GALVA	NIZED STEEL S	TRUCTURES -PROPOSED BUMA	LA 33/11KV SUBSTATION.							
Fender N	No									
Descripti	ion			Bidder's offer						
1. Manufa	acturer's Name & (Country of manufacture								
2. Name o	of item to be suppli	ed								
3. Type of	f galvanized steel st	tructure								
Clause	Description									
	-									
1	Scope									
2	2 Applicable Stands									
4.1	Service condition									
4.2.1	General Require	General Requirements								
4.2.1.1	Manufacturing st	andards								
4.2.1.2		of hot-rolled sections for use in the man	ufacture of steel structures							
4.2.1.3	Angle sections, cl KS 02-572	hannels and flats are hot-rolled and com	plies with the requirements of Kenya Standard							
		Tensile strength of the steel								
4.2.1.4	Yield stress of the									
4.2.1.5	Mechanical Prope									
	A. ANGLES									
	Sr.No	Material Parameter	KPLC Requirements							
	1	Tensile strength	>430<460 N/mm2							
	2	Yield strength	255 N/mm2							
		Tolerances								
		mass	4%							
	3	Leg Length	± 1mm to 3mm							
	5	Thickness	± 0.5mm							
		Out of square	Max deviation 2mm							
	4	straightness	0.3 % of length							
	4 5	Elongation Galvanizing Thickness	24-26%							
	6	Modulus of Elasticity	20 x 10*9							
	7	Density	7860kg/m3							
	8	Nominal length	±0.4%							
	B. CHANNELS	Tancila strengeth	> 420 < 4 (0 NI /2							
	2	Tensile strength Yield strength	>430<460 N/mm2 255 N/mm2							
		Tolerances								
		depth	1.5-3mm							
		width of flange	2.5mm							
able 1	3	flange thickness	-0.5mm ±5mm							
		thickness of web flange out of square	Max deviation 2mm							
		flatness of web	Concave –max 15%							
	4	Elongation	24-26%							

	C. HOLLO	OW SECTI		on oth		< 120 - 1CO		
		<u>1</u> 2	Tensile strength>430<460 N/mm2Yield strength255 N/mm2					
		-	Tolerances	<u> </u>		200 10/1111	12	
			Length			± 1 mm to	4%	
	-	3	Thicknes Out of so			± 0.5 mm to	3mm	
			straightn			Max devia		
		1	Elongation			0.3 % of length 24-26%		
		5		ng Thickness >85 Mie			ons	
		6	Modulus o	of Elasticity		20 x 10*9		
		7	Density Nominal I	7860 kg/r ength $\pm 0.4\%$			13	
		3 5,NUTS,W						
		1	Safe work	ing shear stress				
		2	Grade (Be					
		3	Tolerances threads	s 0.01mm				
	4	1		ng Thickness		>85		
4.2.1.6	Materials I	before and a	after fabrica	tion are straigh	t and free from twists			
4.2.1.7					nish and are free from			
		re drilled in						
1210				cutting proces		-		
4.2.1.8					other so that a gauge 2 sembled members in a			
	members	i ule bolt pa						
4.2.1.9	Erection cl	earances fo	or cleated en					
4.2.1.10	-	f flat straps	are carried					
4.2.2	Welding	1.1.						
4.2.2.1	Type of w	elding						
4.2.2.2	Mode of c	leaning of v	welds					
4.2.3	Galvanizi							
4.2.3.1	-	-	-	rew tapping an	d the removal of burr	s are comp	leted before the	
4.2.3.2		g process contraction						
4.2.3.3	Bolts are c			ncluding the th	reads, and the threads	are left un	coated in the case of	
	nuts Uniformit	f. 41						
4.2.3.4	-	y of the zine		EQUEET				
4.2.4			MPLIANC	E SHEEL			KPLC Requirements	
Table 2	No.	Item						
	1	successful	bid in port	op drawings 'A able device				
	2	Supply of	additional b	polts/nuts/wash				
	<u> </u>	anchor)			Extra 2%			
	3	Supply cal	librated coa	ting thickness r	2 no.			
	Drawings	-(fill list as	per the Kir	nanie order list)				
				No.	Item Description			
			1					
				2				
			3					
			4					
				5				
			6					
			6					
				7				
				8				
4.3	Table 3		9					
			10					
			11					
				12				
				13				
			14					
				15				
				13				
				16				
				17				
				18				
l.				10				

:	5 Marking	& Packing										
5.1.1		Where an item includes a number of components to form a complete assembly, all component parts are included in one composite package which shall be firmly strapped or bound together All galvanized parts are protected from injury to the zinc coating due to abrasion during periods of										
5.1.2		nized parts prage and er		ted from injury	y to the zinc	coating	due to ab	rasion duri	ng periods of			
5.2	2 Markings											
A1	Tests to b	e performed	1									
A2	Standards for inspection and testing											
A3		factured galagineers at m		el structure sha rs site	ll be offered fo	or FATs	s and inspe	ction in the	presence of			
A4	Supplier shall replace without charge to KPLC items that don't meet specification OAP											
B1	QAP	QAP										
B2	Delivery	time, Produc	ction capac	ity & experienc	e of the manuf	facturer						
	a. Fully manufact	manufacturer.										
C1	c. Manufacturer's catalogues, brochures, and technical data;											
	d. Copies of required test certificates and test reports											
	e. Details of manufacturing capacity											
	f. Sales records for previous five years and reference letters from at least four of the customers;											
C2	a. Fully b. Dra											
	c. Marking and packaging details											
	* Words	like 'aoree	l'. 'confirm	ed'. 'As ner KF	PLC specificatio	ons' etc	shall not	he accented	and shall be	considered	non-responsive	
			., conjum									
	••••••											
<u></u>		~.	~.	1.5		•••••	1					
Manufa	cturer's Na	me, Signat	ure, Stamj	o and Date								