



## INVITATION TO TENDER

### ADDENDUM No. 1

#### IMPLEMENTATION OF ARID AND SEMI - ARID LAND (ASAL) RURAL ROADS PROJECT

#### REHABILITATION AND IMPROVEMENT AND PERFORMANCE BASED ROUTINE MAINTENANCE

1. Sololo Town - Mado Adhi - Wayegodda/2, Tender No. AFD/EU /MA/GR/01/2024-25,
2. A2 - Manyatta Jillo - Gororukesa - Central Chief's Office/3, Tender No. AFD/EU /MA/GR/02/2024-25.

Reference is made to the Tender Notice that appeared in the Authority's website and the MyGov pullout (Issue No. 30/2024-2025) on the Star Newspaper dated 4<sup>th</sup> February 2025.

1. The Authority has received various requests for clarification and interested bidders are requested to note as detailed in the table below;

No.	Item	Clarifications Requested	Tender No.	Response
1	<b><u>Section IV:</u></b> <b><u>Bill of</u></b> <b><u>Quantities</u></b>	a) Bill 3 to Bill 26 split into 2 sections (Km 0+000 - Km 1+000 & Km 1+000 - Km 4+300) having the same bill items & units of measurements b) Bill 9, 22 & 25 are repeated, which should not be the case. c) PBRM quantity on "Total Performance Based Routine Maintenance for 10 Km Section (A) = (PBRM X 10Km)" for Km 1+000 - Km 4+300. The length should be 3.3km instead of 10km d) Equally, Bill 9 unit for Km0+000 - Km1+000 is indicated as Lump Sum while Km1+000 - Km4+300 is indicated in months e) Please combine Bill 1 to 26 to form 1 set of quantities representing the full 4.3km	<b>No.:</b> AFD/EU /MA/GR/01/2024-25 <b>Name:</b> Sololo Town – Mado Adhi - Wayegodda/2	Replace BoQ items (page VII-158 TO page VII-193 of the Tender Document) with the BoQ items attached in <b>Annex 1</b> of this addendum

No.	Item	Clarifications Requested	Tender No.	Response
2		BoQ has a Major Structure at Km 11+380 - 4 Cell (5.0m x 2.5m) Box Culvert. The length of the road is 7.2km. Clarify whether the Box Culvert is located off the 7.2km in scope	<b>No.:</b> AFD/EU /MA/GR/02/2024-25 <b>Name:</b> A2 - Manyatta Jillo – Gororukesa – Central Chief’s Office/3	The Box culvert is beyond kilometer 7.2, but within the scope to be covered under the contract.
3		Bill 7 for Box Culvert: Total Carried Forward to Summary: 1,513,800.00. The amount should be deleted from the summary.	<b>No.:</b> AFD/EU /MA/GR/02/2024-25 <b>Name:</b> A2 - Manyatta Jillo – Gororukesa – Central Chief’s Office/3	The Revised BoQ for the Box Culvert at Km 11+380 is attached in <b>Annex 2</b> of this addendum
4	<b>Section IX : Special Conditions Of Contract GCC</b>	<b>GCC 1.1 (z)</b> The Site is located at "Isiolo County" Amend to read Marsabit.  <b>GCC 13.1</b> The minimum insurance amounts and deductibles shall be: (a) for loss or damage to the Works, Materials, Plants & Fees- Contractor’s All risks: [contract value + 15%]. Request: Allow the works to be covered up to the Contract Sum amount. Insurance companies are hesitant to cover over & above.	Both Tenders	Revise GCC 1.1 (z) to read as follows <b><i>The Site is located at Marsabit County and is defined in Drawing No. C.0</i></b>  The minimum insurance remains as outlined in the bidding document

2. Full details of the Clarification Response will be available as from 24<sup>th</sup> February, 2024 and eligible and interested bidders can download the response from Authority’s website **www.kerra.go.ke** and or **www.tenders.go.ke** as from then.
3. The submission dates for the Tenders for **the Rehabilitation and Improvement and Performance Based Routine Maintenance** for Sololo Town - Mado Adhi - Wayegodda/2, Tender No. AFD/EU /MA/GR/01/2024-25, & A2 - Manyatta Jillo - Gororukesa - Central Chief’s Office/3, Tender No. AFD/EU /MA/GR/02/2024-25 **is hereby revised** from **25<sup>th</sup> February, 2025 at 11.00am** to on or before **4<sup>th</sup> March, 2025 at 11.00am**.
4. Completed tender documents should be enclosed in plain sealed envelope, clearly marked with the Tender Name, Tender Number and **deposited in the Tender Boxes at the offices of the Regional Director - Marsabit County** as indicated in the Initial Invitation Notice or be addressed and posted to the respective regional addresses Indicated in the same Initial Invitation Notice.
5. Bids not received at the submission venue by the closing time will not be accepted for opening and will be rejected and returned unopened.
6. Bidders with enquiries are encouraged to do so vide the email address **procurement@kerra.go.ke**.

Issue Date: 21<sup>st</sup> February, 2025

7. Interested Bidders are advised to regularly visit the KeRRA website for any information/addendums on the above tender.
8. All other information remains the same.

**Deputy Director (Supply Chain Management)**

For: Director General

Kenya Rural Roads Authority

## **ANNEX I**

### **Bill of Quantities –**

**Tender No.: AFD/EU /MA/GR/01/2024-25**

**Tender Name: Sololo Town – Mado Adhi - Wayegodda/2**

<b>DESIGN AND CONSTRUCTION SUPERVISION FOR THE IMPLEMENTATION OF GOK/EU/AFD ROADS 2000 CLIMATE PROOFED RURAL ROADS IN ARID AND SEMI-ARID LANDS (ASAL) PROGRAMME</b>		
<b>AREA 2 BATCH 1: MARSABIT COUNTY</b>		
<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>	
<b>ROAD No.:</b>	<b>G412182 - 02</b>	
<b>SUMMARY OF BILL OF QUANTITIES</b>		
<b>01. REHABILITATION AND IMPROVEMENT WORKS</b>		
<b>Item No.</b>	<b>Description</b>	<b>Amount (Kshs)</b>
1	Preliminary and General Costs Items	
3	Setting Out	
4	Site Clearance	
5	Earthworks	
7	Excavation and filling for structures	
8	Culverts and Drainage works	
9	Traffic Control	
10	Grading and Gravelling Works	
20	Road Furniture	
22	Dayworks (Provisional) Schedule of Rates	
25	Cross Cutting issues	
<b>Major Structures</b>	<b>Km 0+200</b> (4 Cell 1200mm Ø CPC)	
	<b>Km 0+250</b> (4 Cell 1200mm Ø CPC)	
	<b>Km 0+300</b> (4 Cell 1200mm Ø CPC)	
	<b>Km 0+510</b> (4 Cell 1200mm Ø CPC)	
	<b>Km 0+700</b> (4 Cell 1200mm Ø CPC)	
	<b>Km 2+200</b> (70m x 6.0m vented Drift)	
	<b>Sub Total (01a)</b>	
	<i>Add provisional sum of 10% of the Sub Total for Contingencies to be expended only with the express approval of the Engineer (01b)</i>	
	<b>Sub Total (01c = 01a + 01b)</b>	
	<i>Add 16% VAT to Subtotal 01c (01d)</i>	
	<i>Add 0.03% Public Procurement Capacity Building Levy of Subtotal 01C (01e)</i>	
	<b>Sub Total A (01f= 01c + 01d + 01e)</b>	

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 1</b>
<b>Bill No. 1:</b>	<b>Preliminary and General Costs Items</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
01-50-026	Allow a prime cost sum of <b>Ksh. 300,000</b> for Engineers miscellaneous account	PC Sum	1.00	300,000.00	
01-50-026-a	Include % of Prime cost sum in item 01-50-026 for contractor's overhead and profit	%			
01-60-002	Clearance on Completion	Lump sum	1.00		
01-60-003	Insurance and Securities	Lump sum	1.00		
01-60-004	Allow a prime cost sum of <b>Kshs. 300,000</b> for Quality Control Tests and Surveys	PC Sum	1.00	300,000.00	
01-60-004-a	Include % of Prime cost sum in item 01-60-004 for contractor's overhead and profit	%			
01-60-005	Provide and erect Publicity Sign Boards	No.	2.00		
01-60-006	Drinking Water	Month	8.00		
01-60-007	Provision site sanitation facility	Lump sum	1.00		
01-80-142	Allow a prime cost sum of <b>Ksh. 5,000,000</b> for CSR Project as instructed	PC Sum	1.00	5,000,000.00	
01-80-142 - a	Include % of Prime cost sum in item 01-80-142 for contractor's overhead and profit	%			
01-80-143	Allow a prime cost sum of <b>Ksh. 300,000</b> for Provision, growing and Maintenance of Trees as instructed	PC Sum	1.00	300,000.00	
01-80-143 - a	Include % of Prime cost sum in item 01-80-143 for contractor's overhead and profit	%			
01-80-144	Allow a prime cost sum of <b>Ksh. 1,000,000</b> for Security	PC Sum	1.00	1,000,000.00	
01-80-144 - a	Include % of Prime cost sum in item 01-80-144 for contractor's overhead and profit	%			
01-80-144 (b)	Hire/provide 1No. 4WD double cabin pick-up of minimum 2800cc engine capacity for security purposes. The cost includes provision of the driver, fuel, insurance and all other running costs of the first 5000Km per vehicle month. Mileage to be a maximum of 50,000Km on delivery/start.	Veh month	8.00		
01-80-144-(c)	Extra Over item 01-80-144-b for mileage over 5000Km per vehicle month (rate inclusive of driver, insurance, fuel and overall maintenance)	Km	10,000.00		
<b>Bill 1: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 2</b>
<b>Bill No. 3:</b>	<b>Setting out</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
03-50-001	Setting out Horizontal Alignment	m	4,300.00		
<b>Bill 3: Total Carried Forward to Summary:</b>					

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 3</b>
<b>Bill No. 4:</b>	<b>Site clearance.</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Bush clearing</u></b>				
04-50-003	Heavy Bush Clearing	m <sup>2</sup>	4,610		
04-50-004	Light Bush Clearing	m <sup>2</sup>	10,340		
04-50-005	Pruning of Tree branches	Prov. Sum	1		
04-50-006	Trees cutting and stump removal (200 - 450 mm girth)	No.	80		
04-50-007	Trees cutting and stump removal (>450 mm girth)	No.	8		
	<b><u>Site clearance and backfill</u></b>				-
04-50-008	Rock/Boulder Removal	Prov. Sum	1		
04-50-009	Stripping and Grubbing	m	26,360		
	<b><u>Concrete Demolitions</u></b>				-
04-50-010	Excavate /remove and disposal of concrete structures	Prov. Sum	1		
04.60.005	Removal of cracked small pipe culverts below 600mm	m	20		
04.60.005a	Removal of cracked large pipe culverts above 600mm	m	40		
<b>Bill 4: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 4</b>
<b>Bill No. 5:</b>	<b>Earthworks</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Setting Out</u></b>				
05-50-001	Re Establishment of Vertical alignment	m	4,300.00		
	<b><u>Side Drain Excavation</u></b>				
05-50-002	Side Drains Excavation (soft Material)	m <sup>3</sup>	5,340.00		
05-50-003	Side Drains Excavation (Hard material)	m <sup>3</sup>	600.00		
	<b><u>Material Filling</u></b>				
05-50-006	Fill in soft material including benching of shoulders and embankments and compact to 95% MDD (AASHTO) in layers of 150mm as directed by the Engineer	m <sup>3</sup>	19,000.00		
05-50-007	As in Item 05-50-006 but in Hard material	m <sup>3</sup>	2,120.00		
	<b><u>Material Cutting</u></b>				
05-50-008	Cut to spoil in soft	m <sup>3</sup>	200.00		
05-50-009	Cut to spoil in hard	m <sup>3</sup>	200.00		
	<b><u>Improved Subgrade</u></b>				
05-60-014	Provide, place and compact to 95% MDD ASHTO T99 improved subgrade of CBR > 15%, in layers of 150mm as specified or as by directed by the Engineer.	m <sup>3</sup>	5,120.00		
<b>Bill 5: Total Carried Forward to Summary:</b>					

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 5</b>
<b>Bill No. 7</b>	<b>Excavation and filling for structures</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
07-50-001	Excavation for drainage structures in soft material	m <sup>3</sup>	250.00		
07-50-002	Excavation for drainage structures in hard material	m <sup>3</sup>	32.00		
<b>Bill 7: Total Carried Forward to Summary:</b>					



<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 6</b>
<b>Bill No. 8</b>	<b>Culverts and Drainage works</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Excavation</u></b>				
08-50-005	Excavate in soft material for mitre drains, catchwater drains, and compact as specified or as directed by the Engineer	m <sup>3</sup>	410		
08-50-005a	As Item 08-50-005 but in Hard materials	m <sup>3</sup>	80		
	<b><u>Supply and Install concrete pipe culverts</u></b>				
08-60-025	600mm surround (type IV)	m	34		
08-60-027	900mm surround (type IV)	m	54		
	<b><u>Minor Drainage Structures - Concrete</u></b>				
08-60-020	Provide place and compact class 20/20 concrete to culvert headwalls, wingwalls, aprons and toe beams including formwork	m <sup>3</sup>	110		
	<b><u>Stone Pitching</u></b>				
08-70-001	Provide Stone Pitching using 150mm dressed masonry stones including grouting of ratio 1:4 cement to mortar	m <sup>2</sup>	710		
	<b><u>Gabion Boxes</u></b>				
08-70-004	Provide and place Macaferri or equivalent Gabion boxes and Mattresses	No.	270		
08-70-005	Provide and place Rockfill to Gabion boxes	m <sup>3</sup>	540		
<b>Bill 8: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 5</b>
<b>Bill No. 9:</b>	<b>Passage of Traffic</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
09-50-004	Traffic control	Month	8		
<b>Bill 9: Total Carried Forward to Summary:</b>					

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 7</b>
<b>Bill No. 10:</b>	<b>Grading and Gravelling works</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Grading</u></b>				
10-50-001	Heavy grading with watering and compaction as specified or as directed by the Engineer.	m <sup>2</sup>	34,400.00		
	<b><u>Gravelling</u></b>				
10-60-001	Provide, transport over any distance, place and compact approved gravel wearing course to carriageway in layers of 150mm as specified or as directed by the Engineer.compact gravel by labour/equipment	m <sup>3</sup>	3,730.00		
<b>Bill 10: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 5</b>
<b>Bill No. 20:</b>	<b>Road Furniture</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Boundary Post</u></b>				
20-50-002	Road Reserve Boundary Post	No	12.00		
20-50-004	Culvert Marker Post	No	63.00		
	<b><u>Traffic Signs</u></b>				
20-50-050	Warning, Priority, Prohibitory and Mandatory signs	No	7.00		
20-50-054	Standard and non-standard informative signs	No	8.00		
	-				
	-				
	-				
<b>Bill 20: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>		<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>			
<b>ROAD No.:</b>		<b>G412182 - 02</b>			
<b>Bill of Quantities</b>					<b>Page: 8</b>
<b>Bill No. 22</b>	<b>Dayworks (Provisional)</b>	<b>Schedule of Rates</b>			
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Plant and Equipment</u></b>				
22-63-008	D4 - Dozer	Hr	2		
22-63-009	D6 - Dozer	Hr	2		
22-63-011	D8 - Dozer	Hr	2		
22-63-017	Wheel loader CAT 955 or Equivalent	Hr	2		
22-63-014	Motor Grader CAT 120 or Equivalent	Hr	2		
22-64-008	Single Drum Roller	Hr	5		
	Pedestrian Double Drum Roller (DDR 60)	Hr	10		
22-62-016	Water Bowser Self propelled 5000lt	Hr	12		
22-62-020	Water Bowser - Tractor towed 5000lt	Hr	4		
22-61-001	3.0 ton Truck - Flat bed	Hr	2		
22-61-007	5.0 ton Truck - Tipper	Hr	4		
22-61-008	7.0 ton Truck - Tipper	Hr	4		
22-63-006	Tractor + Trailer (m <sup>3</sup> )	Hr	2		
22-60-010	1 ton Pickup Van	Hr	12		
22-65-001	Concrete mixer - 200-300lts	Hr	12		
22-67-006	Concrete Poker Vibrator	Hr	12		
22-67-012	Power saw	Hr	5		
	<b><u>Labour</u></b>				
22-50-022	Unskilled Labour - male	day	12		
22-50-022	Unskilled Labour - Female	day	12		
22-50-005	Mason Grade II	day	12		
22-50-006	Carpenter Grade II	day	12		
22-50-007	Overseer	day	12		
22-50-008	Inspector	day	12		
	Driver (Heavy Equipment)	day	12		
22-50-014	Driver Asistant (Turn boy)	day	12		
22-50-015	Store keeper	day	12		
22-50-016	Foreman	day	12		
	Assistant Engineer	day	12		
	<b><u>Materials</u></b>				
22-70-001	Aggregates Fine	m <sup>3</sup>	25		
22-70-003	Aggregates Coarse	m <sup>3</sup>	25		
22-70-005	Cement (32.5N OPC)	bags	50		
22-70-012	High Yield steel Cold formed	Tonnes	0.5		
22-70-022a	Timber 4x2	m	15		
22-70-022b	Timber 6x2	m	10		
22-70-022c	Timber 6x1	m	5		
22-77-013	Rockfil	m <sup>3</sup>	25		
<b>Bill 22: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 10</b>
<b>Bill No. 25</b>	<b>HIV/AIDS Awareness and Prevention</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
25-50-001(a)	HIV/AIDS Awareness Campaigns	Months	8		
25-50-001(b)	HIV/AIDS Prevention Campaigns	P C Sum	1	150,000.00	
25-50-001(c)	Include % of Prime cost sum in item 25-50-001(b) for contractor's overhead and profit	%			
25-50-002	Environmental Mitigation measures	Lumpsum	1		
25-50-003	Health and Safety Measures on Site	Lumpsum	1		
<b>Bill 25: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>		
<b>ROAD No.:</b>	<b>G412182 - 02</b>		
<b>STRUCTURE:</b>	<b>Km 0+200 - 4 Cell 1200 <math>\phi</math> CPC</b>		
<b>SUMMARY OF BILL OF QUANTITIES</b>			
<b>Item No.</b>	<b>Description</b>	<b>Amount (Ksh.)</b>	
7	Excavation and filling of structures		
8	Culverts and Drainage works		
20	Road Furniture		
<b>Sub Total carried forward to summary</b>			

<b>Bill No. 7</b>	<b>Excavation and filling for structures</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
07-60-013	Place, Provide and Compact rockfill to specifications below structure	m <sup>3</sup>	6.68		
07-60-005	Provide and place 250mm thick stone pitching including grouting, and including removal of spoil, to drains, slopes, inlets and outlets, as directed by the Engineer	m <sup>2</sup>	5.00		
<b>Bill 7: Total Carried Forward to Summary:</b>					

<b>Bill No. 8</b>	<b>Culverts and Drainage works</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Excavation</u></b>				
	<i>Note: No separate payments shall be made for gravel for blinding or hauling to spoil unsuitable excavation materials, and the cost of such shall be included in the rates and prices</i>				
08-50-005	Excavate in soft material for ,Ditch, mitre drains, catchwater drains, and compact as specified or as directed by the Engineer	m <sup>3</sup>	50.00		
08-50-005a	As Item 08-50-005 but in Hard materials	m <sup>3</sup>	20.00		
	<b><u>Supply and Install concrete pipe culverts</u></b>				
	<i>Provide, bed, lay, joint and backfill concrete pipes; all in accordance with the specifications and in conformity with the Engineer's instructions as;</i>				
08-60-034b	1200mm without Sorround	m	40.00		
08-60-035	Provide and place <b>Class 15/20</b> concrete to beds, sorround (Type IV) and haunches of concrete pipe and drains	m <sup>3</sup>	60.00		
08-70-026	Provide and place <b>Class 25/20</b> concrete to headwalls, wingwalls, apron slabs, haunches, surrounds, toe walls, inlets and outlets to culverts, minor drainage structures including all formwork, reinforcement and finishing	m <sup>3</sup>	6.00		
08-70-025	Provide and fix steel fabric to BS 4483 size A252 BRC mesh where directed by the Engineer	m <sup>2</sup>	80.00		
<b>Bill 8: Total Carried Forward to Summary:</b>					

<b>Bill No. 20</b>	<b>Road Furniture</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Edge Post</u></b>				
20-70-020	Provide and erect Culvert Edge marker posts as directed by the Engineer	No	4.00		
<b>Bill 20: Total Carried Forward to Summary:</b>					

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>
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Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD No.:</b>	<b>G412182 - 02</b>	
<b>STRUCTURE:</b>	<b>Km 0+250 - 2 Cell 1200 Ø CPC</b>	
SUMMARY OF BILL OF QUANTITIES		
Item No.	Description	Amount (Ksh.)
7	Excavation and filling of structures	
8	Culverts and Drainage works	
20	Road Furniture	
<b>Sub Total carried forward to summary</b>		

Bill of Quantities					Page: 1
<b>Bill No. 7</b>	<b>Excavation and filling for structures</b>				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
07-60-013	Place, Provide and Compact rockfill to specifications below structure	m <sup>3</sup>	10.00		
07-60-005	Provide and place 250mm thick stone pitching including grouting, and including removal of spoil, to drains, slopes, inlets and outlets, as directed by the Engineer	m <sup>2</sup>	5.00		
<b>Bill 7: Total Carried Forward to Summary:</b>					

Bill No. 8 Culverts and Drainage works					
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b><u>Excavation</u></b>				
	<i>Note: No separate payments shall be made for gravel for blinding or hauling to spoil unsuitable excavation materials, and the cost of such shall be included in the rates and prices</i>				
08-50-005	Excavate in soft material for ,Ditch,mitre drains,catchwater drains,and compact as specified or as directed by the Engineer	m <sup>3</sup>	50.00		
08-50-005a	As Item 08-50-005 but in Hard materials	m <sup>3</sup>	20.00		
	<b><u>Supply and Install concrete pipe culverts</u></b>				
	<i>Provide, bed, lay, joint and backfill concrete pipes; all in accordance with the specifications and in conformity with the Engineer's instructions as;</i>				
08-60-034b	1200mm without Sorround	m	40.00		
08-60-035	Provide and place <b>Class 15/20</b> concrete to beds, sorround (Type IV) and haunches of concrete pipe and drains	m <sup>3</sup>	60.00		
08-70-026	Provide and place <b>Class 25/20</b> concrete to headwalls, wingwalls, apron slabs, haunches, surrounds, toe walls, inlets and outlets to culverts, minor drainage structures including all formwork, reinforcement and finishing	m <sup>3</sup>	6.00		
08-70-025	Provide and fix steel fabric to BS 4483 size A252 BRC mesh where directed by the Engineer	m <sup>2</sup>	80.00		
<b>Bill 8: Total Carried Forward to Summary:</b>					

Bill No. 20 Road Furniture					
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)

Issue Date: 21<sup>st</sup> February, 2025

	<b>Edge Post</b>				
20-70-020	Provide and erect Culvert Edge marker posts as directed by the Engineer	No	4.00		
<b>Bill 20: Total Carried Forward to Summary:</b>					
<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>STRUCTURE:</b>	<b>Km 0+300 - 2 Cell 1200 ø CPC</b>				
<b>SUMMARY OF BILL OF QUANTITIES</b>					
<b>Item No.</b>	<b>Description</b>				<b>Amount (Ksh.)</b>
7	Excavation and filling or structures				
8	Culverts and Drainage works				
20	Road Furniture				
<b>Sub Total carried forward to summary</b>					

<b>Bill of Quantities</b>						<b>Page: 1</b>
<b>Bill No. 7</b>	<b>Excavation and filling for structures</b>					
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>	
07-60-013	Place, Provide and Compact rockfill to specifications below structure	m <sup>3</sup>	10.00			
07-60-005	Provide and place 250mm thick stone pitching including grouting, and including removal of spoil, to drains, slopes, inlets and outlets, as directed by the Engineer	m <sup>2</sup>	5.00			
<b>Bill 7: Total Carried Forward to Summary:</b>						

<b>Bill No. 8</b>	<b>Culverts and Drainage works</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b>Excavation</b>				
	<i>Note: No separate payments shall be made for gravel for blinding or hauling to spoil unsuitable excavation materials, and the cost of such shall be included in the rates and prices</i>				
08-50-005	Excavate in soft material for ,Ditch,mitre drains,catchwater drains,and compact as specified or as directed by the Engineer	m <sup>3</sup>	50.00		
08-50-005a	As Item 08-50-005 but in Hard materials	m <sup>3</sup>	15.00		
	<b>Supply and Install concrete pipe culverts</b>				
	<i>Provide, bed, lay, joint and backfill concrete pipes; all in accordance with the specifications and in conformity with the Engineer's instructions as;</i>				
08-60-034b	1200mm without Sorround	m	40.00		
08-60-035	Provide and place <b>Class 15/20</b> concrete to beds, sorround (Type IV) and haunches of concrete pipe and drains	m <sup>3</sup>	60.00		
08-70-026	Provide and place <b>Class 25/20</b> concrete to headwalls, wingwalls, apron slabs, haunches, surrounds, toe walls, inlets and outlets to culverts, minor drainage structures including all formwork, reinforcement and finishing	m <sup>3</sup>	6.00		
08-70-025	Provide and fix steel fabric to BS 4483 size A252 BRC mesh where directed by the Engineer	m <sup>2</sup>	80.00		
<b>Bill 8: Total Carried Forward to Summary:</b>					

<b>Bill No. 20</b>	<b>Road Furniture</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b>Edge Post</b>				



Issue Date: 21<sup>st</sup> February, 2025

20-70-020	Provide and erect Culvert Edge marker posts as directed by the Engineer	No	4.00		
<b>Bill 20: Total Carried Forward to Summary:</b>					

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>STRUCTURE:</b>	<b>Km 0+510 - 2 Cell 1200 ø CPC</b>				
<b>SUMMARY OF BILL OF QUANTITIES</b>					
<b>Item No.</b>	<b>Description</b>	<b>Amount (Ksh.)</b>			
7	Excavation and filling of structures				
8	Culverts and Drainage works				
20	Road Furniture				
<b>Sub Total carried forward to summary</b>					

<b>Bill of Quantities</b>					<b>Page: 1</b>
<b>Bill No. 7</b>	<b>Excavation and filling for structures</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
07-60-013	Place, Provide and Compact rockfill to specifications below structure	m <sup>3</sup>	10.00		
07-60-005	Provide and place 250mm thick stone pitching including grouting, and including removal of spoil, to drains, slopes, inlets and outlets, as directed by the Engineer	m <sup>2</sup>	5.00		
<b>Bill 7: Total Carried Forward to Summary:</b>					

<b>Bill No. 8</b>	<b>Culverts and Drainage works</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Excavation</u></b>				
	<i>Note: No separate payments shall be made for gravel for blinding or hauling to spoil unsuitable excavation materials, and the cost of such shall be included in the rates and prices</i>				
08-50-005	Excavate in soft material for ,Ditch,mitre drains,catchwater drains,and compact as specified or as directed by the Engineer	m <sup>3</sup>	50.00		
08-50-005a	As Item 08-50-005 but in Hard materials	m <sup>3</sup>	15.00		
	<b><u>Supply and Install concrete pipe culverts</u></b>				
	<i>Provide, bed, lay, joint and backfill concrete pipes; all in accordance with the specifications and in conformity with the Engineer's instructions as;</i>				
08-60-034b	1200mm without Sorround	m	40.00		
08-60-035	Provide and place <b>Class 15/20</b> concrete to beds, sorround (Type IV) and haunches of concrete pipe and drains	m <sup>3</sup>	60.00		
08-70-026	Provide and place <b>Class 25/20</b> concrete to headwalls, wingwalls, apron slabs, haunches, surrounds, toe walls, inlets and outlets to culverts, minor drainage structures including all formwork, reinforcement and finishing	m <sup>3</sup>	6.00		
08-70-025	Provide and fix steel fabric to BS 4483 size A252 BRC mesh where directed by the Engineer	m <sup>2</sup>	80.00		
<b>Bill 8: Total Carried Forward to Summary:</b>					

<b>Bill No. 20</b>	<b>Road Furniture</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
	<b><u>Edge Post</u></b>				

Issue Date: 21<sup>st</sup> February, 2025

20-70-020	Provide and erect Culvert Edge marker posts as directed by the Engineer	No	4.00		
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**Bill 20: Total Carried Forward to Summary:**

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>
<b>ROAD No.:</b>	<b>G412182 - 02</b>
<b>STRUCTURE:</b>	<b>Km 0+700 - 2 Cell 1200 ø CPC</b>

**SUMMARY OF BILL OF QUANTITIES**

Item No.	Description	Amount (Ksh.)
7	Excavation and filling of structures	
8	Culverts and Drainage works	
20	Road Furniture	
<b>Sub Total carried forward to summary</b>		

**Bill of Quantities**

Page: 1

Bill No. 7	Excavation and filling for structures				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
07-60-013	Place, Provide and Compact rockfill to specifications below structure	m <sup>3</sup>	10.00		
07-60-005	Provide and place 250mm thick stone pitching including grouting, and including removal of spoil, to drains, slopes, inlets and outlets, as directed by the Engineer	m <sup>2</sup>	5.00		
<b>Bill 7: Total Carried Forward to Summary:</b>					

Bill No. 8	Culverts and Drainage works				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b><u>Excavation</u></b>				
	<i>Note: No separate payments shall be made for gravel for blinding or hauling to spoil unsuitable excavation materials, and the cost of such shall be included in the rates and prices</i>				
08-50-005	Excavate in soft material for ,Ditch,mitre drains,catchwater drains,and compact as specified or as directed by the Engineer	m <sup>3</sup>	50.00		
08-50-005a	As Item 08-50-005 but in Hard materials	m <sup>3</sup>	15.00		
	<b><u>Supply and Install concrete pipe culverts</u></b>				
	<i>Provide, bed, lay, joint and backfill concrete pipes; all in accordance with the specifications and in conformity with the Engineer's instructions as;</i>				
08-60-034b	1200mm without Sorround	m	40.00		
08-60-035	Provide and place <b>Class 15/20</b> concrete to beds, sorround (Type IV) and haunches of concrete pipe and drains	m <sup>3</sup>	60.00		
08-70-026	Provide and place <b>Class 25/20</b> concrete to headwalls, wingwalls, apron slabs, haunches, surrounds, toe walls, inlets and outlets to culverts, minor drainage structures including all formwork, reinforcement and finishing	m <sup>3</sup>	6.00		
08-70-025	Provide and fix steel fabric to BS 4483 size A252 BRC mesh where directed by the Engineer	m <sup>2</sup>	80.00		
<b>Bill 8: Total Carried Forward to Summary:</b>					

Bill No. 20	Road Furniture				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b><u>Edge Post</u></b>				

Issue Date: 21<sup>st</sup> February, 2025

20-70-020	Provide and erect Culvert Edge marker posts as directed by the Engineer	No	4.00		
<b>Bill 20: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>	
<b>ROAD No.:</b>	<b>G412182 - 02</b>	
<b>STRUCTURE:</b>	<b>Km 2+300 - 70m x 6.0m Vented Drift</b>	
<b>SUMMARY OF BILL OF QUANTITIES</b>		
Item No.	Description	Amount (Ksh.)
5	Earthworks	
7	Excavation and filling or structures	
8	Culverts and Drainage works	
17	Concrete Works	
20	Road Furniture	
<b>Sub Total carried forward to summary</b>		

<b>Bill of Quantities</b>					Page: 1
<b>Bill No. 5</b>	<b>Earthworks</b>				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b><u>Material Filling</u></b>				
05-50-006	Fill in soft material including benching of shoulders and embankments and compact to 95% MDD (AASHTO) in layers of 150mm as directed by the Engineer	m <sup>3</sup>	140.00		
05-50-007	As in Item 05-50-006 but in Hard material	m <sup>3</sup>	60.00		
	<b><u>Material Cutting</u></b>				
05-50-008	Cut to spoil in soft	m <sup>3</sup>	180.00		
05-50-009	Cut to spoil in hard	m <sup>3</sup>	20.00		
	<b><u>Improved Subgrade</u></b>				
05-60-014	Provide, place and compact to 95% MDD ASHTO T99 improved subgrade of CBR > 15%, in layers of 150mm as specified or as by directed by the Engineer.	m <sup>3</sup>	80.00		
<b>Bill 5: Total Carried Forward to Summary:</b>					

Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
<b>Bill No. 7</b>	<b>Excavation and filling for structures</b>				
07-50-001	Excavation for drainage structures in soft material (Mechanical)	m <sup>3</sup>	290.00		
07-50-002	Excavation for drainage structures in hard material	m <sup>3</sup>	40.00		
07-50-006	Backfill and Compaction excavated area to foundation level with Selected Granular Fill Material in accordance with the specifications and in conformity with the Engineer's instruction	m <sup>3</sup>	120.00		
07-50-005	Selected Porous Filter Material (6/10mm chippings behind the structure)	m <sup>3</sup>	140.00		
07-60-013	Place, Provide and Compact rockfill to specifications below structure	m <sup>3</sup>	220.00		
07-60-001	Excavation in soft material to any depth, compaction of the surfaces to receive the gabions, backfilling with the excavated materials or hauling to spoil excavated all in accordance with the specifications and in conformity with the Engineer's instructions	m <sup>2</sup>	20.00		

Issue Date: 21<sup>st</sup> February, 2025

07-60-006b	Provide and place filter fabric (300g/m <sup>2</sup> ) under or behind gabions	m <sup>2</sup>	10.00		
07-60-002	Provide and place 2mx1mx1m gabion mesh boxes or 6mx2mx0.3m gabion mattresses, complete with rockfill, as directed by the Engineer	m <sup>3</sup>	20.00		
07-60-004	Provide 1:4 cement mortar grouting to gabion faces as directed by the Engineer	m <sup>2</sup>	20.00		
07-60-005	Provide and place 250mm thick stone pitching including grouting, and including removal of spoil, to drains, slopes, inlets and outlets, as directed by the Engineer	m <sup>2</sup>	20.00		
07-50-003	Carry out river training works as directed by the Engineer, and in compliance with the standard specifications	m <sup>3</sup>	330.00		
<b>Bill 7: Total Carried Forward to Summary:</b>					

Bill No. 8	Culverts and Drainage works				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b>Supply and Install concrete pipe culverts</b>				
	<i>Provide, bed, lay, joint and backfill concrete pipes; all in accordance with the specifications and in conformity with the Engineer's instructions as;</i>				
08-60-034b	1200mm without Sorround	m	40		
08-60-035	Provide and place <b>Class 15/20</b> concrete to beds, sorround (Type IV) and haunches of concrete pipe and drains	m <sup>3</sup>	40		
<b>Bill 8: Total Carried Forward to Summary:</b>					

Bill No. 17	Concrete Works				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b>Structural Concrete</b>				
17-50-027	Provide, place and compact <b>blinding concrete Class 15/20</b> 50mm thick under drift	m <sup>3</sup>	50.00		
17-80-007b	Provide, place and compact concrete <b>Class 30/20</b> for the drift	m <sup>3</sup>	230.00		
	<b>Formwork:</b>				
17-60-003	Supply, erect and dismantal formwork class F2 to side of drift	m <sup>2</sup>	320.00		
	<b>Reinforcement</b>				
17-60-013	Provide, cut, bend and fix High Yield Strength Deformed bar reinforcement to BS 4461, of diameter equal to or less than 16mm as shown on drawing and as specified	Ton	20.00		
<b>Bill 17: Total Carried Forward to Summary:</b>					

Bill No. 20	Road Furniture				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b>Edge Post</b>				
20-70-020	Provide and erect Drift Edge marker posts as directed by the Engineer	No	20.00		
20-60-016	Provide and Erect a Drift Water-Level Controller Reader Post as directed by the Engineer	No.	2.00		
20-50-063	Provide and erect a 600mm size warning type signs	No.	2.00		
<b>Bill 20: Total Carried Forward to Summary:</b>					

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>	
<b>ROAD No.:</b>	<b>G412182 - 02</b>	
<b>02. ROUTINE MAINTENANCE WORKS</b>		
<b>Item No.</b>	<b>Description</b>	<b>Amount (Kshs)</b>
26	Performance Based and Instructed Routine Maintenance Works	
<b>Sub Total (02a)</b>		
<i>Add a provisional sum of 10% of the Sub Total for Contingencies to be expended only with the express approval of the Engineer (02b)</i>		
<b>Sub Total (02c = 02a + 02b )</b>		
<i>Add 16% VAT to Subtotal 02c (02d)</i>		
<i>Add 0.03% Public Procurement Capacity Building Levy of Subtotal 02c (02e)</i>		
<b>Sub Total B(02f = 02c + 02d + 02e )</b>		

Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>Sololo-Mado Adhi 01 (Km 0+000 - Km 4+300)</b>				
<b>ROAD No.:</b>	<b>G412182 - 02</b>				
<b>Bill of Quantities</b>					<b>Page: 14</b>
<b>Bill No. 26</b>	<b>Routine Maintenance Works</b>				
<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate Ksh.</b>	<b>Amount (Ksh.)</b>
<b>PART A. PERFORMANCE BASED MAINTENANCE WORKS</b>					
	Performance Based Routine Maintenance (PBRM)	Km/ month	36.00		
<b>Total Performance Based Routine Maintenance for 4.3 Km Section (A) = (PBRM X 4.3Km)</b>					
<b>PART B. INSTRUCTED MAINTENANCE WORKS</b>					
<i>The Quantities below are indicative of the work that may 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.</i>					
<b>Bill 1:</b>	<b>Preliminaries</b>				
01-60-005	Provide and erect publicity sign boards	No.	2.00		
01-80-026	Allow a prime cost sum for the REs miscellaneous account	LS	100,000.00	1.00	
01-80-027	Extra over 01-80-026 for profits and overheads	%	1.00		
<b>Bill 7:</b>	<b>Excavation and Filling for Structure</b>				
07-50-001	Excavation for drainage structures in soft material (Manual)	m <sup>3</sup>	10.00		
07-50-001a	Excavation for drainage structures in hard material	m <sup>3</sup>	10.00		
07-70-004	Provide and place Gabion boxes and Mattresses as specified	No.	5.00		
07-70-005	Provide and place Rockfill to Gabion boxes and mattresses	m <sup>3</sup>	10.00		
07-60-005	Stone Pitching	m <sup>2</sup>	213.00		
<b>Bill 8:</b>	<b>Road Drainage and Structures</b>				
08-50-005	Excavate in soft material for mitre drains,catchwater drains,and compact as specified or as directed by the Engineer	m <sup>3</sup>	90.00		
08-50-005a	As Item 08-50-005 but in Hard materials	m <sup>3</sup>	9.00		
08-60-025	Culvert Installation - 600mm with surround (type IV)	m	6.00		
08-60-027	Culvert Installation - 900mm with surround (type IV)	m	10.00		
06-60-045e	Provide place and compact class 20/20 concrete to culvert headwalls,wingwalls,aprons and toe beams including formwork	m <sup>3</sup>	10.00		
08-70-003	Gabion Repair	No.	5.00		
<b>Bill 10:</b>	<b>Grading and Gravelling works/light grading</b>				
10-50-003	Carriageway Grading -Light (With watering and compaction)	m <sup>2</sup>	12,040.00		
10-50-006 a	Light Carriageway reshaping manual (Repair of potholes, ruts,gullies with gravel)	m <sup>3</sup>	380.00		
<b>Bill No. 20</b>	<b>Road Furniture</b>				
20-50-001	Traffic Sign Maintenance	No.	5.00		
20-50-005	Marker Posts Maintenance	No	10.00		
<b>Bill 22</b>	<b>Dayworks / Emergencies</b>	LS	100,000.00	1.00	
<b>Bill 25</b>	<b>Cross Cutting Issues</b>	LS	50,000.00	1.00	
<b>Total Instructed Routine Maintenance (B)</b>					
<b>PBRM: Total Carried Forward to Summary: (A + B)</b>					

## **ANNEX 2**

### **BOX CULVERT KM 11+380**

**Tender No.: AFD/EU /MA/GR/02/2024-25**

**Tender Name: : A2 - Manyatta Jillo – Gororukesa – Central  
Chief's Office/3**



Issue Date: 21<sup>st</sup> February, 2025

<b>ROAD NAME:</b>	<b>A2- Manyatta Jilo- Gororukesa-Central Chief Office</b>	
<b>ROAD No.:</b>	<b>G41188 - 03</b>	
<b>STRUCTURE:</b>	<b>Km 11+380 - 4 Cell (5.0m x 2.5m) Box Culvert</b>	
SUMMARY OF BILL OF QUANTITIES		
Item No.	Description	Amount (Ksh.)
5	Earthworks	
7	Excavation and filling or structures	
8	Culverts and Drainage works	
17	Concrete Works	
20	Road Furniture	
<b>Sub Total carried forward to Summary</b>		

Bill of Quantities					Page: 1
<b>Bill No. 7</b>	<b>Excavation and filling for structures</b>				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
07-50-001	Excavation for drainage structures in soft material(Mechanical)	m <sup>3</sup>	581.00		
07-50-002	Excavation for drainage structures in hard material	m <sup>3</sup>	290.00		
07-50-006	Backfill and Compaction excavated area to foundation level with <b>Selected Granular Fill Material</b> in accordance with the specifications and in conformity with the Engineer's instruction	m <sup>3</sup>	49.20		
07-50-005	Selected Porous Filter Material (6/10mm chippings behind the structure	m <sup>3</sup>	14.13		
07-60-006	Provide and place filter fabric (300g/m <sup>2</sup> ) behind structures as instructed by the Engineer	m <sup>2</sup>	40.80		
07-60-013	Place, Provide and Compact rockfill to specifications below structure	m <sup>3</sup>	69.17		
07-60-001	Excavation in soft material to any depth, compaction of the surfaces to receive the gabions, backfilling with the excavated materials or hauling to spoil excvated all in accordance with the specifications and in conformity with the Engineer's instructions	m <sup>2</sup>	26.10		
07-60-006b	Provide and place filter fabric (300g/m <sup>2</sup> ) under or behind gabions	m <sup>2</sup>	87.00		
07-60-002	Provide and place 2mx1mx1m gabion mesh boxes or 6mx2mx0.3m gabion matreses, complete with rockfill, as directed by the Engineer	m <sup>3</sup>	24.00		
07-60-004	Provide 1:3 cement mortar grouting to gabion faces as directed by the Engineer	m <sup>2</sup>	16.00		
07-60-005	Provide and place 250mm thick stone pitching including grouting, and including removal of spoil, to drains, slopes, inlets and outlets, as directed by the Engineer	m <sup>2</sup>	16.00		
07-50-003	Carry out river training works as directed by the Engineer, and in compliance with the standard specifications	m <sup>3</sup>	125.00		
<b>Bill 7: Total Carried Forward to Summary:</b>					

Bill of Quantities					Page: 3
Bill No. 17	Concrete Works				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b><u>Structural Concrete</u></b>				
17-50-027	Provide, place and compact <b>blinding concrete Class 15/20</b> 50mm thick under drift	m <sup>3</sup>	16.00		
17-80-007b	Provide, place and compact concrete <b>Class 30/20</b> for the Box Culvert	m <sup>3</sup>	220.00		
	<b><u>Formwork:</u></b>				
17-60-003	Supply,erect and dismantal formwork class F3 finish	m <sup>2</sup>	561.00		
	<b><u>Reinforcement</u></b>				
17-60-013	Provide, cut, bend and fix High Yield Strength Deformed bar reinforcement to BS 4461, of diameter equal to or less than 16mm as shown on drawing and as specified	Ton	25.59		
<b>Bill 17: Total Carried Forward to Summary:</b>					

Bill No. 20	Road Furniture				
Item No.	Description	Unit	Quantity	Unit Rate Ksh.	Amount (Ksh.)
	<b><u>Edge Post</u></b>				
20-70-020	Provide and erect Culvert edge marker posts as directed by the Engineer	No	4.00		
20-70-055	Provide and erect flexi-beaM guardrails (Metal Beam Crash Barriers) complete with steel posts, spacers, nuts, bolts, 'swarflex' ART 3240 guardrail reflectors every 4m and fittings as per specifications and drawings	m	34.00		
<b>Bill 20: Total Carried Forward to Summary:</b>					