

TENDER CLARIFICATION PRESENTATION

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1. WELCOME & INTRODUCTION

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CONTRACT SANRAL C.004-032-2019/1F

NB: IN THE EVENT OF ANY INCONSISTENCIES IN THIS PRESENTATION AND TENDER DOCUMENT, THE TENDER DOCUMENT SHALL TAKE PRECEDENCE UNLESS CONFIRMED IN AN ADDENDUM



CONTRACT SANRAL C.004-032-2019/1F

**CONSULTING ENGINEERING SERVICES TO PROVIDE FORMALISED ACCESS ROADS
WITHIN THE TOWN OF VENTERSBURG AS A COMMUNITY DEVELOPMENT PROJECT**



CONTRACT SANRAL C.004-032-2019/1F

**CONSULTING ENGINEERING SERVICES TO PROVIDE FORMALISED
ACCESS ROADS WITHIN THE TOWN OF VENTERSBURG AS A
COMMUNITY DEVELOPMENT PROJECT**

SUMMARY OF PROJECT

The project is Consulting Engineering Services to provide formalised access roads within the Town of Ventersburg as a community development project

The proposed project is located at Ventersburg which is within the jurisdiction of the Matjhabeng Local Municipality in the Free State Province. It is in proximity to National Road 1, Section 17x from Ventersburg (km 0) to Kroonstad South (km 44.78).

NOTE ON PART C3 SCOPE OF WORK

The Part C3 Scope of Work of the tender documentation contains generic specification utilised on all Consulting Engineering Tenders.

For this project limited changes to the generic specification have been made.

PART C1: AGREEMENTS AND CONTRACT DATA

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C1.2.2 CONTRACT DATA: INFORMATION PROVIDED BY THE EMPLOYER

Clause	Contract Data
3.4	The address for receipt of communications is: SANRAL KwaZulu-Natal Provincial Office 58Van Eck Place Mkondeni 3212
3.5	The project is Consulting Engineering Services to provide formalised access roads within the Town of Ventersburg as a community development project. The location for the performance of the Project is Free State Province, Lejweleputswa District Municipality, Ventersburg, Voortrekker Street and Bayford Street.
5.1.7	a)The amount of work expressed as a percentage of the tendered contract value (including VAT and excluding provisional and prime cost sums and the respective tendered mark-up (if any) but including provision made for supervision staff (pay-item 3.7.4 (a) and (b))) that will be undertaken by a Targeted Enterprise(s) selected by the Service Provider, shall be a minimum of 30%. a)unless the tenderer is an EME or a QSE with a B-BBEE contributor status level of 1 or 2, in which case there are no sub-contracting requirements.”). b)It is encouraged that Local Targeted Enterprises from the Free State Province in which the project is located shall participate in a minimum of 1/3 (one-third) of the specified requirement.

C1.2.2 CONTRACT DATA: INFORMATION PROVIDED BY THE EMPLOYER

Clause	Contract Data
5.4	5.4.1 The Service Provider shall, at his own cost, unless otherwise agreed, take out and maintain in force such insurance policies in respect of their own risks in performing the Services as are stipulated in the Contract Data, subject to the approval of the Employer, which approved shall not be unreasonably withheld. 5.4.2 The Service Provider shall, at the Employer's request, provide evidence to the Employer showing that the insurance required in terms of Clause 5.4.1 has been taken out with an insurance company registered in the Republic of South Africa, or as otherwise approved by the Employer and maintained in force.

C1.2.2 CONTRACT DATA: INFORMATION PROVIDED BY THE EMPLOYER

Clause	Contract Data
5.5	The Service Provider is required to obtain the Employer's prior approval in writing before taking any of the following actions: a) Appointing Key Personnel not listed by name in the Contract Data. b) Appointing sub-contractors for the performance of any part of the Service. c) Expending any Prime Cost and/or Provisional Sum in the Contract or Training and Development Works Contract. d) Authorising any work under a Variation (Works Authorisation) for the Training and Development Works Contract. e) Authorising any work outside the Contract limits. f) Over-expenditure on the Training and Development Works Contract. g) Changing the scope of work for the Training and Development Works Contract. h) Acceptance of sub-standard work and/or reduced payments under the Training and Development Works Contract. i) All requirements in the relevant documents listed in Clause C3.1.6. j) Making statements to the media regarding the project.

C1.2.2 CONTRACT DATA: INFORMATION PROVIDED BY THE EMPLOYER

Clause	Contract Data
11.2	a) The Service Provider shall not sub-contract more than 25% of the tendered contract value (including value of work allocated to Targeted Enterprise(s), but excluding any services specified in the Scope of Works to be procured under a Provisional Sum through the Employer's Supply Chain Procurement process) to any other enterprise that does not have an equal or higher B-BBEE contributor level, unless the intended sub-contractor(s) is an EME that has the capability and ability to execute the sub-contract. b) 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. c) All Targeted Enterprise(s) and/or sub-contractor(s) shall be registered on the National Treasury's Central Supplier Database (CSD) d) 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: i) the contract shall not be terminated; ii) the Service Provider shall not be penalised up to 10% of the value of the contract.

PROJECT INFORMATION, SCOPE OF WORKS AND SITE INFORMATION

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C3 SCOPE OF WORKS

C3.1.3 Description of the Project

a) Introduction

Training and skills development forms an integral part of the Employer's Transformation Policy and Community Development Strategy and hence, it is important to the Employer that Communities and small, medium and micro enterprise (SMME) Contractors within local Communities are trained and be equipped with skills that can be used to gain meaningful employment and secure subcontracting opportunities.

The purpose of this project is thus for a Training Service Provider and a Construction Manager to PROVIDE FORMALISED ACCESS ROADS WITHIN THE TOWN OF VENTERSBURG AS A COMMUNITY DEVELOPMENT PROJECT.

The training and development programme shall comprise of, amongst others, structured theoretical training with an extensive practical and developmental implementation component.

C3.1.3 Description of the Project (continued)

b) Theoretical (Classroom) Training

The theoretical training shall be a SAQA accredited, full learnership programme that includes multiple, but related, Unit Standards which are relevant to the practical implementation component, i.e. the Works to be constructed. The theoretical, together with the practical, component of the project is aimed at achieving the training and skills development objectives of the Employer to lead towards Targeted Enterprises obtaining a formal qualification in the Construction Industry.

c) Practical (Workplace) Training and Development

During the practical, developmental component of the project, a Construction Management Service Provider shall closely monitor and supervise Targeted Enterprises and shall train, coach, guide, mentor and assist each Targeted Enterprise in all aspects of the management, execution and completion of a typical construction project. Amongst others, Targeted Enterprises shall be developed in the planning of the Works, sourcing and ordering of materials, labour relations, monthly measurements and invoicing procedures.

C3.1.3 Description of the Project (continued)

d) The Construction Project

A Community Development Project has been identified to facilitate the training and development programme.

This Community Development Project entails the provision of formalized roads within the town of Ventersburg as a community development project. The works entails the rehabilitation of approximately 2.5kms of existing roadway along the Voortrekker and Bayford Street's in Ventersburg. Additionally, the community development project aims to assist with the mobility of pedestrians in the area and it is envisaged that concrete walkways will be part of the scope.

The Works consists, amongst others, of the following:

- i) Repair of potholes,
- ii) Repair of base pavement layer where required,
- iii) Resurfacing of the existing road,
- iv) Improvement of sidewalks and verges,
- v) Improvement of road surface stormwater drainage.
- vi) Provision of new road signs and markings and
- vii) Construction of pedestrian facilities.

The minimum design period shall be 6months.

C3.1.3 Description of the Project (continued)

e) Project Approach and Execution

The Service Provider shall be required to approach and execute this project as follows:

- i) Assess and review the provided site information (see Part C4: Site Information) to derive a solution that will advance the employers objectives for this project, which includes, amongst others:
 - a. a theoretical, SAQA accredited, full learnership training programme for Targeted Enterprises;
 - b. a practical, developmental component where Targeted Enterprises shall be trained, coached, guided, mentored and assisted in all aspects of the management, execution and completion of a typical construction project; and
 - c. construction methods that embrace the principles of labour enhanced construction methods (LECM) to maximise the participation of the local community in the project.
- ii) The highest applicable design standards and requirements for the infrastructure type and level of service shall be applied in the assessment. However, the Service Provider shall consider possible constraints such as limited road space, budget constraints, economic viability, LECM etc. and apply value engineering solutions to ensure optimal infrastructure utilisation.
- iii) Prepare concept and preliminary design solutions for consideration and acceptance by the Employer.
- iv) Prepare concept and preliminary theoretical training and practical development programmes for the Community and Targeted Enterprises.
- v) Prepare a property report for land acquisition purposes and submit it to the Employer's service provider for land acquisition matters and/or the relevant municipality for processing and approvals.
- vi) Prepare detail designs and tender documentation for the work to be executed, as well as for the Community and Targeted Enterprise training and development programme.
- vii) Provide a supervision service for the total Targeted Enterprise training and development programme which includes supervision of the construction work activities.
- viii) Where required, identify and let to tender sub-, additional and/or specialist services, e.g. environmental assessments, etc.
- ix) Liaise, during all project stages, with project Stakeholders, affected Communities and other service providers who are appointed on adjacent and/or other road sections, to determine minimum design standards, coordinate design approaches and construction activities, conduct resources and skills analysis, etc. These liaisons may be on an individual basis or group meetings arranged by the Employer.

C3.1.3 Description of the Project (continued)

f) Stages of Services Required

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

- i) Project Assessment.
- ii) Design Development Investigations.
- iii) Detail Design Development, which shall include the following phases:
 - a. ~~Concept~~
 - b. Preliminary
 - c. Detailed Design
- iv) Tender Documentation.
- v) Clarification Meeting, Tender Period and Tender Evaluation.
- vi) Administration and Monitoring of the Training and Development Contract.
- vii) Additional duties, Special Services and Specialist Advice.
- viii) Quality Control of the Training and Development Contract.
- ix) Project Close Out.

C3 SCOPE OF WORKS

C3.1.4 Determination of Remuneration

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

- a) Separate payment for services that are additional to those for which rates were provided;
- b) Payment as per the quantified rates provided for;
- c) Time-based fees; and
- d) Reimbursable expenses.

Payment for additional services, quantified rates provided for and time-based fees, shall be made on completion of the respective quantities and/or milestones achieved.

The fees and/or rates tendered shall include full compensation for the services required under all the different stages as specified herein, 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.

No aspect of the Service Provider's remuneration will be based on the cost of the work and no fee adjustments will be applicable to this Contract.

Should during the project a 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.

C3 SCOPE OF WORKS

C3.1.5 Employer's Cost Estimate

For the purposes of this project, the current budget for the Works is estimated based on the cost of recently completed Works of a similar nature. The final cost will, however, depend on the strategy selected by the Employer based on the most appropriate and cost-effective options identified by the Service Provider during the project assessment and preliminary design phases. The Service Provider shall note that no adjustments to any tendered rates will be applicable irrespective of the actual final cost of the project.

The estimated costs of the different project components, with an anticipated commencement date of May 2027, are provided below (excluding contingencies, CPA during the construction period and VAT):

a)	Training and Development	R 8 000 000.00
b)	Construction of the Works	R 78 000 000.00
	Estimated TOTAL project value (excl. contingencies, CPA and VAT)	R 86 000 000.00

C3 SCOPE OF WORKS

C3.1.7 Stakeholder and Community Liaison and Social Facilitation

Existing Contracts

The Employer currently has a routine road maintenance (RRM) contract in progress along the N1 Section 17x, which is adjacent to the project area. The Service Provider shall not visit the site for purposes of undertaking any investigation without first informing the Route Manager of the visit and what type of investigation is intended. The RRM contractor needs to be able to plan his accommodation of traffic duties and no inspection or investigation can take place without acquiring assistance from the RRM for safe conduct through the site or protection when undertaking intrusive or out-of-vehicle surveys. The Service Provider shall timeously liaise with the Employer and his appointed Route Manager to program the assistance required. The contact details of the parties involved in the RRM contract are as follows:

Route Manager:	Samson Mpaketsane	Wanoza Consulting Engineers
	Tel. number:	(011) 318 7989
	Cell number:	(071) 497 3198
Contractor:	Thandokazi Feleza	Damians Contractors
	Tel. number:	(043) 642 1052
	Cell number:	(074) 356 2402

Table 3.1.9: Project Programme

	Project Stage/Phase	Stage/Phase Completion Date
A	Submission of Tenders	Monday, 12 October 2026
B	Appointment of Service Provider	Friday, 11 December 2026
C	Project Hand-over meeting	Wednesday, 13 January 2027
D	First Progress meeting	Friday, 29 January 2027
E	Submission of draft Assessment Report	Monday, 01 March 2027
F	Submission of draft Concept Design Report	N/A
G	Submission of draft Preliminary Design Report	Thursday, 01 April 2027
H	Submission of Road Safety Audit Report: Stage 1	Thursday, 01 April 2027
I	Submission of Draft Detailed Design Report	Thursday, 29 April 2027
J	Submission of Road Safety Audit Report: Stage 3	Thursday, 29 April 2027
K	Submission of Design to SANRAL's Property Service Provider (PSP) for land acquisition purposes	Thursday, 29 April 2027
L	Submission of Basic Assessment Report or full EIA Report	Thursday, 01 April 2027
M	Submission of WULA to approving authority	Thursday, 01 April 2027
N	Submission of EMP's to approving authority	Monday, 31 May 2027
O	Submission of Final Detailed Design Report	Monday, 31 May 2027
P	Submission of Draft Tender Documents for the Training and Development Programme	Monday, 31 May 2027
Q	Submission of Final Tender Documents for the Training and Development Programme	Monday, 14 June 2027
R	Submission of the Tender Advertisement	Monday, 14 June 2027
S	Tender Clarification Meeting	Monday, 28 June 2027
T	Tender Closure	Monday, 19 July 2027
U	Submission of Tender Evaluation Report	Thursday, 19 August 2027
V	Training and Development Programme Contract Handover	Friday, 17 September 2027
W	Submission of Draft Contract Report and As-built Data	Within 3 months of issue of Taking-over Certificate for the Works
X	Submission of Final Contract Report and As-built Data	Within 1 month of issue of Performance Certificate for the Works

7 October 2026

**Project
Programme**

C3.1.11 Personnel Requirements – Minimum Requirements

Table 3.1.11: Minimum Qualifications and Requirements

Position	Minimum Qualification or Registration	Minimum Relevant Experience (years) ³	Other Requirements
Project Leader	Pr Eng or Pr Tech Eng ¹	5	
Assistant Project Leader	Pr Eng or Pr Tech Eng ¹	N/A	
Design Specialist	Pr Eng or Pr Tech Eng ¹	5	
Assistant Design Specialist	Pr Eng or Pr Tech Eng ¹	N/A	
Surveyor	- Registered Professional Surveyors - Technologist Surveyors - Technician Surveyors	3	Member of SAGC ⁷
Engineering Geologist	Pr Sci.Nat ⁵	3	SAIEG ⁴
Environmental Practitioner	Refer to sub-service procurement document.		
Occupational Health and Safety Specialist	- Design Phase: SACPCMP⁶ registration as a Professional Construction HSE Agent - Construction Phase: SACPCMP⁶ 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	5	- Road safety course (5 CPD). - Minimum 2 (two) audits within 3 (three) years.
Contract Engineer	Pr Eng or Pr Tech Eng ¹	5	
Assistant Contract Engineer	Pr Eng or Pr Tech Eng ¹	N/A	
Engineer's Representative (RE)	Pr Eng or Pr Tech Eng ¹	3	
	Pr Techni Eng ¹	5	
Assistant Engineer's Representative (ARE)	Candidate Engineer or Technologist or	3	
	Candidate Technician ¹	5	
Senior Materials Technician	None specified	10	
	National Diploma in Civil Engineering	5	
	Pr Techni Eng ¹	3	
Materials Technician	None specified	5	

Position	Minimum Qualification or Registration	Minimum Relevant Experience (years) ³	Other Requirements
	National Diploma in Civil Engineering	3	
	Pr Techni Eng ¹	1	
Trainee Technician	Candidate Technician	0	

C3 SCOPE OF

C3.1.19 Participation of targeted enterprise(s)

The Employer may stipulate the participation 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.

The Targeted Enterprise(s) shall be involved throughout the project stages and the percentage 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:

- i) Project Assessment.
- ii) Design Development Investigations.
- iii) Design Development.
- iv) Tender Documentation.
- v) Clarification Meeting, Tender Period and Tender Evaluation.
- vi) Administration and Monitoring of the Training and Development Contract.
- vii) Additional Duties, Special Services and Specialist Advice.
- viii) Quality Control of the Training and Development Contract.
- ix) Project Close Out.

The use of Targeted Enterprise personnel as site staff during the administration and monitoring of the Training, Development and Construction phase is included as part of the percentage specified in the Contract Data.

C3 SCOPE OF WORKS

C3.7 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT

C3.7.2 Administration and Monitoring

Fulfilling the functions of the Engineer

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

- i) Conduct meetings with project Stakeholders and affected or the identified Communities and relevant forums, if necessary, to establish communication channels and to determine issues impacting on the Training and Development Works Contract implementation and construction phase.
- ii) Appoint suitable, able and competent site staff, together with the administration of such staff (including those of any independent Service Provider/s as approved).
- iii) Arrange and attend monthly technical and site meetings and keep minutes of such meetings. Monthly meetings shall also be conducted during the theoretical and practical training phases of the project.

C3.7 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT

C3.7.2 Administration and Monitoring

- iv) Make arrangements on behalf of the Employer for the provision and reproduction of drawings and documents that may be required by the Training and Construction Manager and site staff for the execution of the Works.
- v) Fulfil 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 Training and Development Works Contract.
- vi) Issue instructions to the Training and Construction Manager, coordinate and generally inspect the implementation and construction of the Works for compliance with the Contract at such intervals as appropriate for the proper inspection of the Works, direct site staff and delegate the detailed and day-to-day supervision and inspection of the Works and site administration.
- vii) Advise the Employer regarding the inspection and testing of materials and plant as are usually inspected and tested and arrange for inspection and testing to be carried out in accordance with current appropriate codes, manuals and guidelines.
- viii) Arrange for the carrying out of performance or acceptance tests and surveys as required by the Employer. With the release of the SARDS, the Service Provider will be required to follow the standard workflow within SARDS to determine the number and locality of acceptance testing required for each lot. The data will need to be uploaded into the SARDS portal by Service Provider as per the SARDS interface and then analysed using SARDS, if applicable for this CD project.

C3.7 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT

C3.7.2 Administration and Monitoring

- 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. With the release of the SARDS, the Service Provider will be required to follow the standard workflow within SARDS for approval of materials, if applicable for this CD project.
- xi) Actively manage, report and assist the Training and Construction Manager on training, development and the empowerment programmes committed to by the Contractor in relation to his tendered Contract Participation Goals. Report and sign off on monthly basis, the mentorship programme for Targeted Enterprises provided by the Training and Construction Manager and ensure that all needs of the Targeted Enterprises are recorded monthly and dealt with as the need arises. The monthly report shall be agreed with the Targeted Enterprises, which shall also be signed by each Targeted Enterprise undergoing mentorship.
- xii) Monitor and report monthly on training, empowerment, capacity building, and development of Targeted Enterprises, labour and staff returns, and any such aspects on the Employer's ITIS Project Information Module. Separate allowance for payment for this duty has been made in the Pricing Schedule.
- xiii) 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 record and report Section 24 incidents.
- xiv) Monitor and report on conformance to all relevant Environmental legislation and requirements.

C3.7 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT

C3.7.2 Administration and Monitoring

- xv) Check and control quantities measured and agreed by the Training and Construction Manager and the site supervisory staff and settling any disputes that may arise in this regard. With the release of the SARDS, the Service Provider will be required to follow the standard workflow within SARDS for controlling quantities measured, if applicable for this CD project.
- xvi) Issue certificates for payment to the Training and Construction Manager in accordance with the Conditions of Contract.
- xvii) Review and analyse claims and/or disputes or differences that may arise between the Employer and Training and Construction Manager. 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 pertaining to disputes will be paid for under Additional Duties.
- xviii) Issue Works Authorisations as agreed with, and approved by, the Employer.
- xix) Provide the Employer with progress, monthly materials and laboratory and other reports on all aspects of material importance regarding the Works.
- xx) Identification of risks to the Employer under the Training and Development Works Contract, as well as communicating mitigation measures to the Employer.
- xxi) Provide the Employer within 3 (three) months of issuing the Taking-over Certificate 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 and records shall be provided within 1 (one) month of the issue of the Performance Certificate for the Training and Development Works Contract.
- xxii) Certain construction monitoring duties may be delegated to the Engineer's Representative (RE).

C3.7 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT

C3.7.2 Administration and Monitoring

- xxiii) Receive the Training and Construction Manager's proposed programme, analyse it, comment on it and when found acceptable write to the Construction Manager stating that the programme is acceptable.
- xxiv) Conduct interim monthly performance evaluations on the Training and Construction Manager and a final written and signed report to be submitted to the CIDB as gazetted.
- xxv) Training of Assistant Contract Engineer (if applicable).
- xxvi) Declare structures (bridges, culverts, roads, sections of roads, etc.) safe for use in writing, before it is opened for public use.

C3 SCOPE OF WORKS

C3.7 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT

C3.7.3 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 Training and Development Works Contract in accordance with the requirements of the 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) Resident Engineer
- ii) Assistant Resident Engineer/s
- iii) Senior Materials Technician
- iv) Trainee Technician x 2
- v) Surveyor team (part time)
- vi) Trainee (student)
- vii) Project Liaison Officer
- viii) Administrative Assistants (data capture)
- ix) Mentors or Coaches for Targeted Enterprises (sub-contractors)

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

C.4.2 GEOMETRIC INFORMATION

Table 4.2

Description	Current	Envisaged
Project Limits	N1/17 Ventersburg. Voortrekker Street. Bayford Street. Total Length = 2.5km	No change
Interchanges	B0160 – Voortrekker Street Overpass B0199 – R70 Underpass B1710 – R70 Underpass	No change
TRH 4 Road Category	Voortrekker Street – Category B Bayford Street – Category C	No change
Design Speed	Unknown	To be determined
Level of Service (LOS)	Unknown	LOS C or better
Interchange Capacity	N/A	N/A
Cross Section	Voortrekker Street – 15m wide, surfaced, single lane street with parking and sidewalks. Bayford Street – 20m wide, surfaced, dual carriageway street, 2 lanes each direction with parking and sidewalks.	Improvement of pedestrian mobility. Improvement of on street parking. Formalisation of verges were necessary. Improvement of signage.
Surface Area	Voortrekker Street – Flexible pavement 18100m ² Bayford Street – Flexible pavement 23400m ²	Voortrekker Street – Flexible pavement 18100m ² Bayford Street – Flexible pavement 23400m ²

C.4.3 TRAFFIC INFORMATION

Traffic information is not available. Allowance is made in the Pricing Schedule for a full Traffic Impact Assessment to be undertaken.

C.4.4 PAVEMENT INFORMATION

Pavement information is not available. Allowance has been made in the Pricing Schedule to confirm the existing pavement layers.

C.4.5 GEOTECHNICAL

There are no known geotechnical problem areas identified in the Project Area.

C4 SITE INFORMATION

C.4.6 MATERIAL SOURCES

Material sources for natural and/or crushed gravel for earthworks, layer works, asphalt and concrete layers will have to be identified and proved. Depending on the quantities of each, it may be cost effective to source some, or all, materials from commercial sources

TABLE 4.6

Description	Current	Envisaged
Asphalt aggregate	Commercial/designated	Commercial
Concrete aggregate	Commercial/designated	Commercial
Gravel materials	Commercial <u>and/or</u> borrow pits	Investigations dependent on quantities required

C4 SITE INFORMATION

C.4.7 LAND REQUIREMENTS

TABLE 4.7

Description	Current	Envisaged
Permanent land acquisition	Remaining within road reserve.	Not required.
Temporary land requirements	None	For all non-commercial material sources

C.4.8 ENVIRONMENTAL REQUIREMENTS

TABLE 4.8

Description	Current	Envisaged
EIA	Remaining within road reserve.	To be assessed.
EMP	None	Required

C4 SITE INFORMATION

C.4.9 DRAINAGE

Drainage forms an integral part of the rehabilitation design. Initial assessments indicate that the existing drainage have insufficient capacity and nonfunctional in some areas. Existing drainage is to be assessed and the possibility of improvement is necessary.

Table 4.9

Description	Current	Envisaged
Side drains	Existing	To be assessed
Median drains	N/A	N/A
Meadow drains	N/A	N/A
Sub-surface drains	Existing	To be assessed
Pipe culverts	Existing	To be assessed

C4 SITE INFORMATION

C.4.10 ROAD FURNITURE

The existing road furniture is generally in a poor condition

TABLE 4.10

Description	Current	Envisaged
Road Signs	Existing	To be assessed.
Route marker boards	N/A	N/A
Gantries	N/A	N/A
Guard rails	N/A	To be assessed in line with TMH24
Median guard rails	N/A	N/A
Road studs	N/A	To be assessed.

C4 SITE INFORMATION

C.4.11 STRUCTURES

Structures information are not available.

C.4.12 SUB-SERVICE PROVIDERS

The following sub-service will be required on this project:

- a) Survey
- ~~b) Peer review~~
- c) Environmental Assessment Practitioner
- c) External OHS Auditor
- d) Specialist technical sub-services
- e) Site laboratory
- f) Social Facilitator

THANK YOU

Queries relating to issues arising from these documents may be addressed to:

ProcurementHO7@sanral.co.za

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