What control systems the Contractor envisages to implement on site to support his safety program
How the Contractor will ensure that he adheres to the construction regulations in respect of competent persons for appointments
What external resources the Contractor envisages on using to ensure successful implementation and sustainability of the safety plan
What training to employees the Contractor envisages and how he would go about to execute it
The Contractor should indicate which competent persons he plans on employing

During the tendering phase it will be expected from the tenderer to briefly explain how the abovementioned will be accomplished.

Once a successful tenderer has been appointed, the Contractor shall supply a detailed Health and Safety Plan for review by the Employer, prior to site mobilization, to ensure compliance with the Construction Regulations, 2003. Mobilization shall be dependent upon the acceptance of the Contractor's Health and Safety Management Plan by the Employer. The Contractor's Health and Safety Plan should include, but not be limited to, those sections indicated in Section 3.2 of this specification.

3.2 Outline of Health and Safety Plan

The Contractor's Health and Safety Plan prepared in accordance with this specification shall consist of at least the following sections and sub-sections:

1. Aim and Scope of Plan,
2. Risk Assessment,
    a. Alternative Forms of Risk Assessment,
    b. Methodology of Risk Assessment,
    c. Elements of Risk Assessment,
        i. Scope of assessment,
        ii. Risks Identified,
        iii. Risk Analysis,
        iv. Risk Evaluation,
        v. Risk Treatment,
        vi. Monitoring and reviewing,
3. Resources,
    a. Health and Safety Staffing Organogram,
    b. Supervisors, Inspectors and Issuers,
    c. Employees,
    d. Subcontractors inclusive of their scope of work and their core resources,
    e. Training,
    f. Plant,
    g. Vehicles,
    h. Equipment

4. Materials,
   a. Temporary Materials
   b. Permanent Materials
5. Categories of Work
6. Implementation of Health and Safety Plan,
   a. Administrative systems,
   b. Training,
   c. Reporting,
   d. Monitoring,
   e. Inspections,
7. Auditing,
   a. Internal audits,
   b. Follow-up audits,
8. Financial Aspects,
9. Emergency procedures and response

4. RISK ASSESSMENT

4.1 General

This section of the specification provides guidelines for the Contractor in preparation of risk assessments in order to ensure compliance with Regulation 7 of the Construction Regulations, 2003. This section highlights the principles related to the preparation of suitable and sufficient risk assessments. Contractor Staff intending to prepare risk assessments should be trained and suitably experienced in the application envisaged.

A suitable and sufficient risk assessment is an assessment which:

Accounts for risks that are likely to arise during the construction of the Works,
Enables the development and implementation of systems to manage the risks,
Remains valid for a reasonable period of time,
Provides a basis for training of employees, and
Improves working procedures and introduce long term controls.

The requirements of the Construction Regulations will not be satisfied by a single risk assessment exercise that holds good for all time. The risk assessment process on the Works is an ongoing process.

The objectives of risk assessments are to:

Identify the risks that are mostly in need of reduction,
Identify the various options for achieving such reduction,
Identify the risks that require careful ongoing management, and
Identify the nature of the required ongoing attention.

4.2 Forms of Risk Assessment

In order to ensure compliance with the Construction Regulations, the Contractor will be required to carry out the following three forms of risk assessment:

4.2.1 Baseline or datum risk assessments

The Contractor will be required carry out a risk assessment before the commencement of construction activities on the Works. This “baseline” or “datum” risk assessment will form part of the Contractor’s Health and Safety Plan. The risks and hazards to which persons, plant, vehicles and facilities may be exposed during the construction of the Works should be identified and evaluated. Measures to reduce or control these risks or hazards should be defined during this assessment. The effectiveness of the measures defined and the

baseline risk assessment prepared shall be monitored and reviewed from time to time to ensure that it remains relevant and accurate.

4.2.2 Issue based risk assessments

The Contractor will be required to carry out separate risk assessments during construction of the Works when methods and procedures are varied, for example when:

Designs are amended,
New machines are introduced,
Plant is periodically cleaned and maintained,
Plant is started-up or shut-down,
Systems of work change or operations alter,
Incidents or near-misses occur, or
Technological developments invalidate prior risk assessments.

4.2.3 Continuous risk assessments

The Occupational Health and Safety Act specifically requires that employers shall provide and maintain working environments that are safe and without risk to health. The general awareness of hazards needs to be raised as work ethic to maintain a safe and risk free environment on an ongoing basis. This is achieved by continuous risk assessments, the most important form of risk assessment that takes place as an integral part of day-to-day management. Examples of continuous risk assessments include:

Regular audits,
Maintaining general hazard awareness,
Pre-work risk assessment

4.3 Methodology for the Preparation of Risk Assessments

The Contractor shall in the preparation of his risk assessments, follow the following general principles:

Employ a team of suitably qualified individuals with appropriately varied and relevant experience in risk assessment,
The appointed risk assessor shall lead the risk assessment,
Provide the team with background data, scope of work, potential hazards and underlying causes, and
Where necessary employ experts for complex risk assessments and aspects of risk assessments that require experiential judgment,
Institute an ongoing system of identifying aspects of the work that require risk assessment, and
Conduct risk assessments in workshops of the team or by individual members of the team under guidance of the leader as appropriate to the situation.

4.4 Elements of a Risk Assessment

4.4.1 General

The process of carrying out a risk assessment consists of a number of well-defined steps. These steps improve decision-making by providing a greater understanding of the risks and their impacts. The main steps or elements of the risk assessment process are as follows:

1) Consider scope and nature or risks involved, determine purpose and physical and legal bounds of assessment and define risk evaluating criteria,
2) Systematically identify risks,

3) Analyze risks with regard to causes, likelihood of occurrence and possible consequences against the background of existing controls and its effectiveness,
4) Evaluate risks in terms of pre-established criteria to determine need and priority for attention,
5) Treat risks through a process of risk elimination, substitution, controlling risk at source, risk mitigation such as training and as far as risk remains, provide personal protective equipment (PPE),
6) Monitor and review progress and performance in terms of management system, and
7) Communicate and consult.

The following sections 4.4.2 to 4.4.7 deal with items (2) to (7) above.
These items form the continuing process of the risk assessment as indicated in Figure 1, below.

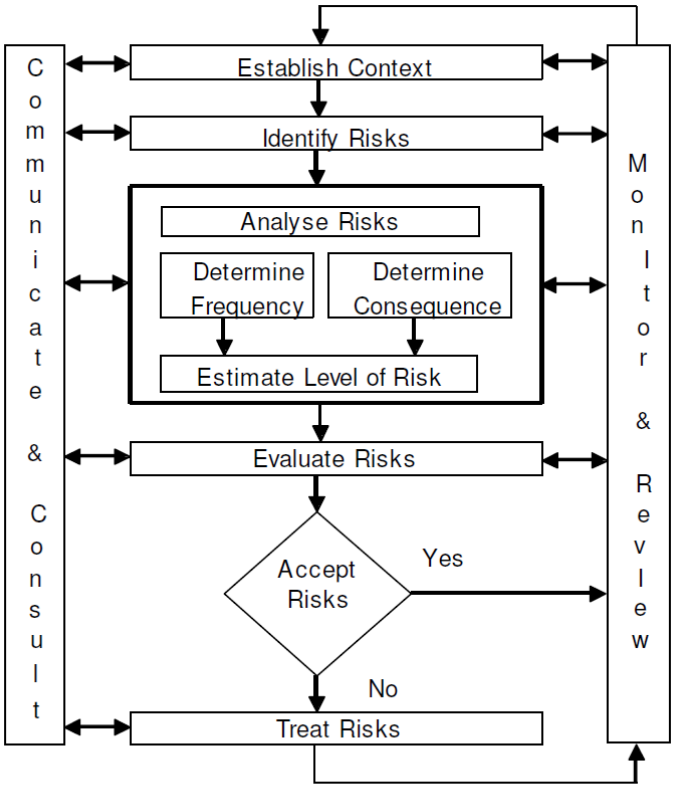


Figure 1: Risk Management Process

The Contractor shall ensure that the risk assessment compiled as part of his Health and Safety Plan contains at least these items.

4.4.2 Risk Identification

The Contractor should regard this step of the risk assessment as the most important. Subsequent analysis and evaluation of risks and the development of risk control measures are wasted if the risks or hazards on the Works are not carefully identified.

The Contractor should bear the following principles in mind when identifying the risks:

i) Systematically address all risks or hazards on the Works,
ii) Review all aspects of the work, but consider only those that have a potential to cause harm,

iii) Rank the risks identified in order of importance and then use appropriately advanced techniques to deal with major risks,
iv) Deal mainly with major risks and don't obscure these with unimportant information, especially minor risks,
v) Address what actually happens in the workplace during the work activity
vi) Consider all persons that may be affected,
vii) Highlight those groups and individuals who may particularly be at risk, and
viii) Review the adequacy and effectiveness of existing safety controls and measures

4.4.3 Risk Analysis

In this step, the Contractor will be required to analyze the risks identified by determining each risks frequency and magnitude or severity of the consequence of the risk or hazard.

The frequency of occurrence of a hazard may be expressed as the number of times that it may occur in a year, decade, lifetime, century, or longer period, according to comparative human experience. The magnitude of the likely consequence of a hazard may be expressed in terms of the degree of incapacitation, number of people or costs involved. The frequency of occurrence of a hazard and the magnitude of its consequence may be compounded as the risk that it poses as shown in the "risk matrix" in Figure 2 below.

Frequency of Occurrence of Hazard	Severity of Consequences of Potential Haz					
	1 Medically treatable	1 Compensable	10 Com	1 Permanently disabling	1 Fatality	10 Fatalities
Frequent; 1 or more occurrences per year	Medium	High	Very high	Severe	Severe	Severe
Several times during a career; 0.1 occ	Medium-low	Medium	High	Very high	Severe	Severe
Unlikely, but possible during a career; 0.01 occurrences per year	Low	Medium-low	Medium	High	Very high	Severe
Very unlikely during a career; 0.001 occurrences per year	Low	Low	Medium-low	Medium	High	Very high
Barely credible; 0.0001 occurrences	Low	Low	Low	Medium-low	Medium	High

Figure 2: Compounded Risk Matrix

The columns in the table represent the likely consequence of the hazard and the rows, the frequency of occurrence. The scales for both quantities represent consistent progressions, albe they qualitative. The risks evidently range from low to severe. Note that diagonals in the matrix represent the risks of the identified hazards, taking the effectiveness of controls into consideration.

The table represents a typical risk matrix that need not necessarily be adopted by the Contractor. The Contractor may use an alternative risk matrix provided that it is approved as part of his Health and Safety Plan.

4.4.4 Risk Evaluation

In this step the Contractor will be required to compare the assessed risk with similar risks previously experienced for the purpose of deciding how to treat the risk. A useful systematic approach for this purpose is as follows:

If the assessed risk exceeds similar risks that have occurred in the past and that are considered to be unacceptable, the assessed risk would require treatment depending upon its magnitude as discussed in Section 4.4.5, or

If the assessed risk exceeds similar historical risks that are acceptable, treatment of the assessed risk will depend on the extent by which it exceeds the historical risks, or

If the assessed risk is less than historical risks that are unacceptable, treatment of the assessed risk will depend on the extent by which it is less than the historical risks, or

If the assessed risk is less than historical risks that are acceptable, the assessed risk would also be acceptable and would not require any treatment.

4.4.5 Risk Treatment

In this step, the Contractor will select and implement appropriate measures for dealing with risk. Typically measures comprise the following:

Elimination by changing designs, procedures, management methods, etc, applicable to high frequency–high consequence risks, or
Reduction by changing designs, procedures, management methods, etc, applicable to high frequency–high consequence risks, or
Minimization by changing designs, procedures, management methods, etc, applicable to high frequency–low consequence risks, or
Transfer or share whole or part of the risk to another party by insurance, contractual arrangements or organizational structures, applicable to low frequency–high consequence risks, or
Control to ensure that risks do not increase, applicable to low frequency–high consequence risks, or
Retention together with provision of monitoring and personal protective equipment, applicable to low frequency–low consequence residual risks after reduction, or
Acceptance without particular action other than provision of personal protective equipment, applicable to low frequency–low consequence risks.

The following principles enable the optimum treatment to be determined:

Avoid risks altogether if possible by using different approaches, substances or methods of work,
Combat risks at source rather than by adopting secondary measures,
Adapt work to the individual rather than the individual to the work, that is, in the design consider the people and their attributes that will operate the system
Take advantage of technological and technical progress,
Risk prevention measures must be part of a coherent policy and approach to safety management that involves performance measurement, goal setting, feedback and analysis, Give preference to measures that protect the whole work force,

Ensure that those for whom protection is provided understand what they need to do to make sure that the protection works, and
Ensure that measures to control risks are an accepted part of an active health and safety culture supported by all levels of the organization; single risk reduction initiatives invariably fail.

4.4.6 Reporting and Recording

The Contractor shall ensure that the risk assessment process is recorded in the form of a report and included in his Health and Safety Plan. The report should be easily accessible to the Contractor's employees, their representatives, to inspectors, the Employer or his Safety Agent and the Engineer. The essential contents of the report should be as follows:

Objectives and expected outcomes, Description of the Works under assessment, Summary of context of study, Composition of risk assessment team, (including qualifications and relevant experience), Approach used to systematically identify risks, Identified risks (ranked in order of priority), Method adopted for assessing frequencies and consequences of risks, Consequences (ranked in order of magnitude), Identification of individuals and groups who may be affected by major hazards and risk and who may especially be at risk, Basis for defining safety standards to be achieved, Contractor's resources devoted to risk assessment, Actions proposed to reduce unacceptably high risks, Review effectiveness of existing safety measures to control risks, and Implementation programme of selected treatments (including controls to manage unacceptably high risks).

4.4.7 Monitoring and Review

It is necessary to monitor risks, the effectiveness of the risk treatment plan and the strategies and management system set up to control implementation. Control of the risk management program entails the setting of standards, monitoring actual performance, comparing the performance with the standards and correcting any deviations from the standard. Risks and the effectiveness of the control measures need to be monitored to ensure changing circumstances do not alter risk priorities. Few risks remain static.

Ongoing review is essential to ensure that the management plan remains relevant. Factors that affect the likelihood and consequences of an outcome may change, as may factors that affect the suitability or cost of the various treatment options. If an accident occurs, or if more is learnt about the hazards in the workplace, the risk assessment may need to be reviewed or modified. Hazards may be observed that have not been anticipated or previously identified and which may require appropriate measures to be taken. After an accident has occurred, it is important to determine whether it was predicted, whether preventive measures were identified, and if so, why they did not work, whether the risk assessment is still suitable and sufficient if it failed to predict the accident, whether to the decision to accept a predicted risk as tolerable is still valid, why the accident occurred and what should be done to prevent similar accidents occurring again. It is therefore necessary to regularly repeat the risk management cycle, the time between reviews being dependent on the nature of the risks and the degree of change likely to take place in the work activity. Review is an integral part of the risk management treatment plan.

4.4.8 Communication and Consultation

The Contractor will be required to communicate and consult with internal and external stakeholders during each step of the risk assessment process. Stakeholders will

include the Employer and his Safety Agent, the Engineer and the Contractor's employees and consultants.

Effective communication will ensure that those responsible for implementing the risk management process and those with a vested interest, understand the basis on which decisions are made and why particular actions are taken. It will also ensure that the perceptions of all those involved are noted and accommodated during the process.

5. RESOURCES

5.1 General

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health And Safety Act, 1993 and all its Regulations and related incorporated standards with regards to the resources and facilities intended for use on the temporary and permanent Works.

5.2 Employees

5.2.1 Inspectors, supervisors and Issuers

The Contractor shall provide in his Health and Safety Plan his intended Staffing Organogram for the Works. The organogram should include those inspectors, supervisors and issuers as envisaged in the Construction Regulations, 2003 required for the Works and any additional supervisory staff members as the Contractor (having taken the scope of the Works into account) considers necessary.

Copies of the supervisory staffs' curriculum vitae or portfolio of evidence and their appointment letters should be appended to the Contractor's Health and Safety Plan.

The Contractor's Health and Safety Plan should in addition cover at least the following aspects:

The number of unskilled, semi-skilled and skilled (including Foreman, Charge hands, Artisans, Operators, Drivers, Clerks, Storeman and Team Leaders) employees he intends employing on the Works,
The health and safety training to be provided to the Contractor's employees, The programme of the health and safety training,
Systems for the review of the effectiveness of the training provided, and
Systems to determine further training requirements throughout the construction period.

In preparing his Health and Safety Plan, the Contractor shall ensure compliance with Clause PS 22 in Section 4.2 of the Project Specifications.

Pro-forma letters of appointment for the various inspectors, supervisors and issuers as contemplated in the Construction Regulations, 2003 are included in Annexure 1 to this specification for use by the Contractor. The Contractor shall ensure that he includes in his Health and Safety Plan the appointment letters for all his inspectors, supervisors and issuers appointed for the Works.

5.2.2 Subcontractors

The Contractor shall with reference to the use of subcontractors on the Works and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

The steps intended to ensure that his Subcontractors prepare, implement and maintain Health and Safety Plans,
How health and safety information will be made available to his Subcontractors when changes are brought about to the design,
How he intends determining that his Subcontractors are registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works,
How he intends determining if his Subcontractors have made provision in their tenders for the cost of health and safety measures during the construction of the Works,
How he intends satisfying himself on the competencies and resources of Subcontractors he intends appointing, and
How he intends ensuring that his Subcontractors perform risk assessments prior to commencing their respective portions of the Works.

5.2.3 Competencies

The Contractor shall establish if a person is competent to perform a certain duty or be appointed in a certain capacity by requesting all candidates to supply the required certificates of competency. Where certificates of competencies cannot be delivered, the Contractor shall request a portfolio of evidence from the respective candidates.

Contractors should do enquiries at the South African Qualifications Authority (SAQUA) relating to the qualifications required for appointment of competent persons.

5.2.4 Physical and Psychological Fitness

Were required by the Occupational Health & Safety Act and its regulations the contractor shall ensure that his employees are in possession of a valid medical certificate of fitness to work in such an environment.

In terms of the Construction Regulations 2003 medical certificates of fitness are required for persons working at elevated positions (Regulation 8(2)(b)), persons working on suspended platforms (Regulation 15(12)a) tower crane operators (Regulation 20 (g)) and construction vehicle and mobile plant operators (Regulation 21 (1)(d)(ii)).

5.3 Plant, Vehicles and Equipment

5.3.1 Suspended platform

The Contractor shall with reference to Regulation 15: Suspended platforms of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How he intends complying with SABS 1808 and SABS 1903,
What systems he intends using to ensure the safety of all suspended platforms,
What tests will be performed to establish the safety of suspended platforms,
How he intends maintaining suspended platforms being used, and
How he will document the design, testing, maintenance and inspections of the suspended platforms.

5.3.2 Boatswains chairs

The Contractor shall with reference to Regulation 16: Boatswains chairs of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

Explain what systems he intends using to ensure the safety of all boatswains chairs, Explain how he intends maintaining boatswains chairs in use,
What tests will be performed to establish the safety of boatswains chairs, and
How he will document the design, testing, maintenance and inspections of the boatswains chairs.

5.3.3 Material hoists

The Contractor shall with reference to Regulation 17: Materials Hoist, of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How he intends confirming the construction stability of the material hoists,
What systems he intends using to ensure the safety of all material hoists,
What tests will be performed to establish the safety of all material hoists,
How he intends maintaining the material hoists being used, and
How he will document the design, testing, maintenance and inspections of all material hoists, and
What safety procedures and precautions are envisaged to ensure safe operation of the materials hoists.

5.3.4 Batch Plants

The Contractor shall with reference to Regulation 18: Batch plants of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

What systems he intends using to ensure the safety of all batch plants,
How he intends maintaining the batch plants in use, and
How he will document the design, testing, maintenance and inspections of batch plants in use.

5.3.5 Explosive powered tools

The Contractor shall with reference to Regulation 19: Explosive powered tools, of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How he intends controlling the issuing of explosive powered tools,
How he intends implementing safety procedures prior to use of explosive powered tools, and
What safety measures will be required during the use of explosive powered tools.

5.3.6 Cranes

This section of the specification shall be read in conjunction with the provisions of the Driven Machinery Regulations, 1988.

The Contractor shall with reference to Regulation 20: Cranes, of the Construction Regulations, 2003 and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How will environmental factors be taken into account in respect to the use of cranes,

What systems he intends using to ensure the safety of all cranes in use,
How he intends maintaining cranes in use,
What tests will be performed to establish the safety of all cranes in use,
What safety procedures and precautions are envisaged to ensure the safe operation of all cranes in use,
How he will document the design, testing, maintenance and inspections of all cranes in use, and
The contractor shall proof compliance of the Driven Machinery Regulation, 1988, with reference to the lifting machinery and tackle being used.

5.3.7 Construction vehicles and mobile plant

The Contractor shall with reference to Regulation 21: Construction vehicles and mobile plant of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How he intends ensuring that construction vehicles and mobile plant are:
- Of acceptable design and construction,
- Maintained and in good working order,
- Used according to design specifications, and
- Are protected from falling into excavations, water or areas lower than the working surfaces,

How he intends ensuring that workers are trained, authorised and physically fit to operate construction vehicles and mobile plant,
What traffic arrangements and safety precautions will be implemented to ensure safe operation of construction vehicles and mobile plant on the Works, and
How he intends safeguarding employees against construction vehicles and mobile plant moving on the construction site.

5.3.8 Electrical Installation and Machinery on construction sites

This section of the specification shall be read in conjunction with the provisions contained in the Electrical Installation Regulations, 1992.

The Contractor shall with reference to Regulation 22: Electrical Installation and machinery on construction sites of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How he intends safeguarding employees against electrical cables or apparatus under, over or on site, and
How he will ensure that electrical installations are of adequate strength to withstand working conditions on a construction site.

5.3.9 Ladders

The Contractor shall with reference to Regulation 13A of the General Safety Regulations and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How he intends ensuring that ladders used are safe and constructed of materials approved for its intended use, and
What precaution will be made to ensure the stability of ladders in use.

6. MATERIALS

6.1 General

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 1993 and all its regulations and related incorporated standards with regards to the design, supply, storage and erection of materials used for the temporary and permanent Works.

6.2 Fall Protection Equipment

The Contractor shall with reference to Regulation 8: Fall Protection Equipment of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

Compilation of a fall protection plan,
How the fall protection plan will be implemented and maintained,
How employees will be screened and declared medically fit to work in areas where fall protection equipment is needed,
How the safeguarding of persons, plant, vehicles, equipment and facilities on the construction site is contemplated,
Training of staff working at heights and in the use of fall protection equipment, How a continuous assessment of the situation will be executed,
How fall protection equipment will be inspected for safety, and
How corrective actions will be implemented
Emergency plans and procedures for treatment of incidents relating to falls from height.

6.3 Scaffolding

The Contractor shall with reference to Regulation 14: Scaffolding of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and

Safety Plan:

How compliance with SABS 085 will be ensured,
How scaffolding in use will be maintained,
What systems are intended to ensure the safety of scaffolding used, and
What tests will be performed to establish the safety of scaffolding used Training plan for scaffold erectors and inspectors.

6.4 Use and temporary storage of flammable liquids on construction sites

This section of the specification shall be read in conjunction with the provisions for the use and storage of flammable goods as determined in the General Safety Regulations.

The Contractor shall with reference to Regulation 23: Use and temporary storage of flammable liquids on construction sites of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How flammable liquids will be stored to minimize the risk of fire or explosions,
How the contractor will identify a flammable store
What safety precautions will be employed if ventilation of the flammable store is not possible.
How access to flammable stores will be controlled,
How empty vessels used for the storage of flammable liquids will be disposed of,
What quantity of flammable liquids will be stored on the construction site,
What systems are intended to ensure the safe storage of flammable liquids, and

What retaining methods will be used to prevent the spreading of any spillage.

6.5 Stacking and storage

This section of the specification shall be read in conjunction with the provisions for the stacking of articles contained in the General Safety Regulations.

The Contractor shall with reference to Regulation 26: Stacking and storage on construction sites of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

Who will supervise the stacking and storage of materials on site, and
What systems are intended to ensure the safe stacking and storage of materials on the site

6.6 Personnel Safety Equipment and Facilities

The Contractor shall comply with Section 2 of the General Safety Regulations, and shall in particular provide all necessary personnel protective equipment for his personnel for the duration of the construction period. To this end the Contractor shall without limiting his obligations indicate in his Health and Safety Plan:

Identify training requirements in the Contractors Training plan in the use and maintenance of personal protective equipment,
The type of personnel safety equipment he will provide, How he intends issuing it to his employees, and
How he will maintain the personnel safety equipment issued.

6.7 First Aid, Emergency Equipment and Procedures

The Contractor shall comply with Section 3 of the General Safety Regulations regarding first aid, emergency equipment and procedures.

7. CATEGORIES OF WORK

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 1993 and all its regulations and related incorporated standards with regards to the execution of the following categories of work.

7.1 General

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

7.1.1 Construction welfare facilities

Contractors will be required to adhere to Regulation 28: Construction welfare facilities of the Construction Regulations, 2003.

This regulation must be read in conjunction with the provisions of the Facilities Regulations, 1990 (as amended) and SANS 0400.

The Contractor must discuss the following in detail in his safety plan:

How will the Contractor establish the amount of facilities required for employees to shower, change, eat and attend to sanitary needs

What measures will the employer take to house employees on site who lives far form their residences or for the provision of transport

7.1.2 Environmental regulations for workplaces

The Contractor shall comply with the Environmental Regulations for Workplaces, 1987, and shall address the following aspects as described in the regulations in his Health and Safety plan:

Thermal requirements, Lighting, Windows, Ventilation, Housekeeping,
Noise and hearing conservation, Precautions against flooding, and
Fire precautions and means of egress.

7.1.3 Housekeeping on construction sites

Contractors will be required to adhere to Construction Regulation 25: Housekeeping on construction sites, of the Construction Regulations, 2003.

This regulation must be read in conjunction with the provisions of the Environmental Regulations for Workplaces, 1987 (as amended).

The Contractor must discuss the following in detail in his safety plan:

How will contractors ensure the neatness of construction sites
What measures does the Contractor envisage to
- o Store and/or stack materials,
- o Remove debris from site,
- o Prevent unauthorized entrance to the site
- o Protect employees or passers-by from falling objects

7.1.4 Fire precaution on construction sites

Contractors will be required to adhere to Construction Regulation 27: Fire precautions on construction sites, of the Construction Regulations, 2003.

This regulation must be read in conjunction with the provisions of the Environmental Regulations for Workplaces, 1987 (as amended).
The Contractor must discuss the following in detail in his safety plan:

How the Contractor will minimize the risk of fire on the site
How the Contractor will identify potential fire hazards
What prohibitions the Contractor will implement to manage risk areas
How many employees the Contractor will train in fire fighting
What organization the Contractor envisage to combat fires on sites
What precautions and procedures will be followed to evacuate employees in the case of a fire

7.1.5 Water Environments

The Contractor will be required to adhere to Construction Regulation 24: Water Environments, of the Construction Regulations, 2003.

The Contractor must discuss the following in detail in his safety plan:

What precautions will the Contractor take to identify dangers where employees may fall into water,
What safety procedures and equipment will the Contractor implement to safeguard employees working at water environments.

7.1.6 Structures

The Contractor will be required to adhere to Construction Regulation 9: Structures, of the Construction Regulations, 2003.

The Contractor must discuss the following in detail in his safety plan:

Explain what controls, test or precautions will be made to prevent structures from collapsing during construction,
The Contractor shall indicate what steps will be taken and implemented to ensure that structures or parts thereof will not be loaded in such a manner that it may collapse, and
What procedures does the Contractor envisage to implement in order to obtain all relevant data on structures before commencement of construction work.

7.1.7 Watching, barricading and lighting

The Contractor will be required to adhere to regulations 11.3.(i) and 11.3.(l) of the Construction Regulations, 2003.

The Contractor must discuss the following in detail in his safety plan in respect of any excavation or other dangerous activity adjacent to public roads and thoroughfares:

Type of barrier or fencing to be used,
Type and spacing of warning lights and warning signs, and
Control systems and personnel he intends employing to ensure that the above items are maintained.

7.1.8 Hazardous Chemical Substances

The Contractor will be required to adhere to the Regulations for Hazardous Chemical Substances 1995 as amended in the handling and storage cement of and other hazardous chemical substances.

The Contractor must discuss the following in detail in his safety plan in respect of each hazardous chemical substance that will be used in the works:
Storage of substance
Handling of substance
Protective clothing and other devices to be used while handling the substance
Medical surveillance.

7.2 Site Clearance

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

7.2.1 Demolition work

Contractors will be required to adhere to Construction Regulation 12: Demolition work, of the Construction Regulations, 2003.

The Contractor shall discuss the following in detail in his safety plan:

Briefly explain how he will safeguard people and property during and after demolition works
Briefly explain how he will protect staff from dangerous situations
Discuss the methods proposed to safeguard the public and property against harm during demolition works
Discuss what type of equipment he envisage to use during demolition work

How will the Contractor ensure the safety of equipment used during demolition work
What steps will the Contractor deem necessary to take where hazardous materials is encountered
Dust control measures
Noise control measures

7.3 Earthworks

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

7.3.1 Excavation work

Contractors will be required to adhere to Construction Regulation 11: Excavation work, of the Construction Regulations, 2003.

The Contractor must discuss the following in detail in his safety plan:

How will the Contractor establish the stability of ground prior to excavations,
What steps will the Contractor follow to ensure that bolstering, shoring and bracing is sufficient to ensure the safety of the excavation, and
What steps will the Contractor follow to ensure the equipment used to safeguard an excavation is sufficient and safe.

7.4 Concrete

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

7.4.1 Formwork and support work

The Contractor shall with reference to Regulation 10: Formwork and support work, of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

How the design of formwork and support work will be carried out,
How the erection of formwork and support work will be managed,
How the continuous assessment of the safety of formwork will be done,
How the loading of formwork and support work will be managed or limited, and
How he intends keeping records of the above.

7.5 Pipes

The Contractor shall comply with Section 9 of the General Safety Regulations, with regards to the welding, flame cutting, grinding, soldering or similar operations associated with pipework.

8 IMPLEMENTATION OF CONTRACTOR'S HEALTH AND SAFETY PLAN

8.1 General

The Contractor shall describe in his Health and Safety Plan how he intends implementing his plan. The Contractor shall indicate the methods he intends using to ensure accurate record keeping of all critical elements identified in his risk assessment and covered in his Health and Safety Plan.

The Contractor shall indicate how internal audits will be carried out, how shortcomings will be addressed, how he intends to review the safety plans, how he would train staff and how he would implement the findings and recommendations of internal audits or inputs of employees.

8.2 Administrative Systems

.

The Contractor shall comply with Section 9 of the General Administrative Regulations, 1996. The Contractor's administrative system shall without limiting his obligations, cover the following:

Up keep of a safety file on site,
Maintenance of his Health and Safety plan,
Procedures to follow for the appointment of competent persons,
Application for permits,
Procedures to follow for notifications, Injury on duty [IOD] administration,
Recording of minutes of safety meetings, Recording of checklists,
Safe keeping of checklists, and
Internal audits.

The Contractor shall in particular ensure that at least one copy of the Occupational Health and Safety Act,1993 and its Regulations is available on the for every 20 employees employed.

8.3 Reporting Systems

The Contractor shall comply with Section 9 of the General Administrative Regulations, 1996 and shall in particular (in accordance with section 12) furnish an inspector with information relating to health and safety on the construction site, when requested to do so.

The Contractor shall notify the Employer of any investigations, complaint or criminal charge which may arise as a consequence of the provision of the Occupational Health and Safety Act, 1993 and its Regulations, pursuant to work performed in terms of this Contract.

8.4 Training

The Contractor shall train all his employees in accordance with the requirements of section 13 of the Occupational Health and Safety Act, 1993. The Contractor shall ensure that every employee is informed of the following:

The hazards of any work he has to perform or plant machinery or equipment he is permitted to use, and
The precautionary measures which should be taken regarding the above.

The Contractor shall, without limiting his obligations, indicate in his Health and Safety Plan how he intends:

Identifying the training needs of the personnel he intends employing, and
Implementing the training identified
What proof of induction training will be carried by his employees (e.g. laminated type identification card).

8.5 Safety Meetings

The Contractor shall conduct at least one formal safety meeting per month with his employees to ensure safety awareness and shall maintain appropriate records of

attendance and meeting content. Such records shall be made available to the Employers Safety Agent. Such meetings shall address at least the following:

Accident / safety incidents
Hazardous conditions
Hazardous materials / substances
Job or work projections
Work procedures
Protective clothing / equipment
Housekeeping
General safety topics

8.6 Inspections and Monitoring

The Contractor shall be required to inspect each workplace prior to works commencing to ensure that all protective equipment is in place and that by entering the workplace no person will be exposed to any hazard which could affect his health or safety. The Contractor shall without limiting his obligations, indicate the following in his Health and Safety Plan:

The inspection and monitoring procedures he intends employing to determine the safety of workplaces, and
Who will be responsible for the checking of each workplace at the commencement of each shift.

The Contractor shall include in his Health and safety Plan all the checklists he intends using during the inspection and monitoring of the implementation of his Health and Safety Plan.

The Contractor can expect inspections of the works by any of the following parties:

The Employer or his Safety Agent,
The Employer's Occupational Safety Officer, or
The designated officer serving in the Department of Manpower and appointed by the Minister as Chief Inspector or his representative.

In addition to site inspections performed by the Employer or his safety agent they shall also do audits and asses the safety situation at the works and investigate incidents. Follow-up inspections will be performed to ensure compliance to recommendations done.

The Employer, his Safety Agent or his Occupational Safety Officer may stop the work at any time under the following conditions:

If the Contractor is not compliant with his Health and Safety Plan Imminent threat to the health and safety of any person on site Continuous non-conformance to corrective action requests.

Inspections by the Chief Inspector or his representative will be by appointment and the purpose would be to investigate complaints received by the Inspector or to investigate serious incidents.

The Chief Inspector or his representative may issue prohibition notices to stop the activities at the works until the situation investigated has been resolved or he may issue an improvement notice whereby the Contractor will have a period to rectify any hazard identified by the inspector.

9. AUDITING

9.1 Internal Audits

The audits contemplated in regulation 4.(1)(d) of the Construction Regulations,2003 will be carried out by the Employer or his appointed Safety Agent.

The intervals for the audits shall be agreed between the Contractor and the Employer or his Safety Agent during the preparation of the Contractor's Health and Safety Plan, but shall be carried out at least once every month or at such shorter interval that an inspector may require. The Employer or his Safety Agent shall provide at least 7 calendar days notice prior to the conducting of an audit.

The findings of each audit will be made known to the Contractor and the Employer in a report prepared by the Employer or his Safety Agent and will be submitted to all parties within seven working days of the respective audit being completed. Any shortfalls identified will be documented in the audit report together with the Contractor's proposals to rectify the same. All audit reports will be filed in the Health and Safety File.

A date for a follow up audit will be negotiated with the Contractor to verify the implementation of all actions to rectify shortfalls as identified in the audit report .

The Contractor will ensure that the same arrangement detailed above be implemented with his Contractors to ensure his compliance with the Construction Regulations and contemplated in regulation 5. (3)(c).

The audits described above only constitutes part compliance by the Employer or the Safety Agent with regulation 4.(1)(c) of the Construction Regulations, 2003.

9.2 Audits by Employer or Safety Agent

The Employer or Safety Agent will be entitled to carry out additional audits or follow-up audits, as the case may be, at any time during the construction period provided that:

i) The audit or follow-up audit are carried out during ordinary working hours, and
ii) The Employer or Safety Agent gives the Contractor at least 24 hours notice of his intention to carry out such audits.

The Contractor's employees indicated in Section 9.1 will be present during any audit carried out by the Employer or his Safety Agent.

10. MEASUREMENT AND PAYMENT

10.1 Measurement and Payment

10.1.1 The scheduled items for health and safety will be as specified in clause 31 of section 001 of the Standard Specifications.

10.1.2 The Contractor shall price all items scheduled in this section of the schedule of quantities to enable the Employer to comply with clause 4.1.(h) of the Construction Regulations, 2003. Failure by the Contractor to price these items will force the Employer to reject the Contractor's tender in terms of clause 4.(4) of the Construction Regulations, 2003.

ANNEXURE 1

APPOINTMENT LETTERS
PRO-FORMA'S

COMPANY LETTER HEAD

Attention: (***Assistant Construction Supervisor's Name)***

APPOINTMENT OF THE ASSISTANT CONSTRUCTION SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 6(2)

I, (***contractor's name)*** hereby appoint **(*assistant construction supervisor's name)*** as the assistant supervisor responsible for **(*site address)*** to carry out the construction work of ***(description of construction work and area of responsibility).***

In terms of this appointment you are required to ensure that all construction work performed under your supervision is carried out as follows:

1. By persons suitably trained and competent to do such work;
2. That all persons are aware and understand the hazards attached to the work being carried out;
3. That the required risk assessments are carried out;
4. That precautionary measures are identified and implemented;
5. That discipline is enforced at the construction site at all times;
6. That all identified statutory requirements are met; and
7. That any other interest in terms of health and safety with respect to the responsible area is met.
8. You will accept the duties of the Construction Supervisor in his absence.

You are required to report any deviations of the above-mentioned instruction to **(*construction supervisor's name)*** and in his absence to the contractor's representative.

This appointment is valid from ***(date)*** to the completion of the stipulated construction work.

You shall submit a written weekly report any non-compliance with the construction Regulations, 2003.

_____ _____ _____

Contractor's Representative full name Signature Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(assistant construction supervisor)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Assistant construction supervisor's Signature Date

COMPANY LETTER HEAD

Attention: (***Safety Officer's Name)***

APPOINTMENT OF THE CONSTRUCTION HEALTH AND SAFETY OFFICER IN TERMS OF CONSTRUCTION REGULATION 6(6)

I, **(*contractor's name)*** hereby appoint **(*safety officer's name)*** as the Construction Health and Safety Officer responsible for **(*site address)*** to manage all the health and safety issues as required in terms of the Act by establishing a health and safety program with elected health and safety Representatives.

You shall ensure that all the requirements in terms of the Act and in particular in terms of the Construction Regulations, 2003 are met. You shall also ensure that all appointed sub-contractors comply with the requirements as stipulated in the Construction Regulations, 2003.

You shall further ensure that all records, registers and required lists are maintained and shall stop construction work upon identifying any non-compliance by any contractor; this includes stopping any work should the competency of the person carrying out such work be questionable.

This appointment is valid from (***date****)* to the completion of the stipulated construction work.

_____ _____ _____

Contractor's Representative full name Signature Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*construction health and safety officer's name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Construction Health & Safety Officer's full name Signature Date

COMPANY LETTER HEAD

Attention: ***(Construction Vehicle and Mobile Plant Inspector)***

APPOINTMENT OF THE CONSTRUCTION VEHICLE AND MOBILE PLANT INSPECTOR IN TERMS OF CONSTRUCTION REGULATION 21(1)(j)

I, (***contractor's name)***hereby appoint (***construction vehicles and mobile plant inspector's name****)* as the construction vehicles and mobile plant inspector responsible for (***site address****)* to inspect on a daily basis all construction vehicles and mobile plant, as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to construction vehicles and mobile plant that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2003 are at all times met.

This appointment is valid from (***date****)* to the completion of the stipulated construction work.

_____	_____	_____
Contractor's Representative full name	Signature	Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*construction vehicles and mobile plant inspector's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____	_____	_____
Construction vehicles and mobile plant inspector's full name	Signature	Date

COMPANY LETTER HEAD

Attention: ***(Sub-Contractor's Name)***

APPOINTMENT OF SUB-CONTRACTOR IN TERMS OF THE CONSTRUCTION REGULATION 5(3)(b)

I, ***(contractor's name)*** hereby appoint ***(sub-contractor's name)*** as the sub-contractor responsible for ***(site address)*** to carry out the construction work of ***(description of construction work)***.

You shall ensure that you meet all the requirements in terms of the Act and in particular in terms of the section 37(2) agreement and the Construction Regulations, 2003. You shall also ensure that all contractors appointed by yourself and reporting to you comply with the requirements as stipulated in the Construction Regulations, 2003.

You shall also ensure that all the information and specifications to ensure that the construction work is carried out in a safe manner are carried over to all contractors appointed and reporting to you.

You shall further ensure that all records, registers and required lists are maintained and that all persons appointed to carry out tasks as stipulated by these regulations are competent and have the necessary resources to complete their tasks effectively in such a manner that health and safety is not in any manner compromised.

This appointment is valid from (***date)*** to the completion of the stipulated construction work.

You shall submit a written weekly report on all shortfalls that have not been met in terms of these regulations.

_____ _____ _____

Contractor's Representative full name Signature Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, (***sub-contractor's name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Sub-Contractor's Representative full name Signature Da

COMPANY LETTER HEAD

Attention: ***(Construction Supervisor's Name)***

APPOINTMENT OF THE CONSTRUCTION SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 6(1)

I, ***(contractor's name)*** hereby appoint ***(construction supervisor's name)*** as the Supervisor responsible for ***(site address)*** to carry out the construction work of ***(description of construction work and area of responsibility)***.

In terms of this appointment you are required to ensure that all construction work performed under your supervision is carried out as follows:

1. By persons suitably trained and competent to do such work;
2. That all statutory appointments have been completed;
3. That, where required, health and safety committees are established and that meetings are accordingly held;
4. That all persons are aware and understand the hazards attached to the work being carried out;
5. That the required risk assessments are carried out;
6. That precautionary measures are identified and implemented;
7. That discipline is enforced at the construction site at all times;
8. That all identified statutory requirements are met; and
9. That any other interests in terms of health and safety with respect to the responsible area is met.
10. You will in writing delegate your duties to the Assistant Construction Supervisor while absent from site.

You are required to report any deviations of the above-mentioned instructions to **(*contractor's name)***. This appointment is valid from ***(date)*** to the completion of the stipulated construction work. You shall submit a written weekly report on all shortfalls that have not been met in terms of these regulations.

Contractor's Representative full name	Signature	Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(construction supervisor)*** understand the implications of the appointment as detailed above and confirm my acceptance.

Construction Supervisor's full name	Signature	Date

COMPANY LETTER HEAD

Attention: ***(Excavation Work Supervisor's Name)***

APPOINTMENT OF THE EXCAVATION WORK SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 11(1)

I, ***(contractor's name)*** hereby appoint ***(excavation work supervisor's name)***as the excavation work supervisor responsible for ***(site address)*** to supervise and carry out all the necessary inspections in terms of all excavation work as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to excavation work that that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations are at all times met. This appointment is valid from ***(date)*** to the completion of the stipulated construction work.

_____ _____ _____

Contractor's representative full name Signature Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*excavation work supervisor's full name)***understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Excavation Work Supervisor full name Signature Date

COMPANY LETTER HEAD

Attention: ***(Form work and Support work supervisor's name)***

APPOINTMENT OF THE FORMWORK AND SUPPORT WORK SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 10(a)

I, ***(contractor name)*** hereby appoint **(*form work and support work supervisor's name)***as the formwork and support work supervisor responsible for ***(site address)*** to supervise and carry out all the necessary inspections in terms of all formwork and support work as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to formwork and support work that the necessary precautionary measures are taken and enforced. Hazards are reported in writing to the Construction, Health and Safety Officer and the Construction Supervisor.

You shall further ensure that the requirements of the Construction Regulations are at all times

met. This appointment is valid from **(*date)*** to the completion of the stipulated construction work.

Contractor's representative full name	Signature	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(formwork and support work supervisor's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

Formwork and Support Work Supervisor's full name	Signature	Date

COMPANY LETTER HEAD

Attention: ***(Ladder Inspector's Name)***

APPOINTMENT OF THE LADDER INSPECTOR IN TERMS OF CONSTRUCTION REGULATION 13(A)

I, ***(contractor's name)*** hereby appoint (***ladder inspector's name)***as the ladder inspector responsible for **(*site address*)** to manage ladders on site. You should inspect the ladders as per the checklist at least once a week.

You shall ensure that when becoming aware of any health and safety hazards in respect to ladders that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2003 are at all times met.

This appointment is valid from **(*date)*** to the completion of the stipulated construction work.

Contractor's representative full name	Signature	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*ladder inspector's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

Ladder inspector's full name	Signature	Date

COMPANY LETTER HEAD

Attention: ***(Risk Assessor's Name)***

APPOINTMENT OF THE CONSTRUCTION SITE RISK ASSESSOR IN TERMS OF CONSTRUCTION REGULATION 7(1)

I, ***(contractor's name)*** hereby appoint ***(risk assessor's name)*** as the construction site risk assessor responsible for ***(site address)*** to carry out risk assessments prior to the commencement of construction work and any other risk assessment that may be required for the duration of the construction work.

You shall ensure that all risks are identified and analyzed and that safe working procedures are drafted and implemented to reduce, mitigate or controls the hazards that were identified.

You will at least use the risk evaluation program with the provided checklists.

This appointment is valid from **(*date)*** to the completion of the stipulated construction work.

_____	_____	_____
Contractor's representative full name	Signature	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*construction site risk assessor's name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____	_____	_____
Construction site Risk Assessor's full name	Signature	Date

COMPANY LETTER HEAD

Attention: ***(Scaffolding Supervisor's Name)***

APPOINTMENT OF THE SCAFFOLDING SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 14(2)

I, ***(contractor's name)*** hereby appoint **(*scaffolding supervisor's name*)** as the scaffolding supervisor responsible for **(*site address)***to supervise and carry out all the necessary inspections in terms of all scaffolding work. (Whether newly erected, altered or moved as per the provided checklist)

You shall ensure that when becoming aware of any health and safety hazards in respect to scaffolding work that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2003 are at all times met.

This appointment is valid from ***(date)*** to the completion of the stipulated construction work.

Contractor's Representative full name	Signature	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(scaffolding supervisor's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

Scaffolding Supervisor's full name	Signature	Date

COMPANY LETTER HEAD

Attention: ***(Stacking and Storage Supervisor's Name)***

APPOINTMENT OF THE STACKING AND STORAGE SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 26(a)

I, ***(contractor's name)*** hereby appoint ***(stacking and storage supervisor's name)*** as the stacking and storage supervisor responsible for ***(site address)*** to manage all stacking and storage on site.

You shall inspect all new stacking and thereafter as often as needed according to the checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to stacking and storage that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations are at all times met. On identifying any shortfalls or hazards convey such information in writing to the construction supervisor.

This appointment is valid from ***(date)*** to the completion of the stipulated construction work.

Contractor's Representative full name	Supervisor	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(stacking and storage supervisor's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

Stacking and Storage Supervisor's Full name	Signature	Date

ANNEXURE 2

NOTIFICATION TEMPLATES

COMPANY LETTER HEAD

Attention: The Provincial Director
The Department of Labour
[Postal Address*]

NOTIFICATION OF CONSTRUCTION WORK ON CONTRACT [NUMBER] [CONTRACT DESCRIPTION]

In terms of regulation 3.(1) of the Construction Regulations , 2003 promulgated on 18 July 2003 in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), we hereby notify you of our intention to commence construction works on the abovementioned contract, which:

Includes the demolition of a structure exceeding a height of 3 meters,
Includes the use of explosives to perform the construction work,
Includes the dismantling of fixed plant at a height greater than 3 meters,
Will exceed 30 days or will involve more than 300 person days of construction,
Includes excavation work deeper than 1 meter, or
Includes working at a height greater than 3 meters above ground or a landing.

1. Parties involved on the Contract

1.1 The Principal Contractor is: [Contractor's Name]
[Contractor's postal address]
[Contractor's postal address]
Att: [Contractor's contact person and telephone number]

1.2 The Client (Employer) is: [Employer's Name]
[Employer's postal address]
Att: [Employer's contact person and telephone number]

1.3 The Client's Safety Agent is: [Safety Agent's Name]
[Safety Agent's postal address]
Att: [Safety Agent's contact person and telephone number]

1.4 The Contractor's Construction Supervisor is: [Contractor's Construction Supervisor's name and telephone number]

2. Details of the construction works

2.1 The physical address of the works is: [Physical address of works]
[Physical address of works]

2.2 The nature of the construction works is: [Provide a description of the works].

2.3 The expected commencement date of the Works is : [Insert expected commencement date]

2.4 The expected completion date of the works is : [Insert expected completion date]

2.5 The estimated maximum number of persons on the construction site:

2.6 A total of _____ contractors will be accountable to the Principal Contractor on the construction site during the execution of the Works. The names of the contractors already chosen are as follows: [Provide a list of the Contractor's subcontractors already appointed]

3. Other details

3.1 The Principal Contractor's compensation registration number is: _____

3.2 In terms of regulation 3.(3) a copy of this notification will be kept on site for inspection. We trust the above is in order.

Yours faithfully,

_____ _____
Signature Date

* Postal Address of Provincial Director as indicated in regulation 1 of the General Administrative Regulations, 1996.

ANNEXURE 3

IDENTIFIED HEALTH AND SAFETY HAZARDS

ANNEXURE 3: IDENTIFIED HEALTH AND SAFETY HAZARDS

In terms of Regulation 4(1)(b) of the Construction Regulations 2003 the following hazards anticipated with the scope of work have been identified.

NOTE: The list of potential hazards is by no means intended to be all inclusive and is not limited to this list, and it remains the responsibility of the Contractor to identify all possible hazards with regards to his scope of work and to put measures in place to mitigate, reduce or control these hazards.

Potential Hazards

1. Commissioning of new installations
2. Confined space entry
3. Demolition/breaking into existing structures
3. Excavation shoring / brazing
4. Excavations been flooded during rain season
5. Explosives
7. Hazardous material handling / storage / management
8. Heat stress
9. Loading and off loading vehicles
10. Manual handling of materials
11. Plant and equipment integrity
12. Public and traffic safety
13. Requirements for plant isolations
14. Roofing and Cladding operations
15. Safe usage and storage of Oxygen, Acetylene and LPG cylinders
16. Scaffolding
17. Stacking and storage of equipment / materials
18. Tie-ins into existing equipment
19. Usage of compressed air and equipment
20. Work involving radioactive sources
21. Working in operational areas
22. Working on live electrical installations / sub-stations / MCC rooms
23. Working on moving equipment.

ANNEXURE 4

COMPLIANCE COVID-19 OCCUPATIONAL HEALTH AND SAFETY MEASURES IN WORKPLACES COVID-19 (C19 OHS), 2020

DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT

CONTRACT NO.: CONMP0006 (2026/2027)

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

PORTION 2: CONTRACT

PART C4: SITE INFORMATION & SUPPLEMENTARY DOCUMENTS

SITE INFORMATION & SUPPLEMENTARY DOCUMENTS

INDEX

Section	Description	Page No
C4.1	LAYOUT PLAN	C4.1.1
C4.2	TENDER DRAWINGS	C4.2.1

DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT

CONTRACT NO.: CON 000 (2024/2025)

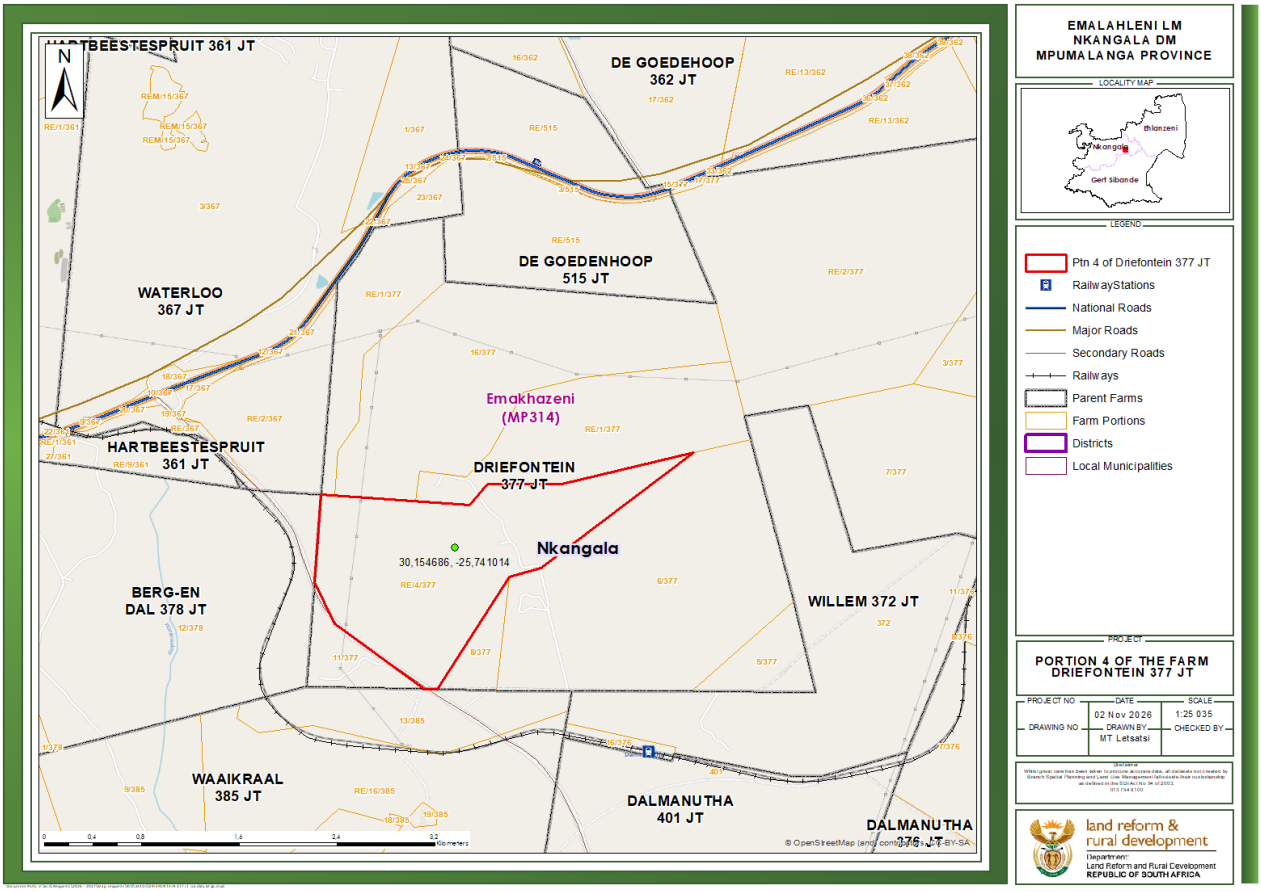
APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

C4.1: LAYOUT PLAN

Site information

Province: Mpumalanga Province
District Municipality: Nkangala District Municipality
Municipality: Emakhazeni Local Municipality
Farm names:

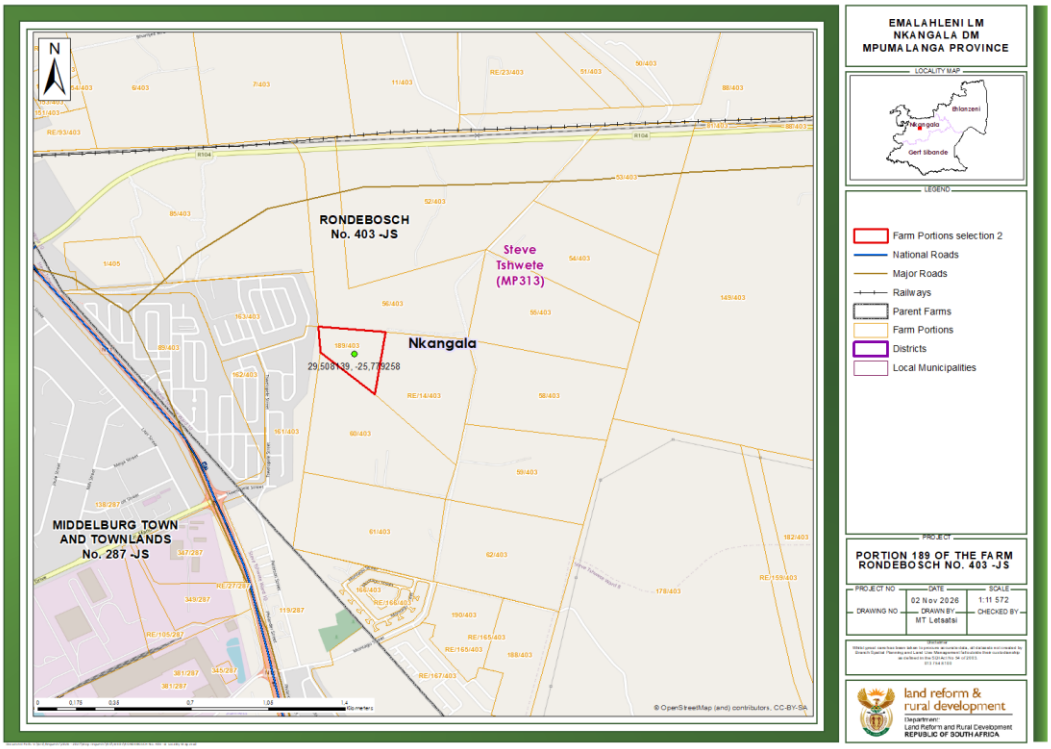
- **Portion 4 Remaining Extent of Farm Driefontein No 377 JT**
  GPS COORDINATES: Latitude: -25,741014
  Longitude: 30,154686



- **PORTION 5 AND 10 OF THE FARM PALMIETFONTEIN 104 JT,**
  GPS Coordinates: 25°21'55.27"S 30° 7'23.69"E

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- **Portion 189 (A Portion of Portion 14) for the Farm Rondebosch 403 JS.**
  GPS COORDINATES: Latitude: -25,779258
  Longitude: 29,508139

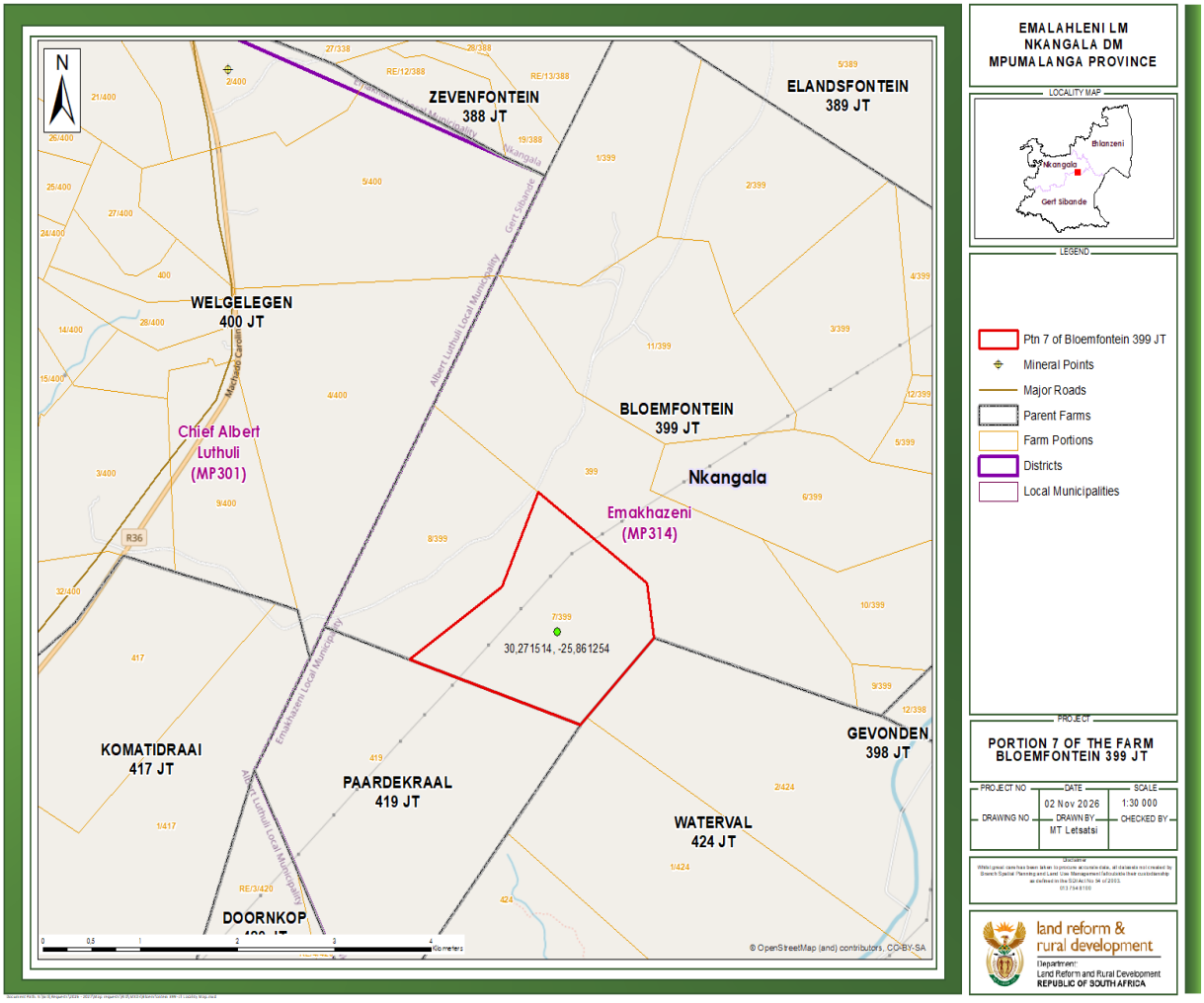


Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- **Portion 7 & 8 of farm Bloemfontein 399 JT**

GPS COORDINATES: Latitude: -25,861254

Longitude: 30,271514508139



Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT

CONTRACT NO.: CON 000 (2024/2025)

APPOINTMENT OF A CONTRACTOR FOR SITING; DRILLING AND EQUIPPING OF BOREHOLES IN PALMIETFONTEIN 104 JT (2), BLOEMFONTEIN 399 JT, RONDEBOSCH 403 JS (2) AND DRIEFONTEIN FARMS IN EMAKHAZENI LOCAL MUNICIPALITY IN NKANGALA DISTRICT IN THE MPUMALANGA PROVINCE

C4.2: TENDER DRAWINGS

No drawings will be issued.