

CONTRACT SANRAL N.011-130-2010/1R

REHABILITATION OF NATIONAL ROUTE N11 SECTION 13:

FROM R518 INTERSECTION (KM 8,345) TO GROOTSANDSLOOT RIVER (KM 24,0)

SANRAL



BUILDING SOUTH AFRICA THROUGH BETTER ROADS

Welcome and Introduction

CONTRACT SANRAL N.011-130-2010/1R

FOR THE REHABILITATION OF NATIONAL ROUTE N11 SECTION 13 FROM R518 INTERSECTION (KM 8,345) TO GROOTSANDSLOOT RIVER (KM 24,0)

❖ Introduction:

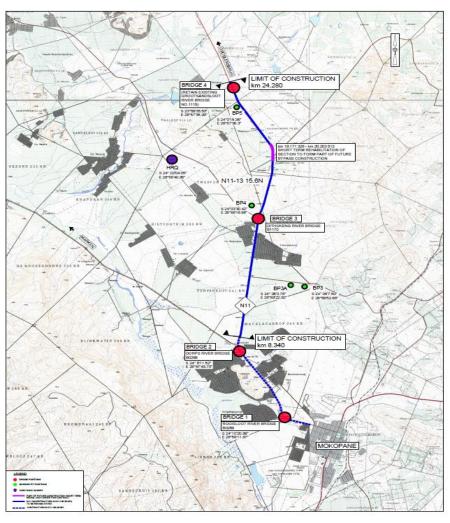
- Client:
 - ➤ The South African National Roads Agency SOC Limited (SANRAL)

Contents of Briefing

- Locality of the Project
- Project Description
- List of Tender Documents
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- C3 Scope of the Works
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LOCALITY OF THE PROJECT

 The project is located in the Limpopo Province, north-west of the town of Mokopane, on National Route N11 leading to the Grobler's Bridge Border Post to Botswana. The approx. length of the project is 16 km.



Project Description

Rehabilitation and Upgrading of National Route N11 Section 13 from R518 Intersection (km 8,345) to the Grootsandsloot River (km 24,0).

The Core strategies of the Project are:

- Improve geometry and drainage.
- Replace 1 bridge over Dithokeng River.
- Strengthen pavement structure.
- Enhance safety.

LIST OF DOCUMENTS - 1

VOLUME	DESCRIPTION	OBTAINABLE FROM
Volume 1	Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer (1999), published by the Fédération Internationale des Ingénieurs-Conseils (FIDIC)	CESA P. O. Box 68482, Bryanston, 2021 Tel: (011) 463 2022 Fax: (011) 463 7383 Email: general@cesa.co.za
Volume 2	The COTO Standard Specifications for Road and Bridge Works for South African Road Authorities (Draft Standard October 2020 edition), issued by the Committee of Transport Officials	From SANRAL and can be downloaded free of charge from the SANRAL's website www.nra.co.za.
Volume 3	The Project Document, containing the Tender Notice, Conditions of Tender, Tender Data, Returnable Schedules, General and Particular conditions of contract, Project Specifications, Pricing Schedule, Form of Offer and Project Information is issued by the Employer	Issued at tender stage in electronic format downloaded from the SANRAL's website
Volume 4	The Road Works Drawings	Issued at tender stage in electronic format downloaded from the SANRAL's website
Volume 5	The Structural Drawings	Issued at tender stage in electronic format downloaded from the SANRAL's website

LIST OF DOCUMENTS - 2

VOLUME	DESCRIPTION	OBTAINABLE FROM
Volume 6	Materials Investigation and Utilization	Issued at tender stage in electronic format downloaded from the SANRAL's website
Volume 7	Environmental Management Plan Report	Issued at tender stage in electronic format downloaded from the SANRAL's website



T1.1: Tender Notice and Invitation to Tender

CIDB Regulation 25(1B) will not be applicable to this contract

Only tenderers who are **registered on the National Treasury Central Supplier Database** and meet the minimum requirements for the key persons as stipulated in Clause C.2.1 at the tender closing date, are eligible to tender.

It is estimated that tenderers should have a CIDB contractor grading designation of **9CE or higher**, however tenderers attention is drawn to clause C.2.1 of the Tender Data when submitting their tender.

Tenders from tenderers registered as potentially emerging enterprises but with a CIDB contractor grading designation lower than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25(7A) of the Construction Industry Development Regulations, will not be accepted.

It is a requirement of this project that the successful tenderer **subcontract a minimum of thirty percent (30%)** or higher as tendered of the work by the end of the contract to **Targeted Enterprise(s)** as defined in the Contract Data.

T1.1: Tender Notice and Invitation to Tender

TENDER DOCUMENTS

Tender documents are available from 16 February 2024 at no cost in electronic format downloaded from the SANRAL's website by the following link:

https://www.nra.co.za/sanral-tenders/status?region_id=national

Tenderers must submit, via email, the duly completed <u>Form A1.1</u> Certificate of Intention to Submit a Tender prior to <u>23 February 2024</u>. Failure to submit this certificate would result in the tenderer not receiving addenda or additional issued information and may result in the tenderer being non-responsive.

COMPLETION AND DELIVERY OF TENDERS

The closing time for receipt of tenders is 11:00 on Friday, 22 March 2024.

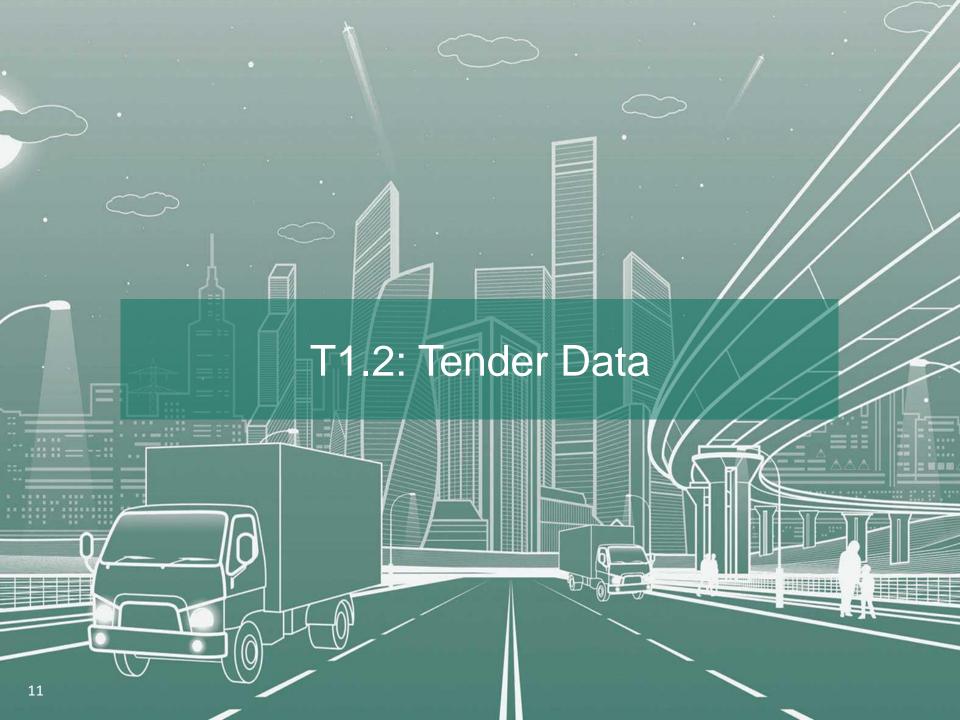
Telegraphic, telephonic, telex, email, facsimile and late tenders will not be accepted.

Tenders may only be submitted in the format as stated in the Tender Data.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data. Queries relating to issues arising from these documents may be addressed to ProcurementNR1@sanral.co.za

LOCATION OF TENDER BOX FOR TENDER SUBMISSIONS:

The South African National Roads Agency SOC Limited (Northern Region) Reception Area 38 Ida Street, Menlo Park, Pretoria, 0081



Conditions of Tender

The Conditions of Tender are the Standard Conditions of Tender as contained in Annexure C of the CIDB STANDARD FOR UNIFORMITY IN ENGINEERING AND CONSTRUCTION WORKS CONTRACTS as per Government Notice No. 423 published in Government Gazette No. 42622 of 08 AUGUST 2019 and as amended from time to time. (see www.cidb.org.za)

Clause Number	Data
C.1.1	Actions
	The Employer is The South African National Road Agency SOC Limited (SANRAL). The Employer's domicilium citandi et executandi (permanent physical business address) is:
	48 Tambotie Avenue Val De Grace, Pretoria, 0184
	The Employer's address for communication relating to this project is: Regional Manager (Northern Region)
	Private Bag X17, OR 38 Ida Street, Lynnwood Ridge, Menlo Park, 0040 0081

Clause Number	Data		
C.1.2	Tender Documents		
	The tender documents issued by the Employer com	iprise:	
	Part T1: Tendering Procedures		
	T1.1 Tender notice and invitation to tender	(White)	
	T1.2 Tender data	(Pink)	
	Part T2: Returnable Schedules		
	T2.1 List of returnable documents	(Yellow)	
	T2.2 Returnable schedules	(Yellow)	
	Part C1: Agreements and contract data		
	C1.1 Form of offer and acceptance	(Yellow)	
	C1.2 Contract data	(Yellow)	
	Part C2: Pricing data		
	C2.1 Pricing instructions (assumptions) (Yellow)		
	C2.2 Pricing Schedules / Bills of Quantities	(Yellow)	
	Part C3: Scope of work		
	C3 Scope of work	(Blue)	
	Part C4: Project Information		
	C4 Project Information	(Green)	
	Part C5: Annexures	(White)	

Clause Number	Data
C.1.4	Communication and employer's agent
	The Employer's Agent during the tender period can be contacted at: ProcurementNR1@sanral.co.za
C.2.1	Eligibility
	Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders:
	a) CIDB registration (Form A12)b) National Treasury Central Supplier Database (Form A3.4)
	Failure to satisfy all the eligibility criteria will result in a non-eligible tender.

Clause Number	Data
C.2.1	a) CIDB registration (Form A12) Only those tenderers who are registered with the CIDB , or are capable of being so prior to the evaluation of submissions , in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry
	Development Regulations, for a 9CE class of construction work , are eligible to have their tenders evaluated. Joint ventures are eligible to submit tenders provided that:
	 Every member of the JV is registered with the CIDB. The lead partner has a contractor grading designation in the CE class of construction work; or not lower than one level below the required grading designation in the class of works under consideration. The combined contractor grading designation calculated per Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a CE class of construction work.

Clause Number	Data	Data			
C.2.1	Tenderers whose CIDB registration expires within the tender validity period, need to demonstrate that there is a reasonable chance of being registered in the appropriate grading designation during the tender evaluation period, by submitting a copy of their timely application for CIDB registration, with their tender submission. Tenderers registered as potentially emerging enterprises but with a CIDB contractor grading designation lower than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25(7A) of the Construction Industry Development				
	Regulation	Regulations, are not eligible to have their tenders evaluated.			
		Category of Upper limits per CIDB Regulation 17 Employer's tender (effective 7 October 2019) allowable margins			
		CE 1	R500 000		
		CE 2	R1 000 000	The Employer will	
		CE 3	R3 000 000	use its discretion	
		CE 4	R6 000 000	in terms of CIDB	
		CE 5	R10 000 000	Practice Note 3	
		CE 6	R20 000 000	on allowable margins to be	
		CE 7	R60 000 000	accepted	
		CE 8	R200 000 000	accepted	

Clause Number	Data
C.2.1	 This contract is not classified in terms of CIDB Regulation 25(1B), and the value of the contract may, for the purpose of CIDB Regulation 25(1), not be taken at its annual value. The tender will be declared non-responsive if: The Tenderer is not registered on CIDB within the required contractor grading and category prior to evaluation of submission (, or the Tenderer is suspended, or the Tenderer has not declared interest of application to upgrade the grading.

Clause Number	Data
C.2.1	b) National Treasury Central Supplier Database (Form A3.4) Tenderers, or in the event of a joint venture, each member of the joint venture, must be registered on the National Treasury Central Supplier Database at the closing date for tender submissions. If not registered as verified online at tender closing; the tender will be declared non-responsive. Failure to satisfy all the eligibility criteria will result in a non-eligible tender.

Eligibility Compliance: Tenderer's Key Personnel Experience (Construction Manager) Contractor's Representative

As per Form D4.3:

If the tenderer's experience does not meet the stipulated minimum requirement, or does not respond within stated period when requested to do so; the tender will be declared non-responsive in terms of clause C.3.13 (b) of the Tender Data.

Professional Registration	Minimum Years of Relevant Experience
SACPCMP as Pr.CM or ECSA as Pr.Eng. or Pr.TechEng.	8

Eligibility Compliance:

Past Experience

As per Form D5.1:

The Tenderer must have satisfactorily completed (at least completed as a prime contractor, joint venture member, management contractor or subcontractor) a minimum number of three (3) similar contracts matching the subject project's scope of work, between 1st January 2008 and tender submission deadline. Each completed contract must have a minimum value that exceeds R200 million and have a Performance Rating not less than zero (0) Adequate, as rated in terms of the CIDB Performance Rating system or official reference letters from previous employer(s).

As per Form D5.2:

Submission of this form is optional. This form must be submitted if the tenderer does not comply with the requirements of Form D5.1, and elects to list projects that are in progress to comply with afore-mentioned requirements.

Clause Number	Data
C.2.6	Acknowledge addenda Failure to apply instructions contained in addenda issued by the Employer will
	render a Tenderer's offer non-responsive in terms of Condition of Tender C.3.8 Test for Responsiveness.
C.2.8	Seek clarification
	Request clarifications at least 12 (twelve) working days before the closing date.
C.2.12	Alternative tender offers
C.2.12.1	"A tenderer wishing to submit an alternative offer (excluding alternative offers of different contract duration, retention guarantees, discounted offers or different compliant material sources) shall first apply to the Employer for confirmation that the Employer's standards and requirements envisaged in the design are not compromised or reduced. Such confirmation must have been provided by the Employer in writing at least 5 (five) working days before the date of tender closing, or as extended by an addendum sent to all tenderers. The application shall not be submitted later than 7 (seven) working days before the date of tender closing given in Tender Data clause C.2.15, or as extended by and addendum sent to all tenderers"

Clause Number	Data
C.2.13	Submitting a tender offer
C.2.13.2	The returnable documents shall be electronically completed in their entirety, submitted on the issued software format or fully compatible format, unless otherwise specified.
	Option 1: Submission in the tender box:
	 Submit the tender offer electronically on a flash drive and printed hard copy of Form of Offer and Summary of Pricing Schedule.
	 In the relevant MS Word 2013 and MS Excel 2013 format as issued, and not in .pdf format, except where so specified.

Clause Number	Data
C.2.13.3	Only the following needs to be submitted:
	Volume 3 – Scanned on a flash drive
	The following information has to be submitted on flash drive:
	The 1st file in pdf format which contains:
	 Scanned copy of Form of Offer (pdf) and printed hard copy of Form of Offer
	Scanned copies of all returnable schedules and attachments (pdf)
	A 2 nd file in excel format:
	 Completed pricing schedule (scanned copy in .pdf and copy in Excel) and printed hardcopy of Summary of Pricing Schedule
	In the event of any discrepancy between the contents of the electronically priced schedule and the electronically provided pricing schedule in pdf format, the contents of the provided pdf format shall be taken as the valid contents. For the information provided by the tenderer as part of his submission, e.g. rates, the signed print-out shall be taken as the valid submission.

Clause Number	Data
C.2.13.5	Option 1: Submission in the tender box
	Only the following needs to be submitted:
	 a) Main Tender Offer The following information to be submitted electronically on flash drive and marked Main Tender Offer followed by the "Tenderer name", in the following order: Form of Offer (signed and scanned as .pdf)
	All returnable schedules and attachments and certificates specific to the tender (signed and scanned as .pdf)
	 Completed pricing schedule (scanned copy in .pdf and copy in Excel) and printed hard copy of Summary of Pricing Schedule.
	 b) For alternative offers the tenderer shall submit the following additional documentation, electronically on a separate flash drive marked Alternative followed by the "Tenderer name": Form of Offer (signed and scanned as .pdf and state "Alternative Form of Offer") and printed hard copy of Form of Offer
	All returnable schedules and attachments and certificates applicable to the alternative offer (signed and scanned as .pdf)
	 Alternative Pricing Schedule (scanned copy in .pdf and copy in Excel) and printed hard copy of Summary of Pricing Schedule. Other relevant information.
	Submit the tender offer electronically on a flash drive in a sealed envelope marked with the

tenderer's company name, the project number and description.

Clause Number	Data				
C.2.15.1	Submission in tender box				
	The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:				
	Location of tender box: Reception area				
	Physical address: SANRAL, 38 Ida Street, Menlo Park, 0081				
	Identification details: Mark envelope with tenderer's company name, the project number and description:				
	CONTRACT SANRAL N.011-130-2010/1R REHABILITATION OF NATIONAL ROUTE N11 SECTION 13 : FROM R518 INTERSECTION (KM 8,345) TO GROOTSANDSLOOT RIVER (KM 24,0)				
	Tenders must be submitted during hours (09:00 to 16:00) Monday to Friday at the Employer's address.				
	It is in the tenderer's interest to ensure that the delivery of the tender offer is recorded in the Employer's tenders received register and deposited in the tender box.				
	It is the tenderer's responsibility to ensure that the tender is submitted before tender closing date and time. SANRAL will not take responsibility for late submissions caused by system errors and or busy networks.				

Clause Number	Data
C.2.16.1	Tender offer validity The tender offer validity period is 24 weeks.
C.2.16.2	Should the tenderer not accept the validity extension or if the tenderer does not withdraw a condition attached to a conditional acceptance, this shall result in a non-responsive tender or the tender is considered to have made an election to exclude itself from the tender process.
C.2.16.3	Where a tenderer, at any time after the opening of his tender offer but prior to entering into a contract based on his tender offer: a) withdraws his tender; b) gives notice of his inability to execute the contract in terms of his tender; or c) fails to comply with a request made in terms of C.2.17, C.2.18 or C.3.9,
	Such tenderer shall be barred from tendering on any of the Employer's tenders for a period to be determined by the Employer, but not less than six (6) months from a date determined by the Employer. This sanction also applies to tenders under evaluation and not yet awarded. This sanction does not apply to tenders under evaluation where a request for extension of the validity period was not accepted by the tenderer. The Employer may fully or partly exempt a tenderer from the provisions of this condition if he is of the opinion that the circumstances justify the exemption.

Clause Number	Data				
C.2.18	Provide other material				
C.2.18.1	Any additional information requested under this clause must be provided within 5 (five) working days of date of request.				
C.2.19	Inspections, tests and analysis				
	Access shall be provided for the following inspections, tests and analysis:				
	Tenderers may visit the site during the tender period at their own discretion. Test and analysis of test results are provided for in the materials investigation and utilisation report (Volume 6).				
C.3.1	Respond to requests from the tenderer				
C.3.1.1	The employer shall respond to clarifications received up to twelve (12) working days before tender closing date.				
	The Employer shall respond to any clarifications from the tenderers emanating from the addenda until 3 working days before tender closing date.				

Clause Number	Data					
C.3.2	Issue Addenda					
	The employer shall issue addenda until ten (10) working days before tender closing date.					
C.3.4	Opening of tender submissions					
C.3.4.1	Opening of the tender offer via live streaming at Northern Region Offices are:					
	Time: 11h00 on 22 March 2024					
	A live streaming link will be provided by the Procurement Office.					
C.3.18	Provide written reasons for actions taken					
	All requests shall be in writing.					
SC.3.19	Jurisdiction					
	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.					

Clause	e Data					
Number						
C3.11.	Evaluating price and preference					
	i. 80/20 preference point system for acquisition of goods and services for Rand value equal to or above R2 000 and up to R50 million.					
The following formula will be used to calculate the points out of 80 for points						
	Ps=80(1-(Pt-Pm)/Pm)					
ii. 90/10 preference point system for acquisition of goods and ser Rand value above R50 million						
	The following formula will be used to calculate the points out of 80 for price:					
	Ps=90(1-(Pt-Pm)/Pm)					
	Where: Ps is the point scored for the price of tender under consideration Pt is the price of the tender under consideration; and Pm is the price of the lowest acceptable tender					

	Clause Number	er Data					
C3.11. Scoring preference (Specific Goals):							
			The specific goals allocated points in terms of this tender	<u>Criteria</u>	Number of points allocated (90/10 system)	Number of points claimed (90/10 system) (To be completed by the tenderer)	
			B-BBEE level scorecard of the tendering entity.	B-BBEE Level 1	10.00		
				B-BBEE Level 2	9.00		
				B-BBEE Level 3	6.00		
				B-BBEE Level 4	5.00		
				B-BBEE Level 5	4.00		
				B-BBEE Level 6	3.00		
				B-BBEE Level 7	2.00		
				B-BBEE Level 8	1.00		
				Non-compliant contributor	0.00		

Clause Number	Data
Number C.3.13	Acceptance of a tender offer The conditions stated in clauses C.3.13(a) to (f) of the Conditions of Tender as well as the following additional clauses C.3.13(g) to (k) shall be applied as objective criteria in terms of section 2(1)(f) of the Preferential Procurement Policy Framework Act, 2000 and as compelling and justifiable reasons in terms of Conditions of Tender clause 5.11: 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; h) the tenderer has not abused the Employer's supply chain management system; i) the tenderer has not failed to perform on any previous contract and has not been given a written notice to this effect; and j) the tenderer is tax compliant. The recommended tenderer who becomes non-compliant, prior to award, shall be notified and must become compliant within 7
	 working days of the date of being notified. A recommended tenderer who remains non-compliant after the 7 working days of being notified, shall be declared non-responsive. k) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer. The licensed compensation insurer shall be approved by Department of Labour in terms of Section 80 of the Compensation for Injury and Disease Act, 1993 (Act No. 130 of 1993).

Clause Number	Data						
C3.13	In addition to the required in the event that a due dil due diligence report will be contract as stated in particle risk associated with the test following: • Assessment of financial stability to obtain the necestability of managerial proposed tender, • Integrity Risk Evaluation, • Operations, Activities, Location of Risk rating (i.e. High Risk proposed tender:	igence is performed be used to evaluate agraph (b). The conder. The due did tatements to assess sary guarantees or in and technical abilities and technical abilities and the following of the following of the following of the statements and the following of the	ed as part of the termite the tenderer's abdue diligence will extended the financial position of	ider evaluation, the bility to perform the valuate the overall occursideration the of the tenderer and its ces in relation to the risk) of the tenderer and its ces in relation to the original consideration to the risk) of the tenderer and its ces in relation to the original consideration to the original consideration.			
	COTO CHAPTER DESCRIPTION QUANTITY COMPLETED						
	5 Crushed stone base 25 000 m ³						
		Cradition dione base	25 000 111				

In situ recycling

Asphalt Layers

Cape Seal

25 000 m³

10 000 ton

100 000 m²

5

9

10



T2: Returnable Schedules

T.2.1 LIST OF RETURNABLE SCHEDULES

The tenderer must complete the following returnable schedules:

Notes to tenderer:

- 1. Returnable schedules have been based on the CIDB Standard for Uniformity in Construction Procurement and incorporate National Treasury requirements within them. Returnable schedules are separated into the following categories:
 - Forms, certificates and schedules for completion by the tenderer for use in the quantitative and qualitative evaluation of the tender (Forms A to E)
 - A list of all returnable documents for completion by the tenderer (Form F1)
- 2. Failure to submit fully completed relevant returnable documents may render such a tender offer non-responsive.
- 3. Tenderers shall note that their signature appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided.
- 4. Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the returnable documents 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:
 - a. the Employer shall inform the tenderer and give the tenderer an opportunity to make representations within 14 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 10 years;
 - b. if the Employer has already entered into a contract with the Tenderer, the Employer has the discretionary right under FIDIC Particular Condition 15.2(g) to terminate the contract.
- 5. These forms must be completed in non-erasable ink and any alterations made prior to tender closure countersigned by an authorised signatory.

T2: Returnable Schedules

FORM A1:

CERTIFICATE CONFIRMING THAT THE TENDERER READ THE PRESENTATION BRIEFING

CONTRACT SANRAL N.011-130-2010/1R

REHABILITATION OF NATIONAL ROUTE N11 SECTION 13: FROM R518 INTERSECTION (KM 8,345) TO GROOTSANDSLOOT RIVER (KM 24,0)

Date:

"28 February 2024"

T2: Returnable Schedules

FORM A1.1:

CERTIFICATE OF INTENTION TO SUBMIT A TENDER

CONTRACT SANRAL N.011-130-2010/1

REHABILITATION OF NATIONAL ROUTE N11 SECTION 13: FROM R518 INTERSECTION (KM 8,345) TO GROOTSANDSLOOT RIVER (KM 24,0)

Date:

"23 February 2024"



C1.2 CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

Note to tenderer:

1. The Conditions of Contract for Construction (1999 edition) published by the Federation Internationale des Ingenieurs-Conseils (FIDIC), as amended, shall apply to this contract. The amendments are those published by FIDIC and reproduced hereafter, together with additional amendments (particular conditions of contract) as prescribed by the South African National Roads Agency SOC Limited

PART B:PARTICULAR CONDITIONS OF CONTRACT

Lists the South African National Road Agency SOC Limited's standard amendments to the FIDIC General Conditions and shall apply to this contract.

C1.2.2 APPENDIX TO TENDER: CONTRACT DATA - INFORMATION PROVIDED BY THE EMPLOYER

<u>Item</u>	<u>CI No</u>	<u>Data</u>			
Time for Completion	1.1.3.3.	27 months maximum (including the contractor's holidays in December and January), of which 3 months maximum will be the Mobilisation Period			
Defects for notification period	1.1.3.7	12 calendar months			
Mobilisation Period	A1.1.3.10	3 months maximum commencing on the Commencement Date.			
Performance Security	A4.2	One Performance Security totalling 10% of the Accepted Contract Amount (excluding VAT) is required.			
Subcontractors and suppliers	A4.4	The percentage of the contract value that may be sublet is dependent on the Minimum Targeted Enterprise subletting targets and shall not exceed the Maximur Subcontracting allowed % as per the following table:			
		Minimum Targeted Enterprise (TE) subletting (%) Maximum Sub-contracting allowed (%)			
		≤30 50			
		>30 to ≤40 60			
		>40 to <45 65			
		≥45 to <50 70			
		≥50 80			
Special non-working hours/days	A6.5	 a) All designated public holidays (including all foreseeable statutory declared election days) b) The annual shut-down period between December and January c) Day before and after Easter Weekend d) Day of State school term closure and day prior to State school term start in the Limpopo Province e) Other non-working days and restricted working hours in Section A1.2.7 f) Sundays g) Between sunset and sunrise 			
Period in which Works must commence	A8.1	Not prior to the date of Access to Site and not later than 1 Month after the end of Mobilisation Period			
Embargo hours and days	A8.3(I)	Embargo period for seal work as defined in Part C3: Scope of Works, clause A10.1.3.2			

C1.2.2 APPENDIX TO TENDER: CONTRACT DATA - INFORMATION PROVIDED BY THE EMPLOYER

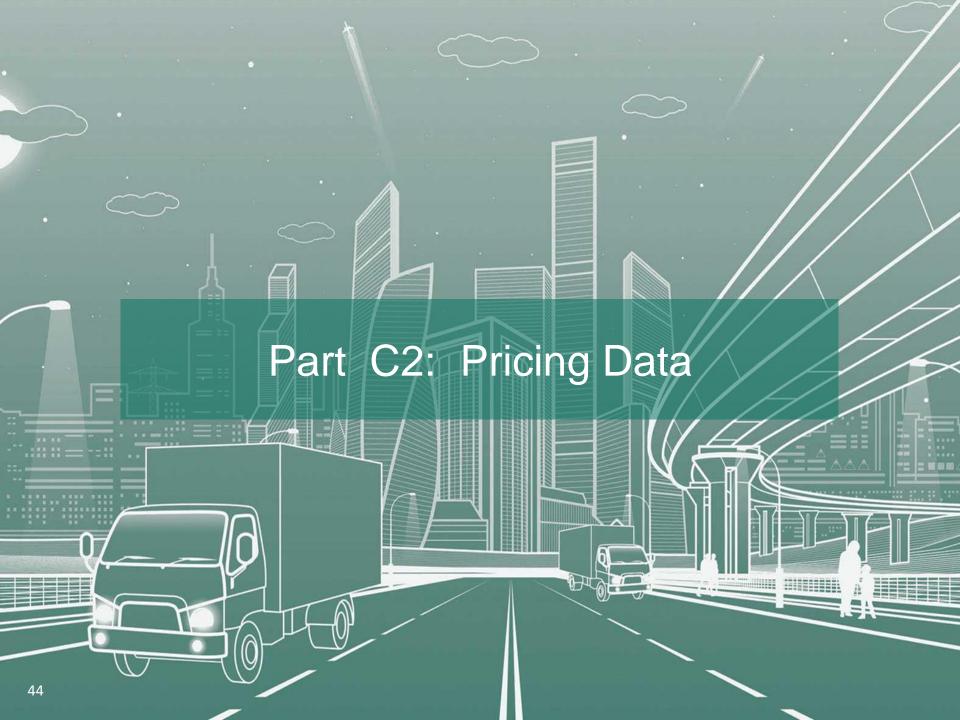
<u>Item</u>	<u>CI No</u>	<u>Data</u>
Restricted working conditions	A8.3(m)	 Accommodation of traffic restrictions. Maintaining 2-way traffic at all times with minimum lane widths of 3,2m. Work areas restricted to a maximum of two (2), each with a maximum length of 4,0km and with 4,0km minimum length between work areas. The minimum length between work areas may be relaxed by the Engineer to accommodate local conditions. Full road width within a work area must be fully completed before a new work area can be occupied. One-way Stop/Go traffic accommodation may be required for the Short-term Rehabilitation of the existing road between km 19,171 and km 20,204 (forming part of the future N11-13X Bypass construction). One-way Stop/Go traffic accommodation may be required for construction of the bridge approaches at the Grootsandsloot Bridge (km 24,25) during the first construction phase. During the contractor's annual shutdown period between December and January, the contractor shall maintain two-way traffic within the contract limits. Refer to Clause 1.2.3.5 and Chapter 1.5 in COTO.
Extension of time for completion	A8.4	An exceptional adverse climatic condition shall be considered where the return period of the climatic condition exceed a return period of 1:12
Delay damages	A8.7(a)	Delay Damages – R55 000 /day

C1.2.2 APPENDIX TO TENDER: CONTRACT DATA - INFORMATION PROVIDED BY THE EMPLOYER

<u>Item</u>	<u>CI No</u>	<u>Data</u>		
Other Non-compliance Charges	A8.7(b)	Other Non-compliance charges: i. Intra-programme dates – N/A ii. Lane occupation levy (Occupation beyond completion dates and times, a well as for remedial work after completion of the Works) – R50 000 /day – The principle of penalties being imposed for late occupation of lanes is as specified in Part C3 clause A1.5.3.4 iii. Non-compliance to requirements of clause A8.3(m) for Accommodation of traffic restrictions during the contractor's annual shutdown period between December and January – R20 000 /day iv. Accommodation of traffic non-compliance as specified in Part C3 clause A1.5.3.7. (i) Fixed penalty – R20 000.00 /occurrence (ii) Time related penalty – R2000.00 /hour iv. Overloading – 2 x Unit Rate of material hauled x overload factor x distance hauled as specified in Part C3 clause A1.7.7. The overload factor is the difference between the Actual loaded vehicle mass and the Gross vehicle mass v. Contract Participation Targets – Calculated as per D1003.05 vi. Contract Skills Development Goal – Calculated as per D1010.05 vii. Subcontracting without disclosure or non-compliance to Subcontract agreement requirements – up to 10% of the Contract Price viii. Layer irregularities i. Asphalt – quantity/100m x unit rate x payment adjustment factor ii. Base – quantity/100m x unit rate x payment adjustment factor		
Retention money: - Percentage	A14.3(c)	10% of value of completed work		
- Limit	A14.3(c)	5% of the Accepted Contract Amount (Including VAT)		
- Guarantee	A14.3(c)	This will be considered provided that the tenderer submits his proposal as an alternative tender and provided that a discount equal to or more than R3 300 000. is offered. The discount shall be effected through two equal deductions from IPC 1 and 2.		

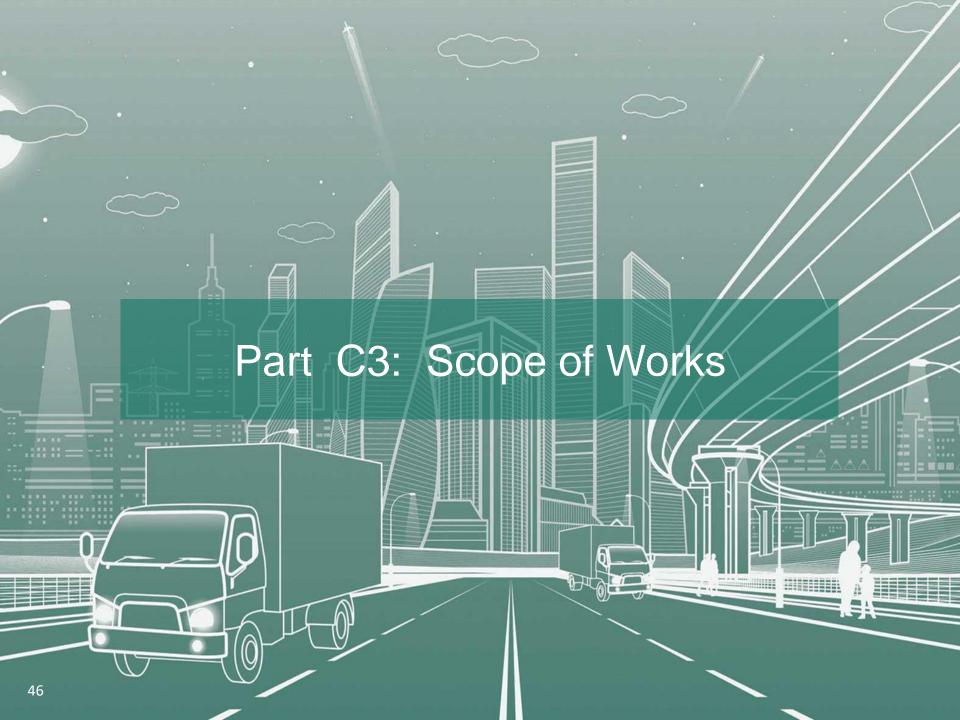
C1.2.2 APPENDIX TO TENDER: CONTRACT DATA - INFORMATION PROVIDED BY THE EMPLOYER

<u>Item</u>	<u>CI No</u>	<u>Data</u>
Minimum amount of interim payment certificate	A14.6	R 3 500 000 (incl. VAT) excluding payments during the Mobilisation Period.
Minimum Insurance cover for Injury to persons and Damage to Property	18.3	R 20 000 000.00
Appointment of DAB	A 20.2	The DAB shall comprise of One (1) Member and its appointment to be not later than 60 days after Access to Site, or in the event that a dispute arises prior to Access to Site, not later than 30 days after a dispute arises between the Parties. For a 1 Member DAB: DAB Member (Roads & Bridges) to comply with the following minimum requirements: Pr.Eng or Pr.TechEng (with civil engineering background) or be on the latest SAICE President's list of alternative dispute resolution professionals; and More than 20 years' experience in the type of construction involved in the Works — Roads & Bridges; and Formal qualification in adjudication, arbitration and/or experience in mediation; and Experience in Dispute Resolution as per the FIDIC Conditions of Contract.



- C2.1 PRICING INSTRUCTIONS
- C2.2 PRICING SCHEDULE (INCORPORATING SBD3)
- C2.3 SUMMARY OF PRICING SCHEDULE

C10.1				GENERAL REQUIREMENTS F	FOR SURFACE TREATM	ENTS	
ITEM		•••••	DESCRIPTION	UNIT	QTY	RATE	AMT
			Multiple stone seals including a cover			•	200000000000000000000000000000000000000
C10.1.3			spray, if specified using:				
	C10.1.3.1		20mm and 10mm aggregate using Grade 1 aggregate and				
		(a)	S-R2 bitumen rubber for first application, S-E1 modified binder for the second application	square metre (m²)	105000		R
	C10.1.3.5	***************************************	20mm with a split application of 7,1mm aggregate using Grade 1 aggregate and				
		(a)	S-R2 bitumen rubber for first application, S-E1 modified binder for the second application	square metre (m ²)	105000		R
C10.1.9			Bituminous binder variations:				
	C10.1.9.6		Non-homogeneous modified binder (S-R2)	litre (ℓ)	16200		R
	C10.1.9.7		Homogeneous modified binder (S-E1) hot applied	litre (ℓ)	24300		R
	C10.1.9.11		Precoating fluid (Petroleum based)	litre (l)	5000		R
C10.1.10			Aggregate variation (Grade 1):				
***************************************	C10.1.10.2		7,1mm aggregate	cubic metre (m ³)	120		R
	C10.1.10.3		10mm aggregate	cubic metre (m ³)	100		R
	C10.1.10.5		20mm aggregate	cubic metre (m³)	100		R
C10.1.11			Application of cover spray:				
	C10.1.11.3		30% Cationic spray-grade emulsion	litre (ℓ)	146000		R
C10.1.13			Precoating of aggregate using a dedicated				
			plant				
	C10.1.13.1		Product containing low flashpoint solvent (petroleum based)	litre (ℓ)	66000		R
C10.1.16			Addition of wetting agent:				
	C10.1.16.1		Providing and supplying	prime cost (PC) sum	1	R 40 000,00	
	C10.1.16.2		Handling, applying, profit and all other costs	percentage of prime-cost sum	R 40 000,00		R
C10.1.17			Aggregate for blinding:				
	C10.1.17.1		Natural sand	cubic metre (m ³)	50		R
	C10.1.17.2		Crusher sand	cubic metre (m ³)	50		R
C10.1.19			Extra over item for work in areas inaccessible to mechanical equipment:				
	C10.1.19.2		Multiple stone seals	square metre (m ²)	500		R
C10.1.26			Trial sections for all seal types specified	Square mene (m)			
C10.1.28		(a)	Slurry seal for texture treatment	square metre (m ²)	3000		R
			20mm and 10mm aggregate using Grade 1	34333			
		(b)	aggregate and				R



SECTION A1: STANDARD AMENDMENTS ISSUED BY COTO

Notes to tenderer:

1. The Standard Specifications for Road and Bridge Works for South African Road Authorities (Draft Standard October 2020 edition) prepared by the Committee of Transport Officials, (COTO), as amended, shall apply to this contract. The amendments are those issued by COTO and reproduced in Section A1, together with additional amendments as set out in Section A2 and Project specific Specification Data as set out in Section B.

SECTION A2: PROJECT SPECIFICATION AMENDMENTS TO THE COTO STANDARD SPECIFICATIONS

Notes to tenderer:

- 1. This Section A2 contains amendments to the Standard Specification, including additional clauses, amendment to clauses or deletion of clauses and specifications, required for this particular contract. Where the Standard Specifications allow a choice to be specified in the Contract Documentation or Project Specifications, between alternative materials or methods of construction, and for additional requirements to be specified to suit a particular contract, these selections are not made in this Section A2. Details of such alternatives or additional requirements applicable to this contract are contained in Section B: Specification Data. Section B also contains project specific sections for Sections C, D and E.
- 2. The number of each clause and each payment item in this part of the project specifications follows the numbering format of the standard specifications.

SECTION B: SPECIFICATION DATA

Notes to tenderer:

- 1. In certain clauses, the Standard Specifications allow a choice to be specified in the Contract Documentation or Project Specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this contract are contained in this Section B: Specification Data.
- 2. The number of each clause and each payment item in this part of the project specifications follows the numbering format of the COTO standard specifications. Where, however, a clause has been amended under Section A2, the clause number is prefixed with a "P" in this Section.

COTO CHAPTER 1: GENERAL

СН	SEC	CL	SUB-CLAUSE	SPECIFICATION DATA
1			GENERAL	
	A1.1		GENERAL PREAMBLE	
		PA1.1.2	DEFINITIONS	
			Site / Site of the Works	The limits of construction is provided in Part C4: Project Information and also shown on the Layout Plans Dwg. No.'s 251020/PPO/001 to 024/LP
	C1.1		GENERAL PREAMBLE	
	A1.2		GENERAL REQUIREMENTS AND PROVISIONS	
		A1.2.7	EXECUTION OF THE WORKS	
			PA1.2.7.1 Programme of work	
			a) General	Also see Appendix B1 at the end of Section B

SANRAL STANDARD SPECIFICATION SECTIONS

D1002	DEFINITIONS AND APPLICABLE LEGISLATION	
	D1002.01 Definitions	
	(r) Target Area(s)	For Targeted Labour: Mogalakwena Local Municipality
	(w) Targeted Labour	Target Group for Targeted Labour: a. black designated groups (As per latest PPPFA Regulations); b. black people; c. women; d. people with disabilities
D1003	TARGET GROUP PARTICIPATION	
	D1003.04 Contract Participation Goal (CPG)	
	CPG for Targeted Labour:	Minimum of 8% of the Final Contract Value by the end of the contract to Targeted Labour Targeted Labour appointed for the Community Development work shall not contribute towards the CPG for Targeted Labour. The Final Contract Value is defined in clause D1003.04
	Targeted Labour minimum contributions by the following Target Groups:	
	a. black designated groups; i. Black people who are youth	30% of targeted labour value
	ii. Black people who are persons with disabilities	0.5% of targeted labour value
	b. Black women;	30% of targeted labour value
	CPG for Targeted Enterprise	Minimum percentage of the greater of either 30% or the C1.1.1 Form of Offer stated percentage, of the Final Contract Value by the end of the Contract to Targeted Enterprises.
		The Final Contract Value is defined in clause D1003.04.

SANRAL STANDARD SPECIFICATION SECTIONS (CONTINUED)

D1003	Targeted Enterprise minimum contribution by the following Target Groups:	
	Targeted Enterprise with ≥51% ownership by Youth	Minimum of 5% of the Final Contract Value
	Targeted Enterprise with ≥51% ownership by Women	Minimum of 5% of the Final Contract Value
	Targeted Enterprise with ≥51% ownership by Military veterans	Minimum of 1% of the Final Contract Value
	Targeted Enterprise with ≥51% ownership by Disabled persons (Differently abled)	Minimum of 0.5% of the Final Contract Value
	Targeted Enterprise with CIDB 1 or 2 grading	Minimum of 1.5% of the Final Contract Value
	Targeted Enterprise with CIDB 3 or 4 grading	Minimum of 1.5% of the Final Contract Value
01009	WORK SUITABLE FOR EXECUTION BY TARGETED ENTERPRISES	To assist the Contractor in achieving his CPG, the following work items have been identified as being suitable for execution by Targeted Enterprises: a) Erection and maintenance of the Contractor's camp site b) Clearing and grubbing. c) Removal of trees. d) Provision of traffic control facilities. e) Management of traffic control facilities and traffic safety as part of the accommodation of traffic. f) Construction and clearing of drains. g) Installation of prefabricated culverts including inlet and outlet structures. h) Concrete channelling and concrete linings for open drains. i) Construction of concrete paving, kerbs and channels. j) Construction of small concrete and other structures. k) Construction of concrete walkways. l) Pitching, stonework and protection against erosion. Construction of gabions. n) Patching and repairing edge breaks. o) Erection of guardrails. p) Landscaping. q) Fencing. r) Road signs. s) Road markings. t) Finishing the road and road reserve.

SANRAL STANDARD SPECIFICATION SECTIONS (CONTINUED)

- u) Site Security Services.
- v) Haulage of materials
- w) Supply of plant.
- x) Supply of fuel.
- y) Specialised subcontract work such as:
 - i) Laying of asphalt using asphalt pavers.
 - ii) Structural concrete such as culvert and bridges.
 - iii) Crushing of materials.
 - iv) Precast manufacture.
 - v) Batch plant erection and operations.
 - vi) Earthworks, layerworks construction.

From the above work items, the following have been identified as suitable for execution by CIDB **CE1** and **CE2** Targeted Enterprises:

- a. Side drains.
- b. Clearing and grubbing.
- c. Construction and clearing of drains.
- d. Slurry application.
- e. Raising of guardrails.
- f. Segmented concrete block paving.
- g. Kerb installation.

SECTION C: ENVIRONMENTAL MANAGEMENT PLAN

C1001 SCOPE

The South African National Roads Agency SOC Limited (SANRAL) recognises environmental management as a key component of road infrastructure development and as part of its Environmental Sustainability Framework has developed this Environmental Management Plan (EMP) as a tool for continual improvement in environmental performance.

This EMP prescribes the methods by which proper environmental controls are to be implemented by the Contractor for construction and maintenance projects. The duration over which the Contractor's controls shall be in place cover the construction period of the project as well as the limited time after contract completion defined by the Conditions of Contract for Construction for Building and Engineering Works Designed by SANRAL published by the Federation Internationale des Ingenieurs-Conseils (FIDIC) as the Defects Notification Period (maintenance period).

The provisions of this EMP are binding on the Contractor during the life of the contract. They are to be read in conjunction with all the documents that comprise the suite of documents for this contract, particularly the conditions of any environmental authorisation and associated site-specific Environmental Management Programme (EMPr). In the event that any conflict occurs between the terms of the EMP and the project specifications or environmental authorisation, the terms herein shall be subordinate.

The EMP is a dynamic document subject to similar influences and changes as are brought by variations to the provisions of the project specification. Any changes to the EMP and/or environmental authorisation cannot occur without being submitted to SANRAL who will manage the process of amending the EMP.

The EMP identifies the following:

- Relevant parties and their responsibilities;
- Construction activities that will impact on the environment;
- Specifications with which the Contractor shall comply in order to protect the environment from the identified impacts; and
- Actions that shall be taken in the event of non-compliance.

SECTION D: STAKEHOLDER AND COMMUNITY
LIAISON, AND TARGETED LABOUR AND
TARGETED ENTERPRISES UTILISATION
AND DEVELOPMENT

D1001 SCOPE

Section D of the Specifications describes the structured engagement with project Stakeholders and affected Communities to the project. It also guides the selection and the enhanced utilisation and development of Targeted Labour and Targeted Enterprises.

D1001.01 Employer's Fourteen Point Plan

The scope of the work described in this Section D of the Specifications shall be based on the Employer's 14 principles for project liaison, sub-contracting and labour sourcing in all SANRAL projects.

These principles must be applied to facilitate better project level liaison with project Stakeholders and affected Communities. In addition, these principles serve to ensure communication and transparency in the execution of the Works and to facilitate inclusivity in the allocation of projects to benefit black business and local communities.

SECTION E:

REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS

Note to tenderer:

Wherever reference is made in this section of the Scope of Works to contractor this is the equivalent of the *principal contractor* in the Occupational Health and Safety Act and Regulations. Similarly, reference to subcontractors is equivalent to *other contractors*.

E1001 SCOPE

The Occupational Health and Safety Act, Act 85 of 1993 (OHS Act) and its Regulations together with SANS Codes set out minimum standards with regards to Occupational Health and Safety. The South African National Roads Agency SOC Limited (SANRAL), has developed this Occupational Health and Safety Specifications with these minimum standards in mind and in certain aspects the requirements of SANRAL exceeds the minimum legal requirements to follow best practices and to ensure a healthy and safe workplace for all.

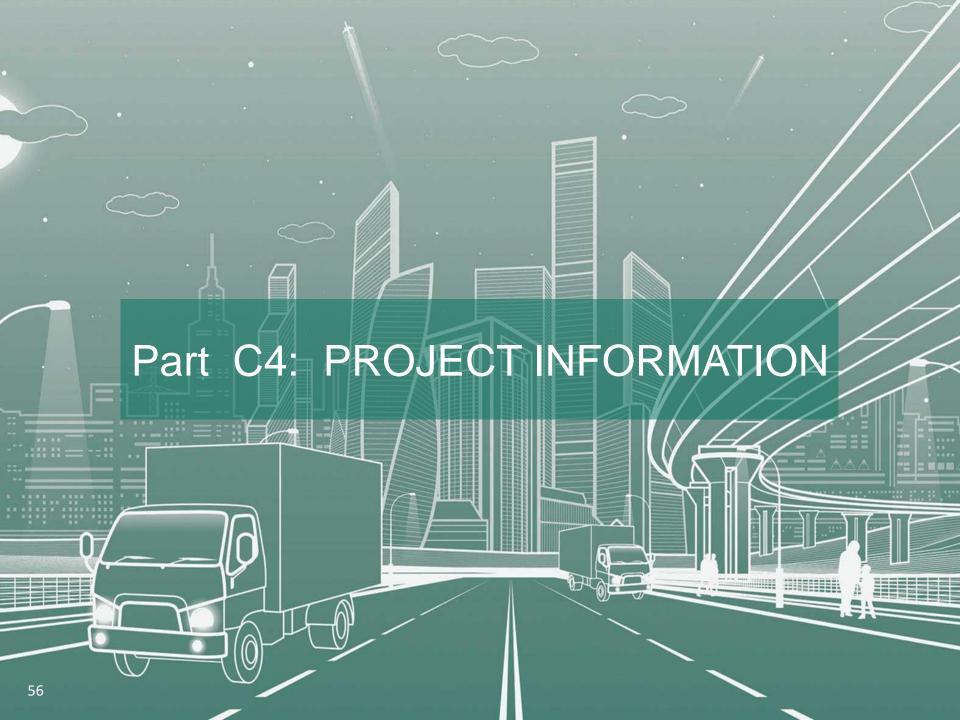
SANRAL in no way assumes The Principal Contractors legal liabilities and responsibilities. The Principal Contractor is and remains accountable for the quality and execution of his health and safety program for his employees. This Health and Safety Specification reflects minimum legal and SANRAL requirements and should not be construed as all encompassing.

It is realized that The Principal Contractor have its own Health and Safety Management system and safe work practices. The intention of this Health and Safety Specification is not to change The Principal Contractors Health and Safety management system, but for The Principal Contractor to use its current Health and Safety management system to draw up a project specific Health and Safety plan according to these specifications as well as to legally comply with the any applicable Regulations under the OHS Act and incorporated Standards.

It is the responsibility of the Principal Contractor and other Contractors to make themselves conversant and comply with the requirements and conditions contained in the various legislation pertaining to their profession and scope of works at all times.

This specification is not exhaustive of all duties imposed by the OHS Act and its Regulations, governing the duties and obligations, of a Designer, Principal Contractor and Contractor performing duties in terms of an agreement with the client (SANRAL). These duties are fully described in the OHS Act and its Regulations and it is the duty of every Designer, Principal Contractor and Contractor to acquaint themselves therewith before commencing work.

This specification is compiled to ensure that the Principal Contractor and any other Contractors working for SANRAL directly or through a Principal Contractor, are aware of the Occupational Health and Safety requirements when working on a SANRAL contract, as well as to make them aware of their legal liabilities and responsibilities as per the Occupational Health & Safety Act, Act 85 of 1993, and its Regulations.



Site Information

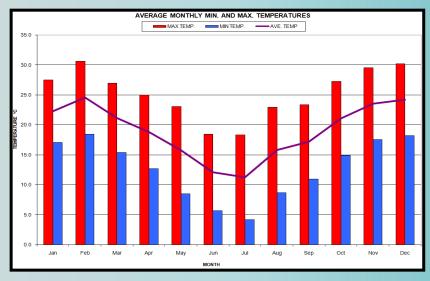


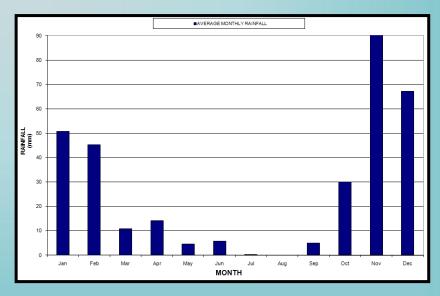
Climate

- Summer rainfall region
- Low temperatures from April to August may have an influence on construction activities.
- Rainfall and temperatures are for Mokopane.

Geology

- Topsoil consists of clayey sandy gravel and silty sand.
- The N11-13 is underlain by rocks of the Bushveld complex and is intruded mostly by gneiss, norite and gabbro.





Site Information (Cont.)



Materials Investigation

Detail provided in Volume 6.

Ground Water

No water table was found in any of the test pits excavated.

Unstable Areas

❖ No unstable conditions were found in any of the test pits excavated.

Traffic

- ❖ km 1,310 to km 8,0 (R518 Marken turn-off) : ± 9000 vpd.
- \star km 8,0 km 23,35 : ± 5000 vpd.
- ❖ km 23,35: ± 2600 vpd.

Description of the Works



km 8,345 to km 23,360

- Widen existing road to a 12,4m minimum width + sidewalks at selected areas.
- Replace Dithokeng River Bridge.

km 23,360 to km 24,280

- Strengthen existing pavement.
- Road width to be retained.
- Retain Grootsandsloot River Bridge.

Community Development Project

Separate CD Contract to go out on tender for Construction of Local Access Roads over total length of road from Mokopane (km 1,310) to End of Contract (km 24,280)

Construction Programme



In drawing up the programme the contractor shall make allowance for the following:

- All special non-working days defined in the Contract Data.
- The expected delays defined in COTO clause A1.2.3.4: Extension of time for delays caused by inclement weather.
- The following embargo hours and days:
 - Thursday before Easter Weekend and Tuesday after Easter Weekend.
 - Last working day of the building industry prior to the December holiday, and Christmas / New-year shut down period.
 - Day of school term closure in the Limpopo Province.

Construction Programme (Cont.)



- Restricted working conditions as defined in the Contract Data, including the following:
 - Two-way traffic to be maintained at all times on Road N11-13, except during construction of bridge approaches at the Groot Sandsloot River (km 24,25) and Short-term Rehabilitation of section forming part of future Mokopane Bypass construction: km 19,171 – km 20,204.
 - Work areas restricted to a maximum of two (2), each with a maximum length of 4,0km and with 4,0km minimum length between work areas.
 - Full road width within a work area must be fully completed before a new work area can be occupied.
 - The effect of low temperatures from April to August on construction activities such as stabilisation, surfacing / sealing and pouring of concrete.

Construction Programme (Cont.)



- The time needed for preparation and approval of the various mix designs specified in the relevant construction sections of the Scope of Works.
- Appointment of targeted enterprises (sub-contractors) to meet specified Contract Participation Goals.
- The initial programme shall realistically account for the forecast cash flow within the defined contract period, and as provided on Form D7: Schedule of Estimated Monthly Expenditure.
- If an alternative contract period is offered, the contractor shall submit a separate programme with the alternative tender.
- Meeting the requirements of the Environmental Management Plan (EMPI)

Construction Programme (Cont.)



- The relocation of property owners affected by the new main road and cross roads, including the design and provision of housing and associated infrastructure by sub-contractors appointed by the main contractor, in cooperation with the main contractor, on site(s) negotiated by SANRAL with the local traditional leaders.
- Installation of street lighting on sections of the N11-13 where the road is crossing built-up areas (to be finalized on site) by sub-contractors appointed by the main contractor, in co-operation with the main contractor. The design of the street lighting and associated works are included in the scope of works of the professional service provider appointed by SANRAL for the construction supervision of the contract.
- As the construction periods on this Conventional N11-13 Road contract and a separate CD contract for the construction of Local Access Roads (to facilitate the closing of direct access from individual properties onto Road N11-13) will overlap, close liaison is required in planning the sequence of construction work on the two contracts respectively.

Roadworks



- Clearing and grubbing.
- Accommodation of traffic.
- Construction of temporary accommodation of traffic (widenings).
- Relocation and/or protection of services (Telkom, Eskom, Mogalakwena Local Municipality, Anglo-Platinum Mine).
- Installation of drainage culverts.
- Installation of subsurface drains.
- Construction of surface drainage channels and structures.
- Construction of banks and dykes.
- Construction of mass earthworks.
- Construction of new pavement layers, asphalt surfacing and Cape Seal.

Roadworks (Cont.)



- Installation of guardrails.
- Erosion protection such as gabions and stone pitching.
- Construction of paved sidewalks.
- Erection of road signs, application of road markings and the installation of road studs.
- Installation of fencing, including a welded mesh pedestrian fence through built-up areas.
- Landscaping.
- Finishing off the road and road reserve, including borrow pits, stone quarry and spoil areas.
- The installation of street lighting in built-up areas.

Cross-Sections



Existing road N11-13:

- km 8,345 km 23,360
 - Lanes: 2 x 3,5m surfaced
 - ❖ Shoulders : 2 x 1,5m gravel
 - Rounding: 2 x 0,5m
 - ❖ Roadway : 11,00m
- km 23,360 km 25,088
 - ❖ Lanes : 2 x 3,7m surfaced
 - ❖ Shoulders: 2 x 1,3m surfaced + 2 x 1,2m gravel
 - Rounding: 2 x 0,5m gravel
 - ❖ Roadway : 12,40m

Cross-Sections (Cont.)



New construction:

N11-13: km 8,345 - km 10,000, km 13,160 - km 14,100 and km 15,820 - km 16,620:

- Urban single carriageway with raised sidewalk one side only:
 - Lanes: 2 x 3,7m surfaced
 - Shoulders: 2 x 2,5m surfaced
 - ❖ Sidewalk kerb: 1 x 0,45m barrier kerb-channel combination
 - ❖ Sidewalk: 1 x 1,8m paved
 - Rounding: 2 x 0,5m gravel
 - ❖ Roadway : 14,65m

N11-13: km 14,100 - km 15,820:

- Urban single carriageway with raised sidewalks both sides:
 - ❖ Lanes : 2 x 3,7m surfaced
 - ❖ Shoulders : 2 x 2,5m surfaced
 - Rounding: 2 x 0,5m gravel
 - ❖ Roadway : 12,40m

Cross-Sections (Cont.)



New construction:

N11-13: km 10,000 - km 13,160 and km16,620 - km 23,360:

- Rural single carriageway:
 - ❖ Lanes: 2 x 3,7m surfaced
 - ❖ Shoulders: 2 x 2,5m surfaced
 - ❖ Rounding: 2 x 0,5m gravel
 - ❖ Roadway : 12,40m

N11-13: km 23,360 - km 24,0:

- Rural single carriageway:
 - Lanes: 2 x 3,7m surfaced
 - ❖ Shoulders: 2 x 1,3m surfaced + 2 x 1,2m gravel
 - Rounding: 2 x 0,5m gravel
 - ❖ Roadway : 12,40m

Cross-Sections (Cont.)



Provincial and Municipal connecting roads:

Lanes: 2 x 3,7m surfaced

Shoulders: 2 x 2,5m surfaced

Rounding: 2 x 0,5m gravel

❖ Roadway : 12,40m

Note: The above lane and shoulder widths to be adjusted to

suit site conditions.

Pavement



New construction

Surfacing:

- km 8,345 km 25,088 : Bituminous single seal (20mm aggregate) with slurry (Cape Seal); Binder: Hot applied polymer modified bitumen Class S-E1 or Cold applied binder Class SC-E2 (70-73)(t).
- Intersections: Sand skeletal mix; Gap graded; NMPS 10mm; PG64E-16 (EMB); Design Level II; minimum 45mm thickness. With 14mm precoated Rolled-in chips (the spreading rate of the chips should be controlled and limited to 6 to 8 kg per m²).

Base: 150mm crushed stone (G1) compacted to 88% of apparent density.

Sub-base: 300mm imported stabilized natural gravel (C3) compacted to 97% of max. dry density (MDD). The layer shall be tested as two layers of 150mm each.

Upper selected: 150mm natural gravel (G6) compacted to 95% of max. dry density (MDD).

Lower selected: 150mm natural gravel (G6) compacted to 95% of max. dry density (MDD).

Fill: Natural gravel (G9) compacted to 93% of max. dry density (MDD), or rockfill.

Shoulder: 150mm natural gravel (as per COTO Table A4.1.5-10) compacted to 95% of max. dry density (MDD).

Pavement (Cont.)



Pavement rehabilitation where H = 600mm - 750mm

Surfacing:

Same as for new pavement construction.

Base:

Same as for new pavement construction.

Sub-base:

Same as for new pavement construction.

Selected layer:

Imported natural gravel (G6) of varying thickness between 150mm and 300mm, compacted to 95% of max. dry density (MDD).

Roadbed (Existing pavement):

Remove failed areas and backfill with natural gravel (G6) compacted to 95% of max. dry density (MDD).

Shoulder:

Same as for new pavement construction.

Pavement (Cont.)



Pavement rehabilitation where H = 450mm – 600mm

Surfacing:

Same as for new pavement construction.

Base:

Same as for new pavement construction.

Sub-base:

Same as for new pavement construction.

Selected layer:

Imported natural gravel (G6) mixed with in-situ bituminous surfacing and base material to a layer thickness of 150mm, and compacted to 95% of Max. Dry Density (MDD).

Shoulder:

Same as for new pavement construction.



Pavement rehabilitation where H = 350mm – 450mm

Surfacing:

Same as new pavement construction.

Base:

Same as new pavement construction.

Sub-base:

Imported natural gravel mixed with in-situ bituminous surfacing and base material to a layer thickness of 300mm, stabilized to C3 and compacted to 97% of max. dry density (MDD). The layer shall be tested as two layers of 150mm each.

Selected layer:

Imported natural gravel (G6) of varying thickness between 150mm and 300mm, compacted to 95% of max. dry density (MDD).

Shoulder:

Same as for new pavement construction.



Provincial and Municipal connecting roads Surfacing :

Bituminous single seal (20mm aggregate) with slurry (Cape Seal), Binder: Hot applied polymer modified bitumen Class S-E1 or Cold applied binder Class SC-E2 (70-73)(t).

Base:

150mm crushed stone (G1) compacted to 88% of apparent density.

Sub-base:

150mm stabilized natural gravel (C3) compacted to 97% of max. dry density (MDD).

Upper selected:

❖ 150mm natural gravel (G6) compacted to 95% of max. dry density (MDD).

Lower selected:

❖ 150mm natural gravel (G6) compacted to 95% of max. dry density (MDD).

Fill:

Natural gravel (G9) compacted to 93% of max. dry density (MDD), or rockfill.

Shoulder:

150mm natural gravel (as per Table A4.1.5-10) compacted to 95% of max. dry density (MDD).



Paved sidewalks

Block paving:

60mm S-A interlocking concrete blocks (25 MPa) on 20mm sand bedding.

Sub-base:

150mm imported natural gravel (G6) compacted to 97% of max. dry density (MDD).

Temporary widening for accommodation of traffic

Surfacing:

Bituminous single seal (14mm aggregate) with slurry (Cape Seal), Binder: Cold applied binder Class SC-E2 (70-73)(t).

Base:

❖ 150mm stabilized natural gravel (C3) compacted to 97% of max. dry density (MDD).

Sub-base:

150mm natural gravel (G6) compacted to 97% of max. dry density (MDD).



Notes:

1. Treatment of deficiencies in lower layers:

In instances where treatment of deficiencies in the lower layers is required and instructed by the engineer, the sub-base material shall be windrowed (if practical) or removed and utilized elsewhere or removed to stockpile to allow for the work to be carried out on these layers.

2. In-situ milling and mixing of existing pavement layers:

The existing asphalt/seal, the crushed stone base, sub-base and shoulder material, which shall be re-used in the sub-base and selected layers, shall first be milled and broken down by means of a recycling machine.

Where no widening of existing road occurs material shall be added to make up any shortages and the layer shall then be constructed by in-situ recycling and mixing of the respective types of materials, including mixing of the water and stabilizing agent (where applicable).

Where widening of the existing road occurs the broken down and milled material shall be spread over the full width and material shall be added to make up any shortages. The layer shall then be constructed by in-situ recycling and mixing of respective types of material, including mixing of the water and stabilizing agent (where applicable).

3. Mixing and stabilizing of sub-base layer:

The sub-base material shall be stabilized and mixed by means of a recycling machine.

Construction Materials



Natural gravel :

- Four gravel borrow pits have been identified (see next slide).
- Predominantly consists of clayey silty sand and clayey sandy gravel.

Crushed stone base :

- Materials for G1 base is obtained from a hard rock quarry ± 6 km from km 16.6.
- The material consists of unweathered anorthosite, suitable for G1 base.

Surfacing stone :

The material from the hard rock quarry is not regarded suitable for the use of surfacing aggregate. To be obtained from commercial sources.

Concrete stone :

- To be obtained from the hard rock quarry or commercial sources.
- No additional payment will be made for crushing and screening if required from the hard rock quarry. Contractor to include in his rates for concrete.

Construction Materials (cont.)



Summary of Borrow Pit Information

BORROW PIT	LOCATION	MATERIAL TYPE	COLTO CLASSIFICATION	ESTIMATED QUANTITIES (M³)	USAGE	UCS @ 100% (Min 1.5MPa)		ITS (Min 250)		STABILIZING AGENT %
NUMBER						2.0%	4.0%	2.0%	4.0%	PROPOSED
3	Farm Turfspruit 241-KR	Clayey silty sand / Clayey sandy gravel	G6 / G7	72,000	Subbase / Selected / Fill	-	-	-	-	-
ЗА	Farm Turfspruit 241-KR	Clayey silty sand / Clayey sandy gravel	G6 / G7	56,000	Subbase / Selected / Fill	1	1	-		-
	Farm Tweefontein 238-KR PT.2	Clayey silty gravel / Clayey sandy gravel	G5 / G6 / G7	110,000	Subbase / Selected / Fill	1.62	4.11	280	510	3.5% Cement (32.5R CEM IV)
4						0.85	2.15	180	380	
						1.27	2.69	420	680	
5	Farm Gillimberg 861- LR PTN. 9	Clayey silty sand / Clayey sandy gravel	GG	68,000	Subbase / Selected / Fill	3.03	3.98	350	610	2.0% Cement (32.5R CEM IV)
5			Go	06,000		1.72	2.56	280	570	

Notes: 1. Borrow Pit 3 to be utilized on N11-13X Bypass Project only.

2. Borrow Pit 3A to be utilized on Contract N.011-130-2019/1: km 1,310 – km 8,345.

Summary of Hard Rock Quarry Information

BORROW PIT NUMBER	LOCATION	MATERIAL TYPE	COLTO CLASSIFICATION	ESTIMATED QUANTITIES (M³)	USAGE
HARD ROCK QUARRY	Farm Tweefontein 238-KR	Hard Rock Anorthosite	G1	467,000(+)	Base / Subbase

Construction Materials (cont.)



Possible Commercial Sources :

- Platistone Mogalakwena
- Platistone Polokwane
- Wearne Crushers Polokwane
- Rooiberg Stone
- Lafarge Polokwane

Construction water :

- Contractor's responsibility.
- Potential water sources :
 - Mogalakwena Municipality
 - Anglo Platinum Mogalakwena Mine
 - Landowners
 - Groot Sandsloot River
 - Gert Combrink Dam just outside Mokopane
- ❖ Water for use on site other than municipal, shall be subject to the required permit from the Department of Water affairs (DWA). The water quality shall conform to the requirements in COTO Table A4.1.5-19.

Drainage



- All existing drainage culverts to be replaced.
- Ten (10) new cast in-situ concrete portal culverts to be constructed.
- Sixty-seven (67) new precast concrete culverts (pipe and portal culverts) to be constructed.
- Concrete side drains to be constructed where shown on the drawings.
- Subsoil drainage to be constructed where road widens and falls within cut conditions, as shown on the drawings.
- Earth and / or gabion berms to be constructed at inlets of culverts.
- Erosion protection to be constructed at culvert outlets as shown on the drawings.

Structures



Dithokeng River Bridge at km 15,606

- Located on a straight.
- \Rightarrow Angle = 20°.
- 3-span box type reinforced structure with 5,0m x 5,0m cell openings.
- ❖ Deck length = 19m average cell length = 24m.
- ❖ Camber = 2,0%
- Road fill material 250mm to 800mm over top of the structure.
- Founded in in-situ material.
- To be constructed in two stages to facilitate traffic accommodation over the existing bridge during construction.
- Wing-walls are normal reinforced cantilever type, founded on spread footings in in-situ material.

Services



Eskom :

Overhead electrical lines.

• Telkom:

Overhead telephone lines and underground cables.

Anglo Platinum :

Underground water pipelines.

Mogalakwena Municipality :

- Overhead electrical lines.
- Underground electrical cables.
- Water pipeline

Contractor to acquaint himself with the position of all the services on the site before commencement of the Works. Contractor to liaise with the relevant service owners well in advance to acquire from them the lead times required to make the necessary arrangements for the protection, removal or relocation of services that may / will be affected by the Works.

Construction Management



Security

Contractor to provide security watchmen for the duration of the contract. No extra cost.

Camp establishment, power supply and other services

- Contractor to make own arrangements for a suitable camp site.
- Contractor to make his own arrangements supply of electrical power and all other services. No extra cost.

Management of the Environment

The contractor will be responsible for construction according to an Environmental Management Plan in terms of Section C of the Contract Specifications.

Health and Safety Obligations

The contractor will be responsible for conducting his work in accordance with the general OHS requirements stated in Section E of the Contract Specifications.

Construction / Management (Cont.)



Construction in confined areas

- It will be necessary to work within confined areas.
- Measurement and payment will be in accordance with the specified cross-sections and dimensions only.
- No extra payment will be made nor will any claim for additional payment be considered in such cases.

Construction Management (Cont.)



Accommodation of traffic

- Contractor responsible for the safe and easy passage of public.
- Accommodation of traffic shall comply with section 1.5 of COTO Standard Specifications for Road and Bridge Works and the COTO project specifications.
- Two-way traffic to be maintained between km 8,345 and km 23,360, excluding Short-term Rehab. section forming part of future Mokopane Bypass construction: km 19,171 km 20,204.
- One-way traffic with STOP/GO control/traffic signals will be allowed for the construction of the bridge approaches at the Grootsandsloot River Bridge (km 24,245).
- Construction only allowed on one half of existing roadway, where work is carried out while 2-way traffic is accommodated on other half of roadway.
- ❖ The Contractor shall not commence construction activities before adequate provision has been made to accommodate traffic in accordance with the requirements of the tender document.

Stakeholder and Community liaison, and Targeted Labour and Targeted Enterprises Utilisation and Development



- SANRAL is committed to Government's objective to extend economic opportunities and entrepreneurial capacity to all localities by the optimum utilization of the resources existing in the vicinity of projects, the development of these resources in the execution of the projects, and by maximizing the amount of project funds retained within the community.
- Section D of Part C3: Scope of Works, covers the contractor's obligations to meet these objectives in detail.

Community Development Project (CDP)



 A Community Development Project (CDP) to be implemented by CIDB Grades 1 and 2 Targeted Enterprise Sub-contractors has already been identified by the Employer and the following separate CD contract will go out on tender for this project:

CONTRACT SANRAL C.002-007-2011/1:

Training and Construction Management of Communities and SMME Contractors for Construction of Local Access Roads on National Road N11-13 from Mokopane (km 1,310) to Grootsandsloot River (km 24,280)

Important Information



• Penalties: (See C1.2.2 – Appendix to Tender)

❖ Delay damages : R55 000 / day

❖ Lane occupation levy : R50 000 / day

❖ Intra-programme dates : N/A

Accommodation of traffic non-compliance:

> Fixed penalty : R20 000 / occurrence

> Time related : R2 000 / hour

❖ Overloading (See A1.7.7) : 2 x Unit Rate of material hauled x

overload factor x distance hauled

❖ Contract Participation Targets : See D1003.05 for CPP Penalties

❖ Layer irregularities:

Asphalt (See A9.1.8.4) : quantity/100m x unit rate x

payment adjustment factor

➤ Base (See A5.3.8.5) : quantity/100m x unit rate x

payment adjustment factor

Important Information (Cont.)



Form A3.2: Certificate of Independent Tender:

See Part T2: Returnable Schedules

This certificate serves as declaration that the tender submitted is free from any collusion with a competitor.

Community Development Projects:

Community Development Projects shall not add towards the Contractor's CPG and shall be additional efforts towards the Employer's transformation and socioeconomic development goals – See sub-clause D1012.02.

Consequential delays:

The contractor shall take note that consequential delays are excluded from the measurement of 'n' days as stated in sub-clause A1.2.3(c).

Project Specific Construction Requirements:

See Part C4, Site Information:

Appendix 2: Baseline Risk Assessment

Appendix 3: Site Specific Health & Safety Specification

Important Information (Cont.)



Construction vehicles:

Contractor to ensure that construction vehicles and equipment used on site and on public roads comply with all current legislation and regulations. See clause A1.2.6. (Overloading subject to penalties).

Material transfer vehicle:

Asphalt must be transferred from haul truck to paver by means of "shuttle buggy". See sub-clause A9.1.6.8.

Split quantities:

Wherever allowance is made for split quantities, SANRAL reserves the right to choose the most appropriate or combination thereof, regardless of any adverse affect on the Contractor's cost. No claims will be entertained. Also see clause C1.1.3.

Surface regularity:

Contractor to take note of the procedure required in clause A5.3.8.5 for testing the base layer as well as the procedure for testing asphalt surface in clause A9.1.8.4.

Important Information (Cont.)



0,5%

1,5%

1,5%

Contract Participation Goals:

> >/= 51% Disabled Persons

> CIDB 1 or 2 grading

> CIDB 3 or 4 grading

*	Target Area: Mogalakwena Local Municipality		
**	Targeted Labour (% of Final Contract Value)	:	8%
	Minimum contributions to targeted labour value:		
	➢ Black Women	:	30%
	➢ Black Youth	:	30%
	Black people with disabilities	:	0,5%
*	Targeted Enterprises (% of Final Contract Value)	:	30%
	Minimum contributions to final contract value:		
	Ownership:		
	>/= 51% Woman	:	5%
	>/= 51% Youth	:	5%
	>/= 51% Military Veterans	:	1%

THANK YOU FOR YOUR ATTENTION

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