



KENYA RURAL ROADS AUTHORITY

MIGORI REGION

REHABILITATION AND SPOT IMPROVEMENT OF AGENG'A-NYAKWERI RD
ROAD NAME: AGENG'A-NYAKWERI RD
ROAD NUMBER: C(869)
TENDER NO: KeRRA/011/MIG/NTK/22 %SAV /39/2021-2022/256

BID DOCUMENT FOR SPOT IMPROVEMENT

- INVITATION FOR TENDERS
- INSTRUCTIONS TO BIDDERS
- QUALIFICATION CRITERIA
- CONDITIONS OF CONTRACT
- APPENDIX TO FORM OF AGREEMENT
- STANDARD FORMS
- SPECIFICATIONS, DRAWINGS AND BILLS OF QUANTITIES

JULY, 2022

The Engineer

DIRECTOR ROAD ASSET MANAGEMENT
 KENYA RURAL ROADS AUTHORITY,
 P.O. BOX 48151-00100,
 NAIROBI.

The Employer

DIRECTOR GENERAL,
 KENYA RURAL ROADS AUTHORITY,
 P.O. BOX 48151-00100,
 NAIROBI.

The Engineer

REGIONAL DIRECTOR
 KENYA RURAL ROADS AUTHORITY,
 MIGORI REGION
 P.O. BOX 164-40400,
 MIGORI

TABLE OF CONTENTS

CONTENTS	PAGE No.
SECTION I: INVITATION FOR TENDERS.....	2
SECTION II: INSTRUCTIONS TO TENDERERS	2
SECTION III: QUALIFICATION CRITERIA	11
SECTION IV: CONDITIONS OF CONTRACT.....	17
SECTION V: APPENDIX TO FORM OF AGREEMENT	26
SECTION VI: STANDARD FORMS	28
SECTION VII: CONTRACTOR'S EVALUATION CHECKLIST	55
SECTION VIII: SPECIFICATIONS, DRAWINGS AND BILLS OF QUANTITIES	55

SECTION I: INVITATION FOR TENDERS

Tender reference No: KeRRA /011/MIG/NTK/22%SAV/39/2021-2022-256

Tender Name: REHABILITATION AND SPOT IMPROVEMENT OF AGENG'A-NYAKWERI

RD The Kenya Rural Roads Authority- Migori Region invites sealed tenders for the **REHABILITATION AND SPOT IMPROVEMENT OF AGENG'A-NYAKWERI RD** Interested eligible candidates may obtain further information and inspect tender documents at **Kenya Rural Roads Authority, P.O Box 164- 40400 Suna-Migori** located at **Migori Town** during normal working hours **8.00 am to 5.00 pm Monday to Friday**.

- 1.1 A complete set of tender documents may be obtained by interested candidates by downloading from KeRRA website www.kerra.go.ke.
- 1.2 Prices quoted should be net inclusive of all taxes, must be in Kenya shillings and shall remain valid for **120** days from the closing date of tender.
- 1.3 Completed tender documents are to be enclosed in plain sealed envelopes marked with Tender name and reference number and deposited in the Tender Box at **Kenya Rural Roads Authority Migori Region P.O. Box 164-40400 Suna- Migori** or to be addressed to **The Regional Director, KeRRA Migori Region** so as to be received on or before the date on the Tender notice.
- 1.4 Tenders will be opened immediately thereafter in the presence of the candidates or their representatives who choose to attend at (Regional Directors Office Migori region located in Migori town.

Supplies Chain Management Officer.

For (Regional Director – Migori Region

SECTION II: INSTRUCTIONS TO TENDERERS

TABLE OF CONTENTS

CLAUSE	PAGE
1. GENERAL	4
2. TENDER DOCUMENTS	5
3. PREPARATION OF TENDERS	5
4. SUBMISSION OF TENDERS	6
5. TENDER OPENING AND EVALUATION	7
6. AWARD OF CONTRACT	8
7. CORRUPT AND FRAUDULENT PRACTICES	9

INSTRUCTIONS TO TENDERERS.

1. General

1.1 The Employer as defined in the Appendix to Conditions of Contract invites tenders for Works Contract as described in the tender documents. The successful Tenderer will be expected to complete the Works by the Intended Completion Date specified in the said Appendix.

1.2 Tenderers shall include the following information and documents with their tenders, unless otherwise stated:

- (a) Certified copy of certificate of Incorporation.
- (b) Experience in works of a similar nature and size for each for at least the last three years,
- (c) Major items of construction equipment owned or leased;
- (d) Qualifications and experience of key site management and technical personnel proposed for the Contract;
- (e) Authority to seek references from the Tenderer's bankers.
- (f) Copy of certificate Registration with National Construction Authority (NCA 1 to NCA 8) and practicing licence to be verified through NCA web site
- (g) Certified Copy of PIN/VAT Registration Certificate
- (h) Valid current Tax compliance certificate to be confirmed through KRA TCC checker
- (i) Bank statements for the last three Months from the date of advert.
- (j) Certified CR12
- (k) Serialisation of all attached documents.
- (l) Current business licence
- (m) Dully filled Confidential business questionnaire (CBQ)
- (n) Form of Tender shall be filled, signed and stamped.
- (o) Registered/Prequalified by KeRRA Migori, in the respective constituencies
- (p) Major items of construction owned or leased.
- (q) Tender Securing Declaration Form (for Women, Youth and Persons with Disabilities).
- (r) Self – Declaration Form – Form SDI.

1.3 The Tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible or liable for those costs.

1.4 The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings, and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Tenderer's own expense.

1.5 SCOPE OF BID

- 1.6 The Employer, as defined in the Conditions of Contract Part II hereinafter “the Employer” wishes to receive bids for the construction of works as described in Section 1, Clause 102 of the Special Specifications –

Location and extent of the Works

The works are located along AGENG’A-NYAKWERI RD road in NYATIKE Constituency of Migori County.

Work to be executed comprise of:

The works consist of but not limited to the following;

- Site clearance works
- Culvert and drainage works
- Grading and gravelling works
- Dayworks
- Any other works as instructed by the Engineer

- 1.7 The successful bidder will be expected to complete the Works within the period stated in the Appendix to form of Tender from the date of commencement of the Works.
- 1.8 Throughout these bidding documents, the terms bid and BIDDER and their derivatives (bidder/Bidder, bid/Bided, bidding/Bidding etc. are synonymous, and day means calendar day. Singular also means plural.

1.9 SOURCE OF FUNDS

- 1.10 The source of funding is the 22% RMLF Development Funds.

- 1.11 The total amount for this contract is **Ksh.2,849,240.00**

1.12 CORRUPT PRACTICES

- 1.13 The Government requires that the bidders, suppliers, sub-Contractors and supervisors observe the highest standard of ethics during the procurement and execution of such Contracts. In this pursuit of this policy, the Government;

- 1.14 Defines for the purposes of this provision, the terms set forth below as follows:

1.15 “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in the execution, and

- 1.16 “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract to the detriment of the Employer, and includes collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Employer of the benefits of free and open competition
- 1.17 Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract, and
- 1.18 Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Government Contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government financed Contract.

1.19 ELIGIBLE BIDDERS

- 1.20 This invitation to bid is open to all Bidders who are legally registered or incorporated in the Republic of Kenya as of the time of bid submission. Registered with the NCA as a Contractor in category 8 or above. Registered/Prequalified by KeRRA Migori, in the respective constituencies.
- 1.21 Bidders shall not have any conflict of interest. Bidders shall be considered to have conflict of interest, if they participated as consultant in the preparation of the design, documentation or technical specifications of the works that are the subject of this bidding other than as far as required by the Employer.
- 1.22 A firm that is under a declaration of ineligibility by the Employer in accordance with Clause 3, at the date of submission of the bid or thereafter, shall be disqualified.
- 1.23 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.

2. Tender Documents

- 2.1 The complete set of tender documents comprises the documents listed here below and any addenda issued in accordance with clause 2.4 here below:-
- (a) These instructions to Tenderers
 - (b) Form of Tender
 - (c) Conditions of Contract and Appendix to Form of Agreement
 - (d) Specifications
 - (e) Drawings
 - (f) Bills of Quantities
 - (g) Other materials required to be filled and submitted in accordance with these Instructions and Conditions
 - (h) Tender securing Declaration Form (for Women, Youth and Persons with Disability)
- 2.2 The Tenderer shall examine all instructions, forms and specifications in the tender documents. Failure to furnish all information required by the tender documents may

result in rejection of his tender.

- 2.3 A prospective Tenderer making inquiries of the tendering documents may notify the Employer in writing or by cable, telex or facsimile at the address indicated in the letter of invitation to tender. The Employer will respond to any request for clarification received earlier than seven [7] days prior to the deadline for submission of tenders. Copies of the Employer's response will be forwarded to all persons issued with tendering documents, including a description of the inquiry, but without identifying its source.
- 2.4 Before the deadline for submission of tenders, the Employer may modify the tendering documents by issuing addenda. Any addendum thus issued shall be part of the tendering documents and shall be communicated in writing or by cable, telex or facsimile to all Tenderers. Prospective Tenderers shall acknowledge receipt of each addendum in writing to the Employer.
- 2.5 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer shall extend, as necessary, the deadline for submission of tenders in accordance with clause 4.2 here below.

3. Preparation of Tenders

- 3.1 All documents relating to the tender and any correspondence shall be in English Language.
- 3.2 The tender submitted by the Tenderer shall comprise the following:-
 - (a) The Tender;
 - (b) Tender Security;
 - (c) Priced Bill of Quantities for lump-sum Contracts
 - (d) Any other materials required to be completed and submitted by Tenderers.
 - (e) Tender Security Declaration Form (for Women, Youth and Persons with Disability)
- 3.3 The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items for which no rate or price is entered by the Tenderer will not be paid for when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. All duties, taxes and other levies payable by the Contractor under the Contract, as of 30 days prior to the deadline for submission of tenders, shall be included in the tender price submitted by the Tenderer.
- 3.4 The rates and prices quoted by the Tenderer shall not be subject to any adjustment during the performance of the Contract.
- 3.5 The unit rates and prices shall be in Kenya Shillings.
- 3.6 Tenders shall remain valid for a period of **One Twenty (120)** days from the date of submission. However in exceptional circumstances, the Employer may request that the Tenderers extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing.
- 3.7 The Tenderer shall prepare one original of the documents comprising the tender documents as described in these Instructions to Tenderers.

- 3.8 The original shall be typed or written in indelible ink and shall be signed by a person or persons duly authorised to sign on behalf of the Tenderer. All pages of the tender where alterations or additions have been made shall be initialed by the person or persons signing the tender.
- 3.9 Clarification of tenders shall be requested by the tenderer to be received by the procuring entity not later than 7 days prior to the deadline for submission of tenders.
- 3.10 The procuring entity shall reply to any clarifications sought by the tenderer within **7 days** of receiving the request to enable the tenderer to make timely submission of its tender.

4. Submission of Tenders

- 4.1 The tender duly filled and sealed in an envelope shall;-
- a) be addressed to the Employer at the address provided in the invitation to tender;
 - b) bear the name and identification number of the Contract as defined in the invitation to tender; and
 - c) provide a warning not to open before the specified time and date for tender opening.
- 4.2 Tenders shall be delivered to the Employer at the address specified above not later than the time and date specified in the invitation to tender.
- 4.3 The tenderer shall not submit any alternative offers unless they are specifically required in the tender documents.
- Only one tender may be submitted by each tenderer. Any tenderer who fails to comply with this requirement will be disqualified.
- 4.4 Any tender received after the deadline for opening tenders will be returned to the tenderer un-opened.
- 4.5 The Employer may extend the deadline for submission of tenders by issuing an amendment in accordance with sub-clause 2.5 in which case all rights and obligations of the Employer and the Tenderers previously subject to the original deadline will then be subject to the new deadline.

5. Tender Opening and Evaluation

- 5.1 The tenders will be opened in the presence of the Tenderers' representatives who choose to attend at the time and in the place specified in the invitation to tender.
- 5.2 The Tenderers' names, the total amount of each tender and such other details as may be considered appropriate, will be announced at the opening by the Employer. Minutes of the

tender opening, including the information disclosed to those present will also be prepared by the Employer.

- 5.3 Information relating to the examination, clarification, evaluation and comparison of tenders and recommendations for the award of the Contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced. Any effort by a Tenderer to influence the Employer's officials, processing of tenders or award decisions may result in the rejection of his tender.
- 5.4 Any errors in the submitted tender arising from a miscalculation of unit price, quantity, subtotal and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive.
- 5.5 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.
- 5.6 Contract price variations shall not be allowed for contracts not exceeding one year (12 months)
- 5.7 Where contract price variation is allowed, the valuation shall not exceed 25% of the original contract price.
- 5.8 Price variation requests shall be processed by the procuring entity within 30 days of receiving the request.
- 5.9 To assist in the examination, evaluation, and comparison of tenders, the Employer at his discretion, may request [in writing] any Tenderer for clarification of the tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, telex or facsimile but no change in the tender price or substance of the tender shall be sought, offered or permitted.
- 5.10 The Tenderer shall not influence the Employer on any matter relating to his tender from the time of the tender opening to the time the Contract is awarded. Any effort by the Tenderer to influence the Employer or his employees in his decision on tender evaluation, tender comparison or Contract award may result in the rejection of the tender.

6. Award of Contract

- 6.1 The award of the Contract will be made to the Tenderer who has offered the lowest evaluated tender price.
- 6.2 Notwithstanding the provisions of clause 6.1 above, the Employer reserves the right to accept or reject any tender and to cancel the tendering process and reject all tenders at any time prior to the award of Contract without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the grounds for the action.
- 6.3 The Tenderer whose tender has been accepted will be notified of the award prior to

expiration of the tender validity period in writing or by cable, telex or facsimile. This notification (hereinafter and in all Contract documents called the “Letter of Acceptance”) will state the sum [hereinafter and in all Contract documents called the “Contract Price” which the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract. The contract shall be formed on the parties signing the contract. At the same time the other tenderers shall be informed that their tenders have not been successful.

- 6.4 The Contract Agreement will incorporate all agreements between the Employer and the successful Tenderer. It will be signed by the Employer and sent to the successful Tenderer, within 30 days following the notification of award. Within 21 days of receipt, the successful Tenderer will sign the Agreement and return it to the Employer.
- 6.5 Within 21 days after receipt of the Letter of Acceptance, the successful Tenderer shall deliver to the Employer a Performance Security amount stipulated in the Appendix to Conditions of Contract.
- 6.6 The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless there is an administrative review request.
- 6.7 The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.
- 6.8 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.

7. Corrupt and fraudulent practices

- 7.1 The procuring entity requires that the tenderer observes the highest standard of ethics during the procurement process and execution of the contract. A tenderer shall sign a declaration that he has not and will not be involved in corrupt and fraudulent practices.
- 7.2 The procuring entity will reject a tender if it determines that the tenderer recommended for award has engaged in corrupt and fraudulent practices in competing for the contract in question.
- 7.3 Further a tenderer who is found to have indulged in corrupt and fraudulent practices risks being debarred from participating in public procurement in Kenya.

SECTION III: QUALIFICATION CRITERIA

Qualification Criteria			Compliance Requirements	Documentation
No.	Subject	Requirement	Single Entity	Submission Requirements
1. Eligibility				
1.1	Eligibility	Nationality in accordance with confidential business Questionnaire in the standard forms	Must meet requirement	Refer to standard form section 7
1.4	Incorporation & Registration	Pursuant to sub clause 1.2 the following shall be provided; - Certified Copy of Certificate of incorporation to show that the applicant is a registered company and legally authorised to do business in Kenya - Proof of registration with the National Construction Authority Category NCA 8 and above for Road Works.	Must meet requirement	Refer to standard form section 7

Qualification Criteria			Compliance Requirements	Documentation
No.	Subject	Requirement	Single Entity	Submission Requirements
2.1	History of Non-Performing Contracts	Non-performance of a contract did not occur within the last three (3) years prior to the deadline for application submission based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract, and where all appeal instances available to the applicant have been exhausted.	Must meet requirement by itself or as party to past	
2.2	Pending Litigation	All pending litigation shall in total not represent more than fifty percent (50%)] of the Applicant's net worth and shall be treated as resolved against the Applicant.	Must meet requirement by itself or as party to past	Refer to standard form section 7
3.1	Financial Performance	Submission of audited balance sheets or if not required by the law of the applicant's country, other financial statements acceptable to the Employer, for the last three [3] years to demonstrate: (a) the current soundness of the applicants financial position and	Must meet requirement (a) Must meet requirement	Refer to standard form section 7

Qualification Criteria			Compliance Requirements	Documentation
No.	Subject	Requirement	Single Entity	Submission Requirements
		its prospective long term profitability, and (b) Submission of bank statement for the last three months from the date of advert.	(b) Must meet requirement	
3.2	Average Annual Construction Turnover	Minimum average annual construction turnover of KShs 10 Million [KShs Ten Million] , calculated as total certified payments received for contracts in progress or completed, within the last 3 years	Must meet requirement	Refer to standard form section 7
4.1	General Construction Experience	Experience under construction contracts in the role of contractor, subcontractor, or management contractor for at least the last Five (5) years prior to the applications submission deadline	Must meet requirement	Refer to standard form section 7

Qualification Criteria			Compliance Requirements	Documentation
No.	Subject	Requirement	Single Entity	Submission Requirements
4.2(a)	Specific Construction Experience	Participation as contractor, management contractor or subcontractor, in at least Two (2) No. contracts within the last Three (3) years , each with a value of at least KShs. 5 Million (KShs Five Million) , that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics as described in Scope of Works	Must meet requirement	Refer to standard form section 7
4.2(b)		b) For the above or other contracts executed during the period stipulated in 4.2(a) above, a minimum construction experience in at least one (1) of: - Routine maintenance - Spot improvement & rehabilitation works - Any other works of similar nature.	Must meet requirements	Refer to standard form section 7
4.3	Work Methodology	Submission of a brief work methodology	Should demonstrate understanding of the scope of works and other general requirements	Refer to standard form section 7

Qualification Criteria			Compliance Requirements	Documentation
No.	Subject	Requirement	Single Entity	Submission Requirements
5. Equipment Holding				
5.1	Minimum number of Equipment	The bidder must indicate the minimum the core plant and equipment considered by the company to be necessary for undertaking the project together with proof of ownership	Must meet the requirement	Refer to standard form section 7
6. Current Commitment				
6.1	On-going contracts	The total value of current works on the on-going contracts must not exceed KShs. 100 million (Kshs One Hundred Million).	Must meet requirements	
7. Site Staff				
1	Site Agent	The site staff shall possess minimum levels set below; Qualification = Diploma in civil Engineering. General Experience = 7 yrs Specific Experience = 5 Yrs	Must meet requirements	Refer to guideline notes
2	Foremen (1 No.)	Qualification = certificate in Civil Engineering		

Qualification Criteria			Compliance Requirements	Documentation
No.	Subject	Requirement	Single Entity	Submission Requirements
5		General Experience = 10 yrs Specific Experience = 7Yrs		

SECTION IV: CONDITIONS OF CONTRACT

	Table of Clauses	Page
1.	DEFINITIONS.....	20
2.	CONTRACT DOCUMENTS.....	21
3.	EMPLOYER’S REPRESENTATIVE’S DECISIONS.....	21
4.	WORKS, LANGUAGE AND LAW OF CONTRACT.....	22
5.	SAFETY, TEMPORARY WORKS AND DISCOVERIES.....	22
6.	WORK PROGRAM AND SUB-CONTRACTING.....	22
7.	THE SITE.....	22
8.	INSTRUCTIONS.....	23
9.	EXTENSION OF COMPLETION DATE.....	23
10.	MANAGEMENT MEETINGS.....	24
11.	DEFECTS.....	24
12.	BILLS OF QUANTITIES.....	25
13.	VARIATIONS.....	25
14.	PAYMENT CERTIFICATES AND FINAL ACCOUNT	26
15.	INSURANCES	27
16.	LIQUIDATED DAMAGES.....	27
17.	COMPLETION AND TAKING OVER.....	27
18.	TERMINATION.....	27
19.	PAYMENT UPON TERMINATION.....	28
20.	CORRUPT GIFTS AND PAYMENTS OF COMMISSION.....	28
21.	SETTLEMENT OF DISPUTES.....	29

CONDITIONS OF CONTRACT

1. Definitions

- 1.1 In this Contract, except where context otherwise requires, the following terms shall be interpreted as indicated;

“Bills of Quantities” means the priced and completed Bill of Quantities forming part of the tender[where applicable].

“Schedule of Rates” means the priced Schedule of Rates forming part of the tender [where applicable].

“The Completion Date” means the date of completion of the Works as certified by the Employer’s Representative.

“The Contract” means the agreement entered into by the Employer and the Contractor as recorded in the Agreement Form and signed by the parties.

“The Contractor” refers to the person or corporate body whose tender to carry out the Works has been accepted by the Employer.

“The Contractor’s Tender” is the completed tendering document submitted by the Contractor to the Employer.

“The Contract Price” is the price stated in the Letter of Acceptance.

“Days” are calendar days; “Months” are calendar months.

“A Defect” is any part of the Works not completed in accordance with the Contract.

“The Defects Liability Certificate” is the certificate issued by Employer’s Representative upon correction of defects by the Contractor.

“The Defects Liability Period” is the period named in the Appendix to Conditions of Contract and calculated from the Completion Date.

“Drawings” include calculations and other information provided or approved by the Employer’s Representative for the execution of the Contract.

“Employer” Includes Central or Local Government administration, Universities, Public Institutions and Corporations and is the party who employs the Contractor to carry out the Works.

“Equipment” is the Contractor’s machinery and vehicles brought temporarily to the Site for the execution of the Works.

“Site” means the place or places where the permanent Works are to be carried out

including workshops where the same is being prepared.

“Materials” are all supplies, including consumables, used by the Contractor for incorporation in the Works.

“Employer’s Representative” is the person appointed by the Employer and notified to the Contractor for the purpose of supervision of the Works.

“Specification” means the Specification of the Works included in the Contract.

“Start Date” is the date when the Contractor shall commence execution of the Works.

“ A Subcontractor” is a person or corporate body who has a Contract with the Contractor to carry out a part of the Work in the Contract, which includes Work on the Site.

“Temporary works” are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

“A Variation” is an instruction given by the Employer’s Representative which varies the Works.

“The Works” are what the Contract requires the Contractor to construct, install, and turnover to the Employer.

2. Contract Documents

2.1 The following documents shall constitute the Contract documents and shall be interpreted in the following order of priority;

- (1) Agreement,
- (2) Letter of Acceptance,
- (3) Contractor’s Tender,
- (4) Conditions of Contract,
- (5) Specifications,
- (6) Drawings,
- (7) Bills of Quantities

3. Employer’s Representative’s Decisions

3.1 Except where otherwise specifically stated, the Employer’s Representative will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

4. Works, Language and Law of Contract

4.1 The Contractor shall construct and install the Works in accordance with the Contract documents. The Works may commence on the Start Date and shall be carried out in accordance with the Program submitted by the Contractor, as updated with the approval of

the Employer's Representative, and complete them by the Intended Completion Date.

- 4.2 The ruling language of the Contract shall be English language and the law governing the Contract shall be the law of the Republic of Kenya.

5. Safety, Temporary works and Discoveries

- 5.1 The Contractor shall be responsible for design of temporary works and shall obtain approval of third parties to the design of the temporary works where required.
- 5.2 The Contractor shall be responsible for the safety of all activities on the Site.
- 5.3 Anything of historical or other interest or significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Employer's Representative of such discoveries and carry out the Employer's Representative's instructions for dealing with them.

6 Work Program and Sub-contracting

- 6.1 Within seven days after Site possession date, the Contractor shall submit to the Employer's Representative for approval a program showing the general methods, arrangements, order and timing for all the activities in the Works.
- 6.2 The Contractor may sub-contract the Works (but only to a maximum of 25 percent of the Contract Price) with the approval of the Employer's Representative. However, he shall not assign the Contract without the approval of the Employer in writing. Sub-contracting shall not alter the Contractor's obligations.

7 The site

- 7.1 The Employer shall give possession of all parts of the Site to the Contractor.
- 7.2 The Contractor shall allow the Employer's Representative and any other person authorised by the Employer's Representative, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

8 Instructions

- 8.1 The Contractor shall carry out all instructions of the Employer's Representative which are in accordance with the Contract.

9 Extension of Completion Date

- 9.1 The Employer's Representative shall extend the Completion Date if an occurrence arises which makes it impossible for completion to be achieved by the Intended Completion Date. The Employer's Representative shall decide whether and by how much to extend the Completion Date.
- 9.2 For the purposes of this clause, the following occurrences shall be valid for consideration;

Delay by:-

- a) force majeure, or
- b) reason of any exceptionally adverse weather conditions, or
- c) reason of civil commotion, strike or lockout affecting any of the trades employed upon the Works or any of the trades engaged in the preparation, manufacture or transportation of any of the goods or materials required for the Works, or
- d) reason of the Employer's Representative's instructions issued under these Conditions, or
- e) reason of the contractor not having received in due time necessary instructions, drawings, details or levels from the Employer's Representative for which he specifically applied in writing on a date which having regard to the date for Completion stated in the appendix to these Conditions or to any extension of time then fixed under this clause was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same, or
- f) delay on the part of artists, tradesmen or others engaged by the Employer in executing work not forming part of this Contract, or
- g) reason of delay by statutory or other services providers or similar bodies engaged directly by the Employer, or
- h) reason of opening up for inspection of any Work covered up or of the testing or any of the Work, materials or goods in accordance with these conditions unless the inspection or test showed that the Work, materials or goods were not in accordance with this Contract, or
- i) reason of delay in appointing a replacement Employer's Representative, or
- j) reason of delay caused by the late supply of goods or materials or in executing Work for which the Employer or his agents are contractually obliged to supply or to execute as the case may be, or
- k) delay in receiving possession of or access to the Site.

10 Management Meetings

- 10.1 A Contract management meeting shall be held regularly and attended by the Employer's Representative and the Contractor. Its business shall be to review the plans for the remaining Work. The Employer's Representative shall record the business of management meetings and provide copies of the record to those attending the meeting and the Employer. The responsibility of the parties for actions to be taken shall be decided by the Employer's Representative either at the management meeting or after the management meeting and stated in writing to all who attend the meeting.

- 10.2 Communication between parties shall be effective only when in writing.

11 Defects

- 11.1 The Employer's Representative shall inspect the Contractor's work and notify the Contractor of any defects that are found. Such inspection shall not affect the Contractor's responsibilities. The Employer's Representative may instruct the Contractor to search for a defect and to uncover and test any Work that the Employer's Representative considers may have a defect. Should the defect be found, the cost of uncovering and making good shall be borne by the Contractor. However if there is no defect found, the cost of uncovering and making good shall be treated as a variation and added to the Contract Price.
- 11.2 The Employer's Representative shall give notice to the Contractor of any defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the Appendix to Form of Agreement.
- 11.3 Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified by the Employer's Representative's notice. If the Contractor has not corrected a defect within the time specified in the Employer's Representative's notice, the Employer's Representative will assess the cost of having the defect corrected by other parties and such cost shall be treated as a variation and be deducted from the Contract Price.

12 Bills of Quantities

- 12.1 The Bills of Quantities shall contain items for the construction, installation, testing and commissioning of the Work to be done by the Contractor. The Contractor will be paid for the quantity of the Work done at the rates in the Bills of Quantities for each item. Items against which no rate is entered by the Tenderer will not be paid for when executed and shall be deemed covered by the rates for other items in the Bills of Quantities.
- 12.2 Where Bills of Quantities do not form part of the Contract, the Contract Price shall be a lump sum (which shall be deemed to have been based on the rates in the Schedule of Rates forming part of the tender) and shall be subject to re-measurement after each stage.

13 Variations

- 13.1 The Contractor shall provide the Employer's Representative with a quotation for carrying out the variations when requested to do so. The Employer's Representative shall assess the quotation and shall obtain the necessary authority from the Employer before the variation is ordered.
- 13.2 If the Work in the variation corresponds with an item description in the Bill of Quantities, the rate in the Bill of Quantities shall be used to calculate the value of the variation. If the nature of the Work in the variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of Work.
- 13.3 If the Contractor's quotation is unreasonable, the Employer's Representative may order the variation and make a change to the Contract Price, which shall be based on the Employer's Representative's own forecast of the effects of the variation on the Contractor's costs.

14 Payment Certificates and Final Account

- 14.1 The Contractor shall be paid after each of the following stages of Work listed here below (subject to re-measurement by the Employer's Representative of the Work done in each stage before payment is made). In case of lump-sum Contracts, the valuation for each stage shall be based on the quantities so obtained in the re-measurement and the rates in the Bill of Quantities.
- (i) Minimum amount of Interim Payment Certificate as indicated in the Appendix to Form of Bid as 10% of the Contract sum.
 - (v) After defects liability period.
- 14.2 Upon deciding that Works included in a particular stage are complete, the Contractor shall submit to the Employer's Representative his application for payment. The Employer's Representative shall check, adjust if necessary and certify the amount to be paid to the Contractor within 21 days of receipt of the Contractor's application. The Employer shall pay the Contractor the amounts so certified within 30 days of the date of issue of each Interim Certificate.
- 14.3 The Contractor shall supply the Employer's Representative with a detailed final account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer's Representative shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 30 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer's Representative shall issue within 21 days a schedule that states the scope of the corrections or additions that are necessary. If the final account is still unsatisfactory after it has been resubmitted, the Employer's Representative shall decide on the amount payable to the Contractor and issue a Final Payment Certificate. The Employer shall pay the Contractor the amount so certified within 60 days of the issue of the Final Payment Certificate.
- 14.4 If the period laid down for payment to the Contractor upon each of the Employer's Representative's Certificate by the Employer has been exceeded, the Contractor shall be entitled to claim simple interest calculated pro-rata on the basis of the number of days delayed at the Central Bank of Kenya's average base lending rate prevailing on the first day the payment becomes overdue. The Contractor will be required to notify the Employer within 15 days of receipt of delayed payments of his intentions to claim interest.

15. Insurance

- 15.1 The Contractor shall be responsible for and shall take out appropriate cover against, among other risks, personal injury; loss of or damage to the Works, materials and plant; and loss of or damage to property.

16. Liquidated Damages

- 16.1 The Contractor shall pay liquidated damages to the Employer at the rate 0.001 per cent of the Contract price per day for each day that the actual Completion Date is later than the Intended Completion Date except in the case of any of the occurrences listed under clause 9.2. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

17. Completion and Taking Over

- 17.1 Upon deciding that the Work is complete the Contractor shall request the Employer's Representative to issue a Certificate of Completion of the Works, upon deciding that the Work is completed.

The Employer shall take over the Site and the Works within seven days of the Employer's Representative issuing a Certificate of Completion.

18. Termination

- 18.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. These fundamental breaches of Contract shall include, but shall not be limited to, the following:

- (a) the Contractor stops Work for 30 days continuously without reasonable cause or authority from the Employer's Representative;
- (b) the Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (c) a payment certified by the Employer's Representative is not paid by the Employer to the Contractor within 30 days after the expiry of the payment periods stated in sub clauses 14.2 and 14.3 hereinabove.
- (d) the Employer's Representative gives notice that failure to correct a particular defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time.

- 18.2 If the Contract is terminated, the Contractor shall stop Work immediately, and leave the Site as soon as reasonably possible. The Employer's Representative shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary buildings on Site.

19. Payment Upon Termination

- 19.1 The Employer may employ and pay other persons to carry out and complete the Works and to rectify any defects and may enter upon the Works and use all materials on Site, plant, equipment and temporary works.
- 19.2 The Contractor shall, during the execution or after the completion of the Works under this clause, remove from the Site as and when required within such reasonable time as the Employer's Representative may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to him, and in default thereof, the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor.
- 19.3 Until after completion of the Works under this clause, the Employer shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and the verification within a reasonable time of the accounts

therefor the Employer's Representative shall certify the amount of expenses properly incurred by the Employer and, if such amount added to the money paid to the Contractor before such determination exceeds the total amount which would have been payable on due completion in accordance with this Contract, the difference shall be a debt payable to the Employer by the Contractor; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

20. Corrupt Gifts and Payments of Commission

20.1 The Contractor shall not;

- (a) Offer or give or agree to give to any person in the service of the Employer any gifts or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract with the Employer or for showing or forbearing to show favour or disfavour to any person in relation to this or any other contract with the Employer.
- (b) Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the Laws of Kenya.

21. Settlement of Disputes

- 21.1 Any dispute arising out of the Contract which cannot be amicably settled between the parties shall be referred by either party to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed by the chairman of the Chartered Institute of Arbitrators, Kenya branch, on the request of the applying party.

SECTION V: APPENDIX TO FORM OF AGREEMENT

This Appendix to Form of Agreement forms part of the Agreement.

Item	Data
Time for Completion	3 Months,
Bid Security	As per the advert.
Priority of Documents	The documents forming the Contract shall be interpreted in the following order of priority: • the Contract Agreement and Appendix to form of agreement • the Letter of Acceptance • the Form of Tender • the Conditions of Contract, Part II - Conditions of Particular Application • the Conditions of Contract, Part I - General Conditions of Contract • the Specifications • the Drawings, • the Priced Bill of Quantities
Law of Contract	Laws of the Republic of Kenya
Language	English
Provision of Site	On Commencement Date
Name and Address of Employer	Director General Kenya Rural Roads Authority P.O. Box 48151-00100 Nairobi
Name and Address of the Engineer	Director Roads Asset Management Kenya Rural Roads Authority P.O. Box 48151-00100 Nairobi
Name and Address of the Engineer's Representative	Regional Director, Kenya Rural Roads Authority P. O. Box 164 -40400 Suna-Migori Region
Penalty to the Contractor for Employer paying workers on his behalf	10% of the amount paid to the workers.
Performance Security Amount Form	5% of sum stated as the Contract Price Bank Guarantee or Insurance Bond issued by PPOA approved insurance companies
Requirements of Contractors Design	Not applicable
Programme	
⇒ Time of Submission	Within 14 days of Commencement Date
⇒ Form of Programme	Bar Chart
⇒ Interval Updates	As requested by the Regional Manager
Liquidated Damages Amount payable due to failure to complete	0.01% of Contract Price per Day to a limit of 1% of Contract Price.
Defects Liability	Refer to guideline Notes
Period of notifying defects	90 days calculated from the date stated in the notice under sub clause 11.2

Item	Data
Percentage of Retention	Refer to guideline Notes
Maximum Amount of Advance Payment	Refer to guideline Notes
Form of Guarantee for Advance Payment	Bank Guarantee
Valuation of Works	Remeasurements with Bills of Quantities
Repayment Schedule for Advance Payment	N/A
Minimum Amount of Interim Payment	10% of contract price
Currency of Payment	Kenya Shilling
Rate of Interest	Simple Interest at a rate of 2% above mean Base Lending Rate as issued by the Central Bank of Kenya.
Insurance	Required
Insurance ⇒ The Works, materials plants & fees- Contractor's All risks ⇒ Third party injury to persons and damage to property ⇒ Workers compensation (WIBA- workers injury benefits policy)	Amount of Cover The Contract Price stated in the Agreement +15%+replacement cost of equipment on site. As per work injury benefits act 2007 laws of Kenya
Arbitration ⇒ Rules ⇒ Appointing Authority ⇒ Place of Arbitration	CAP 49 of the Laws of Kenya Chairman Chartered Institute of Arbitrators, Kenya Branch. Kenya Rural Roads Authority, Headquarters

SECTION VI: STANDARD FORMS

Table of Contents

CONTENTS:	PAGE
FORM OF INVITATION FOR TENDERS.....	29
FORM OF TENDER	30
LETTER OF AWARD	31
FORM OF TENDER SECURITY	32
PERFORMANCE BANK GUARANTEE.....	33
BANK GUARANTEE FOR ADVANCE PAYMENT.....	34
QUALIFICATION INFORMATION	37
CONFIDENTIAL BUSINESS QUESTIONNAIRE.....	38
SCHEDULE OF LABOUR: - BASIC RATES	40
CERTIFICATE OF TENDERER'S VISIT TO SITE	40
FORM OF WRITTEN POWER-OF-ATTORNEY	41
KEY PERSONNEL	43
SCHEDULE OF THE PROPOSED APPROPRIATE EQUIPMENT.....	44
SCHEDULE OF COMPLETED CIVIL WORKS CARRIED OUT IN THE PREVIOUS YEARS	45
SCHEDULE OF ONGOING PROJECTS	46
OTHER SUPPLEMENTARY INFORMATION	47
ADJUDICATOR'S AGREEMENT	48
FRAUD & CORRUPTION	50
ENVIRONMENTAL AND SOCIAL COMMITMENT	51
PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD	52
DECLARATION FORM	53

FORM OF INVITATION FOR TENDERS

_____ [Date]

To: _____ [Name of Contractor]
_____ [Address]

Dear Sirs:

Reference: _____ [Contract Name]

You are qualified to tender for the above Contract.

We hereby invite you and other qualified Tenderers to submit a Tender for the execution and completion of the Works.

A complete set of Tender documents may be purchased from ____

[Mailing address, cable/telex/facsimile numbers].

Upon payment of a non-refundable fee of Kshs _____

All Tenders shall be accompanied bynumber of copies of the same and a Tender Security in the form and amount of Kshs..... and shall be delivered to:

[Address and location]

at or before _____(time and date). Tenders will be opened immediately thereafter, in the presence of those Tenderers' representatives who choose to attend.

Please confirm receipt of this letter and your intention to Tender in writing.

Yours faithfully,

_____ Authorised Signature

_____ Name and Title

FORM OF TENDER

TO: _____[Name of Employer)

_____ [Date]

_____ [Name of Contract]

Dear Sir,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above Works, We, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of Kshs. _____ [Amount in figures] Kenya Shillings _____ [Amount in words]
2. We undertake, if our Tender is accepted, to commence the Works on the commencement date and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix.
3. We agree to abide by this Tender until _____ [Insert date], and it shall remain binding upon us and may be accepted at any time before that date.
4. Unless and until a formal Agreement is prepared and executed this Tender together with your written acceptance thereof, shall constitute a binding Contract between us.
4. We understand that you are not bound to accept the lowest or any Tender you may receive.

Dated this _____ day of _____ 20_____

Signature _____ in the capacity of _____

duly authorized to sign Tenders for and on behalf of _____ [Name of Tenderer] of

_____ [Address of Tenderer]

Witness: Name _____

Address _____

Signature _____

Date _____

LETTER OF AWARD

[Letterhead paper of the Employer]

_____ [Date]

To: _____
[Name of the Contractor]

[Address of the Contractor]

Dear Sir,

This is to notify you that your Tender dated _____
for the execution of _____
[name of the Contract and identification number, as given in the Tender documents] for the
Contract Price of Kshs. _____ [amount in figures] [Kenya
Shillings _____ (amount in words)] in accordance with the
Instructions to Tenderers is hereby accepted.

You are hereby instructed to proceed with the execution of the said Works in accordance with
the Contract documents.

Authorized Signature

Name and Title of Signatory

Attachment :

FORM OF TENDER SECURITY

WHEREAS(hereinafter called “the Tenderer”) has submitted a Tender dated for the Rehabilitation/Spot Improvement of
..... (Name of Contract)

KNOW ALL PEOPLE by these presents that WE having our registered office at(hereinafter called “the Bank”), are bound unto(hereinafter called “the Employer”) in the sum of Kshs..... for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents sealed with the Common Seal of the said Bank this Day of20.....

THE CONDITIONS of this obligation are:

1. If after Tender opening the Tenderer withdraws his Tender during the period of Tender validity specified in the Instructions to Tenderers
Or
2. If the Tenderer, having been notified of the acceptance of his Tender by the Employer during the Period of Tender validity:
 - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Tenderers, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the Period of Tender validity, and any demand in respect thereof should reach the Bank not later than the said date.

[Date]

[Signature of the Bank]

[Witness]

[Seal]

PERFORMANCE BANK GUARANTEE

To: _____(Name of Employer) _____(Date)

_____(Address of Employer)

Dear Sir,

WHEREAS _____(hereinafter called “the Contractor”) has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____(hereinafter called “the Works”);

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognised bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of Kshs. _____ (amount of Guarantee in figures) Kenya Shillings _____ (amount of Guarantee in words), and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings _____ (amount of Guarantee in words) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change, addition or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any change, addition, or modification.

This Guarantee shall be valid until the date of issue of the Employer’s notice under Sub-Clause 8.2 (Taking-Over Notice), of the Conditions of Contract.

SIGNATURE AND SEAL OF THE GUARANTOR _____

Name of Bank _____

Address _____

Date _____

BANK GUARANTEE FOR ADVANCE PAYMENT

To: _____ [Name of Employer] _____ (Date)
_____ [Address of Employer]

Gentlemen,

Ref: _____ [name of Contract]

In accordance with the provisions of the Conditions of Contract of the above-mentioned Contract, **We**, _____ [name and Address of Contractor] (hereinafter called “the Contractor”) shall furnish you with a Bank guarantee by a recognised Bank for the sum specified therein as a security for compliance with his obligations in accordance with the Contract in an amount of Kshs. _____ [amount of Guarantee in figures] Kenya Shillings _____ [amount of Guarantee in words].

We, the _____ [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ [name of Employer] on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding Kshs _____ [amount of Guarantee in figures] Kenya Shillings _____ [amount of Guarantee in words].

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between _____ [name of Employer] and the Contractor, shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition or modification.

This Guarantee shall remain valid and in full effect from the date of the Advance Payment under the Contract until _____ (name of Employer) receives full payment of the same amount from the Contract.

Yours faithfully,
Signature and Seal _____

Name of the Bank or financial institution _____

Address _____

Date _____

Witness: Name: _____

Address: _____

Signature: _____

Date: _____

FORM OF AGREEMENT

THIS AGREEMENT is made on theday of 2021 between the **Kenya Rural Roads Authority**, represented by the Regional Director Kenya Rural Roads Authority, Migori of **P.O. BOX 164 - 40400, Suna -Migori, Kenya** hereinafter called the “**Employer**”

“of the one part and -----
---hereinafter called the “**Contractor**” of the other part.

WHEREAS the Employer is desirous that certain works should be executed, by: -----

And has accepted a Bid by the Contractor to execute, complete and maintain such works
NOW THIS AGREEMENT WITNESSETH as follows :

In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.

The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

The said BID dated -----

- Conditions of Contract; Parts I and II
- The Standard and Special Specifications;
- Priced Bill of Quantities;
- Letter of Acceptance;
- Form of Tender
- Drawings;
- Appendix to the Form of Agreement
- Schedule Of Supplementary Information
- Other Documents/Materials/Conditions agreed and documented.

All aforesaid documents are hereinafter referred to as “**The Contract**”.

In consideration of the payment to be made by the **Employer** to the **Contractor**, the Contractor covenants with the Employer to execute and complete the Works in conformity with the provisions of the Contract.

The Employer hereby covenants to pay the Contractor in consideration of the execution, completion and maintenance of the Works at the Contract Price or such other sum as may become payable under the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS WHEREOF the parties hereto have caused their respective common seals to be hereto affixed (or have hereunto set their respective hands and seals) on the day and year first above written.

SIGNED AND DATED FOR AND ON BEHALF OF THE EMPLOYER:-

Signature: Date

Name: Eng. Joash N. Michoma **Designation:-** Regional Director, KeRRA, Migori.

In the presence of (Witness):-

Name

Designation

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

SIGNED AND DATED FOR AND ON BEHALF OF THE CONTRACTOR:-

Name

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

Designation:.....

In the presence of (Witness):-

Name.....

Signature:..... Date

Address:.....

QUALIFICATION INFORMATION

TENDER QUESTIONNAIRE

Please fill in block letters.

1. Full name of Tenderer;

.....

2. Full address of Tenderer to which Tender correspondence is to be sent (unless an agent has been appointed below);

.....

3. Telephone number (s) of Tenderer;

.....

4. Facsimile of Tenderer;

.....

5. Name of Tenderer's representative to be contacted on matters of the Tender during the Tender period;

.....

6. Details of Tenderer's nominated agent (if any) to receive Tender notices (name, address, telephone, telefax);

.....

.....

Signature of Tenderer

Make copy and deliver to: _____(Name of Employer) (The
Tenderer shall leave one copy at the time of purchase of the Tender documents)

CONFIDENTIAL BUSINESS QUESTIONNAIRE

You are requested to give the particulars indicated in Part 1 and either Part 2 (a) or 2 (b) whichever applies to your type of business.

You are advised that it is a serious offence to give false information on this Form.

Part 1 – General

Business Name

Location of business premises; Country/Town.....

Plot No..... Street/Road

Postal Address..... Tel No.....

Nature of Business.....

Current Trade Licensee No..... Expiring date.....

Maximum value of business which you can handle at any time: Kshs

Name of your Bankers.....

Branch.....

Part 2 (b) – Partnership

Give details of partners as follows:

Name in full	Nationality	Citizenship Details	Shares
--------------	-------------	---------------------	--------

1.....			
--------	--	--	--

2.....			
--------	--	--	--

3.....			
--------	--	--	--

Part 2(c) – Registered Company:

Private or public.....

State the nominal and issued capital of the Company-

Nominal Kshs.....

Issued Kshs.....

Give details of all directors as follows:

	Name in full	Nationality.	Citizenship Details*.	Shares.
1				
2				
3				
4				

Part 2(d) – Interest in the Firm:

Is there any person / persons in Kenya Rural Roads Authority who
has interest in this firm? Yes/No..... (Delete as necessary)

I certify that the information given above is correct.

.....		
.....		
(Title)	(Signature)	(Date)

* Attach proof of citizenship

SCHEDULE OF LABOUR: - BASIC RATES

(Reference: Clause 4 of Conditions of Particular Application)

LABOUR CATEGORY	UNIT (MONTH/SHIFT/HOUR)	RATES

Categories to be generally in accordance with those used by the Kenya Building Construction and Engineering and Allied Trades Workers' Union.

I certify that the above information is correct.

.....
(Title)

.....
(Signature)

.....
(Date)



KENYA RURAL ROADS AUTHORITY

SCHEDULE 3: SITE VISIT ATTENDANCE FAMILIARIZATION FORM

Subsequent to the presidential directive on Covid19 Pandemic, there shall be no pre - tender site visit. Bidders are therefore advised to make personal arrangements for the site visit to familiarize with the site before submission of the bids.

Name of the firm:

Name:

Designation:
.....

Signature: Date:

FORM OF WRITTEN POWER-OF-ATTORNEY

The Tenderer consisting of a joint venture shall state here below the name and address of his representative who is authorised to receive on his behalf correspondence in connection with the Tender.

.....
(Name of Tenderer's Representative in block letters)

.....
(Address of Tenderer's Representative)

.....
(Signature of Tenderer's Representative)

KEY PERSONNEL (as per qualification criteria)

DESIGNATION	NAME	NATIONALITY	SUMMARY OF QUALIFICATIONS AND EXPERIENCE
Headquarters: 1. Managing Director 2. 3. etc.			
Site Office: 1. Site Agent/ Supervisor 2. Foremen 3. 4. 5.			

I certify that the above information is correct.

.....
(Title)

.....
(Signature)

.....
(Date)

SCHEDULE OF THE PROPOSED APPROPRIATE EQUIPMENT.

Mandatory minimum number of equipment required by the Employer for the execution of the project that the bidder must make available for the Contract

Item No.	Equipment Details	Minimum Number Required	No of Equipment Owned by the Bidder	No. of equipment to be hired
1	Pedestrian Roller – Man walk behind			
2	Double drum vibrating pedestrian roller(3Tons)			
3	Self-propelled single drum vibrating (10Tons)	2		
4	Concrete mixers	1		
5	Excavator/loader	2		
6	Concrete vibrators	1		
7	Tipper payload 7 – 10 tonnes	3		
8	Flat bed lorries			
9	Water Bowsers (10,000 litres capacity)	2		
10	Motor Graders	2		

The Bidder must attach certified copies of log books or lease agreement of the following
I certify that the above information is correct.

.....
(Title) (Signature) (Date)

**SCHEDULE OF COMPLETED CIVIL WORKS CARRIED OUT IN
THE PREVIOUS YEARS**

DESCRIPTION OF WORKS AND CLIENT	TOTAL VALUE OF WORKS (KSHS)	CONTRACT PERIOD (YEARS)	YEAR COMPLETED

I certify that the above Civil Works were successfully carried out and completed by ourselves.

.....
(Title)

.....
(Signature)

.....
(Date)

SCHEDULE OF ONGOING PROJECTS

DESCRIPTION OF WORK AND CLIENT	CONTRACT PERIOD	DATE OF COMMEN- CEMENT	DATE OF COMPLETIO N	TOTAL VALUE OF WORKS (KSHS.)	% COMPLET ED TODATE

I certify that the above Civil Works are being carried out by ourselves and that the above information is correct.

.....
(Title)

.....
(Signature)

.....
(Date)

OTHER SUPPLEMENTARY INFORMATION

1. Financial reports for the last three years, balance sheets, profit and loss statements, auditors' reports etc. List them below and attach copies.
.....
.....
.....
2. Evidence of access to financial resources to meet the qualification requirements. Cash in hand, lines of credit etc. List below and attach copies of supporting documents
.....
.....
.....
3. Name, address , telephone, telex, fax numbers of the Tenderer's Bankers who may provide reference if contacted by the Employer.
.....
.....
.....
4. Information on current litigation in which the Tenderer is involved.

OTHER PARTY (IES)	CAUSE OF DISPUTE	AMOUNT INVOLVED (KSHS)

I certify that the above information is correct.

.....
Title

.....
Signature

.....
Date

ADJUDICATOR'S AGREEMENT

Identification of Project:

.....
.....
(the "Project")

Name and address of the Employer:

.....
.....
(the "Employer")

Name and address of the Contractor:

.....
.....
(the "Contractor")

Name and address of the Adjudicator:

.....
.....
(the "Adjudicator")

Whereas the Employer and the Contractor have entered into a Contract ("the Contract") for the execution of the Project and wish to appoint the Adjudicator to act as adjudicator in accordance with the Rules for Adjudication ["the Rules"].

The Employer, Contractor and Adjudicator agree as follows:

1. The Rules and dispute provisions of the Contract shall form part of this Agreement.
2. The Adjudicator shall be paid:

A retainer fee of
per calendar month (where applicable)

A daily fee of

Expenses (including the cost of telephone calls, courier charges, faxes and telexes incurred in connection with his duties; all reasonable and necessary travel expenses, hotel accommodation and subsistence and other direct travel expenses).

Receipts will be required for all expenses.

3. The Adjudicator agrees to act as Adjudicator in accordance with the Rules and has disclosed to the Parties any previous or existing relationship with the Parties or others concerned with the Project.
4. This Agreement shall be governed by the laws of.....
5. The Language of this Agreement shall be

SIGNED BY

For and on behalf of the Employer in the presence of

Witness
Name
Address
Date

SIGNED BY

For and on behalf of the Contractor in the presence of

Witness
Name
Address
Date

SIGNED BY

For and on behalf of the Adjudicator in the presence of

Witness
Name
Address
Date

FRAUD & CORRUPTION

- 1 If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site.
- 2 Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed.
- 3 For the purposes of this Sub-Clause:
 - (i) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) "Coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
- 4 The Contractor declares that:
 - a) They did not engage in any action to influence the Project implementation process to the detriment of the Employer, in particular no collusive practice took place nor will take place, and

The bidding proceedings, contract award, and execution have not and will not be subject to any corrupt practice as defined in the United Nations Convention to combat corruption dated 31 October 2003.

Dated this _____ day of _____ 20_____

Signature _____ in the capacity of _____

duly authorized to sign Tenders for and on behalf of
_____ [Name of Tenderer] of

_____ [Address of Tenderer]

_____ [Seal or Stamp of Tenderer]

ENVIRONMENTAL AND SOCIAL COMMITMENT

I have taken due note of the importance to comply with environmental and social standards and regulations.

I, the undersigned, [.....] acting as the duly authorized representative of [.....],

With respect to the submission of a bid for [.....] in accordance with the invitation to tender No [.....], I undertake to comply, and ensure that our subcontractors, if any, comply with international environmental and labour standards consistent with applicable law and regulations in the country of implementation of the Project, including the fundamental conventions of the International Labour Organisation (ILO) and international environmental treaties

In addition, I also undertake to adopt any environmental and social risk mitigation measures as defined in the environmental and social management plan or the notice of environmental and social impact issued by the Employer.

Dated this _____ day of _____ 20_____

Signature _____ in the capacity of _____

duly authorized to sign Tenders for and on behalf of
_____[Name of Tenderer] of

_____[Address of Tenderer]

_____[Seal or Stamp of Tenderer]

FORM RB 1

**REPUBLIC OF KENYA
PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD**

APPLICATION NO.....OF.....20.....

BETWEEN

.....APPLICANT

AND

.....RESPONDENT (Procuring Entity)

Request for review of the decision of the..... (Name of the Procuring Entity) of
.....dated the...day of20.....in the matter of Tender No.....of
.....20...

REQUEST FOR REVIEW

I/We.....,the above named Applicant(s), of address: Physical
address.....Fax No.....Tel. No.....Email, hereby request the Public
Procurement Administrative Review Board to review the whole/part of the above mentioned
decision on the following grounds , namely:-

- 1.
- 2.
- etc.

By this memorandum, the Applicant requests the Board for an order/orders that: -

- 1.
- 2.
- etc

SIGNED(Applicant)

Dated on.....day of/...20...

FOR OFFICIAL USE ONLY

Lodged with the Secretary Public Procurement Administrative Review Board on
day of20.....

SIGNED

Board Secretary

DECLARATION FORM

Date _____

To _____

The tenderer i.e. (Name and address) _____
_____ declare the following:

- a) Has not been debarred from participating in public procurement.
- b) Has not been involved in and will not be involved in corrupt and fraudulent practices regarding public procurement.

Title

Signature

Date

(To be signed by authorized representative and officially stamped)

SECOND SCHEDULE

Tender - Securing Declaration Form

[The Bidder shall complete in this Form in accordance with the instructions indicated]

Date: Day of

Tender No.....

To:

We, the undersigned declare that

1. We understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration.
2. We accept that we will automatically be suspended from being eligible for bidding in any contract with the purchaser for the period of the time of [.....] starting on [.....], we are in breach of our obligation(s) under the bid conditions, because we-
 - (a) Have withdrawn our Bid during the period of bid validity specified by us in the Bidding Data Sheet:
or
 - (b) Having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity,
 - (i) Fail or refuse to execute the contract, if required, or
 - (ii) Fail or refuse to furnish the performance Security, in accordance with the ITT.
3. We understand that this Bidding Securing Declaration shall expire if we are not successful Bidder, upon the earlier of
 - (i) Our receipt of a copy of your notification of the name of the successful Bidder; or
 - (ii) Twenty-eight days after the expiration of our Tender.
4. We understand that if we are a Joint Venture, the Bid Securing Declaration must be in the name of the Joint Venture that submits to be, and the Joint Venture has not been legally constituted at the time of bidding, the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed: [.....] in the capacity of

Name: [.....].

Duly authorised to sign the bid for and on behalf:[date].....

SECTION VII: CONTRACTOR'S EVALUATION CHECKLIST

Supervision Check List (1/2)

Project Title:	
Contractor:	

1. This check list is for Resident Engineer to check contractor's work execution process.
 2. Fill in date of checking as (day/month), mark as indicated in Filling Example, and state remarks.
 3. Put this check list in the Monthly Progress Report.

	Date	Name	Signature
The Engineer's Representative (Project Engineer)			
Resident Engineer			

Item	Check Point		before	During execution										after	Remarks
			Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
			/	/	/	/	/	/	/	/	/	/	/	/	
1	Execution system in general	1-1	Works Execution Programme (including its revised version if any) is submitted before the date specified in contract document		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		1-2	Works Execution Programme properly reflects the given specifications and site conditions		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		1-3	Execution procedures are in accordance with Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
2	Equipment holding	2-1	All equipment used are properly mobilized in accordance with Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		2-2	All equipment used is well maintained during the execution of works		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
3	Contractor's in-house staff	3-1	Qualified technical staff of contractor are properly assigned as specified in Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		3-2	Contractor's in-house key staff understand work process and schedule properly		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		3-3	Contractor's in-house staff give technical guidance and direction to workers and operators properly and timely		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		3-4	Communications with authority in writing is properly and timely		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
4	Personnel employment	4-1	Workers and operators are deployed in accordance with Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		4-2	Wage payment is properly made on time		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
5	Site base facilities	5-1	Office and stockyard are prepared in accordance with Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		5-2	Site is well maintained during the work execution and cleared on completion		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		5-3	Material stored on site is properly managed during the work execution		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
6	Quality and quantity management	6-1	Material testing, structural examination, and measurements are properly and routinely conducted based on specifications and Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Filling Example : ✓ Check point is satisfactory ■ Check point is unsatisfactory N/A Not applicable

Supervision Check List (2/2)

Project Title:	
Contractor:	

1. This check list is for Resident Engineer to check contractor's work execution process.
2. Fill in date of checking as (day/month), mark as indicated in Filling Example, and state remarks.
3. Put this check list in the Monthly Progress Report.

The Engineer's Representative (Project Engineer)	Signature
Resident Engineer	

Item	Check Point	before	During execution										after	Remarks
		Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
		/	/	/	/	/	/	/	/	/	/	/	/	
6	Quality and quantity management	6-2	Results of material testing, structural examination and measurements are within the specifications.											
		6-3	Results of material testing, structural examination, and measurements are properly compiled as reports for confirmation											
7	Work scheduling	7-1	Understanding of critical path and its reflection on scheduling are proper											
		7-2	Actual proceedings are periodically compared to the planned schedule described in Works Execution Programme											
		7-3	Changes caused by site conditions are properly handled to keep Works on schedule											
		7-4	All works are completed within the contract term or within the extended term as allowed											
8	Work safety management	8-1	No accident occurs to workers, operators, or third-parties.											
		8-2	Safety of workers and operators is considered											
		8-3	Accident prevention efforts for third-parties are proper											
		8-4	Traffic and site safety devices are properly installed and managed											
		8-5	Temporary facilities (e.g. scaffolding) are constantly checked											
9	Environmental and social management	9-1	Environmental and social mitigation efforts (e.g. against noise, vibration, emission, and dust) are conducted											
		9-2	Waste material from site is properly disposed											
		9-3	Damage to existing roads, works and services is avoided or are repaired when it occurs											
		9-4	Transportation by vehicles is properly done with no overloading, and neither material falling, leakage, nor spillage.											

Filling Example : ✓ Check point is satisfactory ■ Check point is unsatisfactory N/A Not applicable

SECTION VIII: SPECIFICATIONS, DRAWINGS AND BILLS OF QUANTITIES

STANDARD SPECIFICATIONS

The Standard Specifications referred to in this document is the *Standard Specifications for Road and Bridge Construction, 1986 Edition* published by the Ministry of Transport and Communications. This document shall form part of the Contract.

Work shall be carried out in accordance with the Standard Specification except as supplemented or revised in the Special Specification.

I. SPECIFICATIONS

Contents:

SECTION 01:	PRELIMINARY AND GENERAL ITEMS.....	E-1
01-40-001:	Mobilisation and Establishment of the Site.....	E-1
01-40-002:	Clearance on Completion.....	E-1
01-40-003:	Insurances and Securities.....	E-1
0140-004:	Quality Control Tests.....	E-2
01-40-005:	Publicity Sign Boards.....	E-2
01-40-006:	Traffic Control.....	E-2
01-40-007:	Drinking Water.....	E-3
SECTION 02	SETTING OUT.....	E-4
02-50-001	Setting Out Horizontal Alignment.....	E-4
SECTION 04	SITE CLEARANCE.....	E-5
04-50-002	Grass cutting.....	E-5
04-50-003	Bush Clearing (heavy).....	E-6
04-50-004	Bush Clearing (Light).....	E-6
04-50-005	Pruning Tree Branches	E-7
04-50-006	Trees and Stumps Removal.....	E-7
04-50-007	Trees and Stumps Removal (>450mm girth).....	E-7
04-50-009	Rock/Boulder Removal.....	E-8
04-50-010	Stripping and Grubbing	E-8
SECTION 07:	EXCAVATION AND FILLING FOR STRUCTURES	E-14
07-50-002	Excavation for Drainage Structures.....	E-14
SECTION 08	CULVERT AND DRAINAGE WORKS.....	E-15
08-50-002:	Ditch Cleaning-manual.....	E-15
08-60-001/005:	Culvert cleaning - partially blocked.....	E-16
08-60-006/010:	Culvert cleaning - fully blocked.....	E-17
08-60-016/035:	Concrete Pipe Culverts.....	E-17
08-70-001	Headwall Repair - masonry	E-19
08-70-002:	Headwall Repair - concrete.....	E-19
08-70-003	Minor Drainage Structures - masonry.....	E-20
08-70-004	Minor Drainage Structures - concrete.....	E-20
08-70-005	Scour Checks – concrete.....	E-21
08-70-006	Scour Checks – masonry.....	E-21
08-70-007	Scour Checks - wooden stakes.....	E-21
08-70-016	Stone Pitching.....	E-23
08-80-002	Gabion Installation.....	E-24
08-80-003	Rock fill to Gabions.....	E-24
08-80-004	Drift Desilting.....	E-25
08-80-005	Drift Repairs - Concrete.....	E-25
08-80-006	Drifts - Stone Pitching.....	E-26
08-80-007	Drifts - Concrete.....	E-26
08-80-008	At-level Scour Checks.....	E-26
08-80-009	Stone Chute Stabilisation.....	E-27
08-80-010	Stone Post Chute Stabilisation.....	E-27
08-80-011	Stone Check Dams.....	E-28

08-80-012	Stone and Post Check Dams.....	E-28
SECTION 10 GRADING AND GRAVELLING.....		E-29
10-50-002:	Carriageway Grading - heavy.....	E-30
10-50-004:	Carriageway Grading - light.....	E-30
10-80-004:	Removal of Overburden - labour.....	E-31
10-80-009:	Removal of Overburden - equipment.....	E-31
10-80-005:	Haulage - Overhaul.....	E-31
10-80-007	Excavation; Free hand; Spreading and Compaction of Gravel-Labour...E-32	
10-80-008	Excavation; Free Haul, Spreading and Compaction of Gravel-Equipment..E-34	
10-80-010	Restoration of Quarries and Borrow pits.....	E-34
SECTION 17 CONCRETE WORKS.....		E-42
17-40-001	Concrete Road Section.....	E-42
SECTION 20 ROAD FURNITURE.....		E-43
20-50-001:	Traffic Sign Maintenance.....	E-43
20-50-002	Erection of Traffic Signs.....	E-43
20-50-004	Marker Post Replacement.....	E-44
20-70-001	Guardrail Repair.....	E-44
20-70-003	Erection of Guardrails.....	E-45
SECTION 22 DAYWORKS.....		E-46
22- Activity Codes		
SECTION 25: HIV/AIDS AWARENESS AND PREVENTION CAMPAIGN.....		E-47
25-50-001	HIV/AIDS Awareness Campaign.....	E-47
25-50-002	HIV/AIDS Prevention Campaign.....	E-47
25-50-003	HIV/AIDS and Cross-cutting Issues.....	E-47

SECTION 01 : PRELIMINARY AND GENERAL ITEMS

Scope:

This section comprises those items that are required at the Commencement and Completion of the Works or that are Provisional Items applicable for the duration of the Works.

01-40- 001 Mobilisation and Establishment of the Site

The Contractor shall provide all equipment, tools, materials, temporary offices, stores and housing required to carry out the Works.

The Contractor shall ensure that all possible means of protection are given to the labour force at all times. Such protection shall include provision of high visibility clothing or vests, goggles and masks for workers in potentially dangerous locations or dealing with potentially harmful materials. The Contractor shall also maintain first aid kits with a minimum of the following items:-

- Non Stick wound dressing
- Selection of plaster/band aids
- Crepe bandages
- Gauze and cotton wool
- Antiseptic solution (washing wounds)
- Antiseptic cream – Betadine, Burnol
- Pain killers Panadol, Disprin
- Anti diarrhoea – Immodium, Diadis, Charcoal
- Anti histamine – Piriton, Triludan
- Anti nausea – Stemetil
- Eye ointment
- Oral re-hydration sachets
- Surgical gloves

Measurement and Payment:

No separate payment shall be made for this item. The Contractor shall include the costs in the rates for other measured items.

01-40- 002 Clearance on Completion

On Completion of the Works, all temporary housing, equipment, signs and tools shall be removed from the site, and the site left in good order to the satisfaction of the Engineer.

Measurement and Payment

The Lump Sum payment will be made upon approval by the Engineer that the Clearance has been satisfactorily carried out.

01-40-003 Insurance and Bonds

The Contractor shall provide Insurance and Sureties in accordance with relevant Clauses in the Conditions of Contract.

Measurement and Payment

Lump Sum payment for this item will be made upon the production of satisfactory evidence by the Contractor that Insurances and Securities have been effected.

01-40-004 Quality Control Tests

The Engineer may instruct the Contractor during the progress of the Works to carry out quality control tests to check materials and standards of workmanship, against the Specifications.

Where such tests indicate defective standards the Engineer shall instruct the Contractor to rectify the defects to the Engineer's satisfaction and at the Contractor's expense.

Measurement and Payment

The contractor should have inbuilt cost of material testing in each itemised rates which will require testing. No separate payment will be made for material testing.

01-40-005 Publicity Sign Boards

The Contractor shall provide Sign Boards as specified on the Drawings or as directed by the Engineer. The Sign Boards shall be placed at the beginning and end of the road or road section covered by this Contract.

Sign Boards shall be maintained for the duration of the Works, and removed on completion.

Quality Control

The Engineer shall check that Sign Boards have been erected in accordance with Drawings and Specifications.

Measurement: Number

The unit of measurement shall be number of Sign Boards erected

Payment

The unit rate shall be the full compensation for labour, tools, materials and incidental costs required for carrying out the work.

01-40- 006 Traffic Control

The Contractor shall provide warning signs, fences, barriers, detours, which shall be properly positioned in advance of the Works to ensure that traffic is well and safely accommodated for the duration of the Works.

Traffic signs and other traffic control facilities shall be kept in good condition and located in positions where they are visible to road users.

Quality Control

The Engineer shall check regularly that traffic control measures are satisfactory.

Measurement and Payment

A Lump Sum shall be paid on a Monthly basis upon the approval of the Engineer that satisfactory control measures are in place.

01-40- 007 Drinking Water

The Contractor shall provide safe drinking water on site for workers at a reasonable distance from all work locations, for the duration of the Works.

Quality Control

The Engineer shall check regularly that adequate supplies of water are available throughout the Site.

Measurement and Payment

A Lump Sum shall be paid on a Monthly basis upon the approval of the Engineer that adequate supplies have been provided.

SECTION 04 : SITE CLEARANCE

Scope

This section covers the clearance of bushes, shrubs, grasses, trees, stumps, boulders, stripping and grubbing of the topsoil, removal of anthills and other unsuitable materials for the specified widths of the road, quarry and borrow areas. The distinction between light and heavy bush shall be decided by the Engineer.

The minimum site clearing widths for each of the activities shall be as shown in Table 4.1

Table 4.1: Site Clearing Widths

<i>Road Category</i>	<i>Running Surface</i>	<i>Stripping and Grubbing</i>	<i>Trees, Stumps, Boulders</i>	<i>Bush Clearing</i>
A/B/C + Secondary Roads	6.0 m	10.6 m	10.6 m	14.0 m
D/E + Minor Roads	5.4 m	10.0 m	10.0 m	13.0 m
RAR Roads	4.5 m	7.9 m	8.0 m	11.0 m
Minor / RAR roads with insufficient widths or Temporary Sections	3.5 m	6.9 m	7.0 m	9.0 m

04-50- 003 Bush Clearing (Heavy)

Where the Engineer designates an area as Heavy Bush (based on the undergrowth density) the Contractor shall clear all vegetation including small trees, shrubs and undergrowth, and their root systems, and shall salvage any re-useable timber or other material by cutting into logs and stacking. Other cleared material shall be collected and disposed of off-site as directed by the Engineer.

Work Method

The Contractor shall use **Labour** methods for this item

Quality Control

The Engineer shall check the cleared widths at 50 metre intervals

Measurement Unit: m²

The measurement shall be the area cleared to the specified width over the length as instructed by the Engineer.

Payment:

The unit rate shall be the full compensation for all labour, tools and incidental costs required to complete the work.

04-50- 004 Bush Clearing (Light)

The Contractor shall clear all vegetation including small trees, and shrubs with their root systems. Grasses and any undergrowth shall be cut to a height of not more than 100mm. The cleared material shall be collected and disposed of away from the side drains and in a manner that causes no visibility obstruction to traffic.

Work Method

The Contractor shall use **Labour** methods for this item

Quality Control

The Engineer shall check the cleared widths at 50 metre intervals.

Measurement Unit: m²

The measurement shall be the area cleared to the specified width over the length as instructed by the Engineer.

Payment:

The unit rate shall be the full compensation for all labour, tools and incidental costs required to complete the work.

SECTION 08: CULVERT AND DRAINAGE WORKS**Scope**

This section covers all Works in connection with the installation, repair and cleaning of concrete pipe culverts; inlet and outlet structures; drifts and drainage protection Works; and the construction of Scour Checks

08-60-001/005: Culvert Cleaning (partially blocked)

08-60-003 600mm dia
08-60-004 900mm dia
08-60-005 1200 mm dia

This activity involves the cleaning of culverts of specified sizes including pipe barrels, the outlet/inlet structures, and the outlet drains, keeping them free of all debris, weed, silt and any obstruction to ensure free passage of water at all times. The debris shall be deposited in approved spoil dumps as directed by the Engineer

Partially blocked culverts shall be those with less than half of the barrel blocked.

Correct widths and slopes of the outlet drains shall be maintained. The gradient of the outlet drain shall be not less than 2 %.

All broken culvert barrels discovered in the course carrying out this activity shall be reported to the Engineer.

This activity shall be carried out before the rains, or as directed by the Engineer.

Work Method

The Contractor shall use **Labour** to carry out this item of work

Quality Control

The culverts shall be checked as free of debris to the satisfaction of the Engineer.

Measurement Unit: m

The measurement shall be the length of culvert, including the outlet drain, cleaned

Payment

The unit rate shall be full compensation for labour, tools and incidental costs required to carry out the work.

08- 60 - 006/7/8/9/10 :Culvert Cleaning (Fully blocked):

08 - 60 - 008 600mm dia;

08 - 60 - 009 900mm dia;

08 - 60 - 010 1200mm dia

This activity involves the cleaning of culverts of specified sizes including pipe barrels, the outlet/inlet structures, and the outlet drains, keeping them free of all debris, weed, silt and any obstruction to ensure free passage of water at all times. The debris shall be deposited in approved spoil dumps as directed by the Engineer

Fully blocked culvert shall be those with greater than half of the barrel blocked.

Correct widths and slopes of the outlet drains shall be maintained. The gradient of the outlet drain shall be not less than 2 %.

All broken culvert barrels discovered in the course of carrying out this activity shall be reported to the Engineer.

This activity should be carried out before the onset of the rains, or as directed by the Engineer.

Work Method

The Contractor shall use **Labour** to carry out this item of work.

Quality Control

The culverts shall be checked as free from debris, to the satisfaction of the Engineer.

Measurement Unit: m

The measurement shall be the length of culvert, including the outlet drain cleaned.

Payment

The unit rate shall be full compensation for labour, tools and incidental costs required to carry out the work.

08-60-016**08-60-021/029****Supply and Installation of Concrete Pipe Culverts**

08-60-024 600 mm unhaunched

08-60-025 600 mm surrounds

08-60-026	900 mm	unhaunched
08-60-027	900 mm	surrounds
08-60-028	1200 mm	unhaunched
08-60-029	1200 mm	surrounds

The Contractor shall supply, lay and joint concrete pipes to form culverts, including excavation, concrete bedding; haunching or surrounds; and backfilling, in accordance with the Drawings for the Type and diameter specified in the Contract or directed by the Engineer.

The pipes shall be of Class 20/20 concrete, at least 28 days cured, and manufactured on site or procured from a supplier approved by the Engineer. The pipes shall be laid on a bedding of Class 15/20 concrete of dimensions as shown on the Drawings and jointed with cement mortar 1:4.

The culvert gradient including the outlet shall be a minimum 2%.

The pipes shall be haunched or surrounded, according to the Type specified, with Class 15/20 concrete to the dimensions shown on the Drawings or as directed by the Engineer.

Backfilling shall be carried with approved material and compacted in layers not exceeding 150 mm loose depth and placed evenly on each side of the pipe. Ramps shall be shaped to achieve a minimum overfill of 75% of the pipe diameter, and shall be tapered back on the carriageway to provide a gradual approach, as directed by the Engineer.

If the Contractor wishes to construct culverts in-site, using inflatable or collapsible forms (Balloon) the Engineer's approval shall first be sought for the proposed working method.

On completion the inside of the culvert shall be smooth, without displaced joints or other obstructions and true to line and level.

Work Method

The Contractor shall use **Labour** and appropriate **Equipment** to carry out this item work

Quality Control

- Concrete quality shall be checked for cracks, honey combing, and other defects.
- Before the pipes are laid, the gradient of the concrete bedding shall be checked and shall not be less than 2%
- The joints shall be checked to see that they have been properly made.

Measurement Unit: m

The measurement shall be in linear metres of the installed Type and size of culvert specified, measured net according to the Drawings.

Payment

The unit rate shall be the full compensation for labour, tools, materials, equipment and any other incidentals that may be required in carrying out the work.

SECTION 10: GRADING AND GRAVELLING

Scope:

Grading covers the work of the reinstating of the road carriageway to the correct camber by removing the high points and filling gullies, corrugations, and wheel ruts to restore a smooth running surface. Graveling consists of the excavation, loading, hauling, dumping, spreading and compaction of gravel wearing course material on the formation of the road carriageway. Gravel shall include lateritic gravel, quartzitic gravel, calcareous gravel, decomposed rock, soft stone coral rag, clayey sand and crushed rock.

The material may be obtained from quarries, borrow pits or excavation in cuttings as directed by the Engineer. Gravel material shall conform to the requirement given in Table 10.1

Table 10.1: Requirement for Gravel Wearing Course

GRADING REQUIREMENTS	
Sieve (mm)	% by Weight Passing
40	100
28	95 - 100
20	85 - 100
14	65 - 100
10	55 - 100
5	35 - 92
2	23 - 77
1	18 - 62
0.425	14 - 50
0.075	10 - 40

For “Quarry
Waste” gravel
stones of
maximum
dimension 80mm
may be permitted

PLASTICITY INDEX REQUIREMENTS PI		
Zone	Min	Max
WET: Mean annual rainfall > 500mm	5	20
DRY: Mean annual rainfall	10	30

BEARING STRENGTH		
Traffic VPD	CBR	DCP Equivalent mm/Blow
>15	20	11
<15	15	14
CBR at 95 % MDD, Modified AASHTO and 4 days soaking		
Lower quality material (CBR 15) may be accepted if no better material can be found		

The Engineer shall approve quarries and the extent of their exploitation. The contractor shall identify the quarries prior to commencement of the Works. The Contractor shall be responsible for the acquisition of the quarry rights and shall conduct respective negotiations with landowners and affected communities.

Alternative sources of gravel material whose quality can be shown to be in compliance with the specification requirements may be used, with the approval of the Engineer and at no extra cost to the

Employer. The Contractor is deemed to have included in his rates for the provision of the gravel material including testing.

10-50-002 Carriageway Grading – Heavy Grading

The Contractor shall scarify the existing carriageway surface, cutting high spots and moving materials to fill potholes, corrugations and wheel ruts and reshape the surface to the specified camber, using a Motor grader unless otherwise directed by the Engineer. All loose rocks, roots and grasses shall be removed and disposed of well clear of the drains.

Pegs 300 to 400mm long shall be placed at 20 m intervals to mark edge of the carriageway.

The material shall be bladed toward the centre of the road starting from both edges until the specified camber is achieved. Suitable material from the side drains may be used as additional material. Any further material needed to achieve the correct camber shall be from an approved source. Compaction shall be carried out using appropriate equipment approved by the Engineer, from the carriageway edges to the centerline in overlapping passes.

No grading shall be carried out in dry conditions. Where additional moisture is required to achieve compaction it shall be added in an even manner without transverse or longitudinal flow.

Work Method

The Contractor shall use **Equipment** to carry out this item.

Quality Control

- The width of the carriageway shall be checked at every 50m intervals and have a tolerance of + 50mm or - 20mm.
- The camber shall be checked with a camber board at 25m intervals and shall have a tolerance of +/- 1%

Measurement Unit: m^2

The measurement shall be the area of carriageway graded, measured net according to the specified width and measured length graded.

Payment

The unit rate shall be the full compensation for labour, tools, equipment and incidental costs required for carrying out the work.

10-50- 004 : Carriageway Grading - Light Grading

The Contractor shall grade the carriageway to control roughness and corrugations using either a Towed or a Motor grader. The width of the carriageway shall be as specified for the Road Class.

Pegs 200 to 300mm long shall be placed at 20 m intervals to mark edge of the carriageway

The material shall be bladed toward the centre of the road, starting from both edges, to the specified camber. Where instructed by the Engineer, suitable materials from the side drains may be used to fill potholes and gullies in the carriageway. Any further material needed to re-form the camber shall be from an approved source. Compaction shall be achieved using the wheels of the equipment, tracked evenly over the full surface, or by other approved means. No grading shall be carried out in dry conditions.

Work Method

The Contractor shall use **Equipment** to carry out this item.

Quality Control

- The width of the carriageway shall be checked at every 50m intervals and have a tolerance of +50mm or -20mm
- The camber shall be checked with a camber board at 25m intervals and shall have a tolerance of +/- 1%

Measurement Unit: m²

The measurement shall be the area of carriageway graded, measured net according to the specified width and measured length graded.

Payment

The unit rate shall be the full compensation for labour, tools, equipment and incidental costs required for carrying out the work.

10-80- 004	Removal of Overburden - Labour
10-80- 009	- Equipment

The Contractor shall remove overburden from quarries and borrow pits, which includes loading, hauling and stockpiling at approved locations. The thickness of the overburden layer to be removed shall be determined from trial pits dug on a 30 metre grid within the quarry area.

The overburden shall be deposited neatly for re-use to reinstate the quarry on completion of the Works, as directed by the Engineer.

Work Method:

The Contractor shall use **Labour** and appropriate **Equipment** to carry out this item.

Quality Control

- The location and manner of stock piling of the overburden for the reinstatement of the quarry shall be to the approval of the Engineer.

Measurement Unit: m³

The measurement shall be the volume of overburden removed as calculated from the cleared area and the mean depth indicated from the trial pits.

Payment

The unit rate shall include full compensation for labour, tools materials and equipment, haulage, stockpiling and incidental costs required for carrying out the work.

10-80- 005 : Haulage (Overhaul beyond 1.5km)

The Contractor shall load the excavated gravel, haul by appropriate equipment and off-load on the road as directed by the Engineer. Where the quantity delivered in any load falls short of the equipment capacity, off-loading shall only be permitted after the agreed spacing is adjusted accordingly.

No vehicle with a capacity of greater than 10 tonnes shall be permitted to off-load gravel directly on

the prepared formation. Any greater loads shall be dumped in stockpiles off-road and transported to the formation areas by appropriate means.

Where loads supplied are found to contain material other than from the approved quarry and are of unacceptable quality, the Contractor shall remove them from site at the Contractor's expense.

Work Method:

The Contractor shall use both **Labour** and **Equipment** to carry out this Item.

Quality Control:

- No haulage equipment shall be used until its capacity has been ascertained by the Engineer
- The quality of gravel dumped on the road shall be according to the Specifications
- The quantity of material delivered in each load shall be checked before dumping is allowed
- The distance between the stacks shall be checked to ensure the required compacted thickness will be achieved.

Measurement Unit: m³km (Overhaul)

No separate payment shall be made for haulage of gravel material. The rate for gravel material should include acquisition of the quarry, excavation of gravel, haulage for any distance, placing, spreading and compact to a minimum thickness of 150mm as directed by the Engineer.

Payment

The unit rate shall include full compensation for labour, tools, equipment, haulage and incidental costs necessary to carry out the work.

Excavation, haul, Spreading and Compaction of Gravel

10-80-007 - Labour

10-80-008 - Equipment

**Excavation of Gravel - Labour
- Equipment**

Gravel shall be excavated from quarries approved by the Engineer, and the Contractor shall inform the Engineer if the quality/availability of the gravel changes during the course of excavation. Excavation and loading shall normally be by labour unless, at the request of the Contractor, the Engineer allows the use of equipment.

Stones and boulders with one dimension greater than 80mm shall be removed from the excavated gravel and deposited outside the quarry at locations approved by the Engineer. Such stones and boulders may be reused in other parts of Works with the approval of the Engineer.

Work Method

The Contractor shall use **Labour** and/or **Equipment** to carry out this work, as directed by the Engineer.

Quality Control:

- Oversize stones and boulders shall not be loaded for haulage to the road.
- Areas containing deleterious material shall not be excavated.

Free haul, spreading and Compaction of Gravel

The Contractor shall spread and compact gravel material, in a manner to ensure a uniform thickness of the layer across the full width of the carriageway and shaped to the specified camber. Spreading also includes the removal of any oversized stones or boulders, which cannot be broken down to the required size, to spoil dumps. Gravel shall be spread within 24 hours of off-loading.

Compaction of the gravel material shall be carried out from the carriageway edges to the centerline by overlapping passes of the compaction equipment. The number of passes shall be as directed by the Engineer dependent upon the equipment used and the material being compacted. Unless otherwise instructed the moisture content of the material shall be within $\pm 2\%$ of optimum

Where additional moisture is required water shall be applied in an even manner and the rate of application shall be such that no transverse or longitudinal flows occur.

The Engineer may instruct the Contractor to carry out density tests on the compacted material to ensure that an acceptable standard has been achieved.

Work Method:

The Contractor shall use **Labour** and/or appropriate **Equipment** to carry out this item.

Quality Control:

- The gravel surface width shall be checked at 100m intervals and shall have a tolerance of + / - 50mm
- Trial holes shall be dug as directed by the Engineer to check the gravel thickness and shall have a tolerance of + 5mm / - 0mm
- The camber shall be checked at 50m intervals and the maximum tolerance shall be + / - 1 %
- The longitudinal profile shall be checked after the compaction of each load to ensure a smooth surface with no corrugations or depressions

Measurement Unit: m^3

The measurement shall be the volume of compacted gravel surfacing measured net according to the Drawings and shall include the excavation and haulage of gravel material to site and processing.

Payment

The unit rate shall be the full compensation for labour, tools, equipment and incidental costs required for carrying out the work.

10-80-010 Restoration of Quarries and Borrow Pits

The Contractor shall level the ground, return the topsoil from the stockpiles, and uniformly spread the material over the full excavation area.

Adequate drainage provisions shall be made to protect the excavation areas, and where necessary appropriate protection measures shall be taken to avoid erosion of the spread topsoil layer. Grass and trees shall be replanted as directed by the Engineer.

Work Method

The Contractor shall use **Labour** and/or **Equipment** to carry out this item as agreed by the Engineer.

Quality Control

The Engineer shall check that the required measures have been satisfactorily taken.

Measurement and Payment: No separate payment

Contractor to include the cost in other activities. No separate payment shall be done.

BILL 22: DAYWORKS

ITEMS 22-50-001 to 22-79-018 are for the Schedule of Rates. The Engineer will include the relevant items for each specific contract document.

A Provisional Sum shall be included in the Bills of Quantities to cover the payment of equipment, labour and materials for work instructed by the Engineer on a Dayworks basis.

The Contractor shall include prices for all items in the Schedule of Rates, in the Dayworks Bill, and shall carry out work using these rates only if directed by the Engineer.

Measurement and Payment

a. Equipment:

Payment for equipment shall only be made for the time each item of equipment is working. Idle time due to breakdown or incompleteness of the equipment shall not be paid. The rate of equipment shall include for the cost of the following:-

- i. Transport of the equipment to the site
- ii. Operators , drivers and assistants including their overtime
- iii. Fuels and lubricants
- iv. Maintenance, spare parts and all costs of repairs
- v. Depreciation, insurance, overheads and profits.

b. Labor

Payment shall only be made for the time each of worker working on the Dayworks as instructed by the Engineer. The rate for labour shall include the cost of,

- i. All wages, allowances and other payments due to the worker
- ii. Provision of small tools used on Dayworks activities by labourers and tradesmen.
- iii. Insurance, overheads and profit.

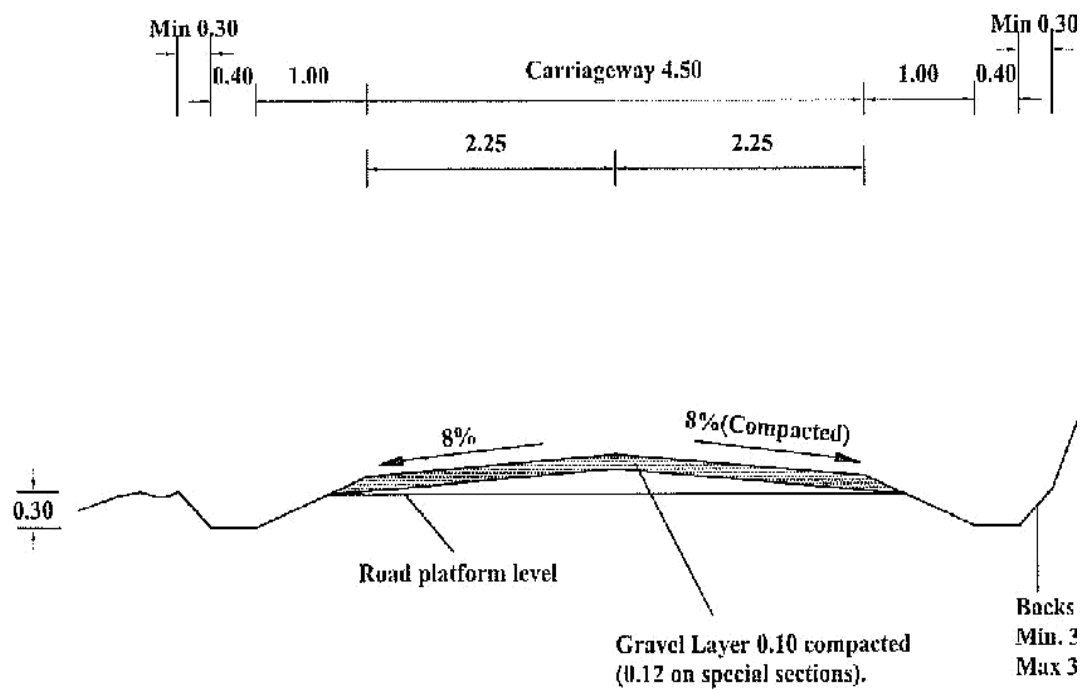
c. Materials

Payment shall only be made for materials instructed by the Engineer for use in Dayworks activities. The rate for materials shall include for the cost of provision of the material, transport to site, storage, handling, overheads and profits.

Schedule of Dayworks

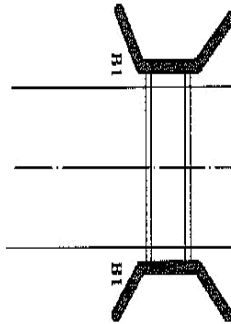
The Engineer shall compile a Schedule of the Equipment, Labour and Materials which may apply to Dayworks activities, to be included in the Dayworks Bill.

DRAWINGS

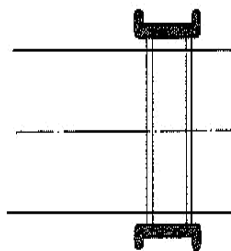


Notes:

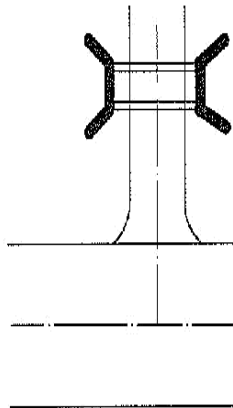
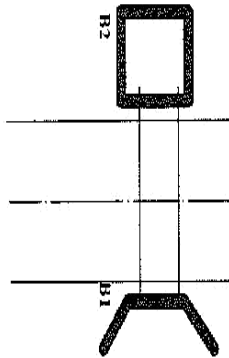
1. All dimensions in metres
2. Gravel thickness may be increased as directed by the Engineer



TYPE 2(ENTRY ONLY)



TYPE 4(ENTRY AND EXIT ON ACCESS)



NOTE

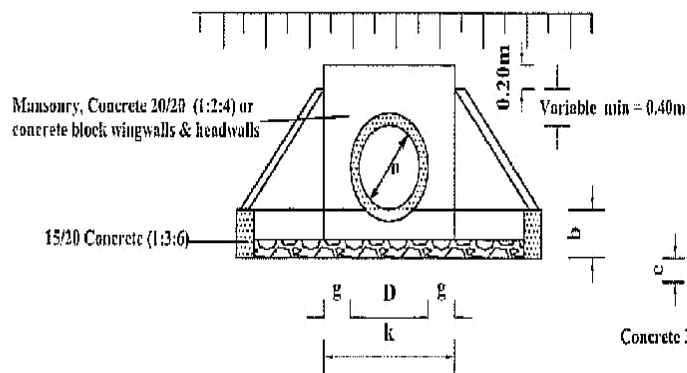
1. The code numbers specify the shape and function and the code letter denotes the material;

A =Concrete block

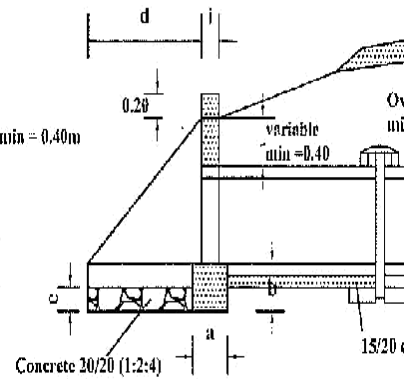
B =Stone masonry

C =Concrete

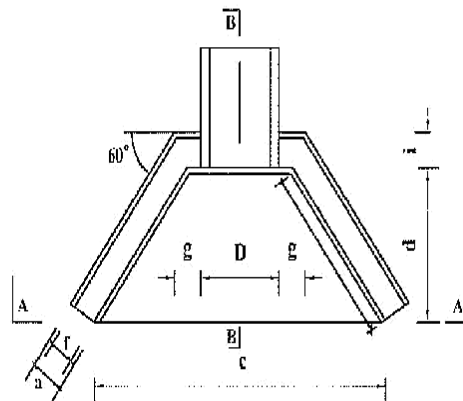
SECTION A-A



SECTION B-B



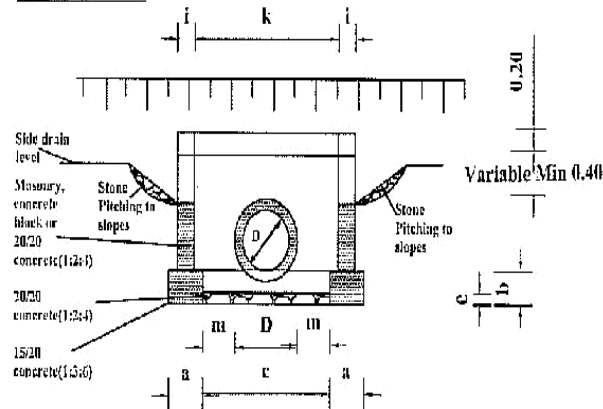
PLAN



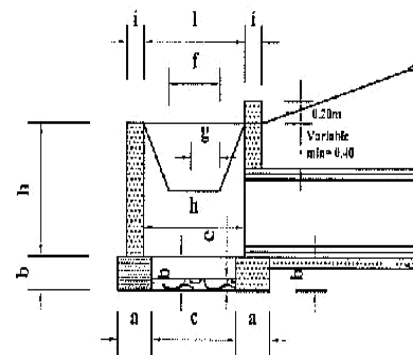
CULVERT TYPES	
X-SECTION WIDTH m	No. of pipes
4.50	6
5.50	7
6.50	8

PIPE DIAMETER IN M		TYPE A and C CONCRETE BLK	
		450	600
DIMENSION	UNIT		
a FOUNDATION	m	0.30	0.30
b FOUNDATION	m	0.30	0.30
c FOUNDATION	m	2.20	2.35
d APRON	m	1.00	1.00
e APRON	m	0.20	0.20
f WALL	m	0.20	0.20
g WALL	m	0.30	0.30
h WALL	m	1.15	1.15
i WALL	m	0.20	0.20
k APRON	m	1.05	1.20
MATERIAL REQUIREMENT			
FOUNDATION			
(concrete)	m ³	0.30	0.32
HEAD/WINGWALLS			
(Concrete/Masonry)	m ³	0.42	0.49
APRON			
(concrete)	m ³	0.33	0.36

SECTION A-A



SECTION B-B



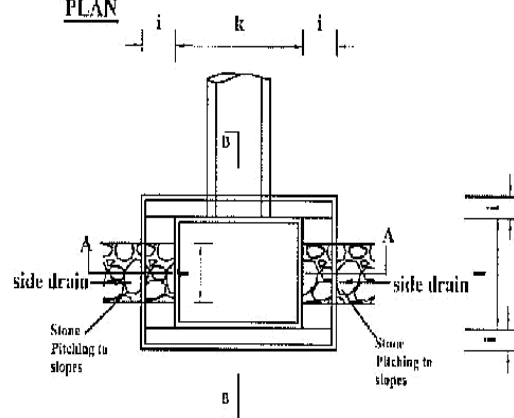
DIMENSIONS AND MATERIAL REQUIREMENTS

PIPE DIAMETER IN (M)	TYPE A CONCRETE BLOCKS				TY M ³
	450	600	900	45	
DIMENSION	UNIT				
a FOUNDATION	m	0.30	0.30	0.30	0.4
b FOUNDATION	m	0.30	0.30	0.30	0.3
c FOUNDATION	m	1.10	1.10	1.40	1.2
d APRON	m	0.90	0.90	0.90	1.0
e APRON	m	0.20	0.20	0.20	0.2
f DROP INLET	m	0.60	0.60	0.60	0.6
g DROP INLET	m	0.30	0.40	0.60	0.3
h DROP INLET	m	0.60	0.80	1.20	0.6
i DROP INLET	m	0.20	0.20	0.20	0.4
k DROP INLET	m	1.20	1.20	1.50	1.2
l DROP INLET	m	1.00	1.00	1.00	1.0
m DROP INLET	m	0.38	0.30	0.30	0.3

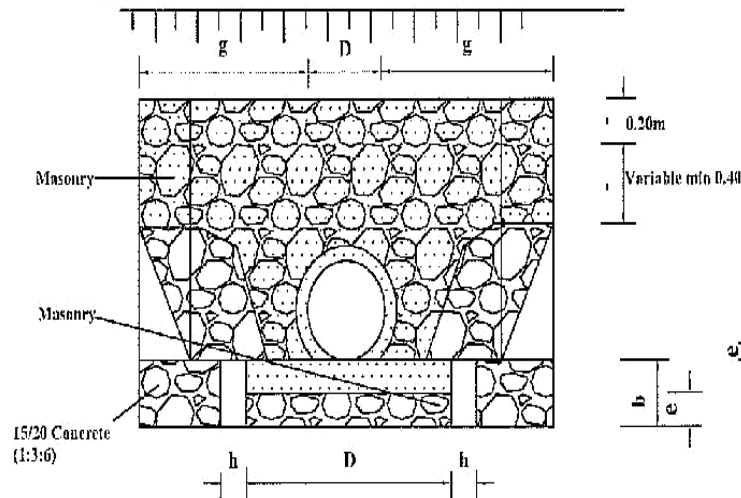
MATERIAL REQUIREMENT

FOUNDATION					
(concrete)	m3	0.47	0.47	0.52	0.7
HEAD/WINGWALLS					
(Concrete/Masonry)	m3	0.56	0.72	1.15	1.2
APRON (concrete)	m3	0.24	0.24	0.30	0.2

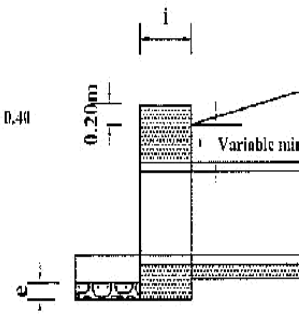
PLAN



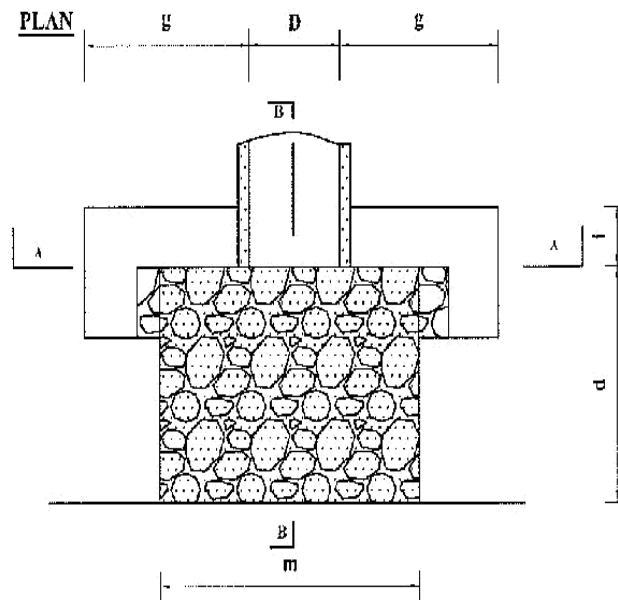
SECTION A-A



SECTION B-B



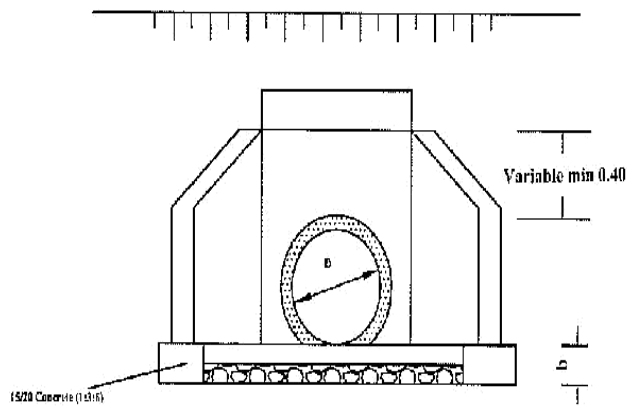
PLAN



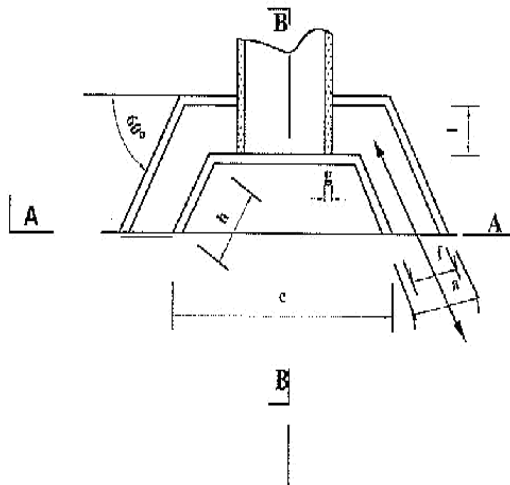
DIMENSIONS AND

PIPE DIAMETER (M)	
DIMENSION	
a	FOUNDATION
b	FOUNDATION
c	FOUNDATION
d	APRON
e	APRON
f	HEADWALL
g	HEADWALL
h	HEADWALL
i	HEADWALL
m	FOUNDATION
MATERIAL REQ'D	
FOUNDATION	(concrete)
HEAD/WING	(Concrete/Masonry)
APRON	(concrete)

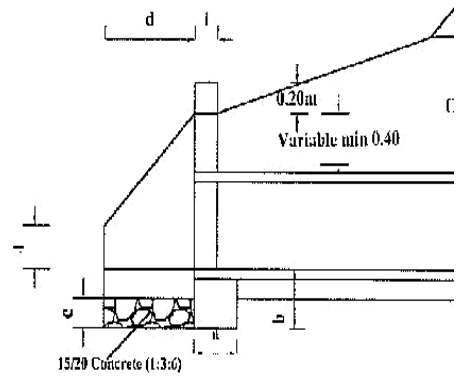
SECTION A-A



PLAN

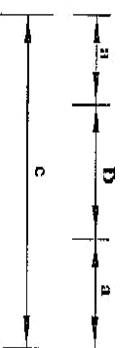
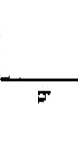
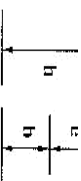
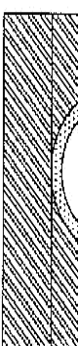


SECTION B-B



DIMENSIONS AND MATERIAL REQUIREMENTS

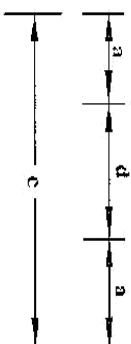
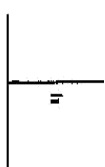
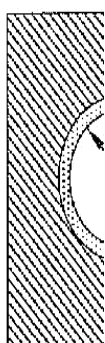
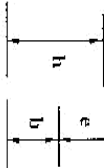
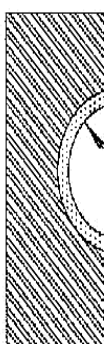
PIPE DIAMETER IN (M)	TYPE A (CONCRETE BLOCKS)		
		450	600
DIMENSION	UNIT		
a FOUNDATION	m	0.20	0.30
b FOUNDATION	m	0.20	0.30
c APRON	m	1.34	1.49
d APRON	m	0.80	0.60
e APRON	m	0.20	0.20
f WINGWALLS	m	0.20	0.20
g WINGWALLS	m	0.10	0.10
h HEADWALLS	m	0.69	0.69
i HEADWALLS	m	0.20	0.20
j HEADWALLS	m	0.65	0.80
k HEADWALLS	m	0.40	0.40
MATERIAL REQUIREMENT			
FOUNDATION (concrete (1:3:6))		0.18	0.20
HEAD/WINGWALLS (Concrete/Masonry)		0.28	0.32
APRON (concrete)		0.12	0.14



Diameter (D)	450 (mm)	600 (mm)	900 (mm)
a	0.15	0.20	0.20
b	0.10	0.15	0.15
c	0.86	1.12	1.48
d	0.56	0.72	1.08
e	0.14	0.18	0.27
f (min)	0.34	0.45	0.68
g	-	-	-
h	0.24	0.33	0.42
i	-	-	-
Concrete Class 15/20	Volume in (m ³ /m)	0.24	0.24
Application	-Fair subgrade condition -Overfill > 75% of the pipe diameter -Seasonal water flow only		
Remarks	Material for back/overfill shall be approved by the Engineer		

450 (mm)	600 (mm)	900 (mm)
0.15	0.20	0.20
0.10	0.15	0.15
0.86	1.12	1.48
0.56	0.72	1.08
0.28	0.36	0.54
0.34	0.45	0.68
-	-	-
0.38	0.51	0.69
-	-	-
Volume in (m ³ /m)		
0.20	0.37	0.56
-Fair to poor subgrade condition -Overfill > 75% of the pipe diameter -Seasonal water flow only		
Material for back/overfill shall be approved by the Engineer		

e
b

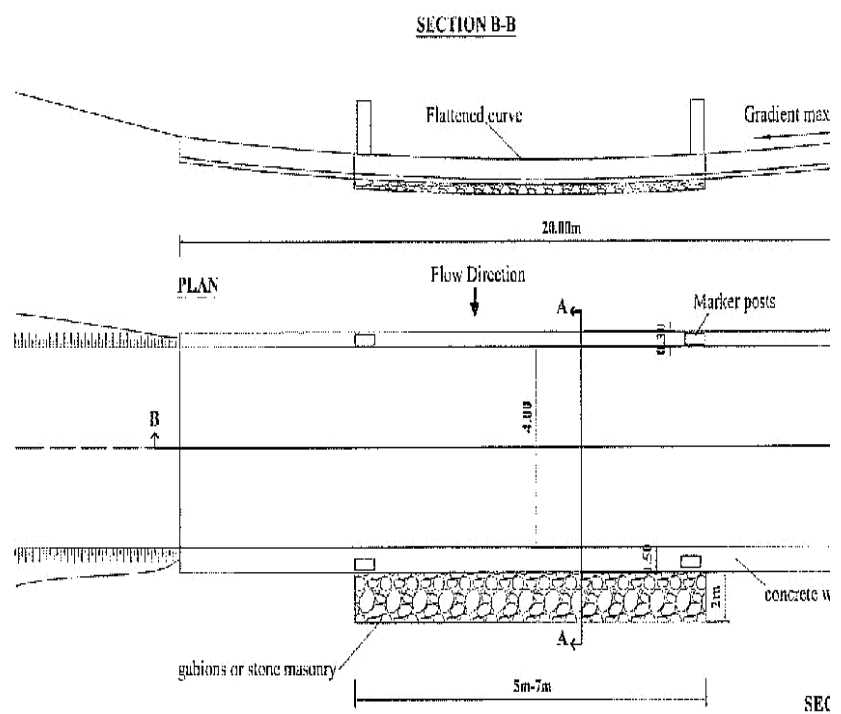


Diameter (D)	450 (mm)	600 (mm)	900 (mm)
a	0.15	0.20	0.20
b	0.10	0.15	0.15
c	0.86	1.12	1.48
d	0.56	0.72	1.08
e	0.42	0.54	0.81
f (min)	0.23	0.3	0.45
g	-	-	-
h	0.52	0.69	0.96
i	-	-	-

450 (mm)	600 (mm)	900 (mm)
0.15	0.20	0.20
0.10	0.15	0.15
0.86	1.12	1.48
0.56	0.72	1.08
0.46	0.52	0.78
0.15	0.15	0.15
0.15	0.15	0.15
0.81	1.02	1.38
0.28	0.35	0.45

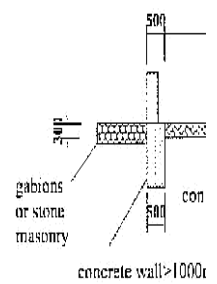
Concrete Class 15/20	Volume in (m ³ /m)	0.26	0.47	0.71
Application	-Fair subgrade condition -Overfill > 75% of the pipe diameter -Seasonal water flow only			
Remarks	Material for back/overfill shall be approved by the Engineer			

Volume in (m ³ /m)	0.37	0.61	0.92
Application	-Fair to poor subgrade condition -Overfill > 75% of the pipe diameter -Seasonal water flow only		
Remarks	Material for back/overfill shall be approved by the Engineer		

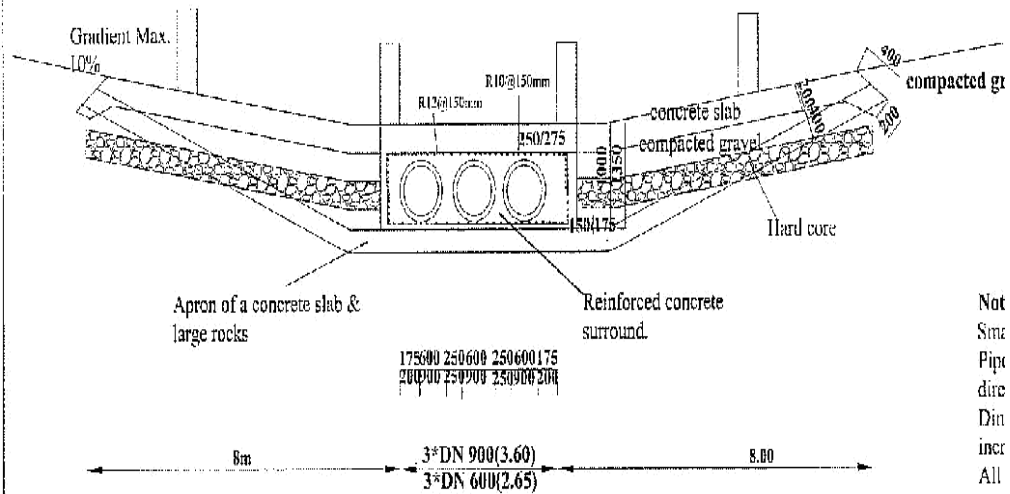


Material : All concrete Class 20/20 (1:2:4)

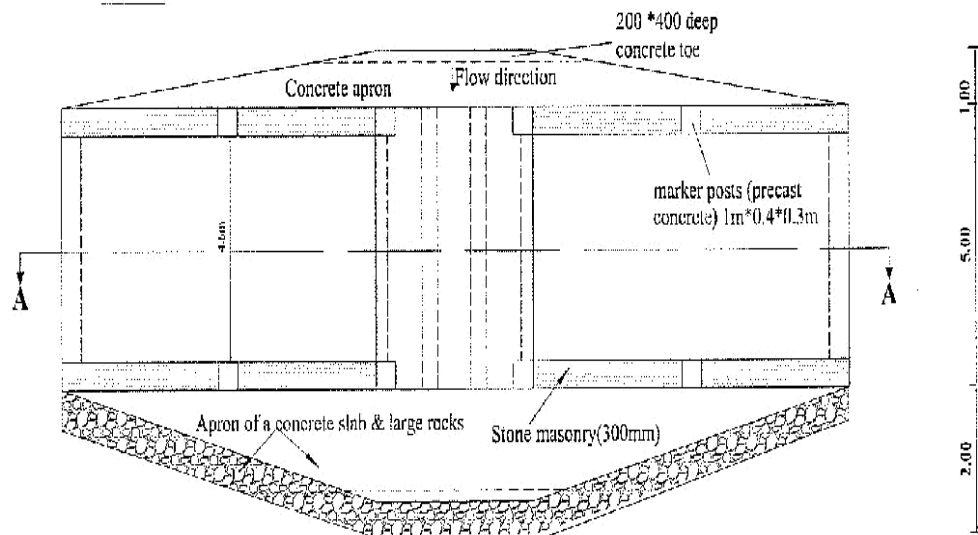
- 1 Concrete wall : 10m³
- 2 Concrete slab: 24m³ or stone masonry
- 3 Concrete toe : 8m³ or stone masonry
- 4 Gabions / mattress rock fill: 4.3m³ or stone masonry
- 5 Gabions /mattress: 36m³
- 6 Marker posts - precast concrete: 4 no.
- 7 Excavation (slab + toes + gabions) 54.2m³



SECTION A-A

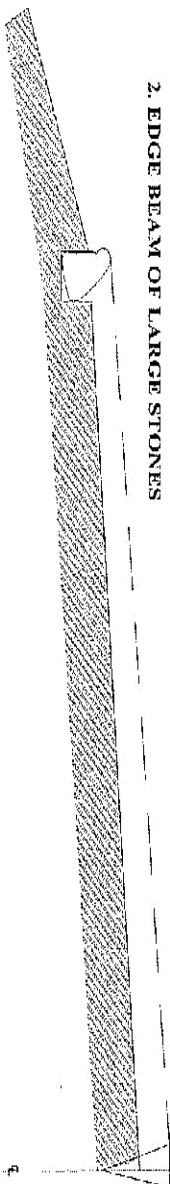


PLAN

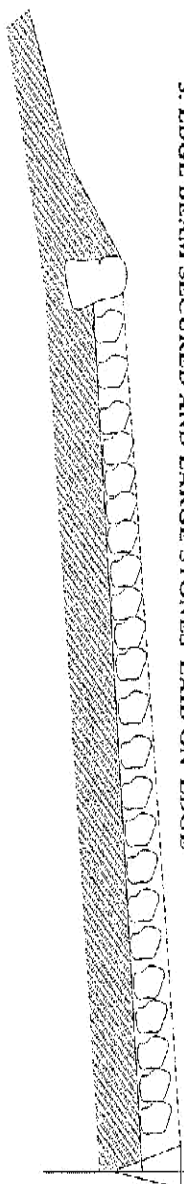




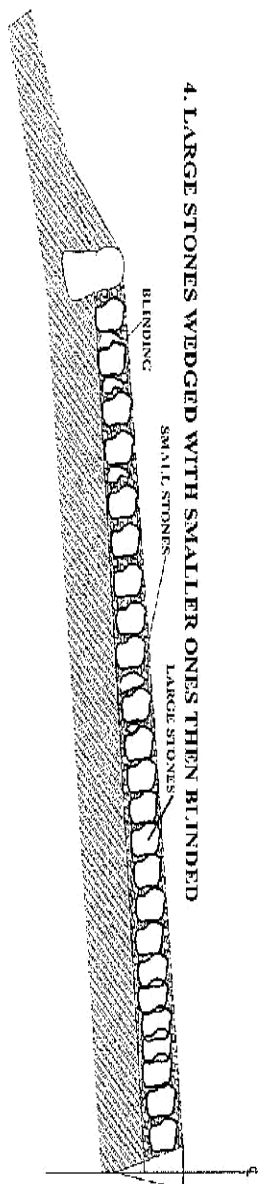
2. EDGE BEAM OF LARGE STONES

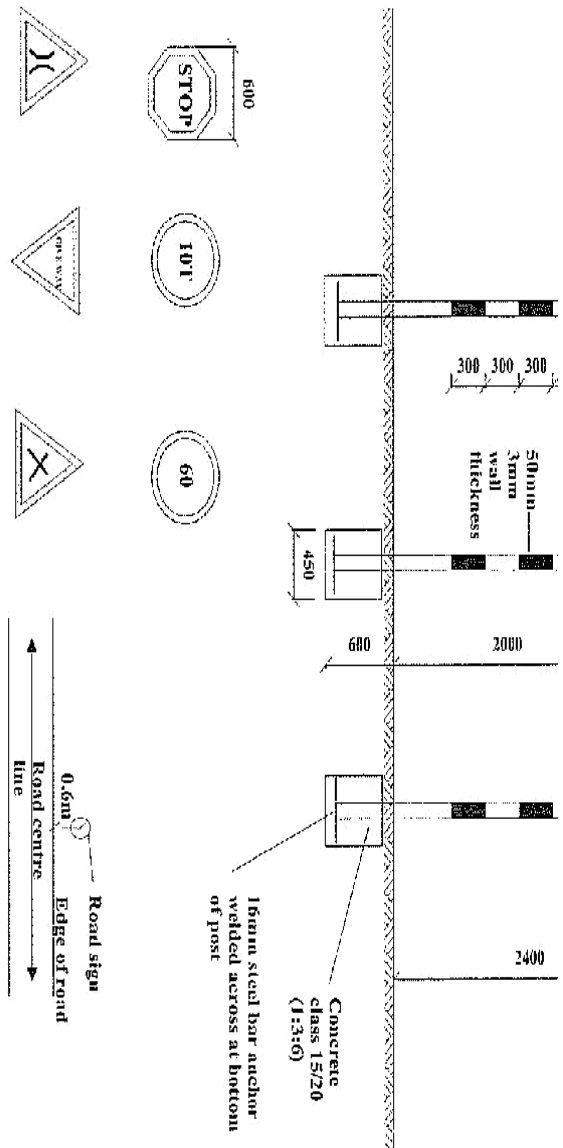


3. EDGE BEAM SECURED AND LARGE STONES LAID ON EDGE



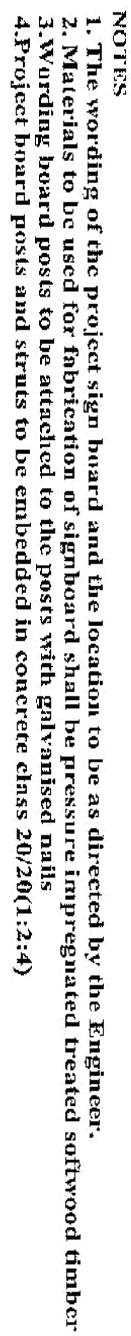
4. LARGE STONES WEDGED WITH SMALLER ONES THEN BLINDED





KEY
 BLACK [] WHITE [] RED []

1. The type of sign required and their location shall be as shown on the Road Plan or as directed by the Engineer.
2. Sign plate to be 2mm thick mild steel plate.
3. Sign post to be 50mm fixing clamps/brackets.
4. Sign plate to be fixed to steel tube by 5 Nos M10 bolts and 50mm fixing clamps/brackets.
5. Sign paints shall be reflective.
6. The sign plate and post shall be treated by applying two coats of lead red oxide paint before applying a priming and two finish coats of approved paints. Paints used shall have a hard, durable and glossy finish.



PREAMBLE TO BILLS OF QUANTITIES

1. The Bills of Quantities form part of the Contract Documents and are to be read in conjunction with the Instructions to Tenderers and these Documents.
2. The prices and rates to be inserted in the Bills of Quantities are to be the full, inclusive value of the work described under the several items including all costs and expenses which may be required in and for the execution of the work described and for the Contractor's overheads and profits. The rates shall be VAT exclusive but include all other taxes, levies and fees applicable. The rates shall be based on the Works being carried out in accordance with the R2000 Strategy of using optimum labour resources.
3. Each item in the Bills of Quantities contains only a brief description of the required work. Fuller details and descriptions of the work to be done, the materials to be used, the standards of workmanship, methods of measurement and payment are to be found in the various sections of the Specifications and on the Drawings.
4. The Quantities set out in the Bills of Quantities are estimated and represent substantially the work to be carried out. There is no guarantee that the Contractor will be required to carry out all the quantity of work indicated under any one particular item or group of items in the Bills of Quantities. The basis of payment shall be the Contractor's rates and the quantities of measured work done in fulfilment of the obligations under the Contract.
5. Work shall be carried out under Dayworks items only at the direction, and with the approval, of the Engineer. The Contractor shall enter rates in the Dayworks Schedule of Rates, which shall reflect the realistic costs, including overheads and profit, of each item. If, in the opinion of the Engineer, a rate is unreasonably high or low, the Contractor may be required to amend the rate to the satisfaction of the Engineer.

BILLS OF QUANTITIES

Bill of Quantities					Page: 1
Bill No.8	DRAINAGE WORKS				Project:
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
8.60.27	Culvert installation 900mm with surround	M	16.20		
	Total Carried Forward to Summary:				

Bill of Quantities					Page: 2
Bill No.10	GRADING AND GRAVELLING WORKS				Project:
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
10.50.02	Heavy grading with watering and compaction	M ²	38,790		
10.60.03	Gravel Patching watering and compaction	M ³	1,458		
	Total Carried Forward to Summary:				

