

BILLS OF QUANTITIES FOR FIVE STAR AND MUHOHO ROAD						
BILL 1: GENERAL						
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
					SHS	CT
1.01	Allow a provisional Sum for material testing services and other Laboratory Services.	PC SUM	1	200,000.00	200,000	
1.02	Include percentage of P.C Sum in item 1.05 for Contractor's overhead and profit	%	1			
1.03	Allow a provisional sum of Kshs 500,000 for the Resident Engineer's Miscellaneous account to be spent in whole or part as directed by the Resident Engineer against receipts.	PC SUM	1	500,000.00	500,000	
1.04	Include percentage of P.C Sum in item 1.07 for Contractor's overhead and profit	%	1			
1.05	Allow Kshs 2,500,000 for attendance of the Engineer to the staff in accordance with clause 137 of special specifications.	PC SUM	1	2,500,000.00	2,500,000	
1.06	Include percentage of P.C Sum in item 1.09 for Contractor's overhead and profit	%	1			
1.07	Provide, fuel and maintain with driver, 1No. 4WD Station Wagon vehicle (Odometer 0 - 60,000km) of engine capacity minimum 2500cc for exclusive use of the Engineer inclusive of the first 4000 Km per vehicle month in accordance with clause 138 of the standard specifications.	V. mth	9			
1.08	EO Item 1.11 for kilometers travelled in any month in excess of 4,000km for all running costs	km	2,000			
1.09	Provide, place and maintain publicity stickers in accordance to KURA's standard drawing on the provided steel frames (inclusive of transport of the steel frames from KURA offices and returning the same upon completion)	No.	4			
1.10	Provision and operation of the Contractor's Environmental Management Plan and performance of all measures required by Clause 142 including payment of all fees to NEMA	PC sum	1	200,000.00	200,000	
1.11	Include percentage of P.C Sum in item 1.14 for Contractor's overhead and profit	%	1			
Total of Bill Carried Forward to Summary						

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	AMOUNT	
					SHS	CT
4.01	Clear site on road reserve including removal of trees, hedges, bushes, vegetation, encroachments (including structures) and other deleterious materials grub up roots and compact backfill to 100% MDD(AASHTO T99) with approved material in accordance with the specifications, and as directed.	ha	2			
4.02	Removal of top soil to a maximum depth of 200mm including removal of grass and other vegetation as directed by the Engineer	m2	3,840			
4.03	Demolish reinforced or mass concrete structures and cart to spoil or stockpile for re-use as directed by the Engineer	m	200			
Total of Bill Carried Forward to Summary						

BILL 8: CULVERTS AND DRAINAGE WORKS						
ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	AMOUNT	
					SHS	CT
	No separate payment shall be made for gravel for blinding and hauling to spoil unsuitable excavation materials and the cost of such shall be included in the rates and /or prices.					
8.01	Excavate in soft materials for side drains, drop inlets, outfall and mitre drains including cart to spoil.	m ³	5,400			
8.02	Clean culverts of all sizes to free flow conditions	m	200			
8.03	Excavate in soft materials for pipe culverts headwalls, wingwalls, apron, toewalls and drop inlets.	m ³	1,000			
8.04	Provide, lay and joint 450 mm inner diameter (ID) precast concrete pipes.	m	200			
8.05	As in item 8.06 but 600 mm ID.	m	400			
8.06	As in item 8.06 but 900 mm ID.	m	80			
8.07	Provide place and compact class 15/20 concrete to beds, sorrounds, haunches and for margin between the shoulder and open drain.	m ³	620			
8.08	Provide place and compact class 25/20 concrete to headwalls, wingwalls, aprons and toe walls to pipeculverts; and slabs on drains, including form work.	m ³	310			
8.90	Provide and place A142 fabric mesh reinforcement for item 8.11.	m ²	20			
8.10	Provide and lay 150mm thick grouted stone pitching with ratio 1:4 cement to mortar as directed	m ²	500			
8.11	Excavate in any material, provide, lay and joint 600mm x 360mm Invert Block Drain (IBD) complete with 2 side slabs of 600x225x75mm as lining for storm water drain including bedding and backfilling with selected material as per the specifications or as instructed by the Engineer.	m	6,500			
8.12	Excavate in any material, provide, lay and joint 300mm Invert Block Drain (IBD) with single side slabs of 600x225x75mm as lining for storm water drain including bedding and backfilling with selected material as per the specifications or as instructed by the Engineer.	m	350			
	Extra over Item 8.11 for precast sideslab of 600x225 75mm	m ²	2,000			
Total of Bill Carried Forward to Summary						

BILL 5: EARTH WORKS						
ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	AMOUNT	
					SHS	CT
	No separate payments shall be made for the overhaul of material and the cost of such haulage shall be included in the rates and or prices					
5.01	Cut to spoil in soft material	m ³	7,776			
5.02	Cut in hard material	m ³	250			
5.03	Provide, place and compact approved fill material on cut areas.	m ³	7,776			
5.04	Provide rock fill to formation level or as directed by the Engineer	m ³	240			
	Total of Bill Carried Forward to Summary					

BILL9: PASSAGE OF TRAFFIC						
ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	AMOUNT	
					SHS	CT
9.01	Allow for the passage of traffic through the works.	km	1.8			
	Total of Bill Carried Forward to Summary					

BILL 12: NATURAL MATERIAL FOR BASE AND SUBBASE						
ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	AMOUNT	
					SHS	CT
	Note: All haulage is to be included in the Contractor's rates and prices. There is no separate payment for overhaul					
12.01	Provide, spread, water and compact natural gravel of 150mm thickness for subbase compacted to 95% MDD(AASHTO T180) to the road carriageway as directed by the Engineer	M ³	5400			
12.02	Provide, lay and compact hand packed stone material including filling of voids with stone dust and watering as directed by the Engineer	M ³	1050			
	Total of Bill Carried Forward to Summary					

BILL 15: BITUMINOUS SURFACE TREATMENT AND SURFACE DRESSING					
ITEM	Description	Units	QTY	Rate (Ksh)	Amount (KSh)
15.01	Prime coat-prepare surface of carriageway, busbays , provide and spread MC-30 cutbacks bitumen at a rate of 0.8-1.2ltrs/sm as prime coat	L	14400		
15.02	Tack coat-prepare surface of carriageway, provide and spray K160s bitumen emulsion as tack coat or seal to carriageway at a spray rate of 0.8-1.2ltrs/sm	L	20640		
Total Carried Forward to Summary:					
BILL 16: BITUMINOUS MIXES					
ITEM	Description	Units	QTY	Rate (Ksh)	Amount (KSh)
16.01	Provide, place and compact Asphaltic Concrete Type I minimum thickness 50mm with 5-6% nominal bitumen content by weight of total mix as binder course on carriageway as directed by the Engineer	M ³	868.8		
Total Carried Forward to Summary:					

BILL 20: ROAD FURNITURE						
ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	AMOUNT	
					SHS	CT
20.01	Provide thermoplastic material for road marking and mark lines on the road as directed	m ²	772			
20.02	Excavate for, provide and place 250 x 125 mm class 25/20 precast concrete raised or ramped kerbs haunched in 100 mm thick class 15/20 concrete base bedding and mortar joined in support to carriageway, bus bays and junctions as directed by the Engineer.					
	(a) Straight kerbs.	m	4,000			
	(b) Kerbs radius: 12 m-6 m.	m	15			
	(c) Ditto but radius: 5 m-1 m.	m	10			
20.03	Ditto 20.02 but 100 x 125 mm flush kerbs in support of carriageway					
	(a) Straight kerbs	m	3,840			
	(b) Kerbs radius: 12 m-6 m	m	15			
	(c) Ditto but radius: 5 m-1 m	m	10			
20.07	Provide and erect permanent road signs where instructed in accordance with the specifications as follows;					
	(a) Warning signs.	No	10			
	(b) Priority, prohibitory and mandatory signs.	No	5			
	(c) Standard informative signs.	No	5			
	(d) Non- standard informative signs of area.					
	(i) Less than 1.0 m ² .	No	2			
Total of Bill Carried Forward to Summary						
BILL 23: CONCRETE PAVING BLOCKS						
ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	AMOUNT	
					SHS	CT
23.01	Supply, lay and compact 80mm thick precast paving blocks with 49N/mm ² cube crushing strength conforming to BS6717 Part I of 1986 or Kenya Bureau of Standards equivalent including 50mm thick sand/quarry dust bed for carriageway	m ²	7,680			
Total of Bill Carried Forward to Summary						

SUMMARY OF BILLS OF QUANTITIES			
Bill No.	DESCRIPTION	AMOUNT	
		SHS.	CT.
1	GENERAL		
4	SITE CLEARANCE AND TOPSOIL STRIPPING		
5	EARTHWORKS		
8	CULVERTS AND DRAINAGE WORKS		
9	PASSAGE OF TRAFFIC		
12	NATURAL MATERIAL SUBBBASE AND BASE		
15	BILL 15: BITUMINOUS SURFACE TREATMENT AND SURFACE DRESSING		
16	BILL 16: BITUMINOUS MIXES		
20	ROAD FURNITURE		
23	CONCRETE PAVING BLOCKS		
	Sub-total 1		
	Add 16% of Sub-total 1 for Value Added Tax to be reimbursed in certificates against official receipts		
	Grand Total Carried Forward to Form of Bid		