

## **ADDENDUM - 2**

BHEL Tender Enquiry No 77/13/6119/PS

Notification Date: 05-08-2013

Due date: 28-08-2013

**Extended due date: 12/09/2013**

**Revised Extended due date: 25/09/2013**

**ITEM: Illumination Package**

**PROJECT: Raw Material Handling System, NMDC – Nagarnar, Chhattisgarh**

- 1) Technical Scope Clarity sought during the **pre bid meeting** held at BHEL-ISG, Bangalore on 06-09-2013 is attached in PDF format. Vendors to take care of the **addendum-2** while submitting the offer.
- 2) Drawing (IS-0-GA-669-501-M931) for Elevation and conveyor profiles of RMHS (sheet 29) enclosed for reference.
- 3) Please note that the due date of submission of offer against above mentioned tender is hereby extended upto **25/09/2013**, 2 PM. Tender opening shall be at 3 PM.

All other terms & conditions shall remain same as per Original Enquiry.

**For any technical queries please contact the following executives:**

**1. Rajkumar Rakhra**                      **09483533374**

**2. S.Banra**                                      **09449826182**

Clarification against vendors queries raised during prebid meeting on 06.09.2013 @ BHEL ISG bangalore & clarifications sought through email

S.NO	Vendor's query	Clarification	Remarks
1	Reflective Index of ceiling/wall/floor	1) For civil buildings reflective index to be considered are 0.7/0.5/0.1 2) For other areas like Junction House, Conveyors, Pent house area, Wagon Tippler reflective index to be considered are 0.3/0.1/0.1	
2	Maintenance factor	to be considered 0.6 at all locations	
3	Regarding Philips type fixture HPK105/70W HPSV	The Type of fixture to be used is HPK 150/70W	
4	Street light pole height	The st. light pole height should be 9 m to 11 m as per tech specifications	
5	Street light lux level	Average lux level to be 15 with 0.6 maintenance factor	
6	For street lighting necessary control gear shall be provided for reduced voltage running during off peak traffic for energy conservation.	Street light luminaire suitable for 250 W HPSV lamps of Philips type SGP 401/SON T 250 W OR equivalent. For energy conservation one step dimming to be provided with multi wattage ballast 250W/150W & like chronosense accessory ( Philips) with each light fitting for time control of the dimming. OR group control for street light for one step dimming can be provided. Various solutions are available with the leading brands.	
7	The location & qty of High Mast	1)The location & qty of High Mast indicated in the layout drawing is tentative. The same may be relocated during engineering stage and the quantity of the HM will depend upon the design to achieve the required Lux level. 2)Only civil foundation for the high mast is in the scope of the purchaser. Remaining scope of work with vendor as per tech specs.	
8	DG sets	1) The location of DG sets is shown in the drawings enclosed with the technical specifications of the DG set. The DG set qty as per the location is 15 nos. These are only tentative quantities for the approval of basic engineering drawings. Actual quantities are to be based on the emergency lighting requirement as mentioned in the technical specifications 2) Civil foundation for the DG sets is also in the scope of the vendors along with cover shed as shown in the DG set layout drawing.	
9	D.C lighting	There is no requirement of the DC lighting.	

*RDH*

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10	MLDB/EMLDB	<p>1) As per SLD the qty for MLDB are 15 nos &amp; qty for EMLD are 02 nos. The qty shown are for basic engg. drawing approval only. The actual quantity will be based on the lighting load calculations only.</p> <p>2) MLDB &amp; EMLDB are to be located in dispatcher control rooms D1 to D6 &amp; Electrical control rooms E1 &amp; E2 only as indicated in Scetion-III, Clause 6.0 of tech specs. The floor plan enclosed in respective drawings indicate the location of MLDB &amp; EMLDB</p>
11	Location of SLDB & ESLDB	SLDB & ESLDB locations to be at Junction houses, dispatcher rooms, wagon tippler, for outdoor lighting & st. lighting at suitable loactions.
12	Start of scope of work	The power source will be at respective dispatcher rooms (D1-D6 & E1,E2) from Power control center(PCC). From Source feeder outgoing cable to the lighting transformer & down the line system upto the illumination point is the scope.
13	Lighting Transformer 200 KVA dry Type Impedence	As per IS 2029, Part-I: 4.5%
14	Annexure I to XV contains the various drawings for different areas of the plant, however summary list of drawings for each area is not provided. We request you to kindly provide area wise list of drawings to carry out our detail design	Refer the technical specification , SECTION: III, clause : 03, scope of supply , works & services. Against each area to be covered there is a reference to annexure. In each annexure there is a pdf file which provide summary of the area to be covered & related drawings attachment.
15	Following Drawings are missing	
a	Junction Houses	
i)	JH-22	Ref. annexure-VI autocad drawing enclosed:IS-1-GA-669-504-M270_JH-121LD_Rev.3.dwg. It shows JH-22 profile
ii)	JH-27	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M319_J27_Rev.2.dwg
iii)	JH-28	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M320_JH-128_Rev.6.dwg
iv)	JH-28A	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M321_J28A_Rev.3.dwg
v)	JH-29	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M322_JH-129_Rev.4.dwg
vi)	JH-30	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M323_JH-130_Rev_4.dwg
vii)	JH-31	Ref. annexure-VI autocad drawing enclosed:IS-1-GA-669-503-M284_J31_Rev.2.dwg

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viii)	JH-35	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-501-M021_J35_Rev.2.dwg	
ix)	JH-36	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M329_J36_REV.2.dwg	
x)	JH-37	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-501-M021_J37_Rev.3.dwg	
xi)	JH-38	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-501-M021_J38_Rev.2.dwg	
xii)	JH-41A	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-504-M335_J41A_Rev.2.dwg	
xiii)	JH-46	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M338_J46_Rev.3.dwg	
xiv)	JH-47	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M339_J47_REV.1.dwg	
xv)	JH-48	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M340_J48_REV.1.dwg	
xvi)	JH-55	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M347_J55_Rev.0.dwg	
xvii)	JH-61A	Ref. annexure-VI junction house pdf drawings. Enclosed in pdf format	
xviii)	JH-69B	Ref. annexure-VI autocad drawing enclosed: IS-1-GA-669-503-M366_J69B_Rev.2.dwg	
xix)	JH-59	Ref. annexure-VI junction house pdf drawings JH-58A enclosed. You will find profile of JH-59	
xx)	JH-63	Ref. annexure-VI junction house pdf drawings JH-63A enclosed. You will find profile of JH-63	
xxi)	JH-24	NOT IN OUR SCOPE	
xxii)	JH-61	Drawing enclosed	
b)	Conveyor Profile		
i)	J41AC1	Ref. plot plan coordinates:(X+4647/Y+5283) from (X+4679/Y+5283) for Length, Width = 4310 mm , Height = 2400 mm	Length / width / Height are tentative
ii)	J59C2	Ref. plot plan coordinates:(X+5247/Y+4870) from (X+5337/Y+4870) for Length, Width = 3910 mm , Height = 2400 mm	Length / width / Height are tentative
iii)	J60C2	Ref. plot plan coordinates:(X+5358/Y+4875) from (X+5455/Y+4875) for Length, Width=3910 mm , Height = 2400 mm	Length / width / Height are tentative
iv)	J61C1	drawing enclosed, Ref. plot plan coordinates:(X+5465/Y+4568) from (X+5465/Y+4711) for Length Width= 4110 mm , Height = 2400 mm	Length / width / Height are tentative

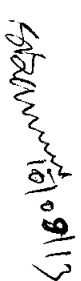
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v)	J63AC1	Ref. plot plan coordinates:(X+4105/Y+4725) from (X+4105/Y+4915) for Length, Width= 4310 mm , Height = 2400 mm	Length / width / Height are tentative
vi)	J69BC1	Not in scope	
c)	Dispatcher room/electrical control room/Civil buildings area - Area repair shop, area sub store, electrical area repair shop, workers rest room, pump houses	1) For Area repair shop, area sub store, electrical area repair shop, pump houses dimensions of the building which are fixed are mentioned in the annexure-VIII, civil structure pdf file. We don't have the drawings right now.	
		2) For workers rest room the auto cad drawing is already enclosed at annexure-VIII.	
16	for Civilstair cases mirror optic fixtures are specified. But we suggest normal surface mounted industrial rail type fixtures for this area.	As per TS only	
17	For Battery rooms, open industrial rail type fixtures are specified , however vapour proof & corrosion resistant fixtures in thses area can be used	For area having acid vapours , vapour proof & corrosion resistant light fittings to be provided.	
18	In Junction houses where EOT cranes are installed the height of the house is increased up to 8 mtrs. It is suggested to use 150W/2520W bay lighting fixtures in place of 70 W HPSV well glass fixture	Provision of type of luminaire for various height options may be followed as per industry standards. 150W/250W may be used as per the requirement & as per tech specification.	
19	We would suggest functional lighting for building periphery & stair case areas	Accepted	
20	To consider Peripheral lighting for emergency purposes	Outdoor area & pheripheral lighting not to be considered for emergency purposes.	
21	Point Wiring	Point wiring is to be done at all location by 2.5 sq.mm stranded Cu only. For concealed wiring in civil structures only 1CX 2.5 sq:mm cu stranded wires to be used. At other location 1CX2.5 sq:mm or 3CX2.5 sq:mm Cu cable can be used.	



22	Concealed wiring in Civil building	In civil building concealed wiring has to be done as per Tech specs.	
23	Automatic changeover to emergency lighting in case of failure of normal lighting	For emergency lighting from DG set auto change over facility to be provided.	
24	Lux level at crusher house & other process buildings	The lux level to be maintained is 150 at 0.6 maintenance factor at the following JH: JH21/22, JH44, JH46, JH49, JH50, JH53, JH61A, JH67, JH68, JH70	
25	Maintenance lighting network with 24 V AC (Clause No: 03, S.no: 1.11 of SECTION-III for tech specs)	All conveyors & JH are to be covered with location of socket at: 1) In JH at each floor of bulding at every 30 m interval or minimum one for each row/side. 2) Socket outlets shall be provided at every 60m distance in conveyer galleries	
26	15 A + 5A, 240 V industrial switch socket socket outlets (Clause No: 03, S.no: 1.12 of SECTION-III for tech specs)	Ref. SECTION-IV, Clause 4.0. S.no18 for the location of the outlets. Apart from the mentioned criteria Socket outlets shall be provided at every 60m distance in conveyer galleries	
27	Lighting performance	All lighting performance will be checked holding the lux meter in horizontal plane at ground level.	

  
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