

REQUEST FOR TENDERS

Tender No.: SCMU10-25/26-0003

FOR

PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS IN THE EASTERN CAPE PROVINCE

Issued by:

Province of the Eastern Cape

Department of Transport

Private Bag X0023 **BHISHO** 5605

c/o Fleming Street & Cowan Close
KING WILLIAM'S TOWN
5601

NAME OF TENDERER:









PROVINCE OF THE EASTERN CAPE: DEPARTMENT OF TRANSPORT

TENDER NO.: SCMU10-25/26-0003

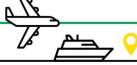
PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE PROVINCE

CONTENTS		PAGE
Number	Heading	
THE REQUEST FOR TENDERS		
Part T1: TEN	DER PROCEDURES	3
T1.1	Tender Notice and Invitation	4
T1.2	Tender Data	6
	URNABLE DOCUMENTS	11
T2.1	Returnable Schedules Required for Tender Evaluation Purposes	13
T2.2	Returnable Schedules to be Incorporated into Contract	35
T2.3	Pro Forma Forms to be Completed by Successful Tenderer	52
THE CONTRA		56
	REEMENT AND CONTRACT DATA	57
C1.1	Form of Offer and Acceptance	58
C1.2	Contract Data	70
C1.3	Adjudicator's Agreement	75
C1.4	Agreement in Terms of Occupational Health & Safety Act	78
PART C2: PR	CICING DATA	82
C2.1	Pricing Instructions	83
C2.2	Pricing Schedules	85
02.2	1 Holling Ochledules	00
PART C3: SC	OPE OF WORK	89
C3.1	Employers Objectives	90
C3.2	Site Location	90
C3.3	Description of the Works	93
C3.4	Use of Specialised Equipment for Inventory and/or Inspections	94
C3.5	Quality Control	95
C3.6	Works Programme	95
C3.7	Deliverables	96
C3.8	Occupational Health and Safety Specifications	97
C3.9	Measurement and Payment	102
PART C4: AP	PENDICES	104
C4.1	Appendix C4.1 – Assessment Forms (Pro-Forma)	105
C4.2	Appendix C4.2 – Locality Plan/Drawings	130
C4.3	Appendix C4.3 – Schedule of Bridges	132

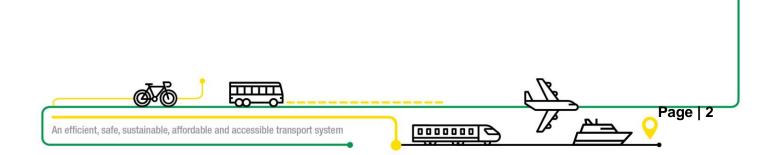








THE TENDER



PART T1: TENDER PROCEDURES



T 1.1 NOTICE AND INVITATION TO TENDER

The Department of Transport hereby invites Tenders from suitably qualified and experienced professional service providers (PSPs) to provide:

PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE

The PSP will need to have extensive experience in the inspection and inventory of bridges and major culverts, as well as in the coordination of bridge and major culvert inspection projects, consultation and liaison.

In terms of the Preferential Procurement Policy Framework Act (Act 5 of 2000) as amended and 2022 Regulations thereto and Preferential Specific Goal Points, tenders shall be evaluated on price based on the 80/20 preference point system and 2022 Regulations thereto and Preferential Specific Goal Points.

Professional Services Providers to provide bids for:

TENDER NO.: SCMU10-25/26-0003				
Description Tender Closing Date and Time				
Provision of Professional Consulting Engineering Services to Conduct Inspection Surveys on Bridges and Major Culverts on Provincial Roads: EC	Friday, 25 April 2025 at 11:00			

Tenders are invited for Provision of Professional Consulting Engineering Services to Conduct Inspection Surveys on Bridges and Major Culverts on Provincial Roads in Eastern Cape Province.

The Province of the Eastern Cape Department of Transport, as the Employer, hereby invites tenders from Professional Consulting Engineering Services to conduct inspection surveys on bridges and major culverts on Provincial Roads in the Eastern Cape.

Inspection surveys shall be executed according to the latest draft TMH19 document (Manual for the Visual Assessment of Road Structures) and the standard procedures associated with the CSIR STRUMAN Bridge Management System, as adopted by the Employer. Only tenderers complying with the requirements as specified in the Conditions of Tender will be considered.

Only tenderers offering Key Persons and personnel with extensive bridge and culvert design and inspection experience are eligible to submit tenders. The pre-evaluation criteria applicable to experience and qualifications are specified in the Tender Data. It is therefore a specific requirement that tenderers provide proof of proposed Key Persons' experience and that the approved Key Persons successfully complete the Employer's Compulsory Testing and Calibration Session.

The 80:20 preferential points system will be applicable with 80 points for price and preference participation goals scoring a maximum of 20 points.

Tender documents are obtainable from www.etender.gov.za or www.etransport.gov.za from 28 March 2025.

Queries relating to the issue of these documents may be addressed to Mr Drikus Bester, Tel No. 041 581 2421, e mail: drikusb@easpe.co.za

A compulsory clarification meeting with representatives of the Department will take place at the offices of the East Golf Club, East London, **on 09 April 2025 at 10:00**.

The closing time for receipt of tenders is **25 April 2025 at 11:00**. Tenders shall be deposited at the tender at the Department of Transport, Entrance Foyer C, Stellenbosch Park Building, c/o Fleming Street & Cowan Close, King William's Town. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted.

Tenders may only be submitted on the tender documentation that is issued.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the Construction Industry Development Board's Board Notice 136 of 2015 (contained in Government Gazette No. 38960 of 10 July 2015).

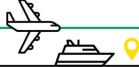
The Standard Conditions of Tender makes several references to the Tender Data. The Tender Data also contains project specific amendments to the Standard Conditions of Tender applicable to this document. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

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

Clause number	Description / Comment
F1.1	The Employer is the Department of Transport, Province of the Eastern Cape
F1.2	The Project Document issued by the Employer comprises the following:
	THE TENDER
	Part T1: Tendering procedures: T1.1 Tender notice and invitation to tender T1.2 Tender data
	Part T2: Returnable documents: T2.1 Returnable schedules for tender evaluation T2.2 Other documents required for tender evaluation T2.3 Returnable schedules that will be incorporated into the contract
	THE CONTRACT
	Part C1: Agreements and contract data C1.1a to C1.1d Form of Offer and Acceptance C1.2 Contract data C1.3 Adjudicator's appointment C1.4 Agreement in terms of Occupational Health and Safety Act
	Part C2: Pricing data C2.1. Pricing instructions C2.2.1 to C2.2.4 Schedules of Quantities
	Part C3: Scope of work
	Part C4: Appendices







F1.4 The name and contact details of the employer's agent are as follows:

Mr. S. Cibi

Department of Transport

Private Bag X0023

BHISHO

5605

Cell. 083 357 7887 | E-mail: sonwabo.cibi@ectransport.gov.za

F2.1 Only tenderers who provide key persons <u>for each Contract(s) tendered for</u>, as listed below as well as in the contract data, will be considered responsive.

The Structures Project Manager shall:

- be accredited with the Committee of Transport Officials (COTO) as a Bridge Inspector or as a Senior Bridge Inspector, having at least 10 years COTO/SANRAL accreditation experience in TMH19 visual inspection of bridges and major culverts.
- be registered as a Professional Engineer under the Engineering Profession Act (Act 46 of 2000), or be registered as a Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- be allowed to be proposed as a Bridge Inspector, having completed at least 50 TMH19 bridge inspections since COTO accreditation, with this experience being gained over the past 5 years,
- be in the permanent employ of the tenderer and,
- be available to execute the required duties and responsibilities on the Contract tendered for should the tenderer's offer be accepted.

Only tenderers who have a <u>minimum</u> of at least <u>four</u> suitably experienced and qualified Bridge and Major Culvert Inspectors and who will be available for the execution and completion of the Contract tendered for are eligible to submit tenders. The Bridge and Major Culvert Inspectors shall consist of at least <u>two Major Culvert Inspectors</u> and <u>two Bridge Inspectors</u>.

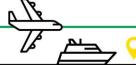
Each Bridge Inspector and Major Culvert Inspector so proposed and ultimately utilised shall be required to comply with and meet all of the following criteria and specific conditions.

The Major Culvert Inspectors shall:

- be a COTO accredited Major Culvert Inspector, having completed at least 50 TMH19 major culvert inspections since COTO accreditation, with this experience being gained over the past 5 years,
- be a qualified as Professional civil engineering technician, technologist or engineer.
- be required to successfully complete and pass the employer's Compulsory "Testing and Calibration Session" with a minimum score of 85%,
- be allowed to conduct inspection surveys on major culverts **only**.
- be in the permanent employ of the tenderer or contractually committed to the tenderer should the tenderer win the tender and be available for the execution of the Contract tendered for and.
- be available to execute the required duties and responsibilities on the Contract tendered for, should the tenderer's offer be accepted.

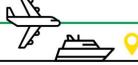






	The Bridge Inspectors shall:		
	 be a COTO accredited Bridge Inspector, having completed at least 50 TMH19 bridge inspections since COTO accreditation, with this experience being gained over the past 5 years, or be a COTO accredited Senior Bridge Inspector, 		
	 be registered as a Professional Engineer under the Engineering Profession Act (Act 46 of 2000), or be registered as a Professional Technologist under the Engineering Profession Act (Act 46 of 2000), 		
	 be required to successfully complete and pass the employer's Compulsory "Testing and Calibration Session" with a minimum score of 85%, 		
	 be allowed to conduct inspection surveys on bridges <u>and</u> major culverts, be in the permanent employ of the tenderer or contractually committed to the tenderer should the tenderer win the tender and be available for the execution of the Contract tendered for and, 		
	 be available to execute the required duties and responsibilities on the Contract tendered for should the tenderer's offer be accepted. 		
	Tenderers shall provide proof of the Key Persons' experience in a <u>detailed and</u> <u>project specific</u> Curricula Vitae, supported by the required certified copies of professional registration, COTO accreditation and qualifications.		
F2.7	The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender.		
F2.12	No alternative tender offers will be accepted by the Employer.		
F2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original, plus one (1) copy.		
F2.13.5	The Employer's address for delivery of tender offers is:		
	Tender Box Department of Transport		
	Entrance Foyer C		
	Stellenbosch Park Building c/o Fleming Street & Cowan Close, KING WILLIAM'S TOWN		
	and identification details to be shown on the tender offers are:		
	TENDER NO.: SCMU10-25/26-0003: PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EC		
F2.13 & 3.5	A two-envelope procedure will not be followed.		
F2.15	The closing time for submission of tender offers is the 25 April 2025 at 11:00am.		
F2.15	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.		
F2.16	The tender offer validity period is ninety (90) days.		
	2 12 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2		



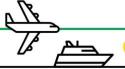


- 7- R	Territorio di all'all'all'all'all'all'all'all'all'all	
	the above steps, the corrected amount shall govern.d) Notify a tenderer upon written request received after the closing date of tenders of all arithmetical errors made by that tenderer.	
	corrections required by this checking process or in the tenderer's addition of prices, the corrected total of the prices shall govern. c) Where there is a discrepancy between the amount indicated in the Tenderer's tender offer and the corrected amount obtained after completing	
	a) If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is an error in the line item total resulting from the product of the unit rate and the quantity, the unit rate shall govern and the line item total shall be corrected.b) Where there is an error in the total of the prices, either as a result of other	
	Check responsive tender offers for arithmetical errors, correcting them in the following manner:	
F3.9	reservation. Replace the contents of the clause with the following:	
	Reject a non-responsive tender offer and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or	
	In addition to the above and in compliance with requirements of Clause F2.1, should the tenderer fail to offer the specified Key Persons or should the Key Persons so offered fail to comply with the minimum requirements regarding experience and qualifications, the tender shall be regarded as non-responsive.	
	 c) Affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified, or d) Indicate that the tenderer or tender does not comply with all the legal and statutory requirements. 	
	or supply identified in the Scope of Work. b) Significantly change the employer's or the tenderer's risk and responsibilities under the contract.	
	A material deviation or qualification is one which, in the employer's opinion, would: a) Detrimentally affect the scope, quality, or performance of the works, services	
F3.8.2	A responsive tender is one that conforms to all terms, conditions, and specifications of the tender documents without material deviations or qualification.	
	Failure on the part of the Tenderer to submit a tender offer as stipulated prior to the closing time including any one of the returnable documents or certificates in clause 2.15 shall be just cause for the Employer to consider the tender offer as being non-responsive	
F3.8.1	Add the following to the clause:	
	Time: 11:00 on 25 April 2025 Location: Entrance Foyer C, Stellenbosch Park Building, c/o Fleming Street & Cowan Close	
F3.4	The time and location for opening of the tender offers are:	
F2.23	The tenderer is required to submit with his/her tender all the documents, schedules and certificates as listed under Part 2 of the Tender Portion.	

F3.11.5 and F3.11.7 to F3.11.8	Method 2 (as described in Clause 3.11.3 of the Standard Conditions of Tender) will be used to evaluate all responsive tender offers. The financial offer will be scored in terms of formula 2 option 1.
F3.13.1	In addition, tender offers will only be accepted if: a) The tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; and b) The tenderer has not: Abused the Employer's Supply Chain Management System; or Failed to perform any previous contract and has been given a written notice to this effect. It is considered that the performance of the services will not be compromised through any conflict of interest.

Additional conditions of tender

Clause number	Description / Comment
F1.6 additional	"Tenderers should note that this tender includes three (3) contracts of similar nature. Tenderers may tender for one or more of the contracts. All contracts will be scored separately. However, if the tenderer provides the same Key Person/s for two or more of the contracts, the tenderer will be able to be awarded a maximum of two with different key personnel or one contract utilized the same key personnel. Where it is found that a specific tenderer is eligible for award of more than one contract, the employer reserves the right not to award more than one contract (of the three contracts) to such a tendering entity. Awards will be made based on the most economically favourable outcome for the Employer, and tenderers will not be afforded the opportunity to select preferred contracts, should they score the highest points on more than one contract. The Employer further reserves the right not to award a contract to any tenderer found to be at a high risk of non/under-performance based on a risk assessment of the current workload or past performance of that tenderer." Tenderers must note that the Schedule of Quantities will not be made available in electronic format.
F2.13 additional	 In addition to Clause F2.13, it is a specific requirement that: a) Tenderers shall not take this tender document apart. Additional documentation to be submitted by tenderers shall be submitted in a separate properly bound document, unless specifically required in this document that such documentation be attached to specific pages of this document. b) Tenderers shall initial every page of this tender document in the bottom right-hand corner.



PART T2: RETURNABLE DOCUMENTS



Tender Qualification Criteria:

T2.1 RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES

- A- Certificate of Attendance at site visit and clarification meeting
- B- Certificate of Authority
- C- Joint Venture / Consortium Disclosure Form
- D- Bidder's Disclosure Form
- E- Compulsory Enterprise Questionnaire
- F- Certificate Of Compliance with Occupational Health and Safety Act, 1993 and Construction Regulations, 2014
- G- Tax Clearance Certificate
- H- Tenderer's Financial Standing
- I- Central Supplier Database
- J- Special Conditions

Failure to meet the above compliance requirements will render the tender[s] non-responsive and disqualified.

T2.2 RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT

- K- Preferential Procurement Regulation 2022
- L- Record of Addenda to Tender Documents
- M- Plant and Equipment
- N- Schedule of Specialist Sub-Consultants
- O- Indicative Programme
- P- Estimated Monthly Expenditure
- Q- Amendments, Qualifications and Alternatives
- R- Company Experience
- S- Personnel Schedule
- T- Total Contract Quality Plan (Incl. Draft Safety Plan)

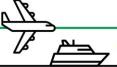
T2.3 PRO FORMA FORMS TO BE COMPLETED BY SUCCESSFUL TENDERER

- C1.1 FORM OF OFFER AND ACCEPTANCE
- C1.2 CONTRACT DATA
- C1.3 ADJUDICATOR'S AGREEMENT
- C1.4 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)
- C2.1 PRICING INSTRUCTIONS
- C2.2 PRICING SCHEDULES
- C3.1 SCOPE OF WORK
- C4 APPENDICES

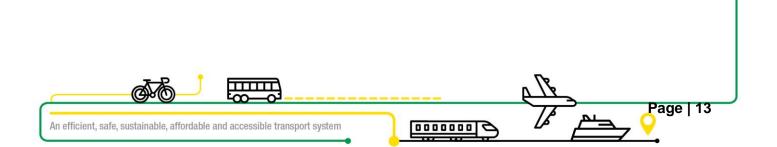








T2.1 RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES



T2.1.A CERTIFICATE OF ATTENDANCE AT SITE VISIT AND CLARIFICATION MEETING

This is to certify that I, (tenderer)	
of (address)	was represented by
the person(s) named below at the compulsory mee	eting held for all tenderers at (location)
on (date)	starting at (time).
the works and / or matters incidental to doing the	ng was to acquaint myself / ourselves with the site of work specified in the tender documents in order for when compiling our rates and prices included in the
Particulars of person(s) attending the meeting:	
Name:	Signature:
Capacity:	
Name:	Signature:
Capacity:	
Attendance of the above person(s) at the representative, namely:	meeting is confirmed by the Employer's
Name:	Signature:
Capacity:	Date:







(V)

SOLE

(l)

COMPANY

T2.1.B CERTIFICATE OF AUTHORITY

(II)

CLOSE

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for the relevant category.

(III)

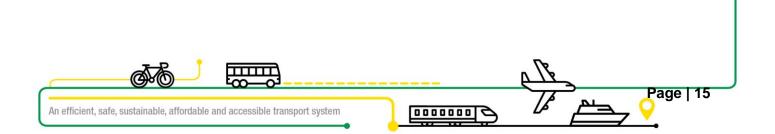
PARTNERSHIP

(IV)

JOINT VENTURE

	CORPORATION			PROPRIETOR		
(I) <u>CERTIFICATE</u>	FOR COMPANY					
of		, hereby confirm	rector of the Boar n that by resolution of	the Board (copy		
capacity of	capacity of, was authorised to sign all documents in					
connection with this te	nder and any contra	ct resulting from it, o	n behalf of the compan	y.		
Managing Director: .						
As Witnesses: 1						
2						
Date:						
(II) <u>CERTIFICATE</u>	FOR CLOSE COR	PORATION				
=			ding as			
in the capacity of			, to sigr	all documents in		
connection with this te	nder	and any	contract resulting from	it, on our behalf.		
NAME	ADI	DRESS	SIGNATURE	DATE		

Note: This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.



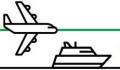
TENDER No.: SCMU10-24/25-0023

A I A R	ADDD5500	on our behalf.	54-
NAME	ADDRESS	SIGNATURE	DAT
the direction of the di	to be completed and signed by ne affairs of the Partnership as a R JOINT VENTURE OF DIRECTORS TO ENTER IN	n whole.	
the direction of the value of the direction of the value	ne affairs of the Partnership as a	n whole. TO CONSORTIA OR JOINT	
the direction of the value of the direction of the value	ne affairs of the Partnership as a R JOINT VENTURE O OF DIRECTORS TO ENTER IN	n whole. TO CONSORTIA OR JOINT	
the direction of the variation of the va	ne affairs of the Partnership as a R JOINT VENTURE O OF DIRECTORS TO ENTER IN	TO CONSORTIA OR JOINT abers / Partners of:	
the direction of the variation of the va	ne affairs of the Partnership as a R JOINT VENTURE O OF DIRECTORS TO ENTER IN g of the Board of *Directors / Mem	TO CONSORTIA OR JOINT abers / Partners of:	
the direction of the variation of the va	ne affairs of the Partnership as a R JOINT VENTURE O OF DIRECTORS TO ENTER IN 19 19 19 19 19 19 19 19 19 19 19 19 19	TO CONSORTIA OR JOINT libers / Partners of: rprise) (place)	
the direction of the V) CERTIFICATE FO ESOLUTION OF BOARD ESOLUTION of a meeting egally correct full name and regulated at	ne affairs of the Partnership as a R JOINT VENTURE O OF DIRECTORS TO ENTER IN g of the Board of *Directors / Mem	TO CONSORTIA OR JOINT libers / Partners of: rprise) (place)	
the direction of the V) CERTIFICATE FO ESOLUTION OF BOARD ESOLUTION of a meeting egally correct full name and regulated at	ne affairs of the Partnership as a R JOINT VENTURE O OF DIRECTORS TO ENTER IN 19 19 19 19 19 19 19 19 19 19 19 19 19	TO CONSORTIA OR JOINT abers / Partners of: prise prise (place) (date)	VENTURE









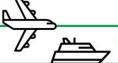
TENDER No.: SCMU10-24/25-0023

to the DEPARTMENT OF TRANSPORT in respect of the following project:				
(Project description as per Bid /Tender Document)				
Bid / Tender Number: Bid /Tender Document)	(Bid / Tender Number as per			
2. *Mr/Mrs/Ms:				
in *his/her Capacity as:	(Position in the Enterprise)			
and who will sign as follows:				
under item 1 above, and any and all other and relating to the consortium/joint venture. 3. The Enterprise accepts joint and several liable fulfilment of the obligations of the joint venture.	onsortium/joint venture agreement with the parties listed or documents and/or correspondence in connection with e, in respect of the project described under item 1 above. bility with the parties listed under item 1 above for the due nture deriving from, and in any way connected with, the nent in respect of the project described under item 1 above.			
	citandi et executandi for all purposes arising from this joint are Department in respect of the project under item 1 above:			
Physical address:				
Postal Address:	(code)			
Telephone number:	,			
Fax number:	(code)			









	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Note:

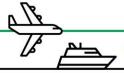
- 1. * Delete which is not applicable
- 2. **NB**. This resolution must be signed by <u>all</u> the Directors / Members / Partners of the Bidding Enterprise
- Should the number of Directors / Members/Partners exceed the space available above, additional names and signatures must be supplied on a separate page

ENTERPRISE STAMP









SPECIAL RESOLUTION OF CONSORTIA OR JOINT VENTURES

ha	ve en	UTION of a meeting of the duly authorised representatives of the following legal entities who tered into a consortium/joint venture to jointly bid for the project mentioned below: (legally correct and registration numbers, if applicable, of the Enterprises forming a Consortium/Joint Venture)			
1.	•				
2.					
3.					
4.					
5.					
6.					
7.					
Нє	eld at .	(place)			
Or	า	(date)			
RE	ESOL	VED that:			
A.		above-mentioned Enterprises submits a Bid in Consortium/Joint Venture to the DEPARTMENT OF NSPORT in respect of the following project:			
	(proje	ect description as per Bid / Tender Document)			
В.	Mr/M	rs/Ms:			
	in *h	nis/her Capacity as: :(Position in the Enterprise)			
	and v	and who will sign as follows: :			
	corre	and is hereby, authorised to sign the Bid, and any and all other documents and/or espondence in connection with and relating to the Bid, as well as to sign any Contract, and any all documentation, resulting from the award of the Bid to the Enterprises in Consortium/Joint ure mentioned above.			
C.		Enterprises constituting the Consortium/Joint Venture, notwithstanding its composition, shall uct all business under the name and style of:			









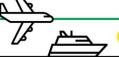
Physical address:

- D. The Enterprises to the Consortium/Joint Venture accepts joint and several liability for the due fulfilment of the obligations of the Consortium/Joint Venture deriving from, and in any way connected with, the Contract entered into with the Department in respect of the project described under item A above.
- E. Any of the Enterprises to the Consortium/Joint Venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention. Notwithstanding such decision to terminate, the Enterprises shall remain jointly and severally liable to the Department for the due fulfilment of the obligations of the Consortium/Joint Venture as mentioned under item D above.
- F. No Enterprise to the Consortium/Joint Venture shall, without the prior written consent of the other Enterprises to the Consortium/Joint Venture and of the Department, cede any of its rights or assign any of its obligation under the consortium/joint venture agreement in relation to the Contract with the Department referred to herein.
- G. The Enterprises choose as the *domicilium citandi et executandi* of the Consortium/Joint Venture for all purposes arising from the consortium/joint venture agreement and the Contract with the Department in respect of the project under item A above:

i ilysical addiess.	
·	
	(code
Postal Address:	
	(code
Telephone number:	(code)
Fax number:	(code)







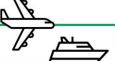
	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			

Note:

- * Delete which is not applicable.
- 2. NB. This resolution must be signed by all the Duly Authorised Representatives of the Legal Entities to the Consortium/Joint Venture submitting this Bid.
- 3. Should the number of Duly Authorised Representatives of the Legal Entities joining forces in this Bid exceed the space available above, additional names and signatures must be supplied on a separate page.
- **4.** Resolutions, duly completed and signed, from the separate Enterprises who participate in this Consortium/Joint Venture must be attached to the Special Resolution.
- 5. Joint Venture Agreement must be attached must be attached to this Bid.







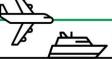
(V) <u>CERTIFICATE FOR SOLE PROPRIETOR</u>
I,, hereby confirm that I am the sole owner of the business trading as
Signature of Sole owner:
As Witnesses:
1
2
Date:
REGISTRATION CERTIFICATE / AGREEMENT / ID DOCUMENT

Important note to tenderer:

Registration Certificates for Companies, Close Corporations and Partnerships, or Agreements and Powers of Attorney for Joint Ventures, or ID documents for Sole Proprietors, all as referred to in the foregoing forms and in T2.1, must be inserted here.







T2.1.C JOINT VENTURE / CONSORTIUM DISCLOSURE FORM

Tenderers submitting tenders as a joint venture or consortium are to attach a signed copy of the Joint Venture / Consortium Agreement **duly signed by all parties**.

Where a Joint Venture / Consortium Agreement has not yet been formalized, the tenderer is to attach a Letter of Intent of a Joint Venture / Consortium, **duly signed by all parties**.

The percentage (%) shareholding as well as the participation details of each member shall be clearly stated.

Please note Form SBD6.1:

- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that **the entity submits their B-BBEE status level certificate**.
- 5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that **the entity submits their consolidated B-BBEE scorecard** as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate tender

NOTE: The bidder of each company to a consortium /joint venture must be registered on the Central Supplier Database (CSD) prior to award.

T2.1.D Bidder's Disclosure

SBD 4: BIDDER'S DISCLOSURE FORM

1. PURPOSE OF THE FORM

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

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

2. BIDDER'S DECLARATION

2.1. Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise, employed by the state?

YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest¹ in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

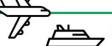
¹the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.





2.2	employed by the procuring institution?
	YES/NO
2.2.1	If so, furnish particulars:
2.3	Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract?
	YES/NO
2.3.1	If so, furnish particulars:
3	DECLARATION
	I, the undersigned, (name) in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:
3.1	I have read and I understand the contents of this disclosure;
3.2	I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
3.3	The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium2 will not be construed as collusive bidding.
3.4	In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
3.5	The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
3.6	There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

0000000



I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

I, THE UNDERSIGNED	
(NAME)	
	ED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT HE TENDER OR ACT AGAINST ME SHOULD THIS
Signature	Date
Position	







T2.1.E COMPULSORY ENTERPRISE QUESTIONNAIRE

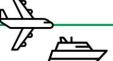
The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.				
Attach to th	nis form the most rece	nt financial staten	nents of the ten	dering entity.
Section 1:	Name of enterprise:			
Section 2:	VAT registration num	nber, if any:		
Section 3:	cidb registration nur	nber, if any:		
Section 4:	Particulars of sole p	roprietors and par	tners in partner	ships
Name*		Identity number*	*	Personal income tax number*
* Complete	only if sole proprietor or	partnership and at	tach separate pa	ge if more than 3 partners
Section 5:	Particulars of compa	nies and close co	orporations	
Company re	egistration number			
Close corpo	ration number			
Tax reference	ce number			
Section 6: Record in the service of the state Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:				
□ a mem □ a mem Nation □ a men munici	 □ a member of any provincial legislature □ a member of the National Assembly or the National Council of Province □ a member of the National Assembly or the National Council of Province □ a member of the board of directors of any municipal entity □ an official of any municipality or municipal □ an employee of Parliament or a provincial legislature 			

TENDER No.: SCMU10-24/25-0023









TENDER No.: SCMU10-24/25-0023

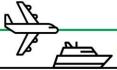
If any of the above boxes are marked, disclose the following:				
Name of sole proprietor, partner, director, manager, principal shareholder or	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)		
stakeholder		Current	Within last 12 months	
*insert separate page if necessary				
 □ a member of any municipal council □ a member of any provincial legislature □ a member of the National Assembly or the National Council of Province □ a member of the board of directors of any municipal entity □ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) □ a member of the board of directors of any municipal entity □ a member of an accounting authority of any national or provincial public entity □ an employee of Parliament or a provincial legislature □ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) □ an employee of Parliament or a provincial legislature □ an employee of any provincial department, national or provincial public entity or an employee of any provincial public entity or an employee of Parliament or a provincial legislature 				
Name of spouse, child or parent Name of institution, public office, board or organ of state and position held Status of service (tick appropriate column)			service appropriate	
		Current	Within last 12 months	
*insert separate page if necessary				
, , ,		olf of the onto	arprico:	
The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise:				
my / our tax matters are in orde ii) confirms that neither the name person, who wholly or partly exe of Tender Defaulters established	in a tax clearance certificate from the South <i>i</i> ;; of the enterprise or the name of any partnercises, or may exercise, control over the ented in terms of the Prevention and Combating of er, director or other person, who wholly or par	er, manager, rprise appea Corrupt Acti	director or other rs on the Register vities Act of 2004;	







control over the enterprise appears, has within the last five years been convicted of fraud or corruption;



- iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed	 Date	
Name	 Position	
Enterprise Name		





T2.1.F CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014

Note to tenderer:

Discovery that the tenderer has failed to make proper disclosure may result in terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderer's misrepresentation.

The tenderer shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).

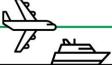
The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 months preceding the date of this tender.

SIGNATURE ON BEHALF OF TENDERER:









T2.1.G TAX CLEARANCE CERTIFICATE

IT IS A CONDITION OF BIDDING THAT:

- 1. The taxes of a successful bidder must be in order, or that satisfactory arrangements have been made with the Receiver of Revenue to meet his/her tax obligations.
- 2. The "Application for Tax Clearance Certificate (in respect of bidders), must be completed in all respects and submitted to the Receiver of Revenue where the bidders register for tax purposes. The Receiver of Revenue will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of twelve (12) months from date of issue. This Tax Clearance Certificate must be submitted in the original together with the bid. Failure to submit the original and valid Tax Clearance Certificate WILL invalidate the bid.
- 3. In the bids where Consortia/Joint Ventures/Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate. Copies of the Application for Tax Clearance Certificates are available at any Receiver's Office.

SIGNATURE	ON BEHALF OF	FTENDERER:	•



T2.1.H TENDERER'S FINANCIAL STANDING

Note to tenderer:

- 1. In terms of the Conditions of Tender the Employer may make inquiries to obtain a bank rating from the tenderer's bank.
- 2. To that end the tenderer must provide with his tender a bank rating, certified by his banker, to the effect that he will be able to successfully complete the contract at the tendered amount within the specified time for completion.
- 3. However, should the tenderer be unable to provide a bank rating with his tender, he shall state the reasons as to why he is unable to do so, and in addition provide the following details of his banker and bank account that he intends to use for project:

Name of account holder:			
Name of Bank:	Branch:		
Account number:	Type of account:		
Telephone number:	Facsimile number:		
Name of contact person (at bank):			
lead to the conclusion that the tenderer do	details or a certified bank rating with his tender, will bes not have the necessary financial resources at his fully within the specified time for completion.		
The Employer undertakes to treat the information thus obtained as confidential, strictly for the use of evaluation of the tender submitted by the tenderer.			
·			
SIGNATURE ON BEHALF OF TENDERER:			







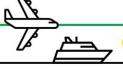


T2.1.I CENTRAL SUPPLIER DATABASE

Tenderers <u>must attach to this page</u>, proof of registration with the Centralised Supplier Database of National Treasury (In the case of **Joint Ventures**, **proof must be provided for each partner**).

I, the undersigned, confirm the following details of the firm/company's registration on the National Treasury Central Supplier Database:
Supplier Name:
Supplier Number





T2.1.J SPECIAL CONDITIONS

1. Joint Venture or Consortium Agreement

An acceptable Joint Venture or Consortium Agreement

 Should clearly and comprehensibly set out the contribution to be made by each member towards the activities of the Joint Venture or Consortium in securing and executing the contract and should allocate monetary values to such contributions.

TENDER No.: SCMU10-24/25-0023

- Should record the percentage participation by each member in all aspects of the fortunes of the Joint Venture or Consortium, including risks, losses and liabilities.
- Should provide for meaningful input by all members to the policy making and management activities of the Joint Venture or Consortium.
- Should provide for the establishment of a management body for the Joint Venture or Consortium.
- Should provide measures to limit, as far as possible, losses to the Joint Venture or Consortium by the default of a member.
- Should promote consensus between the members whilst ensuring that the activities of the Joint Venture or Consortium will not be unduly hindered by failure to achieve it.
- Should have all the partner's physical addresses.

2. Penalties

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

In the event that the Tenderer fails to substantiate that any failure to achieve the contract participation goal was due to quantitative under-runs, the elimination of items contracted to targeted enterprises, or any other reason beyond the Tenderer's control which may be acceptable to the employer, the penalties provided for below shall apply:

- 2.1 The Tenderer may be required to pay to the employer penalties (P) in the amount Determined in accordance with the following formulae:
 - (a) For specified minimum and maximum contract participation goal percentages, the formula shall be as follows:

2.2 The Tenderer's claims for payment may be rejected as being incomplete should the appropriate supporting documentation not be provided.

00000000

Signed	Date
Name	Position
Tenderer	
	- 18 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
	Page 34

T2.2 RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT



T2.2K.

SBD 6.1

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

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

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

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all tenders:
 - The 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - The 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).
- 1.2 To be completed by the organ of state

(delete whichever is not applicable for this tender)

- (a) The applicable preference point system for this tender is the 80/20 preference point system.
- 1.3 Points for this tender shall be awarded for:
 - (a) Price; and
 - (b) Specific goals.
- 1.4 To be completed by the organ of the state:

The maximum points for this tender are allocated as follows:

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

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

TENDER No.: SCMU10-24/25-0023

2. **DEFINITIONS**

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1 **POINTS AWARDED FOR PRICE**

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

$$Ps = 80 \left(1 - rac{Pt - Pmin}{Pmin}
ight)$$
 or $Ps = 90 \left(1 - rac{Pt - Pmin}{Pmin}
ight)$

Where:

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2 FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1 POINTS AWARDED FOR PRICE

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

$$80/20$$
 or $90/10$

$$Ps = 80\left(1 + \frac{Pt - Pmax}{Pmax}\right)$$
 or $Ps = 90\left(1 + \frac{Pt - Pmax}{Pmax}\right)$

Where:

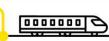
Ps = Points scored for price of tender under consideration

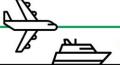
Pt = Price of tender under consideration

Pmax = Price of lowest acceptable tender











4. POINTS AWARDED FOR SPECIFIC GOALS

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

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

Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

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

PREFERENTIAL SPECIFIC GOALS POINTS TABLE		
The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Historically Disadvantaged Individuals		
Black ownership	10	
Woman ownership	5	
Locality:-		
(a) Preferred address in the Eastern Cape on CSD not changed in the last 3 years	5	
b) Alternative address on CSD in the Eastern Cape in the last 3 years	3	
(c) Outside Eastern Cape no satellite office in Eastern Cape		
(i)including preferred address less that 3 years	1	
(ii) Alternative address less than 3 years		







TENDER No.: SCMU10-24/25-0023

	DEC	LARATION WITH REGARD TO COMPANY/FIRM		
4.3	Name	e of company/firm:		
4.4	Comp	pany registration number:		
4.5	Туре	of company/firm:		
		Partnership/Joint Venture/Consortium One-person business/Sole propriety Close Corporation Public Company Personal Liability Company (Pty) Limited Non-Profit Company State Owned Company APPLICABLE BOX		
4.6	the po	undersigned, who is duly authorised to do so on behalf of the company/firm, certify that bints claimed, based on the specific goals as advised in the tender, qualifies the company/or the preference(s) shown and I acknowledge that:		
	i)	The information furnished is true and correct;		
	ii)	The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;		
	iii)	In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;		
	iv)	If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have:		
		 (a) Disqualify the person from the tendering process; (b) Recover costs, losses or damages it has incurred or suffered as a result of that person's conduct; (c) Cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation; (d) Recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of the state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and (e) Forward the matter for criminal prosecution, if deemed necessary. 		
	SIGNATURE(S) OF TENDERER(S)			
SURN	AME A	AND NAME:		
DATE	:			







T2.2L. RECORD OF ADDENDA TO TENDER DOCUMENTS

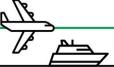
I / We confirm that the following communications amending the tender documents, received from the Employer or his representative before the closing date for submission of this tender offer, have been taken into account in this tender offer.

No	DATE	TITLE OR DETAILS
1		
2		
3		
4		
5		
6		
7		
8		









T2.2M. PLANT AND EQUIPMENT

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

(a) Details of major equipment that is owned by me / us and immediately available for this contract.

DESCRIPTION (Type, Size, Capacity etc)	QUANTITY	YEAR OF MANUFACTURE

Attach additional pages if more space is required

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

DESCRIPTION (Type, Size, Capacity etc)		HOW ACQUIRED	
	QUANTITY	HIRE / BUY	SOURCE

Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

SIGNATURE ON BEHALF OF TENDERER:	
	A /8
An efficient, safe, sustainable, affordable and accessible transport system	Page 41

T2.2N. SCHEDULE OF SPECIALIST SUB-CONSULTANTS

The tenderer shall list below the specialist items of work on this contract. Alternatives may be mentioned.

The tenderer shall state whether he intends to carry out any specialized work himself.

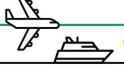
Acceptance of this tender shall not be construed as approval of all or any of the listed specialist sub-consultants. Should any or all of the specialist sub-consultants not be approved subsequent to the acceptance of the tender, it shall in no way invalidate this tender, and the tendered unit rates for the various items of work shall remain final and binding, even in the event of a sub-consultant not listed below being approved by the engineer.

Specialized item	Name of Specialist Sub-consultant





SIGNATURE ON BEHALF OF TENDERER:



T2.20. INDICATIVE PROGRAMME

Note to tenderer:

If a tenderer wishes to submit an alternative tender then this form, appropriately completed, shall be attached to the Pricing Schedule for the alternative proposal.

The tenderer shall attach a preliminary programme, reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this contract. The programme shall be in accordance with the information provided in T2.2P: Schedule of Estimated Monthly Expenditure and with all other aspects of the tender.

SIGNATURE ON BEHALF OF TENDERER:





T2.2P. ESTIMATED MONTHLY EXPENDITURE

Note to Tenderer:

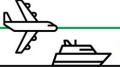
If a tenderer wishes to submit an alternative tender then this form, appropriately complete, shall be attached to the Pricing Schedule for the alternative proposal.

The tenderer shall state his estimated value of the work to be completed every month, based on his preliminary programme and his tendered unit rates, in the table below:

Month	Value
1	
2	
3	
4	
5	
6	
Total	







T2.2Q. AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

(This is not an invitation for amendments, deviations or alternatives but should the tenderer, desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder. The Employer will not consider any amendment or alternative offers unless form (a) and (b) has been completed to the satisfaction of the Employer).

I / We herewith propose the amendments and alternatives as set out in the tables below:

(a) AMENDMENTS

PAGE, CLAUSE OR ITEM NO	PROPOSED AMENDMENT

Notes:

- (1) Amendments to the General and Special Conditions of Contract are not acceptable;
- (2) The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.

(b) ALTERNATIVES

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

- Notes: (1) Individual alternative items that do not justify an alternative tender, and an alternative offer for time for completion should be listed here.
 - (2) In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.
 - (3) Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.

SIGNATURE ON BEHALF OF TENDERER:	
	L B
An efficient, safe, sustainable, affordable and accessible transport system	Page 45

T2.2R. COMPANY EXPERIENCE

Tenderers are required to demonstrate their ability to undertake the work and provide proof of previous experience and expertise to undertake a project of this nature. Bidders shall provide details (including traceable references) of similar projects currently in progress or carried out in the past five years, as per the schedule below:

BRIDGE AND MAJOR CULVERT INSPECTIONS ON PROVINCIAL ROADS IN THE EASTERN CAPE PROVINCE			
PROJECT DESCRIPTION	YEAR COMPLETED	FEE VALUE	EMPLOYER REFERENCE Include Contact Tel. No.

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

SIGNATURE ON BEHALF OF TENDERER:	
	a Pr
An efficient safe sustainable affordable and accessible transport system	Page 46

Page | 47

T2.2S. PERSONNEL SCHEDULE

Only tenderers who have suitably experienced and qualified Key Persons and other Personnel available that satisfy the criteria and specific conditions stated under the Conditions of Tender as well as the Conditions of Contract are eligible to submit tenders.

Only personnel <u>approved</u> by the Employer and, in the case of bridge inspectors and major culvert inspectors, those who have attended and successfully completed the Testing and Calibration Session shall be allowed to carry out the required Deliverables / Inspection Surveys. The tenderer's attention is specifically directed to Clauses 2.1 and 3.8.2 of the Conditions of Tender regarding eligibility and responsiveness.

The names of the proposed Key Persons and other Personnel shall be provided in the table below.

CONTRACT B:

Structures Project Manager/s Name of Key Person Offered:	1
Bridge Inspector/s Name/s of Key Person/s Offered:	1. 2. 3. 4.
Major Culvert Inspector/s Name/s of Key Person/s Offered:	1. 2. 3. 4.

CONTRACT C:

Structures Project Manager/s Name of Key Person Offered:	1
Bridge Inspector/s Name/s of Key Person/s Offered:	1. 2. 3. 4.
Major Culvert Inspector/s Name/s of Key Person/s Offered:	1. 2. 3. 4.

CONTRACT D:

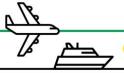
Manager/s Name of Key Person Offered:	1
Bridge Inspector/s Name/s of Key Person/s Offered:	1. 2. 3. 4.
Major Culvert Inspector/s Name/s of Key Person/s Offered:	1. 2. 3. 4.

<u>Detailed and project specific</u> Curricula Vitae for all proposed Personnel shall <u>accompany and be attached to this tender</u>, demonstrating that the individuals comply with the various criteria and specific conditions, as applicable.









The credentials of more than the minimum specified Key Persons may be presented for approval.

With regard to the detail and contents of the Curricula Vitae applicable to **Key Persons**, it should be noted that the following items will be regarded as critical and of particular importance. The Curricula Vitae shall be so structured as to, inter alia, incorporate the following:

- a) Personnel's date of birth.
- b) Personnel's full qualifications (educational).
- c) Name of current employer and position within the enterprise.
- d) A list of previous employers, clearly stating periods of service and providing a person as reference with these employers, complete with contact telephone numbers.

e) For Structures Project Managers:

- Proof of registration as a Professional Engineer or Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- Proof of COTO/SANRAL accreditation as a Bridge Inspector or Senior Bridge Inspector,
- Detailed and project specific experience related bridge and major culvert inspections (TMH19), experience must also be expressed in terms of the number of bridges and major culverts inspected since COTO accreditation, the number of assignments as well as the total number inspected during the past ten years, complete with dates and references.

f) For Bridge Inspectors:

- Proof of registration as a Professional Engineer or Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- Proof of COTO accreditation as a Bridge Inspector or Senior Bridge Inspector,
- Detailed and project specific experience related to bridge and major culvert inspections (TMH19), experience must also be expressed in terms of the number of bridges and major culverts inspected since COTO accreditation, the number of assignments as well as the total number inspected during the past five years, complete with dates and references.

g) For Major Culvert Inspectors:

- Proof of COTO's accreditation as a Major Culvert Inspector,
- Detailed and project specific experience related to major culvert inspections (TMH19).
 Experience must also be expressed in terms of the number of major culverts inspected since COTO accreditation, the number of assignments as well as the total number inspected during the past five years, complete with dates and references.

Failure to comply with all of the above requirements shall be regarded as a material deviation or qualification and the tender shall be declared non-responsive.

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

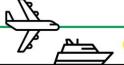
SIGNATURE ON BEHALF OF TENDERER:			
			1
		A Ja	
An efficient, safe, sustainable, affordable and accessible transport system	0000000		Page 49

T2.2T. TOTAL CONTRACT QUALITY PLAN

Quality is intrinsic to the survey's success. Tenderers shall submit a Total Contract Quality Plan with their tender submissions. The Total Contract Quality Plan shall at least include the following:

- Project Plan that describes all processes and time framework in which the survey will be completed.
 No exact dates need to be stated in the project plan but rather a relative timeframe including measurements of Reference Sections before and after the network measurements (e.g. 2 months after the date of appointment).
- Calibration procedures and certificates for all equipment to be used by the Tenderer shall be part of the Total Contract Quality Plan.
- Contingency Plan including backup equipment, a second trained operator, planning for inclement weather, etc.
- The Tenderer shall specify a system whereby he will complete a form or a logbook to note the outcome of the daily checks, which is to be performed on the profilers.
- The Tenderer shall describe the format and contents of the raw data files collected by the profilers.
- The Tenderer shall discuss general quality issues like:
 - o assuring integrity of the data,
 - how to ensure consistency of data if the appointed operator cannot proceed with the survey,
 etc.
- The Total Contract Quality Plan shall include a draft Safety Plan.
- The draft Safety Plan shall provide evidence of the Tenderer's planning regarding the following aspects of safety and include at least the following headings:
 - Safety precautions for surveys
 - Safety procedures during execution of the surveys
 - Emergency procedures in cases of incidents
 - Compliance with OHSA as relevant

The Employer and/or Employer's agent will assess the Total Contract Quality Plan (including draft Safety Plan) and comment to the successful tenderers on the acceptability of the plan and any shortcomings. The draft plan must then be updated to the satisfaction of the Employer before the Service Provider commences any surveys.



T2.3 PRO FORMA FORMS TO BE COMPLETED BY SUCCESSFUL TENDERER



T2.3U. FORM OF GUARANTEE

Contract No:

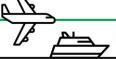
	HEREAS The Province of the Eastern Cape Department of Transport (hereinafter referred to as Employer") entered into, a Contract with:
 (he	ereinafter called "the Contactor") on the day of
•	(Give detailed project name)
	ID WHEREAS it is provided by such Contract that the Tenderer shall provide the Employer with curity by way of a guarantee for the due and faithful fulfillment of such Contract by the Tenderer;
AN the	ID WHEREAS has / have at
rec	quest of the Tenderer, agreed to give such guarantee;
he Em per cor	OW THEREFORE WE
1.	The Employer shall, without reference and the first to unchange amplete liberty of action to act in any manner authorized and/or contemplated by the tender to the said Contract, and/or to agree to any modifications, variations, alterations, ections or extentions of the contract, and the first rights under one guarantee shall him a way be prejudiced nor our liability hereunder be affected by reason of any modification, alterations of the countract, or of any modification proportion, alterations of the countract which the Employer may make, give, concede or a section under the said contract.
2.	This guarantee shall a limited to as a surror money.
3.	The Employer shall be entitled without reference us, to release any guarantee held by it, and to give time to or compound or lake any others a gement with the Tenderer.
4.	This guarantee shall remain in full force are effect until the issue of the Certificate of Completion in terms of the Contract, unless we can sed in writing by the Employer before the issue of the said Certificate of his intention to institute times, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.
5.	Our total liability hereunder shall not exceed the Guaranteed Sum of
	R(in figures)
6.	The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum





with the beneficiary, whereupon our liability hereunder shall cease.





TENDER No.: SCMU10-24/25-0023

7. We hereby choose our address for the serving of all hotices for all purposes ansing here from as
IN WITNESS WHEREOF this guarantee has been executed by us at
Signature
Duly authorized to sign on behalf of
Address
As witnesses:
1
2









T2.3V. PRO FORMA: NOTIFICATION FORM IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993, CONSTRUCTION REGULATIONS 2014

[This form must be completed and forwarded, <u>prior to commencement</u> of work on site, by all Contractors that qualify in terms of Regulation 3 of the Construction Regulations 2014, to the office of the Department of Labour]

1.	1. (a) Name and postal address of Tenderer:		
	(b)		
		Telephone number:	
2.	Ten	nderer's compensation registration number:	
3.	(a)	Name and postal address of client:	
	(b)	Name of client's contact person or agent:	
		Telephone number	
4.		Name and postal address of designer(s) for the pro-	
		Name of designer's contact person:	
		Telephone number	
5.	Nan	me of Tenderer's construction supply vision site apply	erms of
		gulation 6(1):	none
6.		me/s of Tenderer's 1/2 orcate supervises on site app	point of regulation 6(2).
7.		act physical address of the convuction site or site of the convuction of the convuct	
8.		ture of the construction ve	
9.	Ехр	pected commencement date:	
10.	Ехр	pected completion date:	
11.	Esti	imated maximum number of persons on the construction	n site:
12.	Plar	nned number of sub-consultants on the construction site	e accountable to Tenderer:
13.	Nan	me(s) of sub-consultants already chosen:	
CIC	NED) BY: :	
			DATE:
		RER:	
CLII	=N I :	: :	DATE:

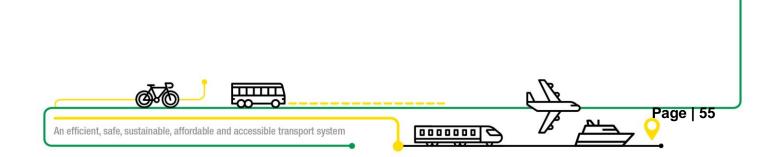




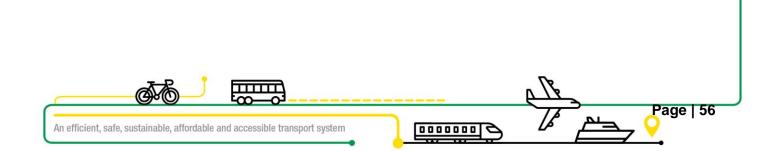


0000000

THE CONTRACT



PART C1: AGREEMENTS & CONTRACT DATA



C1.1A FORM OF OFFER AND ACCEPTANCE: CONTRACT B

OFFER – AMATHOLE DISTRICT AND BUFFALO CITY METROPOLITAN

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: PROFESSIONAL PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE

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

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

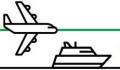
THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS (Contract Price)

			,
R			(In figures)
acceptance an stated in the te	be accepted by the Employer by sign d returning one copy of this document to ender data, whereupon the tenderer bea of contract identified in the contract data	the tenderer before the end comes the party named as	d of the period of validity
For the Tende	erer:		
Signature			
Name			
Capacity			
(Name and ad	dress of organization)		
Name and sign	nature of witness	Date	









ACCEPTANCE

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

TENDER No.: SCMU10-24/25-0023

The terms of the contract, are contained in:

- Part C1 Agreements and contract data, (which includes this agreement)
- Part C2 Pricing data
 Part C3 Scope of work

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C3 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be signed by the authorised representative(s) of both parties.

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

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

For the Employer:

Signature			
J			
Name			
Capacity			
(Name and add	ress of organization)		
Nama and signs	ture of witness		
lame and signature of witnessDate			









For the Tenderer:

SCHEDULE OF DEVIATIONS

Item	Deviation Details

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

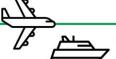
It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising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

Signature		
Name		
Capacity		
(Name and add	ress of organization)	
Name and signa	ature of witnessDate	
For the Employ	/er:	
Signature		
Name		
Capacity		
(Name and add	ress of organization)	
Name and sign	ature of witnessDate	









C1.1C FORM OF OFFER AND ACCEPTANCE: CONTRACT C

OFFER - CHRIS HANI AND JOE GQABI DISTRICTS

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: PROFESSIONAL PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE

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

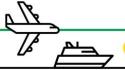
By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the service provider under the contract including compliance with all its terms and conditions according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

	ED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS (Contract Price)
	5 14 12
•••••	Rand (In words);
R	(In figures)
acceptance a stated in the	ay be accepted by the Employer by signing the acceptance part of this form of offer and and returning one copy of this document to the tenderer before the end of the period of validity tender data, whereupon the tenderer becomes the party named as the service provider in s of contract identified in the contract data.
For the Tend	derer:
Signature	
Name	
Capacity	
(Name and a	ddress of organization)
Name and sig	gnature of witnessDate









ACCEPTANCE

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

TENDER No.: SCMU10-24/25-0023

The terms of the contract, are contained in:

- Part C1 Agreements and contract data, (which includes this agreement)
- Part C2 Pricing data
 Part C3 Scope of work

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C3 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be signed by the authorised representative(s) of both parties.

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

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

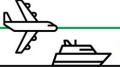
For the Employer:

Signature			
Name			
Capacity			
Name and address of organization)			
Name and signature of witness		ate	









For the Tenderer:

SCHEDULE OF DEVIATIONS

Item	Deviation Details

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

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

Signature	
Name	
Capacity	
(Name and add	ress of organization)
Name and signa	ature of witnessDate
For the Employ	yer:
Signature	
Name	
Capacity	
(Name and add	ress of organization)
Name and signa	ature of witnessDate









C1.1D. FORM OF OFFER AND ACCEPTANCE: CONTRACT D

OFFER - SARAH BAARTMAN DISTRICT AND NELSON MANDELA BAY METROPOLITAN

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: PROFESSIONAL PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE

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

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

	ED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS (Contract Price)
	Rand (In words);
	(In figures)
acceptance a stated in the	by be accepted by the Employer by signing the acceptance part of this form of offer and and returning one copy of this document to the tenderer before the end of the period of validity tender data, whereupon the tenderer becomes the party named as the service provider in sof contract identified in the contract data.
For the Tend	lerer:
Signature	
Name	
Capacity	
(Name and a	ddress of organization)
Name and sig	gnature of witnessDate









ACCEPTANCE

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

TENDER No.: SCMU10-24/25-0023

The terms of the contract, are contained in:

- Part C1 Agreements and contract data, (which includes this agreement)
- Part C2 Pricing data
 Part C3 Scope of work

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C3 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be signed by the authorised representative(s) of both parties.

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

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

For the Employer:

Signature			
Name			
Capacity			
Name and address of organization)			
Name and signature of witness		ate	

0000000







For the Tenderer:

SCHEDULE OF DEVIATIONS

Item	Deviation Details

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

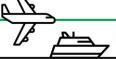
It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising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

Signature	
Name	
Capacity	
(Name and add	ress of organization)
Name and signa	ature of witnessDate
For the Employ	yer:
Signature	
Name	
Capacity	
(Name and add	ress of organization)
Name and signa	ature of witness









C1.2. CONTRACT DATA

The Conditions of Contract are the *Standard Professional Services Contract (July 2009)* published by the Construction Industry Development Board.

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

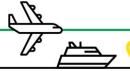
PART 1: DATA PROVIDED BY THE EMPLOYER

Part 1: Data provided by the Employer

Clause	Description/	Wording	
1.	<u>Deliverable</u>		
		ading "Deliverable" within this Clause and replace with:	
	" <u>Deliverable</u>	/ Assessment"	
1.	<u>Employer</u>		
	The Employe	r is the Eastern Cape Department of Transport (ECDOT)).
1.	Key Persons	<u>.</u>	
	Refer also to	Clause 7 of the Conditions of Contract.	
1.	Period of Pe	<u>rformance</u>	
	The Period of	Performance is six (6) months.	
		Provider will be required to provide data to the employe	er on a monthly
	basis.		
1.	Contract(s)		
	The three contracts(s) are for the PROFESSIONAL PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE, as follows:		
	Contract	District	
	В	Amathole District and Buffalo City Metropolitan	
	С	Chris Hani and Joe Gqabi Districts	
	D	Sarah Baartman District and Nelson Mandela Bay Metropolitan	
			·





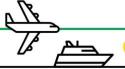


1.	Start Date The Start Date is when the Agreement comes into effect (Refer Form of Offer and Acceptance).
1.	Services Add the following to this Clause. "Services shall be deemed to include each and every separate Deliverable / Assessment."
1.	Add the following new definition to Clause 1: "Conditions of Contract The General Conditions of Contract as amended in the Contract Data."
3.4.1	The authorised and designated representative of the Employer is: Engineering Advice and Services (Pty) Ltd Physical Address: 73 Heugh Road Walmer Gqeberha (port Elizabeth) Postal Address: PO Box 13867 Humewood 6013 Contact Person: Mr Drikus Bester Tel: +27 041 581 2421 Fax: +27 086 6839899 Electronic mail: drikusb@easpe.co.za
3.5	The location for performance of the Project is the Eastern Cape Province.
3.6	The Service Provider may not release public or media statements or publish material related to the Services or Project under any circumstances.
3.12	The penalty payable is R500.00 per day subject to a maximum amount of R25 000.00 for late submission of key reports.
3.15	The Programme shall be submitted within 14 calendar days of the award of the Contract.
4.3.1 (a)	The Employer will provide letters of introduction for approved staff of the Service Provider.



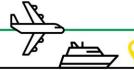






5.4.1	The Service Provider is required to provide the Service with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards.	
	The Service Provider is required to provided the following insurances:	
	a) Insurance against Professional Indemnity	
	Cover is: R 5 million (minimum)	
	Period of cover: From the Start Date up to one (1) year after the completion of the Contract	
	b) Insurance against General Public Liability	
	Cover is: R 10 million	
	Period of cover: From the Start Date up to the completion of the Contract	
	c) Third Party Liability	
	Cover is: R10 million	
	Period of cover: From the Start Date up to the completion of the Contract	
5.5	The Service Provider is required to obtain the Employer's prior approval in writing before taking / effecting any of the following actions:	
	 a) Appointing / utilising any other authorised and designated representative not listed and approved of by name in the Contract (Refer also Clause 5.3). 	
	 b) Appointing / utilising any other Key Persons not listed and approved of by name in terms of the Contract. (Refer also T2.2.S: Personnel Schedule). 	
	 Appointing / utilising any person on this Contract as a Bridge Inspector or a Major Culvert Inspector who has not attended and successfully completed the Testing and Calibration Session. 	
	 d) Appointing / utilising Sub-consultants for the performance of any part of the Service. 	
	e) Expending any Provisional Sum stated in the Contract.	
	f) Over-expenditure on the Contract.	
	g) Changing / amending the Scope of Work.	
	h) Making statements to the media regarding the Project.	
	 i) Using any of the Employer's or his representative's data capture software on other projects not related to this Contract. 	
	j) Selling the Employer's or his representative's data capture software.	
7.1.2	Only tenderers who have Key Persons, as listed below, as well as in the Tender Dare required to perform submit tenders.	
	The Structures Project Manager shall:	





- be accredited with the Committee of Transport Officials (COTO) as a Bridge Inspector or as a Senior Bridge Inspector, having at least 10 years COTO/SANRAL accreditation experience in TMH19 visual inspection of bridges and major culverts.
- be registered as a Professional Engineer under the Engineering Profession Act (Act 46 of 2000), or be registered as a Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- be allowed to be proposed as a Bridge Inspector, having completed at least 50 TMH19 bridge inspections since COTO accreditation, with this experience being gained over the past 5 years,
- be in the permanent employ of the tenderer and,
- be available to execute the required duties and responsibilities on the Contract tendered for should the tenderer's offer be accepted.

A minimum of at least four suitably experienced and qualified Bridge and Major Culvert Inspectors and who will be available for the execution and completion of the contract tendered for, are eligible to submit tenders. The Bridge and Major Culvert Inspectors shall consist of at least two Major Culvert Inspectors and two Bridge Inspectors.

Each Bridge Inspector and Major Culvert Inspector so proposed shall be required to comply with and meet the following criteria and specific conditions.

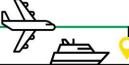
The Major Culvert Inspectors shall:

- be a COTO accredited Major Culvert Inspector, having completed at least 50 TMH19 major culvert inspections since COTO accreditation, with this experience being gained over the past 5 years,
- be a qualified civil engineering technician, technologist or engineer,
- be required to successfully complete and pass the employer's Compulsory "Testing and Calibration Session" with a minimum score of 85%,
- be allowed to conduct inspection surveys on major culverts only,
- be in the permanent employ of the tenderer or contractually committed to the tenderer should the tenderer win the tender and be available for the execution of the Contract tendered for and,
- be available to execute the required duties and responsibilities on the Contract tendered for, should the tenderer's offer be accepted.

The Bridge Inspectors shall:

- be a COTO accredited Bridge Inspector, having completed at least 50 TMH19 bridge inspections since COTO accreditation, with this experience being gained over the past 5 years, or be a COTO accredited Senior Bridge Inspector,
- be registered as a Professional Engineer under the Engineering Profession Act (Act 46 of 2000), or be registered as a Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- be required to successfully complete and pass the employer's Compulsory "Testing and Calibration Session" with a minimum score of 85%,
- be allowed to conduct inspection surveys on bridges and major culverts,
- be in the permanent employ of the tenderer or contractually committed to the tenderer should the tenderer win the tender and be available for the execution of the Contract tendered for and,
- be available to execute the required duties and responsibilities on the Contract tendered for should the tenderer's offer be accepted.





	Tenderers shall provide proof of the Key Persons' experience in a <u>detailed and project specific</u> Curricula Vitae, supported by the required certified copies of professional registration, COTO accreditation and qualifications for each contract tendered for.	
8.1	The Service Provider is to commence the performance of the Services within 7 days of date that the Contract becomes effective.	
8.2.1	The Contract shall be considered to be concluded annually when the Service Provider has completed all Deliverables in accordance with the Scope of Work annually.	
8.4.3 (c)	The period of suspension is not to exceed 12 months.	
9.1	Copyright of documents prepared for the Project shall be vested with the Employer.	
12.1	Interim settlement of disputes is to be by mediation.	
12.4	Final settlement is by arbitration.	
12.2.1	In the event that the parties fail to agree on a mediator, the mediator is nominated by Consulting Engineers South Africa.	
12.4.2	In the event that the parties fail to agree on an arbitrator, the arbitrator is nominated by Consulting Engineers South Africa.	
14	Remuneration and reimbursement of the Service Provider will be on the following basis:	
	Monthly submission of fee claims, with supporting documentation for time spent and disbursements.	







C1.3. ADJUDICATOR'S AGREEMENT

This ag	reement is made on the .	day of	between:
			(name of company / organisation)
of			
			(address)
and			(name of company / organisation)
of			
			(address)
(the Pa	urties)		
and			(name)
of			
	ljudicator).		(address)
Dispute	es or differences may arise	e/have arisen* between the Pa	arties under a Contract dated
	and known as		
and the	ese disputes or differences	s shall be / have been* referre	d to adjudication in accordance with the re") and the Adjudicator may be or has

* Delete as necessary

IT IS NOW AGREED as follows:

- 1 The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
- The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
- The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
- The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
- The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.









TENDER No.: SCMU10-24/25-0023

SIGNED by:	SIGNED by:	SIGNED by:
Name:	Name:	Name:
who warrants that he / she is duly authorised to sign for and on behalf of the first Party in the presence of	who warrants that he / she is duly authorised to sign for and behalf of the second Party in the presence of	the Adjudicator in the presence of
Witness:		
Name:		
Address:		
Date:		







0000000

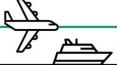
Contract Data

1	The Adjudicator shall be paid at the hourly rate of R in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to: (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs. (b) Telegrams, telex, faxes, and telephone calls. (c) Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. (e) Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R
4	The Adjudicator is/is not* currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

^{*} Delete as necessary







C1.4. AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993) AS AMENDED

THIS AGREEMENT made at
on this the day of in the year between THE
DEPARTMENT OF TRANSPORT, Directorate Planning and Design (hereinafter
called "the Employer") of the one part, herein represented by
in his capacity as
terms of the Employer's standard powers of delegation pursuant to the provisions of Act No 7 of 1998,
and
(hereinafter called "the Mandatory") of the other part, herein represented by
in his capacity as and being duly authorised by
virtue of a resolution appended hereto as Annexure A;
WHEREAS the Employer is desirous that certain works be done, viz
and has accepted a Tender by the Mandatory for the execution of such works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSED AS FOLLOWS:

- 1. The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this contract.
- 2. This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Employer or Engineer requiring him to commence the execution of the Works, to either -
 - (a) The date of the Final Certificate issued in terms of Clause 14 of the CIDB General Conditions of Contract (as contained in the "Standard Professional Services Contract", September 2005) (hereinafter referred to as "the GCC"), as contained in C1.2 of the Contract Documents pertaining to this Contract, or
 - (b) The date of termination of the Contract in terms of Clauses 8.4 of the GCC.









TENDER No.: SCMU10-24/25-0023

- 3. The Mandatory declares himself to be conversant with the following:
 - (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993) as amended by the OHS Amendment Act No 181 of 1993, hereinafter referred to as "The Act", with special reference to the following Sections of The Act:
 - (i) Section 8: General duties of Employers to their employees
 - (ii) Section 9: General duties of Employers and self-employed persons to persons other than employees
 - (iii) Section 37: Acts or omissions by employees or mandatories
 - (iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement
 - (v) Other safety regulations, as applicable.
 - (b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his sub-consultants.
- The Mandatory is responsible for the compliance with the Act by all his sub-consultants, whether or not selected and/or approved by the Employer.

The Mandatory warrants that all his and his sub-contractors' employees are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst any such employees are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.

- 5. The Mandatory undertakes to ensure that he and/or sub-consultants and/or their respective employees will at all times comply with the following conditions:
 - a) The Mandatory shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Mandatory and/or his employees and/or his sub-contractors.

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

Witnesses:	1	2
Names (in capitals):	1	2

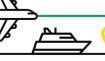
0000000

SIGNED FOR AND (ON BEHALF OF THE MANDATORY:	
Witnesses:	1	2

Names (in canitals):	1	2
manies (in capitais).	1	۷







ANNEXURE A

CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

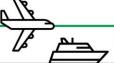
The signatory for the company that is the Service Provider in terms of the above-mentioned Contract and the Mandatory in terms of the above-mentioned Act shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the board of directors.

An example is given below:
"By resolution of the board of directors passed at a meeting held on
Mr/Ms
appears below, has been duly authorised to sign the AGREEMENT IN TERMS OF THE
OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 OF 1993) on behalf of
CIONED ON BELLALE OF THE COMPANY
SIGNED ON BEHALF OF THE COMPANY:
IN HIS/HER CAPACITY AS:
DATE:
SIGNATURE OF SIGNATORY:
WITNESS 1: WITNESS 2:
NAME (in capitals): NAME (in capitals):

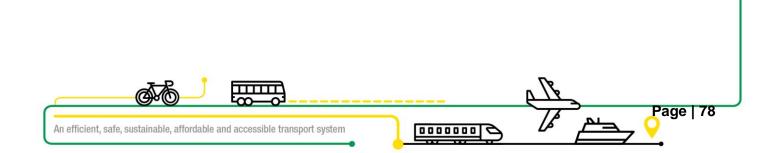








PART C2: PRICING DATA



PART C2.1: PRICING INSTRUCTIONS

Pre-amble to Pricing Schedule

1. The following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each activity / item of work for the services as defined in

the Scope of Work

Quantity: The number of units of work for each item of the services

Rate: The payment per unit of work at which the Tenderer tenders to do the work for the

services

Amount: The product of the quantity and the rate tendered for an activity / item

Lump sum: An amount tendered for an activity / item, the extent of which is described in the Pricing

Schedule, the Scope of Work or elsewhere, but of which the quantity of work for the

service is not measured in units.

Rate only: An amount per unit to be entered by the tenderer for execution of the specific work for

the services. No quantity is provided for this item, which may or may not be used by the

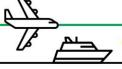
Employer to extend the work to be done under the contract.

 The quantities set out in the Pricing Schedule are approximate quantities. The quantities of work accepted and certified for payment for the services, and <u>not</u> the quantities given in the Pricing Schedule, will be used to determine payments to the service provider.

The validity of the Contract shall in no way be affected by differences between the quantities in the Pricing Schedule and the quantities finally certified for payment. Work for the services will be valued at the rates or lump sums tendered, subject to the provisions of paragraphs 8 and 9 of this section.

- 3. The tendered rates are all-inclusive and covers the execution of the activities as listed, including all accommodation, travelling expenses, all mandatory taxes and levies (excluding VAT), all liaison, insurance against damage, compensation for loss as well as any other possible expenses which have not been specifically mentioned, but which may be related to the execution of the work for the services. Value added tax (VAT) shall be excluded from the rates and prices and provided for as the total VAT on the cost of the Services in the Pricing Schedule.
- 4. The tendered Lump Sum rates are all-inclusive and cover the execution of the activities as listed. These rates should include all work required to execute the activities, all accommodation, travelling expenses, all mandatory taxes and levies (excluding VAT), all liaison, attendance of all meetings, as well as any other possible expenses and disbursements which have not been specifically mentioned, but which may be related to the execution of the work for the services. Value added tax (VAT) shall be excluded from the rates and prices and provided for as the total VAT on the cost of the Services in the Summary of the Pricing Schedule.





5. The Tenderer shall fill in a rate or a lump sum for each activity / item where this is provided for. The Tenderer shall also fill in a rate against the activities / items where the words "Rate only" appear in the amount column. Although no work is foreseen under these activities / items, and no quantities are consequently given in the quantity column, the tendered rates shall apply should work under these items actually be required.

If the Tenderer has tendered a rate but omitted the amount, or vice versa, the missing amount or rate will, if possible, be determined in conjunction with the Tenderer from the available data, and the Tenderer must confirm his acceptance of these amounts and rates.

If the Tenderer groups a number of items together and tenders one lump sum for such group of items, this single tendered lump sum shall apply to that group of items and not to each individual item, or, should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed nil.

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

- 6. The services executed are being measured for payment in accordance with the methods described in the Contract Documents under the various payment items, notwithstanding any custom to the contrary.
- 7. The short descriptions of the payment items in the Pricing Schedule are given to identify the items and not to provide specific details. Reference shall inter alia be made to the Drawings, Scope of Work, Conditions of Contract and Special Conditions of Contract (if any) for more detailed information regarding the extent of the work entailed under each item.
- 8. Subject to the conditions stated in paragraph 9 below, the rates and lump sums filled in by the Tenderer in the Pricing Schedule shall be final and binding with regard to submitting the Tender, and may not be adjusted should there be any mistakes in the extensions thereof and in the total sums appearing in the Tender. Should there be discrepancies between the Tender Sum and the correctly extended and totalled Pricing Schedule, the rates will be deemed correct, and the Employer will have the right to make such adjustments to the Tender Sum as he deems necessary to reconcile the total of the Pricing Schedule with the Tender Sum.

In such an event the Tenderer will be consulted but, failing agreement between the parties, the decision of the Employer will be final and binding. Adjustment of the Tender Sum will take place only after acceptance of the Tender, but prior to the signing of the Contract. In their own interests Tenderers should make doubly sure of the correctness of their tendered rates, the extensions and the Tender Sum.

- 9. A Tender may be rejected if the unit rates or lump sums for some of the activities / items in the Pricing Schedule are in the opinion of the Employer, unreasonable or out of proportion and if the Tenderer fails within a period of seven (7) days of having been notified in writing by the Employer to adjust the unit rates or lump sums for such activities / items to make such adjustments.
- 10. All rates and sums of money quoted in the Pricing Schedule shall be in Rands and whole Cents. Fractions of a cent shall be discarded.



C2.2 PRICING SCHEDULE

C2.2.1 Contract B: Amathole Districts and Buffalo City Metropolitan

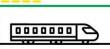
Item Number	Description	Unit	Quantity	Rate	Amount
C3.9.1	Testing and Calibration Workshop	Lump Sum	1		
C3.9.2	Inventory and Inspection:	•			-
(i)	Small Bridges	No	113		
(ii)	Medium Bridges	No	87		
(iii)	Large Bridges	No	24		
(iv)	Very Large Bridges	No	6		
(v)	Major Culverts	No	303		
C3.9.3	Specialised Equipment Hire	Provisional Sum	1	-	R 100 000-00
C3.9.4	Handling Charges on C3.9.3	%	R 100 000-00		
C3.9.5	C3.9.5 <u>Time-Based Fees:</u>			-	
(i)	Structures Project Manager	Hr	80		
(ii)	Bridge Inspector	Hr	80		
(iii)	Major Culvert Inspector	Hr	32		
C3.9.6	Occupational Health and Safety Compliance	Sum	1		
Subtotal A					
Add: Contingencies on Subtotal A above (Fixed Amount)					R 300 000-00
Subtotal B					
Add: 15% V	alue Added Tax on Subtotal B above	•			
	TOTAL OF PRICES RRIED OVER TO FORM OF OFFER	– FORM C1.1b)		

I, the undersigned, wa	arrant that I am duly authorised	d to do so on behalf of th	ne enterprise and confirm
that the contents of th	is schedule are, to my persona	al knowledge and best b	elief, both true and
correct.			

Signed	Date
Name	Position
Tenderer	









C2.2.2 Contract C: Chris Hani and Joe Ggabi Districts

Item Number	Description	Unit	Quantity	Rate	Amount
C3.9.1	Testing and Calibration Workshop	Lump Sum	1		
C3.9.2	Inventory and Inspection:				-
(i)	Small Bridges	No	95		
(ii)	Medium Bridges	No	211		
(iii)	Large Bridges	No	26		
(iv)	Very Large Bridges	No	1		
(v)	Major Culverts	No	577		
C3.9.3	Specialised Equipment Hire	Provisional Sum	1	-	R 100 000-00
C3.9.4	Handling Charges on C3.9.3	%	R 100 000-00		
C3.9.5	.9.5 <u>Time-Based Fees:</u>				
(i)	Structures Project Manager	Hr	80		
(ii)	Bridge Inspector	Hr	80		
(iii)	Major Culvert Inspector	Hr	32		
C3.9.6	Occupational Health and Safety Compliance	Sum	1		
Subtotal	A				
Add: Contingencies on Subtotal A above (Fixed Amount)					R 300 000-00
Subtotal	В				
Add: 15% Value Added Tax on Subtotal B above					
OFFERED TOTAL OF PRICES (TO BE CARRIED OVER TO FORM OF OFFER – FORM C1.1c)					

that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.		
Signed	Date	

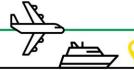
I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm

Tenderer









C2.2.3 Contract D: Sarah Baartman District and Nelson Mandela Bay Metropolitar

C2.2.3 Contract D: Sarah Baartman District and Nelson Mandela Bay Metropolitan					
Item Number	Description	Unit	Quantity	Rate	Amount
C3.9.1	Testing and Calibration Workshop	Lump Sum	1		
C3.9.2	Inventory and Inspection:				-
(i)	Small Bridges	No	82		
(ii)	Medium Bridges	No	82		
(iii)	Large Bridges	No	62		
(iv)	Very Large Bridges	No	36		
(v)	Major Culverts	No	448		
C3.9.3	Specialised Equipment Hire	Provisional Sum	1	-	R 100 000-00
C3.9.4	Handling Charges on C3.9.3	%	R 100 000-00		
C3.9.5	Time-Based Fees:				-
(i)	Structures Project Manager	Hr	80		
(ii)	Bridge Inspector	Hr	80		
(iii)	Major Culvert Inspector	Hr	32		
C3.9.6	Occupational Health and Safety Compliance	Sum	1		
Subtotal A					
Add: Contingencies on Subtotal A above (Fixed Amount)					R 300 000-00
Subtotal B					
Add: 15% V	alue Added Tax on Subtotal B above				
	TOTAL OF PRICES RRIED OVER TO FORM OF OFFER	– FORM C1.1c	1)		

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

0000000

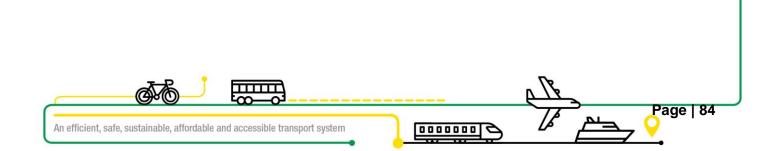




Tenderer



PART C3: SCOPE OF WORK



C3.1 EMPLOYERS OBJECTIVES

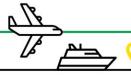
The Employer is responsible for the implementation and maintenance of a Road Asset Management System (RAMS) for all provincial road assets within the Eastern Cape.

According to the recommendations in the TMH19, the Employer is to conduct comprehensive visual inspections every 5 years on the bridges and major culverts on its network. The Employer therefore wishes to appoint suitable Service Providers to undertake inventories and inspections on the approximately 1019 bridges and 1505 major culverts along provincial paved and unpaved roads throughout the Eastern Cape, under 4 separate contracts.

C3.2 SITE LOCATION

The project includes the inventory and inspection of bridges and major culverts along provincial roads throughout the Eastern Cape. The location of the structures to be inspected are indicated on the drawings attached as Appendix B and the total numbers, grouped per District / Metropolitan and Local Municipal area are provided in the table below. A schedule of bridges is attached as Appendix C, indicating the total length of each bridge. For the purpose of this contract, a structure is classified as a Bridge or a Major Culvert in terms of the criteria as stipulated in the latest TMH19.

District/Matropoliton	Local Municipal Area	Estimated Quantities							
District/Metropolitan	(LMA)	Bridges	Major Culverts	Total					
	Amahlathi	39	68	107					
	Great Kei	12	23	35					
	Mbhashe	21	31	52					
Amathole	Mnquma	16	25	41					
	Ngqushwa	16	31	47					
	Raymond Mhlaba	45	63	108					
	DM Total	149	241	390					



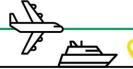
District/Metropolitan	Local Municipal Area	Estimated Quantities							
District/Metropolitari	(LMA)	Bridges	Major Culverts	Total					
	Dr AB Xuma	29	35	64					
	Emalahleni	11	19	30					
	Enoch Mgijima	75	148	223					
Chris Hani	Intsika Yethu	22	36	58					
	Inxuba Yethemba	44	51	95					
	Sakhisizwe	13	12	25					
	DM Total	194	301	495					
	Elundini	29	60	89					
loo Cashi	Senqu	53	130	183					
Joe Gqabi	Walter Sisulu	56	86	142					
	DM Total	138	276	414					
	Blue Crane Route	50	116	166					
	Dr Beyers Naude	50	161	211					
	Kouga	27	23	50					
Sarah Baartman	Kou-Kamma	9	37	46					
Salali Baaililali	Makana	21	64	85					
	Ndlambe	7	5	12					
	Sundays River Valley	14	28	42					
	DM Total	178	434	612					

District/Metropolitan	Local Municipal Area	Estimated Quantities								
District/Metropolitari	(LMA)	Bridges	Major Culverts	Total						
Buffalo City Metropolitan	Metropolitan Total	81	62	143						
Nelson Mandela Bay Metropolitan	Metropolitan Total	84	14	98						
Total		1019	1505	2524						









C3.3 DESCRIPTION OF THE WORKS

The Works will comprise of the following key activities:

C3.3.1TESTING AND CALIBRATION WORKSHOP

A testing and calibration workshop will be held at the offices of the Employer in King Williams Town (or East London). The Employer will invite all Service Provider's bridge inspectors and major culvert inspectors that have been provisionally approved, based on the pre-qualification criteria stated in the Tender Data, to attend the session.

The testing and calibration workshop will extend over a period of two full days. Seeing as the visual condition inspections and inventories will be undertaken in accordance with the procedures of the latest TMH19 (Manual for the Visual Assessment of Road Structures) and CSIR STRUMAN Bridge Management System, the pre-qualified bridge inspectors and major culvert inspectors will be tested on their knowledge of the inventory and inspection procedures. The required pass / calibration rate will be eighty-five percent (85%). Only COTO accredited Bridge Inspectors and Major Culvert Inspectors who pass the theoretical test will be allowed to perform inspections.

C3.3.2INVENTORY AND INSPECTIONS

Inventory and inspection surveys are to be undertaken in accordance with the latest TMH19 document on the bridges and major culverts as listed under C3.2 above. Any other structures that are inspected will not be paid.

This component of the works will include the following activities:

Fieldwork

The Employer will make available the following information to the Service Provider after successful completion of the testing and calibration workshop:

- Maps indicating the location and unique identification number of all structures to be inspected and inventoried.
- Standard inventory and visual inspection forms for bridges and major culverts; Examples of these forms are attached under **Appendix A**, and
- Data capture software/interface.

Inventory data shall be recorded during field inspections, with the inventory data being completed in full. Data fields shaded in light grey (Appendix A refers) need not to be completed when capturing inventory data during field inspections. Specific inventory photographs shall be taken, and GPS (WGS 84) co-ordinates recorded.

Inspectors will rate structural and non-structural elements on a DER-U rating basis as contained in the latest TMH19 documents. Inspectors shall also identify defects and make recommendations on maintenance, repair and remedial measure requirements and associated costs. Photographs are to be taken of distresses and supported by sketches of the distresses and/or cracking patterns.

Data Capture

The CSIR STRUMAN Bridge Management System must be used to capture all data from the fieldwork. No further data capturing or post-processing is required. It is a pre-requisite for the Tenderer to make use of this application.



Quality Control

It is a pre-requisite that a high degree of accuracy be obtained for the visual inspections and data capturing. It is the responsibility of the Service Provider to undertake its own process control testing to ensure the required quality.

Reporting

The Service Provider will be required to prepare regular progress reports and attend monthly progress meetings with the Employer for the duration of the contract.

The Service Provider is also required to submit a close-out report summarising the work completed and main findings.

The following should be noted with regards to visual inspections and data capturing:

- Completed data is to be submitted on a monthly basis to substantiate progress and to allow for quality checking on an ongoing basis,
- All fieldwork must be undertaken in a manner that complies with the relevant safety legislation and regulations. The Employer accepts no responsibility for any eventuality that may occur during execution of the surveys. The Service Providers will perform the work entirely at their own risk and must ensure that suitable safety precautions are taken at all times. This includes the wearing of approved high visibility safety vests by their staff during the surveys, as well as equipping vehicles with appropriate signage and orange lights, and any other issues as stipulated in the Contract Data, and
- Should the Service Provider use any personnel for the visual surveys who have not attended the testing and calibration session, or personnel who attended the session but were not approved by the Employer in writing, the Contract will be terminated forthwith and the Service Provider will forfeit all further rights in terms of the Contract as from the date of such termination.

C3.4 USE OF SPECIALISED EQUIPMENT FOR INVENTORY AND / OR INSPECTIONS

Bridge and major culvert inspectors will be expected to provide ladders or similar equipment to access bridges and major culverts, where necessary. All components that can be inspected without the use of specialist equipment (such as "cherry-pickers') will be deemed to be included under the activities listed under C3.3 above.

The Employer acknowledges that not all the components of certain bridges or major culverts may be accessible using conventional equipment. The Service Provider will be required to list the items / components of each bridge and major culverts that cannot be fully inspected and then present the requirements for achieving a comprehensive inspection to the Employer. The Employer will consider the feasibility of underrating more detailed inspections utilizing specialised equipment and, if warranted, will instruct the Service Provider to undertake these activities.

C3.5 QUALITY CONTROL

The Employer will undertake acceptance control testing as follows:

Inspection Controls

Control inspections will be carried out by the Employer on random bridges and major culverts during or immediately after the period that the Service Provider undertakes its visual inspections. The control inspections will cover a representative sample of at least 5% of the total number of bridges and major culverts inspected.

For bridge and major culvert inspections, the calculated Condition Index (CI) of the Service Providers' inspection will be compared to the CI's of the control survey. The Service Provider's visual inspections will be considered acceptable if the CI's of more than 85% of the bridges correlate within a 10% variance of the control survey CI's. Furthermore, the individual distress ratings will be checked to establish that the correct distress is being identified and that the extent, degree and relevancy rating is being applied in terms of TMH19.

In addition to the condition inspection / assessment, the Employer will also assess the quality and completeness of the bridge and major culvert inventory inspections. The Service Provider's inventory inspections will be considered acceptable if:

- o all the prerequisite minimum data fields have been completed in the format specified, and
- all the fields completed correlate within a 10% variance of the control inspection by the Employer.

Where inspection and inventory errors occur, the Service Provider shall, at his own cost, re-assess these structures within a time period considered reasonable by the Employer, to the satisfaction of the Employer.

The CI comparison will be conducted separately for each of the Service Provider's inspectors, per Local Municipal Area. Should the visual condition inspection and inventory information not meet the abovementioned quality test, the entire batch of visual inspection data (i.e. per inspector and Local Municipal Area) will be rejected.

• Data Capture Controls

The Service Provider will be required to ensure that all the required data fields are completed correctly. Data fields will be checked for completeness and formatting. Should the captured data not comply with the acceptance control check the Service Provider will be required to recapture it until such time as compliance is achieved.

C3.6 WORKS PROGRAMME

The Period of Performance will be **six months**. The following work programme is to be adhered to:

Activity	Commencement	Duration		
Calibration and testing session	Within 14 days of Start Date	2 days		
Visual inspection and data capture	Within 14 days after calibration and testing	5.5 months		



C3.7 DELIVERABLES

The following is to be delivered in terms of the Contract:

- Supply of a suitable number and quality of Bridge Inspectors and / or Major Culvert Inspectors who attend and pass the testing and calibration session;
- Inventory and inspections on the identified bridges and major culverts, with each bridge and major culvert being assessed and the associated inventory and inspections forms completed correctly and in full, with the supporting photographs;
- Capturing and verification / validation of all data for each bridge and major culvert;
- Submission of all maps indicating any bridges and / or major culverts that could not be assessed, or other bridges and/or major culverts that were identified. This includes for spending time with the Employer's Agent to make the necessary spatial changes on the GIS;
- · Attendance of monthly Project Progress meetings with the Employer; and
- Close-out report.

C3.8 OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

C3.8.1INTRODUCTION

a) List of abbreviations

ECDOT Eastern Cape Department of Transport HIRA Hazard Identification Risk Assessment

OHSA Occupational Health and Safety Act No. 85 of 1993 (as amended)

HSA Health and Safety Agent HSP Health and Safety Plan

HSS Health and Safety Specification PPE Personal Protective Equipment

SANS South African National Standards (Authority)

b) Definitions

The definitions used will be those set out in the Regulation Gazette No 7721 of 18 July 2003 with the following additions:

Client: Means the Employer, as defined in the Conditions of Contract.

Hazard Identification and Risk Assessment (HIRA) and Risk Control: Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Health and Safety Agent: Means any person who acts as a representative for the Client in managing the overall health and safety work as their responsible person.

Health and Safety Plan: Means a documented plan which answers to the Health and Safety Specification, including all the supporting documentation that indicate how the Principal Contractor or Contractor plans to manage Health and Safety for the duration of the Contract.

Principal Contractor: Means the Consultant appointed by the DRPW to undertake the visual assessment work as detailed in the tender.

Regulation/s: Means the relevant regulation/s promulgated in terms of the Occupational Health and Safety Act, No. 85 of 1993.

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

Site: Means the roads which are to be assessed by the Principal Contractor. Where there is no demarcated boundary it will include all adjacent areas and roads which are reasonably required for the activities of the Principal Contractor.

c) Key Role-players

Client's Representative: Head of Department, Province of the Eastern Cape Department of Transport



d) <u>Key References</u>

- Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended)
- Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended)
- Committee of Transport Officials (COTO)
- South African Roads Traffic Safety Manual (SARTSM) Chapter 2, Volume 13 of 1999
- Road Traffic Safety Act No. 93 of 1996 (as amended)

C3.8.2 PURPOSE OF THE HEALTH AND SAFETY SPECIFICATION (HSS)

The HSS is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client (i.e. the Principal Contractor) achieve an acceptable level of OHS performance. The Client has a zero tolerance to non-compliance and the endangering of the lives of workers and the public. The purpose of the HSS is to assist Principal Contractors to achieve compliance with the Occupational Health and Safety Act and Regulations, in order to reduce incidents, injuries and occupational illnesses.

No advice, approval of any document required by the HSS (i.e. hazard identification and risk assessment, action plans) or any other form of communication from the Client shall be construed as an acceptance by the Client. Nor shall such communication relieve or absolve the Principal Contractor from any obligation or from achieving compliance with legal requirements. The Principal Contractor remains responsible for achieving the required performance levels and must sign an OHSA S.37.2 Mandatary Agreement with the Client. (Refer C1.3: Health and Safety Agreement).

The HSS highlights the aspects to be implemented over-and-above the minimum requirements of current legislation. Requirements may be changed should new risks or issues be identified during the course of the project.

C3.8.3 IMPLEMENTATION OF THE HSS

The HSS forms an integral part of the Contract and Principal Contractors are required to make it an integral part of their Contracts with Contractors and Suppliers. No work may commence prior to receipt of written approval of the HSP by the HSA. Failure to do so will be noted as a serious offense, and will result in a fine, and/or stoppage of part of, or the whole works, with no extension of time or allowable claims.

This specification must be read in conjunction with the OHSA, it's Regulations (as amended) and any other standards relating to work being done and ensure compliance thereto. The information relative to the Scope of the Work as detailed under Part 3 of the Contract (Refer C3.1 to C3.6), is to be taken into account when developing the Health and Safety Plan (HSP) and associated documentation.

Should there be a change in the Scope of Work, an amended HSS may be issued. In such an instance, the Principal Contractor will be required to resubmit an amended HSP for consideration by and approval of the HSA.

The HSA will conduct a monthly audit (or more frequently, if deemed necessary) of the Principal Contractor to monitor compliance with the HSP. Non-conformances will be noted, with fines being issued or work stopped, where appropriate.

C3.8.4 HSP FRAMEWORK

The Principal Contractor has to demonstrate to the Client that he has a suitable and sufficiently documented HSP as well as the necessary competencies, experience and resources to perform the work safely.

The current legislative requirements, SANS codes and any other standards that may guide practice are to be taken into consideration in the HSP. The HSP shall provide evidence of the Principal Contractor's planning regarding the following aspects of safety and include at least the following:

- Safety precautions for inspections / assessments
- Safety procedures during execution of the inspections / assessments
- Emergency procedures in cases of incidents and or accidents
- Compliance with OHSA as relevant

C3.8.5 PROJECT SPECIFIC REQUIREMENTS

a) Risk Management

The Client has identified the following risks, activities and considerations for which risk assessments, standard working procedures, management and control measures need to be addressed. (The Principal Contractor needs to supplement this with his own risk assessment, to ensure compliance with the OHSA):

- Working on or near roads, with particular emphasis on:
 - o leaving and entering vehicles parked at the road side.
 - o inspecting road surfaces,
 - o travelling at slow speeds on public roads, and
 - o conducting inspections whilst travelling
- Working in remote areas, with particular emphasis on:
 - o access to sustenance, and
 - dehydration
- Neighbouring environmental influences such as bees, snakes, dogs, lightning, etc.

b) Emergency Procedures

As the site is remote and advanced medical support absent, attention to emergency planning and procedures is very important. Emergency procedure(s) shall include, but shall not be limited to, fire, accidents to employees, major incidents/accidents, etc. The Principal Contractor shall advise the HSA and all relevant authorities forthwith, of any emergencies, together with a record of action taken. This shall be confirmed in writing as soon as possible after the incident. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and available to all personnel. These procedures shall form part of the HSP.

c) First Aid

Each assessor shall have completed at least a Level 1 accredited first aid course, prior to undertaking any visual inspections. Each assessor shall carry a first aid kit in their vehicle at all times.

The vehicle shall be equipped with an amber-coloured flashing light of the rotating parabolic reflector type, at least 150 mm high, with a minimum intensity of 100 W. It shall be visible at any angle from the vehicle. The warning light shall be switched on at all times and a sign reading "ROAD INSPECTION" with letters at least 150mm high shall be displayed when the vehicle is used on site.

d) Personal Protective Equipment and Clothing

The Principal Contractor shall ensure that all assessors are issued with and shall wear reflective vests at all times.

All inspection vehicles shall be fitted with at least one operational orange, rotating safety lamp and suitable warning signs, adequate for ensuring safety of the Assessors and all third parties.

C3.8.6 APPOINTMENT OF HEALTH AND SAFETY PERSONNEL

In terms of Section 16 of the OHSA, the Chief Executive Officer of the Principal Contractor may delegate, in writing, part or all of his powers to a suitable person on the site. For the purpose of this Contract, each assessor will be appointed as a Construction Supervisor (as defined in the OHSA). Each assessor (Construction Supervisor) will also assume the role of and perform the duties of a Health and Safety Officer and Traffic Safety Officer. The Principal Contractor shall ensure that the assessors are competent persons, capable of fulfilling this role.

The appointment of competent persons to supervise parts of the Works does not relieve the Principal Contractor from any of his responsibilities to comply with all requirements of the OHSA and Construction Regulations.

C3.8.7 HEALTH AND SAFETY FILE

The Principal Contractor, in terms of Construction Regulation 5(7), shall maintain a Health and Safety File in his office at all times. A copy thereof, shall be kept in each Assessor's vehicle for the duration of the contract. The Principal Contractor shall appoint a suitably qualified person to prepare the Health and Safety File and to keep it up to date for the duration of the contract.

The Health and Safety File shall include at least the following information:

- All Documents as required by the Act and Regulations
- · All Health and Safety reports of inspections and audits
- All non-conformity reports
- All Hazard Identification and Risk Assessments carried out for the project.
- All method statements
- Minutes of all relevant meetings
- Incident records, including investigations and results
- Record of all appointments under the Regulations
- Medical certificates of fitness and a copy of drivers licenses
- Record of Competencies
- Training Records



The Health & Safety File shall, in electronic version, be handed over to the Client on completion of the contract.

It must contain all the documentation as set out above, or as instructed, as well as any handed to the Principal Contractor by any subcontractors.

C3.8.8 ARRANGEMENTS FOR MONITORING AND REVIEW

The Client, or the HSA, may conduct a Monthly Audit to audit compliance with Construction Regulation 4 (1) (d) to ensure that the Principal Contractor has implemented and is maintaining the agreed and approved HSP.

The Client reserves the right to conduct other ad hoc audits and inspections as deemed necessary. A representative of the Principal Contractor must accompany the Client, or his agent, on all audits and inspections and may conduct his own audit/inspection at the same time. Each party will, however, take responsibility for the results of his own audit/inspection results.

C3.8.9 NON-CONFORMANCES

At any time, should the Works, or part of the Works, be stopped in terms of Section 4 subsection (e) the Principal Contractor shall have no claim for extension of time or any other compensation.

Failure or refusal on the part of the contractor to take the necessary steps to ensure the safety of workers and the general public in accordance with these specifications or as required by statutory authorities or ordered by the HSA, shall be sufficient cause for the Client to apply penalties. A penalty shall be deducted for each and every occurrence of non-compliance with any of the requirements of the HSS. The following constitute examples of the types of non-conformances that will attract penalties:

- Minor Penalty: R 50 / count
 - Not wearing PPE
 - Not completing vehicle check registers
- Medium Penalty: R 500 / count and a non-conformance
 - Sub-contractors not audited
 - Working without training or the appropriate health and safety method statements
 - Legal non-conformances identified during the previous audit and not addressed within the agreed time frame
- Severe Penalty: R 5 000 / count, a non-conformance and / or activity stoppage
 - Contractors working without Health and Safety Plan approval
 - Flashing light not working / not used or vehicle signage not displayed
 - Invalid Letters of Good Standing
 - Any breach of legal requirements

C3.9 MEASUREMENT AND PAYMENT

Item Number	Description	Unit
C3.9.1	Testing and Calibration Workshop	Lump Sum

The tendered rate will include full compensation for all activities and costs associated with the testing and calibration of all proposed bridge inspectors and major culvert inspectors, including the following:

- Attendance of the testing and calibration workshop by all proposed bridge inspectors and major culvert inspectors;
- Travel, accommodation and subsistence costs for attending the testing and calibration workshop and doing the calibration assessments; and
- Attendance and training in the use of the data capture module and loading of the software onto the appropriate hardware.

Payment will be made as a lump sum item, after the bridge inspectors and major culvert inspectors pass the testing and calibration workshop. Should a proposed bridge inspector or major culvert inspector fail the testing and calibration workshop, any costs incurred by the Employer or his representative in re-testing or testing additional personnel, may be deducted from payment due to the Service Provider.

Item Number	Description	Unit
C3.9.2	Inventory and Inspection	No

Separate items will be scheduled for bridge inventory and inspections, according to the length of the structures, with one item scheduled for major culvert inventory and inspections. The inventory and inspections items are as follows:

- (i) Small Bridges: A bridge structure with an overall length of less than or equal to 20 meters;
- (ii) Medium Bridges: A bridge structure with an overall length exceeding 20 meters, but less than or equal to 50 meters;
- (iii) Large Bridges: A bridge structure with an overall length exceeding 50 meters, but less than or equal to 100 meters;
- (iv) Very Large Bridges: A bridge structure with an overall length exceeding 100 meters; and
- (v) Major Culverts: A major culvert structure irrespective of the overall length of the structure.

The unit of measurement for the above inventory and inspection items will be the number of bridges and major culverts for which an inventory and condition inspection has been undertaken, the data captured, and submitted to the Employer in the prescribed format and accepted by the Employer.

Payment will not be made for those bridges or major culverts that were under construction or flooded at the time of the inspection and which were therefore not inspected.

The tendered rate will include full compensation for all activities and costs associated with undertaking the bridge and major culvert inventory, inspections and data capturing, including the following:

- Attendance of a briefing meeting with all Key Persons, including the Structures Project Manager at King Williams Town (or East London)
- Attendance of monthly progress meetings by the Structures Project Manager at King Williams Town (or East London)







- Printing of inventory and inspection forms and maps
- Inspections, inventories, safety, security and data capturing
- Travel, accommodation and subsistence costs
- · Quality control by the Structures Project Manager
- · Monthly Progress Reports, and
- Close-out Report

Payment will be paid in three instalments:

- 50% upon submission of the completed <u>inventory and inspection data</u> in hard copy format;
- 25% on submission of the data in the required electronic format, <u>including inventory and</u> inspection photos;
- 25% upon acceptance of the data by the Employer.

Item Number	Description	Unit
C3.9.3	Specialised Equipment Hire	Provisional Sum

The provisional sum is provided for the rental of specialised equipment for the bridge inspections, and the associated travel and disbursement costs. Payment will only be made for work / rentals that are pre-authorised by the Employer.

Item Number	Description	Unit
C3.9.4	Handling Charges on Specialised Equipment Hire Percent	age (%)

The handling charge shall include full compensation to the Service Provider for obtaining quotations, making arrangements for rental, payment on behalf of the Employer and all associated administrative costs.

Item Number	Description	Unit
C3.9.5	Time-based Services	Hour (Hr)

Separate items will be scheduled for the various categories of staff. The tendered rate will be for additional time-based services for the category of staff as instructed by the Employer. This is a provisional allowance, and payment will only be made for time pre-authorised by the Employer.

Item Number	Description	Unit
C3.9.6	Occupational Health and Safety Compliance	Sum

The tendered rate will include full compensation for all activities and costs associated with the Service Provider to comply with the relevant Occupational Health and Safety legislation, regulations and specifications.

This will include, but is not limited to the following:

- Preparing, maintaining. implementing and complying with the required statutory Safety Plans
- Provision and maintenance of the necessary safety equipment such as orange lights and signage for vehicles, safety vests, and the like
- Provision and maintenance of all the necessary insurances.

Payment will be made on a pro-rata basis per month, based on progress.



PART C4: APPENDICES

APPENDIX C4.1: ASSESSMENT FORMS (PRO-FORMA)

APPENDIX C4.2: LOCALITY PLAN / DRAWINGS

APPENDIX C4.3: SCHEDULE OF BRIDGES AND MAJOR CULVERTS

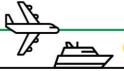


APPENDIX C4.1: ASSESSMENT FORMS (PRO-FORMA)









TENDER No.: SCMU10-24/25-0023

ROAD AUTHORITY						STRUCTURE TYPE BRIDGE NUMBE						ER							L	DCAT	ION :	SKET	СН							
						BRIDGE - GENERAL					BRIDGE NAME																			
						INSPECTION INFORM					N																			
Inspe	ection Typ	e		In		or Nam		JN IN	FORM	Fir				Dat	e (dd/	mm/y	ууу)													
						G	SPS C	OOR	DINA	ΓES																				
D	_	La	titude (\$	South)		SS.s			D	<u> </u>		Long M	itude (E	ast)		SS														
D	5		IVI IVI			33.8	5		D	U		IVI	IVI			00	0.5													
			VEF	RTICA	LCL	EARA	NCE	S (ro	ad-ov	er-roa	d bri	idges	only)																	
	on/Span N																													
Min	height (m)												100) A T	ION D	L C														
	Road No	o.			Roa	d km			F	Road Na	ame		LOC	, A I	Featu		ossed	_			Feat	ure Name	/Road	No.		Т		Region	/Depot	
												ST	RUCT				ATIO													
No. o	f Spans		St	ructure	Orien	tation			Overa	all Lengt	h		0\	/erall	Width	1		Ye	ear Cons	structe	ed					Brid	ge Ty	pe		
													INSPE	ECT	ION R	ATI	NGS													
INSPECT	IONITEM		APPROA		2. G	SUARDR	RAIL	3.1	NATERV	VAY		PROACH	IEMB.	5.	ABUTN	/ENT		6. ABL	JTMENTS	7.		G/ RETAINI	NG	8. SUF	RFACING	3		ER-STRU	CT.	
POSI	TION	D	BANKM	R	D	Е	R	D	E	R	D	OT WOR	R	D	UNDAT	F	_	D T	E I	R	D	WALLS E F		D	E	R	D	RAINAGE E	₹	
Abut																														
Abut																Γ	I	Ţ	1	I			Ţ			1				
		1	0.KERBS	3/	11.1	PARAPI	FT/		<u> </u>																					
INSPECT	IONITEM	S	IDEWALI	KS .	Н	ANDRA	IL		MISC. IT																					
		D	Е	R	D	Е	R	D	Е	R																				
			12. PIER			13. PIER	<u> </u>	-1	4. PIERS	Q.				16	i. SUPP	OPT		17 EYE	PANSION	M	INISD	ECTION	18 17	ONIGITI	IDINAL	10 7	TDANS	VERSAL		
INSPECT	IONITEM		ROTECTI WORKS			JNDATIO			COLUMN		15.	BEARIN	GS		DRAINA				DINTS	`		TEM		MEMBI			MEMB		20. DE0	KSLAB
POSI	TION	D	Е	R	D	Е	R	D	Е	R	D	Е	R	D	Е	F	1	D	E I	R	PO	SITION	D	Е	R	D	E	R	D	E R
Abut									<u> </u>						-	-	_	_	_	-	Spar				-	_	-	-		
Abut															+-	-	-				Spar									
Pier															1	T				-+	Spar	_								
Pier																					Spar	1								
Pier									<u> </u>						-		_	_		_	Spar				<u> </u>	_		-		
Pier Pier																-	_	_	_	_	Spar				<u> </u>			-		
Pier																+	1	1		_	Spar					T				
Pier																					Spar	1								
Pier																	_			_	Spar				<u> </u>					
Pier Pier															1	-	-				Spar									
ITEM	POSITI	ON	СО	DE			DESC	CRIP	TION			Q1	Υ	Un	it	U	Mak									Photo	Photo			
																	Saf	е											Dir	No
															_			_												
															_															
															+			_												
															_			_												
															+			_												
Inspector	's assessm	nent ar	nd furth	er comr	ments:																									
FURTHE			REQUIF	RED?	Y/N								THER I																	
Was UBII			ture inc	pection	s? Y/	N					ie. (der, Bu	sh cu		JBIU	, bette	er wear	ther etc											
2		5, 10		DEGRI		_						E - EX		g			. WIR		- RELE\	/ANC	Υ					U-	- URG	SENCY		
Not Applic-	Unablet		None	Mino		1ode-	Warni	na s	Severe	Local		More than	Less		Genera	,	M in	Мо	derate	Ma	ior	Critical	Reco		onitor	Rou	ıtine	< 10 yrs	<5 yrs	ASAP
able	inspect		0 4			rate	2	+	4	4		ocal	genera		1	H	1		2	2			onl	У	only	-	1	2	2	







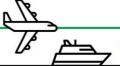


ROAD AUTHORITY					STRUCTURE TYPE				BRIDGE NUMBER						LOCATION SKETCH																
								DGE RCH			BRIDGE NAME																				
						INSP	ECTIO	ON IN	FORM	ATIO	N																				
Inspe	ction Ty	ре		ı	Inspect	tor Nam	ne			Firn	n			Dat	e (dd/	/mm/y	ууу)														
						(SPS C	OOR	DINA	ΓES																					
		L	atitude	(South))							Longi	itude (E	ast)																	
DI)		ΜN	ı		SS.	s		D	D		M	М			SS	S.s														
		_	V	FRTIC	AL CI	I FAR	NCE	S (ro:	ad-ov	er-road	1 bri	aanh	only)	_																	
Positi	n/Span	No	Ť		AL OL		NOL.	1	au-0 V	- Tour	2 511	uges				Τ															
Min	neight (r	n)																													
	Deed	1-			Des			1) I N -			LOC	ATI	ION I						F	ure Name	(D	l Nie		_		Danis	/D1		
	Road N	NO.			ROS	ad km			r	Road Na	me				Feat	ureC	ossed				rea	ure Name	Road	I NO.		-		Region	Depot		
												ST	RUCT	URE	INF	ORN	IATIO	N													
No. o	Spans			Structur	e Orier	ntation			Overa	all Lengti	า		0\	erall	Width	1		Υe	ear Cor	struc	ted		В	ridge	Туре		_				
		_											INSPE	СТІ	ION F	RATI	NGS					4					+				
INSPECT	ONITEM		APPR		2.0	GUARDE	RAIL	3. V	VATERV	/AY		ROACH	HEMB.	5.	ABUTI	MENT	Т.	S. ABI	JTMENT	s		3/ RETAINI	NG	8. SI	RFACIN	3		R-STRU	OT.		
POSI		D	MBANK E		D	E	R	D	E	R	PRO D	DTWOR E	KS R	FO D	UNDAT	_				R	D	WALLS E F	₹	D. D.		R	DR.	AINAGE E I	₹		
Abut																Ī		1					1								
Abut																I	T	Ţ	_				Ţ	Ţ	4			1			
INION	ONL		10. KEF			. PARAP			400 :-	TMC																					
INSPECT	METTEM		SIDEWA	LKS		HANDRA E		21. N	IISC. ITI	EMS R																					
				K	D	-	K	D		K																					
INSPECT	ONLITTM		ER/SP	RINGING	13. PIE	ER/SPRI	INGING		I. PIERS		45.5	EARIN	00	16	S. SUPF	PORT		17. EXF	PANSIC	N	INSP	ECTION	18. L	ONGIT	UDINAL	19.	TRANS	/ERSAL	20. DE	-014.0	LAD
INSPECT	UNITEM	٢	WOR		FO	UNDATI	ONS		RINGIN		15. E	SEARIN	GS		DRAIN	AGE		JC	STAIC		r	TEM		MEME	BER		MEMBI	ERS	20. DE	CK S	LAB
POSI	ION	D	Е	R	D	Е	R	D	Е	R	D	Е	R	D	Е	F	? [)	Е	R	_	SITION	D	Е	R	D	Е	R	D	Е	R
Abut Abut	-														-		-	+	-		Spar			-	-	-	+				
Pier																		\dagger			Spar					T	\top				
Pier																					Spar										
Pier Pier	-																-	+	-		Spar				-		+				
Pier																	+	+			Spar	_									
Pier																					Spar	n									
Pier Pier	-	-		-											-		+	+	_		Spar Spar			-	+-	-	+				
Springing	,																	+			Arch					\vdash	+				
Springin	1																	I			Arch	n									
ITEM	POSIT	rion	С	ODE			DES	CRIPT	TION			QT	Y	Un	it	U	M ak					R	EM A	RKS	i			Photo Dir		hoto No	
																		_													
															+			+													
															+			\top													
																		\perp													
															_			+													
															\dashv			\dagger													
															_			+												-	
											_							+													
																		土													
					\perp						\Box		-1		\bot			\downarrow												\bot	
			+		<u> </u>						\dashv				\dashv			+												+	
					L		_		_							_†	_		_									J			
Inspector's	assessme	ent and	further	commen	nts:																										
FURTHER			UIRED	? Y/N									THER I																		
WasUBIU u Isthe UBIU			einspe	ctions?Y	/N				-				der, Bu	sh cư	tting,	UBIU		r wea		D.											
			_	- DEGF								E - EX	TENT						- RELE	VAN	ICY					U	- URGI	ENCY			
Not Applic-	Unable		None	Min		Mode-	Warni	ing S	evere	Local		ore han	Less then		Genera	al I	M in	Мо	derate	M	lajor	Critical	Reco		Monitor	Ro	utine	< 10 yrs	<5 yrs	A	SAP
able	inspe	ot				rate					lo	ocal	genera			1							on		only	1				1	







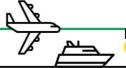


ROAD AUTHORITY					STRUCTURE TYPE					BRIDGE NUMBER										LOCA	TION	SKE	тсн								
						BRI	DGE	≣ - C	ABL	BLE BRIDGE NAME																					
						INSP	FCTIO	ON IN	FORM	M A TIO	N																				
Inspe	ction Ty	ре	Τ	lr		or Nam		J. 11.	I	Fire				Dat	e (dd/	mm/y	yyy)														
			-414 d 1	(O 4h)		C	SPS C	OOR	DINATES																						
Latitude (South) DD MM SS.s					Longitude (East) DD MM SS.s																										
			VE	RTICA	AL CL	EARA	NCE	S (ro	ad-ov	er-roa	d br	idges	only)																		
	on/Span height (r							+					-			+															
IVIIII	neigni (i	11)				<u> </u>							LOC	CATI	ON E	DETA	AIL.														
	Road I	No.			Roa	d km			F	Road Na	ame				Featu	ure Cr	ossed				Fea	ture Name	/Roa	d No.				Regi	n/Depo	t	
												0.7	DUGT		INT	001		o N								<u> </u>					
No. o	f Spans	T	S	tructure	Orien	tation		<u> </u>	Overa	all Lengt	h	SI	RUCT	verall			IAIIC		ear Co	nstru	cted		E	Bridge	Туре						
																								- 5	71 -						
													INSPI				NGS														
INSPECT	ON ITEM		APPRO //BANK/		2.0	SUARDR	RAIL	3.1	WATERV	VAY		PROACH OTWOR			ABUTN JNDAT			6. AB	UTMEN	TS		G/ RETAIN WALLS	ING	8. St	JRFACIN	G		ER-STR RAINAGE			
POSI	TION	D	Е	R	D	Е	R	D	Е	R	D	Е	R	D	Е	F	1	D	Е	R	D	E	R	D	Е	R	D	Е	R		
Abut																+	-	+	_				┥	-							
, tout																															
INSPECT	ONITEM		10. KERE			PARAP		21.1	MISC. ITI	EMS																					
		D	E	R	D	E	R	D	E	R																					
INSPECT	ONITEM		PIER/PY	ION		PIER/PY			4. PIERS		15.	BEARIN	IGS		SUPP				KPANSIO	NC		PECTION	18.	LONGI" MEM	TUDINAL RED	19	.TRANS	SVERSA	20.	DECKS	SLAB
POSI	TION	D	WORKS	R R	D	E	R	D	E	R	D	E	R	D	E	F		D I	E	R		ISITION	D	E		С			D	Е	R
Abut		+	-									_			_	1			_		Spa				<u> </u>	1		<u> </u>	+	_	
Abut																					Spa	n									
Pier	-		+													\perp	_	_	_		Spa		_		+	+	_	-			
Pier Pier																+		_	_		Spa				+						
Pier																					Spa										
Pier	1																				Spa								_		
Pier Pylon			-													+		_	_		Spa	-			+			-			
Pylon																		_			Cab	le			+	H					
		<u> </u>	-													+	-	_			Grou		<u> </u>		-	+					
Pylon																	Mak	(e			Grou		<u> </u>						Pho	o IP	hoto
ITEM	POSI	TION	CC	DE			DES	CRIP	TION			Q1	ſΥ	Uni	t	U	Saf					R	EM	ARKS	3				Di		No
															+			_											-		
															-			-												+	
																		_													
																		_												-	
															1			_												+	
															_			_											-		
																		-												+	
								_			_							_†		_											
																														Ī	
Inspector's	assessme	ent and	rurtherd	comment	S:																										
												ı	TUES	NCD-	OTIC	NEC	OLU:					ı									
FURTHER II WasUBIU u			WIRED?	Y/N					\vdash			Then	THER I	indica	e any	spec	ial req	uiren	nents												
Isthe UBIU			e inspect	tions?Y/	N						ie.	6m Lad					, bette "none		ather et	C.											
N			D	- DEGR	EE							E - EX		-				R	R - RELE	VAN	NCY					L	J - URC	GENCY			
Not Applic-	Unable		None	Mino		lode- rate	Warni	ng S	Severe	Local	1	lore than	Less	1 G	enera	d f	Min	М	oderate	. N	<i>Major</i>	Critical		cord nly	M onito	Ro	outine	< 10 yr	s <5 y	rs /	ASAP
able				!		-0.0				<u> </u>		local	gener	al					^	-	_	_			,	-					_





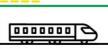


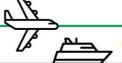


ROAD AUTHORITY			STRUCTURE TYPE	STRUCTURE NUMBE	ER								
			BRIDGE	URE NAME									
			INFORMATION										
Inspector	· / Capture	er Name	Firm	Date (dd/mm/yyyy)			INVENTORY						
				RECORD SHEET									
Photo No	Descript	ion					Direction of Photo	Camera Photo No					
V01	View 1	abutment multi-leve	Bridge in Elevation (Must show total length of bridge, full pier heights and abutments. If necessary take several photos and combine electronically. For nulti-level interchanges more than one bridge may be in photo. Please identify bridge and also describe other bridges in the photo.)										
V02	View 2		Elevation from opposite side vation or else skew elevation	. (A & B bridges might have to n from gap between)	o take o	ther							
V03	View 3		m upper approach (preferab	ly looking along centre line o	f road o	ras							
V04	View 4	Bridge fro	m upper approach (opposite	end).									
V05	View 5	View taker		f feature crossed (road, rail o	or upstre	am							
V06	View 6	View take		f feature crossed (road, rail o	or								
V07	View 7	ı	e to show profile of deck can de edge of deck)	st									
V08	View 8		deck edge to show profile of ee outside edge of deck)										
V09	View 9	Underside											
V10	View 10	Typical pie	Typical pier (take photo of each type)										
V11	View 11	Typical Ab	Typical Abutment (take photo of each type)										
V12	View 12	generally	Bridge number as seen from main route on which bridge is defined (This will generally always be from the higher order route). If no number take photo of parapet where it should have been affixed.										
V13	View 13	Other brid	ge number adjacent to other	road or rail.									
V14	View 14	Typical pa	rapet elevation (take photo o	of each type)									
V15	View 15	Typical roa	adway joint (take photo of ea	ch type)									
V16	View 16	Any other	salient feature										
-													
	<u> </u>												







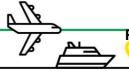


	BRIDGE			ME	
	INVENTORY INFOR	MATION			
Inspector / Capturer Name	Firm	Date	e (dd/mm/yyyy)		INVENTORY
SOURCE: Field	1	As Built [rawings	Design Drawin	gs Files
LOCATION DETAILS					
Route No.	Road No.	Road	Name/ Route Descrip	otion Section	Road Km
Street] [Town	
Region	District	Munic	ipality	District Municipalit	у
Province		, —] [
Suburb	Ward	Depoi			
COORDINATES					
Map Info					
Survey System	Elevation (m)				
Survey System	Elevation (III)				
Latituda (Sauth	h) Longitudo	(East)			
Latitude (South	h) Longitude SS.s DD MM	e (Easi) SS	t e		
Start	33.5 DD IVIIVI				
Middle					
End					
LOCATION FEATURES					
Status	Ownership		Us	se	
Comments					
Orientation	App. Emb Orient.		Di	r. River Flow	
Primary Feature Over/Under	Primary Feature C	rossed	Pr	imary Feature Name	
Primary Feature Road Number	Primary Feature R	oad Km			
Secondary Feature Over/Under	Secondary Feature	e Crossec	Se	econdary Feature Name	
Other Authority	Other Structure No).			









Department of Transport

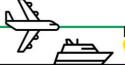
TENDER No.: SCMU10-24/25-0023

CONTRACT DETAILS				
Design Engineers	Contractors	Contract Price	Escalated Cost	Total Cost (Design/Construct)
Construction Authority	Contract Number	Year Completed	Completion period (mo	onths) Year Designed
Construction Cost	Desig	gn Cost	Constu	ction Period (months)
Design Report Available	Location of Design	n Report Constr	uction Report Available L	ocation of Construction Report
STRUCTURAL FEATU	JRES			
Classification	-			
No. of Spans	No. of Piers	No. of Abutments		
Facility Carried	Bridg	е Туре	Bridge	Description
		**		
Deck Const. Method	Parap	pet/Handrails		Approach Slabs (Y/N/Unknown)
Abutment Galleries (Y/N)	Abutn	nent Walls (Y/N)		
fcu Slabs (MPa)	fcu Beams (MPa)	fcu Piers (MPa)	fcu Abutments (Mpa)
fcu Substructure (MPa)	fcu Foundations (MPa	a) fcu Joint N	loses (MPa)	fcu Parapets (Mpa)
ARCH BRIDGE ONLY - STRU	JCTURAL FEATURES RELATED TO	ARCHES		
Arch Span	Springing Thickness	Crown Thi	ckness	fcu Arches (Mpa)
				(
CABLE BRIDGE ONLY - STR	UCTURAL FEATURES RELATED TO	CABLES		
No. of Cable Groups	No. of Pylons			
DECK				
			Deck Depth (m)	Span Dock Soffit
Position	Туре	Material	Average Min Ma	length Deck Sollit
				(11)









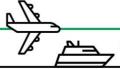
TENDER No.: SCMU10-24/25-0023

BEARINGS Position Fixity Type **EXPANSION JOINTS** Position Туре **Direction of Movement PIERS** Hmax Dmax Position Type Material **Foundation Type Founding Material** (m) **ABUTMENTS** Dmax Hmax Position Type Material **Foundation Type Founding Material** (m) (m) WING / RETAINING WALLS Hmax Dmax Position Material **Foundation Type** Founding Material Type









TENDER No.: SCMU10-24/25-0023

EMBANKMENT PROTECTION												
Position Ty	ype	Material		Thickness (m)	Slope (%)							
CABLE BRIDGE ONLY												
CABLE GROUPS												
Cable Group N	lo. of Cables in Group	Span Supported by Cable group										
PYLON												
Pylon	Pier that is a Pylon											
DIMENSIONS, GEOMETRY AN	ID ROAD CLEARAN	- ICES										
Overall Length (m)	Overall Width (m)	Kerb Width (m)		Maximum Heigh	nt (m)							
Balustrade Width (m) Vertical Alignment	Horizontal Alignment	Camber/Crossfa	II	Angle of Skew (P)							
Single/Dual C/way Over					,							
Direction of Traffic	Carriageway 1	Carriageway 2	2									
Min Road Width (m)												
Approach Width (m)												
Height of Highest Pier/Abutment (m)	Longest Span (m)	Lenç	gth of Spans (m)									
DESIGN CHARACTERISTICS												
Design Live Loading	Design Code(s)		Climate									
Temp Range (°C): From	Temp Range (°C	:): To	Temperature Grad	ent								
Percentage Overloading (%)	Wind Load (kN/m	12)	Natural Frequency	(Hz)								
Checked for NB (units)	Checked for NC	(units)	Load Checked (Y/N	1)								







HYDRAULIC DATA					
Peak Disch. (HKFL) (m3/sec)		Design Discharge (m³/sec)		Design Flood Level (m above m.s.l)
Soffit Level (m above m.s.l)		Clearance (Freeboard) (m)			
Peak Year		Return Period (years)		Depth of Design Flov	v (m)
T Can Teal		Netarri erioù (years)		Depart of Design Flow	(111)
Scour Protection		Risk of Scour			_
Design Scour Depth (m)		Ht above/below Soffit (m)		Catchment Area (km²	2)
Angle Between		Max Scour Depth (m)			
DRAINAGE					
Support Drainage		Superstructure Drainage		Sub-surface Seep	age Drains
Support Dramage		Superstructure Drainage		Sub-surface Geep	age Diams
FACTORS INFLUENCIN	IG FIELD INS	PECTION	,		·
Piers		Bearings		Box Girder	
Deck Soffit		Abutment Galleries		Traffic Volume	
Under Bridge Inspection Unit					
Onder Bridge inspection Office					
Effective Deck Area (m²)		Availability of Drawings		Security Risk	
General Information					
SERVICES IN/ON/UNDE	R STRUCTU	IRE			
Service Type		Description		Location	Responsible Authority
Water Mains					
Sewers					
Ctarrana Bia a a					
Stormwater Pipes					
Electricity Cables					
Licotrony Odbios					
Communication Cables					
	<u> </u>		<u> </u>		
Spare Ducts				_	
			1		
Other	<u> </u>		1		









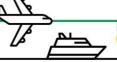
Road On Approach Road Class of Road No of Carriageways No of Lanes/Dimensions (m) Surfacing of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	INIMUM HORIZONTAL CLE	ARANCES			
Date Recorded (dd:mm:yyyy) Clearance (m) Location Description ROAD CONFIGURATION, TRAFFIC VOLUMES AND SURFACING ROAD OVER BRIDGE ROAD OVER BRIDGE ROAD UNDER BRI	Date Recorded (dd:mm:yyyy)	Clearance (m)		Location Description	
Date Recorded (dd:mm:yyyyy) Clearance (m) Location Description DAD CONFIGURATION, TRAFFIC VOLUMES AND SURFACING ROAD OVER BRIDGE ROAD OVER BRIDGE ROAD UNDER BR					
Date Recorded (dd:mm:yyyy) Clearance (m) Location Description DAD CONFIGURATION, TRAFFIC VOLUMES AND SURFACING ROAD OVER BRIDGE ROAD OVER BRIDGE ROAD UNDER BRI					
Date Recorded (dd:mm:yyyy) Clearance (m) Location Description DAD CONFIGURATION, TRAFFIC VOLUMES AND SURFACING ROAD OVER BRIDGE ROAD OVER BRIDGE ROAD UNDER BRI					
Date Recorded (dd:mm:yyyy) Clearance (m) Location Description Road University Service Road On Approach Road Location Description Road University Service Road On Approach Road Location Description Road University Service Road On Approach Road Location Description Road University Service Road University Service					
	INIMUM VERTICAL CLEAR	ANCES			
OAD CONFIGURATION, TRAFFIC VOLUMES AND SURFACING ROAD OVER BRIDGE ROAD OVER BRIDGE ROAD UNDER BRIDGE R					
Road On Approach Road Class of Road No of Carriageways No of Lanes/Dimensions (m) Surfacing of Lanes No of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks No of Sidewalks/Dimensions (m) Surfacing of Sidewalks No of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour	Date Recorded (dd:mm:yyyy)	Clearance (m)		Location Description	
Road On Approach Road Class of Road No of Carriageways No of Lanes/Dimensions (m) Surfacing of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Road On Approach Road Class of Road No of Carriageways No of Lanes/Dimensions (m) Surfacing of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Road On Approach Road Class of Road No of Carriageways No of Lanes/Dimensions (m) Surfacing of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Road On Approach Road Class of Road No of Carriageways No of Lanes/Dimensions (m) Surfacing of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Surfacing of Sidewalks (veh) Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Road On Approach Road Class of Road	OAD CONFIGURATION, TR	RAFFIC VOLUMES	AND SURF	FACING	
Class of Road			ROAD OV	ER BRIDGE	ROAD UNDER BRIDGE
No of Carriageways No of Lanes/Dimensions (m) Surfacing of Lanes No of Shoulders/Dimensions (m) Surfacing of Shoulders No of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks No of Sidewalks/Dimensions (m) Surfacing of Sidewalks Average Annual Daily Traffic (veh) No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance		Road C)n	Approach Road	
No of Lanes/Dimensions (m) Surfacing of Lanes No of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks/Dimensions (m) Surfacing of Sidewalks No of Sidewalks/Dimensions (m) Surfacing of Sidewalks No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	Class of Road				
Surfacing of Lanes No of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks Average Annual Daily Traffic (veh) No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	No of Carriageways				
No of Shoulders/Dimensions (m) Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks Average Annual Daily Traffic (veh) No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	No of Lanes/Dimensions (m)				
Surfacing of Shoulders No of Sidewalks/Dimensions (m) Surfacing of Sidewalks Average Annual Daily Traffic (veh) No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	Surfacing of Lanes				
No of Sidewalks/Dimensions (m) Surfacing of Sidewalks Average Annual Daily Traffic (veh) No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	No of Shoulders/Dimensions (m)				
Surfacing of Sidewalks Average Annual Daily Traffic (veh) No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	Surfacing of Shoulders				
Average Annual Daily Traffic (veh) No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	No of Sidewalks/Dimensions (m)				
No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	Surfacing of Sidewalks				
No. of Heavy Vehicles (veh) Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	Average Annual Daily Traffic (veh)				
Year ADT Recorded Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Peak Traffic AM Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Peak Traffic PM Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance	Peak Traffic AM				
Year Peak Traffic Recorded Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Truck Factor (%) Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Detour Length (km) Minimum Class of Detour Metropolitan Significance					
Minimum Class of Detour Metropolitan Significance					
Metropolitan Significance					
<i>√</i>					
<i>₹</i> / ,					
(4) (6)(6)				1/8	_

F	ROA	DAU	ЈТНО	RITY			STE	RUCT	URE	TYPE				BRID	GE	NUM	BER							LOC	ATION S	KETCH			
							(BR CELI	IDG LUL					BR	DG	E NA	ΜE												
							INSP	ECTIO	ON IN	FORM	ATIO	DN .																	
Inspe	ection	n Type)		lr	nspect	or Nam	e			Fi	rm			D	ate (de	d/mm/g	уууу)											
							G	PS C	OOR	DINA.	ΓES				_														
DI		-	Lat	itude (South)		SS.s			D	D		Long	itude (Eas	t)		S.s											
Di				IVI IVI			33.8	•		D	D		IVI	IVI			3.	5.5											
						<u> </u>								LO	CA	TION	DET	AIL											
	Ro	ad No				Roa	ad km			F	Road N	lame				Fea	ture C	rosse	d			Fea	ture Name	/Road No			Region	/Depot	
Na	-4.0-	-11-	_		0-11-0					0		41-	ST			REIN		ATI								Daislas T			
No.	or Ce	ens			Cell O	rientat	ion			Overa	all Leng	ıtn	+	C	vera	all Wid	ın			Year Co	onstr	ructea				Bridge T	уре		
									<u> </u>					INSP	EC	TION	RAT	INGS	3										
INSPECT	IONIT	TEM		RON SLA		2.WIN	IG/ RET/ WALLS			COUR P		4. EM	BANKN	IENTS	Γ														
POSI	TION		D	E	R	D	E	R	D	E	R	D	Е	R															
Emb	Т																												
Emb																													
INSPECT	IONIT	TEM	5. V	VATERV	VAY	6. R	OADSL	ABS	7. ROA	DWAYJ	OINTS	8. G	UARDR.	AILS		9. PAR HAND		14	4. MI	SCELLAI ITEMS		JS							
			D	Е	R	D	Е	R	D	Е	R	D	Е	R	0) E	: F	۲	D	Е	R								
									12.11	VERTS	LAB/		13. CELI		L														
INSPECT			D 10	0. WALL	s R	11. D	TOP SL	AB R		JNDATI		DISI	PLACEN	IENT R															
Cell	HON		U	_	K	D	_	K	D	_	K	D	_	K															
Cell	+																												
Cell																													
Cell																													
Cell	4																												
Cell	+																												
Cell	1																												
Cell	T																												
Cell	_																												
Cell																		Ма	ike						_			Photo	Photo
ITEM	PO	SITI	ON	СО	DE			DESC	CRIP	IION			Q1	I Y	U	nit	U	Sa					К	EMARK	S			Dir	No
															-														
															-														
															<u> </u>														
															-														
															T														
Inspect	or's	asse	ssme	ent of	struc	cture	condi	tion a	and fu	ırther	com	nent s	:																
FURTH	IER II	NSPE	CTION	N REQU	JIRED	? Y/N	Re	quirem	nents fo	or furth	er insp	ection	:																
				D	DEGR	FF							E - EX	TENT						R - REI	I EV	ANCY				II-IIP	GENCY		
Not	Un	able to	,			T _N	/lode-		T				Nore	Les	s				Т		Т			Record	Monitor				
Applic- able		spect	١	None	Mino		rate	Warni	ng S	evere	Loca		than local	the gene		Gene	al	Min	N	Moderat	ate	M ajor	Critical	only	only	Routine	< 10 yrs	<5 yrs	ASAP
Х		U		0	1		2	3		4	1		2	3		4		1	Т	2		3	4	R	0	1	2	3	4









ROAD	AUTHO	RITY	STRUCTURE TYPE	STRUCTURE NUMBE	R			
			BRIDGE					
			CELLULAR		STR	UCT	URE NAME	
			INFORMATION					
Inspector	/ Capture	er Name	Firm	Date (dd/mm/yyyy)			INVENTORY	
-							RECORD	SHEET
Photo No	Descript	ion					Direction of Photo	Camera Photo No
V01	View 1	Bridge Inl	et in Elevation (Must show to	tal number of barrels & apror	n slab)			
V02	View 2	Bridge Ou dissipate		total number of barrels, appro	oach sla	ab &		
V03	View 3	Bridge fro	m upper approach (in direct	ion of increasing chainage)				
V04	View 4	Bridge fro	m opposite end of approach	(in direction of decreasing cl	hainage)		
V05	View 5	river view)	<u> </u>	of feature crossed (road, rail o		am		
V06	View 6		n from the top of the bridge o am river view)	of feature crossed (road, rail o	or			
V07	View 7		side of barrel showing roof,	walls & floor				
V08		Bridge Nu						
V09	View 9	Anyother	salient feature					
V10	View 10							
V11	View 11							
V12	View 12							
V13	View 13							
V14 V15	View 14 View 15							
V16	View 16							
V10	view 10							









ROAD AUTHORITY	STRUCTURE TYPE		STRUCTU	RE NUMBER		
	BRIDGE CELLUI	AR		STRUCTURE NA	ME	
					ı	
Inspector / Capturer Name	INVENTORY INFOR		e (dd/mm/yyyy)		INVENT	ORY
moposion / Supraior Humo	1	Date	o (damining)		IIVEIVI	OKI
	eld	As Built [Orawings	Design Drawin	gs	Files
LOCATION DETAILS						
Route No.	Road No.	Road	Name/ Route Descrip	tion Section	Road Km]
Street]] [Town]
Region	District	Munic	ipality	District Municipalit	у	_
Province		1		¬]
Suburb	Ward	Depot	·			_
Cubuib	Wald					1
COORDINATES						
Map Info						
Survey System	Elevation (m)					
WGS84						
Latitude (So	uth) Longitude	e (East)				
DD MM	SS.s DD MM	SS	S.s			
Start						
Middle						
End						
LOCATION FEATURES						
Status	Ownership		Us	e.		
Comments						
Orientation	App. Emb Orient.		Dir	r. River Flow		J
Primary Feature Over/Under	Primary Feature C	rossed	Pri	mary Feature Name		7
Primary Feature Road Number	Primary Feature R	oad Km				J
Secondary Feature Over/Under	Secondary Feature	e Crossec	i Se	condary Feature Name		7
Other Authority	Other Structure No).				
<u> </u>						









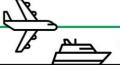
TENDER No.: SCMU10-24/25-0023

CONTRACT DETAILS				
Design Engineers Co	ntractors	Contract Price	Escalated Cost	Total Cost (Design/Construct)
Construction Authority Co	ntract Number	Year Completed	Completion period (mo	nths) Year Designed
Construction Cost		st	Constu	ction Period (months)
Design Report Available	Location of Design Rep	ort Constr	ruction Report Available L	ocation of Construction Report
STRUCTURAL FEATURES				
Classification				
No. of Cells				
Purpose of Culvert	Culvert Type	e	Culvert	Description
Parapet/Handrails	Culvert Roa	ad Slabs	Approac	ch Slabs (Y/N/Unknown)
In/Outlet Walls	Causeway		Buried	Structure (Y/N/Unknown/NA)
Floor Slope (°)	Construction System	fcu Cells -	- Precast (MPa)	fcu Cells - Insitu (Mpa)
fcu ApronSlb/CutWalls (MPa)	fcu Wing/Ret Walls (MPa)	fcu Road 9	Slabs (MPa)	
CELL				
	aterial			Internal Diam. (s x h) (m)
Position Walls	Top Slab	Foundation Type	Founding Material	Int. Width Int. Height
	1000000			
APRON SLABS				
Position	Material		Thickness (m)	
	_			









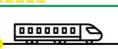
TENDER No.: SCMU10-24/25-0023

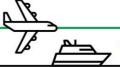
osition	Туре	,				Materia	ıl				Th	nicknes	s (m)		
3	. , , ,		T										····		
	WALLS										_				
osition		Material	l				1	Width (r	n)			De	epth ((m)	
					-										
	IENIT DROTEO	FIGNI				_									
osition	MENT PROTECT	IION		Material						Т.	hicknes	rc (m)		Slope (%	<u> </u>
OSITION				Material						- "	IIICKIIES	S (III <i>)</i>		Slope (7	9
														<u></u>	
													-		
SIPATO	nrs														
osition	JK3	Tv	/pe				Ŧ				Materi	ial			
		- ,	PC												T
IG/RET	FAINING WALL	S													
IG/RET	TAINING WALLS	S		Materia	al		Found	ation Ty	/pe	Foi	unding	Materia	al	Hmax (m) Slope (%
	TAINING WALLS	S		Materia	al		Founda	ation Ty	/pe	Fou	unding	Materia	al	Hmax (m) Slope (%
		S		Materia	al		Founda	ation Ty	/pe	Fot	unding	Materia	al	Hmax (m) Slope (%
		S		Materia	al		Founda	ation Ty	/pe	Fot	unding	Materia	al	Hmax (m) Slope (%
		S		Materia	al		Found	ation Ty	/pe	Fot	unding	Materia	al	Hmax (m) Slope (%
Position	Туре		ROAR				Founda	ation Ty	rpe	Fou	unding	Materia	al	Hmax (m) Slope (%
Position	Type NS, GEOMETR	Y AND F						ation Ty			unding	Materia		Hmax (m	
Position	Type NS, GEOMETR	Y AND F		AD CLE							unding	Materia			
Position	Type NS, GEOMETR gth (m)	Y AND F	erall V	AD CLE	ARAN				r Width	n (m)	unding	Materia	Overa		gth (m)
ENSIO	NS, GEOMETR gth (m)	Y AND F	erall V	AD CLE	ARAN			Min Clear	r Width	n (m)	unding	Materia	Overa	all Cell Lenç	gth (m)
ENSIO	NS, GEOMETR gth (m)	Y AND F	erall V	AD CLE	ARAN			Min Clear	r Width	n (m)	unding	Materia	Overa	all Cell Lenç	gth (m)
ENSIO verall Lenguritical Align	NS, GEOMETR gth (m)	Y AND F	erall V	AD CLE	ARAN ent	CES		Min Clear	r Width	n (m)		Materia	Overa	all Cell Lenç	gth (m)
ENSIO verall Lenguritical Align	NS, GEOMETR gth (m) nment	Y AND F	erall V	AD CLE Vidth (m)	ARAN ent	CES		Min Clear	r Width	n (m)		Materia	Overa	all Cell Leng	gth (m)
ENSIO verall Lengurical Align ax Fill Heigope of Inve	NS, GEOMETR gth (m) nment	Y AND F	erall V	AD CLE Vidth (m)	ARAN ent	CES		Min Clear	r Width	n (m)		Materia	Overa	all Cell Leng	gth (m)
ENSIO rerall Leng ritical Align ax Fill Height	NS, GEOMETR gth (m) mment ght (m) ert Slab (%)	Y AND F	erall V	AD CLE Vidth (m)	ARAN ent	CES		Min Clear	r Width	n (m)		Materia	Overa	all Cell Leng	gth (m)
ENSIO rerall Leng ritical Align ax Fill Height	NS, GEOMETR gth (m) nment ght (m)	Y AND F	rall V	AD CLE Vidth (m) al Alignme	ARAN ent	CES		Min Clear	r Width	n (m)		Materia	Overa	all Cell Leng	gth (m)
ENSIO rerall Lengurical Align ax Fill Height pope of Inventor American Am	NS, GEOMETR gth (m) mment ght (m) ert Slab (%) of Fill Over (m) C/way Over	Y AND F	rall V	AD CLE Vidth (m)	ARAN ent	CES		Min Clear	r Width	n (m)		Materia	Overa	all Cell Leng	gth (m)
ENSIO verall Lengurical Align ax Fill Height ax Depth of Inventor of Invento	NS, GEOMETR gth (m) mment ght (m) ert Slab (%) of Fill Over (m) C/way Over	Y AND F	rall V	AD CLE Vidth (m) al Alignme	ARAN ent	CES		Min Clear Camber/A	r Width	n (m)		Materia	Overa	all Cell Leng	gth (m)
ENSIO rerall Lengurical Align ax Fill Height pope of Inventor American Am	NS, GEOMETR gth (m) mment ght (m) ert Slab (%) of Fill Over (m) C/way Over	Y AND F	rall V	AD CLE Vidth (m) al Alignme	ARAN ent	CES		Min Clear Camber/A	r Width	n (m)		Materia	Overa	all Cell Leng	gth (m)
ENSIO verall Lengurical Align ax Fill Height ax Depth of Inventor of Invento	NS, GEOMETR gth (m) nment ght (m) of Fill Over (m) C/way Over Traffic //idth (m)	Y AND F	rall V	AD CLE Vidth (m) al Alignme	ARAN ent	CES		Min Clear Camber/A	r Width	n (m)		Materia	Overa	all Cell Leng	gth (m)

DESIGN CHARACTERIS	STICS				
Design Live Loading		Design Code(s)		Climate	
Warrant History		% Increase due to Overloading			
HYDRAULIC DATA					
Catchment Area (km²)		Design Return Period (years)		Design Discharge (m	n³/sec)
Design Flood Level (m above	m.s.l)	Clearance (Freeboard) (m)			
Soffit Level (m above m.s.l)		Peak Flood Level (m above m.s.l)		Ht above/below Soffit	(m)
Peak Discharge Year		Scour Protection			
Risk of Scour		Max Scour Depth (m)		Design Scour Depth	(m)
Angle Cell/River Flow (°)		Outlet Velocity (m/s)			
DRAINAGE					
Road Surface	Cell/s	Wing/Re	taining Walls	Sub-sur	face Seepage Drains
FACTORS INFLUENCIN	IG FIELD INS	PECTION			
Access	Effec	ctive Cell Opening (m²) Av	ailability of Dra	awings Se	ecurity Risk
General Information					
SERVICES IN/ON/UNDE	ER STRUCTU	JRE			
Service Type		Description		Location	Responsible Authority
Water Mains					
Sewers					
Stormwater Pipes					
Electricity Cables					
,					
Communication Collins					
Communication Cables					
			1		
Spare Ducts					
Other					









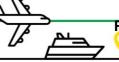
INIMUM HORIZONTAL CLEA	ARANCES			
Date Recorded (dd:mm:yyyy)	Clearance (m)		Location Description	
INIMUM VERTICAL CLEAR	ANCES			
Date Recorded (dd:mm:yyyy)	Clearance (m)		Location Description	
OAD CONFIGURATION, TR	AFFIC VOLUMES	AND SURF	ACING	
		ROAD OV	ER BRIDGE	ROAD UNDER BRIDGE
	Road C	n	Approach Road	
Class of Road				
No of Carriageways				
No of Lanes/Dimensions (m)				
Surfacing of Lanes				
No of Shoulders/Dimensions (m)				
Surfacing of Shoulders				
No of Sidewalks/Dimensions (m)				
Surfacing of Sidewalks				
Average Annual Daily Traffic (veh)				
No. of Heavy Vehicles (veh)				
Year ADT Recorded				
Peak Traffic AM				
Peak Traffic PM				
Year Peak Traffic Recorded				
Truck Factor (%)				
Detour Length (km)				
Minimum Class of Detour				
Metropolitan Significance				
DDITIONAL REMARKS				
	<u> </u>		4/2	∋ Bago I 1

F	OAD	D AU	тно	RITY			STE	RUCTU	RET	YPE			C	ULVI	RT NU	ИВЕ	R					LOC	ATION S	KETCH			
							(MA.						CUL	ERT N	AM E											
							INSPI	ECTIO	N INF	ORM	ATIC	N															
Inspe	ection	Туре)		lr	nspecto	or Nam	е			Fii	m			Date (d	d/mm	/уууу)										ľ
																											ļ
			Lot	itudo (1	Courth)		G	PS CC	ORD	INAT	ES		Long	itudo /	-oot)												
DI)		Lat	itude (South)		SS.s		+	DI	D	\top	Long	itude (ast)		SS.s										
												\top															
														LO	CATION	DEI	ΓAIL										
	Roa	ad No				Road	d km			R	load N	ame			Fea	ature (Crossed			Fea	ture Name	/Road No			Region	/Depot	
													ет	PIICI	UREIN	EOD	MATIC) N									
No.	of Cel	lls	T		Cell O	rientati	ion			Overa	II Leng	th	1		verall Wid				Const	tructed	T			Culvert Ty	уре		
														INSP	ECTION	RA	rings										
INSPECT	ION ITE	EM		OFF WA			G/RET/ WALLS		3.SC WORK	S(INR		4. EM	BANKM														
POSI	TION	Į	D	Е	R	D	Е	R	D	Е	R	D	Е	R													ļ
Emb	+	\dashv						\vdash					_	_													ŀ
INSPECT	ONIT	FM	5 1/	VATERW	VAY	6.00	OAD SLA	ABS 7	. ROAD)WAY I	OINTS	8.0	JARDR.	AllS	9. PAR			MISCELL		US							
		,,	D. V	E	R	D. KC	E	R	D	E	R	D. G	E	R	D HAND	_	R [) E	_	2							ŀ
					-10		_			-	48					+		+	+	-							ŀ
INSPECT	ION ITE	ЕМ	10	D. WALL	S	11.	TOP SL	AB		/ERTSI			13. CELL				•	•	-								
POSI			D	Е	R	D	Е	R	D	E E)NS R	DISI	E	R													ŀ
Cell	Ī																										ŀ
Cell																											
Cell																											
Cell	-																										
Cell	+																										
Cell																											
Cell																											ļ
Cell	+																										ŀ
Cell																											
Cell																											ľ
Cell																											
Cell	+																										
Cell	+																										
ITEM	POS	SITIO	ON	СО	DE			DESC	RIPT	ION			Q1	Υ	Unit	U	M ak				R	EMARK	s			Photo Dir	Photo No
																	Sail	e								ווט	NO
													_			-	1	\perp									
																	+	+									\vdash
																	İ										
							•																				
													_			_	1	-									
													-				+	+									\vdash
																	I										
							,														•		•		•		
													<u> </u>				-	\perp									\square
				\vdash									\vdash					+									$\vdash \vdash \vdash$
																											$\vdash \vdash \vdash$
Inspect	or's	asse	ssme	ent of	stsru	icture	and 1	further	com	ment	s:		-				•										
FURTH	ER IN	NSPF	MOITS	N REOI	JIRED	? Y/N	Re	quireme	ntsfor	r furth	er insp	ection:	:														
. 0.011	2. V IIV	_, _(.,,,,					-1																ł
				D-	DEGR	EE							E - EX					R - R	ELEV	ANCY				U - UR	GENCY		
Not Applic-		able to spect	1	None	Mino		lode- rate	Warnin	g Se	vere	Loca	al	∕lore than	Less	Gene	ral	Min	Mode	rate	M ajor	Critical	Record only	M onitor only	Routine	< 10 yrs	<5 yrs	ASAP
able X		U		0	1	_	2	3		4	1	+	ocal 2	gener 3	al 4		1	2		3	4	R	0	1	2	3	4







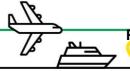


ROAI	D AUTHO	RITY	STRUCTU	RE TYPE	STRUCTURE NUMBER	R		
			MAJ	OR				
			CULV		ST	RUCTU	RE NAME	
	10 1			RMATION	D ((11) ()		INVENTOR	Y PHOTO
Inspecto	r / Captui	rer Name	Firr	n	Date (dd/mm/yyyy)		RECORE	SHEET
Photo No	Descript	ion					Direction of Photo	Camera Photo No
V01			t in Elevation (Mu:	st show total nu	ımber of barrels & apron slab)		Direction of Frioto	Camera i noto no
V02	View 2		let in Elevation (M		number of barrels, approach slab	8		
V03	View 3			(in direction of	increasing chainage)			
V04	View 4				irection of decreasing chainage)			
V05	View 5				sed (road, rail or upstream river v	iew)		
V06	View 6	View taken	from the top of fill	of feature cross	sed (road, rail or downstream rive	er view)		
V07	View 7	View of insi	ide of culvert barre	el showing roof	, walls & floor			
V08	View 8	Culvert Nur	mber					
V09	View 9	Any other s	alient feature					
V10	View 10							
V11	View 11							
V12	View 12							
V13	View 13							
V14	View 14							
V15	View 15							
V16	View 16							
							 	









ROAD AUTHORITY	ST	RUCTURE TYPE	STRUCTI	URE NUMBER	
	MAJC	R CULVERT		STRUCTURE NA	ME
	IN	VENTORY INFORMATION	1		
Inspector / Capturer Nam		Firm Date	e (dd/mm/yyyy)		INVENTORY
SOURCE: Fi	eld	As Built	Drawings	Design Drawir	ngs Files
LOCATION DETAILS					
Route No.	Road No.	Road	l Km	RISFSA Class	
District	Magisteria	al Region Munic	cipality		
COORDINATES					
Map Info					
Survey System		Elevation (m)			
1:50 000 TOPOGRAPHICAL	MAP	Mar Novel			
Map Name		Map Number			
GIS/GPS Coordinates					
Latitude (Sc	outh)	Longitude (East)			
DD MM	SS.s		3.s		
Start					
Middle					
End					
CLASSIFICATION					
Size Category		Asset Class			
Facility Carried		Crossing Type			
LOCATION FEATURE	S				
Status		Ownership		Jse	
Comments					
Orientation		App. Emb Orient.	<u>D</u>	Dir. River Flow	
Primary Feature Over/Under		Primary Feature Crossed	P	rimary Feature Name	
Primary Feature Road Numb	per	Primary Feature Road Km			
Secondary Feature Over/Und	ler	Secondary Feature Cross	ed S	Secondary Feature Name	
Other Authority		Other Structure No.			
	ш			270	
	χ <u></u>				Page 119

TENDER No.: SCMU10-24/25-0023

CONTRACT DETAILS	
Year Completed	
Design Engineers Co	ontractors Contract Price Escalated Cost Total Cost (Design/Construct
Design Engineers	Contractors
Construction Authority Co	ontract Number Year Completed Completion period (months) Year Designed
Construction Cost	Design Cost Constuction Period (months)
Design Report Available	Location of Design Report Construction Report Available Location of Construction Report
DIMENSIONS, GEOMETRY	AND ROAD CLEARANCES
Overall Length (m)	Overall Width (m) Min Clear Width (m) Overall Cell Length (m)
Vertical Alignment	Horizontal Alignment Camber/Crossfall Angle of Skew (°)
Max Fill Height (m)	
Slope of Invert Slab (%)	Min Vertical Clearance (m) Max Cell Size - Width (m) Max Cell Size - Height (m)
Max Depth of Fill Over (m)	
Single/Dual C/way Over	
Direction of Traffic	Carriageway 1 Carriageway 2
Min Road Width (m)	
Approach Width (m)	
STRUCTURAL FEATURES	
No. of Cells	
Purpose of Culvert	Culvert Type Culvert Description
Parapet/Handrails	Culvert Road Slabs Approach Slabs (Y/N/Unknown)
In/Outlet Walls	Causeway Buried Structure (Y/N/Unknown/NA)
Floor Slope (°)	Construction System fcu Cells - Precast (MPa) fcu Cells - Insitu (Mpa)
fcu ApronSlb/CutWalls (MPa)	fcu Wing/Ret Walls (MPa) fcu Road Slabs (MPa)







0000000

TENDER No.: SCMU10-24/25-0023

Position	Mat	erial	Foundation Type	Founding Mate	rial (Diam. (s x h) 'm)
FOSITION	Walls	Top Slab	roundation Type	rounding water	Int. Width	
						-
APRON SLAE	3S					
Position		Material		Thickne	ess (m)	
INVERT SLA	38					
Position	Туре		Material	Т.	nickness (m)	
1 OSICIOII	Турс		Material		nokiic 35 (iii)	
	V. I. C.					
CUT-OFF W	ILLS					
Position	Mat	erial	Width ((m)	Depth (m)	
EMBANKMEN	NT PROTECTIO	N				
EMBANKMEN Position	IT PROTECTIO	N Material		Thickne	ss (m) Slope	(%)
	IT PROTECTIO			Thickne	ss (m) Slope	(%)
	IT PROTECTIO			Thickne	ss (m) Slope	(%)
	IT PROTECTIO			Thickne	ss (m) Slope	(%)
	IT PROTECTIO			Thicknes	ss (m) Slope	(%)
	IT PROTECTIO			Thickne	ss (m) Slope	(%)
				Thickne	ss (m) Slope	(%)
Position				Thickne		(%)
Position		Material				(%)
Position		Material				(%)
Position		Material				(%)
Position		Material				(%)
Position		Material				(%)
Position		Material				(%)

Position Type						
		Material	Foundation Type	Founding Materia	Hmax (m)	Dmax (m)
DESIGN CHARACTER Design Live Loading	RISTICS	Design Code(s)		Climate		
Design Live Loading		Design Code(s)		Cilinate		
Warrant History		% Increase due to 0	Overloading			
HYDRAULIC DATA	·					
Catchment Area (km²)		Design Return Peri	od (years)	Design Discharge (m	³/sec)	
Design Flood Level (m abov	e m.s.l)	Clearance (Freeboa	ard) (m)			
Soffit Level (m above m.s.l)		Peak Flood Level (n	n above m.s.l)	Ht above/below Soffit	(m)	
Peak Discharge Year		Scour Protection				
Risk of Scour		Max Scour Depth (m	n)	Design Scour Depth ((m)	
Angle Cell/River Flow (°)		Outlet Velocity (m/s)				
DRAINAGE						
	0.11/					
Road Sunace			Min = /D = += i= i= = 10/=1	- C	C D-	
Road Surface	Cell/s		Wing/Retaining Wal	S Sub-surfa	ice Seepage Dra	ains
		INSPECTION	Wing/Retaining Wal	s Sub-surfa	ice Seepage Dra	ains
	ING FIELD	INSPECTION Effective Cell Opening (m			ce Seepage Dra	ains
FACTORS INFLUENC	ING FIELD					ains
FACTORS INFLUENC Access	ING FIELD					ains
FACTORS INFLUENC Access	ING FIELD					ains
FACTORS INFLUENC Access	ING FIELD	Effective Cell Opening (m				ains
FACTORS INFLUENC Access General Information	ING FIELD	Effective Cell Opening (m				
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI Service Type	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI Service Type	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI Service Type Water Mains	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI Service Type Water Mains Sewers	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI Service Type Water Mains Sewers	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI Service Type Water Mains Sewers Stormwater Pipes	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI Service Type Water Mains Sewers Stormwater Pipes Electricity Cables Communication Cables	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	
FACTORS INFLUENC Access General Information SERVICES IN/ON/UNI Service Type Water Mains Sewers Stormwater Pipes Electricity Cables	ING FIELD	Effective Cell Opening (m		Drawings Sec	urity Risk	

0000000



MINIMUM HORIZONTAL CLE	ARANCES		
Date Recorded (dd:mm:yyyy)	Clearance (m)	Location Description	
MINIMUM VERTICAL CLEAR	ANCES		
	ANCES		
Date Recorded (dd:mm:yyyy)	Clearance (m)	Location Description	
ROAD CONFIGURATION, TR	RAFFIC VOLUM	JRFACING R CULVERT	ROAD UNDER CULVERT
	Road C	Approach Road	ROAD GIVER COLVERT
Class of Road		.,,,	
No of Carriageways			
No of Lanes/Dimensions (m)			
Surfacing of Lanes			
No of Shoulders/Dimensions (m)			
Surfacing of Shoulders	<u> </u>		
No of Sidewalks/Dimensions (m)			
Surfacing of Sidewalks	•		
Average Annual Daily Traffic (veh)			
No. of Heavy Vehicles (veh)			
Year ADT Recorded			
Peak Traffic AM			
Peak Traffic PM			
Year Peak Traffic Recorded			
Truck Factor (%)			
Detour Length (km)			
Minimum Class of Detour			
Metropolitan Significance			
ADDITIONAL REMARKS			7
F-P F		47	







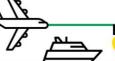


APPENDIX C4.2: LOCALITY PLAN / DRAWINGS









Department of Transport

LIST OF DRAWINGS

Drawing Number	Drawing Title / Description
Appendix C4.2.3	Project B: Amathole DM and Buffalo City Metropolitan
Appendix C4.2.4	Project B: Amathole DM and Buffalo City Metropolitan
Appendix C4.2.5	Project C: Chris Hani and Joe Gqabi DM
Appendix C4.2.6	Project C: Chris Hani and Joe Gqabi DM
Appendix C4.2.7	Project D: Sarah Baartman DM and Nelson Mandela Bay Metropolitan
Appendix C4.2.8	Project D: Sarah Baartman DM and Nelson Mandela Bay Metropolitan

Note:

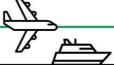
Total Number of Drawings = Eight (8).

All the Drawings are bound in the back of this document and tenderers must ensure that all the Drawings listed above are included and attached to this document.





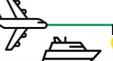




APPENDIX C4.3: SCHEDULE OF BRIDGES







Page | 126

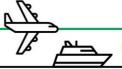
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
1813	Amathole	Amahlathi	Large Bridge	93.0
1953	Amathole	Amahlathi	Large Bridge	74.7
2191	Amathole	Amahlathi	Large Bridge	63.0
2175	Amathole	Amahlathi	Large Bridge	50.6
1866	Amathole	Amahlathi	Medium Bridge	50.0
2190	Amathole	Amahlathi	Medium Bridge	49.0
2174	Amathole	Amahlathi	Medium Bridge	39.1
1943	Amathole	Amahlathi	Medium Bridge	38.9
1917	Amathole	Amahlathi	Medium Bridge	37.5
1999	Amathole	Amahlathi	Medium Bridge	31.5
1994	Amathole	Amahlathi	Medium Bridge	28.1
1789	Amathole	Amahlathi	Medium Bridge	25.3
1838	Amathole	Amahlathi	Medium Bridge	25.3
1878	Amathole	Amahlathi	Medium Bridge	25.3
2007	Amathole	Amahlathi	Medium Bridge	25.2
1969	Amathole	Amahlathi	Medium Bridge	21.7
1963	Amathole	Amahlathi	Medium Bridge	21.6
1865	Amathole	Amahlathi	Medium Bridge	20.8
1896	Amathole	Amahlathi	Small Bridge	19.6
1901	Amathole	Amahlathi	Small Bridge	18.4
2004	Amathole	Amahlathi	Small Bridge	18.0
1966	Amathole	Amahlathi	Small Bridge	15.8
2177	Amathole	Amahlathi	Small Bridge	15.3
2193	Amathole	Amahlathi	Small Bridge	14.4
1883	Amathole	Amahlathi	Small Bridge	14.0
1877	Amathole	Amahlathi	Small Bridge	13.9
1837	Amathole	Amahlathi	Small Bridge	13.3
1860	Amathole	Amahlathi	Small Bridge	13.3
1861	Amathole	Amahlathi	Small Bridge	13.3
1871	Amathole	Amahlathi	Small Bridge	13.3
2182	Amathole	Amahlathi	Small Bridge	13.0
2181	Amathole	Amahlathi	Small Bridge	12.0
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
1965	Amathole	Amahlathi	Small Bridge	11.5
1958	Amathole	Amahlathi	Small Bridge	10.2
1967	Amathole	Amahlathi	Small Bridge	8.4
1788	Amathole	Amahlathi	Small Bridge	7.2
2006	Amathole	Amahlathi	Small Bridge	7.2
1961	Amathole	Amahlathi	Small Bridge	6.8
2003	Amathole	Amahlathi	Small Bridge	6.8
2112	Amathole	Great Kei	Large Bridge	60.0
2142	Amathole	Great Kei	Medium Bridge	49.8
2219	Amathole	Great Kei	Medium Bridge	41.0
2197	Amathole	Great Kei	Medium Bridge	34.5







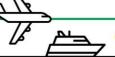




		•	•	
2143	Amathole	Great Kei	Medium Bridge	29.0
2145	Amathole	Great Kei	Medium Bridge	25.2
2199	Amathole	Great Kei	Medium Bridge	20.3
2116	Amathole	Great Kei	Small Bridge	20.0
2205	Amathole	Great Kei	Small Bridge	19.0
2088	Amathole	Great Kei	Small Bridge	13.5
2208	Amathole	Great Kei	Small Bridge	13.0
2150	Amathole	Great Kei	Small Bridge	6.4
1852	Amathole	Mbhashe	Large Bridge	80.4
1799	Amathole	Mbhashe	Large Bridge	72.8
1908	Amathole	Mbhashe	Large Bridge	54.6
2315	Amathole	Mbhashe	Medium Bridge	43.6
1846	Amathole	Mbhashe	Medium Bridge	40.5
1802	Amathole	Mbhashe	Medium Bridge	35.7
1800	Amathole	Mbhashe	Medium Bridge	34.3
1798	Amathole	Mbhashe	Medium Bridge	33.5
1776	Amathole	Mbhashe	Medium Bridge	33.0
1805	Amathole	Mbhashe	Medium Bridge	31.2
1910	Amathole	Mbhashe	Medium Bridge	30.6
1941	Amathole	Mbhashe	Medium Bridge	26.0
1888	Amathole	Mbhashe	Medium Bridge	25.0
1782	Amathole	Mbhashe	Medium Bridge	24.3
1845	Amathole	Mbhashe	Medium Bridge	22.6
1765	Amathole	Mbhashe	Small Bridge	17.1
1758	Amathole	Mbhashe	Small Bridge	15.6
1931	Amathole	Mbhashe	Small Bridge	13.0
1766	Amathole	Mbhashe	Small Bridge	8.4
1803	Amathole	Mbhashe	Small Bridge	6.9
1762	Amathole	Mbhashe	Small Bridge	6.7
1808	Amathole	Mnquma	Large Bridge	82.8
1751	Amathole	Mnquma	Medium Bridge	35.0
1793	Amathole	Mnquma	Medium Bridge	35.0
2977	Amathole	Mnquma	Medium Bridge	31.6
1790	Amathole	Mnquma	Medium Bridge	30.3
1826	Amathole	Mnquma	Medium Bridge	26.5
		·		Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
1000				(m)
1820	Amathole	Mnquma	Medium Bridge	23.6
1828	Amathole	Mnquma	Medium Bridge	21.0
1792	Amathole	Mnquma	Medium Bridge	20.8
2317	Amathole	Mnquma	Medium Bridge	20.4
1847	Amathole	Mnquma	Small Bridge	15.6
1815	Amathole	Mnquma	Small Bridge	15.3
1825	Amathole	Mnquma	Small Bridge	15.3
1821	Amathole	Mnquma	Small Bridge	13.0
1812	Amathole	Mnquma	Small Bridge	12.8
1816	Amathole	Mnquma	Small Bridge	6.8
2622	Amathole	Ngqushwa	Very Large Bridge	158.2



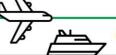




		Department of Ti	апэроп	
2012	Amathole	Ngqushwa	Large Bridge	69.0
2017	Amathole	Ngqushwa	Medium Bridge	40.0
2030	Amathole	Ngqushwa	Medium Bridge	31.0
1988	Amathole	Ngqushwa	Medium Bridge	27.5
2015	Amathole	Ngqushwa	Medium Bridge	26.8
2039	Amathole	Ngqushwa	Small Bridge	19.5
1979	Amathole	Ngqushwa	Small Bridge	15.8
1983	Amathole	Ngqushwa	Small Bridge	15.8
1980	Amathole	Ngqushwa	Small Bridge	15.7
1985	Amathole	Ngqushwa	Small Bridge	14.8
1971	Amathole	Ngqushwa	Small Bridge	13.4
2013	Amathole	Ngqushwa	Small Bridge	13.0
2016	Amathole	Ngqushwa	Small Bridge	12.8
2077	Amathole	Ngqushwa	Small Bridge	10.2
2014	Amathole	Nggushwa	Small Bridge	6.9
2119	Amathole	Raymond Mhlaba	Large Bridge	79.7
2065	Amathole	Raymond Mhlaba	Medium Bridge	40.5
2121	Amathole	Raymond Mhlaba	Medium Bridge	34.7
2090	Amathole	Raymond Mhlaba	Medium Bridge	33.5
1786	Amathole	Raymond Mhlaba	Medium Bridge	31.8
2303	Amathole	Raymond Mhlaba	Medium Bridge	31.0
2120	Amathole	Raymond Mhlaba	Medium Bridge	29.5
2075	Amathole	Raymond Mhlaba	Medium Bridge	29.3
2091	Amathole	Raymond Mhlaba	Medium Bridge	27.0
2092	Amathole	Raymond Mhlaba	Medium Bridge	27.0
2136	Amathole	Raymond Mhlaba	Medium Bridge	24.5
2133	Amathole	Raymond Mhlaba	Medium Bridge	24.0
2058	Amathole	Raymond Mhlaba	Medium Bridge	21.4
1767	Amathole	Raymond Mhlaba	Medium Bridge	21.2
2982	Amathole	Raymond Mhlaba	Medium Bridge	21.1
2103	Amathole	Raymond Mhlaba	Medium Bridge	20.2
1920	Amathole	Raymond Mhlaba	Medium Bridge	20.0
2067	Amathole	Raymond Mhlaba	Medium Bridge	20.0
2304	Amathole	Raymond Mhlaba	Medium Bridge	20.0
2098	Amathole	Raymond Mhlaba	Small Bridge	20.0
				Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
2172	Amathole	Raymond Mhlaba	Small Bridge	(m) 19.3
2041	Amathole	Raymond Mhlaba	Small Bridge	17.6
1761	Amathole	Raymond Mhlaba	Small Bridge	16.6
1779	Amathole	Raymond Mhlaba	Small Bridge	16.3
2100	Amathole	Raymond Mhlaba	Small Bridge	15.8
2093	Amathole	Raymond Mhlaba	Small Bridge	15.6
2093	Amathole	Raymond Mhlaba	Small Bridge	15.5
2102	Amathole	Raymond Mhlaba	Small Bridge	15.3
2104	Amathole	Raymond Mhlaba	Small Bridge	14.8
1784	Amathole	Raymond Mhlaba	Small Bridge	14.6
2156	Amathole	Raymond Mhlaba	Small Bridge	14.2
_ 100	,	. tay mond withaba	Jinan Dilago	17.4



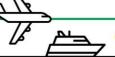




		Department of 11	апэроп	
2159	Amathole	Raymond Mhlaba	Small Bridge	14.2
1795	Amathole	Raymond Mhlaba	Small Bridge	14.1
2170	Amathole	Raymond Mhlaba	Small Bridge	13.9
1755	Amathole	Raymond Mhlaba	Small Bridge	13.7
1778	Amathole	Raymond Mhlaba	Small Bridge	13.0
2167	Amathole	Raymond Mhlaba	Small Bridge	12.8
2094	Amathole	Raymond Mhlaba	Small Bridge	12.0
2146	Amathole	Raymond Mhlaba	Small Bridge	12.0
1775	Amathole	Raymond Mhlaba	Small Bridge	10.3
2195	Amathole	Raymond Mhlaba	Small Bridge	7.4
2108	Amathole	Raymond Mhlaba	Small Bridge	6.5
2165	Amathole	Raymond Mhlaba	Small Bridge	6.2
2095	Amathole	Raymond Mhlaba	Small Bridge	6.1
2097	Amathole	Raymond Mhlaba	Small Bridge	6.1
3437	Buffalo City	Buffalo City	Very Large Bridge	290.0
3442	Buffalo City	Buffalo City	Very Large Bridge	280.0
2245	Buffalo City	Buffalo City	Very Large Bridge	184.0
2252	Buffalo City	Buffalo City	Very Large Bridge	154.0
3207	Buffalo City	Buffalo City	Very Large Bridge	126.0
3436	Buffalo City	Buffalo City	Large Bridge	82.0
3210	Buffalo City	Buffalo City	Large Bridge	80.0
2240	Buffalo City	Buffalo City	Large Bridge	77.1
3141	Buffalo City	Buffalo City	Large Bridge	75.0
2330	Buffalo City	Buffalo City	Large Bridge	74.1
2256	Buffalo City	Buffalo City	Large Bridge	66.9
3139	Buffalo City	Buffalo City	Large Bridge	65.0
3209	Buffalo City	Buffalo City	Large Bridge	60.0
2291	Buffalo City	Buffalo City	Large Bridge	58.5
3159	Buffalo City	Buffalo City	Large Bridge	58.0
2251	Buffalo City	Buffalo City	Large Bridge	57.4
3087	Buffalo City	Buffalo City	Large Bridge	56.0
1814	Buffalo City	Buffalo City	Large Bridge	51.3
2274	Buffalo City	Buffalo City	Medium Bridge	47.0
3056	Buffalo City	Buffalo City	Medium Bridge	42.0
3433	Buffalo City	Buffalo City	Medium Bridge	40.0
				Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
3434	Buffalo City	Buffalo City	Medium Bridge	(m) 39.0
3435	Buffalo City	Buffalo City	Medium Bridge	39.0
2148	Buffalo City	Buffalo City	Medium Bridge	38.0
2218	Buffalo City	Buffalo City	Medium Bridge	35.0
2264	Buffalo City	Buffalo City	Medium Bridge	35.0
3208	Buffalo City	Buffalo City	Medium Bridge	34.0
2301	Buffalo City	Buffalo City	Medium Bridge	33.4
3182	Buffalo City	Buffalo City	Medium Bridge	32.0
3211	Buffalo City	Buffalo City	Medium Bridge	32.0
2314	Buffalo City	Buffalo City	Medium Bridge	30.6
1836	Buffalo City	Buffalo City	Medium Bridge	29.1



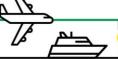




3302	Buffalo City	Buffalo City	Medium Bridge	29.0
2254	Buffalo City	Buffalo City	Medium Bridge	27.5
2290	Buffalo City	Buffalo City	Medium Bridge	26.9
2258	Buffalo City	Buffalo City	Medium Bridge	26.0
2223	Buffalo City	Buffalo City	Medium Bridge	22.2
2222	Buffalo City	Buffalo City	Medium Bridge	21.0
2242	Buffalo City	Buffalo City	Medium Bridge	21.0
2268	Buffalo City	Buffalo City	Medium Bridge	21.0
2286	Buffalo City	Buffalo City	Medium Bridge	20.7
2302	Buffalo City	Buffalo City	Medium Bridge	20.6
2284	Buffalo City	Buffalo City	Small Bridge	19.5
1862	Buffalo City	Buffalo City	Small Bridge	19.2
2272	Buffalo City	Buffalo City	Small Bridge	18.4
2288	Buffalo City	Buffalo City	Small Bridge	16.2
2271	Buffalo City	Buffalo City	Small Bridge	16.0
2247	Buffalo City	Buffalo City	Small Bridge	15.8
2250	Buffalo City	Buffalo City	Small Bridge	14.1
3140	Buffalo City	Buffalo City	Small Bridge	14.0
3443	Buffalo City	Buffalo City	Small Bridge	14.0
2262	Buffalo City	Buffalo City	Small Bridge	13.6
2310	Buffalo City	Buffalo City	Small Bridge	13.5
2215	Buffalo City	Buffalo City	Small Bridge	13.0
2985	Buffalo City	Buffalo City	Small Bridge	12.7
3166	Buffalo City	Buffalo City	Small Bridge	12.0
2276	Buffalo City	Buffalo City	Small Bridge	11.1
2979	Buffalo City	Buffalo City	Small Bridge	10.5
2278	Buffalo City	Buffalo City	Small Bridge	10.4
2296	Buffalo City	Buffalo City	Small Bridge	10.4
2273	Buffalo City	Buffalo City	Small Bridge	10.4
2306	Buffalo City	Buffalo City	Small Bridge	10.2
2243	Buffalo City	Buffalo City	Small Bridge	10.2
3165	Buffalo City	Buffalo City	Small Bridge	10.0
2153	Buffalo City	Buffalo City	Small Bridge	9.8
2265	Buffalo City	Buffalo City	Small Bridge	9.7
2241	Buffalo City	Buffalo City	Small Bridge	9.7
2241	Bullalo City	Bullalo City	Small Bridge	Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
			The state of the s	(m)
3158	Buffalo City	Buffalo City	Small Bridge	9.0
3181	Buffalo City	Buffalo City	Small Bridge	8.5
3454	Buffalo City	Buffalo City	Small Bridge	8.5
2221	Buffalo City	Buffalo City	Small Bridge	7.7
2263	Buffalo City	Buffalo City	Small Bridge	6.6
3438	Buffalo City	Buffalo City	Small Bridge	6.5
2217	Buffalo City	Buffalo City	Small Bridge	6.4
2216	Buffalo City	Buffalo City	Small Bridge	6.3
2285	Buffalo City	Buffalo City	Small Bridge	6.2
2287	Buffalo City	Buffalo City	Small Bridge	6.2
3100	Buffalo City	Buffalo City	Small Bridge	6.2
		-	<u> </u>	



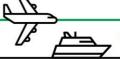




-		Department of Ti	апэроп	
2281	Buffalo City	Buffalo City	Small Bridge	6.0
3432	Buffalo City	Buffalo City	Small Bridge	6.0
2282	Buffalo City	Buffalo City	Small Bridge	5.9
40	Chris Hani	Dr AB Xuma	Large Bridge	95.0
74	Chris Hani	Dr AB Xuma	Large Bridge	94.0
41	Chris Hani	Dr AB Xuma	Large Bridge	75.3
83	Chris Hani	Dr AB Xuma	Large Bridge	72.5
79	Chris Hani	Dr AB Xuma	Large Bridge	52.0
39	Chris Hani	Dr AB Xuma	Medium Bridge	45.0
38	Chris Hani	Dr AB Xuma	Medium Bridge	39.6
42	Chris Hani	Dr AB Xuma	Medium Bridge	39.6
117	Chris Hani	Dr AB Xuma	Medium Bridge	36.0
78	Chris Hani	Dr AB Xuma	Medium Bridge	35.5
98	Chris Hani	Dr AB Xuma	Medium Bridge	32.0
102	Chris Hani	Dr AB Xuma	Medium Bridge	32.0
109	Chris Hani	Dr AB Xuma	Medium Bridge	27.0
116	Chris Hani	Dr AB Xuma	Medium Bridge	26.6
122	Chris Hani	Dr AB Xuma	Medium Bridge	26.5
64	Chris Hani	Dr AB Xuma	Medium Bridge	24.0
100	Chris Hani	Dr AB Xuma	Medium Bridge	21.0
119	Chris Hani	Dr AB Xuma	Medium Bridge	21.0
121	Chris Hani	Dr AB Xuma	Small Bridge	20.0
75	Chris Hani	Dr AB Xuma	Small Bridge	16.5
63	Chris Hani	Dr AB Xuma	Small Bridge	16.0
113	Chris Hani	Dr AB Xuma	Small Bridge	14.0
87	Chris Hani	Dr AB Xuma	Small Bridge	13.5
88	Chris Hani	Dr AB Xuma	Small Bridge	13.0
56	Chris Hani	Dr AB Xuma	Small Bridge	6.2
80	Chris Hani	Dr AB Xuma	Small Bridge	6.2
76	Chris Hani	Dr AB Xuma	Small Bridge	6.1
45	Chris Hani	Dr AB Xuma	Small Bridge	6.0
68	Chris Hani	Dr AB Xuma	Small Bridge	3.0
11	Chris Hani	Emalahleni	Large Bridge	54.0
18	Chris Hani	Emalahleni	Medium Bridge	34.0
3000	Chris Hani	Emalahleni	Medium Bridge	30.8
			Ţ,	Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
				(m)
32	Chris Hani	Emalahleni	Medium Bridge	30.3
16	Chris Hani	Emalahleni	Medium Bridge	27.5
21	Chris Hani	Emalahleni	Medium Bridge	27.2
3	Chris Hani	Emalahleni	Medium Bridge	26.0
4	Chris Hani	Emalahleni	Medium Bridge	23.0
13	Chris Hani	Emalahleni	Medium Bridge	21.7
26	Chris Hani	Emalahleni	Medium Bridge	21.2
10	Chris Hani	Emalahleni	Small Bridge	7.2
410	Chris Hani	Enoch Mgijima	Large Bridge	60.7
3362	Chris Hani	Enoch Mgijima	Large Bridge	54.0
553	Chris Hani	Enoch Mgijima	Large Bridge	53.4







		Department of 11	ansport	
554	Chris Hani	Enoch Mgijima	Medium Bridge	46.5
644	Chris Hani	Enoch Mgijima	Medium Bridge	38.0
3377	Chris Hani	Enoch Mgijima	Medium Bridge	37.0
446	Chris Hani	Enoch Mgijima	Medium Bridge	35.7
436	Chris Hani	Enoch Mgijima	Medium Bridge	30.0
139	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
140	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
141	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
142	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
143	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
144	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
145	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
146	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
148	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
149	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
150	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
151	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
152	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
153	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
154	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
155	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
274	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
384	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
385	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
386	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
388	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
389	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
390	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
391	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
392	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
393	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
394	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
395	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
396	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
397	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
				Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
200	Chris Honi	Enoch Maiiima	Modium Pridge	(m)
398 400	Chris Hani Chris Hani	Enoch Mgijima Enoch Mgijima	Medium Bridge Medium Bridge	28.8 28.8
400	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
401	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
402	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
403	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
404	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
406	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
407	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
407	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
559	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
559	CHIIS FIAHI	LITOCIT WIGIJIITIA	Mediani bilage	20.0





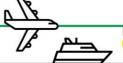




-		Department of 11	апэроп	
560	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
564	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
567	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
570	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
573	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
574	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
577	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
588	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
593	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
595	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
596	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
597	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
601	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
602	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
603	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
604	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
605	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
440	Chris Hani	Enoch Mgijima	Medium Bridge	24.0
444	Chris Hani	Enoch Mgijima	Medium Bridge	23.0
326	Chris Hani	Enoch Mgijima	Medium Bridge	22.0
496	Chris Hani	Enoch Mgijima	Small Bridge	18.6
433	Chris Hani	Enoch Mgijima	Small Bridge	17.0
450	Chris Hani	Enoch Mgijima	Small Bridge	8.0
637	Chris Hani	Enoch Mgijima	Small Bridge	7.6
459	Chris Hani	Enoch Mgijima	Small Bridge	7.2
447	Chris Hani	Enoch Mgijima	Small Bridge	6.8
321	Chris Hani	Intsika Yethu	Large Bridge	62.5
1954	Chris Hani	Intsika Yethu	Medium Bridge	41.6
352	Chris Hani	Intsika Yethu	Medium Bridge	40.2
2034	Chris Hani	Intsika Yethu	Medium Bridge	36.4
330	Chris Hani	Intsika Yethu	Medium Bridge	34.0
292	Chris Hani	Intsika Yethu	Medium Bridge	33.5
324	Chris Hani	Intsika Yethu	Medium Bridge	32.0
316	Chris Hani	Intsika Yethu	Medium Bridge	31.5
280	Chris Hani	Intsika Yethu	Medium Bridge	31.0
				Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
000	Obvio Havi	Intelle V : 0	Madia - Dill	(m)
299	Chris Hani	Intsika Yethu	Medium Bridge	30.0
341	Chris Hani	Intsika Yethu	Medium Bridge	27.0
300	Chris Hani	Intsika Yethu	Medium Bridge	26.0
318	Chris Hani	Intsika Yethu	Medium Bridge	26.0
315	Chris Hani	Intsika Yethu	Medium Bridge	20.3
301	Chris Hani	Intsika Yethu	Small Bridge	16.0
279	Chris Hani	Intsika Yethu	Small Bridge	14.0
291	Chris Hani	Intsika Yethu	Small Bridge	12.5
276	Chris Hani	Intsika Yethu	Small Bridge	11.0
278	Chris Hani	Intsika Yethu	Small Bridge	9.5
281	Chris Hani	Intsika Yethu	Small Bridge	9.5



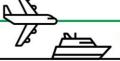




		Department of 11	ansport	
310	Chris Hani	Intsika Yethu	Small Bridge	6.8
308	Chris Hani	Intsika Yethu	Small Bridge	6.0
201	Chris Hani	Inxuba Yethemba	Large Bridge	90.3
170	Chris Hani	Inxuba Yethemba	Large Bridge	86.4
195	Chris Hani	Inxuba Yethemba	Large Bridge	75.0
191	Chris Hani	Inxuba Yethemba	Large Bridge	70.8
172	Chris Hani	Inxuba Yethemba	Large Bridge	68.4
200	Chris Hani	Inxuba Yethemba	Large Bridge	50.5
202	Chris Hani	Inxuba Yethemba	Medium Bridge	47.3
189	Chris Hani	Inxuba Yethemba	Medium Bridge	40.6
206	Chris Hani	Inxuba Yethemba	Medium Bridge	39.0
209	Chris Hani	Inxuba Yethemba	Medium Bridge	36.2
211	Chris Hani	Inxuba Yethemba	Medium Bridge	29.2
185	Chris Hani	Inxuba Yethemba	Medium Bridge	28.6
165	Chris Hani	Inxuba Yethemba	Medium Bridge	28.1
171	Chris Hani	Inxuba Yethemba	Medium Bridge	27.8
241	Chris Hani	Inxuba Yethemba	Medium Bridge	27.1
181	Chris Hani	Inxuba Yethemba	Medium Bridge	26.5
169	Chris Hani	Inxuba Yethemba	Medium Bridge	25.5
177	Chris Hani	Inxuba Yethemba	Medium Bridge	25.5
178	Chris Hani	Inxuba Yethemba	Medium Bridge	24.8
190	Chris Hani	Inxuba Yethemba	Medium Bridge	21.4
192	Chris Hani	Inxuba Yethemba	Medium Bridge	20.7
188	Chris Hani	Inxuba Yethemba	Small Bridge	19.8
207	Chris Hani	Inxuba Yethemba	Small Bridge	18.8
210	Chris Hani	Inxuba Yethemba	Small Bridge	18.6
168	Chris Hani	Inxuba Yethemba	Small Bridge	17.7
166	Chris Hani	Inxuba Yethemba	Small Bridge	17.0
176	Chris Hani	Inxuba Yethemba	Small Bridge	16.4
199	Chris Hani	Inxuba Yethemba	Small Bridge	14.9
208	Chris Hani	Inxuba Yethemba	Small Bridge	14.2
175	Chris Hani	Inxuba Yethemba	Small Bridge	14.0
197	Chris Hani	Inxuba Yethemba	Small Bridge	14.0
198	Chris Hani	Inxuba Yethemba	Small Bridge	14.0
260	Chris Hani	Inxuba Yethemba	Small Bridge	13.6
				Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
173	Chris Hani	Inxuba Yethemba	Small Bridge	(m) 13.2
167	Chris Hani	Inxuba Yethemba	Small Bridge	13.0
196	Chris Hani	Inxuba Yethemba	Small Bridge	12.2
212	Chris Hani	Inxuba Yethemba	Small Bridge	11.6
194	Chris Hani	Inxuba Yethemba	Small Bridge	11.0
257	Chris Hani	Inxuba Yethemba	Small Bridge	9.8
254	Chris Hani	Inxuba Yethemba	Small Bridge	9.6
266	Chris Hani	Inxuba Yethemba	Small Bridge	8.9
174	Chris Hani	Inxuba Yethemba	Small Bridge	7.4
193	Chris Hani	Inxuba Yethemba	Small Bridge	7.4
205	Chris Hani	Inxuba Yethemba	Small Bridge	6.6
205	CIIIIS FIAIII	IIIXUDA TELHEHIDA	Julian Dhuye	0.0



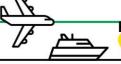




		•	•	
523	Chris Hani	Sakhisizwe	Medium Bridge	34.0
504	Chris Hani	Sakhisizwe	Medium Bridge	31.2
515	Chris Hani	Sakhisizwe	Medium Bridge	27.0
500	Chris Hani	Sakhisizwe	Medium Bridge	22.0
529	Chris Hani	Sakhisizwe	Small Bridge	18.0
506	Chris Hani	Sakhisizwe	Small Bridge	15.0
502	Chris Hani	Sakhisizwe	Small Bridge	12.0
507	Chris Hani	Sakhisizwe	Small Bridge	9.3
539	Chris Hani	Sakhisizwe	Small Bridge	6.5
3197	Chris Hani	Sakhisizwe	Small Bridge	6.4
514	Chris Hani	Sakhisizwe	Small Bridge	6.2
520	Chris Hani	Sakhisizwe	Small Bridge	6.0
3196	Chris Hani	Sakhisizwe	Small Bridge	6.0
652	Joe Gqabi	Elundini	Large Bridge	72.6
1274	Joe Gqabi	Elundini	Medium Bridge	50.0
654	Joe Gqabi	Elundini	Medium Bridge	48.6
655	Joe Gqabi	Elundini	Medium Bridge	48.6
1473	Joe Gqabi	Elundini	Medium Bridge	47.8
668	Joe Gqabi	Elundini	Medium Bridge	42.0
658	Joe Gqabi	Elundini	Medium Bridge	40.2
653	Joe Gqabi	Elundini	Medium Bridge	39.8
656	Joe Gqabi	Elundini	Medium Bridge	33.7
659	Joe Gqabi	Elundini	Medium Bridge	31.7
675	Joe Gqabi	Elundini	Medium Bridge	29.0
663	Joe Gqabi	Elundini	Medium Bridge	26.0
678	Joe Gqabi	Elundini	Medium Bridge	25.0
664	Joe Gqabi	Elundini	Medium Bridge	24.4
666	Joe Gqabi	Elundini	Medium Bridge	24.4
667	Joe Gqabi	Elundini	Medium Bridge	24.4
669	Joe Gqabi	Elundini	Medium Bridge	24.4
670	Joe Gqabi	Elundini	Medium Bridge	24.4
665	Joe Gqabi	Elundini	Medium Bridge	24.0
671	Joe Gqabi	Elundini	Medium Bridge	21.0
661	Joe Gqabi	Elundini	Medium Bridge	20.7
660	Joe Gqabi	Elundini	Medium Bridge	20.2
	·		<u> </u>	Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
				(m)
673	Joe Gqabi	Elundini	Medium Bridge	20.1
662	Joe Gqabi	Elundini	Small Bridge	20.0
674	Joe Gqabi	Elundini	Small Bridge	20.0
728	Joe Gqabi	Elundini	Small Bridge	20.0
738	Joe Gqabi	Elundini	Small Bridge	20.0
679	Joe Gqabi	Elundini	Small Bridge	19.4
676	Joe Gqabi	Elundini	Small Bridge	13.0
883	Joe Gqabi	Senqu	Large Bridge	78.0
888	Joe Gqabi	Senqu	Large Bridge	77.0
886	Joe Gqabi	Senqu	Large Bridge	62.0
887	Joe Gqabi	Senqu	Large Bridge	62.0

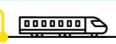


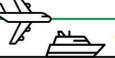




		Department of 11	апэроп	
907	Joe Gqabi	Senqu	Large Bridge	62.0
914	Joe Gqabi	Senqu	Large Bridge	62.0
884	Joe Gqabi	Senqu	Large Bridge	60.0
1044	Joe Gqabi	Senqu	Medium Bridge	41.6
1028	Joe Gqabi	Senqu	Medium Bridge	37.0
929	Joe Gqabi	Senqu	Medium Bridge	36.0
915	Joe Gqabi	Senqu	Medium Bridge	35.0
1041	Joe Gqabi	Senqu	Medium Bridge	32.0
932	Joe Gqabi	Senqu	Medium Bridge	31.0
885	Joe Gqabi	Senqu	Medium Bridge	28.0
916	Joe Gqabi	Senqu	Medium Bridge	28.0
931	Joe Gqabi	Senqu	Medium Bridge	28.0
912	Joe Gqabi	Senqu	Medium Bridge	27.0
920	Joe Gqabi	Senqu	Medium Bridge	27.0
1019	Joe Gqabi	Senqu	Medium Bridge	26.8
926	Joe Gqabi	Senqu	Medium Bridge	26.6
1013	Joe Gqabi	Senqu	Medium Bridge	26.4
913	Joe Gqabi	Senqu	Medium Bridge	26.0
918	Joe Gqabi	Senqu	Medium Bridge	25.0
910	Joe Gqabi	Senqu	Medium Bridge	24.6
925	Joe Gqabi	Senqu	Medium Bridge	23.0
933	Joe Gqabi	Senqu	Medium Bridge	22.0
921	Joe Gqabi	Senqu	Medium Bridge	21.6
908	Joe Gqabi	Senqu	Medium Bridge	21.0
1057	Joe Gqabi	Senqu	Medium Bridge	20.7
909	Joe Gqabi	Senqu	Small Bridge	18.0
924	Joe Gqabi	Senqu	Small Bridge	18.0
928	Joe Gqabi	Senqu	Small Bridge	18.0
1064	Joe Gqabi	Senqu	Small Bridge	16.8
922	Joe Gqabi	Senqu	Small Bridge	16.5
1039	Joe Gqabi	Senqu	Small Bridge	16.5
1060	Joe Gqabi	Senqu	Small Bridge	16.5
1040	Joe Gqabi	Senqu	Small Bridge	16.1
923	Joe Gqabi	Senqu	Small Bridge	16.0
935	Joe Gqabi	Senqu	Small Bridge	15.0
	'	'	3	Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
				(m)
917	Joe Gqabi	Senqu	Small Bridge	14.5
906	Joe Gqabi	Senqu	Small Bridge	14.0
934	Joe Gqabi	Senqu	Small Bridge	14.0
1058	Joe Gqabi	Senqu	Small Bridge	14.0
1070	Joe Gqabi	Senqu	Small Bridge	13.8
911	Joe Gqabi	Senqu	Small Bridge	12.0
1020	Joe Gqabi	Senqu	Small Bridge	11.0
1026	Joe Gqabi	Senqu	Small Bridge	10.5
919	Joe Gqabi	Senqu	Small Bridge	10.0
1022	Joe Gqabi	Senqu	Small Bridge	9.9
1025	Joe Gqabi	Senqu	Small Bridge	9.0



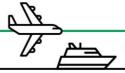




		Department of 11	апэроп	
1062	Joe Gqabi	Sengu	Small Bridge	7.2
927	Joe Gqabi	Senqu	Small Bridge	6.5
930	Joe Gqabi	Senqu	Small Bridge	6.5
3019	Joe Gqabi	Walter Sisulu	Large Bridge	80.0
876	Joe Gqabi	Walter Sisulu	Large Bridge	62.5
3231	Joe Gqabi	Walter Sisulu	Medium Bridge	45.0
3385	Joe Gqabi	Walter Sisulu	Medium Bridge	43.0
831	Joe Gqabi	Walter Sisulu	Medium Bridge	41.6
3018	Joe Gqabi	Walter Sisulu	Medium Bridge	39.2
805	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
806	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
807	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
808	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
809	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
810	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
811	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
812	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
813	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
814	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
815	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
816	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
817	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
818	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
819	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
821	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
822	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
823	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
824	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
825	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
826	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
827	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
828	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
829	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
830	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
857	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
				Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
858	Joe Gqabi	Walter Sisulu	Medium Bridge	(m) 28.7
859	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
860	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
861	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
862	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
863	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
864	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
865	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
866	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
867	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
868	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
500	1000 04001	Traitor Dibaia	Modiani Dilago	20.1





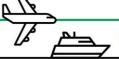


-		Department of Tre	порот	
875	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
3006	Joe Gqabi	Walter Sisulu	Medium Bridge	26.0
871	Joe Gqabi	Walter Sisulu	Medium Bridge	25.6
870	Joe Gqabi	Walter Sisulu	Medium Bridge	21.8
3371	Joe Gqabi	Walter Sisulu	Medium Bridge	21.0
879	Joe Gqabi	Walter Sisulu	Medium Bridge	20.9
869	Joe Gqabi	Walter Sisulu	Small Bridge	20.0
835	Joe Gqabi	Walter Sisulu	Small Bridge	19.3
873	Joe Gqabi	Walter Sisulu	Small Bridge	15.4
878	Joe Gqabi	Walter Sisulu	Small Bridge	14.7
842	Joe Gqabi	Walter Sisulu	Small Bridge	7.0
3016	Joe Gqabi	Walter Sisulu	Small Bridge	6.8
3021	Joe Gqabi	Walter Sisulu	Small Bridge	6.7
3493	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	1500.0
3494	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	1500.0
3393	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	484.0
3490	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	346.0
3479	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	320.0
3491	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	308.0
3480	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	300.0
3481	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	300.0
3487	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	296.0
3477	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	269.0
3484	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	248.0
3486	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	231.0
3394	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	230.0
3478	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	214.0
2909	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	201.0
3482	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	196.0
3035	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	193.0
3492	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	184.0
3483	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	174.0
3420	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	153.0
3476	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	140.0
3081	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	138.0
		j	, , ,	Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
000=	N. I. N. I. I			(m)
3066	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	132.5
3473	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	116.5
3485	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	114.0
3092	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	110.0
3489	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	106.0
2897	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	100.0
3399	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	97.3
3488	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	93.0
3048	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	92.6
3064	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	92.0
3070	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	91.0







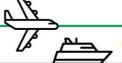


-		2 3 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
3095	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	89.5
3096	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	89.5
3428	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	86.5
3410	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	82.0
3409	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	81.6
3408	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	80.0
3094	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	78.0
3050	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	75.3
3415	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	65.5
3412	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	64.5
3049	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	64.4
3425	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	64.0
3206	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	63.0
3401	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	62.0
2929	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	60.0
3079	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	59.0
3067	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	58.0
3082	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	56.5
3046	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	56.3
3047	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	56.3
3411	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	54.4
3421	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	53.0
3390	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	52.0
3065	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	50.0
3422	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	50.0
3068	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	44.0
3072	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	42.0
3071	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	41.0
3474	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	37.0
3475	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	37.0
3034	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	36.6
3069	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	34.0
2930	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	33.6
3471	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	31.0
3062	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	30.5
	Troisen manaela zaj	Treate III and a Day	a 2age	Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
	-			(m)
3080	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	30.5
3078	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	29.5
3044	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	22.4
3043	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	21.8
3398	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	20.0
3042	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	17.3
3045	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	17.3
3396	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	15.8
3403	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	13.6
3073	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	11.5
3391	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	10.0









		2000		
2789	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	9.8
2798	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	7.6
3392	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	7.0
3085	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	6.6
3086	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	6.6
2410	Sarah Baartman	Blue Crane Route	Large Bridge	76.8
2507	Sarah Baartman	Blue Crane Route	Large Bridge	73.7
2511	Sarah Baartman	Blue Crane Route	Large Bridge	69.0
2441	Sarah Baartman	Blue Crane Route	Large Bridge	64.8
2467	Sarah Baartman	Blue Crane Route	Large Bridge	51.5
2417	Sarah Baartman	Blue Crane Route	Medium Bridge	48.5
2435	Sarah Baartman	Blue Crane Route	Medium Bridge	47.8
2476	Sarah Baartman	Blue Crane Route	Medium Bridge	45.9
2495	Sarah Baartman	Blue Crane Route	Medium Bridge	40.8
2493	Sarah Baartman	Blue Crane Route	Medium Bridge	30.7
2403	Sarah Baartman	Blue Crane Route	Medium Bridge	29.1
2437	Sarah Baartman	Blue Crane Route	Medium Bridge	29.1
2741	Sarah Baartman	Blue Crane Route	Medium Bridge	26.8
2537	Sarah Baartman	Blue Crane Route	Medium Bridge	24.6
2742	Sarah Baartman	Blue Crane Route	Medium Bridge	24.6
2496	Sarah Baartman	Blue Crane Route	Medium Bridge	24.4
2451	Sarah Baartman	Blue Crane Route	Medium Bridge	24.2
2483	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2500	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2502	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2506	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2565	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2528	Sarah Baartman	Blue Crane Route	Medium Bridge	22.4
2563	Sarah Baartman	Blue Crane Route	Medium Bridge	22.4
2559	Sarah Baartman	Blue Crane Route	Medium Bridge	22.2
2558	Sarah Baartman	Blue Crane Route	Medium Bridge	20.3
2480	Sarah Baartman	Blue Crane Route	Small Bridge	16.5
2510	Sarah Baartman	Blue Crane Route	Small Bridge	16.5
2560	Sarah Baartman	Blue Crane Route	Small Bridge	16.0
2486	Sarah Baartman	Blue Crane Route	Small Bridge	15.2
2454	Sarah Baartman	Blue Crane Route	Small Bridge	14.8
2460	Sarah Baartman	Blue Crane Route	Small Bridge	14.7
2468	Sarah Baartman	Blue Crane Route	Small Bridge	14.3
2-100	Caran Baartman	Bide Grane Rodie	Oman Bridge	Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
	·	, ,	,,	(m)
2413	Sarah Baartman	Blue Crane Route	Small Bridge	13.8
2449	Sarah Baartman	Blue Crane Route	Small Bridge	11.6
2485	Sarah Baartman	Blue Crane Route	Small Bridge	11.4
2474	Sarah Baartman	Blue Crane Route	Small Bridge	10.2
2488	Sarah Baartman	Blue Crane Route	Small Bridge	10.2
2547	Sarah Baartman	Blue Crane Route	Small Bridge	10.0
2472	Sarah Baartman	Blue Crane Route	Small Bridge	9.7
2436	Sarah Baartman	Blue Crane Route	Small Bridge	9.6



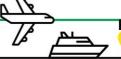




		Department of Tra	ansport	
2521	Sarah Baartman	Blue Crane Route	Small Bridge	9.1
2445	Sarah Baartman	Blue Crane Route	Small Bridge	8.3
2522	Sarah Baartman	Blue Crane Route	Small Bridge	7.5
2536	Sarah Baartman	Blue Crane Route	Small Bridge	7.5
2562	Sarah Baartman	Blue Crane Route	Small Bridge	7.4
2498	Sarah Baartman	Blue Crane Route	Small Bridge	7.0
2497	Sarah Baartman	Blue Crane Route	Small Bridge	6.9
2566	Sarah Baartman	Blue Crane Route	Small Bridge	6.6
2812	Sarah Baartman	Blue Crane Route	Small Bridge	6.6
2667	Sarah Baartman	Dr Beyers Naude	Very Large Bridge	167.1
2782	Sarah Baartman	Dr Beyers Naude	Large Bridge	99.0
2878	Sarah Baartman	Dr Beyers Naude	Large Bridge	96.5
3153	Sarah Baartman	Dr Beyers Naude	Large Bridge	95.5
2663	Sarah Baartman	Dr Beyers Naude	Large Bridge	56.4
2687	Sarah Baartman	Dr Beyers Naude	Medium Bridge	49.8
2776	Sarah Baartman	Dr Beyers Naude	Medium Bridge	48.8
2696	Sarah Baartman	Dr Beyers Naude	Medium Bridge	45.6
2635	Sarah Baartman	Dr Beyers Naude	Medium Bridge	41.1
2688	Sarah Baartman	Dr Beyers Naude	Medium Bridge	40.3
2692	Sarah Baartman	Dr Beyers Naude	Medium Bridge	40.0
2378	Sarah Baartman	Dr Beyers Naude	Medium Bridge	39.9
2646	Sarah Baartman	Dr Beyers Naude	Medium Bridge	39.4
2657	Sarah Baartman	Dr Beyers Naude	Medium Bridge	38.9
2755	Sarah Baartman	Dr Beyers Naude	Medium Bridge	38.4
2726	Sarah Baartman	Dr Beyers Naude	Medium Bridge	35.7
2711	Sarah Baartman	Dr Beyers Naude	Medium Bridge	34.7
2840	Sarah Baartman	Dr Beyers Naude	Medium Bridge	34.7
2841	Sarah Baartman	Dr Beyers Naude	Medium Bridge	34.7
2377	Sarah Baartman	Dr Beyers Naude	Medium Bridge	33.8
2710	Sarah Baartman	Dr Beyers Naude	Medium Bridge	29.5
2762	Sarah Baartman	Dr Beyers Naude	Medium Bridge	29.5
2848	Sarah Baartman	Dr Beyers Naude	Medium Bridge	29.4
2884	Sarah Baartman	Dr Beyers Naude	Medium Bridge	29.4
2724	Sarah Baartman	Dr Beyers Naude	Medium Bridge	28.8
2839	Sarah Baartman	Dr Beyers Naude	Medium Bridge	27.4
2639	Sarah Baartman	Dr Beyers Naude	Medium Bridge	27.0
2644	Sarah Baartman	Dr Beyers Naude	Medium Bridge	27.0
2381	Sarah Baartman	Dr Beyers Naude	Medium Bridge	26.3
				Estimated
ID	District/Metropolitan	Local Municipality	New Structure Type	Overall Length
2376	Sarah Baartman	Dr Beyers Naude	Medium Bridge	(m) 26.0
2846	Sarah Baartman	Dr Beyers Naude	Medium Bridge	25.3
2662	Sarah Baartman	Dr Beyers Naude	Medium Bridge	25.0
2725	Sarah Baartman	Dr Beyers Naude	Medium Bridge	24.2
2672	Sarah Baartman	Dr Beyers Naude	Medium Bridge	20.4
2675	Sarah Baartman	Dr Beyers Naude	Medium Bridge	20.4
2717	Sarah Baartman	Dr Beyers Naude	Medium Bridge	20.4
2405	Sarah Baartman	Dr Beyers Naude	Small Bridge	20.0
2700	Sarah Daarinan	DI DOYGIS MAUUE	oman bridge	20.0



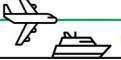




-		Department of Th	апэроп	
2652	Sarah Baartman	Dr Beyers Naude	Small Bridge	20.0
2847	Sarah Baartman	Dr Beyers Naude	Small Bridge	20.0
2778	Sarah Baartman	Dr Beyers Naude	Small Bridge	19.9
2658	Sarah Baartman	Dr Beyers Naude	Small Bridge	18.5
2761	Sarah Baartman	Dr Beyers Naude	Small Bridge	15.6
2689	Sarah Baartman	Dr Beyers Naude	Small Bridge	15.1
2691	Sarah Baartman	Dr Beyers Naude	Small Bridge	15.1
2697	Sarah Baartman	Dr Beyers Naude	Small Bridge	15.1
2713	Sarah Baartman	Dr Beyers Naude	Small Bridge	14.0
2712	Sarah Baartman	Dr Beyers Naude	Small Bridge	9.9
2765	Sarah Baartman	Dr Beyers Naude	Small Bridge	9.5
2856	Sarah Baartman	Dr Beyers Naude	Small Bridge	8.7
2734	Sarah Baartman	Dr Beyers Naude	Small Bridge	6.7
2394	Sarah Baartman	Kouga	Very Large Bridge	530.0
2398	Sarah Baartman	Kouga	Very Large Bridge	497.0
2402	Sarah Baartman	Kouga	Very Large Bridge	287.2
2880	Sarah Baartman	Kouga	Very Large Bridge	183.9
2881	Sarah Baartman	Kouga	Very Large Bridge	114.4
2863	Sarah Baartman	Kouga	Large Bridge	100.0
2917	Sarah Baartman	<u> </u>	Large Bridge	95.0
2396	Sarah Baartman	Kouga		93.2
2388	Sarah Baartman	Kouga	Large Bridge	83.5
		Kouga	Large Bridge	
2854	Sarah Baartman	Kouga	Large Bridge	80.5
2920	Sarah Baartman	Kouga	Large Bridge	74.0
2392	Sarah Baartman	Kouga	Large Bridge	71.5
2870	Sarah Baartman	Kouga	Large Bridge	64.8
2918	Sarah Baartman	Kouga	Large Bridge	64.0
2915	Sarah Baartman	Kouga	Large Bridge	62.5
2916	Sarah Baartman	Kouga	Large Bridge	62.5
2862	Sarah Baartman	Kouga	Large Bridge	57.6
2526	Sarah Baartman	Kouga	Large Bridge	57.0
2389	Sarah Baartman	Kouga	Medium Bridge	33.6
2864	Sarah Baartman	Kouga	Medium Bridge	28.8
2853	Sarah Baartman	Kouga	Medium Bridge	24.0
2404	Sarah Baartman	Kouga	Medium Bridge	22.0
2401	Sarah Baartman	Kouga	Small Bridge	18.6
2787	Sarah Baartman	Kouga	Small Bridge	18.0
2784	Sarah Baartman	Kouga	Small Bridge	11.2
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length
				(m)
2393	Sarah Baartman	Kouga	Small Bridge	8.4
2399	Sarah Baartman	Kouga	Small Bridge	8.0
2379	Sarah Baartman	Kou-Kamma	Very Large Bridge	101.9
2341	Sarah Baartman	Kou-Kamma	Large Bridge	78.6
2933	Sarah Baartman	Kou-Kamma	Large Bridge	71.0
2919	Sarah Baartman	Kou-Kamma	Large Bridge	67.0
2921	Sarah Baartman	Kou-Kamma	Large Bridge	65.0
2340	Sarah Baartman	Kou-Kamma	Large Bridge	57.5
	•	•		i e







Sarah Baartman Kou-Kamma Medium Bridge 34.5	2358	Sarah Baartman	Kou-Kamma	Medium Bridge	36.4
2339				,	
2019 Sarah Baartman Makana Very Large Bridge 158.0 2570 Sarah Baartman Makana Very Large Bridge 120.0 3169 Sarah Baartman Makana Large Bridge 86.0 2573 Sarah Baartman Makana Large Bridge 80.0 2576 Sarah Baartman Makana Large Bridge 77.8 2575 Sarah Baartman Makana Large Bridge 61.0 2564 Sarah Baartman Makana Large Bridge 61.0 2564 Sarah Baartman Makana Medium Bridge 41.1 2822 Sarah Baartman Makana Medium Bridge 22.3 2824 Sarah Baartman Makana Medium Bridge 20.9 2813 Sarah Baartman Makana Small Bridge 18.7 2810 Sarah Baartman Makana Small Bridge 16.1 2820 Sarah Baartman Makana Small Bridge 19.4 2608 Sarah Baartman Makana					
Sarah Baartman Makana Large Bridge 86.0			_		
2593 Sarah Baartman Makana Large Bridge 77.8 2576 Sarah Baartman Makana Large Bridge 75.4 2746 Sarah Baartman Makana Large Bridge 61.0 2746 Sarah Baartman Makana Large Bridge 61.0 2564 Sarah Baartman Makana Medium Bridge 41.1 2822 Sarah Baartman Makana Medium Bridge 22.5 2816 Sarah Baartman Makana Medium Bridge 20.9 2816 Sarah Baartman Makana Medium Bridge 20.9 2816 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 13.5 2820 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 6.9 2819 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small					
2576 Sarah Baartman Makana Large Bridge 75.4 2575 Sarah Baartman Makana Large Bridge 75.4 2746 Sarah Baartman Makana Large Bridge 61.0 2564 Sarah Baartman Makana Medium Bridge 41.1 2822 Sarah Baartman Makana Medium Bridge 22.3 2824 Sarah Baartman Makana Medium Bridge 21.5 2816 Sarah Baartman Makana Medium Bridge 20.9 2816 Sarah Baartman Makana Small Bridge 18.7 2810 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 7.2 2829 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.6 2573 Sarah Baartman Makana Small B					
2575 Sarah Baartman Makana Large Bridge 75.4 2746 Sarah Baartman Makana Large Bridge 61.0 2564 Sarah Baartman Makana Medium Bridge 41.1 2822 Sarah Baartman Makana Medium Bridge 22.3 2824 Sarah Baartman Makana Medium Bridge 21.5 2816 Sarah Baartman Makana Small Bridge 18.7 2813 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 16.1 2568 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 7.2 2829 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.7 2573 Sarah Baartman Makana Small Bridge 6.7 2585 Sarah Baartman Makana Small Bri					
2746 Sarah Baartman Makana Large Bridge 61.0 2564 Sarah Baartman Makana Medium Bridge 41.1 2822 Sarah Baartman Makana Medium Bridge 22.3 2824 Sarah Baartman Makana Medium Bridge 21.5 2816 Sarah Baartman Makana Medium Bridge 20.9 2613 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 19.5 2820 Sarah Baartman Makana Small Bridge 19.5 2608 Sarah Baartman Makana Small Bridge 9.4 2609 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.6 2573 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Br			1		
2564 Sarah Baartman Makana Medium Bridge 41.1 2822 Sarah Baartman Makana Medium Bridge 22.3 2824 Sarah Baartman Makana Medium Bridge 21.5 2816 Sarah Baartman Makana Medium Bridge 20.9 2613 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 9.4 2609 Sarah Baartman Makana Small Bridge 7.2 2829 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Bri					
2822 Sarah Baartman Makana Medium Bridge 22.3 2824 Sarah Baartman Makana Medium Bridge 21.5 2816 Sarah Baartman Makana Medium Bridge 20.9 2613 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 16.1 2568 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 7.2 2829 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.6 2573 Sarah Baartman Makana Small Bridge 6.6 2585 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Ndlambe Large Bridge 8.2 3167 Sarah Baartman Ndlambe Medium Bri					
2824 Sarah Baartman Makana Medium Bridge 21.5 2816 Sarah Baartman Makana Medium Bridge 20.9 2613 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 18.7 2568 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 9.4 2609 Sarah Baartman Makana Small Bridge 6.9 2609 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.7 2585 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Small Br					
2816 Sarah Baartman Makana Medium Bridge 20.9 2613 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 16.1 2568 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 9.4 2609 Sarah Baartman Makana Small Bridge 6.9 2609 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.6 2585 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Mdlambe Large Bridge 82.0 23167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Small Bridge 19.7 2834 Sarah Baartman Ndlambe Small B					
2613 Sarah Baartman Makana Small Bridge 18.7 2820 Sarah Baartman Makana Small Bridge 16.1 2568 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 9.4 2609 Sarah Baartman Makana Small Bridge 7.2 2829 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.6 2573 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 48.5 2833 Sarah Baartman Ndlambe Small Bridge 19.7 2834 Sarah Baartman Ndlambe Small Brid					
2820 Sarah Baartman Makana Small Bridge 16.1 2568 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 9.4 2609 Sarah Baartman Makana Small Bridge 6.9 2829 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.6 2573 Sarah Baartman Makana Small Bridge 6.6 2573 Sarah Baartman Makana Small Bridge 6.6 2585 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Small Bridge 19.7 2834 Sarah Baartman Ndlambe Small Bridg					
2568 Sarah Baartman Makana Small Bridge 13.5 2608 Sarah Baartman Makana Small Bridge 9.4 2609 Sarah Baartman Makana Small Bridge 7.2 2829 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.6 2585 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Medium Bridge 19.7 2831 Sarah Baartman Ndlambe Small Bridge 19.5 3157 Sarah Baartman Ndlambe Small Bridge 17.0 2831 Sarah Baartman Ndlambe Small B					
2608 Sarah Baartman Makana Small Bridge 9.4 2609 Sarah Baartman Makana Small Bridge 7.2 2829 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.6 2585 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Small Bridge 19.7 2834 Sarah Baartman Ndlambe Small Bridge 19.5 3157 Sarah Baartman Ndlambe Small Bridge 17.0 2831 Sarah Baartman Sundays River Valley					
2609 Sarah Baartman Makana Small Bridge 7.2 2829 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.7 2585 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Small Bridge 19.7 2834 Sarah Baartman Ndlambe Small Bridge 19.5 3157 Sarah Baartman Ndlambe Small Bridge 17.0 2831 Sarah Baartman Ndlambe Small Bridge 15.9 2898 Sarah Baartman Sundays River Valley					
2829 Sarah Baartman Makana Small Bridge 6.9 2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.7 2585 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Medium Bridge 48.5 2833 Sarah Baartman Ndlambe Small Bridge 19.7 2834 Sarah Baartman Ndlambe Small Bridge 17.0 3157 Sarah Baartman Ndlambe Small Bridge 17.0 2831 Sarah Baartman Ndlambe Small Bridge 15.9 2898 Sarah Baartman Sundays River Valley Medium Bridge 45.0 3117 Sarah Baartman Sundays River					
2619 Sarah Baartman Makana Small Bridge 6.8 2573 Sarah Baartman Makana Small Bridge 6.7 2585 Sarah Baartman Makana Small Bridge 6.6 2606 Sarah Baartman Makana Small Bridge 6.6 2922 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Medium Bridge 48.5 2833 Sarah Baartman Ndlambe Small Bridge 19.7 2834 Sarah Baartman Ndlambe Small Bridge 19.5 3157 Sarah Baartman Ndlambe Small Bridge 17.0 2831 Sarah Baartman Ndlambe Small Bridge 15.9 2898 Sarah Baartman Sundays River Valley Medium Bridge 45.0 3117 Sarah Baartman Sundays River Valley Small Bridge 18.8 2892 Sarah Baartman <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
2573Sarah BaartmanMakanaSmall Bridge6.72585Sarah BaartmanMakanaSmall Bridge6.62606Sarah BaartmanMakanaSmall Bridge6.62922Sarah BaartmanNdlambeLarge Bridge82.03167Sarah BaartmanNdlambeMedium Bridge49.02828Sarah BaartmanNdlambeMedium Bridge48.52833Sarah BaartmanNdlambeSmall Bridge19.72834Sarah BaartmanNdlambeSmall Bridge19.53157Sarah BaartmanNdlambeSmall Bridge17.02831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge11.12801Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge7.3280					
2585Sarah BaartmanMakanaSmall Bridge6.62606Sarah BaartmanMakanaSmall Bridge6.62922Sarah BaartmanNdlambeLarge Bridge82.03167Sarah BaartmanNdlambeMedium Bridge49.02828Sarah BaartmanNdlambeMedium Bridge48.52833Sarah BaartmanNdlambeSmall Bridge19.72834Sarah BaartmanNdlambeSmall Bridge19.53157Sarah BaartmanNdlambeSmall Bridge17.02831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.0 <td></td> <td></td> <td></td> <td></td> <td></td>					
2606Sarah BaartmanMakanaSmall Bridge6.62922Sarah BaartmanNdlambeLarge Bridge82.03167Sarah BaartmanNdlambeMedium Bridge49.02828Sarah BaartmanNdlambeMedium Bridge48.52833Sarah BaartmanNdlambeSmall Bridge19.72834Sarah BaartmanNdlambeSmall Bridge17.02831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanNdlambeSmall Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge7.32893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge<					
2922 Sarah Baartman Ndlambe Large Bridge 82.0 3167 Sarah Baartman Ndlambe Medium Bridge 49.0 2828 Sarah Baartman Ndlambe Medium Bridge 48.5 2833 Sarah Baartman Ndlambe Small Bridge 19.7 2834 Sarah Baartman Ndlambe Small Bridge 19.5 3157 Sarah Baartman Ndlambe Small Bridge 17.0 2831 Sarah Baartman Ndlambe Small Bridge 15.9 2898 Sarah Baartman Sundays River Valley Medium Bridge 45.0 3117 Sarah Baartman Sundays River Valley Small Bridge 18.8 2892 Sarah Baartman Sundays River Valley Small Bridge 17.3 2877 Sarah Baartman Sundays River Valley Small Bridge 16.1 2867 Sarah Baartman Sundays River Valley Small Bridge 11.3 2810 Sarah Baartman Sundays River Valley Small Bridge 11.1					
3167Sarah BaartmanNdlambeMedium Bridge49.02828Sarah BaartmanNdlambeMedium Bridge48.52833Sarah BaartmanNdlambeSmall Bridge19.72834Sarah BaartmanNdlambeSmall Bridge19.53157Sarah BaartmanNdlambeSmall Bridge17.02831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge7.0					
2828Sarah BaartmanNdlambeMedium Bridge48.52833Sarah BaartmanNdlambeSmall Bridge19.72834Sarah BaartmanNdlambeSmall Bridge19.53157Sarah BaartmanNdlambeSmall Bridge17.02831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9			_		
2833Sarah BaartmanNdlambeSmall Bridge19.72834Sarah BaartmanNdlambeSmall Bridge19.53157Sarah BaartmanNdlambeSmall Bridge17.02831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9					
2834Sarah BaartmanNdlambeSmall Bridge19.53157Sarah BaartmanNdlambeSmall Bridge17.02831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9					
3157Sarah BaartmanNdlambeSmall Bridge17.02831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9					•
2831Sarah BaartmanNdlambeSmall Bridge15.92898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge7.0			_		
2898Sarah BaartmanSundays River ValleyMedium Bridge45.03117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9				<u> </u>	
3117Sarah BaartmanSundays River ValleyMedium Bridge22.02886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2831	Sarah Baartman	Ndlambe	Small Bridge	15.9
2886Sarah BaartmanSundays River ValleySmall Bridge18.82892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2898	Sarah Baartman	Sundays River Valley	Medium Bridge	45.0
2892Sarah BaartmanSundays River ValleySmall Bridge17.32877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	3117	Sarah Baartman	Sundays River Valley	Medium Bridge	22.0
2877Sarah BaartmanSundays River ValleySmall Bridge16.12867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2886	Sarah Baartman	Sundays River Valley	Small Bridge	18.8
2867Sarah BaartmanSundays River ValleySmall Bridge14.42891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2892	Sarah Baartman		Small Bridge	17.3
2891Sarah BaartmanSundays River ValleySmall Bridge11.32810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2877	Sarah Baartman	Sundays River Valley	Small Bridge	
2810Sarah BaartmanSundays River ValleySmall Bridge11.12807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2867	Sarah Baartman	Sundays River Valley	Small Bridge	
2807Sarah BaartmanSundays River ValleySmall Bridge10.22887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9		Sarah Baartman	Sundays River Valley	Small Bridge	11.3
2887Sarah BaartmanSundays River ValleySmall Bridge8.72893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2810	Sarah Baartman	Sundays River Valley	Small Bridge	11.1
2893Sarah BaartmanSundays River ValleySmall Bridge7.32803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2807	Sarah Baartman	Sundays River Valley	Small Bridge	10.2
2803Sarah BaartmanSundays River ValleySmall Bridge7.02882Sarah BaartmanSundays River ValleySmall Bridge6.9	2887	Sarah Baartman	Sundays River Valley	Small Bridge	8.7
2882 Sarah Baartman Sundays River Valley Small Bridge 6.9	2893	Sarah Baartman	Sundays River Valley	Small Bridge	7.3
	2803	Sarah Baartman	Sundays River Valley	Small Bridge	7.0
	2882	Sarah Baartman	Sundays River Valley	Small Bridge	6.9
	2885	Sarah Baartman	Sundays River Valley	Small Bridge	6.9





