

2

BHARAT HEAVY ELECTRICAL LIMITED, JHANSI

Specification No SP/MISC/7807
Item No SP/MISC/1/8/7807
Location TOWN SHIP
Quantity ONE

DESIGN, MANUFACTURING, SUPPLY, ERECTION & COMMISSIONING of LED High Mast light System (200WX8,16 Mtr.)

Note :

- VENDOR must submit complete information against clause No-11.0 (Qualifying Condition). The offer meeting this clause would only be processed
- The "Specified/to be confirmed by vender" Column and where applicable, the " Devitaions" Column of the formate shall be filled in by the Vendor and submitted along with the offer. Technical details also submitted with the offer. Inadequate/ Incomplete. Ambiguos, of unsustainable information against any of the clauses of the specification / requirement shall be treated as non- compliance.
- The offer and all documents enclosed with offer should be in English language only.

SCOPE: DESIGN, MANUFACTURING, SUPPLY, ERECTION & COMMISSIONING Of LED High Mast light System (200WX8,16Mtr.) AS PER SPECIFICATION BELOW

S.NO.	DESCRIPTION FOR BHEL REQUIREMENT	UOM	QTY	SPECIFIED / TO BE CONFIRMED BY VENDER	OFFERED	DEVIATION
1	SCOPE OF SUPPLY					
1.1	Supply of 16M high mast shaft in two section suitable for 55 m/sec wind speed along with head frame, luminaires carriage suitable for 08 luminaires in symmetrical arrangement and other required accessories.	No.	1	Vendor to confirm		
1.2	Supply of raising lowering system comprising double drum winch, 6mm diameter SS wire rope, trailing cable, connector, integral power tool motor, manual handle, junction box, lightning finial. (Wiring material from JB to individual luminaire & MCB in base compartment are not included and are a part of installation).	set	1	Vendor to confirm		
1.3	Supply of foundation bolts manufactured from special steel along with nuts, washers, anchor plate and common template.	set	1	Vendor to confirm		
1.4	Supply of LED floodlight type 200 W LED.	No.	8	Vendor to confirm		
1.5	Supply of LED type single dome aviation obstruction light.	No.	1	Vendor to confirm		
1.6	Supply of outdoor stand mounted feeder pillar with 32A TPN MCB incomer, single dial time switch, 25A TP contactor for the automatic switching of luminaries, power tool control with 2 no 9A contactors and raise lower push button, Suitable Incoming and out going terminals.	No.	1	Vendor to confirm		
2	SCOPE OF WORK					
2.1	Erection of the high mast with the help of suitable tools and plants, wiring of luminaires with all wiring materials like PVC insulated PVC sheathed flexible cable of suitable copper conductor cores , lugs, MCB and all labour.	job	1	Vendor to confirm		
2.2	Provision of GI pipe earthing for High mast with 2.5 M long 40 mm dia GI Pipe including connection to High mast earth terminal with 25 x 3 mm GI flats with all materials and labour. (2nos per mast required)	No.	2	Vendor to confirm		
2.3	Installation of the mast feeder pillar by grouting the stand in concrete	job	1	Vendor to confirm		
3	SPECIFICATION					
3.1	HIGH MAST SYSTEM					
3.1.1	Make :			Vendor to Specify		
3.1.2	Model :			Vendor to Specify		
3.1.3	Height of mast : 16 Meter, (Min.)			Vendor to confirm & Specify		
3.1.4	No. of sections : Two (Min.)			Vendor to confirm		
3.1.5	Make & type of LED light : 200 W LED			Vendor to Specify		
3.1.6	Material construction : Corrosion Resistant high strength low carbon structural grade steel			Vendor to Specify		
3.1.7	Base dia. and top diameter : Top-150mm (Approx.) Bottom-400mm (Approx.)			Vendor to Specify		
3.1.8	Plate thickness : Top:3 mm (Min.) Bottom:4 mm (Min.)			Vendor to Specify		
3.1.9	Cross section of Mast :			Vendor to Specify		
3.1.10	Standard for of galvanisation : As per BS EN ISO 1461 or equivalent std.			Vendor to Specify		
3.1.11	Size of opening and door at base : 1200 x 250 mm (Approx.)			Vendor to Specify		
3.1.12	Diameter of base plate : 550 mm (Approx.)			Vendor to Specify		
3.1.13	Thickness of base plate : 25 mm (Approx.)			Vendor to Specify		
3.1.14	Lightning protection finial : G.I single spike			Vendor to confirm		
3.1.15	Max.withstand wind speed : 55 m/s as per IS : 875 (Part - III)			Vendor to confirm		
3.2	LUMINAIRES CARRIAGE					
3.2.1	Material of construction/Dia.of pipe :			Vendor to Specify		
3.2.2	Diameter of carriage ring (mm) :			Vendor to Specify		
3.2.3	Construction : No. of Arm No. of section			Vendor to Specify		

①

SIGN, MANUFACTURING, SUPPLY, ERECTION & COMMISSIONING OF LED High Mast light System (200WX8,16Mtr.) AS PER SPECIFICATION BELOW

S.NO.	DESCRIPTION FOR BHEL REQUIREMENT	UOM	QTY	SPECIFIED / TO BE CONFIRMED BY VENDOR	OFFERED	DEVIATION
3.2.4	Load carrying capacity : No. of luminaire can be mounted			Vendor to Specify		
3.3	TRAILING CABLE					
3.3.1	Conductor : Copper,			Vendor to confirm		
3.3.2	Insulation : PVC Flexible			Vendor to confirm		
3.3.3	No. of circuits per mast : One no cable per mast			Vendor to confirm		
3.4	WINCH / POWER TOOL			Vendor to confirm		
3.4.1	Type / SWL of winch : Double drum/ to be specified by vendor			Vendor to specify		
3.4.2	Method of operation : Integral Motor			Vendor to confirm		
3.4.3	Motor capacity : 1 HP(Min.)			Vendor to specify		
3.4.4	Motor speed : single/double			Vendor to Specify		
3.5	STAINLESS STEEL WIRE ROPE					
3.5.1	Grade / construction : AISI 316, 7/19 construction			Vendor to confirm		
3.5.2	Number of ropes : Two continuous			Vendor to confirm		
3.5.3	Diameter : 6 mm(Min.)			Vendor to confirm		
3.5.4	Length of wire rope :			Vendor to Specify		
3.5.5	Breaking load capacity :			Vendor to Specify		
4.0	ELECTRICAL SUPPLY AND CONTROLS					
4.1	The single point electric supply will be provided by BHEL near the high mast .			Vendor to confirm		
4.2	All electric connection from above single point electric supply will be done by vendor for the E&C of high mast with his own labour and material.			Vendor to confirm		
4.3	The connection shall be made through copper cable .			Vendor to confirm		
5.0	ACCESSORIES AND TOOLKITS					
5.1	The LED HIGH MAST system shall be supplied complete with all standard accessories and tool kit..			Vendor to confirm		
5.2	list of accessories to be supplied with LED HIGH MAST with out extra cost.			Vendor to submit		
6.0	DETAILS TO BE SUBMITTED WITH THE OFFER					
6.1	Total electrical load			Vendor to Specify		
6.2	A/c supply required for high mast light- single / three phase.			Vendor to Specify		
6.3	Total weight of the equipment.			Vendor to Specify		
6.4	Total space required			Vendor to Specify		
7.0	DOCUMENTATION :					
7.1	Detailed Technical literature with outline general arrangement drawing of offerd model of high mast, including LED details , LED mounting arrengment (luminaires) & foundation/ mounting details etc.			Vendor to submit		
8.0	Erection and commissioning					
8.1	Erection and commissioning of LED high mast system to be done by vendor with his own labour and tools in line with specification.			Vendor to confirm		
8.2	All civil work will be in the scope of BHEL JHANSI. However, all civil drawing, details required for the Erection and commissioning of high mast will be provided by vendor within 15 days of issuing the purchase order. Any special chemical required for the grouting /foundation/E&C work will be provided by vendor with out extra cost.			Vendor to confirm		
8.3	Any thing else which is required for the succesfull functioning and E&C of 16 mtr. LED type high mast light (200w x 8) will be in the scope of vendor with out extra cost.			Vendor to confirm		
9.0	GUARANTEE:					
9.1	24 Months form the date of commissioning of the equipment.			Vendor to confirm		
10.0	INSPECTION					
10.1	The equipment is to be inspected & tested by the representative of BHEL prior to dispatch at supplier works.			Vendor to confirm		
10.2	15 days advance information regarding inspection of material .			Vendor to confirm		
11.0	QUALIFYING CONDITION					
11.1	Only those OEM/ authorised dealer (authorisation certificate required along with offer), who have supplied and installed at least two no. of high mast light (min.12 Mtr.height) in last five year should quote(from the date of opening of this enquiry). P.O. COPY & INSTALLATION/COMPLETION REPORT/ PERFORMANCE CERTIFICATE ISSUED OR CERTIFIED BY CUSTOMER /SERVICE REPORT of supplied high mast light as above must be submitted.			Vendor to submit		
12.0	BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false/ incorrect, the offer shall be rejected.			Vendor to confirm		

Sandeep Singh
Sr. Engg/WEX

Pawan Kumar
Sr. Mgr. WEX

Rajeev Agrawal
A.G.M/WEX

11/8/2019

Page-1