

ANNEX 1

	PROPOSED MAINTANANCE OF EXTERNAL PERIMETER PAVEMENT AT TIMES TOWER. PRICING NOTES
Item	Description
A	SECTION NO.1 - PRICING NOTES SITE DESCRIPTION The site for the works is at Times Tower in Nairobi. During the contract the contractor will be expected to take all necessary measures as directed by the Project Manager to minimize any inconvenience to users of adjacent properties and their customers that may arise from the carrying out of the contract. It is a mandatory requirement that the tenderer visits the
В	site before pricing the bills of quantities. Prior arrangements for the site visit shall be made by the Project Manager. SITE ACCESS Access to site is through the designated entrances by the Project Manager. No other entrance will be used by the Contractor unless expressly permitted by the Project Manager at his own discretion. The Contractor must allow for keeping clean at all
С	times the existing access to the site. WORK DESCRIPTION AND SCOPE OF CONTRACT. The scope of the works in this contract involve the MAINTANANCE of the external pavement in the designated space provided by the Project Manager. The works involve: • Demolition of the existing pavement • Removal of existing bollards • Excavation • Filling
	 Compaction Installation of a new pavement Installation of new manhole covers Repainting of existing road kerbs Installation of bollards and painting them The standards of workmanship and materials used are expected to be of the highest levels achievable to be commensurate with the best standards in the building industry in Kenya.
D	SAMPLES The Contractor shall furnish at the earliest possible opportunity before the relevant section of the work commences and at his cost, any samples of materials or workmanship that may be called for by the Project Manager for his approval and any further samples in the case of rejection until they are approved. Such samples, when approved, shall be the minimum standard for the work to which they apply.
Ε	SUPERVISION The works shall be executed under the direction and to the entire satisfaction of the Project Manager who shall, at all times, have access to the site.
F	SECURITY OF THE WORKS The Contractor shall be entirely responsible for the security of the works, materials, plant, and personnel.
G	EXISTING SERVICES Prior to commencement of any work the contractor shall ascertain from the relevant authorities and from a keen observation of the site the exact positions, depths and levels of all existing electric cables, water pipes and other services in the site and shall make whatever provisions may be necessary and those that may be required by the authorities concerned for the support and protection of such services. Any damage or disturbance caused to any service/installation shall be reported immediately to the Project Manager and the relevant authority and shall be made good to their satisfaction at the Contractor's expense. In addition to the above requirement, the Contractor is required to program any disconnection and reconnection of services in such a manner that it shall not in any way affect the continuity of the operations of the adjacent buildings.
н	LOCAL REGULATIONS AND BY-LAWS The contractor is to comply with all regulations and by-laws of the Nairobi City County Government and other regulatory bodies including serving of notices and paying of fees/permits where applicable. The Contractor shall be responsible for obtaining all necessary approvals for the works as per the respective legislation. The costs of these approvals shall be deemed to be included in the Contractor's rates.



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Α	MATERIALS, TOOLS, PLANT, AND SCAFFOLDING The Contractor shall be responsible for the provision of all materials, scaffolding, tools, plant, transport and workmen required for the works except insofar as may be stated otherwise herein. All materials and workmanship used in the execution of the works shall be of the best quality and description. Any materials condemned by the Project Manager shall immediately be removed from the site at the Contractor's cost. All plant, tools and scaffolding shall comply with all regulations whether general or local which are in force throughout the period of the contract and shall be altered or adapted during the contract as may be necessary to comply with any amendments.
В	PUBLIC AND PRIVATE ROADS, PAVEMENTS ETC. The Contractor shall make good at his own expense any damage he may cause to public and / or private roads and pavements in the course of executing this contract.
С	SPACE TO BE OCCUPIED BY THE CONTRACTOR The Contractor shall not occupy any space in the site other than the one he will be directly working on. The Contractor may use the open area within the site's premises for his storage requirements. The Project Manager will give directions to the Contractor on which part of the open space he is allowed to use. The Contractor shall construct proper storage facilities for his materials and the salvage materials and remove them and make good at the end of the contract. The security of the works and the materials stored on site will be the responsibility of the Contractor.
D	PROGRESS SCHEDULE Immediately after signing the contract, the Contractor is to prepare a Time and Progress Chart showing the time and order in which he proposes to carry out the works within the total construction time stated in the contract. The chart shall show in detail the order in which each section, element or activity of the works is to be carried out. At the end of each week the Contractor shall mark on the chart in a different colour the actual time taken to complete the respective stages and sections of the work. The Contractor shall also show upon the chart or on a different sheet to be made available to the Project Manager the anticipated weekly labour strength required (divided into labourers and craftsmen) and shall similarly mark up the actual numbers employed. The Contractor shall obtain the Project Manager's approval of the chart and he shall pin one copy upon the site where directed. He shall thereafter adhere strictly to the approved schedule. In the event of the work falling behind the approved programme for any reason whatsoever, the Contractor shall within a week of the deviation becoming apparent, prepare a revised schedule showing how lost time would be made up within the overall Contract Period. Upon commencement of the works, the Contractor shall be required, in addition to other requirements on the recording of progress contained herein, to compile and submit to the Project Manager Site Weekly reports upon which shall be recorded daily activities on site including the labour and machinery (if any) on site, deliveries of materials on site and any incidents , accidents that may have occured.
Е	WATER AND ELECTRICITY SUPPLY FOR THE WORKS The Contractor shall make arrangements to provide all necessary water, electric light and power required for use in the works. No guarantee is given or implied that sufficient water will be available from mains and the Contractor must make his own arrangements for augmenting this supply at his own cost.
F	SANITATION OF THE WORKS The Contractor shall make his own arrangements for sanitary conveniences for his workmen. Any arrangements so made shall be in conformity with the Public Health requirements for such facilities. He shall be solely liable for any infringement of the requirements.
G	LABOUR AND PLANT RETURNS The Contractor shall deliver to the Project Manager detailed weekly returns showing the supervisory staff and the numbers of the several classes of labour and plant employed on the Works.



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Item	Description
Α	SAFETY, HEALTH AND WELFARE OF WORKPEOPLE The Contractor's rates shall include for providing for the safety, health and welfare of workpeople and for complying with any relevant Ordinances, and Regulations.
В	PROTECTING AND CLEANING THE WORK The Contractor shall cover up and protect all finished work liable to damage including provision of temporary roofs, gutters, drains, etc., as necessary until the completion of the works. In the event of any damage occurring to the works, materials, sewers, drains, gullies, paths or other works on the site in temporary possession of the contractor for the purpose of this Contract, either from the weather, want of proper protection, defects or insufficiency of the works or any other cause whatsoever during the progress of the works, the Contractor alone shall be responsible and shall, without extra charge, make good.
С	PREVENTION OF NUISANCE / NOISE The Contractor shall take all possible precautions to prevent any nuisance, inconvenience or injury to the occupiers/users of the site generally; users of the adjacent and neighbouring properties, and to the public, and shall use proper precautions to ensure the safety of all wheeled traffic and pedestrians. All work operations which may produce undue levels of noise, dust, vibration, welding flashes or any other discomfort to the occupiers of the neighbouring buildings or the general public must be undertaken at suitable times which shall be determined in close liaison with the Project Manager. In addition to the above provision on nuisance, the Contractor shall keep the general noise emanating from the site operations at all times to a level that does not cause discomfort to the average person. He shall take all necessary measures to muffle the noise from his tools, equipment and workmen to the reasonable satisfaction of the Project Manager.
D	REMOVAL OF PLANT, RUBBISH, ETC. The Contractor shall, upon completion of the Works, remove and clear away all plant, rubbish, cans and unused materials, and shall leave the whole of the site of the works in a clean and tidy state to the satisfaction of the Project Manager. During site operations, he shall also remove from the site all rubbish and dirt as it is produced to maintain the cleanliness of the site.
Е	VISITORS BOOK AND SITE DIARY The Contractor shall keep on the site a visitors book for recording the names of all persons who visit the site for the purpose of the project. He shall also maintain on site a diary in which he shall record site activities on a daily basis and particularly any occurrence which bears on the progress of the works in any way. The visitors' book and the diary shall be surrendered to the Project Manager at the completion of the project or at any other time that the Project Manager may request.
F	NO WORKMEN TO BE HOUSED ON SITE No labour with the exception of a watchman may be housed on the site. The cost of transporting labour to and from the site or elsewhere will be deemed to included in the tender.
G	PROTECTION OF WORKS AND PERSONS The Contractor shall allow for the protection of his own and his Sub-Contractor's work liable to damage, including provision of temporary roofs, gutters, drains, etc., if necessary and shall caseup, cover or in other suitable ways protect all finished work liable to injury, to the satisfaction of the Project Manager until completion of the Contract. From the beginning to the completion of the works, the same shall be under the entire care and control of the Contractor, who shall take all possible precautions to prevent any nuisance, inconvenience or injury to the holders or occupiers of surrounding properties and to the public generally, and shall at all times keep all paths and roads affected by the works in a safe and clear state, and shall use proper precautions to ensure the safety of all wheeled traffic and pedestrians. The Contractor shall allow for providing all watching, lighting, barriers, covering open trenches and protection of the public and his own and Sub-Contract works as may be necessary for the safety of the works and for the protection of the public and his own and Sub-Contractor's employees. In the event of any damage or loss occurring to the works or to materials or to any sewers, gullies, drains, paths, or other works on the site in temporary possession of the Contractor for the purpose of this Contract either from the weather, want of proper protection, defects, theft, insufficiency of the works or any other cause whatsoever during the progress of the works, or for any accident or damage to property or persons by reason of the said works, the Contractor alone shall be responsible and shall without extra charge, make good all damage and pay all costs incurred.



	PROPOSED MAINTANANCE OF EXTERNAL PERIMETER PAVEMENT AT TIMES TOWER. PRICING NOTES
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A	EXISTING PROPERTY The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services and he will be held responsible for all damage arising from the execution of this Contract to the aforementioned, and he shall make good all such damage where directed at his own expense to the satisfaction of the Project Manager.
В	WORK RE-MEASUREMENT All work in this contract shall be re-measured on completion and a final account of the contract prepared by the Project Manager. The contractor will be given the opportunity to be present for all remeasurements. The final contract sum will be based on the final re-measurements. The Contractor is therefore cautioned against using the bills of quantities for ordering of materials as the quantities may change in the course of the contract. Neither should the contractor use the Quantities in the Bills of Quantities for executing work on site. The use of the bills of quantities by the contractor for the above purposes shall be at the contractors own risk and no claims arising from any losses arising therefrom shall be accepted.
С	SHEDS FOR STORAGE OF MATERIALS The Contractor shall provide, erect and maintain on the site, in such positions as may be directed, ample temporary watertight, lock-up sheds for the proper storage and protection of cement and other materials liable to damage, and shall remove same at completion and make good all surfaces disturbed. He shall also provide space for storage accommodation which Sub-Contractors may wish to erect for themselves.
D	WORK TO BE OPENED UP AT THE REQUEST OF THE PROJECT MANAGER The Contractor shall, at the request of the Project Manager open for inspection any work covered up, and, should the Contractor refuse or neglect to comply with such request, the Project Manager may employ workmen other than those employed by the Contractor to open up the same. If the said work has been covered up in contravention of the Project Manager's instructions, or if, on being opened up, it be found not in accordance with the drawings or Bills of Quantities or the instruction of the Project Manager, the expenses of opening and covering it up again whether done by the Contractor or by the Project Manager shall be borne by and be recoverable from the Contractor or may be deducted from any monies due to the Contractor. If the work has not been covered up in contravention of such instructions and be found in accordance with the said drawings and Bills of Quantities, then the expenses aforesaid shall be borne by the Project Manager and be added to the Contract Sum; provided always that, in the case of foundations or of any other urgent work has been opened, make or cause to be made the inspection thereof, and at the expiration of such time, if such inspection shall not have been made the Contractor may cover up the same and shall not be required to open it up again for inspection except at the expense of the Project Manager.
Е	CONTRACT COMPLETION PERIOD The contract completion period in accordance with the conditions of contract must be strictly adhered to. The Project Manager shall strictly monitor the Contractor's progress in relation to the progress chart and should it be found necessary, the Project Manager shall inform the Contractor in writing that his actual performance on site is not satisfactory. In all such cases, the Contractor shall accelerate his rate of performance, production and progress by all means such as additional labour, plant e.t.c., and working overtime all at his cost.
F	VALUE ADDED TAX (VAT) All rates quoted shall be deemed to be inclusive of 16% VAT.
G	TEMPORARY SECLUSION OF THE WORKS AND PEDESTRIAN TRAFFIC CONTROL The Contractor may be required by the Project Manager or by the local bylaws to enhance the seclusion of the works by providing warning signs and barriers as necessary. The exact location of the warning signs and barriers is to be directed by the Project Manager. The Contractor shall allow for maintaining passage of pedestrian traffic through the works and thoroughly maintaining the warning signs and barriers throughout the Contract and clearing away and making good disturbed ground on completion. All materials arising will remain the property of the Contractor and he should allow credit against this accordingly.



Item Description Unit Qty Rate Amount (Ksh) SECTION NO.2 - PRELIMINARIES MIRERIAL LESTING Image: Construction of the testing of materials as specified hereunder including the supply and preparation of materials to be tested, the cost of materials and their packing and conveyance to the nearest approved testing laboratory, laboratory charges, etc. Image: Imag	DILL	OF QUANTITIES FOR PROPOSED MAINTANANCE OF EX TOWER.	XTERNA	L PERI	METER PAVE	MENT AT TIMES
A MATERIAL TESTING Allow for all expenses in connection with the testing of materials as specified hereunder including the supply and preparation of materials to be tested, the cost of materials and their packing and conveyance to the nearest approved testing laboratory, laboratory charges, etc. ITEM 1 B SIGNBOARD The Contractor must allow for providing, erecting and maintaining a site signboard, the size, type of construction and lettering of which shall be to the Project Manager's approval, in lettering 50mm high. The board is to be fixed in an elevated position on the site where indicated by the Project Manager. On completion of the works, the notice board shall be removed and making good shall be carried out as necessary. ITEM 1 C LOCAL REGULATIONS AND BY-LAWS The contractor is to comply with all regulations and by-laws of the Nairobi City County Government and other regulatory bodies including serving of notices and paying of fees/permits where applicable. The Contractor shall be responsible for obtaining all necessary approvals for the works as per the respective legislation. The costs of these approvals shall be deemed to be included in the ITEM 1	Item	Description	Unit	Qty	Rate	Amount (Ksh)
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BILI	OF QUANTITIES FOR PROPOSED MAINTANANCE OF EX TOWER.	XTERNA	L PERI	METER PAVE	CMENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount (Ksh)
	SECTION NO.3 - MAIN WORKS				
А	Demolition Work				
	The items of demolitions and removal shall include cleaning of affected surfaces, and removal of the debris from site to Nairobi City County Goverment approved dumping sites. Care to be taken to preserve the structural integrity of existing road kerbs. Accumulation of debris within the site premises shall not be allowed.				
1.0	Carefully remove existing 600 x 600 x 50mm grey P.C. paving slabs and cart away debris.	SM	1400		
2.0	Carefully remove existing steel pipe bollards; diameter 105mm overall size 1100mm long embedded to a depth of 0.4m with 700mm protruding from ground; filled with concrete class 15 and a 1:3 cement mortar elliptical coping.	No.	101		
3.0	Ditto but diameter 90mm.	No.	89		
4.0	Ditto but diameter 105mm overall size 1540mm long at the parking area.	No.	15		
	Total Carried to Main Works Summary				



BILL	OF QUANTITIES FOR PROPOSED MAINTANANCE OF EX TOWER.	KTERNA	L PERI	METER PAVE	EMENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
В	Pre-cast Concrete Pavement				
	Excavation and Disposal				
1.0	General excavation of material other than topsoil, rock or artificial hard material to reduce levels not exceeding 0.25 m: average depth 150 mm from existing ground level.	СМ	210		
2.0	Cart away from site surplus excavation spoil away to approved Nairobi City County Government dumping sites.	СМ	210		
	Filling and Treatment				
3.0	Imported approved hardcore base filling in making up levels well rolled and compacted to 95% maximum dry density: depositing and compacting in layers maximum 150mm thick.	СМ	210		
4.0	50mm quarry dust bed on compacted hardcore to receive concrete paving blocks.	SM	1400		
5.0	Telvar or other equal and approved herbicide treatment under pavement: with 20 years guarantee.	SM	1400		
6.0	Approved anti-termite treatment under pavement: applied by approved professional pest control specialist: applied strictly in accordance with the manufacturer's instructions: ten(10) year guarantee.	SM	1400		
	Pre-cast Concrete Paving Blocks				
7.0	Provide and lay 60 mm thick heavy duty blocks with minimum crushing strength of 49N/mm2:FULL BODIED COLOURED CABRO BLOCKS: QUADPAVE shape: STRETCHERBOND pattern: to prepared sub-base: laid to falls not exceeding 15 degrees from horizontal: compacted by surface vibration: samples to be approved by Project Manager. Rate to include bedding formed with uniformly graded river sand cushioning properly compacted with a mechanical compactor to required level, grade and camber as instructed by the Project Manager and sand to fill the joints, ties and edge restraints.	SM	1400		
	Pre-cast Concrete Kerbs				
6.0	125mm x 250mm pre-cast concrete (C25/20) kerb: splayed: bedding, jointing and pointing in cement/sand mortar 1:3; including all necessary excavation, disposal and formwork: laid on and including 100mm thick plain insitu concrete class 20/(20) haunched base and back 375mm wide.	LM	500		
7.0	Prepare and apply three coats of 'Crown Paints Solo' or other equal and approved road marking enamel paint on surfaces of kerbs 200 - 300mm girth	LM	500		
	Total Carried to Collection				



BILL	OF QUANTITIES FOR PROPOSED MAINTANANCE OF E. TOWER.	XTERNA	L PERI	METER PAVE	MENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
8.0	125 x 100mm Precast concrete (class 25/20) channel finished fair on all exposed surfaces bedded, jointed and pointed in cement mortar (1:3) laid on and including 375 100mm Plain concrete (class 20/20) foundation haunched up on both sides including all necessary excavation, formwork and soil disposal.	LM	500		
	Total Carried to Collection				
	Collection: Paved Pavement				
	Total Brought from Page 7				
	Total Brought from Page 8 above				
	Total Carried to Main Works Summary				



BILI	OF QUANTITIES FOR PROPOSED MAINTANANCE OF EX TOWER.	KTERNA	L PERI	METER PAVE	MENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
с	Asphalt Pavement				
	<u>Restoration of Existing Asphalt Pavement</u> (<u>Street Parking on Lt. Tumbo Avenue and Service Lane on Times</u> <u>Tower Frontage</u>				
1.0	Prepare existing road surfaces as necessary to receive prime coat (measured separately) and fill up any existing pot holes with concrete grade 30 to approval.	SM			RATE ONLY
2.0	Prepare and apply medium curing back (MC 30) primer.	SM			RATE ONLY
3.0	Provide, heat and spray K1-70 emulsion tack coat at a rate of spray in the range of 0.6 litre/m2 to 0.8 litres/m ² or as instructed by the Engineer/Project Manager.	SM			RATE ONLY
4.0	Provide, lay and compact 25mm thick Asphalt Concrete (AC) with modified bitumen and 0/14mm aggregates on prepared surface of asphalt base layer with all leads and lifts (tack coat measured separately) complete.	SM			RATE ONLY
	Road Marking				
5.0	Prepare and apply reflectorized thermoplastic paint for road markings ($w = 10$ cm) on surface dressed pavement. A reflective finish to be achieved by sprinkling Ballotini glass beads on to the wet paint film or by thoroughly dispersing Ballotini glass beads in the paint prior to application.	LM			RATE ONLY
	Total Carried to Main Works Summary				



BILL	OF QUANTITIES FOR PROPOSED MAINTANANCE OF EX TOWER.	XTERNA	L PERI	METER PAVE	MENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
D	<u>Manhole Covers</u>				
	Carefully remove existing Pre-cast concrete manhole covers; replace with medium duty (Grade B) cast iron manhole covers and frames complete with holder brackets and anchors: samples to be approved by Project Manager: Rates to include for insitu concrete surround.				
1.0	Ditto 600 x 900mm.	No.	7		
2.0	Ditto 600 x 600mm.	No.	9		
3.0	Ditto 450 x 600mm	No.	5		
	Total Carried to Main Works Summary				



BILI	L OF QUANTITIES FOR PROPOSED MAINTANANCE OF EX TOWER.	XTERNA	L PERI	METER PAVE	MENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
Е	<u>Street Furniture</u>				
	Bollards				
1.0	600mm Diameter x 1200mm high in stainless steel 316 finish above ground precast concrete (class 25/20) anti-ram typical bollard embedded in ground link beam foundation with and including 400mm high planter on top, 20mm notch (2No.) with reflective paint, 50mm diameter x 1700mm long soil filled UPVC drain pipe and all complete with necessary reinforcement, formwork, excavation, disposal of surplus material and exposed surfaces sandblasted to approval all in accordance to Structural Engineer's drawing.	No.	250		
2.0	Fabricate, supply, and install removable steel pipe bollards using black pipe of 125mm internal diameter; wall thickness 4.85mm; with a 3mm thick steel elliptical coping welded at the top; encirceld with 3 bands of 50mm wide 3M Diamond Grade 980 Series yellow reflective tape; overall size 1540mm long to be embedded to steel casings at the parking area to details. Paintwork to include one coat of zinc phosphate primer as CROWN or equivalent, one coat of CROWN Premium undercoat and two coats of Grey CROWN Super Gloss or equivalent.	No.	15		
3	600mm Diameter x 1200mm high above ground precast concrete (class 25/20) anti-ram typical bollard embedded in ground link beam foundation with and including 400mm high planter on top, 20mm notch (2No.) with reflective paint, 50mm diameter x 1700mm long soil filled UPVC drain pipe and all complete with necessary reinforcement, formwork, excavation, disposal of surplus material and exposed surfaces sandblasted to approval all in accordance to Structural Engineer's drawing.	NO			RATE ONLY
	Ground Link Beam				
4.0	600 x 800mm deep Concrete (class 25/20) ground beam linking the 600mm diameter security bollards (measured separately) with and including all necessary reinforcement, formwork, excavation and disposal of surplus material to the entire satisfaction of the Project Manager.	LM	300		
	BRANDING & SIGNAGES-all the specs and sizes to be				
5.0	as guided by KRA Branding manual and approved by M&C team <u>Directional Signage's</u> Supply and installation of directional/building signage (1.3m wide by 1.6m high) pole mounted(SHS 40x40x 1.5mm) 0.6m deep and 1.4m high using; Stainless steel metal sheet	NO	8		
А	of minimum 16G thickness brush finish and steel framing painted as per specification including required size of vinyl sticker as per M&C specifications.				
В	Ditto but "No Photography"	NO	2		
С	Ditto but "No smoking"	NO	2		
6.0	Allow for repair and making good of sections of worn out mild steel fence as directed by the Project Manager	ITEM	1		
	Total Carried to Main Works Summary				



BILI	. OF QUANTITIES FOR PROPOSED MAINTANANCE OF EX TOWER.	KTERNA	L PERI	METER PAVE	MENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
F	Entrance Canopies				
Ī	ELEMENT NO. 3				
	STRUCTURAL STEEL FRAME				
	Structural steelworks shall be inaccordance with BS 950 (1990),				
	all welding inaccordance with BS5135, bolts and nuts, grade 4.6				
	to BS 4360, all steelworks shall be primed with red oxide before				
	site delivery. Rates to include cut, fabricate, erect and fix in				
	position.				
	All members shall include welded / bolted connections including				
	all bolts, nuts, plates and welds				
	Walls				
A	75 x 50 x 4mm thick studs weighing 7.34kg/m	Kg	3,898		
_	Roofing				
B	75 x 50 x 3mm thick steel weighing 5.6kg/m	Kg	700		
C	50 x 50 x 3mm thick steel SHS; weighing 4.43kg/m; including				
	welding/bolting to bracings.	Kg	200		
D	Accessories/Connections				
D	150 x 150 x 8mm thick plate including making 4No. 16mm diameter bolt				
	holes	No.	72		
Е	16mm diameter, 250mm long galvanised steel bolts	No.	144		
	ELEMENT NO. 4 ROOFING				
	Roof covering				
	Heavy duty gauge clear polycarbonate twin wall hollow profile				
	sheet: 8mm thick: from Sai Raj Ltd or equal and approved				
	supplier: allow for fixing accessories: with seamless silicon				
	joints: on RHS framing (measured separately):				
	jonnov on teno namnig (monour ou separatory).				
Α	Entrance canopy roof (colour to be selected and approved by the project				
	manager)	m²	108		
	ELEMENT NO. 5				
	FAÇADE CLADDING				
	Glass				
Α	12mm thick clear toughened safety frameless glass : fixed to pressed				
	structural steel frame (measured separately) : including all necessary				
	beading, rubber joints and accessories to approval: pointed externally in				
	mastic sealant: all to Architect's details and approval	m²	49		
В	Ditto: but stained mosaic glass to clients approval:	m²	49		
	Alucobond				
C	Approved quality alucobond wall cladding as supplied by an appproved				
	specialist on and including pressed steel frameworks colour to match				
	existing external finishes: deflection controlled: allow end trimming: allow				
	for making holes for light fittings, or other mounted fittings as necessary:				
	protect finished product: all to architect details: 5 Year guantee				
		m²	94		
-	Gypsum/ Plasterboard Cladding				
D	12mm thick waterproof gypsum as "gyproc" or equal and approved quality				
	gypsum board fixed to pressed steel framwork (measured separately):				
	including skimming with appropriate filler	m²	94		
	ELEMENT NO. 6				
	FINISHES				
	Floor Finishes (To be done by others) Wall Finishes				
	Sand and clean surfaces: apply one coat skimming compound as				
	'Wall Magic or equal and approved: apply one coat "Crown"				
	Cover Matt and three coats silk vinyl emulsion paint: from				
	"Crown" or equal approved: on				
А	Gypsum cladding surfaces (internally)	m²	94		
	Wire brush to clean thouroughly, apply one touch up primer,		⁹⁴		
	Prepare and apply three coats gloss oil paint from 'Crown' or				
	"Duracoat": First grade paints; single brand or equal and				
	approved;				
В	Structural steel frame surfaces	m²	232		
	Total Carried to Main Works Summary		i -		
	Total Carried to Main Works Summary				



BILI	L OF QUANTITIES FOR PROPOSED MAINTANANCE OF EX TOWER.	XTERNA	L PERI	METER PAVE	MENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
G	Solar Street Lighting				
	Supply and install Solar Lights and accessories complete with associated control terminations & fixing materials. The Contractor should allow for actual product demonstration that will include confirmation of charging, battery storage capability, on/off and dimming functionalities and first level maintenance training of client's team				
1.0	IP66 Walkway/Road light in die-cast aluminium body with Flat Glass enclosure complete with 20W LED Energy saving high lumen integrated motion sensor lamp as ALLTOP 0903A20-01 20W or equivalent with the following features:	No.	44		
	 <u>Product Features</u> Intelligent control, automatically turn on or off. ALL IN ONE design, integrated with solar panel, LED street light, LiFePO4 (Lithium) battery and controller. Mono solar panel high-efficiency crystalline PV module PWM/MPPT smart controller integrated with PIR sensor for controling the light output as full brightness or DIM mode half brightness upon the detection of movements. 10-12 hours lighting per day, 3days lasting in rainy days IP Rating of IP66 guard level, aluminium housing 3 years Warranty 				
	Pole Set (Single Arm)				
2.0	5m high, Q235 steel grade; hot-dip galvanized and spray coated treatment including base plate with Single Fixture Mount, 450mm Long Bracket, Pole Top Mount with vandal proof bolt and nuts	No.	44		
3.0	Allow for pole mount concrete plinth with 4 No. mounting bolts to Structual Engineer's details/Project Manager's approval or as provided by the pole manufacturer.	ITEM	44		
	Indoor LED Video wall				
4	Supply and install wall mounted indoor LED vidieo wall display screen without bezels/seemlessly connected overall size 2.2 meters high x 4.2 meters width composed of LED display sceens overal size 640mm x 480mm x 65mm as ABSEN KL II SERIES LED Screen or equal and approved including license free Digital Signage Software	NO	1		
	Type of LED: SMD				
	Pixel pitch: P2.5				
	Aspect Ratio: 16:9				
	Color Precision: Color management technology Fine Adjustment: Grayscale improvement technology HFR + - High frame rate mode High refresh rate Brightness: 800nits				
	Panel Material: Fine die-casting aluminum Front and rear serviceable Installation types: Stacking, wall mounting and hanging 2 year warranty as standard				
	Total Carried to Main Works Summary				



BILL	OF QUANTITIES FOR PROPOSED MAINTANANCE OF TOWER.	EXTERNA	L PERI	METER PAVE	MENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
	SUMMARY: MAIN WORKS				
А	Demolitions - Page 6				
В	Pre-cast Concrete Pavement - Page 8				
С	Asphalt Pavement - Page 9				
D	Manhole Covers - Page 10				
Е	Street Furniture (Bollards) - Page 11				
F	Entrance Canopies - Page 12				
G	Solar Street Lighting & Indoor display screen wall - Page 13				
	TOTAL CARRIED TO GRAND SUMMARY				-



BILL	OF QUANTITIES FOR PROPOSED MAINTANANCE OF 1 TOWER.	EXTERNA	L PERI	METER PAVE	MENT AT TIMES
Item	Description	Unit	Qty	Rate	Amount(Kshs)
	SECTION NO.4 - PROVISIONAL SUMS				
А	LANDSCAPING				
	Provide a sum of shillings five hundred thousand only (Shs. 500,000.00) for Landscaping	SUM			500,000.00
В	SIGNAGE				
	Provide a sum of shillings five hundred thousand only (Shs. 500,000.00) for Signage	SUM			500,000.00
С	STORM WATER DRAINAGE				
	Provide a sum of shillings five hundred thousand only (Shs. 500,000.00) for Storm Water Drainage	SUM			500,000.00
	TOTAL CARRIED TO GRAND SUMMARY				1,500,000.00



Item	Description	Unit	Qty	Rate	Amount(Kshs)
	F F F F F F F F F F				
	GRAND SUMMARY				
	SECTION NO.2 - PRELIMINARIES				
	SECTION NO.3 - MAIN WORKS				
	SECTION NO.4 - PROVISIONAL SUMS				1,500,000.00
	Sub-Total 1				
	Add 5% Contingency				
	Sub-Total 2				
	Add: 16% VAT				
	TOTAL SUM (V.A.T. INCLUSIVE)				