

**ESKOM GENERATION****2025/07/15****ROAD MAINTENANCE AND  
REPAIRS AT CAMDEN POWER  
STATION FOR A PERIOD OF 5  
YEARS :PROVISIONAL BILLS OF  
QUANTITIES****CONTRACT NUMBER :****CONTRACTOR :****CONTRACT AMOUNT :  
(Excluding VAT)****CONTRACT AMOUNT :  
(Including VAT)**

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# NOTES TO TENDERERS

# **ROAD MAINTENANCE AND REPAIRS AT CAMDEN POWER STATION FOR A PERIOD OF 5 YEARS :PROVISIONAL BILLS OF QUANTITIES**

## **NOTES TO TENDERERS**

### **NOTES TO TENDERERS**

#### **1. Provisional Bills of Quantities**

This document comprises Notes to Tenderers and Provisional Bills of Quantities and is hereafter referred to as "the Provisional Bills of Quantities".

**The Tenderers are to note that this is a Contract with a Provisional Bills of Quantities.**

#### **2.1 CONTRACT DOCUMENTS**

The contract documents will consist of:

2.1.1 The NEC3 Engineering and Construction Contract Third Edition 2013 together with all amendments.

2.1.2 These Provisional Bills of Quantities, including all annexures and supplementary documentation referred to therein.

2.1.3 Documents to be provided by the Contractor in terms of the requirements of these Provisional Bills of Quantities.

2.1.4 Construction Regulations 2014

2.1.5 Occupational Health and Safety Act of 1993

2.1.6 National Road Traffic Act 1966(Act no 93 of 1966) and National Road Traffic Regulation 2000

2.1.7 The South African National Roads Agency Limited ("SANRAL") was established in terms of the South African National Roads Agency Limited and The National Roads Act, 1998 (Act No 7 of 1998) ("the SANRAL Act").

2.1.8 SANRAL Act provides for the establishment of SAMRAL to manage and control the Republics national roads system and take charge of the development, maintenance, and rehabilitation of national roads within the framework of government policy.

#### **2.2 DRAWINGS**

**There are no drawings available for this project**

#### **3.VALUE ADDED TAX**

Tenderers should compute their rates from the net costs (excluding Value Added Tax). Value Added Tax at the current rate of 15% is to be added to the net sub-total on the final summary page by means of a single sum calculation to establish the tender price.

#### **4.SCOPE OF WORK**

As a guide only, the work comprises as follows:-

***Maintenance of the External and Internal roads at Camden Power station including but not limited to fixing of Pot Holes, Gravel roads, Repair of inlet drains, cleaning stormwater side drains and Road Markings.***

#### **5. POSSESSION OF SITE**

The date of which possession of the Site shall be given to the Contractor shall be within 7 **working days** of the acceptance of this tender.

## **6.CONSTRUCTION PERIOD - DATES FOR PRACTICAL COMPLETION**

The intended date for practical completion and penalty for each calendar day for non-completion shall be:

**Practical Completion:** 60 Month from the date of Site Handover

## **7. TENDERS**

Tenderers are required to visit the site of the Works before tendering and must obtain a signature from the Employer or his duly authorised representative to the effect that they have done so. Failure to visit the site and to submit the Certificate of Acquaintance with the tender will result in the rejection of the tender.

### **A Non compulsory site inspection will be conducted.**

The Employer will not be liable for any costs incurred in the preparation of the tender nor will he be bound to accept the lowest or any portion of any tender.

## **8. COMMON LAW OR BY-LAW REQUIREMENTS**

No liability for not specifically mentioning any normal contractual, Common Law or By-Law requirements will be accepted by the Employer, or Contracts Manager.

## **9. AREA OF WORKS**

The Tenderer shall ascertain by personal viewing of the site any restrictions to the area that may be occupied by the contractor including any restrictions imposed by any buildings, etc. and any limitations or restrictions that may be imposed by Eskom Engineers.

Access to the site shall be logically planned and enclosed to ensure minimum disruption to existing user operations.

The contractor is deemed to have allowed for all necessary temporary fencing, screening, hoardings, etc.

Space for the storage of Materials must be arranged with the Contracts Manager

The Contractor shall make all necessary provisions in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained as admitted. Tenderers will be held responsible for any misunderstanding of incorrect information, however obtained, except information which may have been given in writing over the signature of the Contracts Manager.

## **10.MANAGEMENT OF WORKS**

The Contractor shall, to the satisfaction of the Contracts Manager, provide, in addition to the Contractor's Site Representative, the services of an experienced and competent Construction Manager.

The names and CV's of the Contractor's proposed Management Team shall be submitted to the Contracts Manager prior to commencement on site and, after the Contracts Manager's agreement on the composition and competence thereof has been obtained, no changes shall be made nor shall any member of the said team be removed from the project while remaining in the employ of the Contractor without the Contracts Manager's prior written approval.

The Contractor shall make necessary provisions in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained or admitted.

## **11. INSPECTION OF WORK**

The Contractor shall obtain all local authority approvals if required and shall ensure that all work is also approved by the Contracts Manager prior to covering up. The fact that the work will be inspected periodically in no way absolves the Contractor from total responsibility for the quality of his workmanship and for compliance with the specification. He shall timeously notify the Contracts Manager so that inspections can be arranged.

## **12. SITE CLEANLINESS**

The Contractor shall clear away all dirt, rubbish and superfluous material as they accumulate and leave the whole of the site clean and tidy on completion to the satisfaction of the Contracts Manager. The Contractor is advised that the adjacent site is functional at all times and that the incumbents should not be unduly inconvenienced.

## **13. ORDERING OF MATERIALS**

No claims will be entertained due to non-availability of materials or labour. The Tenderer is therefore required to investigate and ensure that the specific materials and components required for the works will be available at the relevant estimated construction times, at the time of tendering.

## **14. PROGRAMME**

The Contractor will be required to submit an outline programme of work to completion of the contract with the issue of the Form of Offer and Acceptance.

## **15. CONTRACT PRICE ADJUSTMENT**

The Contract Sum shall be subject to CPA

## **16. PRICED Provisional Bills of Quantities:**

Tenderers must submit to the Contracts Manager a copy of the Provisional Bills of Quantities fully priced and extended, with his tender. After the Bills have been checked, and when called upon, each page of the Provisional Bills of Quantities shall be initialled and the Index page and the Final Summary page signed in full by the Tenderer.

## **17. PAYMENT OF PRELIMINARIES:**

Tenderers are to note that the Payment of Preliminaries & Generals shall be on the NEC3 Engineering and Construction Engineering and Construction Standard Contract third Edition third Edition [Prorated to the Value of Work Executed]

## **18. ADJUSTMENT OF PRELIMINARIES:**

Tenderers are to note that the Adjustment of Preliminaries & Generals shall be on NEC3 Engineering and Construction Standard Contract third Edition third Edition [Fixed - 10%, Value - 15% and Time - 75%]

## **19. DIFFERENCE AND DISCREPANCIES:**

Should there be any difference or discrepancy between the prices or particulars contained in the official Tender Form and those contained in any covering letter from the Tenderer, the prices contained in the official Tender Form shall prevail.

Every Tenderer shall be deemed to have waived, renounced and abandoned any conditions printed or written upon any stationery used by him for the purpose of or in connection with the submission of his Tender, which are in conflict with the Conditions of Tender or Special and General Conditions of the NEC Contract.

Tenderers are warned that any material divergence from the official conditions or specifications may render their Tenders liable to disqualification.

The Tenderers are to note that if there are any arithmetical errors in the Tenderers' form of tender in calculation of the Tender Sum, the Contracts Manager will correct the calculation accordingly.

## **20 COMMUNICATION WITH MEMBERS OF THE CLIENT COMPANY OR PROFESSIONAL TEAM**

A Tenderer shall not in any way communicate with a member of the Client Company or Professional Team or with any officer on a question affecting any contract or the supply of goods or for any work, undertaking or service which is the subject of a Tender during the period between the closing date for receipt of Tenders and the despatch of the written notification of the Employer's decision on the award of the contract; provided that a Tenderer shall not hereby be precluded from obtaining from the Employer or his authorised representative information as to the date upon which the award of the contract is likely to be made or, after the decision upon the award has been made by the Contracts Manager to which the Employer had delegated its powers, information as to the nature of the decision or such information as was publicly disclosed at the opening of Tenders.

## **21. IMPORT PERMITS:**

Tenderers must apply direct for any import permit and/or currency required, however the Contracts Manager will furnish successful Tenderers with a supporting statement if required.

## **22. Provisional Bills of Quantities:**

No alteration, erasure, omission or addition is to be made to the text and conditions of these Provisional Bills of Quantities and should any such alteration, amendment, note or addition be made, the same will not be recognised, but the reading of the Provisional Bills of Quantities as prepared by the Contracts Manager will be adhered to.

It should be understood that the system of measurement herein adopted is the only system of measurement which will be recognised in connection with this contract. Before the signing of the contract, the Contracts Manager will be entitled to call for adjustments of individual rates and rectify discrepancies, as he considers necessary without alterations to the Tender Amount.

## **23. TRAFFIC AUTHORITIES AND REGULATIONS (N/A)**

The Contractor shall comply with all requirements of the Authorities in connection with traffic control, gaining access to the site, prevention or disruption of the flow of traffic, transporting of materials and equipment to and from the site and he shall make all necessary arrangements, pay all deposits, fees and charges in connection therewith.

## **24. PROTECTION OF PERSONS AND PROPERTY**

The Contractor shall adopt all safety measures in compliance with all statutes, regulations, etc., and shall take all measures to protect all property and to secure the safety and freedom from injury of all persons.

The Contractor shall in addition take all necessary steps to prevent nuisance from dust and the like and shall use every endeavour to minimise noise emanating from the Contract Works. The Contractor is referred to the various forms that require his attention prior to commencing work on site - All forms duly completed and signed must be forwarded to the Contracts Manager.

Tenderers are to note that the building will remain occupied for the duration of the Works except for the sections of the Works under construction in terms of the requirements of the Sectional Completion.

## **25 EXISTING AND ADJOINING PROPERTIES, PAVINGS ETC.**

The Contractor shall execute the whole of the Contract Works with the minimum of disturbance to the existing and adjoining premises and occupants thereof. He shall keep the Site dust free and clean, and shall keep pavements, surrounding roads etc., free of builder's rubble and clean to the entire satisfaction of the Contracts Manager and the Authorities.

The Contractor shall leave such buildings, structures, fences, pavings, roadways, kerbs, gardens, municipal pavements, streets, etc., in the same condition at completion as they were at the commencement of the Contract. Before commencing work, the Contractor shall arrange with the owners of the existing and adjoining buildings and/or the Authorities for an inspection to be made jointly with themselves, the Contractor and the Contracts Manager in order to make written notes of any defects, etc. which may later be claimed to have been caused by the operations under this Contract. Should defects be disclosed, the Contractor shall submit same in writing to the Contracts Manager before commencing the Contract, failing which it shall be understood that no such defects existed and the Contractor shall be liable for all claims in this connection.

## **26. PROCEDURE OF WORKS**

The Contractor shall be solely responsible for ensuring that the procedure of works is kept to and no deviations will be entertained.

Should this, however not be possible then the Contractor shall timeously notify the Contracts Manager

The Contractor shall make any and all necessary allowances in his pricing for the disruption and costs that will be required to comply with any such restrictions.



## **SPECIAL CLAUSES**

### **27. TRADE NAMES, ETC.**

All materials, fittings, finishes, etc. specified under a "Trade Name", catalogue number or reference shall be either exactly as described or of equal quality, specification and weight to those described.

The Contracts Manager's written approval must be obtained for any departure from the specification before the submission of tenders, failing which specified materials, fittings, finishings, etc. shall be deemed to have been allowed for in the tenders.

Where articles other than what the manufacturer specified are used, an adjustment of the prices will be made and Variation Orders issued to cover these adjustments.

The Contractor must take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.

All references in these Provisional Bills of Quantities to Specifications of the Bureau of Standards shall be deemed to be reference to the latest issues of such Specifications, and any subsequent amendments thereto. All articles, materials or items described as to conform to the SABS Specifications must bear the SABS mark.

### **28. CONTRACTOR'S RESPONSIBILITY**

The Contracts Manager and the other Professional Consultants shall not be responsible for any act or omission on the part of the Contractor, which may result in any patent or latent defects, in materials or workmanship, breach or neglect of any local regulations. The Contractor shall at all times be responsible for any such neglect, deviation or wrong act, whether the same is discovered before or after the final certificate, or any other Certificate, has been approved.

### **29. SITE INSTRUCTIONS AND RECORDS**

The Contractor shall supply and have available at the site of the works at all times, the following site books:-

#### **a) Site Instruction Book**

Receiving and recording instructions in a suitable A4 size triplicate book kept on site. Instructions issued shall be recorded by the Contracts Manager or other Employer's Agents to whom the Contracts Manager has delegated Authority in the book.

Only site instructions issued in such a book shall be recognised.

#### **b) Daily Record Book**

The Contractor shall record in a suitable A4 size triplicate book kept at the site, a daily record of work done, all site visits by the Contracts Manager and other professional personnel and all events affecting the Works, such as progress, issue of plans, breakdown of machinery, etc. The labour, plant and material on site shall be recorded as well as work performed. Entries must be made by the Contractor and must be signed and forwarded to the Contracts Manager for his counter signature on a daily basis. Copies of these records shall be for the Contracts Manager, Employer and Contractor.

### **30. LOCATION OF TEMPORARY BUILDING AND TEMPORARY SERVICES**

The Contractor shall provide all necessary temporary works, including temporary roads, tracks, crossings, hard standing and services, etc. required for his own and Sub-Contractor's use during the construction and maintenance period.

There is no guarantee given or implied that Site Conditions will be such that the Contractor will be able to erect such offices, stores and temporary accommodation within the site boundaries and it shall be the Contractor's responsibility to adopt whatever measures he deems necessary in this regard and to obtain permission and pay all cost in connection therewith.

By the submission of a tender, any Tenderer will, if awarded the contract to which this tender document relates, be deemed to be the mandatory as envisaged by Section 37 (2) of the Act. As a mandatory the successful Tenderer will be deemed to be the "Contractor" and an Employer in his/her/their own right with duties as prescribed in the Act and accordingly will be deemed to have agreed to be solely responsible for ensuring that in connection with the service to which this tender document relates, all work will be performed and machinery and plant used in accordance with the Act. Should the Contractor, for whatever reason be unable to perform as required by the Act, the Contractor undertakes to inform the Employer accordingly.

**The Contractor (mandatory) will be required to:-**

- 1 Provide the Employer with a Health and Safety programme and plan specifically related to the Works and ensure that the programme and plan are implemented and maintained, with the programme being subject to audit, at least once a month, by the Contracts Manager;
- 2 Exercise discretion and appoint a Full-time Safety Officer (in writing) to assist in the control of all safety related aspects, and to give input into the health and safety plan;
- 3 Appoint (in writing) a full time competent Supervisor (as defined in the Regulation in terms of the Act) to supervise the project;
- 4 Provide the Employer and any Sub-Contractors that may be engaged by the Contractor and/or Nominated Sub-Contractors with a programme of construction for the Works as well as a method statement with the necessary details and procedures for execution;
- 5 Provide the Employer both before commencing and during construction work with a copy of a risk assessment performed by a competent person who has been appointed in writing by the Contractor, and the risk assessment must form part of the health and safety plan;
- 6 Ensure that every employee or person (including visitors) who enters the site of the Works undergoes health and safety induction training pertaining to hazards identified on the site of the Works and upon such training having been successfully completed, the Contractor must issue written confirmation by a competent person to the trained employees or persons who shall be further instructed to carry such confirmation with them at all times whilst on the site of the Works;
- 7 Issue, on loan, the necessary personal protective equipment to visitors to the site of the Works; and
- 8 Be in good standing with the Compensation Commissioner at all times during the duration of the Contract.
- 9 The Contractor is to sign a Non-Disclosure Agreement prior to collecting or receiving any proprietary information from Eskom, drawings, documentation, reports and photographs

The Contractor will be deemed to have satisfied himself with his obligations in terms of the Act and to have allowed for all costs arising from compliance with the Act as no claim for extra costs arising from compliance with, and obligations in terms of the Act will be entertained.

**31 CONTRACTORS TO VISIT SITE PRIOR TO SUBMISSION OF TENDER**

The contractors are urged to visit the site that has been identified to get an overview of the nature of works and the location of the building prior to pricing this document.

**32 PRICING OF THESE GENERAL NOTES**

The Contractor must allow in his pricing for any additional costs arising from these "General Notes" as no later claims for additional costs will be considered.

**33 TAX COMPLIANCE**

Failure to provide mandatory information required in this Bid will result in the submissions being deemed null and void and shall be considered non-responsive. An Electronic Tax Compliance Status (TCS) System will be used to verify the bidder's tax compliance status so bidders must request a unique security personal identification number (PIN) from SARS which must be submitted with the bid

**No alternative tender offers will be considered.**

**These Bills are not to be used for the purpose of ordering materials.**

**All Bill rates are to include for material, labour, plant, wastage, transport and profit.**

## PRELIMINARIES AND GENERAL

**ROAD MAINTENANCE AND REPAIRS AT CAMDEN POWER STATION FOR A PERIOD OF 5 YEARS :PROVISIONAL BILLS OF QUANTITIES**

Schedule Description		Unit	Amount
<b>PRELIMINARIES AND GENERAL</b>			
<b>SCOPE OF WORKS</b>			
The contractor are to refer to the Road Specification Document enclosed to these Bills of Quantities. The contractors are urged to study this Scope of works prior to pricing.			
<b>PRICING OF THE BILLS OF QUANTITIES</b>			
Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderers omission to price any item will be entertained			
<b>CONTRACT PERIOD</b>			
60 MONTHS :The Supplier/Contractor must allow all obligations in his pricing for the duration of the contract			
<b>ESTABLISHMENT OF FACILITIES ON SITE</b>			
<b>1</b>	<b>FIXED CHARGES FOR 5 YEARS</b>		
1.1	Contractual requirement (Contractor to supply breakdown)	sum	R
1.2	<b>Establishment of facilities on site for 5 years</b>		
1.2.1	Transportation to site	sum	R
1.2.2	Offices for engineer & staff and signs	sum	R
1.2.3	Quality	sum	R
1.2.4	Other fixed-charge obligations:	sum	R
1.3	<b>Contractor's obligations in respect of the Occupational Health and Safety Act for 5 years</b>		
1.3.1	Health and Safety Requirements	sum	R
1.3.2	PPE	sum	R
1.3.3	Medicals Entry ,Exit and Induction	sum	R
1.3.2	SAPS Vetting and /or Finger Print Check	sum	R
1.4	De- establishment	sum	R
<b>TOTAL COST FIXED CHARGES (A)</b>		<b>R</b>	
<b>2</b>	<b>TIME RELATED CHARGES</b>		
<b>FACILITIES FOR CONTRACTOR FOR 5 YEARS</b>			R
2.1	Operate & maintain facilities for the duration of the contract	sum	R
2.2	Offices for engineer & staff	sum	R
2.3	<b>Facilities for the Contractor for the duration of construction for 5 years</b>		
2.4	Offices & storage sheds	sum	R
2.5	Workshops	sum	R
2.6	Ablution & latrine facilities	sum	R
2.7	Accommodation	sum	R
2.8	Transport	sum	R
2.9	Plant	sum	R
2.1	Other time-related obligations:	sum	R
<b>TOTAL COST TIME RELATED ITEMS (B)</b>		<b>R</b>	
<b>TOTAL COST A+B TRANSFERRED TO FINAL SUMMARY PAGE</b>		<b>R</b>	

# PROVISIONAL BILLS OF QUANTITIES

No.	DESCRIPTION	UOM	QUANTITY	RATE	AMOUNT
	<b><u>BILL NO.1 : ROADWAY ETC</u></b>  <b><u>PREAMBLES</u></b>  For Model Preambles refer to SANS Documents which is obtainable on request for the full descriptions of materials and work to be done in this Bill.  <b><u>SUPPLEMENTARY PREAMBLES</u></b>  <b><u>Rate approvals:</u></b>  The tenderer is advised that any rate that is required for new work must include the following breakdown:  Material, labour, plant, wastage, transport and profit.  Rate approvals must be authorised by the Principal Agent prior to work being carried out.  <b><u>NATURE OF GROUND</u></b>  The Tenderer must acquaint himself with the nature of the material to be excavated. The nature of the ground is assumed to be medium, dense and very dense material, therefore earth, but possibly interspersed with "hard rock" or "intermediate material".  A soils investigation has been carried out on site by the Engineer and the report is annexed to these bills of quantities. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" described in the above report and where conditions of a more difficult character are indicated these are separately measured.  <b><u>LABOUR INTENSIVE ITEMS</u></b>  All items marked (LI) must be executed in a labour intensive manner, no deviations will be accepted. The Contractor must take this method of construction into consideration when programmes the work.  <b><u>SCOPE OF WORKS</u></b>  The contractor are to refer to the Road Specification Document enclosed to these Bills of Quantities. The contractors are urged to study this Scope of works prior to pricing.  <b><u>RATE ONLY ITEMS</u></b>  The contractor is referred to the following items where RATE ONLY appears. The contractor is encourage to price these item with market related prices as these RATE ONLY items will be used during the course of the 5 year contract and Eskom will not renegotiate these rates,  <b><u>PRICING OF THE BILLS OF QUANTITIES</u></b>  Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderers omission to price any item will be entertained  <b><u>BILL NO.1 : ROADWAY ETC</u></b>  <b><u>RIPPING UP AND REMOVE OF EXISTING</u></b>  1 Ripping up and remove G8 material compacted to 95% Mod AASHTO density m <sup>3</sup> 1 R RATE ONLY 2 Ripping up and remove G7 material compacted to 93% Mod AASHTO density m <sup>3</sup> 1 R RATE ONLY 3 Ripping up and remove G5 material compacted to 95% Mod AASHTO density to Roadway m <sup>3</sup> 1 R RATE ONLY 4 Ripping up and remove G2 material compacted to 95% Mod AASHTO density to Roadway m <sup>3</sup> 1 R RATE ONLY 5 60mm Premix paving and prepare surface for new m <sup>2</sup> 1 R RATE ONLY  <b><u>REMOVE REINFORCED CONCRETE PAVING</u></b>  <b><u>25MPa/26mm Reinforced concrete</u></b> 6 Break up and remove in situ paving to concrete. m <sup>3</sup> 1 R RATE ONLY 7 Break up and remove paving to secure pipeline below, in roadways, etc in panels between construction joints etc. m <sup>3</sup> 1 R RATE ONLY  <b><u>30MPa/26mm Reinforced concrete</u></b> 8 Break up and remove paving to roadways, etc in panels between construction joints etc. m <sup>3</sup> 1 R RATE ONLY  <b><u>REMOVE EXISTING PRECAST CONCRETE KERBING</u></b> 9 Carefully remove 125 x 230 high Kerb fig 6. m 1 R RATE ONLY 10 Carefully remove 125 x 230mm high Kerb fig 6 circular to radius exceeding 4m. m 1 R RATE ONLY 11 Carefully remove Kerb with 300 x 100mm strip foundation and 150 x 150mm haunching at back. m 1 R RATE ONLY 12 Carefully remove 125 x 230mm high Kerb fig 6 and 300mm x 170mm thick channel. m 1 R RATE ONLY 13 Carefully remove 125 x 230 high Kerb fig 6 and 300mm x 170mm thick channel circular to radius exceeding 4m. m 1 R RATE ONLY 14 Carefully remove 125 x 230mm Kerb fig 6 and 400mm x 170mm thick channel m 1 R RATE ONLY 15 Carefully remove 125 230mm high Kerb fig 6 and 600mm x 170mm thick channel. m 1 R RATE ONLY				

	<b><u>BREAK UP AND REMOVING OF EXISTING CAST CONCRETE ANCHOR BLOCKS</u></b>				
16	Break up and remove In-situ Concrete Anchor Block In Block Paving.	m³	1	R	RATE ONLY
	<b><u>ROADWAY PAVINGS AND WALKWAYS</u></b>				
	<b><u>Bulk excavation in earth:</u></b>				
17	Reduced levels over site (L.I.)	m³	1	R	RATE ONLY
	<b><u>Extra over all excavations for carting away:</u></b>				
18	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor (L.I.)	m³	1	R	RATE ONLY
	<b><u>Extra over bulk excavation in earth for:</u></b>				
19	Soft rock material	m³	1	R	RATE ONLY
20	Hard rock material	m³	1	R	RATE ONLY
	<b><u>Selected earth filling obtained from the excavations and/or prescribed stock piles on site compacted in 150mm thick layers to 93% Mod. AASHTO density:</u></b>				
21	Forming banks and slopes.	m³	1	R	RATE ONLY
	<b><u>Selected earth filling obtained from the excavations and/or prescribed stock piles on site compacted in 150mm thick layers to 100% Mod. AASHTO density:</u></b>				
22	Under road pavings.	m³	1	R	RATE ONLY
23	Keeping excavations free of all water other than subterranean water. (L.I.)	Item	1	R	RATE ONLY
	<b><u>Earth filling supplied by the contractor compacted in 150mm thick layers:</u></b>				
24	Under pavings,asphalt, etc of G7 material in accordance with SANS 1200 DM compacted to 95% Mod AASHTO density (L.I.)	m³	1	R	RATE ONLY
25	Under pavings,asphalt, etc of G2 material in accordance with SANS 1200 DM compacted to 98% Mod AASHTO density (L.I.)	m³	1	R	RATE ONLY
26	Under pavings,asphalt, etc of G3 material stabilized with 3% cement in accordance with SANS 1200 DM compacted to 95% Mod AASHTO density accurately graded to falls and cross falls as directed (L.I.)	m³	1	R	RATE ONLY
27	Supply of dump rock 80mm - 150mm	t	1	R	RATE ONLY
	<b><u>Compaction of surfaces:</u></b>				
28	Compaction of ground surface under roadway paving including scarifying for a depth of 300mm in two 150mm layers, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density (L.I.)	m²	1	R	RATE ONLY
	<b><u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u></b>				
29	Under floors, paving, etc including forming and poisoning shallow furrows against foundation walls, etc, filling in furrows and ramming. (L.I.)	m²	1	R	RATE ONLY
	<b><u>Weed killer:</u></b>				
30	Weedmaster Turfmaster' or equal approved weed killer mixed in the proportion of 1 litre weed killer to 50 litres of water and applied at a rate of 0,5 litres/m2 to surface below paving (L.I.)	m²	1	R	RATE ONLY
	<b><u>Prescribed density tests on filling</u></b>				
31	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	1	R	RATE ONLY
32	Maximum dry density and optimum moisture content test in accordance with method A7 of TMH 1	No	1	R	RATE ONLY
33	Atterberg limits test in accordance with methods A2 to A4 of TMH1	No	1	R	RATE ONLY
34	UCS test in accordance with method A14 of TMH1	No	1	R	RATE ONLY
	<b><u>Bituminous premix road surfacing, by approved asphaltting specialist, at municipal entrance:</u></b>				
35	Sealer coat of cutback bitumen spread over base course at the rate of 0,7 litre per m2.	m²	1	R	RATE ONLY
36	20mm Medium mix asphalt to roads.	m²	1	R	RATE ONLY
37	40mm Medium mix asphalt to roads.	m²	1	R	RATE ONLY
38	60mm Medium mix asphalt to roads.	m²	1	R	RATE ONLY
	<b><u>BARRIER KERBS</u></b>				
	<b><u>Precast concrete finished smooth on exposed surfaces including 1:3 cement mortar bedding, jointing and pointing:</u></b>				
39	Barrier kerb (SANS 927 fig 6 125x 230mm high with Class 15 unreinforced concrete 100 x 100mm haunching at back and 300 x 100mm strip footing including excavation, backfilling, formwork, etc (L.I.)	m	1	R	RATE ONLY

40	Barrier kerb (SANS 927 fig 6) 125 x 230mm high with Class 15 unreinforced concrete 100 x 100mm haunching at back and 300 x 100mm strip footing laid circular to not exceeding 4m radius including excavation, backfilling, formwork, etc (L.I.)	m	1	R	RATE ONLY
41	Barrier kerb (SANS 927 fig 6) 125x 230mm high with Class 15 unreinforced concrete 100 x 100mm haunching at back and 300 x 100mm strip footing laid circular to exceeding 4m radius including excavation, backfilling, formwork, etc (L.I.)	m	1	R	RATE ONLY
42	Barrier kerb (SANS 927 fig 3) 150 x 300mm high with Class 15 unreinforced concrete 100 x 100mm haunching at back and 300 x 100mm strip footing including excavation, backfilling, formwork, etc (L.I.)	m	1	R	RATE ONLY
43	Barrier kerb (SANS 927 fig 3) 150 x 300mm high with Class 15 unreinforced concrete 100 x 100mm haunching at back and 300 x 100mm strip footing laid circular to not exceeding 4m radius including excavation, backfilling, formwork, etc (L.I.)	m	1	R	RATE ONLY
44	Barrier kerb (SANS 927 fig 3) 150 x 300mm high with Class 15 unreinforced concrete 100 x 100mm haunching at back and 300 x 100mm strip footing laid circular to exceeding 4m radius including excavation, backfilling, formwork, etc (L.I.)	m	1	R	RATE ONLY
45	Supply of concrete pipe circular for Culvert (800mm diameter)	m	1	R	RATE ONLY
<b><u>Mountable Kerbs</u></b>					
<b><u>230 x 125mm high Mountable Kerb with Class 20/19 continuous concrete base and channel size 600 x 155mm and Class 15/13 continuous concrete haunching 150 x 100mm haunching at back, including excavation, backfilling, formwork, etc.:</u></b>					
46	Mountable Kerb fig 6.	m	1	R	RATE ONLY
47	Mountable Kerb fig 6 circular to radius not exceeding 4m	m	1	R	RATE ONLY
48	Mountable Kerb fig 6 circular to radius exceeding 4m.	m	1	R	RATE ONLY
<b><u>ROAD PAINTWORK</u></b>					
<b><u>Approved waterbase roadmarking paint:</u></b>					
49	Line 100mm wide (L.I.)	m	1	R	RATE ONLY
50	Line 200mm wide (L.I.)	m	1	R	RATE ONLY
51	Line 300mm wide (L.I.)	m	1	R	RATE ONLY
52	Line 500mm wide (L.I.)	m	1	R	RATE ONLY
53	100mm Interrupted line on concrete block surfaces. (L.I.)	m	1	R	RATE ONLY
54	100mm Interrupted traverse line on concrete island surfaces any colour. (L.I.)	m	1	R	RATE ONLY
55	Directional arrow size 750 x 1500mm on concrete block surfaces. (L.I.)	No.	1	R	RATE ONLY
56	Paralegic symbol size 1500 x 1500mm on concrete block surfaces. (L.I.)	No.	1	R	RATE ONLY
57	5600 x 2200mm Demarcated pedestrian crossing. (L.I.)	No.	1	R	RATE ONLY
58	White lettering and symbols	No	1	R	RATE ONLY
<b><u>Approved Thermoplastic roadmarking paint:</u></b>					
59	Line 100mm wide (L.I.)	m	1	R	RATE ONLY
60	Line 200mm wide (L.I.)	m	1	R	RATE ONLY
61	Line 300mm wide (L.I.)	m	1	R	RATE ONLY
62	Line 500mm wide (L.I.)	m	1	R	RATE ONLY
63	100mm Interrupted line on concrete block surfaces. (L.I.)	m	1	R	RATE ONLY
64	100mm Interrupted traverse line on concrete island surfaces any colour. (L.I.)	m	1	R	RATE ONLY
65	Directional arrow size 750 x 1500mm on concrete block surfaces. (L.I.)	No.	1	R	RATE ONLY
66	Paralegic symbol size 1500 x 1500mm on concrete block surfaces. (L.I.)	No.	1	R	RATE ONLY
67	5600 x 2200mm Demarcated pedestrian crossing. (L.I.)	No.	1	R	RATE ONLY
68	White lettering and symbols	No.	1	R	RATE ONLY
<b><u>Special signs</u></b>					
69	Super bright LED 4 x 8mm double sided Solar Road Stud with Ni-CD 1200mAH battery and weight 650g	No.	1	R	RATE ONLY
<b><u>ROAD WORK REPAIRS</u></b>					
<b><u>TRAFFIC CONTROL</u></b>					
70	(a) Flagmen 2 No	Man/days	800	R	R
71	(b) Portable STOP and GO-RY signs	once off	1	R	R
72	(e) Road signs, R- and TR-series	once off	1	R	R
73	(f) Road signs, TW-series	once off	1	R	R
74	(g) Road signs, STW-, DTG-, TGS- AND TG-series (excluding delineators and barricades)	once off	1	R	R
75	(h) Cones	once off	1	R	R
<b><u>Fixing of Potholes in asphalt surfacing inside and outside the Power station</u></b>					



76	Repairing of potholes that occur entirely in an asphalt layer and will seldom require more than a 75 or 100 mm-thick asphalt layer. The contractor must allow for all works related to the fixing of pot holes	m2	7500	R	R
77	Repairing of potholes that are deeper than the asphalt thickness and passe into the base course, but is no deeper than the bottom of the base or the upper part of the sub-base.	m2	7500	R	R
	<b><u>Asphalt surfacing to a maximum of 45mm thick using 60/70 penetration--grade bitumen:grade bitumen.</u></b>				
78	Milling of 20-45mm asphalt	m2	15000	R	R
79	Complete application and compaction of Continuously graded, medium grade asphalt (20 - 45 mm)	m2	15000	R	R
80	Tack coat of 30% stable grade emulsion	litres	500	R	R
81	Binder variations :Road grade bitumen's(penetration-grade bitumen's)	tons	1	R	R
	<b><u>Fixing of transverse and longitudinal Cracks on Surfaced Road Damage</u></b>				
	<b><u>All cracks shall be addressed using the method stipulated on the SANRAL's Routine Maintenance Manual.</u></b>				
	<b><u>Passive cracks (top open cracks)</u></b>				
	<b><u>Cracks less than 3mm</u></b>				
82	Cleaning cracks with compressed air and treating cracks with insecticide and herbicide (if required)	m	500	R	R
83	Injecting a modified emulsion or inverted bitumen emulsion prime (MSP-1) into the cracks	m	500	R	R
	<b><u>Cracks 3mm and wider</u></b>				
84	Clean out and heat the crack with a "Hot dog lance" or "Hot air lance", hot air blasting is necessary for removing old asphalt from the sidewall thus improving adhesion.	m	500	R	R
85	Injection of primer into crack using compressed air propulsion; ensuring the walls of the crack are properly coated and application of crack sealant.	m	500	R	R
	<b><u>Wider cracks (15mm and bigger)</u></b>				
86	Application of a mixture of 1 part washed river sand, plus 1 part slaked lime and water made into slurry be poured into the crack up to 20mm below the surrounding surface.	m	500	R	R
87	Priming of the crack using MSP 1 or equivalent and fill the remaining crack depth with using rubber crumb/crusher dust.	m	500	R	R
	<b><u>Active cracks (top open cracks)</u></b>				
88	Surface preparation	m2	1200	R	R
89	Application of bitumen rubber single seals and geotextile fabrics	m2	1200	R	R
	<b><u>Surfaced roads shoulder (edge break)</u></b>				
90	Cutting out all breaks neatly parallel to the centreline and Removing all loose material,	m	9000	R	R
91	Prime tacking and replacing with hot asphalt	m3	180	R	R
	<b><u>V-DRAINS</u></b>				
92	Construct of 30 v-drain size 1500mm wide (inclusive of surface preparation, formwork, expansion joint)	m	100	R	R
93	25MPa concrete in V-drains of channels	m³	24	R	R
94	Reinforcing mesh Ref 100	m2	150	R	R
	<b><u>Fixing gravel road Shoulder and cross section outside the Power station</u></b>				
95	Bladding of double carriageway gravel road which is 6m wide	m2	214000	R	R
96	Supply of G5 material	m3	2408	R	R
97	Supply of G7 material	m3	450	R	R
98	Filling and compaction of G5 material on distressed wearing course and base sections of the road to Compacted to 95% Mod AASHTO in maximum thicknesses of 150mm.	m2	16053	R	R
99	Filling and compaction of G7 material on distressed wearing course and base sections of the road to Compacted to 95% Mod AASHTO in maximum thicknesses of 150mm.	m2	3000	R	R
100	Ripping of Subgrade material to a depth of 150 mm and compacted to 93% Mod AASHTO Density (Material to be imported from suitable commercial source if required).	m2	8027	R	R
	<b><u>Fixing gravel road Shoulder and cross section inside the Power station</u></b>				
101	Bladding of single carriageway gravel road	m2	124000	R	R
102	Supply of G5 Material	m3	4000	R	R
103	Supply of G7 Material	m3	4000	R	R
104	Ripping, Filling and compaction of G5 material on distressed wearing course and base sections of the road to Compacted to 95% Mod AASHTO in maximum thicknesses of 150mm.	m2	13300	R	R

105	Ripping, Filling and compaction of G7 material on distressed wearing course and base sections of the road to Compacted to 95% Mod AASHTO in maximum thicknesses of 150mm.	m2	13300	R	R
106	Ripping of Subgrade material to a depth of 150 mm and compacted to 93% Mod AASHTO Density (Material to be imported from suitable commercial source if required).	m2	3100	R	R
<b><u>Road Drainage Maintenance</u></b>					
107	Cleaning of stormwater side drains for both surfaced and gravel roads and culverts on an as and when required bases.	m	25000	R	R
108	Reparing damaged drainage structures, including inlet structures, concrete v drains, culverts, headwalls etc. as and when required for the duration of the contract as per the detailed Road Specifications Document using 30MPa concrete	m3	40	R	R
109	High and Mild Reinforcement bars	ton	1	R	R
110	Reinforcement Mesh Ref 240	m2	450	R	R
111	Joint sealing on the drainage structures using an SABS approved flexible joint sealing material for concrete structures.	m	150	R	R
112	Supply and installation of reinforced concrete pipes of up to 800mm diameter	m	36	R	R
<b><u>Precast Kerbing</u></b>					
113	Reparing damage kerbing and walkway to match existing as and when required for the duration of the contract s per the detailed Road Specifications Document, this shall include the material for repairs	m	2000	R	R
114	Repairing of roads and side walks with 80mm interlocking paving blocks.	m2	3000	R	R
<b><u>Road Marking</u></b>					
<b><u>Approved roadmarking paint:</u></b>					
<b><u>Prepare surfaces, wash thoroughly, remove loose material, leave to dry and apply three coats 'Promac Aqualine Road Marking' waterborne acrylic ( retro-reflective road marking paint)</u></b>					
<b><u>(a)White lines</u></b>					
115	i)Parking bays on G-Block paving surfaces (100mm solid line).	m	12000	R	R
116	ii)Parking bays on Asphalt surfaces (100mm solid line).	m	20000	R	R
117	iii)100mm Interrupted line on asphalt surfaces.	m	16000	R	R
118	iv)100mm Line on asphalt surfaces.	m	20000	R	R
119	vii)Directional arrow size 750 x 1500mm on concrete block surfaces. (L.I.)	No.	120	R	R
120	viii)Paraplegic symbol size 1500 x 1500mm on concrete block surfaces. (L.I.)	No.	50	R	R
121	ix)5600 x 2200mm Demarcated pedestrian crossing. (L.I.)	No.	120	R	R
122	x)White lettering and symbols	m2	100	R	R
<b><u>(b)Yellow lines</u></b>					
123	i)100mm Line on asphalt surfaces.	m	2000	R	R
<b><u>Road Studs</u></b>					
124	Installation Road Studs (Cat eyes)	No	1000	R	R
<b><u>Guard Rails</u></b>					
125	Installation of Guard rails inclusive of supports	m	5000	R	R
<b><u>c) Black lines or paint</u></b>					
126	i) 100mm line	m	50	R	R
<b><u>Prepare surfaces, wash thoroughly, remove loose material, leave to dry and apply Thermoplastic road marking paint with( retro-reflective beads)</u></b>					
127	i)Islands (yellow and white)	m2	550	R	R
128	ii)White lettering and symbols	m2	150	R	R
129	iii)Yield signs (3000 x1500mm)	No	300	R	R
130	iv)Stop sign size 3000 x 1500mm on G-Block paving surfaces.	No	50	R	R
131	v)Stop sign size 3000 x 1500mm on Asphalt surfaces.	No	300	R	R
132	vi)Zebra Crossing (7000 x 2000)	No	150	R	R
<b><u>Chemical Dust suppression</u></b>					
<b><u>Preamble</u></b>					
Application shall be done using a water tanker with nozzles that have been set to the manufacturer's recommended application pressure.					

	<p>The selected product must allow for timeous return to service of the road to traffic.</p> <p>The road's surface preparation and that of the of the product and application thereof must be according to the manufacturer's instructions. This includes the moisture content of the road's surface, mixing ratio of the product, etc.</p> <p>The application shall ensure that the product adequately penetrates and covers all parts of the roadbed.</p> <p>Repair the roads' defects. This shall include re-establishing the cross-sectional shape and side drains of all roads for adequate drainage.</p> <p>On the roads with ash pipes in the middle, ensure that the road drains away from this median.</p> <p>NB! All material (G5) and yellow plant (roller compactor, grader, dump truck etc.) for the above shall be provided and applied/operated by the Contractor. The material for the wearing coarse and subgrade shall be placed and compacted as per [3]. The above shall be done via the Camden's roads maintenance contract, and it must be done prior to the chemical dust suppression of the roads.</p> <p>The actual scope for chemical dust suppression shall include but not limited to:</p> <p>Supply and apply <i>dustex</i> or <i>similar approved product</i> on all the identified roads Application shall be done using a water tanker with nozzles that have been set to the manufacturer's recommended application pressure.</p> <p>The selected product must allow for timeous return to service of the road to traffic.</p> <p>The road's surface preparation and that of the of the product and application thereof must be according to the manufacturer's instructions. This includes the moisture content of the road's surface, mixing ratio of the product, etc.</p> <p>The application shall ensure that the product adequately penetrates and covers all parts of the roadbed.</p> <p>Supply and apply <i>dustex</i> or <i>similar approved product</i> on Gravel roads Application shall be done using a water tanker with nozzles that have been set to the manufacturer's recommended application pressure. Mixing ratio to yeild optimum results as per product's manufacturer' instruction.</p> <p><b><u>PROVISIONAL SUMS</u></b></p> <p>NOTE: All P.C. Amounts and Provisional Sums appearing in these Bills of Quantities are Net Costs excluding Value Added Tax (VAT) and the Contractor must add for any profit, etc. If required against the item immediately following the P.C Amount or Provisional Sum concerned.</p> <p>The Provisional Sums are all NET amounts (exclusive of commission or discount for the contractor)</p> <p>Under no circumstances may any Provisional or Budgetary amount be extended at an amount lower than the amount given in the descriptions.</p> <p>Provisional Sums and Budgetary allowances contained herein may be omitted or reduced at the Contracts Manager discretion and the Contractor shall not be entitled to claim for any loss by way of reductions or omission of any discount or percentage relating to Provisional amounts and Budgetary sums or any loss of profit related thereto.</p>				
133	Provide the amount of R2 000,000.00 (Two million Rands) for undertaking any unforeseen work that might be required during the contruction period	Item	1		R 2 000 000.00
134	Profit and attendance on above item.	Item	1		R
<b>TOTAL COST TRANSFERRED TO FINAL SUMMARY PAGE</b>					<b>R</b>

# FINAL SUMMARY

ROAD MAINTENANCE AND REPAIRS AT CAMDEN POWER STATION FOR A PERIOD OF 5 YEARS :PROVISIONAL  
BILLS OF QUANTITIES

**FINAL SUMMARY**

No.	Description		Amount
1	Preliminaries		R
2	Bills Of Quantites		R
	Sub Total		R
	<u>Value Added Tax</u>		
	Allow 15 per cent (15%) of the above sub-total for Value Added Tax		R
	CARRIED TO FORM OF OFFER AND ACCEPTANCE		R