

# Bill of Quantities for the Proposed Restoration of water supply Infrastructure Destroyed by Road Construction at Kaptebeswet-Kipsolu Road in Kericho County

## BIDDERS TO FILL THE PRICE SCHEDULE

Item No.	Description	Unit	Quantity	Unit Cost	Total Cost Kshs
<b>1</b>	<b>BILL NO. 1: PIPES, EXCAVATION WORKS AND BACKFILLING</b>				
<b>1.1</b>	Excavate trench n.e 500mm wide by 1200mm deep in moderate ground and backfilling.	CM	2250		-
	<i>Supply and Installation of HDPE Pipes manufactured in accordance with ISO 4427:2007 Standard. All pipes shall be manufactured using pre-compounded carbon black, bimodal, high density polyethylene MRS10.0 material i.e.(PE 100). When viewed without magnification, the internal and external surfaces of pipes shall be smooth, clean and free from scoring, cavities and other surface defects. The pipe ends shall be cut cleanly and square to the axis of the pipe. The pipes shall be black with colored identification stripes with protection from UV Light. The dimensions of the pipe shall be measured in accordance with ISO 3126. All pipes shall be permanently and legibly marked in such a way that the marking does not initiate cracks or other types of failure and such that normal storage, weathering, handling, installation and use do not affect the legibility of the marking. The colour of the printed information shall differ from the basic colour of the product. The marking shall be such that it is legible without magnification. The minimum requirement for marking shall be: Standard Number-ISO4427; Manufacturer's identification-name of symbol; Material Designation PE 100; Pressure rating in bars-Nominal Pressure; Production Period-Date or code.</i>				
<b>1.2</b>	4" HDPE PN16	M	3400		-
<b>1.3</b>	2" HDPE PN16	M	2000		-
<b>PAGE TOTAL CARRIED FORWARD TO COLLECTION SHEET</b>					-

2	<b>BILL No. 2 : FITTINGS AND APPURTENANCES</b>				
	<i>Supply and install saddle clamps for the existing lateral connections complete with rubber gaskets. The saddle clamps shall be made of galvanized iron plate 6mm thick while the gaskets shall be 3mm thick.</i>				
<b>2.1</b>	4"X2" Saddle clamps	No	5		
<b>2.2</b>	4"X1" Saddle clamps	No	11		
<b>2.3</b>	2"X3/4" Saddle clamps	No	5		
	<i>Supply and install Pegler gate valves</i>				
<b>2.4</b>	2" Gate Valves	No	5		
<b>2.5</b>	1" Gate Valves	No	11		
<b>2.6</b>	3/4" Gate Valves	No	5		
	<i>Supply and Install DN 2" (50mm-Discharge orifice) PN 16 Air valve. The Air Valve shall automatically discharge or admit large volumes of air during the filling or draining of the pipe. The Valve shall be with flanged end. The coating shall be fusion bonded epoxy coating according to the standard DIN 30677-2. The dimensions of the Air valves shall be 165mm (flanged base), 336mm (height) 2" BSP female discharger and the weight not less than 7.3 Kg. The material for the parts are: discharge outlet-polypropylene; threaded Rod-stainless steel; Air &amp; Vacuum Seal, O-ring, Rolling Seal-EPDM rubber. The body shall be ductile iron.</i>				
<b>2.7</b>	2" PN16 Air Valves at Tegat Shopping Centre	No	1		
	<i>Supply and Install modified 4" x 2" Saddle clamp with a 2" Pegler gate valve to act as a Wash Out. The saddle clamp shall be made of galvanized iron plate 6mm thick while the gaskets shall be 3mm thick.</i>				
<b>2.8</b>	4" Wash Out at Kipsolu Junction	No	1		

	<i>Supple and Install Flanged Sluice EN 558-2 S.14/DIN F4. Valve The Wedge shall be fully vulcanized with drinking water approved EPDM rubber compound. The conical stem hole in the wedge shall be large to prevent stagnant water. The stem shall be of stainless steel with wedge stop and rolled threads. The tripple safety stem sealing shall be with an NBR wiper ring, a polyamide bearing with four NBR O-rings and an EPDM rubber manchette. The round EPDM bonnet gasket shall be fixed in a recess.</i>				
<b>2.9</b>	4" Sluice Valves at Kaplemeiywet Junction and Tea Buying Centre		2		
	<b>PAGE TOTAL CARRIED FORWARD TO COLLECTION SHEET</b>				-

3	BILL No. 3: CHAMBERS			
	<i>All chambers shall be 1m x 1m x depth to be determined on site, plastered and fitted with step irons. The chambers shall have 150 mm thick BRC reinforced concrete covers. All concrete works shall be 1:2:4 while the ratio for mortar shall be 1:4.</i>			
3.1	Construct Masonry chambers	No	3	
PAGE TOTAL CARRIED FORWARD TO COLLECTION SHEET				

SECTION COLLECTION SHEET				
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	Bill Total inclusive of Duties and Taxes, Carried to Grand Summary (A)			
	ADD10% Contingencies (B)			
	GRAND-TOTAL (A+B)			

**Notes:**

- CM Cubic meters
- No Number
- M Meters