



TENDER NO. SCMU10-21/22-0034

**PROFESSIONAL CONSULTING ENGINEERING
SERVICES FOR ADMINISTRATION AND
MONITORING OF THE WORKS CONTRACT FOR
UPGRADING OF PROVINCIAL ROAD DR08005
MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3:
SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING
MAINTENANCE WORKS**

CLOSING DATE AND TIME

11:00 on Wednesday 09 March 2022

ISSUED BY:

**Eastern Cape Department of
Transport
32 Cowan Close, Flemming Street
Stellenbosch Park Building
Schornville
King Williams Town
5601**

FOR RESPONDENT:

Name of Respondent Entity:

CSD No.:



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TENDER

PART T1: TENDERING PROCEDURES

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SCMU10-21/22-0034: PROFESSIONAL CONSULTING ENGINEERING SERVICES FOR ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS

T1.1: TENDER NOTICE AND INVITATION TO TENDER

T1.1.1 TENDER INVITATION

The Department of Transport of the Province of Eastern Cape, as the Employer, hereby invites tenders for the provision of Professional Consulting Engineering Services for Administration and Monitoring of the Works Contract for Upgrading of Provincial Road DR08005 Magusheni to Mzamba (R61) ± 79km Phase 3: Section 2 Km 59,5 to Km 67,7 - Including Maintenance Works.

The Service Provider shall also enter into a contract over the full contract duration through partnership, joint venture or subcontracting with a Targeted Enterprise(s) to perform the specified Employer's Targeted Enterprises target of the employment of:

- (a) An Assistant Contracts Engineer
- (b) A full-time Assistant Engineer's Representative (as part of the Site Staff personnel)

Tender documents will be available as at 12h00 on Friday, 11 February 2022 free of charge, via download from the Eastern Cape Department of Transport website www.ectransport.gov.za and/or Department of National Treasury eTender Publication <https://www.etenders.gov.za/>.

In lieu of a clarification meeting, the Employer shall provide a Clarification briefing presentation for prospective tenderers outlining important aspects of the tender documentation including eligibility and responsiveness criteria. After review of the Clarification briefing presentation and inspection of the tender documentation, tenderers may seek further clarification from the Employer in terms of the Conditions of Tender. The Clarification briefing presentation shall be available for download on the Eastern Cape Department of Transport website www.ectransport.gov.za.

Tenderers may seek clarification from the Employer in terms of this tender up to 7 days working days prior to closing of the tender. Tenderers will be required to download any addenda issued by the Employer from the Eastern Cape Department of Transport website www.ectransport.gov.za only. Failure to do so will render the tender non-responsive.

Eligibility:

Only those tenderers who satisfy all the following criteria, as indicated in C.2.1.1 of T1.2: TENDER DATA are eligible to submit tenders.

- a) Company experience
- b) Key personnel

T1.1.2 TENDER SUBMISSIONS

The completed tender document as well as any supporting documentation shall be placed in a sealed envelope clearly marked **"Tender for Contract No: SCMU10-21/22-0034 for Professional Consulting Engineering Services for Administration and Monitoring of the Works Contract for Upgrading of Provincial Road DR08005 Magusheni to Mzamba (R61) ± 79km Phase 3: Section 2 Km 59,5 to Km 67,7 - Including Maintenance Works** and deposited in the Tender Box at the Department of Transport, Entrance Foyer C, Stellenbosch Park, 32 Cowan Place, Schornville, King William's Town, not later than **11h00 on Wednesday, 09 March 2022**.





Province of the
EASTERN CAPE
TRANSPORT

T1.1.3 TENDER EVALUATION

This tender will be evaluated in two (2) phases as follows:

- Phase One: Compliance, eligibility and responsiveness in terms of the tender rules and conditions,
- Phase Two: Responsive tenderers will thereafter be evaluated in terms of price and preference, including risk analysis, as stated in the tender data.

For this tender, it is estimated that the 90/10 system shall apply for Price and Preference. Where a maximum of 90 points can be scored for price (based on Tenderer's Offer) and a maximum of 10 points can be scored for preference (based on Tenderer's B-BBEE status level).

T1.1.4 TENDER SPECIFICATIONS, CONDITIONS AND RULES

The conditions of tender applicable for this tender are detailed in T1.2: TENDER DATA and T2.2: RETURNABLE SCHEDULES.

Note: Tender validity period is **90 days**

T1.1.5 ENQUIRIES WITH REGARD TO THIS ADVERT MAY BE DIRECTED TO:

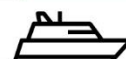
SCM Related Enquiries

Contact: Mr. M. Cwili – Cell No.: 067 414 2504
Email: Mandiphiwe.Cwili@ectransport.gov.za
Mr. P. Nqikashe – Cell No.: 076 419 8001
Email: philasande.nqikashe@ectransport.gov.za

Technical Enquiries

Mr. C Boshoff
082 854 3795
Clive.Boshoff@ectransport.gov.za

For Complaints, Fraud, & Tender Abuse: Call: 0800 701 1701



An efficient, safe, sustainable, affordable and accessible transport system

T1.2: TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement as per Board Notice No. 423 of 2019 published in Government Gazette No. 42622 of 08 August 2019 and as amended from time to time. (see www.cidb.org.za)

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

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

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

Clause	Wording / Data
C.1	General
C.1.1	Actions
C.1.1.1	<i>Add the following:</i> The Employer is the Eastern Cape Department of Transport , represented by the Head of Department and/or such other person or persons duly authorized thereto by the Employer in writing.
C.1.1.2	<i>Add the following clauses after the first paragraph:</i> The parties agree that this tender and its acceptance shall also be subject to the terms and conditions contained in the Employer's Supply Chain Management Policy ('SCM Policy'). Abuse of the supply chain management system is not permitted and may result in actions as set out in the SCM Policy.
C.1.1.4	<i>Add the following after C.1.1.3:</i> Unless stated otherwise in the tender data, each tenderer and the Employer undertake to accept the jurisdiction of the law courts of the Republic of South Africa.
C.1.2	Tender Documents Refer to contents' pages of this document for a complete and comprehensive list of all Tender Documents.
C.1.3	Interpretation
C.1.3.3	<i>Add the following after C.1.3.3 d)</i> e) material responsiveness criteria mean a responsiveness criteria for which the tenderer must be responsive in accordance with the conditions of tender applicable to said responsiveness criteria at the closing time for submission of tender offers, for which the clarification of substance provide by the tenderer after submission shall not be sought, offered or permitted.

Clause	Wording / Data
C.1.4	<p>Communication and the employer's agent</p> <p>The Employer's agent is:</p> <p>Name: Mr Clive Boshoff</p> <p>Address: 32 Cowan Close, Flemming Street Stellenbosch Park Building Schornville King Williams Town, 5601</p> <p>Tel: 082 854 3795</p> <p>Fax: Not available</p> <p>E-mail: Clive.Boshoff@ectransport.gov.za</p>
C.2	Tenderer's obligations
<p>C.2.1</p> <p>C.2.1.1</p>	<p>Eligibility</p> <p>Only those tenderers who satisfy all the following criteria are eligible to submit tenders:</p> <p>a) Company experience:</p> <p>In order to be considered for an appointment in terms of this tender, the tenderer must be able to demonstrate the completion of at least one (1) similar project in the past ten (10) years or currently being carried out.</p> <p>A similar project is defined as BITUMINOUS SURFACED ROAD UPGRADE PROJECT of which:</p> <ul style="list-style-type: none"> i) the works contract (construction) value is at least R 130 million (incl. VAT); and ii) the employer is a National or Provincial Roads Authority; and iii) is located within the South African Development Community (SADC) region; and iv) the Works during Administration and Monitoring of the Works Contract (construction) stage included as a minimum the following activities: <ul style="list-style-type: none"> 1) bulk earthworks operations; and 2) road layerworks and bituminous surfacing; and 3) stormwater drainage (e.g. pipe culverts, box culverts, concrete lined drains); and 4) the use of EME / QSE subcontractors as part of the employer's contract participation goal. <p>A completed Returnable Schedule L: COMPANY EXPERIENCE SCHEDULE (including TABLE A of this schedule) to be provided, including all attached documents and Returnable Schedule(s) as required.</p> <p>Compliance with C.2.1.1a) and Returnable Schedule L: COMPANY EXPERIENCE SCHEDULE (including TABLE A of this schedule) is deemed a <u>material responsiveness criteria</u>.</p>

Clause	Wording / Data
	<p>b) Key personnel:</p> <p>In order to be considered for an appointment in terms of this tender, the tenderer must have in its full-time employment or intend to employ (subcontract), for the duration of the required services the following key personnel who comply with the following minimum requirements:</p> <p>i) <u>Contact Engineer who shall</u></p> <ul style="list-style-type: none"> • be registered as a Professional Engineer or Professional Engineering Technologist under the Engineering Profession Act (Act 46 of 2000), and • have a minimum of 10 years' experience in the roads upgrading field, and • have experience on 2 similar projects (see similar project definition in clause C.2.1.1) as Contract Engineer, and • be in the permanent employment of the tenderer or who the tenderer intends to employ (subcontract) for the duration of the required services, if the tenderer is appointed in terms of this tender. <p>ii) <u>Engineer's Representative who shall</u></p> <ul style="list-style-type: none"> • be registered as a Professional Engineering Technologist or Professional Engineering Technician under the Engineering Profession Act (Act 46 of 2000), and • have a minimum of 10 years' experience in the roads upgrading field, and • have experience on 2 similar projects (see similar project definition in clause C.2.1.1) as Engineer's Representative, and • have completed the NQF level 5 or 7 unit standard for Labour Intensive Construction, obtained from a SAQA accredited institution and • be in the permanent employment of the tenderer or who the tenderer intends to employ (subcontract) for the duration of the required services, if the tenderer is appointed in terms of this tender. <p>iii) <u>Senior Materials Technician who shall</u></p> <ul style="list-style-type: none"> • have experience in materials investigation, quality control and reporting on Administration and Monitoring of the Works Contract (construction) stage projects, and • be in the permanent employment of the tenderer or who the tenderer intends to employ (subcontract) for the duration of the required services, if the tenderer is appointed in terms of this tender, and • have a minimum of 20 years' experience with no formal qualification or registration, or • have a minimum of 10 years' experience post National Diploma in civil engineering, or • have a minimum of 5 years' experience post Professional Engineering Technician or higher registration. <p>A completed Returnable Schedule N: KEY PERSONNEL SCHEDULE (including Table A of this schedule) to be provided, including all attached documents and Returnable Schedule(s) as required.</p>

Clause	Wording / Data
	Compliance with C.2.1.1b) and Returnable Schedule N: KEY PERSONNEL SCHEDULE (including Table A of this schedule) is deemed a <u>material responsiveness criteria</u> .
C.2.6	Acknowledge addenda <i>Add the following:</i> Failure to apply instructions contained in addenda may render a tenderer's offer non-responsive in terms of Condition of Tender C.3.8.
C.2.7	Clarification meeting <i>Delete the heading "Clarification meeting" and replace with "Clarification briefing"</i> <i>Delete the contents of the clause and replace with the following:</i> In lieu of a clarification meeting, the Employer shall provide a Clarification briefing presentation for prospective tenderers outlining important aspects of the tender documentation including eligibility and responsiveness criteria. After review of the Clarification briefing presentation and inspection of the tender documentation, tenderers may seek further clarification from the Employer in terms of the Conditions of Tender. The Clarification briefing presentation shall be available for download on the Eastern Cape Department of Transport website www.ectransport.gov.za .
C.2.8	Seek clarification Request clarifications at least seven (7) working days before the closing time.
C.2.9	Insurance No insurance is provided by the Employer.
C.2.10	Pricing the tender offer <i>Add the following after C.2.10.4:</i>
C.2.10.5	No tendered rates and/or lump sums provided by the tenderer shall be negative. Failure to comply may result in a non-responsive tender
C.2.12	Alternative tender offers No alternative tender offers will be considered.
C.2.13	Submitting a tender offer
C.2.13.1	If a tenderer, including key personnel, a joint venture or consortium member or a Targeted Enterprise, submits or participates in more than one tender for the same project, then all such tenders shall be disqualified.
C.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original, plus zero (0) copies.
C.2.13.5	The tender submission details are stated in T1.1: TENDER NOTICE AND INVITATION TO TENDER .

Clause	Wording / Data
C.2.13.6	A two-envelope procedure will not be followed (C.3.5).
C.2.15 C.2.15.1	Closing time The closing time for submission of tender offers is as stated in T1.1: TENDER NOTICE AND INVITATION TO TENDER . It is the responsibility of the tenderer to ensure that tender documents are submitted on or before the closing date and time and at the correct location as the Employer will not take responsibility for any wrong delivery.
C.2.16 C.2.16.1	Tender offer validity The tender offer validity period is 90 days.
C.2.17	Clarification of tender offer after submission Any clarification requested by the Employer must be provided within the time period as stated in the Employer's written request.
C.2.23	Certificates The tenderer is required to submit with his tender all certificates as required for in T1.2: TENDER DATA and T2.2: RETURNABLE SCHEDULES .
C.3	The employer's undertakings
C.3.1 C.3.1.1	Respond to requests from the tenderer The Employer shall respond to clarifications received up to seven (7) working days before the tender closing time.
C.3.2	Issue Addenda The Employer shall issue addenda until five (5) working days before the tender closing time. Addenda issued by the Employer (if any) shall be available for download on the Eastern Cape Department of Transport website www.ectransport.gov.za only. Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the Employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail or facsimile or registered post or making available via download.
C.3.4 C.3.4.2	Opening of tender submissions Delete the contents of C.3.4.2 and replace with the following: After the tender closing time the Employer's Supply Chain Management officials shall open submitted tender offers. Thereafter the Employer shall make available via download on the Eastern

Clause	Wording / Data
	Cape Department of Transport website www.ectransport.gov.za the names of each tenderer whose tender offer was opened and, where applicable, the total price offered.
C.3.7	<p>Grounds for rejection and disqualification</p> <p><i>Add the following:</i></p> <p>Prior to disqualification, the Employer shall inform the tenderer and give the tenderer an opportunity to make representations within fourteen (14) calendar days as to why the tender submitted should not be disqualified and as to why the tenderer should not be restricted by the National Treasury from conducting any business with any organ of state for a period not exceeding ten (10) years.</p> <p>In the event of disqualification, the Employer may, at its sole discretion, claim damages from the tenderer and impose a specified period during which tender offers will not be accepted from the offending tenderer and, the Employer shall inform the National Treasury in writing.</p>
C.3.8 C.3.8.2	<p>Test for responsiveness</p> <p><i>Add the following after C.3.8.2c):</i></p> <p>d) affect the evaluation of a material responsiveness criteria.</p>
C.3.9 C.3.9.5	<p>Arithmetical errors, omissions and discrepancies</p> <p><i>Amend the heading to read "Arithmetical errors, omissions, discrepancies and imbalanced rates or lump sums"</i></p> <p><i>Add the following after C.3.9.4:</i></p> <p>In the event of tendered rates or lump sums being declared by the Employer to be imbalanced to it:</p> <ol style="list-style-type: none"> because they are not priced, either excessively low or high, or not in proper balance with other rates or lump sums of a similar nature, <p>The tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to.</p> <p>If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.</p> <p>The tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the tender offer in accordance with this clause.</p> <p>Should the tenderer fail to amend his tender in a manner acceptable to and within the time stated by the Employer, the Employer may declare the tender as non-responsive.</p>

Clause	Wording / Data								
C.3.11	Evaluation of tender offers								
C.3.11.1	<p>General</p> <p>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.</p>								
C.3.11.2	<p>Price and Preference Method</p> <p>Reduce each responsive tender offer to a comparative price and preference by:</p> <ol style="list-style-type: none"> Scoring tender evaluation points for price in terms of C.3.11.4. Scoring tender evaluation points for preference in terms of C.3.11.5. Add the tender evaluation points for price and preference. <p>The procedure for the evaluation of responsive tenders is Price and Preference.</p> <table border="1"> <thead> <tr> <th></th><th>Maximum number of tender evaluation points (per point system)</th></tr> </thead> <tbody> <tr> <td>Price component</td><td>80 or 90</td></tr> <tr> <td>Preference component</td><td>20 or 10</td></tr> <tr> <td>Total evaluation points</td><td>100</td></tr> </tbody> </table>		Maximum number of tender evaluation points (per point system)	Price component	80 or 90	Preference component	20 or 10	Total evaluation points	100
	Maximum number of tender evaluation points (per point system)								
Price component	80 or 90								
Preference component	20 or 10								
Total evaluation points	100								
C.3.11.2.1	<p>The 80/20 evaluation points system:</p> <p>Is applicable where financial value, inclusive of VAT, of the lowest responsive tender offer has a value that equals or is less than R 50 000 000.00.</p>								
C.3.11.2.2	<p>The 90/10 evaluation points system:</p> <p>Is applicable where the financial value, inclusive of VAT, of the lowest responsive tender offer received has a value in excess of R 50 000 000.00.</p>								
C.3.11.2.3	Rank tender offers from highest number of total tender evaluation points to the lowest.								
C.3.11.2.4	Recommend the tenderer with the highest number of total tender evaluation points for award of a contract, unless there are compelling and justifiable reasons not to do so.								
C.3.11.2.5	Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of total tender evaluation points and recommend the tenderer with the highest number of total tender evaluation points, unless there are compelling and justifiable reasons not to do so, in which case the process set out herein shall be repeated.								
C.3.11.3	<p>Decimal places</p> <p>Score price and preference tender evaluation points, as relevant, to two decimal places.</p>								

Clause	Wording / Data
C.3.11.4	<p>Scoring Price</p> <p>Score price tender evaluation points of responsive tender offers, using the following formula</p> $N_{FO} = W_1 \times \left[1 - \left\{ \frac{(P - P_m)}{P_m} \right\} \right]$ <p>N_{FO} is the number of tender evaluation points awarded for price.</p> <p>W_1 is the maximum possible number of tender evaluation points for price as stated in the tender data.</p> <p>P is the comparative price of the tender offer under consideration.</p> <p>P_m is the lowest comparative price</p>
C.3.11.5	<p>Scoring preference</p>
C.3.11.5.1	<p>Preference tender evaluation points are awarded to responsive tenderers in accordance with the tenderer's eligible B-BBEE status level of contributor.</p>
C.3.11.5.2	<p>Confirm that responsive tenderers are eligible for the preferences claimed in accordance with the following provisions:</p> <ol style="list-style-type: none"> A tenderer's scorecard shall be measured in terms the latest amended Construction Sector Code in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, (Act No. 53 of 2003) as amended by the B-BBEE Act 46 of 2013 as issued by the Department of Trade and Industry; and The Scorecard shall be submitted as a certificate attached to returnable schedule SBD6.1 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017; and The certificate shall: <ol style="list-style-type: none"> be an original or an original certified copy of the original; and have been issued by a verification agency accredited by the South African National Accreditation System (SANAS); or have been issued by a registered auditor approved by the Independent be in the form of a sworn affidavit in the case of an Exempted Micro Enterprise (EME); and The Verification Certificate must be valid at the tender closing date; and The date of issue of the certificate must be less than twelve (12) months prior to the tender closing date; and Compliance with any other information requested to be attached to returnable schedule SBD6.1 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017; If a tenderer claims a preference score without submitting an acceptable verification certificate, a period of 24 hours will be granted to submit an acceptable verification certificate which was valid at date of tender closure; and Failure to submit a valid verification certificate will result in the award of zero (0) points for preference; and In the case of a joint venture (JV), a consolidated B-BBEE verification certificate in the name of the JV shall be submitted.

Clause	Wording / Data																														
C.3.11.5.3	Reject all claims for preferences where tenderers are not eligible for such preferences in terms of C.3.11.5.2.																														
C.3.11.5.4	<p>Calculate the total number of tender evaluation points for preference claimed in accordance with the following provisions.</p> <p>Scoring preference is based on a tenderer's scorecard measured in terms the latest amended Construction Sector Code in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, (Act No. 53 of 2003) as amended by the B-BBEE Act 46 of 2013 as issued by the Department of Trade and Industry and eligibility for preference points provisions</p> <p>Points awarded will be according to the tenderer's B-BBEE status level of contributor as per the table below:</p> <table><tr><th>B-BBEE Status Level of contributor</th><th>Number of Points (80/20 system)</th><th>Number of Points (90/10 system)</th></tr><tr><td>1</td><td>20</td><td>10</td></tr><tr><td>2</td><td>18</td><td>9</td></tr><tr><td>3</td><td>14</td><td>6</td></tr><tr><td>4</td><td>12</td><td>5</td></tr><tr><td>5</td><td>8</td><td>4</td></tr><tr><td>6</td><td>6</td><td>3</td></tr><tr><td>7</td><td>4</td><td>2</td></tr><tr><td>8</td><td>2</td><td>1</td></tr><tr><td>Non-Compliant Contributor</td><td>0</td><td>0</td></tr></table>	B-BBEE Status Level of contributor	Number of Points (80/20 system)	Number of Points (90/10 system)	1	20	10	2	18	9	3	14	6	4	12	5	5	8	4	6	6	3	7	4	2	8	2	1	Non-Compliant Contributor	0	0
B-BBEE Status Level of contributor	Number of Points (80/20 system)	Number of Points (90/10 system)																													
1	20	10																													
2	18	9																													
3	14	6																													
4	12	5																													
5	8	4																													
6	6	3																													
7	4	2																													
8	2	1																													
Non-Compliant Contributor	0	0																													
C.3.11.6	<p>Risk Analysis</p> <p>Notwithstanding compliance regarding C2.1 or any other requirements of the tender, the Employer will perform a risk analysis of at least the top five (5) responsive tenderers with the highest number of total tender evaluation points in respect of the following:</p> <p>a) reasonableness of the financial offer</p> <p>b) reasonableness of tendered item rates and lump sums</p> <p>The conclusions drawn from this risk analysis will be used by the Employer in determining the acceptability of the tender offer in terms of C.3.13 b)</p>																														
C.3.13	<p>Acceptance of tender offer</p> <p>Add the following after C.3.13 f):</p> <p>g) the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; and</p> <p>h) the tenderer has not abused the Employer's supply chain management system; and</p> <p>i) the tenderer has not failed to perform on any previous contract with the Employer; and</p> <p>j) the tenderer has provided a complete and signed CERTIFICATE OF AUTHORITY FOR SIGNATORY in terms of Returnable Schedule C: CERTIFICATE OF AUTHORITY FOR SIGNATORY; and</p>																														

Clause	Wording / Data
	<p>k) the tenderer has provided a completed Returnable Schedule E: (SBD 1) INVITATION TO BID AND TERMS AND CONDITIONS FOR BIDDING; and</p> <p>l) the tenderer has provided a completed Returnable Schedule F: COMPULSORY ENTERPRISE QUESTIONNAIRE; and</p> <p>m) the tenderer has provided a completed Returnable Schedule G: (SBD 4) DECLARATION OF INTEREST; and</p> <p>n) the tenderer has provided a completed Returnable Schedule I: (SBD 8) DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTISES which does not indicate any conflict or past practices that renders the tender non-responsive; and</p> <p>o) the tenderer has provided a completed Returnable Schedule J: (SBD 9) CERTIFICATE OF INDEPENDENT TENDER DETERMINATION which does not indicate any non-compliance with the requirements of the applicable Returnable Schedule; and</p> <p>p) the tenderer has provided a completed Returnable Schedule O: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE; and</p> <p>q) the tenderer has provided company registration and CIPRO certificates in terms of Returnable Schedule P: COMPANY REGISTRATION AND CIPRO CERTIFICATES; and</p> <p>r) the tenderer is tax compliant in terms of SARS; and</p> <p>s) the tenderer has completed and provided Returnable Schedule R: CERTIFICATE OF INSURANCE COVER which indicates the tenderer's ability, if appointed to the contract, to provide the required insurances as stated in C1.2: CONTRACT DATA (PART 1: DATA PROVIDED BY THE EMPLOYER); and</p> <p>t) the tenderer has provided evidence that he is registered and in good standing with the Compensation Fund in terms of Section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993); and</p> <p>u) the tenderer has completed and provided Returnable Schedule U: CERTIFICATE OF PERMISSION TO CONDUCT DUE DILIGENCE INVESTIGATION; and</p> <p>v) the tenderer is eligible and responsive in terms of the Standard Conditions of Tender, T1.2 TENDER DATA and Returnable Schedules.</p>
C.3.16	<p>Registration of the award</p> <p><i>Delete and replace with the following:</i></p> <p>The Employer shall, after acceptance of the tender offer in writing, register and publish the award in terms of the Employer's Supply Chain Management Policy.</p>
C.3.17	<p>Provide copies of the contracts</p> <p>The number of paper copies of the signed contract to be provided by the Employer is one (1).</p>

TENDER

PART T2: RETURNABLE DOCUMENTS

T2.1	LIST OF RETURNABLE DOCUMENTS	18
T2.2	RETURNABLE SCHEDULES	20

T2.1: LIST OF RETURNABLE DOCUMENTS**T2.1.1 THE TENDERER MUST COMPLETE THE FOLLOWING RETURNABLE SCHEDULES IN NON-ERASABLE BLACK INK**

SCHEDULE	DESCRIPTION	CHECKLIST
A	CERTIFICATE OF CONFIRMATION THAT THE TENDERER READ THE CLARIFICATION BRIEFING PRESENTATION	Y <input type="checkbox"/> / N <input type="checkbox"/>
B	JOINT VENTURE / CONSORTIUM DISCLOSURE (if applicable)	Y <input type="checkbox"/> / N <input type="checkbox"/>
C	CERTIFICATE OF AUTHORITY FOR SIGNATORY	Y <input type="checkbox"/> / N <input type="checkbox"/>
D1	CERTIFICATE OF SINGLE TENDER SUBMISSION (JV or CONSORTIUM MEMBER)	Y <input type="checkbox"/> / N <input type="checkbox"/>
D2	CERTIFICATE OF SINGLE TENDER SUBMISSION (SUBCONTRACTED KEY PERSON)	Y <input type="checkbox"/> / N <input type="checkbox"/>
E	(SBD 1) INVITATION TO BID AND TERMS AND CONDITIONS FOR BIDDING	Y <input type="checkbox"/> / N <input type="checkbox"/>
F	COMPULSORY ENTERPRISE QUESTIONNAIRE	Y <input type="checkbox"/> / N <input type="checkbox"/>
G	(SBD 4) DECLARATION OF INTEREST	Y <input type="checkbox"/> / N <input type="checkbox"/>
H	(SBD 6.1) PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017 (including affidavit forms for EMEs)	Y <input type="checkbox"/> / N <input type="checkbox"/>
I	(SBD 8) DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTISES	Y <input type="checkbox"/> / N <input type="checkbox"/>
J	(SBD 9) CERTIFICATE OF INDEPENDENT TENDER DETERMINATION	Y <input type="checkbox"/> / N <input type="checkbox"/>
K	RECORD OF ADDENDA TO TENDER DOCUMENTS	Y <input type="checkbox"/> / N <input type="checkbox"/>
L	COMPANY EXPERIENCE SCHEDULE (including TABLE A of this schedule)	Y <input type="checkbox"/> / N <input type="checkbox"/>
M	SIMILAR PROJECT VERIFICATION FORM	Y <input type="checkbox"/> / N <input type="checkbox"/>
N	KEY PERSONNEL SCHEDULE (including Table A of this schedule)	Y <input type="checkbox"/> / N <input type="checkbox"/>
O	REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE	Y <input type="checkbox"/> / N <input type="checkbox"/>
P	COMPANY REGISTRATION AND CIPRO CERTIFICATES	Y <input type="checkbox"/> / N <input type="checkbox"/>
Q	CERTIFICATE OF TAX COMPLIANCE	Y <input type="checkbox"/> / N <input type="checkbox"/>
R	CERTIFICATE OF INSURANCE COVER	Y <input type="checkbox"/> / N <input type="checkbox"/>
S	TENDERER'S REGISTERED FINANCIAL SERVICE PROVIDER LETTER AND BANK DETAILS	Y <input type="checkbox"/> / N <input type="checkbox"/>
T	CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014 AS WELL AS COID ACT, 1993	Y <input type="checkbox"/> / N <input type="checkbox"/>
U	CERTIFICATE OF PERMISSION TO CONDUCT DUE DILIGENCE INVESTIGATION	Y <input type="checkbox"/> / N <input type="checkbox"/>
V	SCHEDULE OF DEVIATIONS OR QUALIFICATIONS BY TENDERER	Y <input type="checkbox"/> / N <input type="checkbox"/>

T2.1.2 OTHER PARTS OF THE DOCUMENT TO BE COMPLETED AS PART OF THE TENDER SUBMISSION

C1.1.1 FORM OF OFFER

C1.2 CONTRACT DATA (PART 2: DATA PROVIDED BY THE SERVICE PROVIDER)

C2.2 PRICING SCHEDULE

NOTES TO TENDERER

- a) Returnable Schedules have been based on the CIDB Standard for Uniformity in Construction Procurement and incorporate National Treasury and Eastern Cape Department of Transport requirements.
- (b) Failure to submit fully completed relevant Returnable Schedules may render such a tender offer non-responsive.
- (c) Tenderers shall note that their signature appended to Returnable Schedules represents a declaration that they vouch for the accuracy and correctness of the information provided.
- (d) Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the Returnable Schedules and / or supporting documentation is accepted in good faith and as justification for entering into a contract with a tenderer. If subsequently any information is found to be incorrect such discovery shall be taken as wilful misrepresentation by that tenderer to induce the contract. In such event:
 - (i) the Employer shall inform the tenderer and give the tenderer an opportunity to make representations within fourteen (14) days as to why the tender submitted should not be disqualified in terms of the Conditions of Tender and as to why the Employer should not apply any other measures available;
 - (ii) if the Employer has already entered into a contract with the tenderer, the Employer has the discretionary right under the Conditions of Contract to terminate the contract.
- (e) All supporting documentation and certificates shall be securely attached to the applicable Returnable Schedules. It is the responsibility of the tenderer to ensure no loose or unsecure pages are present in the submitted tender which may render the tender non-responsive.
- (f) Where the space provided in the bound tender document is insufficient the tenderer may, after giving written notice to the Employer, may draw up separate schedules in accordance with the given formats. These schedules shall then be bound together with a suitable contents page and submitted with the tender. All such schedules must be signed and clearly marked as appendices to the relevant returnable schedules. The Employer does not take any responsibility for any separate schedules lost during the tender evaluation process.

T2.2: RETURNABLE SCHEDULES

A:	CERTIFICATE OF CONFIRMATION THAT THE TENDERER READ THE CLARIFICATION BRIEFING PRESENTATION
-----------	---

Note to tenderer:

1. The tender is required to complete this certificate to certify that the tender has read the clarification briefing presentation provided for by the Employer as part of this tender documentation.

This is to certify that I,

representative of (insert name of tenderer)

.....
of (address)

.....
Telephone number

Fax number

E-mail

read the clarification briefing presentation provided for by the Employer as part of this tender documentation.

TENDERER'S REPRESENTATIVE

.....
Signature

.....
Date

B: JOINT VENTURE / CONSORTIUM DISCLOSURE (if applicable)**Notes to tenderer:**

1. If submitting a tender offer as a joint venture (JV) or consortium, attach a signed copy of the JV or Consortium Agreement duly signed by all members, to this Returnable Schedule.
2. The percentage (%) shareholding as well as the participation details of each member shall be clearly stated.
3. In case of a JV or consortium the tender is required to comply with the additional requirements in terms of following Returnable Schedules:
 - C: CERTIFICATE OF AUTHORITY FOR SIGNATORY
 - D1: CERTIFICATE OF SINGLE TENDER SUBMISSION (JV or CONSORTIUM MEMBER)
 - F: COMPULSORY ENTERPRISE QUESTIONNAIRE
 - G: (SBD 4) DECLARATION OF INTEREST
 - H: (SBD 6.1) PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017
 - I: (SBD 8) DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTISES
 - O: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE
 - P: COMPANY REGISTRATION AND CIPRO CERTIFICATES
 - Q: CERTIFICATE OF TAX COMPLIANCE
 - R: CERTIFICATE OF INSURANCE COVER
 - S: TENDERER'S REGISTERED FINANCIAL SERVICE PROVIDER LETTER AND BANK DETAILS
 - T: CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014 AS WELL AS COID ACT, 1993
 - U: CERTIFICATE OF PERMISSION TO CONDUCT DUE DILIGENCE INVESTIGATION
4. Failure to comply with the requirements of this Returnable Schedules may render the tender offer non-responsive.

TENDERER'S REPRESENTATIVE

.....
Signature.....
Date

C: CERTIFICATE OF AUTHORITY FOR SIGNATORY
--

Notes to tenderer:

- 1 The signatory for the tenderer shall confirm his/her authority thereto by attaching, to this Returnable Schedule, on the tendering company's letterhead a duly signed and dated copy of the relevant resolution of the board of directors/partners.
2. In the event of a tender submission by a joint venture or consortium, a certificate is required from each member of the joint venture or consortium clearly setting out authority for signatory.
3. The resolution below is given as an example of an acceptable format for authorisation, but submission of this page with the example completed shall not be accepted as authorisation of the tenderer's signatory.
4. Compliance with the requirements of this Returnable Schedule is deemed a material responsiveness criteria.

EXAMPLE BELOW:

By resolution of the board of directors passed at a meeting held on.....

Mr/Ms

whose signature appears below, has been duly authorised to sign all documents in connection with the tender for **SCMU10-21/22-0034** and any contract that may arise therefrom on behalf of

.....
(name of tenderer in block capitals)

SIGNED ON BEHALF OF THE COMPANY:.....

IN HIS/HER CAPACITY AS:

DATE:.....

SIGNATURE OF SIGNATORY:.....

WITNESS:

SIGNATURE

SIGNATURE

.....
NAME (PRINT)

.....
NAME (PRINT)

D1: CERTIFICATE OF SINGLE TENDER SUBMISSION (JV or CONSORTIUM MEMBER)
--

Notes to tenderer:

1. This certificate serves as a declaration by the tenderer's Joint Venture (JV) or Consortium member that a single tender was submitted.
2. In the case of a Joint Venture (JV) or Consortium a separate certificate is to be completed and submitted by each JV or Consortium member.
3. One (1) completed certificate required for each Joint Venture / Consortium member and attached to Returnable Schedule B: JOINT VENTURE / CONSORTIUM DISCLOSURE, if applicable.
4. Compliance with the requirements of this Returnable Schedule is deemed a material responsiveness criteria if the tenderer submits a tender offer as a Joint Venture (JV) or Consortium.

DECLARATION

I, the undersigned,

in submitting the accompanying tender on behalf of the tenderer do hereby make the following statements that I certify to be true and complete in every respect:

1. I have read and understand the notes to, and the contents of, this certificate.
2. Joint Venture / Consortium member name:
3. I understand that the accompanying tender and any other tender shall be disqualified in the event that I, include a Joint Venture / Consortium member participating in more the one (1) tender for this project.

SIGNATURE:

DATE:

NAME:

POSITION:

D2: CERTIFICATE OF SINGLE TENDER SUBMISSION (SUBCONTRACTED KEY PERSON)**Notes to tenderer:**

1. This certificate serves as a declaration by the tenderer's (subcontracted) Key Person that a single tender was submitted.
2. In the case of a subcontracted Key Person, a separate certificate is to be completed and submitted by each subcontracted Key Person.
3. One (1) completed certificate required for each subcontracted Key Person and attached to Returnable Schedule N: KEY PERSONNEL SCHEDULE, if applicable.
4. Compliance with the requirements of this Returnable Schedule is deemed a material responsiveness criteria if a tenderer submits a tender offer which includes subcontracted Key Person(s) (a person who is not in the full-time employment of the tenderer at the tender closing time).

DECLARATION

I, the undersigned,

in submitting the accompanying tender on behalf of the tenderer do hereby make the following statements that I certify to be true and complete in every respect:

1. I have read and understand the notes to, and the contents of, this certificate.
2. Key Person name:
3. Key Personnel position:
4. I understand that the accompanying tender and any other tender shall be disqualified in the event that I, include a subcontracted Key Person participating in more the one (1) tender for this project.

SIGNATURE:

DATE:

NAME:

POSITION:

E: (SBD 1) INVITATION TO BID AND TERMS AND CONDITIONS FOR BIDDING**PART A: INVITATION TO BID**

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE EASTERN CAPE DEPARTMENT OF TRANSPORT					
BID NUMBER:	SCMU10-21/22-0034	CLOSING DATE:	09/03/2022	CLOSING TIME:	11H00
DESCRIPTION	Professional Consulting Engineering Services for Administration and Monitoring of the Works Contract for Upgrading of Provincial Road DR08005 Magusheni to Mzamba (R61) ± 79km Phase 3: Section 2 Km 59,5 to Km 67,7 - Including Maintenance Works				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
Eastern Cape Department of Transport					
32 Cowan Close, Flemming Street					
Entrance Foyer C, Stellenbosch Park Building					
Schornville, King Williams Town, 5601					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Mr M Cwili and Mr P Nqikashe		CONTACT PERSON	Mr C Boshoff	
TELEPHONE NUMBER	(067) 414-2504 and (067) 419-8001		TELEPHONE NUMBER	(082) 854 3795	
FACSIMILE NUMBER	Not available		FACSIMILE NUMBER	Not available	
E-MAIL ADDRESS	Mandiphiwe.Cwili@ectransport.gov.za and Philasande.Nqikashe@ectransport.gov.za		E-MAIL ADDRESS	Clive.Boshoff@ectransport.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
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No	
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSES) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]	
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				<input type="checkbox"/> YES <input type="checkbox"/> 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 SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

SBD 1**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, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4	THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
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:

F: 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: 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 5: Particulars of companies and close corporations

Company registration number

Close corporation number

Tax reference number

Section 6: The attached SBD4 must be completed for each submission and attached as a submission requirement

Section 7: The attached SBD6.1 must be completed for each submission and attached as a submission requirement

Section 8: The attached SBD8 must be completed for each submission and attached as a submission requirement

Section 9: The attached SBD9 must be completed for each submission and attached as a submission requirement

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

- i) authorizes the Employer to verify Tax Compliance status from the South African Revenue Services or the Centralised Suppliers Database (CSD);
- ii) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- 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:

G: (SBD 4) DECLARATION OF INTEREST

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

- the tenderer is employed by the State; and/or
- the legal person on whose behalf the tender document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the tender, or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the tender.

2. **Definitions:**

2.1 “State” means:

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

- 2.2 “Shareholder” means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

3. **In case of a joint venture (JV), separate declaration of interest returnable schedule is to be completed and submitted by each JV member.**

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

4.1 Full Name of tenderer or his or her representative:

.....

4.2 Identity Number:

4.3 Position occupied in the Company (director, trustee, shareholder):

4.4 Company Registration Number:

4.5 Tax Reference Number:

4.6 VAT Registration Number:

- 4.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 5 below.

SBD 4

4.7 Are you or any person connected with the tenderer presently employed by the State? **YES / NO**

4.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member:

Name of State institution at which you or the person connected to the tenderer is employed :

Position occupied in the State institution:

Any other particulars:

.....

.....

.....

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

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

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

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

.....

.....

.....

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

4.8.1 If so, furnish particulars:

.....

.....

.....

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

SBD 4

4.9.1 If so, furnish particulars.

.....

.....

.....

4.10 Are you, or any person connected with the tenderer, **YES/NO**
 aware of any relationship (family, friend, other) between
 any other tenderer and any person employed by the State
 who may be involved with the evaluation and or adjudication
 of this tender?

4.10.1 If so, furnish particulars.

.....

.....

.....

4.11 Do you or any of the directors / trustees / shareholders / members **YES/NO**
 of the company have any interest in any other related companies
 whether or not they are tendering for this contract?

4.11.1 If so, furnish particulars:

.....

.....

.....

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

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

6 DECLARATION

I, THE UNDERSIGNED (NAME)

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 4 and 5 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF C.3.7 OF THE CONDITIONS OF TENDER SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

H: (SBD 6.1) PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017 (including affidavit forms for EMEs)

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

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

1. GENERAL CONDITIONS

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

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

1.2

- (a) The value of this bid is estimated to **not exceed** R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
- (b) Either the 80/20 or 90/10 preference point system will be applicable to this tender (*delete whichever is not applicable for this tender*).

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

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

	POINTS
PRICE	90
B-BBEE STATUS LEVEL OF CONTRIBUTOR	10
TOTAL POINTS FOR PRICE AND B-BBEE MUST NOT EXCEED	100

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

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

SBD 6.1**2. DEFINITIONS**

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

3. POINTS AWARDED FOR PRICE**3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS**

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

80/20	or	90/10
$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$	or	$P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$

Where

P _s	=	Points scored for price of bid under consideration
P _t	=	Price of bid under consideration
P _{min}	=	Price of lowest acceptable bid

SBD 6.1**4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR**

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

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

5. BID DECLARATION

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

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

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

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

7. SUB-CONTRACTING

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

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

- 7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted %
- ii) The name of the sub-contractor
- iii) The B-BBEE status level of the sub-contractor
- iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

SBD 6.1

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

Designated Group: An EME or QSE which is at least 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:

8.2 VAT registration number:

8.3 Company registration number:

8.4 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
☐ One person business/sole propriety
☐ Close corporation
☐ Company
☐ (Pty) Limited

(Tick applicable box)

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

8.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
☐ Supplier
☐ Professional service provider
☐ Other service providers, e.g. transporter, etc.

(Tick applicable box)

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

SBD 6.1

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

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES

1.

2.

.....
SIGNATURE(S) OF BIDDER(S)

DATE.....

ADDRESS.....

.....

SWORN AFFIDAVIT – B-BBEE EXEMPTED MICRO ENTERPRISE (EME)

NOTE: THIS FORM IS ONLY TO BE COMPLETED IF THE TENDERING ENTITY IS AN EXEMPTED MICRO ENTERPRISE, WITH AN ANNUAL TURNOVER OF LESS THAN R10 MILLION.

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a member / director / owner of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name	
Trading Name	
Registration Number	
Enterprise Address	

3. I hereby declare under oath that:

- The enterprise is _____% black owned;
- The enterprise is _____% black woman owned;
- Based on the management accounts and other information available on the _____ financial year, the income did not exceed R10,000,000.00 (ten million rands);

Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% black owned	Level One (135% B-BBEE procurement recognition)	
More than 51% black owned	Level Two (125% B-BBEE procurement recognition)	
Less than 51% black owned	Level Four (100% B-BBEE procurement recognition)	

4. The entity is an empowering supplier in terms of **the dti** Codes of Good Practice.
5. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
6. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: _____

Date: _____

Commissioner of Oaths
Signature & stamp

I: (SBD 8) DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTISES
--

1. The declaration:
 - (a) must form part of all tenders submitted.
 - (b) in the case of a joint venture (JV), must be completed and submitted by each member of the JV.
2. This returnable schedule serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
3. The tender of any tenderer may be disregarded if that tenderer or any of its directors have:
 - (a) abused the institution's supply chain management system;
 - (b) committed fraud or any other improper conduct in relation to such system; or;
 - (c) failed to perform on any previous contract
4. **In order to give effect to the above, the following questionnaire must be completed and submitted with the tender.**

ITEM	QUESTION	RESPONSE	
4.1	Is the tenderer or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	Is the tenderer or any of its directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the tenderer or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the tenderer and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of tenderer

J: (SBD 9) CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

1. The certificate:
 - (a) must form part of all bids¹ submitted.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
3. Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
4. This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

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

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Institution)

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

I certify, on behalf of: _____ that:
(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.

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

SBD 9

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation);
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

K: RECORD OF ADDENDA TO TENDER DOCUMENTS**Note to tenderer:**

1. If an addendum containing material amendments is not incorporated by the tenderer in his tender offer, the tender will be declared non-responsive.

We confirm that the following addenda issued by the Employer on the Eastern Cape Department of Transport website www.ectransport.gov.za, 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.		
11.		
12.		

(Attach additional pages if required.)

TENDERER'S REPRESENTATIVE

.....
Signature

.....
Date

L: COMPANY EXPERIENCE SCHEDULE (including Table A of this schedule)
--

Notes to Tenderer:

1. The tenderer is required to complete Table A of this Returnable Schedule, indicating similar projects completed or currently being carried out by the tenderer as defined in C.2.1.1a) of T1.2: TENDER DATA.
2. For each similar project listed by the tenderer in Table A, the tenderer must attach to this Returnable Schedule:
 - a) the tenderer's appointment letter for the similar project; and
 - b) the Works Contract completion certificate of the project (if completed); and
 - c) a completed and signed Returnable Schedule M: SIMILAR PROJECT VERIFICATION FORM [ensure stamp of respondent (employer for the similar project) is on the form].
3. The tenderer is required to indicate in TABLE A if the similar project was completed or currently being carried out as:
 - a) a single entity (SE); or
 - b) a joint venture or consortium (JV or C)
4. The tenderer must only list defined similar projects completed or currently being carried out by the tenderer in TABLE A.
5. The information supplied by the tenderer will be deemed material in terms of the Employer's evaluation of the tenderer's eligibility to submit a tender offer.
6. Compliance with C.2.1.1a) of T1.2: TENDER DATA and this Returnable Schedule is deemed a material responsiveness criteria.

TABLE A: LIST OF SIMILAR PROJECTS FOR RETURNABLE SCHEDULE L

COMPLETION DATE (mm/yyyy) or CURRENTLY BEING CARRIED OUT				
VALUE OF WORKS COMPLETED (incl. VAT)				
DURATION OF WORKS (months)				
SHORT DESCRIPTION OF WORKS COMPLETED				
WORK DONE AS A (tick applicable box) [SE = Single entity JV or C = Joint Venture or Consortium]	<input type="checkbox"/> SE <input type="checkbox"/> JV or C	<input type="checkbox"/> SE <input type="checkbox"/> JV or C	<input type="checkbox"/> SE <input type="checkbox"/> JV or C	<input type="checkbox"/> SE <input type="checkbox"/> JV or C
EMPLOYER				
CONTRACT NAME AND CONTRACT NUMBER				

TENDERER'S REPRESENTATIVE

.....
Signature.....
Date

M:	SIMILAR PROJECT VERIFICATION FORM (one verification form required for each listed project in Table A of Returnable Schedule L: COMPANY EXPERIENCE SCHEDULE)
-----------	--

SIMILAR PROJECT VERIFICATION FORM (QUESTIONNAIRE)**FOR TENDER NO. SCMU10-21/22-0034**

PROFESSIONAL CONSULTING ENGINEERING SERVICES FOR ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS

NAME OF TENDERER:

VERIFICATION OF TENDERER'S INDICATED SIMILAR PROJECT

Page 1 of 2

PART A OF RETURNABLE SCHEDULE M:*[To be completed by the tenderer]*

CONTRACT NO.:

CONTRACT NAME:

EMPLOYER:

CONSULTING ENGINEER:

CONTRACTOR:

VALUE OF WORKS CONTRACT AT COMPLETION (INCL. VAT): R

MONTH/YEAR COMPLETED:

PART B OF RETURNABLE SCHEDULE M:*[To be completed by the employer for the CONTRACT NO. indicated in Part A of Returnable Schedule M]*

1. Was the consulting engineer (as indicated in Part A of Returnable Schedule M) appointed by the employer for CONTRACT NO. as indicated in Part A of Returnable Schedule M?

YES	NO
-----	----

(TICK APPLICABLE BOX)

2. Was a certificate of completion in terms of the conditions of contract, for CONTRACT NO. as indicated in Part A of Returnable Schedule M, issued to the contractor?

YES	NO	CURRENTLY BEING CARRIED OUT
-----	----	-----------------------------

(TICK APPLICABLE BOX)

3. Was the works contract (construction) value at completion or estimate for works currently being carried out more or equal than (≥) R 130 million (incl. VAT) for CONTRACT NO. as indicated in Part A of Returnable Schedule M?

YES	NO
-----	----

*(TICK APPLICABLE BOX)***CONTINUES ON NEXT PAGE**

RETURABLE SCHEDULE M (continues)**VERIFICATION OF TENDERER'S INDICATED SIMILAR PROJECT**

Page 2 of 2

PART B OR RETURABLE SCHEDULE M (continues):*[To be completed by the employer for the CONTRACT NO. indicated in Part A of Returnable Schedule M]*

4. Is the employer for CONTRACT NO. as indicated in Part A of Returnable Schedule M a National or Provincial Roads Authority?

YES	NO
-----	----

(TICK APPLICABLE BOX)

5. Is the project located within the SADC (South African Development Community) region?

YES	NO
-----	----

(TICK APPLICABLE BOX)

6. Does the works during Administration and Monitoring of the Works Contract (construction) stage included as a minimum the following activities:

- a) Bulk earthworks operations

YES	NO
-----	----

(TICK APPLICABLE BOX)

- b) Road layerworks and bituminous surfacing

YES	NO
-----	----

(TICK APPLICABLE BOX)

- c) Stormwater drainage (e.g. pipe culverts, box culverts, concrete lined drains)

YES	NO
-----	----

(TICK APPLICABLE BOX)

- d) The use of EME / QSE subcontractors as part of the employer's contract participation goal.

YES	NO
-----	----

*(TICK APPLICABLE BOX)***Details of Respondent** *(employer for the CONTRACT NO. indicated in Part A of Returnable Schedule M):*

Verification information supplied by:

(state name & surname)

Designation on Project:

Name of Roads Authority:

Signature: Date:

Contact Details:

Tel No.:

Email:

Company Stamp:

--

(Please return both pages to Tenderer for submission with his Tender)

N: KEY PERSONNEL SCHEDULE (including Table A of this schedule)

Notes to Tenderer:

1. The tenderer is required to complete Table A of this Returnable Schedule, indicating the required information for Key Personnel as defined in C.2.1.1b) of T1.2: TENDER DATA.
2. The tenderer is required to indicate in TABLE A of this Returnable Schedule if the Key Person(s) is in the full-time employment of the tenderer or intend to employ (subcontracted).
3. For each indicated Key Person listed by the tenderer in Table A, the tenderer must attach to this Returnable Schedule:
 - a) A detailed CV of the Key Person, which includes type and duration of experience and references for similar project experience; and
 - b) Certified copy of professional registration (if required); and
 - c) Certified copy of NQF level 5 or 7 unit standard for Labour Intensive Construction, obtained from a SAQA accredited institution, for Engineer's Representative; and
 - c) Letter (on the tenderer's company letterhead) confirming that the Key Person is in the full-time employment of the tender signed by the tenderer; or
 - d) Letter of intent (on the tenderer's company letterhead) for the Key Person which the tenderer intends to employ (subcontract), if awarded the contract, signed by both the tenderer and Key Person. Including, Returnable Schedule D2: CERTIFICATE OF SINGLE TENDER SUBMISSION (SUBCONTRACTED KEY PERSONNEL).
4. The information supplied by the tenderer will be deemed material in terms of the Employer's evaluation of the tenderer's eligibility to submit a tender offer.
5. Compliance with C.2.1.1b) of T1.2: TENDER DATA and this Returnable Schedule is deemed a material responsiveness criteria.

TABLE A: LIST OF KEY PERSONNEL FOR RETURNABLE SCHEDULE N

Contact No.			
Currently in the full-time employment of the tenderer (Yes / No)			
Post Minimum Registration / Qualification Experience (years)			
Professional Registration No. with ECSA			
ID Number			
Name & Surname			
Position	Contact Engineer	Engineer's Representative	Senior Materials Technician

TENDERER'S REPRESENTATIVE

.....
Signature.....
Date

O: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE**Notes to Tenderer:**

1. The tenderer must be registered the National Treasury Central Supplier Database and tax status must be compliant, in terms of National Treasury requirements, prior to acceptance of a tender offer.
2. The tenderer shall complete this Returnable Schedule and attach a printed copy of the Active Supplier Listing on the National Treasury Central Supplier Database (www.treasury.go.za). In the case of a joint venture (JV) or consortium, the tenderer shall provide printed copies of the Active Supplier Listing on the National Treasury Central Supplier Database for each member of the JV.
3. The information supplied in this returnable schedule and any additional information as may be requested by the Employer will be deemed material to the Employer's risk analysis, in terms of C.3.13b) of the Standard Conditions of Tender, of the tender offer.

IN CASE OF SINGLE TENDERING ENTITY:

Name of Supplier:

Central Supplier Database Supplier Number:

IN CASE OF A JOINT VENTURE / CONSORTIUM:*Lead member if Joint Venture / Consortium*

Name of Supplier:

Central Supplier Database Supplier Number:

Other member(s) of Joint Venture / Consortium

Name of Supplier:

Central Supplier Database Supplier Number:

Name of Supplier:

Central Supplier Database Supplier Number:

(Attached additional pages if more space is required.)

TENDERER'S REPRESENTATIVE

.....
Signature.....
Date

P: COMPANY REGISTRATION AND CIPRO CERTIFICATES

Notes to Tenderer:

1. The tenderer is required to attach to the Returnable Schedule, copies of their Company Registration Documents and CIPRO registration forms. Including copies of identification documents (ID's) of all Directors or members of the company.
2. In the event of a tender submission by a joint venture or consortium each member of the joint venture or consortium must provide the required documents as indicated in item 1 of the notes.
3. The information supplied in this returnable schedule and any additional information as may be requested by the Employer will be deemed material to the Employer's risk analysis, in terms of C.3.13b) of the Standard Conditions of Tender, of the tender offer.

Q: CERTIFICATE OF TAX COMPLIANCE**Notes to Tenderer:**

1. The tenderer is required to complete the declaration below.
2. In the event of a tender submission by a joint venture or consortium each member of the joint venture or consortium is required to complete the declaration below.
3. Each Targeted Enterprise taking part of a tender submission is required to complete the declaration below.
4. The information supplied in this returnable schedule and any additional information as may be requested by the Employer will be deemed material to the Employer's risk analysis, in terms of C.3.13b) of the Standard Conditions of Tender, of the tender offer.

I, (name)

the undersigned in my capacity as (position)

on behalf of (name of company)

herewith grant consent that SARS may disclose to the Eastern Cape Department of Transport our tax compliance status.

For this purpose our unique security personal identification number (PIN) is

.....
SIGNATURE

.....
DATE

R: CERTIFICATE OF INSURANCE COVER**Notes to Tenderer:**

1. The tenderer is required to complete this Returnable Schedule and attach proof of insurance cover.
2. In the event of a tender submission by a joint venture or consortium each member of the joint venture or consortium is required to complete a copy of this Returnable Schedule and attach proof of insurance cover.
3. The information supplied in this returnable schedule and any additional information as may be requested by the Employer will be deemed material to the Employer's risk analysis, in terms of C.3.13b) of the Standard Conditions of Tender, of the tender offer.

The tenderer shall provide the following details of this insurance cover:

i) Name of Tenderer:

ii) Period of Validity:

iii) Value of Insurance:

- Professional Indemnity (for each and every case)

Company:

Value:

- General public liability

Company:

Value:

- Third party liability

Company:

Value:

TENDERER'S REPRESENTATIVE

.....
Signature

.....
Date

S: TENDERER'S REGISTERED FINANCIAL SERVICE PROVIDER LETTER AND BANK DETAILS**Notes to Tenderer:**

1. The tenderer is required to complete this Returnable Schedule and attach a letter (dated less than 3 months prior to the tender closing date) from the bank at which he declares he conducts his account.
2. In the event of a tender submission by a joint venture or consortium each member of the joint venture or consortium is required to complete a copy of this Returnable Schedule and attach a letter (dated less than 3 months prior to the tender closing date) from the bank at which he declares he conducts his account.
3. The information supplied in this returnable schedule and any additional information as may be requested by the Employer will be deemed material to the Employer's risk analysis, in terms of C.3.13b) of the Standard Conditions of Tender, of the tender offer.

The tenderer shall provide the following:

- i) Name of account holder:
- ii) Account number:
- iii) Bank name:
- iv) Branch number:
- v) Bank and branch contact details:
.....

TENDERER'S REPRESENTATIVE

.....
Signature

.....
Date

T: CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014 AS WELL AS COLD ACT, 1993
--

Notes to Tenderer:

1. Discovery that the tenderer has failed to make proper disclosure may result in the Employer terminating a contract that may result from this tender on the ground that it has been rendered invalid by the tenderer's misrepresentation.
2. The tenderer shall attach to this Returnable Schedule evidence that he is registered and in good standing with the Compensation Fund in terms of Section 80 of the Compensation for Injury and Disease Act (COLD) (Act 130 of 1993).
3. In the event of a tender submission by a joint venture or consortium each member of the joint venture or consortium is required to comply with the requirements of this Returnable Schedule.
4. The information supplied in this returnable schedule and any additional information as may be requested by the Employer will be deemed material to the Employer's risk analysis, in terms of C.3.13b) of the Standard Conditions of Tender, of the tender offer.

U: CERTIFICATE OF PERMISSION TO CONDUCT DUE DILIGENCE INVESTIGATION
--

Notes to Tenderer:

1. The tenderer is required to complete the declaration below.
2. In the event of a tender submission by a joint venture or consortium each member of the joint venture or consortium is required to complete the declaration below.
3. The information supplied in this returnable schedule and any additional information as may be requested by the Employer will be deemed material to the Employer's risk analysis, in terms of C.3.13b) of the Standard Conditions of Tender, of the tender offer.

I, (name)

the undersigned in my capacity as (position)

on behalf of (name of company)

herewith grant consent that the Eastern Cape Department of Transport or any of their appointed Service Providers may

conduct a due diligence investigation on

..... (name of company)

to evaluate our ability to perform the contract as stipulated in C.3.13b) of the Conditions of Tender.

In addition, any information in this regard requested by the Eastern Cape Department of Transport or any of their appointed Service Providers, shall be submitted within the timelines of the request.

.....
SIGNATURE

.....
DATE

V: SCHEDULE OF DEVIATIONS OR QUALIFICATIONS BY TENDERER**Note to Tenderer:**

1. The tenderer's attention is drawn to C.2.12 of T1.2: TENDER DATA that no alternative tender offers will be considered and C.3.8 of the Standard Conditions of Tender and T1.2: TENDER DATA regarding the Employer's handling of material deviations and qualifications.

Page Number	Clause / Item	Proposal

TENDERER'S REPRESENTATIVE

.....
Signature.....
Date

CONTRACT

PART C1: AGREEMENT AND CONTRACT DATA

C1.1	FORM OF OFFER AND ACCEPTANCE	60
C1.2	CONTRACT DATA	64

C1.1: FORM OF OFFER AND ACCEPTANCE**(AGREEMENT)****C1.1.1 FORM OF OFFER**

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

CONTRACT NO: SCMU10-21/22-0034

**PROFESSIONAL CONSULTING ENGINEERING SERVICES FOR ADMINISTRATION AND MONITORING OF THE
WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM
PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS**

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

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

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

.....

.....

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

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

For the **Tenderer**:

Signature and Name of **Witness**:

.....
Signature

.....
Signature

.....
Name

.....
Name

.....
Capacity

.....
Date

Name and Address of Organisation:

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

C1.1.2 FORM OF 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 Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviation (if any), contact the Employer's Agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with these 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 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 cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

For the **Employer**:

Signature and Name of **Witness**:

.....
Signature

.....
Signature

.....
Name

.....
Name

.....:
Capacity

.....
Date

Name and Address of Organisation:

**Department of Transport
Province of the Eastern Cape
Private Bag X0023
Bhisho
5605**

C1.1.3 SCHEDULE OF DEVIATIONS**Notes:**

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

- (i) Subject:
Details:
- (ii) Subject:
Details:
- (iii) Subject:
Details:
- (iv) Subject:
Details:
- (v) Subject:
Details:

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

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

For the Tenderer:

..... Signature

..... Name

..... Capacity

Name and Address of Organisation

.....

.....

.....

.....

.....

.....

..... Witness Signature

..... Witness Name

..... Date

For the Employer:

.....

.....

.....

Name and Address of Organisation

Department of Transport

Province of the Eastern Cape

Private Bag X0023

Bhisho

5605

.....

.....

.....

C1.2: CONTRACT DATA

The General Conditions of Contract as contained in the **Standard Professional Services Contract, July 2009, Third Edition of CIDB document 1015**, as published by the Construction Industry Development Board, is applicable to this Contract.

Tenderers shall obtain their own copy of the stated Standard Professional Services Contract from the Construction Industry Development Board's website, refer www.cidb.org.za.

The pro-forma documents and pages attached to the Standard Professional Services Contract on pages 17 to 24 shall not apply to this Contract and shall be replaced with the documentation bound under this Contract Document.

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

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

PART 1: DATA PROVIDED BY THE EMPLOYER

Clause	Description / Wording
1.	<p>DEFINITIONS</p> <p><i>Add the following new definitions to Clause 1:</i></p> <p><u>"Agent"</u> The Service Provider appointed in terms of the Occupational Health and Safety Act No. 85 of 1993, including the relevant Regulations.</p> <p><u>Black People</u> Black people has the meaning assigned to it in section 1 of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003).</p> <p><u>Construction monitoring/supervision</u> The process of managing and co-ordinating the Works Contract and over-seeing and/or inspecting the Works in accordance with the Employer's requirements.</p> <p><u>Consulting Engineering Firm</u> A natural person or legal entity which provides independent technology-based intellectual services in the built, human and natural environment to clients for a fee, and does not engage in or is not a subsidiary or holding company of a company that engages in manufacturing or construction and is not in substance owned by the State or a similar public body or is not in substance the design department of a development, manufacturing or construction enterprise.</p> <p><u>Contractor</u> The contracting party named as contractor in the form of offer and acceptance of the Works Contract accepted by the Employer.</p> <p><u>EME</u> EME is an exempted micro enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003).</p>

Clause	Description / Wording
	<p><u>Engineer</u> The natural or juristic person, partnership, Incorporated Company, Propriety Limited Company or Close Corporation appointed in writing by the Employer for the construction monitoring and management of the engineering Works undertaken by the Contractor.</p> <p><u>People with Disabilities</u> People with Disabilities has the meaning assigned to it in section 1 of the Employment Equity Act, 1998 (Act No. 55 of 1998).</p> <p><u>QSE</u> QSE is a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003).</p> <p><u>Targeted Enterprise</u> A Consulting Engineering Firm who is an EME (BEP)* or QSE (BEP)*, contracted by the Service Provider to perform a specified percentage of work stated in the Contract Data under his guidance and which complies with the following:</p> <ul style="list-style-type: none"> (a) Is at least 51% owned by black people and (b) Has a B-BBEE status* of 'level one or level two contributor'; and (c) does not share equity holding with the Service Provider; and (d) is registered in terms of the Company's Act, 2008 (Act No. 71 of 2008) or Close Corporation Act, 1984 (Act No. 69 of 1984); and (e) is registered on the National Treasury's Central Supplier Database (CSD). <p>* NOTE: All references to EME, QSE, B-BBEE status are in terms of the amended Construction Sector Codes published in Notice 931 of 2017 in Government Gazette No 41287 on 1 December 2017.</p> <p><u>Works or Works Contract</u> That project or part of a project that the employer wishes to have delivered and for which the Service Provider has been appointed for the performance of the services specified in this contract.</p> <p><u>Youth</u> For purposes of this contract, Youth means persons between the ages of 18 (eighteen) and 35 (thirty-five)."</p>
1.	The Employer is the Eastern Cape Department of Transport (ECDOT).
3.4 and 4.3.2	<p>The authorized and designated representative of the Employer is:</p> <p>Name: Mr Clive Boshoff</p> <p>The address for receipt of communications is:</p> <p>Telephone: 082 854 3795</p> <p>Facsimile: Not available</p> <p>E-mail: Clive.Boshoff@ectransport.gov.za</p> <p>Physical address: 32 Cowan Close, Flemming Street Stellenbosch Park Building Schornville King Williams Town, 5601</p> <p>Postal address: Private Bag X0023 Bhisho, 5605</p>
1.	The Project is Professional Consulting Engineering Services for Administration and Monitoring of the Works Contract for Upgrading of Provincial Road DR08005 Magusheni to Mzamba (R61) ± 79km Phase 3: Section 2 Km 59,5 to Km 67,7 - Including Maintenance Works.

Clause	Description / Wording
1.	The Start Date is when the Agreement comes into effect (Refer to C1.1 Form of Offer and Acceptance).
3.4.1	Communications by facsimile is not permitted.
3.5	The location for the performance of the Project is as indicated in Part C4: Site Information.
3.6	The Service Provider may not release public or media statements or publish material related to the Services or the Project under any circumstances without written approval of the Employer.
3.12.1	<p>The penalty payable for poor performance will be applied over the full-time duration of the Contract. Penalty charges shall be as follows:</p> <ul style="list-style-type: none"> (a) Failure to meet milestone dates in the Project programme = R 2 000.00/day (excl. VAT) subject to a maximum amount of 10% of the Contract Value (excluding prime cost and provisional sums). (b) Failure to disclose Subcontractors = up to 10% of the Contract Value. (c) Failure to meet the to meet specified target of work for Targeted Enterprises = 30% of the value by which the cumulative value of payments to the Targeted Enterprises fails to meet the specified Employer's target.
3.15.1	The programme shall be submitted within 14 days of the Start Date.
3.16	<i>Delete the contents of Clause 3.16.</i>
5	SERVICE PROVIDER'S OBLIGATIONS
5.1	General
5.1.1	<p><i>Amend Clause 5.1.1 to read as follows:</i></p> <p>"The Service Provider shall perform the Services in accordance with the Scope of Work with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards and shall be responsible for breach of professional duty by reason of any error, omission or neglect in connection with delivering the services"</p> <p><i>Add the following Clauses after Clause 5.1.2:</i></p>
"5.1.3	Where the Services include the exercise of powers to certify, decide or otherwise exercise discretion in regard to a contract or agreement between the Employer and Others, then the Service Provider shall act in respect of that contract or agreement as an independent professional.
5.1.4	Unless specifically instructed differently, the Service Provider is delegated as the Employer's "Mandatar" in terms of the Occupational Health and Safety Act (Act no. 85 of 1993), and as the Employer's Agent as defined in Construction Regulations 5(5), (6) and (7) of the said Act.
5.1.5	The Service Provider, if requested by the Employer, shall provide any plans and calculations for checking by others.
5.1.6	All design calculations shall be kept and safeguarded for the duration of the insurance(s) required in terms of Clause 5.4.1.

Clause	Description / Wording
5.1.7	<p>The Service Provider shall enter into a contract over the full contract duration through partnership, joint venture or subcontracting with a Targeted Enterprise(s) to perform the specified Employer's Targeted Enterprises target as indicated below.</p> <p>Employment of:</p> <ul style="list-style-type: none"> (a) An Assistant Contracts Engineer (b) A full-time Assistant Engineer's Representative (as part of the Site Staff personnel)
5.1.8	<p>The Service Provider undertakes to pay the Targeted Enterprise(s) the full value due in each interim fee claim. The Service Provider further undertakes to make payment within 30 (thirty) days of presentation by the Service Provider of the interim fee claim to the Employer for payment, or by the 30th of the month following that in which the Targeted Enterprise(s) completed the work, whichever date is earlier."</p>
5.4.1	<p>The Service Provider is required to provide the Service with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards.</p> <p>The Service Provider is required to provide the following insurances:</p> <ol style="list-style-type: none"> 1. Insurance against Professional Indemnity Cover is: R 10,0 million without a limit on the number of claims (The limit of liability is only provided to cover the Employer's damages and does not allow for the Service Provider's costs for defending any claim.) Period of cover: Structures – 25 years, all other instances – 10 years 2. Insurance against General Public Liability Cover is: R 10,0 million Period of cover: Structures – 25 years, all other instances – 10 years 3. Insurance against Third Party Liability Cover is: R 10,0 million Period of cover: Duration of the contract only.
5.5	<p>The Service Provider is required to obtain the Employer's prior approval in writing before taking / effecting any of the following actions:</p> <ol style="list-style-type: none"> 1. Appointing Key Personnel not listed by name in the Contract Data. 2. Appointing subcontractors for the performance of any part of the Service. 3. Expending any Prime Cost and/or Provisional Sum in the Contract or Works Contract. 4. Authorising any work under a Variation (Works Authorisation) for the Works Contract. 5. Authorising any work outside the contract limits. 6. Over-expenditure on the Works Contract. 7. Changing the scope of work for the Works Contract. 8. Acceptance of sub-standard work and/or reduced payments under the Works Contract. 9. Making statements to the media regarding the project.
7.1.2	<p>Key Persons required for this project are:</p> <ol style="list-style-type: none"> 1. Contract Engineer which shall <ul style="list-style-type: none"> • be registered as a Professional Engineer or Professional Engineering Technologist under the Engineering Profession Act (Act 46 of 2000), which a minimum of 10 years' post professional registration experience; and

Clause	Description / Wording
	<ul style="list-style-type: none"> be available to execute the required duties and responsibilities on this Contract, should the tenderer's offer be accepted. <p>2. Engineer's Representative which shall</p> <ul style="list-style-type: none"> be registered as a Professional Engineering Technologist or Professional Engineering Technician under the Engineering Profession Act (Act 46 of 2000), which a minimum of 10 years' post professional registration experience, and have completed the NQF level 5 or 7 unit standard for Labour Intensive Construction, obtained from a SAQA accredited institution; and be available to execute the required duties and responsibilities on this Contract, should the tenderer's offer be accepted. <p>3. Senior Materials Technician which shall</p> <ul style="list-style-type: none"> No qualification/registration – minimum 20 years' experience, or National Diploma in civil engineering qualification – minimum 10 years' experience, or Professional Engineering Technician registration – minimum 5 year's post registration experience
7.1.6	<p><i>Add the following after Clause 7.1.5:</i></p> <p>Except in the case of replacement resulting from death or where the Employer requests a replacement not provided for by the Contract, the Service Provider shall bear all additional costs arising out of or incidental to such replacement.</p>
7.2	<p>The working hours and holiday for site staff are:</p> <ul style="list-style-type: none"> Site working hours Annual leave shall be taken during the recognized construction industry shutdown period.
8.1	<p>The Service Provider is to commence the performance of the Services within fourteen (14) days of date that the Contract becomes effective.</p>
8.4.3 (c)	<p>The period of suspension under this Clause is not to exceed three (3) months.</p>
9.1	<p>Copyright of documents prepared for the Project shall vest with the Employer.</p>
11.3	<p>The Targeted Enterprise(s) shall not be allowed to sub-contract any work that forms part of the specified participation percentage without the Employer's approval.</p> <p>All Targeted Enterprise(s)/ subcontractor(s) shall be registered on the National Treasury's Central Supplier Database (CSD)</p> <p>The Service Provider shall disclose all subcontracting arrangements. If the Service Provider fails to disclose, he shall be given 14 days to make representation as to why:</p> <ul style="list-style-type: none"> (i) the contract shall not be terminated; (ii) the Service Provider shall not be penalised up to 10% of the value of the contract.
12.1.2	<p>Interim settlement of disputes is to be by adjudication.</p>
12.3.3	<p>In the event that the parties fail to agree on an Adjudicator, the Adjudicator is to be nominated by the President of the South African Institution of Civil Engineering.</p>

Clause	Description / Wording
12.3.4	Final settlement is by arbitration.
12.4.2	In the event that parties fail to agree on an arbitrator, the arbitrator is to be nominated by the President of the South African Institution of Civil Engineering.
13.4	Neither the Employer nor the Service Provider is liable for any loss or damage resulting from any occurrence unless a claim is formally made within 12 months from the date of termination or completion of the Contract.
14.5	<i>Add the following after Clause 14.4:</i> If applicable, Contract Price Adjustment will be paid according to pricing instruction clause C2.1.6 of the pricing data. Base date shall be 28 days prior to the latest date for submission of tenders.
15.	The interest rate is the current prime interest rate charged by banks plus 2% per annum and calculated from the due date of payment.

PART 2: DATA PROVIDED BY THE SERVICE PROVIDER

Clause	Description / Wording
1.	<p>The Service Provider is:</p> <p>.....</p> <p>.....</p> <p>.....</p>
1.	<p>The Service Provider's address for receipt of communications and notices is:</p> <p>Address (Postal):</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Address (Physical):</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Telephone Number (Work):</p> <p>Telephone Number (After Hours):</p> <p>Facsimile Number:</p> <p>Electronic Mail Address (E-mail):</p>

Clause	Description / Wording												
5.3	<p>The authorised and designated representative of the Service Provider is:</p> <p>Name:</p> <p>The postal address for receipt of communications is:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Telephone No:</p> <p>Cellular Phone No:</p> <p>Facsimile No:</p> <p>Electronic Mail Address (E-mail):</p>												
5.5 and 7.1.2	<p>The Key Persons and their functions in relation to the Services are:</p> <table border="1"> <thead> <tr> <th><i>Position</i></th><th><i>Name & Surname</i></th><th><i>Indicate whether full-time employed or subcontracted</i></th></tr> </thead> <tbody> <tr> <td>Contract Engineer</td><td></td><td></td></tr> <tr> <td>Engineers Representative</td><td></td><td></td></tr> <tr> <td>Senior Materials Technician</td><td></td><td></td></tr> </tbody> </table>	<i>Position</i>	<i>Name & Surname</i>	<i>Indicate whether full-time employed or subcontracted</i>	Contract Engineer			Engineers Representative			Senior Materials Technician		
<i>Position</i>	<i>Name & Surname</i>	<i>Indicate whether full-time employed or subcontracted</i>											
Contract Engineer													
Engineers Representative													
Senior Materials Technician													

CONTRACT

PART C2: PRICING DATA

C2.1	PRICING INSTRUCTIONS	73
C2.2	PRICING SCHEDULE	76

C2.1: PRICING INSTRUCTIONS

C2.1.1 For the purposes of this Pricing Schedule, 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 Works.
Quantity:	The number of units of work for each item as provided by the Employer.
Rate:	The payment per unit of work for which a rate has been provided by the Employer or for which the Service Provider tenders to do the work.
Amount:	The product of the quantity and the rate tendered for an item.
Lump Sum:	An amount tendered for an item, the extent of which is described in the Pricing Schedule, the Scope of Work or elsewhere, but of which the quantity of work is not measured in units.
Provisional Sum:	An amount allowed for in the Pricing Schedule, for which the quantity of work is not known.
Prime Cost:	Is a specific type of Provisional Sum where payment is made on the production of invoices showing the cost price of the implementation or installation of the service required. Services rendered in this manner carry a cost for which a rate or a lump sum is offered at tender stage to cover all the tenderer's handling, supervision and liability costs in providing the item or services.

C2.1.2 The quantities provided by the Employer in the Pricing Schedule are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the Pricing Schedule, will be used to determine payments to the Service Provider.

The validity of the Contract shall in no way be affected by differences between the quantities in the Pricing Schedule and the quantities finally certified for payment. Work is valued at the rates or lump sums tendered.

C2.1.3 Rates and lump sums shall include full compensation for overheads, profits, incidentals, tax (other than VAT), etc., and for the completed items of work as specified in the Scope of Works and Contract Data and for all the risks, obligations and responsibilities specified in the General Conditions of Contract, Particular or Special Conditions of Contract, except in so far as the quantities given in the Pricing Schedule are only approximate.

C2.1.4 The Tenderer shall fill in a quantity or a rate or a lump sum for each item where provision is made. Items against which no rate or lump sum has been entered in the tender will not be paid for when the work is executed, as payment for such work will be regarded as being covered by other rates or lump sums in the Pricing Schedule.

The Tenderer shall fill in a rate against all items where the words "Rate Only" appears in the amount column. Although no work is foreseen under such item and no quantities are consequently given in the quantity column, the tendered rate shall apply should work under this item actually be required. Tenders should note the provisions of clause C2.1.10 of this preamble.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the Contract.

C2.1.5 The short descriptions of the payment items in the Pricing Schedule are only given to identify the items and to provide specific details. Reference shall, *inter alia*, be made to the Contract Data, General Conditions of Contract and Particular/Special Conditions of Contract and Scope of Works for more detailed information regarding the extent of work entailed under each item.

C2.1.6 Where so indicated under measurement and payment, prices or rates will be subject to adjustment for escalation as provided for below:

- The prices or rates shall be fixed for the first 12-month period determined from the tender base date and no change during this period will be allowed for escalation.
- On the 12-month anniversary date of the Contract base date the rates or sums shall be adjusted by the 12-month year on year CPI index (as published in the monthly bulletin PO141. of Statistics South Africa under table B) and fixed at this value for the following 12-month period. Subsequent 12-month periods shall be dealt with on the same basis.
- Adjustment of lump sum prices for escalation shall only be applicable to that portion of the relevant Service which is incomplete at the end of the 12-month anniversary date and shall not be applicable to any progress payments already claimed.

Adjustment for escalation shall only be applicable for services or portions thereof, that are still within the prescribed programme and any approved extensions of time.

C2.1.7 Interim payments for lump sum payment items may be permitted. Such interim payments shall however be limited to proven progress achieved for that particular service deliverable. The sum of any progress payments made under a particular lump sum payment item shall be de-ducted prior to calculating any adjustments for escalation as described in clause C2.1.6 above.

C2.1.8 Provisional and Prime Cost Sums: Each Sum shall only be used, in whole or in part, in accordance with the Employer's instructions and the Contract Price shall be adjusted accordingly. The total sum paid to the Service Provider shall include only such amounts, for the work, supplies or services to which the Sum relates, as the Employer shall have instructed.

For each Sum, the Employer may instruct plant, materials or services to be procured by the Service Provider in accordance with the Employer's policies, and for which there shall be included in the Contract Price:

- The actual amounts paid (or due to be paid) by the Service Provider under the Sum, and
- An item for compilation and printing of procurement documentation, quotation/tender process and evaluation, and all overhead charges and profit, tendered in the Pricing Schedule. Provided that for Prime Cost Sums only, where a percentage mark-up or lump sum mark-up is tendered, which shall exclude profit.

The Service Provider shall produce all quotations, invoices, vouchers and accounts or receipts in substantiation of any claim under a Sum.

Any percentage adjustment or lump sum mark-up against the Sum for handling fee, profits, etc. shall not be negative.

C2.1.9 Subject to the conditions stated in Clause C2.1.10 below, the rates and lump sums filled in by the Tenderer in the Pricing Schedule shall be final and binding with regard to submitting the tender and may not be adjusted should there be any mistakes in the extensions thereof and in the total sums appearing in the tender. Should there be any discrepancies between the tender sum and the correctly extended and totalled pricing schedule, the rates and the lump sums will be regarded as being correct, and the Employer shall have the right to make adjustments to the tender sum to reconcile the tender sum with the total of the Pricing Schedule. In such an event the tenderer will be consulted but, failing agreement between the parties, the decision of the Employer shall be final and binding. Adjustment of the tender sum will take place prior to the signing of the Contract. In their own interest Tenderers must make doubly sure of the correctness of their tendered rates and lump sums, the extensions and the tender sum.

C2.1.10 A tender shall be deemed non-responsive if the unit rates or lump sums for some of the items in the Pricing Schedule are, in the opinion of the Employer, unreasonable or out of proportion, and if the tenderer fails, within a period of seven (7) days of having been notified in writing by the Employer to adjust the unit rates or lump sums for such items, to make such adjustments.

- C2.1.11 All rates and sums of money quoted in the Pricing Schedule shall be in South African Rand and whole cents
- C2.1.12 The item numbers appearing in the Pricing Schedule refer to the corresponding item numbers in the Scope of Work.

C2.2: PRICING SCHEDULE

ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS

A. PERCENTAGE BASED FEES: PROFESSIONAL ENGINEERING SERVICES (NORMAL SERVICES)

<p>Basic fee for normal services in the discipline for a <u>road upgrading project</u> in terms of Guideline Professional Fees (Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 46 of 2000) as published in Government Gazette No. 44333 of 26 March 2021 and as amended by the Employer</p> <p>Employer's estimated cost of works (excl. VAT)</p> <p><u>Basic fee calculation:</u></p> <p>Primary Fee =</p> <p>Secondary Fee = (R 132 040 000.00 x 6.5%)</p> <p>Sub-total Basic Fee =</p> <p>Basic Fee factor 1.25</p> <p>Total Basic Fee =</p>	<p>R 227 000 000.00</p>	<p>Fee-based stages of service for this project:</p>			
		Project Assessment		N/A	
		Preliminary Design		N/A	
		Detail Design		N/A	
		Administration and Monitoring of the Works Contract		30%	
		Close Out		5%	
		R 19 559 500.00			
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.10.1	Fee-based stages of services:				
	(a) Project Assessment	%	Not Applicable		
	(b) Preliminary Design	%	Not Applicable		
	(c) Detail Design	%	Not Applicable		
	(d) Administration and Monitoring of the Works Contract	%	R 5 867 850.00		
	(e) Close Out	%	R 977 975.00		
SUBTOTAL A CARRIED FORWARD TO SUMMARY					

ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS (continue....)

B. DESIGN DEVELOPMENT					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.10.2	Survey Services:				
	(a) Survey services during design stage	prime cost (PC)	1	R 150 000.00	R 150 000.00
	(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.2(a)	lump sum (LS)	1		
3.10.6	Pavement / Materials Investigation and Testing Services:				
	(a) Pavement / materials investigation services during design stage	prime cost (PC)	1	R 450 000.00	R 450 000.00
	(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.6(a)	lump sum (LS)	1		
3.10.9	Phase / Stage Discontinuity:				
	(a) Review of detail design stage	lump sum (LS)	1		
	(b) Review of maintenance requirements for existing and new phases	lump sum (LS)	1		
	(c) Review of tender documentation by original designer	prime cost (PC)	1	R 350 000.00	R 350 000.00
	(d) Visits to construction site by original designer	prime cost (PC)	1	R 4 000 000.00	R 4 000 000.00
	(e) Handling cost and profit in respect of subitems 3.10.9(c) and (d)	%	R 4 350 000.00		
SUBTOTAL B CARRIED FORWARD TO SUMMARY					

ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS (continue....)

C. TENDER DOCUMENTATION AND PROCUREMENT					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.10.10	Employer's Gateway Review Process	lump sum (LS)	1		
3.10.11	Tender Documentation and Procurement:				
	(a) Preparation of draft tender documentation	lump sum (LS)	1		
	(b) Preparation of final tender documentation	lump sum (LS)	1		
	(c) Disbursements for tender documentation	lump sum (LS)	1		
	(d) Preparation of clarification meeting presentation	lump sum (LS)	1		
	(e) Service Provider's tender period cost	lump sum (LS)	1		
	(f) Tender evaluation and report	lump sum (LS)	1		
	(g) Disbursements for tender evaluation and report	lump sum (LS)	1		
	(h) Preparation of Works contract documents	lump sum (LS)	1		
SUBTOTAL C CARRIED FORWARD TO SUMMARY					

D. ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.10.12	Establishment of Supervisory Personnel and Office Equipment on Site:				
	(a) Relocation costs of individual supervisory personnel	prime cost (PC)	1	R 500 000.00	R 500 000.00
	(b) Handling cost and profit in respect of subitem 3.10.9(a)	%	R 500 000.00		
	(c) Establishment of office equipment	lump sum (LS)	1		
TOTAL CARRIED FORWARD TO NEXT PAGE					

ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS (continue....)

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE					
3.10.13	Monitoring of the Works Contract:				
	(a) Full-time site supervisory personnel	provisional sum (PS)	1	R 12 500 000.00	R 12 500 000.00
	(b) Additional overhead costs and profit in respect of subitem 3.10.13(a)	%	R 12 500 000.00		
	(c) Provision and monthly cost of office equipment	month	18		
	(d) Accommodation for site supervisory personnel	provisional sum (PS)	1	R 1 200 000.00	R 1 200 000.00
	(e) Handling costs and profit in respect of subitem 3.10.13(d)	%	R 1 200 000.00		
	(f) Disbursements for Engineer and Design Specialist(s)	month	18		
	(g) Administration and Monitoring of the Works Contract for extended Works Contract	month	3		
	(h) Administration and Monitoring of the Works Contract for prolonged site stoppages not under the control of the Employer	month	3		
3.10.14	Transport for site supervisory personnel:				
	(a) Travelling to perform duties	km	250 000		
3.10.15	Training:				
	(a) Targeted Enterprise Understudy	provisional sum (PS)	1	R 1 250 000.00	R 1 250 000.00
	(b) Employer's candidate engineers	provisional sum (PS)	1	R 100 000.00	R 100 000.00
	(c) Engineering students receiving experiential training	provisional sum (PS)	1	R 100 000.00	R 100 000.00
	(d) Handling costs and profit in respect of subitems 3.10.15(a), (b) and (c)	%	R 1 450 000.00		
TOTAL CARRIED FORWARD TO NEXT PAGE					

ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS (continue....)

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE					
3.10.16	Occupational Health and Safety Obligations Services:				
	(a) Occupational health and safety obligations services during administration and monitoring of the works contract stage	prime cost (PC)	1	R 875 000.00	R 875 000.00
	(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.16(a)	lump sum (LS)	1		
3.10.17	Environmental Services:				
	(a) Environmental services during administration and monitoring of the works contract stages	prime cost (PC)	1	R 875 000.00	R 875 000.00
	(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.17(a)	lump sum (LS)	1		
SUBTOTAL D CARRIED FORWARD TO SUMMARY					

E. ADDITIONAL SERVICES / DUTIES, SPECIAL SERVICES AND SPECIALIST ADVICE					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.10.18	Additional services / duties by the Service Provider:				
	(a) Personnel cost:				
	(ii) Category B	hr	200		
	(iii) Category C	hr	350		
	(iv) Category D	hr	350		
	(b) Disbursements to perform additional services / duties	prime cost (PC)	1	R 250 000.00	R 250 000.00
	(c) Handling cost and profit in respect of subitem 3.10.12(b)	%	R 250 000.00		
TOTAL CARRIED FORWARD TO NEXT PAGE					

ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS (continue....)

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE					
3.10.19	Additional Duties by the Employer	hr		R – 2 000.00	Rate Only
3.10.20	Special Services and Specialist Advice:				
	(a) Personnel cost for services or advice provided by Service Provider:				
	(i) Category A	hr	50		
	(ii) Category B	hr	100		
	(iii) Category C	hr	150		
	(iv) Category D	hr	150		
	(b) Services or advise procured by Service Provider	prime cost (PC)	1	R 250 000.00	R 250 000.00
	(c) Handling cost and profit in respect of subitem 3.10.20(b)	%	R 250 000.00		
3.10.21	Payment and Monthly Reporting cost	provisional sum (PS)	1	R 100 000.00	R 100 000.00
SUBTOTAL E CARRIED FORWARD TO SUMMARY					

F. QUALITY CONTROL OF THE WORKS CONTRACT					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.10.22	Works Contract Quality Control:				
	(a) Provision of a fully operational laboratory during administration and monitoring of the works contract stage	prime cost (PC)	1	R 12 000 000.00	R 12 000 000.00
	(b) Handling cost and profit in respect of subitem 3.10.22(a)	%	R 12 000 000.00		
TOTAL CARRIED FORWARD TO NEXT PAGE					

ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS (continue....)

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE					
	(c) Off-site materials testing	prime cost (PC)	1	R 750 000.00	R 750 000.00
	(d) Handling cost and profit in respect of subitem 3.10.22(c)	%	R 750 000.00		
	(e) Part-time survey services during administration and monitoring of the works contract stage	prime cost (PC)	1	R 300 000.00	R 300 000.00
	(f) Handling cost and profit in respect of subitem 3.10.22(e)	%	R 300 000.00		
SUBTOTAL F CARRIED FORWARD TO SUMMARY					

ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT FOR UPGRADING OF PROVINCIAL ROAD DR08005 MAGUSHENI TO MZAMBA (R61) ± 79KM PHASE 3: SECTION 2 KM 59,5 TO KM 67,7 - INCLUDING MAINTENANCE WORKS (continue....)

SUMMARY OF PRICING SCHEDULE		
ITEM	DESCRIPTION	AMOUNT
A	PERCENTAGE BASED FEES: PROFESSIONAL ENGINEERING SERVICES (NORMAL SERVICES)	
B	DESIGN DEVELOPMENT	
C	TENDER DOCUMENTATION AND PROCUREMENT	
D	ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT	
E	ADDITIONAL SERVICES / DUTIES, SPECIAL SERVICES AND SPECIALIST ADVICE	
F	QUALITY CONTROL OF THE WORKS CONTRACT	
SUBTOTAL 1 (A+B+C+D+E+F)		
PROVISION FOR CONTINGENCIES (Add 10% of SUBTOTAL 1)		
PROVISION FOR ESCALATION (Add 5% of SUBTOTAL 1)		
SUBTOTAL 2		
VALUE ADDED TAX (VAT) (Add 15% of Subtotal 2)		
TOTAL TENDER AMOUNT CARRIED FORWARD TO FORM OF OFFER AND ACCEPTANCE		

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signature:.....

Date:.....

Name:.....

Position:.....

Tenderer:.....

CONTRACT**PART C3: SCOPE OF WORK**

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C3.1 GENERAL REQUIREMENTS

C3.1.1 Scope

This section covers matters that relate to the project as a whole. Definitions, phrases or wording that would otherwise require repetition in other sections of this document are also covered in this section. Matters covered by the General and/or Particular Conditions of Contract are not repeated in this section, except to provide more detailed information.

C3.1.2 Location of the Project

The proposed project is located on surfaced district road DR08005, also referred to as R61 is located within the Mbizana Local Municipal area which is located within the Alfred Nzo District. DR08005 (R61) starts at Magusheni and ends at Mzamba.

Additional information is indicated in Part C4: Site Information

C3.1.3 Description of the Project

The Employer, the Department of Transport (DoT) in the Eastern Cape, is responsible for the maintenance and upgrade of provincial roads in the Eastern Cape. As part of its Maintenance and Upgrade Strategy, the Employer wishes to procure the services of suitable professional Service Provider(s) to undertake the administration and monitoring of the works contract for upgrading of provincial road DR08005 Magusheni to Mzamba (R61) ± 79km Phase 3: Section 2 Km 59,5 to Km 67,7 - Including Maintenance Works.

Upgrade: Indicates that additional capacity is required in the form of upgrading the existing surfaced single carriageway road by means of improving the horizontal and vertical alignments by constructing mass earthworks (cut / fill), new pavement structure and surfacing, new surface and sub-surface drainage, new road furniture (road signs, sidewalks, fencing, etc.) and new road markings.

In addition, the project shall involve the maintenance the existing surfaced road consisting of previously completed phases and future phases of the project.

The Services required of the Service Provider are divided into the following distinct stages:

- Detailed Design Review.
- Tender Documentation and Procurement Stage which shall include the following:
 - Documentation (Draft & Final)
 - Gateway Review
 - Clarification Meeting / Tender document presentation
 - Tender Period
 - Tender Evaluation
 - Contract Documentation for the Works
- Administration and Monitoring of the Works Contract Stage.
- Additional duties, Special Services and Specialist Advice.
- Quality Control: Works Contract.
- Close Out Stage.

C3.1.4 Determination of Remuneration

The basis for determining remuneration shall be based on 4 (four) different methods, which are not necessarily mutually exclusive, namely:

- Fee based on the cost of works;
- Separate payment for services that are additional to those provided for in the normal fee-based calculation;
- Time-based fees; and
- Reimbursable expenses.

(a) Fee determination

The determination of fees will be based on different construction work types, i.e. road works, structures and other works. The estimated cost of construction for each work type is provided by the Employer. This cost of works is a forecasted estimate escalated to the planned commencement date of the works contract (excluding contingencies, CPA during the construction period and VAT). Where a full service is not required or the commencement date of the works contract is unknown the forecasted cost of the works will be escalated to the completion date of the service.

The basic fee for normal services in the disciplines for civil and structural engineering, pertaining to Engineering Projects – Table 1, is determined in terms of Guideline Professional Fees (Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 46 of 2000) as published in Government Gazette No. 44333 of 26 March 2021, shall apply as amended by the Employer.

The complexity factor by which the basic fee is multiplied is provided by the Employer.

Table C3.1.4(a) below indicates remuneration payable, depending on the type of service required.

Table C3.1.4(a): Remuneration payable

Section	Stage	Remuneration Payable for Civil and Structural Engineering Services
C3.2	Project Assessment	Fee based on Table C3.1.4(b) below
C3.3	Investigations for Design Development	Tendered separately and excluded from the fee
C3.4	Design Development:	
	Design Development (a) Preliminary Design (b) Detail Design	Fee based on Table C3.1.4(b) below
	Phase / Stage Discontinuity Project	Tendered as separate payment and excluded from the fee
C3.5	Tender Documentation and Procurement	Tendered as separate payment and excluded from the fee
C3.6	Administration and Monitoring of the Works Contract	Fee based on Table C3.1.4(b) below plus reimbursable expenditure for site personnel
C3.7	Additional Duties, Special Services and Specialist Advice	Tendered as separate payment and excluded from the fee
C3.8	Quality Control: Works Contract	Tendered as separate payment and excluded from the fee
C3.9	Close Out	Fee based on Table C3.1.4(b) below plus any reimbursable expenditure

Table C3.1.4(b) below shows Employer's amended percentages points that are used for proportioning the calculated ECSA basic fee for normal services over the various applicable fee-based stages of services required.

Table C3.1.4(b): Percentage allocation per Fee-based Stage of Service

Description of Fee-based Stages of Services	Percentage points for each fee-based stage	This Project
Project Assessment	5	Not applicable
Design Development:		
(a) Preliminary Design	25	Not applicable
(b) Detail Design	25	Not applicable
Administration and Monitoring of the Works Contract	30	Applicable
Close Out	5	Applicable
Total	90	

For each fee-based stage of services (where applicable), the tendered fee percentage points provided by the Service Provider shall apply.

The product of the calculated basic fee and tendered fee percentage points provided by the Service Provider, hereinafter referred to as the tendered fee-based stage fees, shall include full compensation for all normal services / duties and requirements associated with each fee-based stage of services as specified herein, including all disbursements, materials, printing, travel, subsistence, allowances for overhead charges incurred by the Service Provider as part of normal business operations, the cost of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general, materials, printing, and all other costs and all profits, but excluding all specified additional services provided for herein.

Should during the project a particular future phase be unbundled, cancelled, abandoned or postponed (more than 6 months), no compensation will be applicable to the unbundling, cancellation, abandonment or postponement or to the outstanding phases. Additionally, no re-adjustment of the percentage points for each stage and tendered fee percentage points will be applicable.

The calculation of tendered fee-based stage fees, payable shall be based on:

- Initially on the estimated cost of works agreed between the Employer and Service Provider, referred to as the Employer's estimated cost of works.
- Employer's estimated cost of works adjusted to the accepted tender sum of the Works Contract exclusive of third party payments to others, all provisional and prime cost sums for which designs are not required, contractor contributions, allowances made for contingencies and contract price adjustments and VAT.
- Estimated contract price of the Works Contract exclusive of third party payments to others, all provisional and prime cost sums for which designs are not required, contractor contributions and VAT.
- Thereafter adjusted based on the total final contract price of the Works Contract:
 - before deduction of penalties
 - exclusive of third party payments to others, all provisional and prime cost sums for which designs are not required, contractor contributions and VAT certified.

(b) Time-based fees

Time-based fees are calculated by multiplying the hourly rate tendered for the different applicable personnel categories, as detailed in Clause C3.1.11(c), with the actual time spent by such professional and technical staff in rendering services required and approved by the Employer.

Tendered time-based fees for different personnel categories as detailed in Clause C3.1.11(c) shall include full compensation of professional and technical staff costs for additional services required by the Employer, including allowances for overhead charges incurred by the Service Provider as part of normal business operations, including the cost

of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general, materials, printing, and all other costs and all profits.

(c) Travelling Reimbursement

Calculation of travel costs are based on the shortest paved road travel distance from the appointed Service Provider's closets office, within the Eastern Cape Province, to the Site. Failing which, the following shall apply:

- the shortest paved road travel distance from the appointed Service Provider's closets office, outside of the Eastern Cape Province, measured from the Eastern Cape Province boundary to the Site; or
- the shortest paved road travel distance from the Employer's office in Bhisho to the Site; whichever is the shortest paved road travel distance as agreed with the Employer.

Travel expenses to Site for inputs associated with additional services shall be remunerated at the tendered rates. During the Administration and Monitoring of the Works Contract stage site travel by the Service Provider's site supervisory staff shall be limited to a maximum of 5 000 km per person per month or as approved by the Employer. Travel log sheets, verified and signed by the Service Provider, for each vehicle utilised shall be submitted to the Employer for approval with each claim.

Travelling time to Site for inputs associated with additional services shall be remunerated at the tendered time-based rates for additional services, for all agreed time spent travelling by the Service Provider's staff (excluding the Service Provider's site supervisory staff).

C3.1.5 Employer's Estimate Cost of Works

For the purpose of this project the Employer's estimated construction cost of works is **R 227 000 000.00** excluding contingencies, CPA during the construction period and VAT.

The Employer's estimated cost of the works forms the basis on which the basic fee for normal services prior to the tendered fee percentage points provided by the Services Provider is calculated.

C3.1.6 Standards, Manuals and Guideline Documents

The standards, manuals and guideline documents to be used in the project are as follows (latest revision to be used as applicable):

- TMH 3: Specifications for the Provision of Traffic and Weigh-in-Motion Monitoring Service
- TMH 8: Traffic and Axle Load Monitoring Procedures
- TMH 9: (Standard Visual Assessment Manual for Pavements)
- TMH10: Manual for the Completion of As-Built Materials Data Sheets
- TMH 13: Network Level Pavement Surveillance Measurements
- TMH 14: South African Standard Automatic Traffic Data Collection Formats
- TMH 16: South African Traffic Impact and Site Traffic Assessment Manual
- TMH 17: South African Trip Data Manual
- TMH 19: Manual for the Visual Assessment of Road Structures
- Draft TMH 11: Standard Survey Methods
- TRH 3: Design and Construction of Surfacing Seals
- TRH 4: Structural Design for Flexible Pavements
- TRH 8: Design and Use of Hot Mix Asphalts in Pavements
- Draft TRH 12: (Flexible Pavement Rehabilitation and Design)
- Draft TRH 16: (Traffic Loading for Pavement and Rehabilitation Design)
- TRH 17: Geometric Design of Rural Roads
- Draft TRH 19 (Standard Nomenclature and Methods for Describing the Condition of Jointed Concrete Pavements)
- TRH 26: South African Road Classification and Access Management Manual
- Code of Procedure Manual for Geotechnical and Materials Investigation, Design and Documentation
- Code of Procedure for the Planning and Design of Highway Structures in South Africa
- SANRAL's Drainage Manual

- The Highway Capacity Manual
- South African Pavement Engineering Manual (SAPEM)
- Highway Development and Management Model (HDM-4)
- South African Roads Design System (SARDS) (when available)
- South African Road Safety Audit Manual (SARSAM)
- The SAICE Code of Practice: The Safety of Persons Working in Small Diameter Shafts or Test Pits for Civil Engineering Purposes
- Current industry best practice
- General Conditions of Contract for Construction Works: GCC 2015
- Standard Specifications for Road and Bridge Works: COLTO; 1998

The style, format and presentation of the documents prepared by the Service Provider shall be in accordance with the requirements of the Employer.

The latest versions and editions of these standards shall always be used. These standards are generally available from industry role players' websites, e.g. CSIR website (www.csir.org.za). Others can be purchased from SANRAL and organisations such as CESA, SAICE, etc.

Standard Road Details drawings for the Department of Transport, Eastern Cape Province are available from the Employer on request.

The above is not an exhaustive list but shall be viewed as being the minimum standards applicable to the project. The Service Provider must apply his own knowledge and experience and recommend to the Employer other appropriate standards for his consideration.

C3.1.7 Stakeholder and Community Liaison, Social Facilitation and Employer's Contract Participation Goals

The Service Provider shall provide assistance to the Employer's In-house Social Facilitators for the duration of the project. This shall be achieved through structured engagement with affected Stakeholders within the Target Area of the project.

Require assistance provided by the Service Provider shall be deemed as an additional service.

The project is located within the following district within the Eastern Cape Province.

The Target Area for the projects shall be:

- For Targeted Labour (local labour):
 - the Wards within the road passes through.
- For Targeted Subcontractors (SMMEs) and Targeted Suppliers
 - the local municipal area(s) within the road passes through.

For the purpose of the Works Contract, the Service Provider shall make use of the Employer's specific specification for:

- Targeted Labour Participation and Development Specifications
- Targeted Subcontractor Participation and Development Specifications
- Targeted Supplier Participation Specifications

These specifications are available from the Employer upon written request from the Service Provider.

At the start of the Administration and Monitoring of the Works Contract Stage of the project a Project Management Team (PMT) consisting of the Employer, Contract Engineer and Contractor shall be established to review and manage implementation of the Employer's Contract Participation Goals.

C3.1.8 Permits and Authorisations

Any Environmental Management Plans/Programmes (EMP's) over and above the Employer's standard plan (EMPI) that may be required will be treated as a specialised additional service. Conversely, the compilation of any plans/reports

necessary to comply with the relevant environmental legislation pertaining to applications to operate quarries and borrow pits will be treated as a normal sub-service. Procurement of sub-Service Providers in such instances shall be in accordance with the requirements of clause C3.1.17. As approvals of any EMP's etc. are essential prior to the commencement of the Works, the Service Provider shall be responsible to ensure that all submissions to the relevant approving authorities are completed by the milestone date tabled in clause C3.1.9.

C3.1.9 Project Programme

The Service Provider shall programme its duties in such a manner so as to complete the various stages/phases of the project within the time periods specified in Table C3.1.9A below.

Table C3.1.9A: Project Programme

	Project Stage/Phase	Stage/Phase Time Period or Completion Date
A	Appointment of Service Provider	To be announced
B	Project Hand-over meeting	Within 3 weeks of A
C	Detailed Design Review	Within 1 month of B
D	Submission of draft Tender Documents for the Works and Detailed Design Review report	Within 3 weeks of C
E	Submission of Gateway Review documentation and presentation	Within 1 week of D
F	Submission of final Tender Documents and Compulsory Tender Briefing Presentation	Within 2 weeks of E
G	Tender Closure	To be announced
H	Employer's submission of tender evaluation information	To be announced
I	Submission of Tender Evaluation Report	Within 2 weeks of H
J	Acceptance of Tender Offer	To be announced
K	Submission of Contract Documents for the Works	Within 14 days of J
L	Works Contract Start-up Period	2 months
M	Works Contract Construction Period	18 months
N	Submission of draft Close-out report and as-built data	Within 3 months of issuing Works Completion Certificate
O	Submission of final Close-out report and as-built data	Within 1 month of issuing Works Final Approval Certificate

C3.1.10 Penalties and Delays

Penalties shall be applied for each calendar day by which the Service Provider fails to meet the prescribed dates for submission of the required design information for land acquisition purposes, EMP's and EIA's, draft Design Report(s), Tender Documentation for the Works or Tender Commercial Evaluation Report, draft and final Contract Report and As-built data. The quantum of the penalty shall be as listed in the Contract Data. Draft reports and documents shall be submitted to the Employer prior to any meetings scheduled for the discussion and finalisation thereof as specified in the documentation requirements. The Service Provider shall thus take this period into account in compiling its programme.

Any delays to the above programme that are attributable to the Employer, or to other agreed mitigating circumstances, will not be subject to penalties. In the event of such instances arising, any extensions of time granted shall be limited to the equivalent number of calendar days attributable to each instance.

C3.1.11 Personnel Requirements**(a) Key persons**

The Service Provider's key persons become a contractual commitment upon award. However, the Employer recognises that key persons may for some or other reason not be available for the full duration of the project and any changes to those listed are, to all intents and purposes, a change or variation to the contract. Any proposed change should be handled formally by way of written request to the Employer for approval. Replacement personnel shall be of same or better competence and experience as those initially accepted.

The key persons required for this project are listed in C1.2: Contract Data: Part 1 – Information provided by the Employer. The tenderer must list proposed candidates for the prescribed positions in the core team in C1.2: Contract Data: Part 2 – Information provided by the Service Provider.

(b) Minimum Requirements

The minimum qualifications and requirements for the Services and sub-Service Provider's personnel shall be as indicated in the table below.

Minimum Requirements

Position	Minimum Qualification/Registration	Minimum Relevant Experience (years)³	Other Requirements
Project Leader	Pr Eng or Pr Tech Eng ¹	10	
Design Specialist	Pr Eng or Pr Tech Eng ¹	10	
Surveyor	Registered Professional Surveyors, Technologist Surveyors, Technician Surveyors	5	Member of SAGC ⁷
Engineering Geologist	Pr Sci.Nat ⁵	5	SAIEG ⁴
Environmental Practitioner	Refer to sub-service procurement document		
OHS Specialist	Design Phase: SACPCMP ⁶ registration as a Professional Construction HSE Agent Construction Phase: SACPCMP ⁶ registration as a Professional Construction HSE Agent or Manager	As required by SACPCMP ⁶	
Road Safety Audit Team Leader	Pr Eng or Pr Tech Eng ¹	10	Road safety course (5 CPD) Minimum 2 (two) audits within 3 (three) years
Contract Engineer	Pr Eng or Pr Tech Eng ¹	10	
Assistant Contracts Engineer	Pr Eng or Pr Tech Eng ¹	Not applicable	
Engineer's Representative (RE)	Pr Tech Eng or Pr Techni Eng ¹	10	Completed a NQF level 5 or 7 unit standard for Labour Intensive Construction
Assistant RE	Pr Techni Eng ¹	5	

Position	Minimum Qualification/Registration	Minimum Relevant Experience (years) ³	Other Requirements
	Candidate Techni Eng ¹	3	
Senior Materials Technician	None specified	20	
	National Diploma in civil engineering	10	
	Pr Techni Eng ¹	5	
Materials Technician	None specified	10	
	National Diploma in civil engineering	5	
	Pr Techni Eng ¹	2	
Trainee Technician	Candidate Technician	0	

- 1 Registered with Engineering Council of South Africa (ECSA) or any other international body recognised by ECSA, i.e. Washington Accord, Dublin Accord and Sydney Accord.
- 2 Registered with Environmental Assessment Practitioners of South Africa.
- 3 Relevant experience is the actual number of years, measured from the date of acquiring the minimum qualification/registration, worked in the field of the specified position.
For the road safety audit team leader the field shall be road safety design and/or traffic and transportation engineering and/or geometric design.
- 4 Full member of the South African Institute for Engineering Geologist.
- 5 Registered with the South African Council for Natural Scientific Professions (SACNASP).
- 6 South African Council for Project and Construction Management Professions (SACPCMP)
- 7 South African Geomatics Council (SAGC)

(c) Personnel Category Definitions

The category of personnel necessary to undertake the work shall be approved by the Employer in accordance with the following definitions:

- (i) Category A shall mean a top practitioner whose expertise is nationally or internationally recognised and who provides advice at a level of specialisation where such advice is recognised as that of an expert.
- (ii) Category B shall mean a partner, a sole proprietor, a director, or a member who, jointly or severally with his other partners, co-directors, or co-members, bears the risks of business, takes full responsibility for the liabilities of such practice, performs work of a conceptual nature in engineering design and development, provides strategy guidance in planning and executing a project and/or carries responsibility for quality management pertaining to a project. (e.g. Project Leader. Design Specialist and Contract Engineer)
- (iii) Category C shall mean all salaried senior professional and technical staff performing work of an engineering nature and who carry the direct technical responsibility for one or more specific activities related to the project. A person referred to in Categories A or B may also fall in this category if such person performs work of an engineering nature at this level. (e.g. Engineer's Representative (RE))
- (iv) Category D shall mean all other salaried technical staff performing work of an engineering nature under the direction and control of any person contemplated in categories A, B or C.

C3.1.12 Meetings and Liaisons

- (a) Meetings and liaisons between the Employer and the Service Provider

Meetings between the Employer and the Service Provider are formal occasions. The Employer shall perform the duties of chairperson and the Service Provider the secretarial services. The Service Provider shall submit draft minutes to the

Employer for review before distribution which shall not be later than 14 (fourteen) calendar days after the meeting. Meetings and liaisons shall be scheduled according to the Service Provider's approved programme to discuss and record the progress of the Services.

Draft copies of all reports, design and tender documents submitted for review shall be discussed at specially convened meetings prior to their finalisation.

Attendance at the meetings and liaisons shall include joint venture members (if any), sub-Service Providers and the designated key persons except for the hand-over meeting where the Employer shall also perform the duties of secretarial services. A key person shall not be substituted by another Service Provider employee unless express permission for this has been sought from and approved by the Employer in writing. The Employer shall have the right to delay a meeting because of the non-availability of a key person and any delay costs so incurred shall be for the account of the Service Provider.

(i) Project hand-over meeting

The date of the meeting will have been fixed and notice for it and an agenda included with the letter of acceptance of the Service Provider's offer.

The Service Provider shall come to this meeting prepared by his desktop assessment of the project details. The meeting provides a platform for the Service Provider to explain in detail how he intends going about the design development with specific reference to the methods, manuals and systems he will apply. For example, the relevant chapters dealing with pavement composition and behaviour, materials testing, standards, materials utilisation, design, etc. contained in the *South African Pavement Engineering Manual* (SAPEM) and the supporting suite of TMH and TRH publications have particular significance. Similarly the *Code of Procedure for the Planning and Design of Highway Structures in South Africa* shall form the basis of the Service Provider's intended design development for structures. The Service Provider shall identify those he thinks are relevant and anticipates he will use in developing the project design.

In addition, the Service Provider shall explain and demonstrate his awareness of the encompassing social, natural, economic, safety and statutory environment within which the project is situated and how each impacts on it.

Further, the Service Provider shall demonstrate his understanding of the Topographical survey and Land Acquisition process and the critical aspects that would give rise to material delays in the project proceeding to the Design and Construction Phase.

(ii) Progress meetings

The date for the first progress meeting shall be fixed at the hand-over meeting mindful that it cannot take place until the Service Provider has conducted his *in loco* inspection of the project site. The first progress meeting shall not be scheduled longer than six calendar weeks after the hand-over meeting. Proposals for investigation and intrusive testing will be discussed at this first meeting.

The Service Provider's programme, as envisaged at the hand-over meeting shall be fine-tuned and approved at the first progress meeting. The approved programme shall identify the number and frequency of progress meetings. They may be reduced or increased as necessary to achieve the milestone date of delivery of the approved detailed design.

Topographical surveys and the Land Acquisition (if any) process must form an integral part of the Service Provider's programme and must be listed separately in their proposed programme.

The purpose of progress meetings is to discuss the development of the project design and the minutes produced shall form the record of progress against programme. The minutes shall record the discussions held and the decisions made.

Duties of some sub-Service Providers are not directly related to the development and production of the project design; nevertheless, because of the severe impact their progress can place on the programme, their presence at, and participation in, design progress discussions is not negotiable. They shall attend progress meetings and any delays caused by postponements due to their non-availability shall be to the account of the Service Provider.

(iii) Gateway Review meetings

It is a requirement of the Employer that projects shall have a Gateway Review process after submission of the draft Tender Document for the Works.

The review meeting shall be initiated by the Employer and the focus of such review meeting shall in the first instance be on the quality of the documentation and thereafter on:

- (1) deliverability (the extent to which a project is deemed likely to deliver the expected benefits within the declared cost, time and performance envelope);
- (2) affordability (the extent to which the level of expenditure and financial risk involved in a project can be taken up on, given the Employer's overall financial position, both singly and in the light of other current and projected commitments); and
- (3) value for money.

The Service Provider shall be required to produce a MS PowerPoint presentation for the Gateway Review meeting and present the project as said meeting.

Documentation to submitted 14 calendar days prior to the Gateway Review meeting shall include the following:

- Approved Final Detailed Design Report or Detailed Design Review Report (whichever is applicable)
- Environmental Basic Assessment Report or full EIA
- Materials investigation report
- Draft Tender Documents for the Works Contract.

(b) Other project related meetings

The Service Provider must ensure that proceedings of meetings (whether formal or informal) are formally documented. These meetings may be between the Service Provider, sub-Service Providers and/or other Stakeholders. The Employer may attend these meetings.

C3.1.13 Risk Management

The concept of risk shall be discussed at all meetings, starting with the hand-over meeting. The Service Provider shall identify restrictions and limitations on the design development that the various processes may impose, estimate the probability that they will impact on performance, advise what measures are proposed to avoid them and what mitigating measures could be taken to mitigate in the event they do occur. This creates a risk register that must be raised and discussed at each successive progress meeting.

Used properly, the risk register will predict or pre-warn of change; as the probability of an event increases so will the need for a Works Authorisation to approve extensions of time or allocation of more funds become more certain.

A base risk register shall be discussed and recorded at the hand-over meeting. It shall be re-visited at each successive progress meeting to confirm the status of each and record any changes. The opportunity to add more or remove others will also be discussed at the progress meetings.

A fundamental element of risk assessment, but by no means the only one, will be economic affordability meaning that each design strategy must be separately and broadly estimated for comparison against the basis of the Employer's budget for the project. In essence, this analysis relates to testing the economic and technical feasibility of the Employer's envisaged design strategy. Similarly, other identified risks will have a cost element to them and these must also be brought to the Employer's attention for discussion and decision. The Employer may require the Service Provider to make use of its standard risk reporting format.

C3.1.14 Document Management

Three (3) hard copies of draft reports and/or documents shall be submitted 10 (ten) calendar days prior to the meeting dates for discussion purposes. All changes emanating from these meetings shall be incorporated into a final version. The record of the changes shall be by means of track changes to the draft version and submitted in CD format.

When a volume consists of more than 1 book, the number of the volume appears on the cover and on the title page, together with the number of the book, e.g. Volume 3: Book 1 of, or Volume 3: Book 2 of

The table below lists the requirements of documentation that the Service Providers shall apply.

Table C3.1.14: Documentation Requirements

Document Characteristics	Draft Reports/Documents	Final Reports/Documents	Books of Drawings
Page	A4 80g/m ²	A4 80g/m ²	A2 80g/m ²
Cover page layout	Employer's pro-forma works document cover page with appropriate wording for the specific report/document compiled		
Cover	White 80g/m ²	White 160g/m ²	White 80g/m ²
Printing All left hand margins to be 2.5cm Printing to be left justified	Back to back pages	Reports: back to back Contract document: back to back except: - New sections - All returnable schedules - Pricing schedule	All on separate pages
Binding Maximum thickness to be 3cm	Plastic ring binders	Reports: plastic ring binders Contract documents: stapled, glued and bound	Draft: Stapled and bound Final: stapled, glued and bound
Number of paper copies	3 (three)	Reports: 1 (one) Tender documents: 1 (one) Tender evaluation: 2 (two) Contract documents: 2 (two) original for signature and 1 (one) copy	Draft: 3 (three) Final: 2 (two) original for signature and 1 (one) copy
Number of electronic copies	1 (one) CD/DVD	1 (one) CD/DVD 1 (one) CD/DVD of signed contract	1 (one) CD/DVD
Electronic format	MS Office 2013 and PDF	MS Office 2013 and PDF	PDF

C3.1.15 Management of Drawings

When the Service Provider produces drawings he shall, where applicable, use the Employer's typical details and when doing so they shall become integrated into the Service Provider's detail design for which he will assume full professional responsibility.

Drawings shall incorporate what has been discussed and agreed at the various progress meetings. All drawings issued to the contractor shall be fully signed and any amendments thereof shall also carry full original signatures.

C3.1.16 Safety

This part of the specification has the objective to assist the Service Provider entering into contracts with the Employer that they comply with the Occupational Health and Safety (OH&S) Act, No 85 of 1993, as well as all applicable Regulations. Compliance with this document does not absolve the Service Provider from complying with minimum legal requirements and the Service Provider remains responsible for the health and safety of his employees and those of his Mandataries. The Service Provider shall therefore include this part of the specification to any contract that he may have with sub-Service Providers and/or suppliers.

This part also covers the development of a health and safety specification that addresses all aspects of occupational health and safety as affected by this contract. It provides the requirements that the Service Provider shall comply with in order to reduce the risks associated with this contract, which may lead to incidents causing injury and/or ill health. In this matter the spirit and intention of Regulation 5(1)(l) of the Construction Regulations, 2014, regarding negotiations between the parties, related to the contents and approval of the Health and Safety Plan, must be complied with.

The Service Provider shall on award of the contract become the Client's Agent in terms of Construction Regulation 5(5), (6) and (7) of the Occupational Health and Safety Act, (Act 85 of 1993). The duties and responsibilities as the Client's Agent are as prescribed in Construction Regulation 5(7).

For purposes of clarity typical duties required of the Service Provider are given in (b) and (c) below, but they shall not be interpreted as being exhaustive and if any conflict between them and the legislated Construction Regulations occurs the latter shall rule.

(a) Project Specific Requirements

The following is a list of Baseline Risk Assessment and project specific health and safety specifications prepared by the Client in terms of Construction Regulation 5(1)(a) and 5(1)(f).

(i) Baseline Risk Assessment for Design Phase

- Excavation – locating existing underground services, digging test pits
- Manual handling – setting up surveying equipment
- Ergonomic risks
- High & Low voltage power lines – overhead & underground
- Work in close proximity to railway lines
- Uneven ground surfaces
- Personal safety & security risks
- Traffic Control (Ensure Correct Signage at Correct Distances)
- Working from ladders
- Exposure to noise
- Working in close proximity to traffic
- Working with hot materials
- Radio Active equipment
- Hazardous Chemical Substances
- Flammable Materials
- Driving to and from site
- Biological risks e.g. bees, snakes, spiders, etc.
- Environmental risks
 - Bad weather conditions,
 - rain,
 - lightning,
 - wind,
 - poor visibility
 - heat exposure – dehydration
 - cold environment

(ii) Baseline Risk Assessment for Supervision Phase

Clearing and grubbing of the area/site

- Site establishment including:
 - Office(s)
 - Secure/safe storage for materials, plant and equipment
 - Ablutions
 - Sheltered eating area
 - Maintenance workshop
 - Vehicle access to the site

- Temporary fuel storage, where applicable
- Laboratory establishment, where applicable (Client responsibility)
- Dealing with existing structures – possibility of asbestos
- Location of existing services, e.g. gas, telecommunications, electrical supply and similar
- Installation and maintenance of temporary construction electrical supply, lighting and equipment
- Adjacent land uses/surrounding property exposures
- Boundary and access control/public liability exposures (NB: The Employer is also responsible for the OH&S of non-employees affected by his/her work activities)
- Health risks arising from neighbouring as well as own activities and from the environment, e.g. threats by dogs, bees, snakes, lightning, etc.
- Exposure to a water environment
- Exposure to noise
- Exposure to vibration
- Protection against dehydration and heat exhaustion
- Protection from wet and cold conditions
- Dealing with HIV/Aids and other diseases such as silicosis or asbestosis, where applicable
- Use of portable electrical equipment including:
 - Angle grinder
 - Electrical drilling machine
 - Circular saw
 - Generator
- Excavations including:
 - Ground/soil conditions
 - Trenching
 - Shoring
 - Drainage of trenches
- Welding including:
 - Arc welding
 - Gas welding
 - Flame cutting
 - Use of LP gas torches and appliances
- Loading and off-loading of trucks
- Aggregate/sand and other materials delivery
- Manual and mechanical handling
- Lifting and lowering operations
- Driving and operation of construction vehicles and mobile plant including:
 - Trenching machine
 - Excavator
 - Bomag roller
 - Plate compactor
 - Front end loader
 - Mobile cranes and the ancillary lifting tackle
 - Asphalt paving equipmentMilling machines
 - Parking of vehicles and mobile plant
 - Towing of vehicles and mobile plant
- Use and storage of flammable liquids and other hazardous substances, e.g. petrol, diesel, cement, asphalt, bituminous materials and similar
- Layering and bedding
- Installation of pipes in trenches
- Backfilling of trenches
- Protection against flooding
- Gabion work
- Protection from overhead power lines (High and low)
- Work adjacent or in proximity of railway lines
- Work adjacent or in proximity of traffic
- Working at heights

- Formwork and support work (temporary works) including scaffolding
- Demolition work, where applicable
- Bulk mixing plant, where applicable
- Environmental impacts such as pollution of water, air or soil

(b) Design Phase

The Service Provider or his registered Professional Construction Health & Safety Agent must identify elements of the design that are inherently dangerous or hazardous during the construction phase and design in such a manner as to mitigate or eliminate the risk where possible. To this avail the Service Provider (or his Agent as outlined above) must prepare a baseline risk assessment for the intended construction work project, and make the same available to the Employer. This duty of identification continues into the construction phase of the project regardless that the designer may not be monitoring the construction phase. All identified dangers/hazards are to be listed and brought to the attention of potential contractors by means of the baseline risk assessment as outlined above and envisaged in Construction Regulations 5(1)(a); (b) and (c).

For example, staging for bridge decks or shoring of unstable excavations is the designer's responsibility to identify and notify of the health and safety risk. It is also the designer's responsibility to undertake inspections at critical phases of construction to ensure that the identified risks are continuously and appropriately mitigated.

(c) Construction Phase

During the construction phase the supervising Service Provider must ensure that the Employer's duties are continuously fulfilled. Monthly audits will be conducted by either the registered Professional Construction Health and Safety Agent or a registered Construction Health and Safety Manager.

Furthermore, the Service Provider must, in compliance with Section 24 of the Occupational Health and Safety Act (Act 85 of 1993) report immediately to the Employer's Health and Safety Officer and the relevant project manager the details of a Section 24 incident, including confirmation that the construction contractor has similarly reported the same incident directly to the Department of Employment and Labour.

(d) General Occupational Health and Safety Provisions

The Service Provider shall be required produce a Site specific health and safety specifications for the intended construction work based on the Employer's pro-forma document.

C3.1.17 Procedure for Procurement of sub-Service Providers

A sub-service is taken to mean any service necessary for the production of the project design and later construction, which is performed by someone other than the Service Provider. A sub-service procured directly by the Service Provider requires the Service Provider to enter into a sub-service agreement with that sub-Service Provider. The relationship between the Service Provider and sub-Service Provider is that of contractor/sub-contractor.

The Service Provider is responsible for the performance of the sub-service.

Procurement of a sub-service shall be undertaken by means of a:

- Quotation process for appointments less than R 1 000 000.00 inclusive of VAT, requires minimum of three (3) quotations; or
- Tender process for appointments equal or greater than R 1 000 000.00 inclusive of VAT, requires open tender.

The Service Provider shall compile and issue relevant and approved terms of reference, together with the relevant work/pricing schedules, in accordance with the Employer's standards and Supply Chain Management and procurement policies.

Quotation process will require the Service Provider:

- Invite quotations from identified potential sub-Service Providers;

- Receive submitted quotations and submit closing register to the Employer;
- Evaluate submitted quotation offers and submit a report with recommendations to the Employer for approval prior to the appointment of any sub-Service Provider;
- Once approved, the Service Provider shall enter into an agreement with the sub-Service Provider with a copy of same submitted to the Employer.

Tender process will require the Service Provider:

- Submit tender documents to the Employer's office for publication on the Employer's website;
- Receive submitted tenders, in a sealed envelope, directly to the Employer's office by the date and time agreed, will be opened in public by the Employer's delegated staff;
- Remove under signature all submitted tender offers for evaluation and submit a report with recommendations to the Employer for approval prior to the appointment of any sub-Service Provider;
- Once approved, the Service Provider shall enter into an agreement with the sub-Service Provider with a copy of same submitted to the Employer.

In cases where a conflict of interest may arise, e.g. the Service Provider have shares in a laboratory that also wants to tender, the Employer will take over the procurement process described in the above paragraph as well as do the evaluation and recommendation of the sub-Service Provider.

C3.1.18 Participation of Targeted Enterprise(s)

The Employer may stipulate the involvement of Targeted Enterprise(s) in the project design and construction as a mechanism to broaden the economic share of the national spend on engineering services and as a means to hasten and improve the transfer of technical skills.

The Service Provider's Targeted Enterprise(s) become a contractual commitment upon award.

- (a) The Targeted Enterprise(s) shall be involved throughout the project stages and the Employer's target specified in the Contract Data shall be applicable to actual work split (excluding all provisional and prime cost sums but including site staff salaries) amongst the following stages:
- Administration and Monitoring of the Works
 - Additional duties, special services and specialist advice
 - Quality control
 - Close out
- (b) The use of Targeted Enterprise personnel as site staff during the administration and monitoring of the Works phase is included as part of the Employer's target specified in the Contract Data.

C3.1.19 Training

- (a) Service Provider's staff and Targeted Enterprise

The Employer encourages training of candidate engineers or undergraduates requiring experiential training on this project. Training of the Service Provider's own permanent staff, temporary staff or Targeted Enterprise involved in this project becomes a reportable monthly event in terms of time and cost attributable to the Employer's spend from its allocated budget. Separate allowance has been made to train the Service Provider's and Targeted Enterprise's staff as assistants to certain required positions.

- (b) Employer's trainees

The Employer may enter into a separate arrangement with the Service Provider for training of its own permanent employees as a secondment for the express purpose of providing its candidate engineers with design and/or site supervision experience. The Employer may also enter into an arrangement with the Service Provider to provide experiential training to students.

The design phase provides the opportunity for students and candidate engineers to receive training. Three distinct categories of training are recognised. The first, and most formal, is the placement of the Employer's candidate engineers with the Service Provider for training distinctly geared to professional registration with the Engineering Council of South Africa (ECSA). The training provided shall be pre-dominantly, but not exclusively, related to this project and may be subject to scrutiny and inspection in loco by the Employer who is responsible for candidates' remunerations. The trainees are expected to work according to the Service Provider's terms and conditions of employment, especially those related to confidentiality. They are to be treated as if they were the Service Provider's own full-time personnel. No allowances shall be made for working overtime.

Less formal will be experiential training the Service Provider is requested to provide to university or university of technology undergraduate students. The training provided must be in accordance with the academic institution requirements. The Service Provider, apart from providing the technical training, shall also provide trainees with all the tools (including appropriate information technology hardware and software) and space necessary to carry out engineering or survey work as if they were the Service Provider's own permanent staff.

Reporting on training progress of each candidate engineer and student shall be compiled according to the formats and intervals set by ECSA (for engineering students) or SAGC (The South African Geomatics Council).

C3.1.20 Payment and Monthly Reporting

When submitting interim payment certificates for payment the Service Provider shall use the Employer's standard forms and formats.

The Service Provider shall submit payment certificates for all work rendered in the Employer's financial year within that specific year.

The Service Provider shall submit and update on a monthly basis a cash flow forecast for the remuneration of the full service to be rendered.

The Service Provider shall complete and submit the following monthly reports during the Administration and Monitoring of the Works Contract Stage making use of the Employer's forms and formats:

- Targeted Labour monthly expenditure
- Targeted Subcontractor monthly expenditure and development
- Targeted Supplier monthly expenditure
- Monthly construction report
- Monthly progress photos

Allowance has been made for these requirements in the Pricing Schedule under Additional Duties. Failure to comply may result in payments being withheld.

C3.1.21 Multiple Strategies

Service Provider appointments by the Employer premise the fundamental concept that the Service Provider is capable of providing a design that is not just fit for purpose but also carries the hall mark of value for money. The design strategy on which the Employer has based his budget. It is expected of the Service Provider to interrogate the appropriateness of this design and to offer alternatives to it for consideration by the Employer.

C3.1.22 Service Provider's Estimated Cost of the Works

The Service Provider shall at the completion of each stage or phase where applicable, provide the Employer with an updated realistic estimate of the cost of the works as well as the foreseen duration of the works.

C3.1.23 Economic Feasibility Analysis

Development of the design shall include continuous testing of the feasibility of the project so that in the unlikely event of a total misreading of the project scope as prescribed a decision can be made to abandon, change or continue with the design development. The earlier the warning the earlier change decisions can be made.

Where applicable for a stage, the feasibility outcome shall be accompanied by the output of HDM 4 analyses and even at the first progress meeting comments on the feasibility must be discussed, however unrefined the input parameters might be.

The Service Provider shall undertake economic feasibility analysis utilising HDM 4 at the end of the following stages/phases:

- Project Assessment
- Preliminary Design
- Detailed Design

In performing the economic feasibility analysis the Service Provider shall:

- Utilise the latest release of HDM-4 or any other software as instructed by the Employer.
- Divide the project into uniform sections that as minimum considers changes in geometry/alignment, pavement condition, construction/maintenance history, climate and traffic characteristics.
- For each identified uniform section determine the appropriate input parameters for geometry/alignment, pavement condition, construction/maintenance history, climate, traffic characteristics and calibration parameters as per the latest HDM-4 Configuration Setup where applicable. The Employer will provide the general network input parameters.
- Define the default Employer vehicle fleet with associated inputs as within the latest HDM-4 Configuration Setup. This process will also include defining appropriate traffic growth sets for the project or uniform sections if applicable.
- Define a "Do Minimum" maintenance standard consisting of the following routine maintenance activities: patching, crack sealing, edge repair and road reserve maintenance, as per the latest HDM-4 Configuration Setup where applicable.
- Define various maintenance and improvement standards under consideration for the various uniform sections on the project, as per the latest HDM-4 Configuration Setup where applicable.
- Perform economic cost benefit analysis, including accident costs and acceleration effects as per the latest HDM-4 Configuration Setup where applicable.
- Analyse the economic analysis results obtained and submit to the Employer for discussion and review.

For this project an HDM-4 economic analysis will not be required.

C3.1.24 Communication Management

Communication management must be identified early in the life of the project and discussed with the Employer as to who shall be responsible for liaising with which party and to define the limits or authority that either party has to speak for or commit the other.

At the earliest stage of design development the Service Provider should have already identified the relevant and potential stakeholders in the project and list those that may play a sanctioning role that could accelerate or delay delivery of the project.

C3.1.25 Services

The early identification of services is a critical element in the project. The Service Provider shall identify those that are observable during the project assessment stage and those resulting from further later investigations.

During the design development phase the Service Provider shall continuously liaise with the identified service owners (who form part of the strategic partners) and with the Employer. A first step is to search for any wayleave or similar authorisation agreement for the service to be placed within, alongside or across the project site. All liaison shall be formal and in writing.

Service relocation may be required. If any design is required to temporarily or permanently relocate the service such design shall not be to the Employer's account unless agreed during liaison with the service owner. Regardless that any agreement is reached the Employer shall not take responsibility for the subsequent design, it being deemed that it cannot assume liability for property that it does not own or operate. However, the Service Provider is at liberty to offer its design capabilities to the service owner under an agreement between them. The service owner's design cost recovery may be via the contract should the Employer and service owner so agree, but no design liability shall pass to the Employer.

C3.2 PROJECT ASSESSMENT STAGE

C3.2.1 Scope

This section covers the project assessment stage which precedes any design development. Thereafter, the actual designs will be produced in a single or multiple phases depending on the complexity of the project. This stage requires assessment of the project through perusal of relevant reports and previous studies, designs or surveys relating to the project, undertaking new inspections, surveys, studies and/or intrusive investigations, including subsequent testing, and analysis of test results.

Whilst the aspect of Land Acquisition may still be premature in the sense that the work required to determine what land will be required is only done later, it is nevertheless important that the Service Provider is always familiar with the contents of the Employer's Land Acquisition procedures.

The stage ends with the production of a report detailing the findings of the assessment and the identification of multiple design options to be developed in the following stage.

C3.2.2 Assessment in Phases

Assessment of the project shall be conducted in the sequence described hereunder.

In the first part of project assessment the Service Provider shall undertake an initial assessment, i.e. a desktop assessment of the information provided, which may also include additional data, reports, studies etc. issued with the letter of acceptance of an offer. This part culminates with attendance at the project hand-over meeting at which the Service Provider will put forward for discussion and approval of the planned assessments in the context of an overall design development strategy.

The second part of project assessment is the visual assessment and thorough analysis of information provided, whereafter the Service Provider shall arrange for the first progress meeting with the Employer for the purpose of confirming the design strategy and acquiring approval for the type, quantity and positioning of intrusive and other investigations which form the third part of project assessment.

First and second parts of the assessment requirements are summarised below and expanded in the following paragraphs:

- Review and analyse information provided
- Conduct visual assessment of the road
- Identify statutory and regulatory requirements
- Identify other stakeholders with whom consultations may be needed
- Consider feasibility of various construction strategies
- Evaluate risk that the project presents to the Employer
- Other criteria

C3.2.3 Initial Assessment

Existing information with respect to the relevant project is given in Part C4: Site information. The information provided there is deemed sufficient both for purposes of tendering and for initial assessment (i.e. desktop assessment). This information shall be studied and used to determine the extent of intrusive investigations that need to be undertaken to prove pavement or existing ground or structural conditions. In the case of reports, studies or designs previously undertaken and not able to be condensed into Part C4: Site Information, these must be collected from the Employer by the Service Provider and returned together with the submission of the Detailed Design report. Failure to return information for which the Service Provider will have signed out from the Employer's registry will constitute reason for the Employer to withhold payment until such information has been returned in an acceptable condition for continued archiving.

The Service Provider should not take the existing data at face value only but shall interrogate its integrity and accuracy as well as determine the need to access any additional data such as as-built drawings, plans, traffic counts etc. and enquire from the Employer whether such additional information does exist and assist in sourcing same if possible.

Existing data is, by itself, insufficient to conduct a detailed assessment and must be amplified by visual inspections and subsequent surveys and investigations.

(a) Traffic assessment

The Service Provider shall review existing traffic data available for the project to determine any potential need for capacity and pavement improvement and identify any need for additional traffic counts or studies.

(b) Geometric assessment

No existing horizontal and vertical alignment data is available for the project. The Service Provider shall include the survey of the existing road alignment as part of the additional topographical road reserve survey service.

(c) Pavement assessment

Identify uniform sections within the project site. No existing pavement as-built records are available for the project.

(d) Structures assessment

Assess the available information and conduct a site inspection of all structures located on the route in order to undertake a condition assessment and to gain a general appreciation for the structures and the structural issues that may arise as a result of the envisaged work.

Identify which structures require capacity improvement (hydrologically, traffic, strength, etc.) and maintenance/rehabilitation interventions.

(e) Drainage assessment

Assess all drainage systems and compare to drainage manual guidelines.

(f) Geotechnical assessment

Identify potential geotechnical risks.

(g) Assessment of material sources

Assess all available information.

(h) Safety assessment

Assess Incident Management System (IMS) data for potential hazardous locations.

(i) Environmental assessment

The Employer anticipates that no environmental authorisation will be required. From data available assess whether the Employer's expected authorisation process is correct, using the services of an environmental specialist who shall confirm the type of environmental approval, (i.e. basic application, or full environmental investigation including all other permits and authorisations) that must be applied for from the relevant Authorities. In addition, the Service Provider; will also assist in identifying the content for an independent Environmental Assessment Practitioner's (EAP) sub-service tender document.

(j) Land Assessment

At this stage, the identification of informal settlements that may impact on the project must be carried out. Where the project traverses land under the control of a Tribal (Traditional) Authority then the identification of clusters of homes and/or other structures that may require relocation should be made. The above, if evident, must immediately be reported to the Employer.

C3.2.4 Visual Survey

The Service Provider shall carry out a comprehensive visual assessment survey for the project with the purpose of comparing the desktop assessment assumptions against visible reality. Apart from an overall impression the visit shall be used to assess the existing condition of the pavement, all drainage and other structures, road side furniture, slopes, road safety and all other aspects in order to ascertain the current overall condition. This survey shall be conducted by the Service Provider's designated design specialist(s) and cannot be delegated to others.

The visual survey shall also include the identification of any other associated aspects located within the road prism affecting the functionality/structural integrity of the road and/or road safety issues including but not limited to:

- Surface drainage
- Sub-surface drainage (including pipe culverts)
- Present or potential geotechnical instability
- Excessive shoulder drop-off
- Intersection details
- Pedestrian issues
- Any evident or suspected road safety issues
- Condition of bridge joints and balustrades/handrails
- All identifiable services
- Any other issues that may be glaringly evident

The visit should include an inspection of all borrow pits and quarries identified during the initial assessment and act on any other relevant information emanating from the hand-over meeting discussions. Where any borrow pit or quarry is in any way affected by an informal settlement, the information gathered must immediately be brought to the attention of the Employer.

The condition of all existing structures shall be inspected. The BMS inspection sheets shall be forwarded to the Service Provider, who shall verify the accuracy thereof and report on the advancement of the identified defects and the development of any new defects. Rehabilitation and maintenance requirements are to be identified and incorporated into the designs in discussion with the Employer. Any structures that are not listed on Employer's BMS that are found within the project limits are to be included. The Employer is to be notified of such inclusions in order to update the BMS. The structures are also to be assessed in order to gain a general appreciation for the structures and structural issues that may arise as a result of the envisaged works.

C3.2.5 Identification of Statutory and Regulatory Controls

The Service Provider shall identify legislation applicable to this project and bring to the notice of the Employer together with recommendations how compliance thereto can be incorporated into the project design.

The following aspects must be dealt with at this point:

- Road closures arising from the design;
- The closure of public places that would arise from the design;
- The impact must be determined that the project/design will have on zoning criteria for properties in a township. This is in particular reference to where such properties will be reduced to a size as a result of the design and where such remaining portions will be in conflict with the such zoning criteria; and
- Statutory provisions relating to Mining Rights, Proclamations and De-proclamations of Provincial and Municipal Roads, the closure of streets and public places, the existence of Informal Property Rights, Traditional Authorities, etc. need to be clearly identified at this stage.

All of the above may give rise to the need to appoint other professionals such as a Land Surveyor, Town Planner, etc. in order to ensure formal compliance at the time of Detailed Design. The Service Provider must therefore set out the Terms of Reference with regards to each such statutory requirement in a report to the Employer having specific regard to the time frames involved and an estimate of costs in obtaining such statutory authorisation.

C3.2.6 Other Authorities and Stakeholders

The Service Provider shall identify all authorities and stakeholders who should be consulted about the design and implementation of this project and the degree to which liaison with each is expected. In addition, the Service Provider shall compile a list of the relevant persons, their capacity to act for such authority or body and their contact details, with whom liaison must take place but shall not commit to any meetings without first engaging the Employer to confirm how and when such meetings should be held.

Where the Project traverses land under the control of a Tribal (Traditional) Authority then the Department of Rural Development and Land Reform is to be notified and a determination and record of which officer is responsible for the area affected must be made.

During the development of the design and the construction phases the Service Provider shall continue these same liaison duties, including representing the Employer if so authorised and providing the Employer with written records of all liaison meetings and conversations.

Allowance has been made for these requirements in the Pricing Schedule under Additional Duties.

C3.2.7 Other Criteria

The above aspects of project assessment should not be considered as exhaustive. The Service Provider shall undertake the first phase of assessment to identify as many items as possible that will need to be considered when developing the design and the emanating scope of work, including consultation with the relevant routine maintenance Service Provider.

C3.2.8 Presentation of Visual Survey

The Service Provider shall, at the first progress meeting, present for discussion the findings of the visual survey that will ultimately be included in the project assessment report. This meeting also serves the purpose of affording the Service Provider the opportunity to further demonstrate his understanding of the project and seek approval for proposed investigations and/or studies.

The Service Provider shall also present initial design strategy proposals at this meeting.

C3.2.9 Market Analysis and Databases

The Service Provider shall undertake a market analysis in terms of the CIDB guidelines for undertaking a feasibility study (CIDB grading, Central Supplier Database (CSD), etc.) of availability and type of Targeted Subcontractors for the Works Contract.

Allowance has been made for these requirements in the Pricing Schedule under Additional Duties.

C3.2.10 Project Assessment Report

A project assessment report shall be submitted for discussion at the progress meeting. The content of this report will depend on the available information and the scope of the work and may include the following aspects where applicable:

- Document initial scope of works and the methods and procedures required to maintain the condition of infrastructure
- Establish the scale and cost plan for the project
- Identify risks that need to be mitigated
- Identification of additional studies, e.g. geotech, survey, traffic, etc.
- X-section development strategy – 20 years
- Intersection/interchange improvements (where applicable)
- Appropriate Legislation
- Identify stakeholders
- Identify services
- Existing pavement condition

- Geotechnical stability
- Road furniture condition and compliance
- Confirm BMS assessment with recommendations
- Economic Feasibility Analysis
- Preliminary Land Report
- Market Analysis and Databases

Although all aspects are important, particular emphasis should be given to the materials making up the existing pavement, their current reported condition and their respective sources.

During the first part of the assessment, and based purely on the information given and/or collected, the Service Provider must devise other feasible strategies for further discussion with the Employer.

C3.3 INVESTIGATIONS FOR DESIGN DEVELOPMENT

C3.3.1 Scope

This section covers the investigations preceding any design development. This process requires investigations to be undertaken either in-house or through the appointment of relevant sub-Service Providers.

C3.3.2 Investigations, Sampling and Testing

Intrusive investigations are deemed to be any type of investigation that probes into or removes from the pavement layers, sub-grades, structures' elements and other areas, e.g. cuttings, etc.

Supervision of intrusive investigations shall not be delegated, they shall be supervised and logged by the key person listed as the relevant design specialist.

Provision for investigations, sampling and testing has been allowed for in the Pricing Schedule.

The Service Provider shall submit for approval a schedule of proposed work for all field work, sampling and testing prior to commencement.

C3.3.3 Survey Services

All survey requirements must be identified by the Service Provider as early as possible during the Project Assessment stage in order to ensure that there will be sufficient time to undertake these surveys. It is important that the Service Provider familiarises himself with the requirements of TMH11: Standard Survey Methods in order to ensure that the survey deliverables will conform to the Service Provider's requirements.

The Service Provider is required to provide the type and extent of the survey and determine a reasonable time period for its production.

(a) Procurement of the survey sub-service

The Service Provider shall identify all potential survey requirements during the initial and visual assessment stages, including the survey of potential borrow pits and/or quarries. Discussion of purpose and extent of the survey shall be included in the agenda of the first progress meeting.

The Services Provider shall be required to procurement survey services in accordance with Clause C3.1.17.

All survey shall be carried out to TMH11: Standard Survey Methods.

(b) Management of the survey sub-Service Provider

Whenever the Service Provider procures the survey services, the following processes shall be applied:

- Call for and evaluate regular progress reports and attend relevant progress meetings.
- Attend to enquiries from the survey company.
- It is a requirement for the survey sub-Service Provider to submit a survey verification report for existing beacons prior to using their values. The verification entails the following:
 - Evaluate the verification survey methodology
 - Evaluate the verification residuals
 - Advise the survey sub-Service Provider to re-survey the existing control beacons or to adopt their values for the rest of the survey
- Receive the newly established permanent survey control survey data and co-ordinates for approval prior to the acceptance of the values for any further surveys.

When receiving completed survey data from the survey sub-Service Provider the following processes listed below shall be followed:

- Check that all deliverables have been submitted by the survey sub-Service Provider in terms of the tender requirements.
- Conduct survey data quality control and forward required corrections (if any) to the survey sub-Service Provider. The date by which corrections are required must be identified.
- Receive corrected survey data (if any) from survey sub-Service Provider and conduct survey data quality control. Destroy all previous data.
- Submit a copy of the final survey data to the Employer for proof of service completed.
- Make payment to the survey sub-Service Provider.

C3.3.4 Traffic Monitoring Services

All traffic monitoring requirements must be identified by the Service Provider as early as possible during the Project Assessment stage in order to ensure that there will be sufficient time to undertake these surveys. It is important that the Service Provider familiarises himself with the requirements of TMH3: Specifications for the Provision of Traffic and Weigh-in-Motion Monitoring Services and TMH14: South African Standard Traffic Data Collection Format in order to ensure that the traffic monitoring deliverables will conform to the Service Provider's requirements.

The Service Provider is required to provide the type and extent of the survey and determine a reasonable time period for its production.

(a) Procurement of the traffic monitoring sub-Service Provider

The Service Provider shall identify all potential traffic monitoring requirements during the initial and visual assessment stages. Discussion of purpose and extent of the survey shall be included in the agenda of the first progress meeting.

The Services Provider shall be required to procurement traffic monitoring services in accordance with Clause C3.1.17.

All traffic monitoring are to be carried out to TMH3 and TMH14 standards

(b) Management of the traffic monitoring sub-Service Provider

Whenever the Service Provider procures the traffic monitoring services, the following processes shall be applied:

- Call for and evaluate regular progress reports and attend relevant progress meetings.
- Attend to enquiries from the traffic monitoring company.
- It is a requirement for the TMSP to submit a traffic monitoring report. The report entails the following:
 - Evaluate the survey methodology
 - Evaluate the positions for traffic monitoring
 - Advise the Service Provider to re-evaluate the proposed positions or advise on the suitability of the traffic monitoring system to be used.
 - Take the necessary geocoded photographs to verify positions of traffic counts.
 - Compile the Station Information Report
- Receive the traffic monitoring data for approval prior to the acceptance of the values for any further surveys.

When receiving completed traffic monitoring data from the traffic monitoring sub-Service Provider the following processes listed below shall be followed:

- Check that all deliverables have been submitted by the traffic monitoring sub-Service Provider in terms of the tender requirements.
- Conduct complete data quality control and forward required corrections (if any) to the traffic monitoring sub-Service Provider. The date by which corrections are required must be identified.
- Receive corrected data (if any) from traffic monitoring sub-Service Provider and conduct complete data quality control. Destroy all previous data.
- Submit a copy of the final complete data to the Employer for proof of service completed.
- Make payment to the traffic monitoring sub-Service Provider.

C3.3.5 Environmental Service

The Service Provider shall identify all potential environmental issues relating to the envisaged scope of the Works during the assessment stage, including areas where potential borrow pits and/or quarries may be located.

The environmental sub-Service Provider shall distinguish between the design and construction stages. The Employer requires that the same sub-Service Provider fulfils the duties of the Environmental Assessment Practitioner (EAP) and later as the Environmental Control Officer (ECO), in accordance with the Mineral and Petroleum Resources Development Act (28 of 2002).

The Services Provider shall be required to procurement environmental services in accordance with Clause C3.1.17.

C3.3.6 Geotechnical and Drilling Services

The Service Provider shall identify all potential geotechnical and drilling requirements as early as possible during the Project Assessment stage in order to ensure that there will be sufficient time to undertake these services. If required, the Services Provider shall be required to procurement geotechnical and drilling services in accordance with Clause C3.1.17.

Once appointed, the contract will be carried out between the Geotechnical and Drilling sub-Service Provider and the Service Provider.

Supervision of the sub-service work shall only be undertaken by suitably qualified and experienced personnel. Dependant on the scope and/or scale of such sub-services, supervision may be required on a full time or part time basis as determined by the Employer.

The logging of the cores and profiling of test pits are the Service Provider's responsibility. All core logging and test pit profiling are to be carried out, officially checked and signed by a suitably qualified and experienced engineering geologist as specified in Section 38 of the COTO Standards and Specifications for Sub-service Investigations (2010).

The Service Provider's geotechnical engineer shall be responsible for reviewing the results of the investigations and confirming its acceptance. The geotechnical engineer will be involved in the planning, procurement and managing of the sub-contract. The geotechnical engineer will be responsible for the acceptance of data collected during the investigation including amongst others, core logs, test pit profiles, laboratory test, etc. and the production of a factual geotechnical report. In addition, the geotechnical engineer will be responsible for an interpretive geotechnical report as well as a design geotechnical report required for fulfilling the design.

C3.3.7 Other Special Services and Specialist Advice

The Employer may require other special services and specialist advice which are not included in the normal duties. These may include:

- road network planning studies
- traffic, axle weight and transportation studies (including traffic counts only)
- economic studies
- model studies
- soil mapping and seismic or similar surveys
- monitoring of road and bridge elements
- pavement surveillance surveys (e.g. FWD)
- mediation, arbitration and litigation
- land acquisition assistance

The Service Provider shall, if and when required by the Employer to do so, procure such other specialist services in accordance with the procedures for the procurement of sub-Service Providers. The Service Provider may tender for these services.

In the event of "specialist advice" the reimbursable costs shall be inclusive of the investigations and analysis to provide the Employer with an appropriate technical solution. In the case of "special services" the reimbursable cost is only for the specific survey, tests or data required and exclude the analysis thereof, the cost of which shall be included in the tendered rates for design.

Provision for payment of other special services and specialist advice are provided in Section C3.8: Additional Duties. Where investigations are to be undertaken the Service Provider shall compile a schedule of required work, which shall be subject to the approval of the Employer, before any investigation may commence.

C3.3.8 Pavement / Materials Investigation and Testing

The Service Provider shall be required to determine the number and location of testing required for approval by the Employer.

(a) Test pits

All test pits shall be excavated, profiled and sampled in accordance with the M1 Manual and industry best practice. The dimensions of the excavation shall be sufficient to permit safe working conditions and to allow for adequate quantities of material to be sampled from each horizon for the envisaged testing. All test pits shall be excavated to a minimum depth of 800mm, or deeper if so specified by the design engineer.

All test pits shall be backfilled utilizing material which is at least of a similar quality as that removed from the relevant horizon. The upper 150mm horizon shall consist of at least G2 quality material stabilized with 2% emulsion and 1% cement. The surfacing shall consist of hot/cold asphalt or prefabricated seal patches as appropriate to the existing surfacing and traffic/road class. Compaction shall be by appropriate compaction equipment in layers not exceeding 150mm.

(b) Dynamic Cone Penetration (DCP) testing

Dynamic Cone Penetration (DCP) testing shall be carried out in accordance with the standard test method. Appropriate drilling equipment shall be utilized to penetrate asphalt, highly stabilized or cemented layers prior to proceeding with the testing. Results of DCP testing shall be produced in a format enabling full assessment of the various pavement layers to be assessed.

(c) Transport of samples to laboratory

All samples shall be securely fastened, labelled and transported to the laboratory appointed to carry out the required testing.

(d) Laboratory testing

Only SANAS accredited laboratories shall be permitted to carry out laboratory testing of materials. All testing shall be carried out in accordance with the methods specified in the relevant test methods.

C3.4 DESIGN DEVELOPMENT STAGE

C3.4.1 Scope

This section covers the requirements for the compilation and submission of a Preliminary and Detailed Design and the various phases that the Service Provider may have to apply so as to develop the design in such a way that the Employer is provided the opportunity to select the most appropriate design strategy.

It is a fundamental requirement that the Service Provider has a thorough working knowledge of the Employer's complete suite of design standards, codes, manuals and guidelines (i.e. those that it publishes and those for which it provides an industry custodianship), which shall be used in the production of the designs in all their separate phases. In addition, the Service Provider shall apply any other industry best practice publication that may be appropriate. Furthermore, the Employer's philosophy of appropriate standards and cost effectiveness shall always be considered.

C3.4.2 Investigations, Sampling and Testing

Intrusive investigations are deemed to be any type of investigation that probes into or removes from the roadbed, borrow pits, quarries, structure founding materials and other areas, e.g. cuttings, etc. Investigations, both intrusive and non-destructive, sampling as well as associated laboratory testing, must be approved by the Employer before they are undertaken.

The Service Provider shall initially identify and then determine the viability of sources for the supply of materials by arranging for test pits, samples, laboratory testing and reporting on them. The investigations may involve drilling, both by percussion and core recovery if needed to prove new sites or extensions to existing pits. Depending on the locality of the project site, the investigation of materials sources shall include the use of commercial sources as well as existing Employer owned sources on, alongside or near the project site. This will require sampling and testing of the commercial products. When the project demands crushed stone products the investigation of more than one source shall be required.

Supervision of intrusive investigations shall not be delegated, they shall be supervised and logged by the key person listed as the relevant design specialist.

Provision for investigations, sampling and testing has been allowed for in the Pricing Schedule.

The Service Provider shall submit for approval a schedule of proposed work for all field work, sampling and testing prior to commencement.

C3.4.3 Preliminary Design

The underlying purpose of preliminary design is to develop more than one option for presentation to the Employer for selection of that which is the most appropriate based on technical functionality and economic benefit. The selected option(s) will then be further developed in the detailed design phase.

The Service Provider shall, using the findings of the project assessment and investigations, identify problem areas, provide comprehensive evidence that their underlying cause is understood and propose appropriate corrective or reparative remedies. These proposals will accompany others for multiple design methodologies that are considered appropriate to the project including identification of their respective technical inputs. All proposals shall be discussed with the Employer. At least 3 (three) different methodologies must be proposed not all of which need to include identified remedies. Proposed methodologies should separately deal with elements relating to capacity improvements so that these may be individually developed together with the methodologies so that the Employer is presented with an array of design options from which to make decisions for progression to detailed design.

The duties to be performed include but are not limited to the following:

- (i) Provide a programme for documentation and implementation of the works;
- (ii) Include a baseline risk assessment and a health and safety specification;
- (iii) Include an operations and maintenance support plan over the service life;
- (iv) Establish the feasibility of satisfying the original scope of works within the original budget, and if not, motivate a revised scope and/or budget;

- (v) Include a technology (alternatives) options assessment;
- (vi) Include a regulatory due diligence (compliance with various regulations and required statutory permissions impacting this project);
- (vii) Advising the Employer as to the need for any further surveys of any kind, analysis, tests and site or other investigations which may be required, and arranging for these to be carried out at the Employer's expense including a risk assessment and sensitivity analysis associated with the need;
- (viii) Advising the Employer regarding environmental requirements and management plans and attending to the same;
- (ix) Advising the Employer, as may be necessary, upon the appointment of and brief to other professional engineers, architects and specialist advisers and arranging such appointments and consultations with such advisers in matters affecting the works;
- (x) Preparation of preliminary design plans and other drawings
- (xi) Consultation on technical matters with authorities and interested and affected parties;
- (xii) Making modifications to the preliminary design of the works in connection with or dictated by the consultations aforesaid;
- (xiii) Identification and reporting on services and owners as well as relocations/protection measures required;
- (xiv) Submission of estimates of capital and life cycle costs and economic and financial implications in relation to the proposals and the confirmation of the financial sustainability thereof;
- (xv) Conduct a Land Audit of each Route under consideration. In this regard the Service Provider must produce a (high level) property report for each such Route being investigated including the land required for material sources. This report must identify at the very least the following:
 - property type
 - ownership type
 - title type
 - informal rights
 - informal settlements
 - mining rights
 - real rights (servitudes, etc.)
 - jurisdiction of affected non-National Roads
 - Traditional (Tribal) Authorities and their jurisdiction
 - Municipal Authorities
 - affected streets and public places
 - proclaimed forestry, conservation, irrigation, etc. areas

In addition the Service Provider must undertake a 'high level' Land Acquisition cost analysis for each Route being investigated inclusive of the land required for material sources.

The Service Provider shall at this stage ensure that relevant one-on-one consultations with affected land owners are conducted including the holders of formal, informal rights and all other rights as defined above. Where land is in the ownership of the State (Municipal, Provincial or National) or other State Authorities, then the Service Provider shall also attend on such authorities in order to give notice of the intention to acquire portions of or the whole of such properties. The impact of the routes on such rights must be clearly documented in the report.

In regard to all of the above, the Employer may instruct the Service Provider to appoint a specialist if it becomes evident that there are complexities that would require specialist input.

The Employer must be advised immediately if there is evidence of unlawful occupation of land along the proposed Routes and on land earmarked for material sources

- (xvi) Compilation and submission of a Preliminary Design Report and if required a Preliminary Materials Report.
- (xvii) The requirements for structures under the Preliminary Design Phase will be split into two stages:
 - The first stage shall comprise submission of a separate Basic Planning Structures Report (which includes bridges, major culverts, lesser culverts, walls, gantries, light masts and buildings) for all new and existing structures in terms of Clause 13.2 of the Code of Procedure for the Planning and Design of Highway and Road Structures in South Africa. The first stage report shall be, in essence, a road planning report in which structural issues as envisaged are addressed. This stage shall include Bridge Width schedules submitted for approval and is submitted in conjunction with the submission of the overall Preliminary Design Report.

- The second stage shall comprise submission of a separate structures report (which includes bridges, major culverts, lesser culverts, walls, gantries, light masts and buildings) for all new and existing structures in terms of Clause 13.3 of the Code of Procedure for the Planning and Design of Highway and Road Structures in South Africa. In the case of bridges, a separate report shall be submitted per bridge. This report shall investigate structural solutions in terms of environmental and site conditions, geometric constraints, structural requirements, financial aspects and those considerations that have a bearing on the feasibility of the postulated solutions. These submissions shall take place after approval of the Preliminary Design Report.

C3.4.4 Detailed Design

The Employer will select from the outcome of the preliminary design phase, the design option and other possible design elements that are to be developed to detailed design.

The duties to be performed include but are not limited to the following:

- (i) Provide a programme for documentation and implementation of the works;
- (ii) Include a baseline risk assessment and a health and safety specification;
- (iii) Include an operations and maintenance support plan over the service life;
- (iv) Establish the feasibility of satisfying the original scope of works within the original budget, and if not, motivate a revised scope and/or budget;
- (v) Include a technology (alternatives) options assessment;
- (vi) Include a regulatory due diligence (compliance with various regulations and required statutory permissions impacting this project);
- (vii) Advise the Employer as to the necessity for setting out or staking out the works, establishment of construction beacons;
- (viii) Advise the Employer as to the need for any further surveys of any kind, analysis, tests or other investigations which may be required and arranging for these to be carried out including a risk assessment and sensitivity analysis associated with the need;
- (ix) Advise the Employer regarding environmental requirements and management and attending to same as agreed with the Employer;
- (x) Preparation of designs inclusive of all calculations, drawings, project specifications and Engineering schedules of quantities in accordance with the requirements of the Employer's current appropriate Codes, Manuals and Guidelines; including labour maximisation/optimisation in all phase of the design.
- (xi) Estimates of the cost of the works, using the unit rates of the Employer's database if applicable;
- (xii) Identify and advise the Employer on communication channels, employment forums and issues impacting on the design;
- (xiii) The timeous arrangement for the relocation of any services which may disrupt the construction programme. This may include relocation of services prior to construction stage;
- (xiv) Conduct a Detailed Land Audit of the entire project area.

The Employer may instruct the Service Provider to appoint a specialist if it becomes evident that there are complexities that would require specialist input.

In regards to this land audit, the Service Provider must produce a detailed report for each property along the route and all land required for material sources. This report must identify, at the very least, the following:

- property type
- ownership type
- title type
- informal rights
- informal settlements
- mining rights
- real rights (servitudes, etc.)
- jurisdiction of affected non-National Roads
- Traditional (Tribal) Authorities and their jurisdiction
- Municipal Authorities
- affected streets and public places

- proclaimed forestry, conservation, irrigation, etc. areas

The Service Provider shall, at this stage, then also conduct one-on-one consultations with each land owner affected by the project and with the holders of formal and informal rights and indeed all other rights as defined above. Where land is in the ownership of the State (Municipal, Provincial or National) or other State Authorities, then the Service Provider shall accompany the specialist (if appointed) when meeting with such authorities in order to deal with aspects raised by such authorities and where such aspects are of a Technical/Design nature. In this regard, careful reference must be made to the formalities.

It is emphasised that the purpose of this interaction is to reach consensus with each land owner so affected with regards to the impact that the land acquisition will have on his property and to all of his entitlements and to clearly determine the conditions under which the land owner will be willing to sell the land required.

This is expanded on further in this document below. In this regard, the Employer must be advised immediately if there is evidence of unlawful occupation of land along the proposed route and on land earmarked for material sources.

The revised road reserve must be determined and have the Employer's approval.

- (xv) Submit the necessary design documentation to local and other authorities for approval, if required;
- (xvi) Consultation on and incorporation of, where applicable, technical matters with authorities and interested and affected parties;
- (xvii) Compilation and submission of a Detailed Design Report and if required a Materials Report;
- (xviii) Submission of Economic Feasibility Analysis (where required) and confirm the financial sustainability of the project.
- (xix) Undertake a market analysis in terms of the CIDB guidelines for undertaking a feasibility study (CIDB grading, Central Supplier Database, etc. of availability and type of Targeted Subcontractors for the Works Contract.

Detail design requires the drafting of a final project specification that will be incorporated into a full tender document. A full set of drawings complying with the Employer's latest drawing standards shall be presented for signature. The Service Provider shall be aware of the Employer's procedures for iterative presentations of drawings for approval, signature, archiving and amendment to include the as-built record.

Guidelines for drawings are contained in TMH11: Standard Survey Methods (latest version) published by the Committee of Transport Offices (COTO). This reference contains all the relevant information relating to grid intervals, topographical detailing, symbols, colours, weight, and letter sizes etc and acts as the standard to be used for the production of drawings for use by a contractor.

C3.4.5 OHS Requirements

The Service Provider shall at all stages of the design development identify elements of the design that are inherently dangerous or hazardous during the construction phase and design in such a manner as to mitigate or eliminate the risk where possible. At the culmination of each development phase all identified dangers/hazards shall be listed and brought to the attention of the Employer and agreed hazards shall be emphasised and given prominence by way of notification on the drawings and separately listed in the respective phase-end reports. They shall appear in the drawings and the tender document for issue to a contractor.

For example, staging for bridge decks or shoring of unstable excavations is the designer's responsibility to identify and notify of the health and safety risk.

C3.4.6 Environmental Requirements

Throughout the development of the project design the Service Provider shall liaise closely with the appointed EAP as he/she performs the environmental subservice. It is desirable that the EAP accompanies the Service Provider to the regular progress meetings to ensure accurate reporting on the state of the application for environmental approvals. The compilation of the various Environmental Management Programmes (EMPrs) that the respective relevant authorities require shall be modelled on the Employer's standard Environmental Management Plan with as little deviation from it as possible. Any adaptation or change shall be reported to the Employer for approval and later incorporation into the contract document.

Any cause derived from these EMPs that requires incorporation into the design shall similarly be reported to the Employer for approval.

C3.4.7 Land Requirements

The Service Provider is required to submit a comprehensive and detailed Property Report if any expropriation of land is required for the project.

C3.4.8 Road Safety Audit

- (1) The Service Provider shall in terms of the South African Road Safety Audit Manual (Second Edition, May 2012), hereafter referred to as the SARSAM:
 - (i) Develop a Scope of Works for the procurement of the services of a Road Safety Audit Team for **Stage 3 (detailed design stage)** of the Project. The stages and numbering refer to the definitions in SARSAM. Such Scope of Works shall include but are not limited to:
 - Conducting a project Information Review;
 - Conducting a Site Inspection/s;
 - Producing a Road Safety Audit Report;
 - Issuing the Road Safety Audit Report and discussing the initial findings with Employer and Service Provider;
 - Initiating and Conducting a Completion Meeting;as prescribed in the SARSAM.
 - (2) Recommend with motivation to the Employer the composition of the Road Safety Audit Team depending on the size and complexity of the project, as prescribed in the SARSAM. Generally the Road Safety Audit Team will comprise an Audit Team Leader and at least two (2) Audit Team members. The Audit Team Leader is the lead auditor that is responsible for compiling the road safety audit report and representing the audit team in liaising with the Employer and the Service Provider. The Audit Team Member/s is the second auditor that assists in and contributes to the road safety audit. The Audit Team Leader and Member/s must be independent from the Service Provider, and must not be under the employ of the Service Provider
 - (i) The Service Provider must ensure that the minimum requirements of the Audit Team Leader and Members comply with the Employers latest Road Safety Audit Policy.
 - (ii) Once the Road Safety Audit Team is appointed, the Service Provider shall:
 - Compile and Issue a Road Safety Audit Brief to the Road Safety Audit Team;
 - Initiate and conduct a Commencement Meeting with the Road Safety Audit Team;
 - Attend a Completion Meeting if requested by the Employer;
 - Review Audit Findings and Recommendations;
 - Compile and issue a Response Report including Risk Assessment of Safety Concerns;as prescribed in the SARSAM.
- (3) The Service Provider shall implement Design Changes as identified by the Road Safety Audit Team and as agreed to with Employer, as specified in the Response Report.
- (4) The Service Provider should provide written feedback on lessons learned and knowledge gained, which shall take the form of a short report.

C3.4.9 Project Cost and Feasibility

At the reporting stage of each design development phase a cost estimate of the works, including contract price adjustment (CPA) shall be determined. A separate cost estimate shall be compiled for each design option. On completion of the detailed design stage this estimate shall consist of a priced schedule of quantities. This estimate shall include a contractor's

probable preliminary and general costs as well as a provision for contract price adjustment. No allowance is to be made for a contingent sum. However, the inclusion of provisional sums within the schedule of quantities is acceptable.

In addition to a cost estimate of each design being developed a feasibility analysis shall also be conducted as specified.

C3.4.10 Project Programme and Constructability

At completion of the detailed design phase the Service Provider shall provide a comprehensive logic programme of construction activities regardless of the complexity of the project. The programme shall also be used to verify a realistic construction period.

The programme shall include the following:

- A work breakdown structure that identifies all major activities.
- Scheduled duration for each activity.
- Linkages between activities that clearly identify sequence, floats and critical path.
- Simultaneous activities shall be identified as well as priority activities.
- Time for each activity.
- A risk assessment schedule with mitigating plans of issues that could prevent the due completion date being met.

Should the Employer require an electronic version of the programme for review purposes, the Service Provider shall supply the programme in a format compatible with the Employer's software.

Throughout the development of the project design the Service Provider shall consider the constructability of the design which shall also be reflected in the programme. Typical aspects and/or constraints that should be considered (but not limited to) are traffic volumes, time of day/year, work space, weather, safety, environmental issues and land acquisition issues.

C3.4.11 Detailed Design Report

A detailed design report shall be submitted for discussion at the progress meeting. This report shall, as a minimum, cover all the duties as specified under Detail Design including:

- Deviations from standards, e.g. geometric, drainage, road classification, structures, etc.
- Geometric and capacity improvements
- Existing versus proposed X-section
- X-section development strategy – 20 years
- Intersection/interchange improvements
- Outcome of interaction with stakeholders
- Relocation of services
- Existing pavement condition and accepted pavement design
- Materials utilisation
- Geotechnical improvements
- Road furniture improvements
- Additional land requirements
- Drainage improvements
- New structures and any capacity improvements to existing structures (which includes bridges, major culverts, lesser culverts, walls, gantries, light masts and buildings)
- Comprehensive report on Land Acquisition (where the report shall inter alia report on the risks associated with gaining timeous access to the land required)

C3.4.12 Phase/Stage Discontinuity

Whenever discontinuity occurs between various design phases within the design development stage, the Service Provider shall review the design of the Service Provider who undertook the previous phase design. The Service Provider shall also take account of any other information and data acquired from its own approved investigations. Should the Service Provider be required to re-design certain portions of the previous phase, the Service Provider shall take full liability for that portion.

Whenever discontinuity between design development stage and/or tender documentation stage and/or contract administration and monitoring of the works stage occurs:

- The Service Provider shall review the design of the Service Provider who undertook the design development (the designer) taking account of any other information and data acquired from its own approved investigations. Should the Service Provider be required to re-design certain portions of the original design the Service Provider shall take full liability for that portion.
- The designer will be afforded the opportunity to review the final tender documentation compiled by the Service Provider. This is done in recognition of the designer's ongoing liability for the design and providing the protection to review and comment on the original design and specifications still being appropriate for the prevailing circumstances and/or conditions. In addition, the designer will be provided the opportunity to inspect the construction works periodically to ensure his/her professional obligations are not being compromised. Any visit shall be in the company of the Service Provider appointed for construction monitoring. The frequency of any such inspections shall be appropriate to the scope and scale of the Works.

C3.5 TENDER DOCUMENTATION AND PROCUREMENT

C3.5.1 Scope

This section covers the requirements and process for the compilation of tender documentation, gateway review, invitation to tender for the Works Contract, Contractors' clarification meeting, tender period and evaluation of tenders received for the Works Contract.

C3.5.2 Tender Documentation

The following documents shall form the Tender Documents for the Works Contract:

- (i) **VOLUME 1:** General Conditions of Contract for Construction Works: GCC 2015 (to be purchased separately by tenderers).
- (ii) **VOLUME 2:** The Standard Specification for Road and Bridge Works for State Road Authorities, March 1998, issued by the Committee of Land Transport Officials (to be purchased separately by tenderers).
- (iii) **VOLUME 3:** The Project Document, which includes Conditions of Tender, Particular Conditions of Contract, Scope of Works and Site Information, all in accordance with the Employer's standard pro-forma document.
- (iv) **VOLUME 4:** Books of Construction Drawings for tender purposes (if required).
- (v) **VOLUME 5:** Materials Investigation and Utilisation Information (if required by the Employer to be bound separately)
- (vi) **VOLUME 6:** Environmental Management Programme (if required by the Employer to be bound separately).

C3.5.3 Compilation of Draft / Final Tender Document

The Service Provider shall adhere to the following process:

- (i) Compile and submit all relevant draft tender documentation (three hard copies and electronic format) for the purpose of review by the original designer (if applicable), discussion with the Employer and Employer's Gateway review process as indicated in Clause C3.1.12(a)(iii).
- (ii) Prepare and submit the Service Provider's works contract estimate.
- (iii) Subsequent to discussion Employer's Gateway review of the draft documentation, the Service Provider shall:
 - compile final tender documentation incorporating all the amendments arising therefrom the discussion;
 - Submit final tender documentation and clarification meeting presentation in electronic format (pdf) to the Employer's Procurement Department for loading on the Employer's tender bulletin website, including three hard copies.

C3.5.4 Tender Advertisement

The Service Provider shall prepare the tender advertisement and submit to the Employer who will place the tender advertisement with the relevant organisations.

C3.5.5 Clarification Meeting (on-line)

The Service Provider shall be required to compile and submit a MS PowerPoint clarification meeting presentation for prospective tenderers for the Works Contract in accordance with the Employer's standard requirements and shall include as a minimum the following:

- Describing the Conditions of Tender and Tender Data.
- Describing Returnable Schedules to be submitted.
- Describing the Conditions of Contract and Contract Data.
- Describing the Works with as much detail as is required for specific items or operations.
- Describing important aspects of the project, e.g. limits of the Contract, location of borrow pits/quarries, bridge sites, display of core samples, etc to provide a holistic overview.

C3.5.6 Tender Period

The Service Provider shall communicate, through the Employer's Procurement Department, with all tenderers during the tender period in accordance with Conditions of Tender for the works contract. The actions below need to be followed:

- Attending to any technical queries or points of clarification requested by tenderers.
- Compilation for distribution, by the Employer's Procurement Department and confirmation of receipt by all tenderers of any addenda to the Tender Document.
- Informing and obtaining approval from the Employer of any unresolved enquiries and changes to date for submission of tenders.

C3.5.7 Tender Evaluation Assistance

The Employer requires the Service Provider to provide tender evaluation assistance in the form of:

- Obtaining the top 5 responsive tender offers from the Employer.
- Prepare and submit the Service Provider's tender estimate.
- Conduct a technical and commercial risk assessments in terms of the conditions of tender and the Employer's Procurement Department.
- Prepare and submit a detailed technical and commercial risk assessment report to the Employer.

C3.5.8 Contract Documents for the Works

The Service Provider shall, within 14 (fourteen) days of the date of the Letter of Acceptance, prepare and submit 2 (two) sets of contract documents for signature by the Employer and appointed Contractor for the Works. These documents shall be prepared in accordance with the requirements listed in the Employer's pro-forma document. One (1) electronic copy in pdf format of a fully signed (by all parties) contract shall also be submitted. The number of additional sets of contract documents for use by the Engineer and his site staff shall be at the discretion of the Service Provider.

The following shall be bound at the back of Volume 3, or bound together as a separate volume together with a table of contents:

- (i) all addenda issued, together with proof of receipt, completed and signed by the successful tenderer;
- (ii) all letters, statements and documents submitted by the successful tenderer with his tender;
- (iii) all correspondence between the Service Provider and the successful tenderer prior to tender acceptance;
- (iv) the Employer's Letter of Acceptance of tender; and
- (v) the contractor's Letter of Acceptance, including any conditions.

The contract documents shall comprise all the documents mentioned above, together with Volumes 1 and 2 and the performance guarantee, which shall remain separate documents.

The Engineer shall assess the performance guarantee provided by the Contractor for conformance with the pro-forma working in the tender documentation and if satisfied, shall thereafter submit it to the Employer for safe keeping.

C3.6 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT**C3.6.1 Scope**

This section covers the duties and obligations of the Service Provider in the provision of the Engineer and site supervisory staff for the administration, construction monitoring and measurement of the Works carried out by the Contractor appointed by the Employer during the original Works Contract duration, extended duration and including prolonged site stoppages not under the control of the Employer (i.e. Business Rescue or Community unrest).

C3.6.2 Administration and Monitoring**(a) Fulfilling the functions of the Engineer**

The appointed Engineer for the project shall be that person listed in the tender as the Contracts Engineer, who shall be authorized by the Service Provider to carry out the work intended by the specifications and the duties required by the GCC 2015 general conditions of contract.

The duties of the Engineer shall be in accordance with the Employer's standard requirements and shall, inter alia, include:

- (i) Conduct meetings with affected communities and relevant forums, if necessary, to establish communication channels and to determine issues impacting on the construction phase.
- (ii) Appointment of suitable, able and competent site staff, together with the administration of such staff (including those of any independent Service Provider/s as approved).
- (iii) Arranging and attending monthly technical and site meetings and keeping minutes of such meetings.
- (iv) Making arrangements on behalf of the Employer for the provision and reproduction of such drawings and documents as may be required by the contractor and site staff for the execution of the works.
- (v) Fulfilling all functions and obligations stated or implied for the Engineer, and delegated to the Engineer's Representative, in the Employer's Particular Conditions of Contract, Standard Specifications or Scope of Works or any other document applicable to the control and administration of a works contract.
- (vi) Issuing instructions to the Contractor, co-coordinating and generally inspecting the execution of the Works for compliance with the contract at such intervals as appropriate for the purpose of the proper inspection of the works, directing site staff and delegating the detailed and day-to-day supervision/inspection of the works and site administration.
- (vii) Advising the Employer regarding the inspection and testing of such materials and plant as are usually inspected and tested and arranging for such inspection and testing to be carried out in accordance with current appropriate codes, manuals and guidelines.
- (viii) Arranging for the carrying out of performance or acceptance tests and surveys as required by the Employer.
- (ix) Ensure regular inspections by the design specialists for all work on the project.
- (x) Approve all materials and ensure compliance of materials mix designs to the specifications.
- (xi) Monitor and report on training, development and empowerment programmes required from the Contractor terms of the Employer's Contract Participation Goals identified in the work contract document.
- (xii) Monitor and report on conformance to all relevant Occupational Health and Safety legislation including regular internal audits to be conducted by the Service Provider's nominated specialist, arrangement for visits by the designer at identified critical phases of construction and recording/reporting of Section 24 incidents.
- (xiii) Monitor and report on conformance to all relevant Environmental legislation and requirements.
- (xiv) Checking and controlling of quantities measured and agreed by the Contractor and the site supervisory staff and settling any disputes that may arise in this regard.
- (xv) Issuing certificates for payment to the Contractor in accordance with the conditions of contract.
- (xvi) Review and analyse claims and/or disputes or differences that may arise between the Employer and Contractor. Present to the Employer the Engineer's review and analysis for discussion and consultation before the Engineer's decision is made known to the Parties. All duties with regard to disputes will be paid for under Additional duties.
- (xvii) Issuing works authorisations, as agreed with and approved by the Employer.
- (xviii) Provide the Employer with progress, monthly materials and laboratory and other reports on all aspects of material importance regarding the Works.
- (xix) Identification of risks to the Employer under the Works Contract, as well as communicating mitigations measures to the Employer.

- (xx) Provide the Employer within 3 months of issuing the Certificate of Completion of the works with such draft construction reports, materials as-built records, as-built plans in PDF format and all other documents normally associated with contract administration. The final reports/records shall be provided within 1 month of the issue of the Final Approval Certificate for the Works contract.
- (xxi) Certain construction monitoring duties may be delegated to the Engineer's representative (RE).
- (xxii) Receive the contractor's proposed programme, analyse it, comment on it and when found acceptable write to the contractor stating that the programme is acceptable.
- (xxiii) Conducting interim monthly performance evaluations on the Contractor and a final written and signed report to be submitted to the CIDB as gazetted.
- (xxiv) Training of Assistant Contract Engineer (if applicable).

(b) Head office administration

The Service Provider shall supply sufficient head office administrative support to the site personnel to ensure efficient and timeous administration of the Works Contract.

The Service Provider shall furthermore be responsible for the safe keeping of all original Roadworks and Structural Drawings as well as all other documentation related to the different phases of the project, for a period of at least 5 (five) years after the defects notification period. No additional payment will be made for this.

(c) Occupational Health and Safety obligations

The Service Provider shall execute the duties of the Employer, as his appointed agent, as contemplated in the Construction Regulations (2014) to the Occupational Health and Safety Act (Act No. 85 of 1993).

The Service Provider shall arrange, formally and in writing, for the Works Contractor to provide documentary evidence of compliance with all the requirements of the said Act. The Service Provider shall also carry out regular site audits to ensure compliance thereto. Should the Service Provider not have "in-house" capacity to undertake such duties, an external recognized specialist shall be appointed. **This individual needs to be registered with the SACPCMP as a Professional Construction Health and Safety Agent or a Construction Health and Safety Manager.** Provision for payment for all OH&S obligations during the construction phase has been included in the Pricing Schedule.

(d) Monthly Technical and Site Meetings

The appointed Engineer for the project shall visit the site at least 2 (two) times per month on **separate** occasions. One visit shall be scheduled for the Technical Meeting with a thorough site inspection with the Contractor and the Engineer's representative. A second visit shall be scheduled for the monthly Site Meeting with a thorough site inspection with the Contractor and Employer's representative.

(e) Compilation of monthly materials and laboratory report

The appointed engineer shall be responsible for the compilation of monthly materials and laboratory reports. These reports shall be in accordance with the Employer's guideline documents. The site laboratory Service Provider must supply the necessary information to be included in the report, but it will be the sole responsibility of the engineer to ensure that the information provided is true and correct. These reports shall be submitted to the Employer's relevant Project Manager on a monthly basis, for the duration of the works contract. The reports shall be submitted in hard copy format. The reports shall reach the Employer by no later than the 7th of the month. No additional payment will be made for this.

(f) Site visits by design specialist(s)

The appointed design specialist(s) for the project shall visit the site to comply with the Construction Regulations of the Occupational Health and Safety Act (No 85 of 1993) as relevant for the design of the Works during the construction phase as well as the designer's obligations with respect to the relevant professional engineer's legislation. Furthermore, the design specialist(s) shall as a minimum attend the construction of trial section including inter alia, stabilization trials, base construction trials and final surfacing trials. The design specialist for structures shall visit the site at least once a month whilst construction of the new bridge and the widening of the existing is in progress and whilst remedial works to existing structures is being carried out. It is also expected during the initial foundation stage of structures that the founding material (including for piles) for major culverts and bridges shall be inspected by an experienced geotechnical engineer. This means

that for all major structures it is expected that the geotechnical engineer will do the initial approvals of foundation founding material on a monthly basis or more often as required.

(g) Assistance for procurement of targeted subcontractor work packages

The Service Provider shall be required to assist the contractor with regards to the procurement of sub-contractors to comply with the Targeted Subcontractor Participation and Development Specifications of the Construction Contract.

The specifications for the procurement of targeted subcontractor work packages are provided for in the Employer's Targeted Subcontractor Participation and Development Specifications and includes for:

- Compilation of tender documents
- Tender invitations
- Issuing of tender documents
- Tender briefing
- Tender adjudication

Allowance has been made for the requirements in the Pricing Schedule under Additional Duties.

(h) Fulfilling the duties of the Senior Materials Technician/Materials Technician

The duties of the Senior Materials Technician/Materials Technician shall be in accordance with the Employer's standard requirements and shall, inter alia, include:

- (i) Work in a close relationship with the laboratory including having regular discussions with the laboratory manager about the condition, progress and standard of the laboratory;
- (ii) Conduct regular laboratory inspections and report and draft report;
- (iii) Act as liaison between the Engineer's Representative and the laboratory;
- (iv) Advise the Engineer's Representative where the laboratory does not comply with the contractual and technical requirements;
- (v) Prepare and sign-off materials mix and seal designs or any other relevant matter for submission to the Engineer's Representative;
- (vi) Verify the requests for lot approval submitted by the contractor and ensure the tests requested are in line with the lot submitted.
- (vii) Ensure the laboratory is granted sufficient time for sampling with regards to every request received;
- (viii) Keeps track of submission time for laboratory results. Determine the number and locality of acceptance testing required for each lot. Receive and verify all the test results from the laboratory manager.
- (ix) Sign-off test reports and make recommendations for approval or rejection.
- (x) Inspect works daily which shall inter alia include materials sources, layer works, structures and any other materials related to items on site;
- (xi) Do visual inspections on materials in lots submitted for approval;
- (xii) Inspect all trial sections constructed and complete as well as record trial section checklists;
- (xiii) Populate progress sheets linking test requests with the position on layer works.
- (xiv) Draft the monthly materials and laboratory reports;
- (xv) Keep As-Built data up to date.

C3.6.3 Establishment of supervisory personnel on site

(a) Supervisory team

The Service Provider shall be required to provide a team on site to monitor, administer and measure the Works in accordance with the requirements of the Works Contract, Employer's standard requirements and industry good practice.

Provision has been made in the Pricing Schedule for the envisaged staffing requirement. The establishment of such staff, however, shall be subject to the approval of the Employer. For the envisaged scope of the Works, the supervisory team will consist of at least the following:

- (i) Engineer's Representative
- (ii) 2x Assistant Engineer's Representative (Of which one must be supplied by the appointed Targeted Enterprise)
- (iii) Senior Materials Technician
- (iv) 3x Graduate Engineering Technicians (as provided for by the Employer)
- (v) Administrative Assistant (data capture) (from the local community)

The minimum requirements for qualification and experience of the supervisory team are specified in Clause C3.1.11.

Provision has been made in the Pricing Schedule to cover the total annual cost of employment (TACE) of the supervisory staff which shall include the following:

- (i) Basic salary.
- (ii) Other benefits not reflected in the basic salary, which may include:
 - normal annual bonus (maximum of one month's salary or part thereof if contract is less than 1 (one) year) but excluding any performance bonuses or merit bonuses;
 - consulting firm's contribution to medical aid;
 - group life assurance, accident and disability insurance;
 - pension/provident fund contributions by the consulting firm;
 - allowances forming part of the remuneration package which are pensionable (car allowances, etc.);
 - computer and cell phone allowance if part of package; and
 - other justifiable costs and allowances approved by the Employer.
- (iii) costs payable due to all applicable statutory requirements such as:
 - Workmen's compensation fund contributions;
 - Unemployment insurance contributions; and
 - Other applicable statutory levies.

A standardised **site staff overhead factor of 1.58 will be applied to the TACE of the supervisory staff** (excluding the surveyor and his assistants, trainee (student) and Administrative Assistants (data capture)) which is made up as follows:

Description	Site staff overheads
Salaries (Technical) TACE	1.00
Salaries (Non-technical) TACE	0.24
Telephone and communication	Tender item
Rental of premises, electricity, water	Provided by Employer
Transport not recovered from project	Tender item
Paper, stationary, consumables	Tender item
Audit, bank charges, interest, insurance	0.08
Marketing	0.02
Office equipment	Tender item
Training and development	0.02
Project direct expenses not recoverable	0.08
Head Office expenses	0.14
Net Overhead Factor before profit	1.58

Provision has also been made in the Pricing Schedule for additional overhead costs related to the employment of the relevant personnel, which may include the following:

- overtime by salaried professional and semi-professional staff (qualified Engineers, Technologists and Technicians) and all such other staff for which overtime is not payable in terms of the Labour Act;
- ordinary leave and sick leave (one month);
- administration related to salaries, legislation, etc.; and
- other overhead expenses and profit.

Replacement of staff as a result of any extended period of leave or sick leave outside the normal contractor's year end break shall be to the approval of the Employer.

Three (3) months prior to the commencement of the works contract the Service Provider shall submit for consideration and approval to the Employer a detailed proposal in the Employer's prescribed format which shall include a CV of appropriate experience and qualifications as well as a cost estimate (including salary adjustments/increases) for each required and/or proposed person.

The annual salaries for those approved staff shall be substantiated by an auditor's certificate at the start of the project and whenever salary or staff changes occur thereafter. Prior approval is required for any salary adjustments/increases which shall be in line with CPI.

Survey services may be required on either a full time or part time basis as appropriate for the scope of the Works.

Where provision has been made in the Pricing Schedule, the surveyor shall be appointed as a sub-Service Provider and procured directly by the Service Provider in terms of Clause C3.1.7. The Service Provider shall enter into a sub-service agreement with the surveyor. The terms of reference with regards to the survey service on site shall be based on the requirement of the Employer as set out in Chapter 10 of Technical Methods for Highways TMH11: Standard Survey Methods.

The Employer shall be entitled to instruct the Service Provider to remove forthwith from the Works any person employed by the Service Provider on or about the execution of the Works who, in the opinion of the Employer, misconducts himself or is incompetent or negligent in the proper performance of his duties, or whose presence on site is otherwise considered by the Employer, on reasonable grounds, to be undesirable.

(b) Relocation of site staff

Provision has been made in the Pricing Schedule for the costs to relocate the supervisory team to site.

(c) Accommodation

Appropriate housing for the supervisory team will be required to be provided by the Service Provider. A provisional sum has been allowed in the Pricing Schedule for this purpose. Accommodation of the site staff shall be located as near to the Works as practically possible.

The Employer reserves the right to limit the monthly supervisory team's accommodation cost claimed.

(d) Establishment of site office

Provision for the erection and maintenance of a site office building and all related services will be made under the Works Contract. The Service Provider shall, however, provide sufficient office equipment to perform all required duties for the monitoring of the Works Contract. This shall, inter alia, include the following:

- all cell phones,
- safety equipment in accordance with the OHS requirements, e.g. safety jackets, rotating amber lights, safety boots, etc.
- photo copiers, fax machines, modems, personal computers and printers (including all hardware and software)
- consumables and stationary
- digital camera

One (1) landline, including rental, call and data costs for work related office and fax usage shall be provided through the Works Contract. Should fixed connectivity not be available mobile connectivity with data shall be provided through the Works Contract.

Provision has been made in the Pricing Schedule for supplying the equipment as well as the monthly operational costs thereof.

In addition, the Resident Engineer as his/her assistants shall be equipped with mobile phones with the following minimum specification:

- Operating system: Android or higher
- Camera resolution: 5 Meg pixels or greater – 8MP recommended
- Screen resolution: 480 x 800 pixels or greater
- GPS facility: Yes, with geo-tagging for images
- Data connection: 3G or greater

C3.6.4 Monitoring of the Works Contract

The Service Provider shall ensure that all the work required under the Works Contract is carried out in accordance with the requirements of the Works Contract and current best practice and shall include effective financial control. Construction monitoring shall be carried out in a pro-active manner and in accordance with the Employer's standard requirements and current best practice.

The Service Provider shall be responsible for the normal duties associated with the management and supervision of a works contract, which duties shall, inter alia, include:

- Monitoring and reporting of the Contractor's programme.
- Implement Engineer's quality control plan.
- Monitor Contractor's quality control plan.
- Site audits, inspection, quality control testing, approval, rejection of work.
- Measurement and certification of completed work inclusive of cash flow forecasts.
- Provide a final cost estimate for the work contract on a monthly basis, including estimated costs of claims.
- Regular Site Meetings with Contractor and Employer.
- Monitoring of the third party claims.
- Monitoring and reporting of Contractor's commitments in terms of the Employer's Contract Participation Goals.
- Supervision of traffic accommodation arrangements.
- Statutory control functions, which may include investigations into the legality of services and accesses without formal wayleave agreements and assist with the application for approval where required.
- Attend Project Liaison Committee (PLC) and Project Management Team (PMT) and all other meetings relating to the Targeted Enterprises (subcontractors & suppliers) and Targeted Labour.
- Monitoring and reporting of the project's EMP and NEMA requirements.
- Implement the Engineers requirements in terms of compliance with the OH&S Act.
- Monitor the Contractor's compliance with the OH&S Act.
- Compile all reports and as-built data in accordance with the Employer's standard requirements.

C3.6.5 Transport for site supervisory staff and additional services

The Service Provider shall provide sufficient appropriate vehicles on site to carry out the duties as specified in clause C3.6.4. Only travel in the execution of these duties, as well as any other travel necessary as a result of any additional duties as ordered by the Employer, shall be claimable. Estimated travel costs as a result of week-end travel by site staff to their place of permanent residence shall be approved beforehand by the Employer.

Travel log sheets for each vehicle utilised shall be certified by the Engineer and included under cover of the payment certificates submitted to the Employer.

The Employer reserves the right to limit the monthly supervisory team's travel distance claim to 5 000 km per person.

C3.7 ADDITIONAL DUTIES, SPECIAL SERVICES AND SPECIALIST ADVICE**C3.7.1 Scope**

This section covers additional work, other special services and specialist advice, other duties, including a dispute process, etc. that the Service Provider may be required to undertake over and above the normal duties and obligations as specified.

C3.7.2 Additional Duties, Special Services and Specialist Advice**(a) By the Service Provider**

The Employer may order additional duties, special services and specialist advice that fall outside the specified scope. Such additional duties, special services and specialist advice may involve, but not be limited to:

- Scope of works changes
- Additional design requirements
- Assistance for procurement of targeted subcontractor work packages
- Additional investigations during the Defects Liability Period
- Special services and specialist advice such as:
 - traffic, axle weight and transportation studies (including traffic counts only)
 - mediation, arbitration and litigation
 - land acquisition assistance
- Diverse other services, etc.
- Disputes

Allowance is made in the Pricing Schedule for payment on a time basis for any such work that may be required. The level of expertise necessary for any such work shall be concomitant with the issues to be addressed.

Any additional duties, special services and specialist advice shall be fully scheduled and submitted to the Employer for approval prior to the commencement therewith.

(b) By the Employer

Additional duties performed by the Employer may involve, but not be limited to:

- re-evaluation of any replacement personnel by the Tender Evaluation Panel
- reviewing of draft documentation submitted more than once

Allowance is made in the Pricing Schedule for payment on a time basis for any such service performed more than once.

C3.7.3 Payment and Monthly Reporting

When submitting interim payment certificates for payment the Service Provider shall use the Employer's standard forms and formats.

The Service Provider shall submit payment certificates for all work rendered in the Employer's financial year within that specific year.

The Service Provider shall submit and update on a monthly basis a cash flow forecast for the remuneration of the full service to be rendered.

The Service Provider shall complete and submit the following monthly reports during the Administration and Monitoring of the Works Contract Stage making use of the Employer's forms and formats:

- Targeted Labour monthly expenditure
- Targeted Subcontractor monthly expenditure and development
- Targeted Supplier monthly expenditure
- Monthly construction report
- Monthly progress photos

Allowance has been made for these requirements in the Pricing Schedule under in terms of a Provisional Sum. Failure to comply may result in payments being withheld.

C3.8 QUALITY CONTROL: WORKS CONTRACT**C3.8.1 Materials****(a) Scope**

This section covers the requirements for the provision and quality management of a site laboratory established or commercial laboratory to carry out the necessary materials testing and construction quality of the Works.

(b) Standards

The Service Provider shall procure a fully operational laboratory and administer the laboratory to undertake the relevant investigative testing as well as process and acceptance control testing in accordance with specified requirements of the Works Contract as well as the Employer's standard requirements. A provisional sum has been allowed in the Pricing Schedule for this service.

The laboratory shall be a SANAS accredited laboratory or operate under the umbrella of a SANAS accredited main laboratory that shall be responsible for ensuring that all sampling and testing is carried out accurately and strictly in accordance with the relevant test methods as well as the SANAS accreditation requirements.

(c) Duties and responsibilities**(i) Establishment and operation of the laboratory**

Where a site laboratory is required provision for the erection of a laboratory building, together with workbenches, services, furniture etc. will be made under the Works Contract, the planning and documentation for which shall be included in the tender documentation stage.

The Service Provider shall procure the services of a sub-Service Provider for laboratory services via a tender process in accordance with Clause C3.1.17. The successful sub-Service Provider shall be SANAS accredited and able to provide laboratory equipment and competent staff for the operation of the laboratory. The requirements in terms of the laboratory shall be specified in the sub-contract based on the Employer's requirements. The appointment of the appropriate laboratory shall be approved by the Employer.

The Service Provider shall ensure the supply of such laboratory equipment as necessary to carry out the required testing relevant to the scope of the Works. All equipment shall conform strictly to SANAS accreditation requirements and/or the specifications as listed in the relevant test methods.

(d) Testing of materials off-site

Any testing which may be of such a low frequency as to not warrant the establishment of the relevant equipment and staff on site, or being of a specialised nature, shall be carried out in an off-site SANAS accredited commercial laboratory or the National Reference Laboratory. A provisional sum has been allowed for the costs of this testing.

C3.8.2 Survey**(a) Scope**

This section summarises the requirements for the provision of a site survey service to carry out the necessary survey quality control on the Works as specified in Technical Methods for Highways TMH11: Standard Survey Methods.

The purpose of this service is to ensure that the works are constructed as designed and specified and the relevant records are kept up to date. In this regard, the service shall provide for, inter alia:

- The verification of existing control or the establishment of new control and the supply of the data.
- The verification of all relevant setting out work carried out by the contractor.
- The verification that the works are constructed within tolerances specified.
- The verification of relevant quantities for measurement purposes.

- The checking of designs from a setting out point of view.
- The verification of construction records (as-built data).
- To undertake any survey work as required by the Engineer.

A provisional sum has been allowed in the Pricing Schedule for this service.

(b) Standards

The service shall be undertaken in accordance with TMH11 requirements, COTO Standard Specifications and Project Specifications.

(c) Procurement of the Survey Service

The Service Provider shall procure the services of a sub-Service Provider for survey in accordance with Clause C3.1.17. A prime cost sum has been allowed in the Pricing Schedule for this service.

C3.9 CLOSE OUT**C3.9.1 Scope**

This section covers the fulfilling and completion of the project close-out including necessary documentation to facilitate effective completion, hand-over and operation of the project.

The Service Provider shall administer the Works Contract during the period subsequent to the issuing of the Certificate of Completion of the Works up to and including the issuing of the Final Approval Certificate to the Employer and Contractor (including the final payment certificate).

C3.9.2 Certificate of Completion

Upon completion of the written list setting out the work to be completed as specified within the Certificate of Practical Completion, the Engineer shall issue the Certificate of Completion to the Employer and Contractor.

The Service Provider shall undertake a full inspection of the Works (including close-out of the Contractor's Health and Safety File) to identify any outstanding minor work, and/or the rectifying of defects, and/or the clearing of the Site items and provide a date by which such items need to be completed for inclusion with the Certificate of Completion. The inspections shall be undertaken by the Engineer and his representative for the Works.

Upon issuing of the Certificate of Completion, unless otherwise provided in the Works Contract:

- The performance guarantee shall be returned within 14 calendar days to the Guarantor;
- The Defects Liability Period shall commence;
- The retention shall be reduced to half;
- The possession of the Site shall revert to the Employer;
- Insurance of the Works shall cease (Liability insurance remain in place until the end of the Defects Liability Period).

The Service Provider shall arrange an on-site meeting and inspection of the Works with representatives of the Employer and Contractor prior to the issuing of the Certificate of Completion.

C3.9.3 Contractor's CIDB performance evaluation

The Service Provider shall undertake the required performance evaluation of the contractor according to the CIDB's requirements as soon as the issuing of the Certificate of Completion. The Service Provider shall submit the above to the Employer at the date of issuing of the Certificate of Completion.

C3.9.4 Construction records (As-builts) and Contract report(s)

The Service Provider shall prepare and submit, in accordance with the Employer's standard requirements, draft construction records reflecting the works as constructed as well as any deviations from the designs as well as a draft contract report(s) providing information on how the contract was executed. Once reviewed and accepted by the Employer the Service Provider shall prepare and submit the final construction records and report(s).

C3.9.5 Final Approval Certificate

The Service Provider shall undertake a full inspection of the Works to identify any defects and/or damages before the end of the Defects Liability Period. The inspections shall be undertaken by the Engineer and his representative for the Works. Should both of them not be available, the Service Provider shall propose a person having sufficient knowledge of assessing the work for approval by the Employer.

After the inspection the Service Provider shall arrange an on-site meeting and further inspection with representatives of the Employer and Contractor. At this meeting, parties will be informed of the defects and/or damages identified during the inspection. There-after an inspection will follow with all the parties involved to identify any further defects and/or damages. Once identified defects and/or damages are addressed the engineer shall notify the Employer that the Final Approval Certificate can be issued.

C3.9.6 Co-ordinate and Monitor Remedying of Defects

The Service Provider shall co-ordinate and monitor the remedying of any defects and/or damages identified during the defects notification period.

Prior to the provision of any service under this sub-clause the Service Provider shall submit to the Employer for approval a schedule of personnel necessary to undertake the additional services including a cost estimate. Payment for this service shall be made in terms of Clause C.3.8.

C3.9.7 Final Payment Certificate

Upon issuing of the Final Approval Certificate the engineer shall prepare the final payment certificate for approval by the Employer.

C3.9.8 Extended Guarantees

Where the Service Provider is required to perform services (e.g. inspections after the completion date of the Works Contract) relating to extended guarantees for the Works Contract (e.g. Product Performance Guarantees) separate arrangements for remuneration will be made by the Employer under Additional Duties.

C3.10 MEASUREMENT AND PAYMENT

The principles for the measurement and payment of fees to the Service Provider are explained in Clause C2.1 PRICING INSTRUCTIONS of Part C2: PRICING DATA and Part C3: SCOPE OF WORKS

Item		Unit
3.10.1	Fee-based stages of services:	
(a)	Project Assessment	percentage (%)
(b)	Preliminary Design	percentage (%)
(c)	Detail Design	percentage (%)
(d)	Administration and Monitoring of the Works Contract	percentage (%)
(e)	Close Out	percentage (%)

The unit measurement of subitems 3.10.1(a) to (e) shall be the tendered percentage for each specific fee-based stage of services. Measurement for payment shall be in terms of Clause C3.1.4(a).

The product of the calculated basic fee and tendered percentage shall include full compensation for all normal services / duties and requirements associated with each applicable fee-based stage of service as specified in Sections C3.1, C3.2, C3.4, C3.6 and C3.9. Including all disbursements, materials, printing, travel, subsistence, allowances for overhead charges incurred by the Service Provider as part of normal business operations, the cost of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general, materials, printing, and all other costs and all profits, but excluding all specified additional services provided for herein.

Interim payments will only be considered by the Employer should it be warranted by progress.

Item		Unit
3.10.2	Survey Services:	
(a)	Survey services during design stage	prime cost (PC)
(b)	Cost for procuring and managing sub-Service Provider under subitem 3.10.2(a)	lump sum (LS)

The unit of measurement under subitem 3.10.2(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.2(b) shall be the lump sum.

The tendered lump sum under subitem 3.10.2(b) shall only be applicable where such service is carried out under the Prime Cost sum and shall include for all costs associated with the planning, compiling a schedule of all envisaged survey work during design stage, compilation of quotation/tender documentation for procurement purposes, issuing of up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement of the sub-service and recommendations to the Employer including management cost, administrative cost, handling fees and profit.

Contract price adjustment shall be applicable to subitem 3.10.2(b) in accordance with Clause C2.1.6.

Item		Unit
3.10.3	Traffic Monitoring Services:	
(a)	Traffic monitoring services during design stage	prime cost (PC)
(b)	Cost for procuring and managing sub-Service Provider under subitem 3.10.3(a)	lump sum (LS)

The unit of measurement under subitem 3.10.3(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.3(b) shall be the lump sum.

The tendered lump sum under subitem 3.10.3(b) shall only be applicable where such service is carried out under the Prime Cost sum and shall include for all costs associated with the planning, compiling a schedule of all envisage traffic monitoring work during design stage, compilation of quotation/tender documentation for procurement purposes, issuing up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement of the sub-service and recommendation to the Employer including management cost, administration cost, handling fees and profit.

Contract price adjustment shall be applicable to subitem 3.10.3(b) in accordance with Clause C2.1.6.

Item		Unit
3.10.4	Environmental Services:	
(a)	Environmental services during design stage	prime cost (PC)
(b)	Cost for procuring and managing sub-Service Provider under subitem 3.10.4(a)	lump sum (LS)

The unit of measurement under subitem 3.10.4(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.4(b) shall be the lump sum.

The tendered lump sum under subitem 3.10.4(b) shall only be applicable where such service is carried out under the Prime Cost sum and shall include for all costs associated with the planning, compiling a schedule of all envisage environmental services work during design stage, compilation of quotation/tender documentation for procurement purposes, issuing up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement of the sub-service and recommendation to the Employer including management cost, administration cost, handling fees and profit.

Contract price adjustment shall be applicable to subitem 3.10.4(b) in accordance with Clause C2.1.6.

Item		Unit
3.10.5	Geotechnical and Drilling Services:	
(a)	Geotechnical and/or Drilling investigations	prime cost (PC)
(b)	Handling costs for planning, procuring geotechnical and/or drilling services under subitem 3.10.5(a)	lump sum (LS)
(c)	Administration and monitoring of the geotechnical and/or drilling contract by the engineer	month
(d)	Supervision of the work:	
	(i) Full time supervision	provisional sum (PS)
	(ii) Engineering Geologist for logging of cores and Profiling of test pits	month
	(iii) Accommodation costs	provisional sum (PS)
	(iv) Occupational Health and Safety obligations (continuous compliance and monthly audits)	month
(e)	Geotechnical and Drilling contract:	
	(i) Geotechnical and Drilling contractor	prime cost (PC)
	(ii) Handling cost for planning, procuring geotechnical and drilling contractor under subsubitem 3.10.5(e)(i)	lump sum (LS)

The unit of measurement under subitem 3.10.5(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement for subitem 3.10.5(b) shall be the lump sum. The Service Provider shall identify the full scope of the sub-service investigation(s), type and estimated quantity of tests required and shall compile quotation/tender documents in accordance with the Employer's standard requirements, procurement policy and industry best practices for procuring the relevant sub-service. The lump sum tendered shall include full compensation for personnel, transport, accommodation, materials, printing and all other costs associated with the compilation of quotation/tender documents, issuing quotation/tender documents, clarification meetings, evaluation and producing a tender evaluation report.

Contract price adjustment shall be applicable to subitem 3.10.5(b) in accordance with Clause C2.1.6.

The unit of measurement for subitem 3.10.5(c) shall be month or part thereof and the rate tendered shall include full compensation for the engineer's cost including all subsistence, travel, accommodation, meeting attendance and other costs associated with administration and monitoring of the geotechnical and/or drilling investigation, including preparation and submission of contractor's payment certificates.

Contract price adjustment shall be applicable to subitem 3.10.5(c) in accordance with Clause C2.1.6.

The provisional sum under subsubitem 3.10.5(d)(i) shall cover all monthly costs for personnel including all subsistence and travel costs associated with providing full time supervision of the work.

The provisional sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement for subsubitem 3.10.5(d)(ii) shall be month or part thereof and the rate tendered shall include full compensation for all personnel costs including all subsistence and travel costs associated with providing an Engineering Geologist for the logging of cores.

Contract price adjustment shall be applicable to subsubitem 3.10.5(d)(ii) in accordance with Clause C2.1.6.

The provisional sum under subsubitem 3.10.5(d)(iii) shall cover all costs associated with the accommodation for full time supervision personnel and the Engineering Geologist.

The provisional sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement for subsubitem 3.10.5(d)(iv) shall be month or part thereof and the tendered rate shall include full compensation for all costs, including personnel, transport, accommodation and subsistence for the Occupational Health and

Safety Specialist for fulfilling the Service Provider's obligations as the Agent with respect to the requirements of the Construction Regulations of the Occupational Health and Safety Act (Act 85 of 1993).

Contract price adjustment shall be applicable to subsubitem 3.10.5(d)(iv) in accordance with Clause C2.1.6.

The unit of measurement under subsubitem 3.10.5(e)(i) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement for subsubitem 3.10.5(e)(ii) shall be the lump sum. The lump sum tendered shall include full compensation for personnel, transport, accommodation, materials, printing and all other costs associated with the compilation of quotation/tender documents, issuing quotation/tender documents, clarification meeting, evaluation and producing a tender evaluation report.

Contract price adjustment shall be applicable to subsubitem 3.10.5(e)(ii) in accordance with Clause C2.1.6.

Item	Unit
3.10.6 Pavement / Materials Investigation and Testing Services:	
(a) Pavement / materials investigation services during design stage	prime cost (PC)
(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.6(a)	lump sum (LS)

The unit of measurement under subitem 3.10.6(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.6(b) shall be the lump sum.

The tendered lump sum under subitem 3.10.6(b) shall only be applicable where such service is carried out under the Prime Cost sum and shall include for all costs associated with the planning, compiling a schedule of all envisage pavement / materials investigation and testing services work during design stage, compilation of quotation/tender documentation for procurement purposes, issuing up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement of the sub-service and recommendation to the Employer including management cost, administration cost, handling fees and profit.

Contract price adjustment shall be applicable to subitem 3.10.6(b) in accordance with Clause C2.1.6.

Item	Unit
3.10.7 Occupational Health and Safety Obligations Services:	
(a) Occupational health and safety obligations services during design stage	prime cost (PC)
(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.7(a)	lump sum (LS)

The unit of measurement under subitem 3.10.7(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.7(b) shall be the lump sum.

The tendered lump sum under subitem 3.10.7(b) shall only be applicable where such service is carried out under the Prime Cost sum and shall include for all costs associated with the planning, compiling a schedule of all occupational health and safety obligations services work during design stage, compilation of quotation/tender documentation for procurement purposes, issuing up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement of the sub-service and recommendation to the Employer including management cost, administration cost, handling fees and profit.

Contract price adjustment shall be applicable to subitem 3.10.7(b) in accordance with Clause C2.1.6.

Item	Unit
3.10.8 Road Safety Audit Services:	
(a) Road safety audit services during design stage	prime cost (PC)
(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.8(a)	lump sum (LS)

The unit of measurement under subitem 3.10.8(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.8(b) shall be the lump sum.

The tendered lump sum under subitem 3.10.8(b) shall only be applicable where such service is carried out under the Prime Cost sum and shall include for all costs associated with the planning, compiling a schedule of all envisaged road safety audit work during design stage, compilation of quotation/tender documentation for procurement purposes, issuing of up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement of the sub-service and recommendations to the Employer including management cost, administrative cost, handling fees and profit.

Contract price adjustment shall be applicable to subitem 3.10.8(b) in accordance with Clause C2.1.6.

Item	Unit
3.10.9 Phase / Stage Discontinuity:	
(a) Review of detail design stage	lump sum (LS)
(b) Review of maintenance requirements for existing and new phases	lump sum (LS)
(c) Review of tender documentation by original designer	prime cost (PC)
(d) Visits to construction site by original designer	prime cost (PC)
(e) Handling cost and profit in respect of subitems 3.10.9(c) and (d)	percentage (%)

The unit of measurement under subitem 3.10.9(a) shall be the lump sum.

The tendered lump sum shall include full compensation for the time and cost to review the respective documents including all travel and subsistence costs, the costs of all written, telephonic and electronic communications and all other incidentals necessary to read, understand, create and express opinions and decisions from them, regardless of their quantity or complexity. It shall also include the submission of a report addressing the full review.

The unit of measurement under subitem 3.10.9(b) shall be the lump sum.

The tendered lump sum shall include full compensation for the time and cost to review the respective documents including all travel and subsistence costs, the costs of all written, telephonic and electronic communications and all other incidentals necessary to read, understand, create and express opinions and decisions from them, regardless of their quantity or complexity. It shall also include the submission of a report addressing the full review.

The unit of measurement under subitem 3.10.9(c) shall be the prime cost sum.

Payment under subitem 3.10.9(c) shall be made to cover full compensation for the time and cost to review the respective documents including all travel and subsistence costs, the costs of all written, telephonic and electronic communications and all other incidentals necessary to read, understand, create and express opinions and decisions from them, regardless of their quantity or complexity. It shall also include the submission of a report addressing the full review by the original designer.

The unit of measurement under subitem 3.10.9(d) shall be the prime cost sum.

Payment under subitem 3.10.9(d) shall be made to cover all costs by the original designer to visit the site.

The unit of measurement under subitems 3.10.9(c) and (d) shall be the percentage.

Payment under subitems 3.10.9(c) and (d) shall be made on the amount actually spent and shall include full compensation for handling costs and profit to the Service Provider.

The rates tendered under this payment item shall also include for all costs associated with compliance with the Construction Regulations of the Occupational Health and Safety Act (No. 85 of 1993) as relevant for the design of the Works during the construction phase as well as the designer's obligations with respect to the relevant professional engineers' legislation.

Contract price adjustment shall be applicable to subitems 3.10.9(a) and (b) in accordance with Clause C2.1.6.

Item	Unit
3.10.10 Employer's Gateway Review Process	lump sum (LS)

The unit of measurement under item 3.10.10 shall be the lump sum.

The tendered lump sum shall include full compensation for time related costs, all disbursements, materials, printing and all other costs associated with presenting the project to the Employer's Gateway Review team in accordance with Clause C3.1.12(a)(iii).

Contract price adjustment shall be applicable to item 3.10.10 in accordance with Clause C2.1.6.

Item	Unit
3.10.11 Tender Documentation and Procurement:	
(a) Preparation of draft tender documentation	lump sum (LS)
(b) Preparation of final tender documentation	lump sum (LS)
(c) Disbursements for tender documentation	lump sum (LS)
(d) Preparation of clarification meeting presentation	lump sum (LS)
(e) Service Provider's tender period cost	lump sum (LS)
(f) Tender evaluation and report	lump sum (LS)
(g) Disbursements for tender evaluation and report	lump sum (LS)
(h) Preparation of Works contract documents	lump sum (LS)

The unit of measurement under subitems 3.10.11(a) to (h) shall be the lump sum.

The tendered lump sum under subitem 3.10.11(a) shall include full compensation for time related costs associated with the compilation of the draft tender documentation and discussion/meetings with the Employer in accordance with Section C3.5.

The tendered lump sum under subitem 3.10.11(b) shall include full compensation for time related costs associated with the compilation of the final tender documentation and discussion/meetings with the Employer in accordance with Section C3.5.

The tendered lump sum under subitem 3.10.11(c) shall include full compensation for all disbursements, materials, printing and all other costs associated with compilation of the draft and final tender documentation and discussion/meetings with the Employer in accordance with Section C3.5.

The tendered lump sum under subitem 3.10.11(d) shall include full compensation for all costs incurred by the Service Provider in respect to the compilation and submission of the clarification meeting presentation in accordance with Clause C3.5.5

The tendered lump sum under subitem 3.10.11(e) shall include full compensation for all costs incurred by the Service Provider in respect to the tender period in accordance with Clause C3.5.6.

The tendered lump sum under subitem 3.10.11(f) shall include full compensation for time related costs associated with the tender evaluation assistance and report by the Service Provider in accordance with Clause C3.5.7

The tendered lump sum under subitem 3.10.11(g) shall include full compensation for all disbursements, materials, printing and all other costs associated with the tender evaluation assistance and report by the Service Provider in accordance with Clause C3.5.7.

The tendered lump sum under subitem 3.10.11(h) shall include full compensation for all costs incurred by the Service Provider in respect to the preparation of Works contract documents in accordance with Clause C3.5.8.

Contract price adjustment shall be applicable to subitems 3.10.11(a) to (h) in accordance with Clause C2.1.6.

Item	Unit
3.10.12 Establishment of Supervisory Personnel and Office Equipment on Site:	
(a) Relocation costs of individual supervisory personnel	prime cost (PC)
(b) Handling cost and profit in respect of subitem 3.10.12(a)	percentage (%)
(c) Establishment of office equipment	lump sum (LS)

The unit of measurement under subitem 3.10.12(a) shall be the prime cost sum.

Payment under subitem 3.10.12(a) shall be made for all costs related to establishing the individual supervisory personnel on site and their removal after completion of the Works, as approved by the Employer.

The prime cost sum shall be paid for in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.12(b) shall be the percentage.

Payment under subitem 3.10.12(b) shall be made on the amount actually spent and shall include full compensation for handling costs and profit to the Service Provider.

The unit of measurement under subitem 3.10.12(c) shall be the lump sum.

The tendered lump sum shall include full compensation for establishment and de-establishment of all office equipment on site, including all associated costs. Payment shall only be made once all office equipment has been established on site.

Contract price adjustment shall be applicable to subitem 3.10.12(c) in accordance with Clause C2.1.6.

Item	Unit
3.10.13 Monitoring of the Works Contract:	
(a) Full-time site supervisory personnel	provisional sum (PS)
(b) Additional overhead costs and profit in respect of subitem 3.10.13(a)	percentage (%)
(c) Provision and monthly cost of office equipment	month
(d) Accommodation for site supervisory personnel	provisional sum (PS)
(e) Handling costs and profit in respect of subitem 3.10.13(d)	percentage (%)
(f) Disbursements for Engineer and Design Specialist(s)	month
(g) Administration and Monitoring of the Works Contract for extended Works Contract period from the original Employer's estimate	month
(h) Administration and Monitoring of the Works Contract for prolonged site stoppages not under the control of the Employer	month

The provisional sum under subitem 3.10.13(a) is to cover the monthly (pro rata for part thereof) Total Annual Cost of Employment (TACE) including a 1.58 site staff overhead factor of the supervisory staff (excluding Surveyor and his assistants, Trainee (student) and Administrative Assistant (data capture)) as listed in Clause C3.6.3(a) and approved by the Employer.

Payment under subitem 3.10.13(a) shall only be applicable for the period actually established on Site and shall in no instance be prior to the official hand-over of the Works to the contractor or after 28 days of the date of the Certificate of Completion of the Works Contract. The TACE shall be verified by means of an audited statement.

The provisional sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.13(b) shall be the percentage.

The tendered percentage under subitem 3.10.13(b) shall include full compensation for all additional overhead and profit related to the employment of the relevant site supervisory personnel as specified in Clause C3.6.3(a).

The unit of measurement under subitem 3.10.13(c) shall be the month (pro rata for part thereof).

The tendered rate under subitem 3.10.13(c) shall include full compensation for supplying and maintaining all office equipment as specified in Clause C3.6.3(d), including all incidentals, all monthly charges such as cell and mobile data costs and insurance to operate the equipment.

Contract price adjustment shall be applicable to subitem 3.10.13(c) in accordance with Clause C2.1.6.

The provisional sum under subitem 3.10.13(d) is to cover the cost of accommodation for site supervisory personnel, as approved by the Employer.

The provisional sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.13(e) shall be the percentage.

The tendered percentage under subitem 3.10.13(e) shall include full compensation for all costs associated with the reimbursement by the Service Provider for rented accommodation, including all handling fees and profit.

The unit of measurement under subitem 3.10.13(f) shall be the month (pro rata for part thereof).

The tendered rate under subitem 3.10.13(f) shall include compensation for the transport and subsistence of the Engineer and Design Specialist(s) as well as all related costs, disbursements and profit.

Contract price adjustment shall be applicable to subitem 3.10.13(f) in accordance with Clause C2.1.6.

The unit of measurement under subitems 3.10.13(g) and (h) shall be the month (pro rata for part thereof).

The tendered rate under subitem 3.10.13(g) and (h) shall include compensation for all services / duties and requirements associated with the administration and monitoring of the Works Contract as specified in Clauses C3.1.4, C3.6.2, C3.6.3 and C3.6.4 during an extended Works Contract duration or prolonged site stoppages not under the control of the Employer. It shall further include for all costs, disbursements, overheads and profit but excluding the costs, disbursements and profit related to the transport and subsistence of the Engineer and Design Specialist(s) during an extended Works Contract duration or prolonged site stoppages not under the control of the Employer.

Contract price adjustment shall be applicable to subitems 3.10.13(g) and (h) in accordance with Clause C2.1.6.

Item	Unit
3.10.14 Transport for site supervisory personnel:	
(a) Travelling to perform duties	kilometre (km)

The unit of measurement under subitem 3.10.14(a) shall be the kilometre travelled by the Service Provider's site supervisory personnel in the performance of duties as specified in Clause C3.6.4.

The tendered rate under subitem 3.10.14(a) shall include full compensation for providing sufficient appropriate vehicles on Site, maintenance, running costs and fuel to carry out the duties as specified in Clause C3.6.4, including all handling costs

and profit. Only travel in the execution of these duties as approved by the Employer as specified in Clause C3.6.5 shall be paid.

Contract price adjustment shall be applicable to subitem 3.10.14(a) in accordance with Clause C2.1.6.

Item	Unit
3.10.15 Training:	
(a) Targeted Enterprise Assistant Contract Engineer	provisional sum (PS)
(b) Employer's candidate engineers	provisional sum (PS)
(c) Engineering students receiving experiential training	provisional sum (PS)
(d) Handling costs and profit in respect of subitems 3.10.15(a), (b) and (c)	percentage (%)

The unit of measurement under subitems 3.10.15(a), (b) and (c) shall be the provisional sum.

The provisional sum under subitem 3.10.15(a) shall include full compensation for cost incurred by the Service Provider in respect to training provided, as approved by the Employer, for the appointed Targeted Enterprise Assistant Contract Engineer. Costs excluded includes the Targeted Enterprise Assistant Contract Engineer time-based costs.

The provisional sum under subitem 3.10.15(b) shall include full compensation for cost incurred by the Service Provider in respect to training provided, as approved by the Employer, for the Employer's candidate engineers.

The provisional sum under subitem 3.10.15(c) shall include full compensation for cost incurred by the Service Provider in respect to training provided, as approved by the Employer, for local Engineering students receiving experiential training.

The provisional sum shall be paid for in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.15(d) shall be the percentage.

Payment under subitem 3.10.15(d) shall be made on the amount actually spent and shall include full compensation for handling costs and profit to the Service Provider.

Item	Unit
3.10.16 Occupational Health and Safety Obligations Services:	
(a) Occupational health and safety obligations services during administration and monitoring of the works contract stage	prime cost (PC)
(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.16(a)	lump sum (LS)

The unit of measurement under subitem 3.10.16(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.16(b) shall be the lump sum.

The tendered lump sum under subitem 3.10.16(b) shall only be applicable where such service is carried out under the Prime Cost sum and shall include for all costs associated with the planning, compiling a schedule of all occupational health and safety obligations services work during administration and monitoring of the works contract stage, compilation of quotation/tender documentation for procurement purposes, issuing up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement of the sub-service and recommendation to the Employer including management cost, administration cost, handling fees and profit.

Contract price adjustment shall be applicable to subitem 3.10.16(b) in accordance with Clause C2.1.6.

Item	Unit
3.10.17 Environmental Services:	
(a) Environmental services during administration and monitoring of the works contract stage	prime cost (PC)
(b) Cost for procuring and managing sub-Service Provider under subitem 3.10.17(a)	lump sum (LS)

The unit of measurement under subitem 3.10.17(a) shall be the prime cost sum.

The prime cost sum shall be paid in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.17(b) shall be the lump sum.

The tendered lump sum under subitem 3.10.17(b) shall only be applicable where such service is carried out under the Prime Cost sum and shall include for all costs associated with the planning, compiling a schedule of all envisage environmental services work during administration and monitoring of the works contract stage, compilation of quotation/tender documentation for procurement purposes, issuing up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement of the sub-service and recommendation to the Employer including management cost, administration cost, handling fees and profit.

Contract price adjustment shall be applicable to subitem 3.10.17(b) in accordance with Clause C2.1.6.

Item	Unit
3.10.18 Additional services / duties by the Service Provider:	
(a) Personnel cost:	
(i) Category A	hour (hr)
(ii) Category B	hour (hr)
(iii) Category C	hour (hr)
(iv) Category D	hour (hr)
(b) Disbursements to perform additional services / duties	prime cost (PC)
(c) Handling cost and profit in respect of subitem 3.10.18(b)	percentage (%)

The unit of measurement under subsubitems 3.10.18(a)(i) to (iv) shall be the hour (pro rata for part thereof). The personnel category definitions are specified in Clause C3.1.11(c) and shall be measured as specified in Clause C3.1.4(b).

The tendered rates under subsubitems 3.10.18(a)(i) to (iv) shall include full compensation professional and technical staff costs for additional services required by the Employer, including allowances for overhead charges incurred by the Service Provider as part of normal business operations, including the cost of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general, materials, printing, and all other costs and all profits.

Contract price adjustment shall be applicable to subsubitems 3.10.12(a)(i) to (iv) in accordance with Clause C2.1.6.

The unit of measurement under subitem 3.10.18(b) shall be the prime cost sum.

Payment under subitem 3.10.18(b) shall be made for all disbursement cost of personnel accommodation, travel and subsistence associated with the undertaking of additional duties. Transport by private vehicle, if required, shall be paid at the tender rate under subitem 3.10.14(a).

The prime cost sum shall be paid for in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.18(c) shall be the percentage.

Payment under subitem 3.10.18(c) shall be made on the amount actually spent and shall include full compensation for handling costs and profit to the Service Provider.

Item	Unit
3.10.19 Additional Duties by the Employer	hour (hr)

The unit of measurement under item 3.10.19 shall be the hour of Employer personnel utilised for additional duties.

The provided negative rate shall be for carrying out additional duties as specified in Clauses C3.1.11, C3.5.3 and C3.7.2(b).

The minimum time will always be 2 (two) hours per key person re-evaluated and actual hours will be charged for reviewing draft documentation submitted more than once. The value shall be deducted from the Service Provider's interim monthly account immediately after having been informed by the Employer.

Contract price adjustment shall be applicable to item 3.10.19 in accordance with Clause C2.1.6.

Item	Unit
3.10.20 Special Services and Specialist Advice:	
(a) Personnel cost for services or advice provided by Service Provider:	
(i) Category A	hour (hr)
(ii) Category B	hour (hr)
(iii) Category C	hour (hr)
(iv) Category D	hour (hr)
(b) Services or advice procured by Service Provider	prime cost (PC)
(c) Handling cost and profit in respect of subitem 3.10.20(b)	percentage (%)

The unit of measurement under subsubitems 3.10.20(a)(i) to (iv) shall be the hour (pro rata for part thereof). The personnel category definitions are specified in Clause C3.1.11(c) and shall be measured as specified in Clause C3.1.4(b).

The tendered rates under subsubitems 3.10.20(a)(i) to (iv) shall include full compensation professional and technical staff costs for special services or specialist advice as specified in Clause C3.3.7, including allowances for overhead charges incurred by the Service Provider as part of normal business operations, including the cost of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general, materials, printing, and all other costs and all profits.

Contract price adjustment shall be applicable to subsubitems 3.10.20(a)(i) to (iv) in accordance with Clause C2.1.6.

The prime cost shall be paid for in accordance with Clause C2.1.8.

The unit of measurement under subitem 3.10.20(c) shall be the percentage.

The tendered percentage under subitem 3.10.20(c) shall include full compensation for all costs associated with the planning, scheduling, compilation of quotation/tender documentation for procurement purposes, issuing up to 10 (ten) quotation/tender documents in electronic format and evaluation for the procurement and management of the sub-service including handling fees and profit.

Item	Unit
3.10.21 Payment and Monthly Reporting cost	provisional sum (PS)

The unit of measurement under item 3.10.21 shall be the provisional sum.

The provisional sum under item 3.10.21 shall include full compensation for all cost incurred by the Service Provider in respect to compliance in accordance with Clause C3.7.3 and as instructed by the Employer.

The provisional sum shall be paid for in accordance with Clause C2.1.8.

Item		Unit
3.10.22	Works Contract Quality Control:	
(a)	Provision of a fully operational laboratory during administration and monitoring of the works contract stage	prime cost (PC)
(b)	Handling cost and profit in respect of subitem 3.10.22(a)	percentage (%)
(c)	Off-site materials testing	prime cost (PC)
(d)	Handling cost and profit in respect of subitem 3.10.22(c)	percentage (%)
(e)	Part-time survey services during administration and monitoring of the works contract stage	prime cost (PC)
(f)	Handling cost and profit in respect of subitem 3.22.14(e)	percentage (%)

The unit of measurement under subitems 3.22.14(a), (c) and (e) shall be the prime cost sum.

The prime cost sums shall be paid for in accordance with Clause C2.1.8.

The tendered percentage under subitem 3.10.22(b) shall include full compensation for all costs associated with the planning, scheduling, compilation of quotation/tender documentation for procurement purposes, issuing up to 10 (ten) quotation/tender documents in electronic format and evaluation for the procurement and management of the laboratory service as approved by the Employer including handling fees and profit.

The tendered percentage under subitem 3.10.22(d) shall include full compensation for all costs associated with the planning, scheduling, compilation of quotation/tender documentation for procurement purposes, issuing up to 10 (ten) quotation/tender documents in electronic format and evaluation for the procurement of the off-site laboratory testing as approved by the Employer including handling fees and profit.

The tendered percentage under subitem 3.10.22(f) shall include full compensation for all costs associated with the planning, scheduling, compilation of quotation/tender documentation for procurement purposes, issuing up to 10 (ten) quotation/tender documents in electronic format and evaluation for the procurement of the part-time survey services as approved by the Employer including handling fees and profit.

CONTRACT**PART C4: SITE INFORMATION**

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C4.1 LOCATION OF THE PROJECT

The proposed project is located on surfaced district road DR08005, also referred to as R61 is located within the Mbizana Local Municipal area which is located within the Alfred Nzo District. DR08005 (R61) starts at Magusheni and ends at Mzamba.

This project forms part of a phased programme to upgrade ± 79 km length of DR08005 (R61) between Magusheni and Mzamba.

Table C4.1(a) Project Location:

Phasing	Position	Description of Works	Length (km)
Ph 3 / Sec 2	KM 59,5 to KM 67,7	Upgrade works (Reconstruction of existing surface road)	8,2
Ph1 / Sec 1	KM 67,7 to KM 78	Maintenance works (Maintenance and small works on previously upgraded surface road)	11,1
Ph 1 / Sec 2	KM 50,5 to KM 59,5	Maintenance works (Maintenance and small works on previously upgraded surface road)	9
Ph 3 / Sec 1	KM 33,0 to KM 50,5	Maintenance works (Surface and pavement patch repair existing surface road) – Future upgrade phase	17,5
Ph 4	KM 0,0 to KM 13,1	Maintenance works (Surface and pavement patch repair existing surface road) – Future upgrade phase	13,1

C4.2 DESCRIPTION OF THE PROJECT

The Employer, the Department of Transport (DoT) in the Eastern Cape, is responsible for the maintenance and upgrade of provincial roads in the Eastern Cape. As part of its Maintenance and Upgrade Strategy, the Employer wishes to procure the services of suitable professional Service Provider(s) to undertake the administration and monitoring of the works contract for upgrading of provincial road DR08005 Magusheni to Mzamba (R61) ± 79 km Phase 3: Section 2 Km 59,5 to Km 67,7 - Including Maintenance Works.

Upgrade: Indicates that additional capacity is required in the form of upgrading the existing surfaced single carriageway road by means of improving the horizontal and vertical alignments by constructing mass earthworks (cut / fill), new pavement structure and surfacing, new surface and sub-surface drainage, new road furniture (road signs, sidewalks, fencing, etc.) and new road markings.

In addition, the project shall involve the maintenance the existing surfaced road consisting of previously completed phases and future phases of the project.

The Services required of the Service Provider are divided into the following distinct stages:

- Detailed Design Review.
- Tender Documentation and Procurement Stage which shall include the following:
 - Documentation (Draft & Final)
 - Gateway Review
 - Clarification Meeting / Tender document presentation
 - Tender Period
 - Tender Evaluation
 - Contract Documentation for the Works
- Administration and Monitoring of the Works Contract Stage.
- Additional duties, Special Services and Specialist Advice.
- Quality Control: Works Contract.
- Close Out Stage.

C4.3 GEOMETRIC INFORMATION

Phase 3 Section 2 (KM 59,5 to KM 67,7) – UPGRADE WORKS SECTION

The geometry of the road could be described as rolling with few bends over the entire length. It is predominately built on or near the water shed.

The highest point of the road is at an elevation of 404 m at KM 63,1 and the lowest of the road is at an elevation of 370 m at KM 60,7.

The average surfaced width of the road is 8,4 m and narrow gravel shoulders in places. There are no passing lanes present along the road.

This portion of the project makes up the bulk of the works and includes a full range of road works associated with the upgrading and reconstruction of an existing surfaced road to a new surfaced road. The new surface road to be constructed is located adjacent to the existing surface road.

Phase 1 Section 1 (KM 67,7 to KM 78) – MAINTENANCE AND SMALL WORKS SECTION

The geometry of the road has recently been upgraded and can be described as rolling with bends over the entire length. It is predominately built on or near the water shed.

The highest point of the road is at an elevation of 393.8 m at KM 67,82 and the lowest of the road is at an elevation of 20.5 m at KM 78,7.

The standard surface width is 9,8 m with 1,2 m wide surface shoulders and 800 mm wide gravel shoulder in fill condition. There are few passing lanes.

This portion of the project involves selected maintenance and small works on the previously upgraded Phase 1 Section 1, completed in June 2018.

Phase 1 Section 2 (KM 50,5 to KM 59,5) – MAINTENANCE AND SMALL WORKS SECTION

The geometry of the road has recently been upgraded and can be described as rolling with many bends over the entire length. It is predominately built on or near the water shed.

The highest point of the road is at an elevation of 637.9 m at KM 50,56 and the lowest of the road is at an elevation of 361.9 m at KM 59,16.

The standard surface width is 9,8 m with 1,2 m wide surface shoulders and 800 mm wide gravel shoulder in fill condition. There are a number of passing lanes.

This portion of the project involves selected maintenance and small works on the previously upgraded Phase 1 Section 2, completed in June 2018.

Phase 3 Section 1 (KM 33,0 to KM 50,5) – MAINTENANCE WORKS SECTION

The geometry of the road could be described as rolling with several bends over the entire length. It is predominately built on or near the water shed.

The highest point of the road is at an elevation of 758.3 m at KM 33,0 and the lowest of the road is at an elevation of 616.3 m at KM 48,4.

The average surfaced width of the road is 8,4 m and narrow gravel shoulders in places. There are no passing lanes present along the road.

The portion of the project involves surface and pavement patch repairs the existing surface road. (Future upgrade phase)

Phase 4 (KM 0,0 to KM 13,1) – MAINTENANCE WORKS SECTION

The geometry of the road could be described as rolling and in localised areas mountainous with some steep vertical grades with several bends over the entire length. It is predominately built on or near the water shed.

The highest point of the road is at an elevation of 1135 m at KM 0,85 and the lowest of the road is at an elevation of 876 m at KM 8,65.

The average surfaced width of the road is 8,4 m and narrow gravel shoulders in places. There are no passing lanes present along the road.

The portion of the project involves surface and pavement patch repairs the existing surface road. (Future upgrade phase)

C4.4 TRAFFIC INFORMATION

No recent traffic information is available from the Employer.

During the recently constructed Phases 1 and 2 the approximate traffic volume was 7 000 vehicles (20% heavy) per day.

C4.5 PAVEMENT INFORMATION

Available pavement information from the Employer:

Phase 3 Section 2 (KM 59,5 to KM 67,7) – UPGRADE WORKS SECTION

The pavement structure consists of bituminous asphalt and base layers with thickness ranging between 80 to 160 mm thick. These layers are supported by a thin stabilised and unstabilised gravel subbase layer. The average total thickness of the pavement structure varies between 200 and 250 mm. A surface and pavement patch repairs have been made over the years.

Phase 1 Section 1 (KM 67,7 to KM 78) and Phase 1 Section 2 (KM 50,5 to KM 59,5) – MAINTENANCE AND SMALL WORKS SECTIONS

The pavement structure consists of:

- 20 mm Cape Seal surfacing
- 150 mm compacted thick bituminous stabilized (BSM1) G2 base layer
- 300 mm compacted thick cement stabilized (C3) G5 subbase layer
- 150 mm compacted thick G7 upper selected layer
- 200 mm compacted thick G9 lower selected layer

Completed in June 2018

Phase 3 Section 1 (KM 33,0 to KM 50,5) and Phase 4 (KM 0,0 to KM 13,1) – MAINTENANCE WORKS SECTIONS

The pavement structure consists of bituminous asphalt and base layers with thickness ranging between 80 to 160 mm thick. These layers are supported by a thin stabilised and unstabilised gravel subbase layer. The average total thickness of the pavement structure varies between 200 and 250 mm. Several surface and pavement patch repairs have been made over the years.

C4.6 GEOTECHNICAL

There are no known geotechnical problem areas identified on these projects and no geotechnical work is included in the scope of work. However, the Service Provider must notify the Employer of any potential geotechnical problem areas as part of the design review.

C4.7 MATERIAL SOURCES

Fill and Selected Layers

It is foreseen that all fill and selected layer materials shall be available from road cuttings and Employer's approved borrow pit BP 61,0. Provision needs to be made for the establishment of single-stage crushing to breakdown hard materials for use in course fill material and selected layers.

Blasted Rockfill, Pioneer layer and Rock toe Materials

It is foreseen that all such material shall be available from the Employer's approved Lugwijini (hard rock tillite) quarry at KM 58,2.

Crushed stone for layerworks, surfacing, concrete and gabions

It is foreseen that all such material shall be available from the Employer's approved Lugwijini (hard rock tillite) quarry at KM 58,2. Provision needs to be made for the establishment of multi-stage crushing to breakdown hard materials for use as crushed stone products.

It is foreseen that all crusher stone materials will be sourced from commercial sources. The Service Provider shall however assess the Employer's approved borrow pits along the route for possible use for fill and natural gravel materials.

C4.8 LAND REQUIREMENTS

Employer to advise after appointment of a Service Provider.

C4.9 ENVIRONMENTAL REQUIREMENTS

All available current Environmental Approvals shall be made available to the Service Provider.

C4.10 ROAD FURNITURE

No current conditional assessment for existing road furniture is available from the Employer.

C4.11 STRUCTURES

Structures (bridges and major culverts) information are available from the Employer although no work on existing structures is part of the scope of the work is expect at this stage.

C4.12 SUB-SERVICE PROVIDERS

The following sub-services will be required on the project(s):

- Environmental Practitioner (construction stages)
- OHS Specialist (construction stages)
- Specialist technical sub-services
- Site or commercial materials laboratory (construction stage)
- Part-time survey (construction stage)

C4.13 APPENDICES

Locality Plans

Appendix A: Locality Plan

APPENDIX A

LOCALITY PLAN