

ENGINEER'S COST ESTIMATE: KMC-MADUKANI SEWERLINE

ITEM	DESCRIPTION	UNIT	QTY	RATE (KShs)	AMOUNT (KShs)
A	CLASS A: SITE CLEARANCE				
	<u>Site clearance</u>				
A1	Demolish and cart away natural and artificial articles, objects and obstructions which are above the original surface, 1.5 m on either side of the proposed pipeline	m ²	4,400.00		
A2	Trees of girth 500mm -1m measured 1.0m above ground level	nr	0		
B	CLASS B: EXCAVATION				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations with the specifications.				
B1	Excavate trench for sewer in soft material, depth not exceeding 1.0m, average width 1.2m, part return, fill-in and ram, part remove to dump.	m ³	2107		
B2	Ditto for depth not exceeding 2.0m	m ³	688		
B3	E.O for excavation in hard material	m ³	688		
C	CLASS C: PIPEWORK - PIPES				
	Provide, lay, joint and test the following flexible uPVC Pipes to KS-ISO-1452. Rates to include for all jointly materials, cutting wastage.				
C1	Supply and lay 300mm diameter PVC pipes, including approved material bed and haunches as detailed, and pipe surround at joints.	m	1007		
C2	Supply and lay 225mm diameter PVC pipes, including approved material bed and haunches as detailed, and pipe surround at joints.	m	750		
D	CLASS D: MANHOLES AND FITTINGS				
D1	Provide and Construct manholes using in situ cast rings as detailed, at spacing shown on the drawing and at every junction, including manhole covers, step irons and all fittings and greasing as necessary.	nr	24		
D2	Construct masonry manholes as detailed, at spacing shown on the drawing and at every junction, including manhole covers, step irons and all fittings and greasing as necessary.	nr	43		
E	CLASS E: CONNECTION TO EXISTING SEWER				
E1	Extra over item C above for connection to existing sewer line.	LS	1		
	Sub Total				
	ADD 10% contingencies	%	10		
	TOTAL				
	Add 16% VAT	%	16		
	TOTAL CARRIED TO SUMMARY				