OIL INDIA LIMITED

(A Government of India Enterprise) P.O. Duliajan-786602, Assam, India E-mail: material@oilindia.in

INVITATION FOR BID NATIONAL COMPETITIVE BID

OIL INDIA LIMITED invites National Competitive Bid (NCB) through its e-procurement portal https://etender.srm.oilindia.in/irj/portal for the following items:

E-Tender No.	Bid Closing / Opening Date	Item
SSI5506P18	12.10.2017	PIPE WRENCH-690 Nos.
SSI5613P18	12.10.2017	CGI SHEET-5000 Nos.
SDI5636P18	12.10.2017	CALLER ID PHONE & PUSH BUTTON PHONE-978 Nos
SDI5634P18	12.10.2017	SUPPLY, INSTALLATION AND COMMISSIONING OF SPARES, CONSUMABLES AND INSULATION (OF EXISTING DUCTS SYSTEM) OF THREE (3) NUMBERS 2 X 11 TR CAPACITY PACKAGE OF BLUE STAR MAKE AIR CONDITIONERS.
SDI5648P18	12.10.2017	FORKLIFT TRUCK-3 Nos.
SSI5192P18	12.10.2017	SPOTTING FLUID-30,000L
SDI5361P18	12.10.2017	POLY ALUMINIUM CHLORIDE-30,000KG
SDI5646P18	12.10.2017	OFFICE FURNITURE- 324 Nos
SDI5644P18	12.10.2017	CABINET, RAKES, WORKSTATIONS- 43 Nos
SDI5654P18	12.10.2017	WOOLEN CLOTH AND KHAKI TERRICOTTON UNIFORM- 5149 mtrs
SDI5649P18	12.10.2017	HIGH MAST – 02 NOS
SDI5650P18	12.10.2017	WATER SEPERATOR – 10 NOS
SDI5651P18	12.10.2017	WATER SOFTENING PLANT – 04 NOS
SDI5652P18	26.10.2017	SKID MOUNTED TOOL ROOM – 04 NOS
SDI5653P18	26.10.2017	WATER TANK – 10 NOS
SDI5638P18	12.10.2017	VIDEO CONFERENCE SYSTEM- 1 No

SDI5639P18 12.10.2017	PRINTER-185 Nos.
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Tender fee (Non-refundable): Rs 1,000.00 (to **be paid online only**); Bid Closing/Opening Time: (**11 Hrs.) IST/(14 Hrs.) IST**; Period of sale of documents: **Till one week prior to bid closing date**. The complete bid documents and details for purchasing bid documents, participation in E-tenders are available on OIL's e-procurement portal https://etender.srm.oilindia.in/irj/portal as well as OIL's website www.oil-india.com.

NOTE: All addenda, Corrigenda, time extension etc. to the tenders will be hosted on above website and e-portal only and no separate notification shall be issued in the press. Bidders should regularly visit above website and e-portal to keep themselves updated.

Attention for Micro & Small Enterprises (MSEs):

Applications are invited from Micro & Small Enterprises (MSEs) to register/enrol their names for supply of listed items against OIL's future tenders. Details alongwith the list of those items are available on OIL's website http://www.oil-india.com/ under "For Vendors>>National Tenders>>Attention for Micro and Small Enterprises (MSEs)" at link http://oil-india.com/oilnew/nmse

Last date of receipt of application is 31.10.2017.

9

OIL INDIA LIMITED

(A Government of India Enterprises) PO: Duliajan – 786602

Assam (India)

TELEPHONE NO: (91-374) 2808719

FAX NO: (91-374) 2800533

 $Email: \ ranjanbarman@oilindia.in \ ; \ erp_mm@oilindia.in$

FORWARDING LETTER

Tender No. : SDI5649P18 DT: 05.09.2017

Tender Fee : **Rs. 1,000.00**

Bid Security Amount : Applicable

Bidding Type : SINGLE STAGE COMPOSITE BID SYSTEM

Bid Closing on : As mentioned in the e-portal

Bid Opening on : -do-

Performance Security : Applicable

Integrity Pact : Not Applicable

OIL invites Bids for Procurement and Installation & Commissioning OF High Mast – (Qty = 04 Nos) through its e-Procurement site under SINGLE STAGE COMPOSITE BID SYSTEM. The bidding documents and other terms and conditions are available at Booklet No. MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents

The general details of tender can be viewed by opening the RFx [Tender] under RFx and Auctions. The details of items tendered can be found in the Item Data and details uploaded under Technical RFX.

The tender will be governed by:

- a) For technical support on various matters viz. Online registration of vendors, Resetting of Passwords, submission of online bids etc, vendors should contact OIL's ERP MM Deptt at following: Tel Nos = 0374-2807178, 0374-2807171, 0374-2807192, Email id = erp_mm@oilindia.in.
- b) OIL's office timings are as below:

	Time (in IST)
Monday – Friday	07.00 AM to 11.00 AM; 12.30 PM to 03.30
	PM
Saturday	07.00 AM to 11.00 AM
Sunday and Holidays	Closed

Vendors should contact OIL officials at above timings only.

c) OIL Bank Details:

		Bank Details of Beneficiary
a	Bank Name	STAE BANK OF INDIA
b	Branch Name	Duliajan
с	Branch Address	Duliajan, Dist-Dibrugarh
d	Banker Account No.	10494832599
e	Type of Account	Current Account
f	IFSC Code	SBIN0002053
g	MICR Code	786002302
h	SWIFT Code	SBININBB479
i	Contact No.	9435554859
j	Contact Person Name	Mr. K.L.K.Banik, AGM
k	Fax No.	0374-2802729
1	Email Id	sbi.02053@sbi.co.in

- d) "General Terms & Conditions" for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.
- e) Technical specifications and Quantity as per **Annexure 1A**.
- f) The prescribed Bid Forms for submission of bids are available in the Technical RFx-> External Area > Tender Documents.
- g) Amendments to the NIT after its issue will be published on OIL's website only. Revision, clarification, addendum, corrigendum, time extension etc. to the tender will be hosted on OIL website only. No separate notification shall be issued in the press. Prospective bidders are requested to visit website regularly to keep themselves updated.
- h) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).
- i) Bidder are advised to fill up the Technical bid check list (**Annexure EEE**) and Response sheet (**Annexure FFF**) given in MS excel format in Technical RFx -> External Area -> Tender Documents. The above filled up document to be uploaded in the Technical Attachment. For details please refer "Vendor User Manual" / "NEW INSTRUCTIONS"

Special Notes:

1.0 Vendors having OIL's User ID & password to pay Tender Fee on-line through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

Vendors who do not have OIL's User ID & password, may generate User ID & password online by the Vendor by using the link for supplier enlistment given in OIL's e-tender portal and then pay Tender Fee on-line through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

No physical tender documents will be provided. Details of NIT can be viewed using "Guest Login" provided in the e-Procurement portal. The link to e-Procurement portal has been also provided through OIL's web site www.oil-india.com.

NOTE:

In case of MSE/PSUs/ Govt. Bodies / eligible institutions etc., they shall apply to DGM-Materials, Oil India Limited, P.O. Duliajan, Assam-786602 for waiver of Tender Fee upto one week prior to the Bid closing date (or as amended in e-portal).

- 2.0 The tender is invited under SINGLE STAGE- COMPOSITE BID SYSTEM. The bidders are required to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" through electronic format in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.
- 2.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the Technical RFx Response-> Technical Attachment only. For details please refer "NEW INSTRUCTIONS" ". Please refer Annex-BB for price schedule.
- 3.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with <u>Tender no.</u> and <u>Due date</u> to **DGM- Materials**, **Materials Department**, **Oil India Limited**, **Duliajan 786602**, **Assam** on or before the Bid Closing Date and Time mentioned in the Tender.
 - a) Original Bid Security
 - b) Detailed Catalogue (if any)
 - c) Any other document required to be submitted in original as per tender requirement

All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in Duplicate.

- 4.0 Benefits to Micro & Small Enterprises (MSEs) as per OIL's Public Procurement Policy for Micro and Small Enterprises (MSEs) shall be given. Bidders are requested to go through ANNEXURE I of MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders for more details. MSE bidders are exempted from submission of Tender Fees and Bid Security/Earnest Money provided they are registered for the items they intend to quote.
- 5.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.

- 6.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time failing which the offer shall be rejected.
- 7.0 Bid must be submitted electronically only through OIL's e-procurement portal. Bid submitted in any other form will be rejected.
- 8.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-CCC**. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per **Annexure-CCC**) contradict the Clauses of the tender and / or "General Terms & Conditions" as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.
- 9.0 To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.
- 10.0 Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.
- 11.0 If Bank Guarantee is submitted towards 'Bid Security', then bidders have to ensure that the Bank Guarantee issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the Bank Guarantee can be obtained.
- 12.0 Bidders are requested to refer to the enclosed <u>Annexure BBB</u> for the Taxes and Duties clauses under GST regime.

13.0 Delivery/collection Instructions in cases where transportation is in OIL's scope:

- (i) the suppliers shall be required to deliver the Sundry consignments of weight less than 3 (Three) Tons at the godown/office/collection point of OIL's authorized transporter in various cities.
- (ii) consignments weighing more than 3(Three) Tons shall be collected from the supplier's premises/loading points by OIL's authorized transporter.
- (iii) the names of OIL's current authorized transporters are:
 - a) M/s Western Carriers (India) Ltd.
 - b) M/s DARCL Logistics Limited

Bidder's are requested to note the above delivery/collection instructions while submitting their offers.

14.0 While submitting the offers bidders are requested to refer to the enclosed **Annexure – BB** (Price Bid Format and Evaluation Criteria).

Please do refer "NEW INSTRUCTION TO BIDDER FOR SUBMISSION" for the above two points and also please refer "New Vendor Manual (effective 12.04.2017)" available in the login Page of the OIL's E-tender Portal.



NOTE:

<u>Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.</u>

Yours Faithfully

Sd-

(R BARMAN) SR. MANAGER MATERIALS (IP) FOR DGM-MATERIALS

Complied

Tender No & Date: SDI5649P18 DT: 05.09.2017

BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

Criteria

The following BRC/BEC will govern the evaluation of the bids received against this tender. Bids that do not comply with stipulated BRC/BEC in full will be treated as non responsive and such bids shall prima-facie be rejected. Bid evaluation will be done only for those bids that pass through the "Bid Rejection Criteria" as stipulated in this document.

Other terms and conditions of the enquiry shall be as per General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BRC / BEC) contradict the Clauses of the tender or MM/LOCAL/E-01/2005 elsewhere, those in the BRC / BEC shall prevail.

Criteria	No4	′
	Not	
	Complied.	
	(Remarks	if
	any)	
1.0 BID REJECTION CRITERIA (BRC):	-	
The bid shall conform generally to the specifications, terms and conditions given in this document. Notwithstanding the general conformity of the bids to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected.		
A) TECHNICAL:		
1. Bidder should have the experience of successfully executing at least 02(two) similar order in preceding 5(five) years as on the original Bid Closing Date.		
"Similar Order" shall mean: (i. e., supplying and commissioning) of at least 02 (two) no. of 30meter high mast to Central Govt./State Govt./ PSU/ Public Ltd company in the last 5 years as on bid closing date		
2. Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along with copies of any of the following documents in respect of satisfactory execution of each of those Purchase Orders, such as:		
i. Satisfactory Inspection Report (OR)		
ii. Satisfactory Supply Completion / Installation Report (OR)		
iii. Consignee Receipted Delivery Challans (OR)		
iv. Central Excise Gate Pass / Tax Invoices issued under relevant rules of Central Excise / VAT/GST		

(OR)

v. Any other documentary evidence that can substantiate the satisfactory execution of each of the purchase orders cited above.

B) FINANCIAL

- a) Annual Financial Turnover of the bidder during any of preceding 03 (three) financial / accounting years from the original bid closing date should be at least Rs. 16.66 Lakhs.
- b) Net Worth of the firm should be Positive for preceding financial / Accounting year. (FY=2016-2017)

Note -For (a) & (b): Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year....................... (As the case may be) has actually not been audited so far'.

Notes:

- a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-
- i) A certificate issued by a practicing Chartered Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE-J.

OR

- ii) Audited Balance Sheet along with Profit & Loss account.
- b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

C) COMMERCIAL:

- i) Validity of the bid shall be minimum 90 days from the Bid Closing Date.
- ii) Bid security:

The bid must be accompanied by Bid Security of **Rs.** 66,700.00 in OIL's prescribed format as Bank Guarantee in favour of OIL. The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid

Closing date to DGM-Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. **The Bank Guarantee towards Bid Security shall be valid for 6 months from Bid closing date.** (i.e. upto 12.04.2018).

Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.

If bid security in ORIGINAL of above mentioned Amount and Validity is not received or paid online within bid closing date and time, the bid submitted through electronic form will be rejected without any further consideration.

For exemption for submission of Bid Security, please refer Clause No. 8.16 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

The format of Bank Guarantee towards Bid Security (Annexure – VII) has been amended to Annexure – VII (Revised) and bidders should submit Bank Guarantee towards Bid Security as per Annexure – VII (Revised) only.

iii) Bids are invited under "Single Stage Composite Bid System". Bidders have to submit both the "Techno-commercial Unpriced Bids" and "Priced Bids" through electronic form in the OIL's e-Tender portal within the bid Closing date and time stipulated in the e-tender. The Techno-commercial Unpriced bid is to be submitted as per scope of works and Technical specification of the tender and the priced bid as per the online Commercial bid format. For details of submission procedure, please refer relevant para of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

iv) Performance Security:

The successful bidder shall submit Performance Security @ 10% of PO value within 30 days of receipt of the formal purchase order failing which OIL reserves the right to cancel the order and forfeit the Bid Security. Bidders should undertake in their bids to submit Performance Security as stated above.

The Performance Security shall be in any one of the following forms:

A Bank Guarantee in the prescribed OIL's format valid for 3(three) months beyond the Warranty period indicated in the Purchase Order /contract agreement.

The Performance Security for capital nature items like plant and machinery etc. shall be valid for 12 months from the date of commissioning plus 3(three) months or 18 months from the date of shipment/despatch plus 3(three) months whichever concludes earlier. However, for consumables like chemicals, cement, tubular etc. the Performance Security shall be valid for 12 months from the date of shipment/despatch plus 3(three) months.

The validity requirement of Performance Security is assuming despatch within stipulated delivery period and confirmation to all terms and conditions of order. In case of any delay in despatch or non-confirmation to all terms and conditions of order, validity of the Performance Security is to be extended suitably as advised by OIL.

- v) The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- vi) Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.
- vii) All the Bids must be Digitally Signed using "Class 3" digital certificate with Organisation's name (*e-commerce application*) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than "Class 3 with Organisation's Name" digital certificate, will be rejected.
- viii) Price should be maintained in the "online price schedule" only. The price submitted other than the "online price schedule" shall not be considered.
- ix) A bid shall be rejected straightway if it does not conform to any one of the following clauses:
- (a) Validity of bid shorter than the validity indicated in the Tender.
- (b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.
- (c) Bid Security with (i) Validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.
- (d) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.
- x) <u>DELIVERY</u>: Materials/items are to be supplied by the bidder within 4 months after receipt of LOA/firm order. Bidder/supplier has to complete installation and commissioning jobs for all items within 3 months, on intimation of site clearance by OIL.

NOTE: FOR CLAUSE NOS. C(ii) & C(iv) OF BID SECURITY/EMD AND PBG

The bidders/successful bidders are requested to advise the Bank Guarantee issuing bank to comply with the following and ensure to submit, the receipt of the copy of SFMS message as sent by the issuing bank branch, along with the original bank guarantee in Oil's tender issuing office:

The bank guarantee issued by the bank must be routed through SFMS platform as per following details:

- (i) "MT 760 / MT 760 COV for issuance of bank guarantee.
- (ii) "MT 760 / MT 767 COV for amendment of bank guarantee

The above message/intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Duliajan Branch, IFS Code - UTIB0001129, Branch

Address - AXIS Bank Ltd, Duliajan Branch, Daily Bazar, Jyotinagar, Duliajan, District - Dibrugarh, PIN- 786602

2.0 BID EVALUATION CRITERIA (BEC)

The bids conforming to the terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria as well as verification of original of any or all documents/ documentary evidences pertaining to BRC, will be considered for further evaluation as per the Bid Evaluation Criteria given below.

A) TECHNICAL:

i) The bid will be evaluated strictly as per NIT specification, terms & conditions.

B) COMMERCIAL:

- i) To evaluate the inter-se-ranking of the offers, all Taxes / Levies will be considered as per prevailing Govt. guidelines as applicable on the bid opening date. Bidders may check this with the appropriate authority before submitting their offer.
- ii) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.
- iii) To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

NOTE:

<u>Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the terms and conditions of NIT.</u>

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TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI5649P18 DT: 05.09.2017

TTTT 5.10 10	l l
	any)
	(Remarks if
	Complied. (Remarks if
	Not
	Complied /

ITEM NO.10

SUPPLY OF 30 METERS TALL HIGH MAST LIGHTING SYSTEM WITH 12NOS. OF 2X400 WATT SON FITTINGS WITH NON INTEGRAL CONTROL GEAR BOX. DETAILS OF SPECIFICATIONS ARE GIVEN BELOW: - QTY = 02 NOS

Annexure-I

TECHNICAL SPECIFICATIONS OF 30 MTRS HIGH MAST LIGHTING SYSTEM

1.0 MAST:

- 1.1 The high mast shall be continuously tapered, polygonal cross section and 30 meters high above base plate. The mast shall be fabricated from steel plate welded construction in suitable number of sections (not less than 3), telescopically jointed giving a continuous tapered profile and presenting good visual appearances.
- 1.2 Mast sections material shall conform to IS 2062.
- 1.3 The mast sections are hot dipped galvanized both inside and outside conforming to IS: 4759-1984, IS: 2629-1985, IS: 2633-1072. Galvanisation thickness shall be of minimum 80 micron.
- 1.4 Mast structure shall be designed to withstand wind velocity of 180km/hr. with 3 sec. gust conforming IS: 875 part VIII 1987 and should have wind load factor 1.25 and material factor 1.15.
- 1.5 The base flange shall be provided with gusset and high tensile anchor bolts.
- 1.6 The bottom most section shall accommodate winch electric drive, cable, plug/socket etc. with a proper door opening in order to permit clear access to the above components. The door shall be dust proof; vermin proof and weather protected (IP 55) and shall be provided with suitable locking arrangement.
- 1.7 Mast shall be provided with lightning protection.
- 1.8 Provisions for suitable Earthing shall be provided.
- 1.9 The mast shaft shall be made with best steel in compliance with BS EN 10025 FE 510 having the guaranteed characteristics.

- a. Minimum yield strength = 335 N/Sq. mm for thickness< 30mm.
- b. Tensile strength ranging from 340 to 470 N/sq. mm.
- c. Minimum elongation for thickness between 3 mm and 30 mm.
- d. All holding bolts are hot dip galvanized to BS 729.

2.0 LANTERN CARRIAGE

- 2.1 The lantern carriage shall be of steel tubular ring type construction designed to accommodate 12 Nos. of HPSV flood light luminaries with necessary C.G. Box in and radically symmetrical fashion.
- 2.2. The complete lantern carriage assembly shall be hot dip galvanized after fabrication.
- 2.3 The carriage shall have proper arrangement to avoid swing and to prevent damage to mast surface or other installed parts during lowering/raising operation of carriage.
- 2.4. All hardware used shall have necessary corrosion protection.
- 2.5 Lantern Carriage/Accessories shall be made with best steel in compliance with BS EN 10025 FE 430 A having the following guaranteed characteristics.
- a.Minimum yield strength 225 to 250 N/Sq. mm for thickness< 30mm
- b. Tensile strength ranging from 340 to 470 N/Sq. mm.
- c. Minimum elongation 23 to 26%.
- 2.6 Galvanization as per IS 4759, minimum thickness of galvanization 80 micron.

3.0 WINCH ASSEMBLY:

- 3.1 Winch assembly, meant for hoisting of lantern carriage shall be fixed in the base of the mast and shall have provision to operate both manually and electrically. The double drum winch should be suitably designed to handle the total weight of lantern carriage assembly with all fittings and accessories with required factor of safety.
- 3.2 The winch shall be of self sustaining and self lubricating type with positive locking arrangement. The rope drum is fabricated as per IS-807 and the wire rope is wound/unwound on double drum winch during movement of lantern carriage.
- 3.3 Particular care shall be exercised in all aspects of design, manufacture, and testing and installation arrangement of the system to ensure optimum safety under all operating condition to give a minimum 25 years of operating life.
- 3.4 Test certificates shall be provided with each winch stating clearly the capacity, speed and recommended lubricant.
- 3.5 The material of construction for top pulley block shall be non corrosive and preferably made of die cast LM-6 aluminum /brass alloy with self lubricating bearing.
- 3.6 The design shall ensure that the operation of pulley is maintenance free Pulley should be provided with weather proof cover.

4.0 WIRE ROPE:

- 4.1. The wire ropes are flexible marine grade and non corrosive stainless steel.
- 4.2. A minimum 8 turn of wire ropes shall be on the drum when the lantern carriage is fully lowered.
- 4.3. The stainless steel wire is of minimum 6mm diameter, 7x19 constructions which shall have a factor of safety not less than 5 times the safe working load (SFL) of winch.

5.0 WINCH DRIVING POWER TOOL:

5.1 The winch drive unit shall be squirrel cage reversible induction motor with following characteristic:

415V, 3 phase, 50 HZ

Class F insulation and temperature class limited to class B

Weather resistant

- IP 55 Protections, Make- Crompton Greaves/ Kirloskar Ltd/ Siemens/ Bharat Bijlee
- 5.2. The capacity of the electric motor used in power tool shall be compatible to handle the design load of lantern carriage (Min 2.0 HP).
- 5.3 The power tool shall be housed at the base of the mast.
- 5.4 For safety reasons and final precision docking of lantern carriage ring, the power tool must have provision to operate manually by using external crank device without removing the drive motor from the winch unit.

6.0 CONTROL PANEL (FEEDER PILLAR BOX)

- 6.1. Feeder pillar box made of 14 SWG CRCA sheet metal, self supporting, floor mounted, dust, vermin and weather proof for outdoor use shall be supplied for locally/automatically switching' ON/OFF of luminaries. The enclosure protection shall be IP 55. The control panel comprises the following.
- 6.2. 63 Amps, TPN SFU with 63 A fuse as incomer with silver plated contacts.

Make: GE/Siemens/Schneider.

6.3. 32 Amps TPN fuse switch unit as isolator for motor starter(Fuse as per motor HP).

Make: GE/Siemens/Schneider.

6.4 Earth leakage Relay with separate core balance current transformer

Sensitivity: 30 mA to 3A, Time delay: 0 - 5 sec, current and time setting

adjustable in steps.

Make: Merlin Gerlin/ MDS Legrand

6.5. Triple pole power contactor AC 3 rating min 40A rating for long life for light control. Make: Siemens/Telemmchanique/GEPC

Triple pole power contactor AC 3 rating min 16A rating for motor hoisting and lowering, Make: Siemens/Telemmchanique/GEPC

6.6. Digital Voltmeter & Ammeter, size-96mm X 96mm,

Range 0-600V, Current transformer with CT ratio-50/5 Make- Conzerv / AEI Ltd/L&T

LED- 3 nos for R,Y,B phase indication.

LED-2 Nos for a)Raising b)Lowering of the mast

- 6.7. Start/Stop push button for locally switching ON/OFF the luminaries 1 set.
- 6.8. NS 4 type fuses carrier and base for control circuit.
- 6.9. Automatic lighting Switch with digital time—switch of DIN rail mounting suitable for astronomical calculations of sun rise and sun set during summer/winter by setting date, time and positions of longitude and lattitude, model-Astro Rex-D21 of Legrand, astro-time -switch, 230V AC, 50HZ, Make- MDS legrand/ Merlin Gerin
- 6.10.All power and control wiring shall be done with 1 core, 1100 V grade PVC insulated, IS marked ,flexible copper cable. Power cable size shall be as per IS 8623,control cable 2.5 Sqmm.
- 6.11. Brought out terminals of tinned copper shall be provided at incomer for terminating 4x25

Sqmm PVCA cable. All outgoing connections from 63 A TPN Switch shall be tapped through suitable rectangular copper bars.

- 6.12. Detachable gland plate and copper brought out terminals for incoming and outgoing cable connection
- 6.13. Feeder Pillar box to be cleaned with 7 tank anti rust treatment and then power coated on all sides with DA Paint. (Min thickness of paint 50 micron)
- 6.14. Push button for raising and lowering the mobile part shall operate on "Dead man principal" i.e. action shall cease as soon as the button is released.
- 6.15. Feeder Pillar should be located min. 5meters radial distance from high mast.
- 6.16. A single line diagram for Feeder Pillar shall be submitted along with the offer.
- 6.17. The height of foundation for panel shall be min. 450 mm from the ground level.

7.0 LUMINARIES:

7.1. 12 nos. of non-integral type, 2x400 W HPSV flood light luminaries with IP-65 protection similar to RVP 501 of Phillips Make with HPSV tubular lamps complete with external control gear box with all accessories. Cast Aluminium alloy control gear box shall be complete with VPI Electro Magnetic ballast, ignitor PF correction capacitor and individual HRC fuse and shall be as per IP 65.

Make of Luminaries shall be restricted to: PHILLIPS/CROMPTON/BAJAJ/GE

2Nos. 4 core, 6sqmm, copper conductor, flexible screen cable, 1100V grade, Make- Nicco/ Incab / Polycab /Finolex shall be used from lantern carriage to terminal block. Terminal block shall be covered to protect it from the entry of insects and dust particles.

8.0. EARTHING:

8.1. The mast shall be provided with lightning protection system comprising of an Earthing system per following specification:

50mmdia, 3 meters Long G.I Pipe with bricks enclosures of size 600mm X 600mm and RCC cover - 4Nos.

30mm X 6mm G.I straps for interconnection of stud at mast

2 nos.each electrodes for lightening arrester and 2Nos. earth electrodes for earthing system of high mast lighting system shall be provided.

9.0 TOOL BOX:

9.1 A tool box of sheet steel containing a set of general and special purpose tools is to be supplied along with high mast for maintenance job.

10.0. AVIATION OBSTRUCTION LIGHTS & LIGHTENING ARRESTER

10.1 Medium intensity LED aviation obstruction light similar to neon spiral type fitted in a weather- proof box on body unit of Aluminium alloy shall be supplied. The cover of the light will be glass with rubber gasket (IP65 protection). High Luminosity flashing red light emitting diodes having life of 11 years. Power consumption 10 to 15 Watts, 230V AC, 50HZ, 90 candela. LED#s are mounted on fire retardant epoxy printed circuit board in five series-parallel circuits.-1Set

Make- Binay Opto Electonics Pvt. Ltd./Bajaj Electricals Ltd/ Philips.

- 10.1 Lightning protection shall be provided on the top of the high mast.
- 10.2 Lightening arrester shall be connected rigidly to the foot of the mast.

11.0. FOUNDATION:

- 11.1 Foundation of high mast shall be designed for Zone V considering the Earth Quake resistance measure. Party shall have to design and furnish the details of foundation of High mast along with the offer for zone V.
- 11.2 The bearing capacity of the soil is 10 T/m 2

12. GENERAL CONDITIONS:

- 12.1 Supply, erection, testing and commissioning, including civil foundation jobs, of high mast to be done by the party. The civil jobs of the foundation of the high mast shall be done by the party after approval of foundation drawing by OIL. All the materials for foundation shall be supplied by the party including metallic items like site bolts, anchor plate, steel template etc. Curing time and treatment for foundation shall be as directed by OIL before start of foundation work.
- 12.2 All necessary arrangements for erection of mast are to be made by the party including supply of all safety appliances and tools to workman.
- 12.3 Transportation of men and materials to the site will be party's responsibility and M/S. Oil India Limited will not provide any transport or transferring of man and materials to the site.
- 12.4 The persons who are authorized to carry out electrical works should have valid electrical supervising license and work permit as per I.E. Rules. Copy of the license to be submitted along with the offer.
- 12.5 For installation, testing and commissioning of mast, party should have valid electrical license valid for Assam. Copy of the license to be submitted along with the offer.
- 12.6 The party should submit detailed schedule of program of work within 15 days from the award of order.
- 12.7 The whole work should be completed within 3 to 4 month from the date of issue of order to the entire satisfaction of Engineer-in-charge of OIL.
- 12.8 The party will be responsible for their tools, tackle and materials and personnel at site till the towers are finally handed over to OIL.
- 12.9 The party will take all safety measures during the execution of the work. OIL will not compensate to the party in any way for any loss of man and material.
- 12.10 If due to improper execution of the work or due to negligence on the part of the party's workmen, OIL#s property is damaged, the parties will compensate for the loss.
- 12.11 The party will submit six set of operation and maintenance instruction manual with each high mast set and on site drawings of all the components of mast.
- 12.12 All the works shall be carried out as per relevant codes, practices rules and regulations. The workmanship will be of very high standard.
- 12.13 Party shall make its own arrangement for boarding and lodging of their working personnel.
- 12.14 The work shall be carried out under direct supervision of the party. The party shall submit monthly progress report of work to the Engineer-in-charge in writing.
- 12.15 If the job is not completed in the stipulated time, the contactor shall be penalized at the rate of 0.01% of the unfinished job per month.
- 12.16 Any deviation shall be clearly spelled out along with the offer.
- 12.17 Verticality and straightness measurement shall be carried out and these should be within the limits as specified by manufacturer for wind velocity, earthquake zone mentioned in Tender.
- 12.18 A separate test certificate of the winch shall be submitted.
- 12.19 Supplier's Test Certificate shall be submitted for each reel of rope.
- 12.20 Test certificate of chemical composition and mechanical properties of Sheets and Flange

Plates shall be submitted as per the relevant Standards.

- 12.21 Test certificate of Head Frame Assembly, Mast sections, Trailing cable and cable connector as per relevant standards shall be submitted.
- 12.22 Welding and Fabrication detail shall be submitted to OIL. These should be as per relevant standard Rules, Regulations and practices.
- 12.23 Principles and details of joints shall be shown on drawings which will be submitted immediately after placement of order.
- 12.24 The thickness of internal and external galvanization shall be as per B5729 and IS 4759 and a test certificate shall be submitted confirming the minimum thickness of galvanization 80 micron.
- 12.25 Detailed dimensional drawing of the complete Mast including the dimensional details of Base door opening, the distance from the Mast Flange plate to the bottom of the door etc. should be submitted after placement of purchase order.
- 12.26 A drawing with details of Head Frame Assembly complete with Pulley, Guides, Ropes, covering to stop access of birds or other objects/rains etc. and power wiring arrangement should also be submitted after placement of purchase order.
- 12.27 Heat resisting cable shall be used between lamp holders and circuit connection points. Manufacture's Test Certificate as per relevant standard shall be submitted after placement of order.
- 12.28 Type of light distribution diagram will be submitted immediately after placement of purchase order.
- 12.29 All components shall be designed to require the minimum of maintenance and skilled attention and also to allow routine maintenance to be carried out quickly and easily with a minimum use of tools.
- 12.30 Every reasonable precaution and provision shall be incorporated in the design of the equipment for the safety and security of the system and of those concerned with its operation and maintenance.
- 12.31 The electrical installation shall comply of all appropriate statutory requirements, rules, regulations, standards and practices.
- 12.32 All metal work including luminaries, control gear units and luminaries carriage shall be bonded to the earth core of the luminaries supply cable. The earth continuity from luminaries carriage shall be via a single core of the multi-core cable.
- 12.33 The Mast shall be ventilated. Details by means of which this is achieved shall be submitted after placement of order.
- 12.34 The average rate of raising and lowering shall be not less than 3 meters per minute. Initial supply of oil for winch shall be given by the party.
- 12.35 High mast and accessories with fitting will be inspected by OIL's, Engineer at the premises of supplier before dispatch.
- 12.36 Party should submit credential to establish that they have executed successfully supply, erection, testing and commissioning of similar type of high mast in at least two Govt, semi-govt or PSU organizations. The manufacturer of the make offered by the party must have the experience of manufacturing of atleast 100 Nos of similar type high mast in last 5 years from the date of enquiry.Party/Authorised dealer must have experience of erection and commissioning of at least 5 Nos of similar high mast lights in Zone V area. Performance certificate of satisfactory completion of jobs and trouble free operation of the high mast offered from those organizations shall be submitted. Offer without any of these documents will be liable for rejection
- 12.37 Test certificate of steel plate, anchor plate, wire rope, Drum winch, wind velocity test and galvanization thickness shall be furnished along with quotation.
- 12.38 Party should fill up the Data sheet as per Annexure-II failing which offer is liable for rejection.

- 12.39 High mast should be designed to have maintenance free life of 25years and should be guaranteed for a period of 25 years against any manufacturing / design defects.
- 12.40 The construction of high mast must be of suitable design such that it can withstand the abnormal climatic condition which is normally encountered in this part of the country. It may also be noted that the location comes under Seismic zone V i.e. Earth quake prone area.
- 12.41 Self supporting 4 legged FRP platform ladder of suitable height of 8.10 feet shall be supplied for maintenance of high mast fitting when mast is lowered. Ladder shall be supplied with locking facility with the mast.

Documents: The following documents are to be submitted along with the offer for technical scrutiny failing which offer shall be liable for rejection.

- 1. RCC foundation details (2 sets) suitable for Zone V
- 2. Design calculations of foundation of high mast(2 sets)
- 3. Design calculation of high mast
- 4. Complete Catalogue of high mast ,luminaries and aviation light
- 5. General Arrangement (GA) diagram and Circuit diagrams of Feeder Pillar.
- 6. Illumination level chart
- 7. Test certificate of steel plate, anchor plate, wire rope, and galvanization thickness Drum winch, wind velocity test
- 8. Quality Assurance Plan for High mast shaft and accessories.
- 9. Credentials/ Experience certificates indicated as per Para: 12.36
- 10. Filled in data sheet as per Annexure II

Payment terms- 80% of the materials values against dispatch documents and balance 20% of the materials value along with 100% taxes , Installation and commissioning charges after successful installation, testing , commissioning and handing over of all high mast lighting system.

BID REJECTION CRITERIA (BRC)/BID EVALUATUION CRITERIA(BEC):

Offer without any of the documents indicated under Para "Documents" will not be considered for evaluation.

ITEM NO. 20

INSTALLATION & COMMISSIONING AND TESTING OF ITEM NO.10- QTY= 01 AU (1AU MEANS INSTALLATION & COMMISSIONING OF 02 NOS HIGH MAST AS MENTIONED IN ITEM NO. 10)

INSTALLATION AND COMMISSIONING JOBS SHALL INCLUDE:

- 1. Delivery of all items at site by bidder.
- 2. Installation, testing & commissioning of the complete light masts including feeder pillars.
- 3. All cabling works from feeder pillar to mast/power tool/luminaires
- 4. Supply of earth straps & earth electrodes, preparation of earth pits in the scope of OIL.
- 4. Laying and connection of earth straps from mast and feeder pillar to earth pits.
- 5. Accomodation may be provided on chargeable basisi subject to availablity of house.
- 6. Crane service may be provided on chargeable basis subject to availability of crane.
- 7. Transportation of man & materials up to site is the scope of bidder.
- 8. Commissioning report to be provided after the completion of work for the release of payment.

ITEM NO. 30

SUPPLY OF 30 METERS TALL HIGH MAST LIGHTING SYSTEM WITH 12NOS. OF 2X400 WATT SON FITTINGS WITH NON INTEGRAL CONTROL GEAR BOX. DETAILS OF SPECIFICATIONS ARE GIVEN BELOW: QTY = 02 NOS

Annexure-I

TECHNICAL SPECIFICATIONS OF 30 MTRS HIGH MAST LIGHTING SYSTEM

1.0 MAST:

- 1.1 The high mast shall be continuously tapered, polygonal cross section and 30 meters high above base plate. The mast shall be fabricated from steel plate welded construction in suitable number of sections (not less than 3), telescopically jointed giving a continuous tapered profile and presenting good visual appearances.
- 1.2 Mast sections material shall conform to IS 2062.
- 1.3 The mast sections are hot dipped galvanized both inside and outside conforming to IS: 4759-1984, IS: 2629-1985, IS: 2633-1072. Galvanisation thickness shall be of minimum 80 micron.
- 1.4 Mast structure shall be designed to withstand wind velocity of 180km/hr. with 3 sec. gust conforming IS: 875 part VIII 1987 and should have wind load factor 1.25 and material factor 1.15.
- 1.5 The base flange shall be provided with gusset and high tensile anchor bolts.
- 1.6 The bottom most section shall accommodate winch electric drive, cable, plug/socket etc. with a proper door opening in order to permit clear access to the above components. The door shall be dust proof; vermin proof and weather protected (IP 55) and shall be provided with suitable locking arrangement.
- 1.7 Mast shall be provided with lightning protection.
- 1.8 Provisions for suitable Earthing shall be provided.
- 1.9 The mast shaft shall be made with best steel in compliance with BS EN 10025 FE 510 having the guaranteed characteristics.
 - a. Minimum yield strength = 335 N/Sq. mm for thickness< 30mm.
 - b. Tensile strength ranging from 340 to 470 N/sq. mm.
 - c. Minimum elongation for thickness between 3 mm and 30 mm.
 - d. All holding bolts are hot dip galvanized to BS 729.

2.0 LANTERN CARRIAGE

2.1 The lantern carriage shall be of steel tubular ring type construction designed to accommodate 12 Nos. of HPSV flood light luminaries with necessary C.G. Box in and radically

symmetrical fashion.

- 2.2. The complete lantern carriage assembly shall be hot dip galvanized after fabrication.
- 2.3 The carriage shall have proper arrangement to avoid swing and to prevent damage to mast surface or other installed parts during lowering/raising operation of carriage.
- 2.4. All hardware used shall have necessary corrosion protection.
- 2.5 Lantern Carriage/Accessories shall be made with best steel in compliance with BS EN 10025 FE 430 A having the following guaranteed characteristics.
- a.Minimum yield strength 225 to 250 N/Sq. mm for thickness< 30mm
- b. Tensile strength ranging from 340 to 470 N/Sq. mm.
- c. Minimum elongation 23 to 26%.
- 2.6 Galvanization as per IS 4759, minimum thickness of galvanization 80 micron.

3.0 WINCH ASSEMBLY:

- 3.1 Winch assembly, meant for hoisting of lantern carriage shall be fixed in the base of the mast and shall have provision to operate both manually and electrically. The double drum winch should be suitably designed to handle the total weight of lantern carriage assembly with all fittings and accessories with required factor of safety.
- 3.2 The winch shall be of self sustaining and self lubricating type with positive locking arrangement. The rope drum is fabricated as per IS-807 and the wire rope is wound/unwound on double drum winch during movement of lantern carriage.
- 3.3 Particular care shall be exercised in all aspects of design, manufacture, and testing and installation arrangement of the system to ensure optimum safety under all operating condition to give a minimum 25 years of operating life.
- 3.4 Test certificates shall be provided with each winch stating clearly the capacity, speed and recommended lubricant.
- 3.5 The material of construction for top pulley block shall be non corrosive and preferably made of die cast LM-6 aluminum /brass alloy with self lubricating bearing.
- 3.6 The design shall ensure that the operation of pulley is maintenance free Pulley should be provided with weather proof cover.

4.0 WIRE ROPE:

- 4.1. The wire ropes are flexible marine grade and non corrosive stainless steel.
- 4.2. A minimum 8 turn of wire ropes shall be on the drum when the lantern carriage is fully lowered.
- 4.3. The stainless steel wire is of minimum 6mm diameter, 7x19 constructions which shall have a factor of safety not less than 5 times the safe working load (SFL) of winch.

5.0 WINCH DRIVING POWER TOOL:

5.1 The winch drive unit shall be squirrel cage reversible induction motor with following characteristic:

415V, 3 phase, 50 HZ

Class F insulation and temperature class limited to class B

Weather resistant

- IP 55 Protections, Make- Crompton Greaves/ Kirloskar Ltd/ Siemens/ Bharat Bijlee
- 5.2. The capacity of the electric motor used in power tool shall be compatible to handle the design load of lantern carriage (Min 2.0 HP).
- 5.3 The power tool shall be housed at the base of the mast.

5.4 For safety reasons and final precision docking of lantern carriage ring, the power tool must have provision to operate manually by using external crank device without removing the drive motor from the winch unit.

6.0 CONTROL PANEL (FEEDER PILLAR BOX)

- 6.1. Feeder pillar box made of 14 SWG CRCA sheet metal, self supporting, floor mounted, dust, vermin and weather proof for outdoor use shall be supplied for locally/automatically switching' ON/OFF of luminaries. The enclosure protection shall be IP 55. The control panel comprises the following.
- 6.2. 63 Amps, TPN SFU with 63 A fuse as incomer with silver plated contacts.

Make: GE/Siemens/Schneider.

6.3. 32 Amps TPN fuse switch unit as isolator for motor starter(Fuse as per motor HP).

Make: GE/Siemens/Schneider.

6.4 Earth leakage Relay with separate core balance current transformer

Sensitivity: 30 mA to 3A, Time delay: 0 - 5 sec, current and time setting

adjustable in steps.

Make: Merlin Gerlin/ MDS Legrand

6.5. Triple pole power contactor AC 3 rating min 40A rating for long life for light control. Make: Siemens/Telemmchanique/GEPC

Triple pole power contactor AC 3 rating min 16A rating for motor hoisting and lowering, Make: Siemens/Telemmchanique/GEPC

6.6. Digital Voltmeter & Ammeter, size-96mm X 96mm,

Range 0-600V, Current transformer with CT ratio-50/5 Make- Conzerv / AEI Ltd/L&T

LED- 3 nos for R,Y,B phase indication.

LED-2 Nos for a)Raising b)Lowering of the mast

- 6.7. Start/Stop push button for locally switching ON/OFF the luminaries 1 set.
- 6.8. NS 4 type fuses carrier and base for control circuit.
- 6.9. Automatic lighting Switch with digital time—switch of DIN rail mounting suitable for astronomical calculations of sun rise and sun set during summer/winter by setting date, time and positions of longitude and lattitude, model-Astro Rex-D21 of Legrand, astro-time -switch, 230V AC, 50HZ, Make- MDS legrand/ Merlin Gerin
- 6.10.All power and control wiring shall be done with 1 core, 1100 V grade PVC insulated, IS marked ,flexible copper cable. Power cable size shall be as per IS 8623,control cable 2.5 Sqmm.
- 6.11. Brought out terminals of tinned copper shall be provided at incomer for terminating 4x25 Sqmm PVCA cable. All outgoing connections from 63 A TPN Switch shall be tapped through suitable rectangular copper bars.
- 6.12. Detachable gland plate and copper brought out terminals for incoming and outgoing cable connection
- 6.13. Feeder Pillar box to be cleaned with 7 tank anti rust treatment and then power coated on all sides with DA Paint. (Min thickness of paint 50 micron)
- 6.14. Push button for raising and lowering the mobile part shall operate on "Dead man principal" i.e. action shall cease as soon as the button is released.
- 6.15. Feeder Pillar should be located min. 5meters radial distance from high mast.
- 6.16. A single line diagram for Feeder Pillar shall be submitted along with the offer.

6.17. The height of foundation for panel shall be min. 450 mm from the ground level.

7.0 LUMINARIES:

7.1. 12 nos. of non-integral type, 2x400 W HPSV flood light luminaries with IP-65 protection similar to RVP 501 of Phillips Make with HPSV tubular lamps complete with external control gear box with all accessories. Cast Aluminium alloy control gear box shall be complete with VPI Electro Magnetic ballast, ignitor PF correction capacitor and individual HRC fuse and shall be as per IP 65.

Make of Luminaries shall be restricted to: PHILLIPS/CROMPTON/BAJAJ/GE

2Nos. 4 core, 6sqmm, copper conductor, flexible screen cable, 1100V grade, Make-Nicco/Incab / Polycab /Finolex shall be used from lantern carriage to terminal block. Terminal block shall be covered to protect it from the entry of insects and dust particles.

8.0. EARTHING:

8.1. The mast shall be provided with lightning protection system comprising of an Earthing system per following specification:

50mmdia, 3 meters Long G.I Pipe with bricks enclosures of size 600mm X 600mm and RCC cover - 4Nos.

30mm X 6mm G.I straps for interconnection of stud at mast

2 nos.each electrodes for lightening arrester and 2Nos. earth electrodes for earthing system of high mast lighting system shall be provided.

9.0 TOOL BOX:

9.1 A tool box of sheet steel containing a set of general and special purpose tools is to be supplied along with high mast for maintenance job.

10.0. AVIATION OBSTRUCTION LIGHTS & LIGHTENING ARRESTER

10.1 Medium intensity LED aviation obstruction light similar to neon spiral type fitted in a weather- proof box on body unit of Aluminium alloy shall be supplied. The cover of the light will be glass with rubber gasket (IP65 protection). High Luminosity flashing red light emitting diodes having life of 11 years. Power consumption 10 to 15 Watts, 230V AC, 50HZ, 90 candela. LED#s are mounted on fire retardant epoxy printed circuit board in five seriesparallel circuits.-1Set

Make-Binay Opto Electonics Pvt. Ltd./Bajaj Electricals Ltd/ Philips.

- 10.1 Lightning protection shall be provided on the top of the high mast.
- 10.2 Lightening arrester shall be connected rigidly to the foot of the mast.

11.0. FOUNDATION:

- 11.1 Foundation of high mast shall be designed for Zone V considering the Earth Quake resistance measure. Party shall have to design and furnish the details of foundation of High mast along with the offer for zone V.
- 11.2 The bearing capacity of the soil is 10 T/m 2

12. GENERAL CONDITIONS:

12.1 Supply, erection, testing and commissioning, including civil foundation jobs, of high mast to be done by the party. The civil jobs of the foundation of the high mast shall be done by the

party after approval of foundation drawing by OIL. All the materials for foundation shall be supplied by the party including metallic items like site bolts, anchor plate, steel template etc. Curing time and treatment for foundation shall be as directed by OIL before start of foundation work.

- 12.2 All necessary arrangements for erection of mast are to be made by the party including supply of all safety appliances and tools to workman.
- 12.3 Transportation of men and materials to the site will be party's responsibility and M/S. Oil India Limited will not provide any transport or transferring of man and materials to the site.
- 12.4 The persons who are authorized to carry out electrical works should have valid electrical supervising license and work permit as per I.E. Rules. Copy of the license to be submitted along with the offer.
- 12.5 For installation, testing and commissioning of mast, party should have valid electrical license valid for Assam. Copy of the license to be submitted along with the offer.
- 12.6 The party should submit detailed schedule of program of work within 15 days from the award of order.
- 12.7 The whole work should be completed within 3 to 4 month from the date of issue of order to the entire satisfaction of Engineer-in-charge of OIL.
- 12.8 The party will be responsible for their tools, tackle and materials and personnel at site till the towers are finally handed over to OIL.
- 12.9 The party will take all safety measures during the execution of the work. OIL will not compensate to the party in any way for any loss of man and material.
- 12.10 If due to improper execution of the work or due to negligence on the part of the party's workmen, OIL#s property is damaged, the parties will compensate for the loss.
- 12.11 The party will submit six set of operation and maintenance instruction manual with each high mast set and on site drawings of all the components of mast.
- 12.12 All the works shall be carried out as per relevant codes, practices rules and regulations. The workmanship will be of very high standard.
- 12.13 Party shall make its own arrangement for boarding and lodging of their working personnel.
- 12.14 The work shall be carried out under direct supervision of the party. The party shall submit monthly progress report of work to the Engineer-in-charge in writing.
- 12.15 If the job is not completed in the stipulated time, the contactor shall be penalized at the rate of 0.01% of the unfinished job per month.
- 12.16 Any deviation shall be clearly spelled out along with the offer.
- 12.17 Verticality and straightness measurement shall be carried out and these should be within the limits as specified by manufacturer for wind velocity, earthquake zone mentioned in Tender.
- 12.18 A separate test certificate of the winch shall be submitted.
- 12.19 Supplier's Test Certificate shall be submitted for each reel of rope.
- 12.20 Test certificate of chemical composition and mechanical properties of Sheets and Flange Plates shall be submitted as per the relevant Standards.
- 12.21 Test certificate of Head Frame Assembly, Mast sections, Trailing cable and cable connector as per relevant standards shall be submitted.
- 12.22 Welding and Fabrication detail shall be submitted to OIL. These should be as per relevant standard Rules, Regulations and practices.
- 12.23 Principles and details of joints shall be shown on drawings which will be submitted immediately after placement of order.
- 12.24 The thickness of internal and external galvanization shall be as per B5729 and IS 4759 and a test certificate shall be submitted confirming the minimum thickness of galvanization 80 micron.

- 12.25 Detailed dimensional drawing of the complete Mast including the dimensional details of Base door opening, the distance from the Mast Flange plate to the bottom of the door etc. should be submitted after placement of purchase order.
- 12.26 A drawing with details of Head Frame Assembly complete with Pulley, Guides, Ropes, covering to stop access of birds or other objects/rains etc. and power wiring arrangement should also be submitted after placement of purchase order.
- 12.27 Heat resisting cable shall be used between lamp holders and circuit connection points. Manufacture's Test Certificate as per relevant standard shall be submitted after placement of order.
- 12.28 Type of light distribution diagram will be submitted immediately after placement of purchase order.
- 12.29 All components shall be designed to require the minimum of maintenance and skilled attention and also to allow routine maintenance to be carried out quickly and easily with a minimum use of tools.
- 12.30 Every reasonable precaution and provision shall be incorporated in the design of the equipment for the safety and security of the system and of those concerned with its operation and maintenance.
- 12.31 The electrical installation shall comply of all appropriate statutory requirements, rules, regulations, standards and practices.
- 12.32 All metal work including luminaries, control gear units and luminaries carriage shall be bonded to the earth core of the luminaries supply cable. The earth continuity from luminaries carriage shall be via a single core of the multi-core cable.
- 12.33 The Mast shall be ventilated. Details by means of which this is achieved shall be submitted after placement of order.
- 12.34 The average rate of raising and lowering shall be not less than 3 meters per minute. Initial supply of oil for winch shall be given by the party.
- 12.35 High mast and accessories with fitting will be inspected by OIL's, Engineer at the premises of supplier before dispatch.
- 12.36 Party should submit credential to establish that they have executed successfully supply, erection, testing and commissioning of similar type of high mast in at least two Govt, semi-govt or PSU organizations. The manufacturer of the make offered by the party must have the experience of manufacturing of atleast 100 Nos of similar type high mast in last 5 years from the date of enquiry.Party/Authorised dealer must have experience of erection and commissioning of at least 5 Nos of similar high mast lights in Zone V area. Performance certificate of satisfactory completion of jobs and trouble free operation of the high mast offered from those organizations shall be submitted. Offer without any of these documents will be liable for rejection
- 12.37 Test certificate of steel plate, anchor plate, wire rope, Drum winch, wind velocity test and galvanization thickness shall be furnished along with quotation.
- 12.38 Party should fill up the Data sheet as per Annexure-II failing which offer is liable for rejection.
- 12.39 High mast should be designed to have maintenance free life of 25years and should be guaranteed for a period of 25 years against any manufacturing / design defects.
- 12.40 The construction of high mast must be of suitable design such that it can withstand the abnormal climatic condition which is normally encountered in this part of the country. It may also be noted that the location comes under Seismic zone V i.e. Earth quake prone area.
- 12.41 Self supporting 4 legged FRP platform ladder of suitable height of 8.10 feet shall be supplied for maintenance of high mast fitting when mast is lowered. Ladder shall be supplied with locking facility with the mast.

Documents: The following documents are to be submitted along with the offer for technical

scrutiny failing which offer shall be liable for rejection.

- 1. RCC foundation details (2 sets) suitable for Zone V
- 2. Design calculations of foundation of high mast(2 sets)
- 3. Design calculation of high mast
- 4. Complete Catalogue of high mast ,luminaries and aviation light
- 5. General Arrangement (GA) diagram and Circuit diagrams of Feeder Pillar.
- 6. Illumination level chart
- 7. Test certificate of steel plate, anchor plate, wire rope, Drum winch, wind velocity test and galvanization thickness
- 8. Quality Assurance Plan for High mast shaft and accessories.
- 9. Credentials/ Experience certificates indicated as per Para: 12.36
- 10. Filled in data sheet as per Annexure II

Payment terms- 80% of the materials values against dispatch documents and balance 20% of the materials value along with 100% taxes , Installation and commissioning charges after successful installation, testing , commissioning and handing over of all high mast lighting system.

BID REJECTION CRITERIA (BRC)/BID EVALUATUION CRITERIA(BEC):

Offer without any of the documents indicated under Para "Documents" will not be considered for evaluation.

ITEM NO. 40

INSTALLATION & COMMISSIONING AND TESTING OF ITEM NO.30 – QTY = 01 AU (1AU MEANS INSTALLATION & COMMISSIONING OF 02 NOS HIGH MAST) AS MENTIONED IN ITEM NO. 30

Installation and commissioning jobs shall include:

- 1. Delivery of all items at site by bidder.
- 2. Installation, testing & commissioning of the complete light masts including feeder pillars.
- 3. All cabling works from feeder pillar to mast/power tool/luminaires
- 4. Supply of earth straps & earth electrodes, preparation of earth pits in the scope of OIL
- 4. Laying and connection of earth straps from mast and feeder pillar to earth pits.
- 5. Accomodation may be provided on chargeable basisi subject to availablity of house.
- 6. Crane service may be provided on chargeable basis subject to availability of crane.
- 7. Transfortation of man & materials up to site is the scope of bidder.
- 8. Commissioning report to be provided after the completion of work for the release of payment.

SPECIAL TERMS AND CONDITIONS (FOR BOTH THE ITEM)

- 1. Materials should be procured from original Engineering manufacturer (OEM)/ authorized dealers only. In case of authorized dealers valid authorized dealership certificate should be submitted along with the offer.
- 2. The bidder should have experience of successfully executing similar order (i. e., supplying and commissioning) of at least 02 (two) no. of 30meter high mast to Central Govt./State Govt./ PSU/ Public

Ltd company in the last 5 years as on bid closing date. Documentary evidence for the same in the form of P.O. along with invoice to be submitted along with offer.

- 3. High Mast Foundation design should as per zone-V Earthquake categorization, bidder has to certify the same in their offer.
- 4. Quotation with catalogue / leaflet/literature should be forwarded to Chief Electrical engineer Oil India Ltd. Moran.
- 5. Technical catalogue/ leaflet, Operation & maintenance manual of the panel should be submitted along with the offer otherwise offer will be rejected.
- 6. The quotations along with the following documents should be submitted to us for technical scrutiny:
 - i) Details of RCC foundations, 2 sets suitable for Zone V
 - ii) Design calculations of foundation of High Mast (2 sets)
 - iii) Design calculations of High Mast,
 - iv) Catalogue of high mast and luminaries.
 - v) General arrangement (GA)diagram & circuit diagrams of Feeder Pillar.
 - vi) Illumination level chart.
 - vii) Test certificates of steel plate, anchor bolts/plates, wire rope,drum winch, wind velocity test & galvanisation thickness.
 - viii) Quality Assurance Plan of manufacturer for high mast shaft and accessories .
 - iX) Radiographic test of High Mast.
- 7. High Mast & accessories with all fittings will be inspected by OIL's Engineers at the premises of the supplier/ manufacturer before dispatch. Radiographic test must be carried out in presence of OIL's representative at main workshop.
- 8. Packing should be adequate to avoid transit damage and ingress of moisture.
- 9. High Mast should be designed to have a maintenance free life of 25 years and should be guaranteed for a period of 25 years against any manufacturing / design defects.

10.Make: Philips / Bajaj / Crompton Greaves / GE.

11. MATERIALS ARE FOR MORAN.

- 12. The party should submit the documents related to back up services, guarantee & supply of spares from OEM or Original equipment supplier.
- 13.In case of order, 2 (two) sets of maintenance & operating manuals should be supplied along with the materials.
- 14. Necessary civil jobs for commissioning for commissioning of supplied panels will be carried out by supplier at their own cost.

NOTE:

<u>Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non</u> compliance to all the NIT terms and conditions of NIT.

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Annexure-EEE

Tende	r No.		
Bidde	r's Name :		
		Complianc	e by Bidder
SL.	BEC / TENDER REQUIREMENTS		Indicate Corresponding
NO.			page ref. of unpriced bid or
1	Confirm that validity has been offered as per NIT.	Confirmed' / Not applicable	Comments
	·		
	Confirm that Bid Security / Earnest Money has been submitted		
	as per NIT (Wherever Applicable) ?		
3	Confirm that you shall submit Performance security (in the		
	event of placement of order) (Wherever Applicable)?		
4	Confirm that duly signed Integrity Pact has been submitted as		
	per NIT (Wherever Applicable) ?		
5	Confirm that you have submitted documentary evidence of		
	successfully executing one Purchase order as stipulated in NIT in		
	any of the preceding 5 financial years (*)		
6	Confirm that you have submitted Balance Sheet and Profit and		
	Loss Account of any of the preceding 3 financial years certified		
	by a chartered accountant.		
7	Confirm that the bid has been signed using Class 3 digital		
	certificate with Organisation's Name as per NIT.		
8	Confirm that you have not taken any exception/deviations to		
	the NIT.		

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory execution of the purchase order cited above.

Response Sheet Annexure-FFF

Tender No.	
Bidders Name	

Bidders Response Sheet

SI No.	Description	Remarks
1	Place of Despatch	
2	Whether Freight charges have been included in your quoted prices	
3	Whether Insurance charges have been included in your quoted prices	
4	Make of quoted Product	
5	Offered Validity of Bid as per NIT	
6	Bid Security Submitted (if applicable)	
6	Details of Bid Security Submitted to OIL (if applicable)	
	a) Bid Security Amount (In Rs):	
	b) Bid Security Valid upto:	
7	Whether you shall submit Performance Security in the event of placement of	
	order on you (if applicable)	
8	Integrity Pact Submitted (if applicable)	
9	Whether you have submitted documentary evidence of successfully executing	
	one Purchase order as stipulated in NIT in any of the preceding 5 financial	
	years (*)	
10	Whether you have submitted Balance Sheet and Profit and Loss Account of	
	any of the preceding 3 financial years certified by a chartered accountant.	
11	Delivery Period in weeks from placement of order	
12	Complied to Payment terms of NIT (if applicable) otherwise to Standard	
	Payment Terms of OIL or not.	
13	If bidder is MSE whether you have quoted your own product	
14	If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing	
	Bank including Telephone, Fax Nos and Email id of branch manager	

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory

(TO BE FILLED UP BY ALL THE VENDOR IN THEIR OWN LETER HEAD) (ALL FIELDS ARE MANDATORY)

Tender No.	:	•••••
Name of Beneficiary	:M/s	
Vendor Code	:	••••••••••••
Address	:	
Phone No. (Land Line)	:	
Mobile No.	:	
E-mail address	:	
Bank Account No. (Minimum		
Eleven Digit No.)	:	
Bank Name	:	
Branch	:	
Complete Address of your	:	
Bank	:	
IFSC Code of your Bank		
a) RTGS	:	
b) NEFT	:	
PAN	:	
VAT Registration No.	:	
CST Registration No.	:	
Service Tax Registration No.	:	
Provident Fund Registration	:	
our above mentioned accoun	nt directly and we shall not hold	Oil India Limited can be remitted to Oil India Limited responsible if the ount due to incorrect details furnished
	Office Seal	Signature of Vendor

Counter Signed by Banker: Seal of Bank:

Enclosure: Self attested photocopies of the following documents-

- 1) PAN Card
- 2) VAT Registration Certificate
- 3) Service Tax Registration
- 4) CST Registration
- 5) Provident Registration Certificate
- 6) Cancelled cheque of the bank account mentioned above (in original).
- 7) Bank Statement not older than 15 days on the date of submission.