PROPOSED BIO DIGESTER FOR WAJIR STAFF HOUSES -32M3 CAPACITY RAINAGE lear site to remove debris, shrubs, grass and cart way. rench Excavation cavate trench for 150mm dia U.P.V.C pipe verage not exceeding 1.5deep eturn fill and ram cart away surplus excavated material average 20m away and spread on site PVC pipework 00mm heavy duty golden brown pipe	12 18 10 8	SM CM CM			
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verage not exceeding 1.5deep eturn fill and ram eart away surplus excavated material average 00m away and spread on site PVC pipework 00mm heavy duty golden brown pipe	10	СМ			
eturn fill and ram cart away surplus excavated material average 00m away and spread on site PVC pipework 00mm heavy duty golden brown pipe	10	СМ			
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cart away surplus excavated material average 00m away and spread on site PVC pipework 00mm heavy duty golden brown pipe	8				
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PVC pipework 00mm heavy duty golden brown pipe		СМ			
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00mm heavy duty golden brown pipe	150				
00mm heavy duty golden brown pipe	150	1 1			
	100	LM			
00mm heavy duty grey pipe		Livi			
our in ried by doily give y pipe	3	LM			
	٦	LIVI			
Omm ditto	50	LM			
ornin anto	00	Livi			
xtra over UPVC pipework for the following					
	3	NO			
oomin didnierer bend					
00 mm diameter Tee	3	NO			
oo min didineter ree	ľ				
Omm digmater hand	3	NO			
omm didmeter bend	١				
Pectangular manholes average 0.75m deen	6	NO			
detailigulai maimoles average 6.75m acep					
ling chamber heavy duty manheles			2		
	2	NO			
verage r.om deep.	-		- 1		
PEOVOEOVOEO do on quilly trans in aluding all					
		NO.			
, and the second	3	INO			
			- n *		
and testing by water.	1	ITEM			
2 e e e e e e e e e e e e e e e e e e e	chara over UPVC pipework for the following ends 00mm diameter bend 00 mm diameter Tee 00mm diameter bend ectangular manholes average 0.75m deep ing chamber heavy duty manholes iverage 1.0m deep. 50x250x250 deep gully trap including all excavations 50mm concrete bed 140mm inck masonry walling 1:4 sand; cement plaster covered with a 390x390x6mm m/s plate. Allow for flushing of the sewerage system and testing by water.	Actra over UPVC pipework for the following ends 00mm diameter bend 3 3 3 3 3 3 3 3 3 3 3 3 3	Actra over UPVC pipework for the following ends Domm diameter bend Rectangular manholes average 0.75m deep Rectangular manholes average 1.0m deep Rectangular manholes 1.0	ends 00mm diameter bend 00 mm diameter Tee 00mm diameter bend 00 mm diameter Tee 00 mm diameter bend 00 mm	Attra over UPVC pipework for the following ends Domm diameter bend The second of the following and the sewerage system and testing by water. The second over UPVC pipework for the following and the following and the sewerage system and testing by water. The second over UPVC pipework for the following and the following and the following and the following and the sewerage system and testing by water. The second over UPVC pipework for the following and the



		·					 	
		BIO DIGESTER						
		SUBSTRUCTURES (ALL PROVISIONAL)						
		Consists and install his dispostory works		4 1				
		Supply and install biodigester waste treatment system complete with the						
		following itemsto the satisfaction of the PM.				,		
		The system is expected to treat						
		approximately 13,300 gallons per day(50						
		cubic metres per day) or 200 persons complete with all accessories as Riflo						
		SEPTICA System or equivalent whichever is						
		higher. The tenderer to submit the technical			_ 11 L,=			
		brochures and working calculations together						
		with the tender for evaluation. Alternative and approved systems utilising packaged						
		systems may be provided						
		<u> </u>						
		Excavation						
	A	Excavate pit exceeding n.e. 1.50m deep						
,		starting from ground level	24	CM				
		[] 1 50 do lo						
	n	Excavate pit exceeding 1.50m deep but not exceeding 3.0m deep starting from						
	В	reduced level	8	СМ				
		Extra over excavations for excavating in						
(С	hard rock (class I)	24	СМ				
		Return fill and ram approved excavated						
	D	material around foundations	7	C14				
				СМ				
		Load and cart away surplus excavated						
	E	Imaterial	17	СМ				
		Allow for keeping the whole excavation				1		
	F	free from all water including spring and						
		running water	1	ITEM				
(G	Allow for plunking and strutting the whole excavation	1	ITEM				
		GACGYGIIOT						
		Mass concrete class 'P' in:						
	Н	50mm thick blinding under foundations	16	SM				
		Carried to Collection				111		

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
74 (YO) Y	Reinforced insitu concrete class 25/(20mm	Service Servic	- Capacita		
	aggregates)	400 100		Man and a second	
Α	200mm thick floor bed	16	SM		
В	200mm thick wall	62	SM		
С	200mm thick suspended slab	16	SM		
D	Strip foundation	1	СМ		
E	Assorted reinforcement Fabric mesh reinforcement to B.S. 4483 ref A142 weighing 2.22kg/m² (measured net- no allowance made for laps)				
		32	SM		
F	Sawn formwork to: Soffites of suspended slab, Sides walls and Edge of bed between 150 - 225mm wide				
		16	SM		
G	Water proof cement/sand (1:3) in: 20mm thick screed to floor bed cross falls	16	SM		
Н	20mm thick screed trowelled hard and smooth	16	SM		
J	20mm thick render to walls	15	SM		
K	20mm thick render to soffites	16	SM		
L	Sundries Form or leave 100mm diameter hole in 200mm thick reinforced concrete wall and slab	10	No		
Μ	Form or leave 600 x 600mm hole in 200mm thick reinforced concrete suspended slab	3	No		
Ν	600 x 600mm heavy duty double manhole cover and frame including setting cover in concrete opening and forming rebate	3	No		



Carried to Collection

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
А	16mm diameter U-shaped mild steel step iron fixed to structural wall.	10	No		
В	200mm galvanised mild steel water bar on construction joints	26	No		
С	Approved filling Hand packed crushed stone hardcore.	10	Cm		
D	Blind surfaces of hardcore with 50mm thick well watered fine murram or crushed stone	4	SM		
E	Insecticide treatment on blinded surfaces with "Termidor" termicide or other equal and approved at the rate of fipromil (250gm/ litre) after dilution with water (1:100) at the rate of 5litres per square metre all in accordance with Manufacturer's Specifications	16	SM		
F	Single layer 1000 gauge polythene sheeting with minimum 300mm side and end laps	4	SM		
	Carried to Collection		†		

ITEM	DESCRIPTION	QTY	UNIT	RATE	K.SHS
	1No. Soak Pit		min-pit		
	Excavations				
	Excavate for soak pits exceeding 1.5m depth but not exceeding 3.0m deep	W 18			
Α	starting from ground level spread on site as				
	directed	8	СМ		
	directed	0	CM		
	Natural Stone Walling				
	Natural Stone Walling		Per II - 1		profession and the second of t
	150mm thick walling bedded and jointed				
В	in cement sand mortar and reinforced			9.0	
	every alternate course with hoop iron	10	SM		
	Backfilling				
С	Approved local hardcore filling	8	СМ		
	, ipproved recarriances o mining				
D	Approved red soil	2	СМ		
	1				2.0
					10.0
	West of the second seco	GR	AND S	UMMARY	
BILL	DESCRIPTION	age N			CONTRACTOR'S USE
NO.	DESCRIPTION	ago i		0	
					K.SHS.
1	PRELIMINARIES	P / 15			
	MODES	010			
2	WORKS	B/D 5	'		
	TOTAL KSHS				
	TOTAL KSTIS				
	Add VAT 16%				
	Total Estimate				
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