

CENTRAL UNIVERSITY OF JHARKHAND
Brambe, Ranchi – 835 205



Tender Document

For

**Design, Supply, Installation & Commissioning
of 30.5 Mtr. (100 feet) High National Flag Mast
at Permanent Campus Central University of Jharkhand,
Ranchi.**

NOTICE INVITING TENDER (NIT)

Name of the Work/Services: “Design, supply, installation & commissioning of 30.5 Mtr. (100 feet) High National Flag Mast at Permanent Campus at Central University of Jharkhand, Ranchi.”

1. Schedule of tender Process:

- | | | | |
|-----|--|---|--|
| (a) | Publication of Tender | : | 01 st July, 2020 |
| (b) | Pre-Bid Meeting | : | 06 th July, 2020 |
| (c) | Last date and time for Submission of :
tender documents | : | 11 th July, 2020 (1400 Hrs) |
| (d) | Date and time of Tender Opening : | : | 11 th July, 2020 (1430 Hrs) |

2. The tender documents may be downloaded from official website of Central University of Jharkhand, Ranchi (www.cuj.ac.in) and **CPP Portal** as per the schedule given above. Bidders are requested to follow the instructions carefully as per the tender document given in the website.

3. The tenders shall be submitted in two parts viz. Technical Bid and Financial Bid, along with all the tender documents and the Tender acceptance Letter duly signed and numbered in all pages. Overwriting should not be made. If there is any overwriting, it must be initialed by the bidder before submitting. In case of non-submitting of copies of documents specified, such bids shall be summarily rejected.

4. Interested firms/ agencies/ companies are advised to visit University website www.cuj.ac.in or CPP Portal regularly till closing date of submission of tender for any corrigendum/ addendum/ amendment. After closing date, any notice regarding tender will be notified in University website.

5. In the event of any of the above-mentioned date being subsequently declared as a holiday/closed day for this office, the tenders will be opened on the next working day at the scheduled time without any further notice.

SECTION – I

Instructions to Bidders (ITB) and Appendix to ITB

1. Central University of Jharkhand, Ranchi (Central University) established by an act of Parliament in 2009, invites sealed tenders under Single Stage two bid system for **Design, supply, installation & commissioning of 30.5 Mtr. (100 feet) High National Flag Mast at Permanent Campus, Central University of Jharkhand, Cheri-Manatu, Ranchi**
2. The tenderer should have requisite experience of successful completion of CPWD/ PWD or similar Government Departments works as on 31.03.2020 and experience for satisfactorily completion of similar nature of work.
3. The tenderer must have an average annual turnover of **Rs. 10.00 Lakhs** during the previous three financial years i.e. 2016-17, 2017-18, 2018-19.
4. **Tender Cost:** Applicant contractor must submit the demand draft for Rs. 2,000/- (Rupees Two Thousand only) in favor of 'Central University of Jharkhand, Brambe, Ranchi' obtained from any Nationalized/ scheduled Bank valid for three months as a tender fees. All applicable bank charges shall be borne by the applicant and he shall not have any claim what so ever on this account on Government. Tender fee shall be non-refundable. The demand draft for tender fees must deliver to CUJ, Brambe, Ranchi on or before last date/ time of Bid Submission.
5. **EMD Payment:** The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of **Rs. 50000/-** (Rupees Fifty Thousand only) by way of Demand Draft. The demand draft shall be drawn in favour of **“Central University of Jharkhand”** payable at Ranchi. The EMD of the successful bidder shall be returned after the successful submission of Bank Guarantee/ Security Deposit and for unsuccessful bidder(s), it shall be returned after award of the contract. The demand draft for EMD must deliver to Central University of Jharkhand, Brambe, Ranchi on or before last date / time of Bid Submission. The details are as follows: -
 - (a) No request for transfer of any pervious deposit of earnest money or security deposit or payment of any pending bill held by the University in respect of any previous work will be entertained.
 - (b) Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulation made herein or backs out after quoting the rates, the aforesaid amount of earnest money shall be forfeited.
 - (c) The Tender without Earnest Money and tender fee will be summarily rejected.
 - (d) The Firm who are registered with National Small Industries Corporation (NSIC)/ MSME are exempted to submit the EMD (Copy of registration must be provide along with technical bid)

(e) No Claim shall lie against the CUJ in respect of erosion in the value or interest on the amount of EMD.

(f) The EMD, in case of successful bidders, shall be returned after submission of performance security and in case of unsuccessful Bidders, EMD shall be returned to the bidder on written request after the finalization of the tender. No interest will be payable by the CUJ on the EMD.

6. **Submission of Tender:** The tender shall be submitted in two part, viz., technical bid and financial bid. All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before submit. The bid shall be submitted to: -

**The Registrar,
Central University of Jharkhand,
Brambe, Ranchi - 835205
Email: - registrar@cuja.ac.in
Website: www.cuja.ac.in**

By Speed post/ Registered Post/ By hand but in no case bid received after due date & time, shall be entertained and shall be refunded without considering. No correspondence will be entertained in this matter after last date & time.

1. Tenders are invited from reputed contractor for issue of tender documents for the work of:-

“Design, supply, installation & commissioning of 30.5 Mtr. (100 feet) High National Flag Mast at Permanent Campus Central University of Jharkhand, Ranchi.”

2. To become eligible for issue of tender, the tenderer shall have to furnish an affidavit as under:-

“I/ We undertake and confirm that eligible similar work(s) has / have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/ we shall be debarred for tendering in Central University of Jharkhand in future forever. Also, if such a violation comes to the notice of Department before date of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit / Performance Guarantee.”

3. The time allowed for carrying out the work will be **30 days** from the date of award of contract as defined in schedule “F” or from the first date of handing over the site, whichever is later, if any, indicated in the tender documents.

4. The site for the work is available in full.

5. Bid documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms and conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen in the office of the Registrar, Central University of Jharkhand, Ranchi in office hours except on Sundays and Public Holidays. The tender form can be downloaded from the University website www.cuj.ac.in and CPP Portal (payment for tender to be made through Demand Draft in favour of Central University of Jharkhand payable at Ranchi along with tender document at the time of submission of bid.) Further details are as follows: -

(a) Bid shall be accompanied with Tender Cost of Rs. 2,000/- and Earnest Money (EMD) of Rs. 50,000/- in demand draft of a scheduled bank issued in favour of Central University of Jharkhand payable at Ranchi.

(b) Application supported by prescribed annexure, Earnest money, Copy of Enlistment Order, tender cost and tender shall be placed in separate sealed envelopes clearly written on each as **“Technical Bid/ Earnest Money”** and **“Financial Bid”** respectively with name of work written on each envelop. Both envelopes shall be submitted together in another main sealed envelope with name of work written on cover. The bids will be received up to 1400 Hrs on 11th July, 2020 in the office of Registrar, Central University of Jharkhand, Brambe, Ranchi-835205.

(c) The contractor, whose tender is accepted, will be required to furnish performance guarantee of 05% (Five percent) of the tendered amount within the period specified in schedule "F". This guarantee shall be in the form of Banker's Cheque/ Demand Draft / Pay order of any scheduled bank (in case guarantee amount is less than 1,00,000/-) or Government Securities or fixed Deposit Receipts or Guarantee Bonds of any scheduled Bank in accordance with the prescribed form.

(d) In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule "F", including the extended period, if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

6. The description of the work is as follows: -

(a) Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity, facilities for workers and all other services required for executing the work, unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

(b) The University does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.

(c) Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the tenderer who resort to canvassing will be liable to be rejected.

(d) The University reserves the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.

(e) The tender for the works shall remain open for acceptance for a period of thirty (30) days from the date of opening of the financial bid. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the University, then the University shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money/ Performance guarantee as aforesaid. Further the tenderer shall not be allowed to participate in the re-tendering process of the work.

(f) The bid document shall form a part of the contract document. The successful tenderer/ contractor, on acceptance of his bid by the Accepting Authority, shall, within 07 days from the award of work, sign the contract consisting of:-

(i) The bid documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of invitation of bid and acceptance thereof together with any correspondence leading thereto.

(ii) Standard C.P.W.D Form **8** - 2014 edition with upto date correction slip issued upto the last date of issue of tender.

7. **ARBITRATION:** In event of any question, dispute/difference arising under this Contract/ agreement the same shall be referred to sole arbitrator, the Vice-Chancellor of CUJ or his nominee. The award of the arbitrator appointed by Vice-Chancellor shall be final and binding on both the parties. The provisions of Arbitration and Conciliation Act, 1996 shall be applicable.

8. Settlements of disputes, if any, with regard to providing services and interpretation of any clause in this agreement, the High Court of Jharkhand at Ranchi shall have the Jurisdiction.

Registrar
Central University of Jharkhand

SECTION- II

GENERAL CONDITIONS OF CONTRACT

1. Electricity shall be arranged by the contractor. CUJ shall not take any responsibility in the regard.
2. Some restrictions may be imposed by the security staff etc. on the working and for movement for labour materials etc. The contractor shall be bound to follow all such restrictions / instructions and nothing extra shall be payable on this account.
3. The work will be carried out in the manner complying in all respects with the requirements of relevant bye laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer in charge and nothing extra will be paid on this account.
4. The contractor shall give a performance test of the entire installation (s) as per standing specification before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
5. Samples of various materials required for testing shall be provided free of charges by the contractor. Testing charges, if any, unless otherwise provided shall be borne by the department. All other expenditure required to be incurred for taking the samples, conveyance, packing etc. shall be borne by the contractor himself. In case of failure of sample, whole cost of testing shall be borne by contractor.
6. The **Landscaping** and architectural drawings shall at all times be properly correlated before executing work. However, in case of any discrepancy in the items given in the schedule of quantities appended with the tender and Architectural drawings related to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer in charge.
7. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by department.
8. In the case of items of which abbreviated nomenclature is not available in the above cited publication and also in case of extra and substituted items of works for which abbreviated nomenclature is not provided in the agreement, the full nomenclature of items shall be reproduced in the measurements books and bill forms for running account bill. The full nomenclature of the items shall be adopted in preparing abstract of final bill in the measurement book and also in the bill form for final bill.
9. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the Engineer in charge. Nothing extra shall be paid on this account.
10. No payment will be made to the contractor for damage caused by rains, or other natural calamities during the execution of the works and no such claim on this account will be entertained.

11. Wherever work is specified to be done or material procured through specialized agencies, their names shall be got approved well in advance from Engineer in charge. Failure to do so shall not justify delay in execution of work. It is suggested that immediately after award of work, contractor should negotiate with concerned specialist agencies and send their names for approval to Engineer in charge. Any material procured without prior approval of Engineer in charge in writing is liable to be rejected. Engineer in charge reserves right to get the materials tested in laboratories of his choice before final acceptance. Non standard materials shall not be accepted.

12. The contractor shall maintain the time bound progress for the execution of work and got it approved by the Engineer in charge.

13. The contractor shall take instruction from the Engineer in charge for stacking of materials at any place. No excavated earth or building material shall be stacked on areas where other buildings, roads, services or compound walls are to be constructed.

14. The contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case, he or his authorized representative is not present or does not associate himself, the results or such tests and consequences thereon shall be binding on the contractor.

15. In case of non availability of material of the brands specified in the list of approved materials an equivalent brand may be used after getting written approval of T/S Authority giving details to indicate that the brand proposed to be used is equivalent to the brands mentioned in the agreement.

SECTION – III

SPECIAL CONDITION OF CONTRACT

1. The work in general shall be executed as per the description of the item, specification attached, latest CPWD specifications Vol-I & II with upto date correction slips.
2. In case of any variation between different applicable specifications, the following order of precedence will be followed : -
 - (a) Nomenclature of item
 - (b) Additional condition, Additional specification and Particular specifications attached with the tender document.
 - (c) Latest CPWD Specifications Vol-I to II
 - (d) Indian Standard Specifications / B.I.S.
 - (e) Decision of Engineer in charge.
3. The work shall be executed and measured as per metric units given in the schedule of quantities, drawings etc. (F.P.S. units wherever indicated are for guidance only).
4. The Agency shall have to engage manpower who has sufficient experience.
5. The work shall be executed strictly accordingly to instruction of the Engineer-in- Charge and conditions of the contract.
6. The contractor shall deploy required number of Mason, Carpenter, Plumber and Sewer man, who will be present throughout the day. The attendance register will be signed JE / AE and representative of contractor on daily basis.
7. The contractor shall be responsible their good character; all damage done to the existing structure by the workers shall be made good by the contractor at his risk and cost. If the contractor fails to make good the damage then same shall be made good at risk and cost of the contractor by the Engineer-in Charge.
8. All operations are be carried daily for the seven days of the week, if required (normal duty will be all working days except Sundays and Holidays).
9. Under no conditions shall the contractor sublet or appoint any agency. If it found at any stage the contract shall be rescinded after giving a notice of 48 hours and the work for the remaining period shall be got executed from other agency at risk and cost of the contractor.
10. The contractor if required shall be at his own cost take necessary insurance cover in respect of staff and other person to be in service to render to Central

University of Jharkhand. He shall comply with all relevant labour laws as applicable to the existing or modified during the contract period. The staff employed will be on the contractor roll. Complete liabilities will be on part of the contractor for their discipline and normal activities.

11. Any hindrance caused to the above operations will be cleared by the contractor at his own cost.

12. The contractor will issue identity card to the workers as approved by Engineer-in -Charge.

13. The contractor will issue uniform to all the workers as approved by Engineer-in- Charge and nothing extra shall be paid on this account.

14. Any damage done by the contractor to any existing work during the course of execution of the work tendered for shall be made good by him at his own cost.

15. The contractor shall maintain in good condition all works during the execution till completion of entire work allotted to him.

16. The contractor shall take all precautions to avoid all accidents by exhibiting necessary precaution banners day night.

17. The contractor shall clear the site thoroughly of rubbish scaffolding materials etc. before the completion of the work.

18. Tendered rates are inclusive of all taxes and levies payable under the respective statutes.

19. Rates quoted shall be inclusive of the GST as leviable by the Central/ State Governments on the transfer of property in goods involved in the execution of works contract and nothing extra will be payable on that account.

20. **Payment Terms.**

(a) The complete work of performance guarantee is for period of 03 years from the date of completion of work and security deposit will be refunded after completion defect liability period of 03 years. However, Contractor can get the refund of SD only after submission of Bank Guarantee of the amount equal to SD with validity period 03 years.

(b) No interim payment shall be made for supply items and partly executed work.

(c) Payment shall be made on successfully completion of installation, testing and commissioning of work after deduction of security deposit, Income-Tax, Labour Cess and GST etc. as per rules.

21. **Liquidated Damages:** In the event of failure to Design, supply the items/ materials, installation and commissioning within the stipulated date/ period in accordance with the sample and/ or specifications mentioned in the work order and in the event of breach of any of the terms and conditions mentioned in the work order, the university is entitled to recover from the successful bidder/supplier as agreed liquidated damages, a sum of 0.5% of the total value of work order per week subject to a maximum of 10% of the total value of the work order.

22. **Guarantee:** The rates quoted in tender are inclusive of 03 years guarantee and cover maintenance & replacement of all defective items and parts of the high mast flag system. Engineer-in-, within one week after the date of notice, otherwise recovery as decided by Engineer-in-charge shall be made from the security deposit amount.

SECTION-IV

TECHNICAL SPECIFICATIONS

1. **SCOPE.:** The scope of this specification covers the design, manufacture, transport, installation, testing and commissioning of the complete Flag system, using Raising and Lowering type of Flag mast towers, including the civil foundation works. The Central University of Jharkhand will only provide the feeder cable of required size upto the base compartment of the high mast.

2. **APPLICABLE STANDARDS.** The applicable codes followed for high mast designs are as follows: -

- (a) TR. No. - 7 : High Masts for Lighting and CCTV (2000 edition) of ILE, UK
- (b) IS 875 Part – 3 : Wind Loading
- (c) BS EN 10025:1993 : High Tensile Steel Sheets
- (d) BS EN ISO 1461 : Galvanization
- (e) SABS 0225:1991 : High Mast natural frequency calculation
- (f) IS 2062 Mild Steel
- (g) IS 3459 /2256 : Stainless Steel Wire Rope
- (h) IS 325 : Motor

FLAG MAST :

(a) **Pole:**

(i) **Structure details.** The Flag Mast shall be continuously tapered, polygonal cross sections (twenty sided) with the pulley box arrangement at the top. The structure gives good visual appearance and is based on proven design confirming to relevant Indian standards, to give assured performance, reliability and service. The Masts are constructed from steel conforming to IS 2062 or BSEN 10025 and cut and folded to form twenty sided section and is telescopically jointed and fillet welded. Mast section delivered to site shall not have any intermediate joint. The Mast is provided with full-penetrated flange, which is free from any lamination or incursion. The welded connection of the base flange is fully developed to the strength of the entire section. The base flange is provided with supplementary gussets between the bolts to ensure elimination of helical stress concentration. For metal protection of the Mast, the entire fabricated Mast is hot dip galvanized internally and externally in single dip. The external surface of the mast is also applied with suitable Poly Urethane paint. A vandal resistant, weather proof, lockable door of suitable size is provided at the base of high mast to access comfortably the components at the base compartment for normal operation & for maintenance.

(ii) **Dynamic Loading of Mast.** The mast structure shall be suitable to sustain an assumed maximum reaction arising from a wind speed as per IS 875 (3 second gust) and are measured at a height of 10 metres above ground level. The designed life of the mast should be 25 Years.

(b) **Raising and lowering mechanism:**

(i) **Winch:** The winch shall be high speed completely self sustaining without the need for brake shoe, springs or clutches. There is a permanent oil bath for self-lubrication. The drums are to be properly grooved to provide a perfect seat for wire ropes. The raising time of the flag shall not be more than 3 minutes. The winch is normally be operated by an electrical power tool however there should be provision for manual operation also by means of manual handle. The winches are type tested through reputed institutions like IIT as consultants or NABL certified Lab's/Govt. Lab and the type test reports are submitted along with offer. A test certificate is to be submitted along with supplies.

(ii) **Head Frame.** The hot dip galvanized head frame is to be designed as a capping unit of the mast is of welded steel construction and provided with guides and separators between the ropes and cable. The LM6 Aluminium pulleys with bush bearing mounted through stainless steel shaft shall be suitable to accommodate wire ropes and multi core trailing cable. The head frame is provided with guides and stops with PVC buffer for the docking of luminaires carriage. The pulley assembly is covered by a hot dip galvanized canopy.

(iii) **Stainless Steel Wire Ropes.** The stainless steel wire ropes are generally be of 6 mm dia, 7/19 construction with central core being stainless steel only. The grade of wire ropes are in accordance to AISI 316. The breaking load of each rope is not less than 2350 Kg giving a factor of safety of more than 5 for the system at full load as per the Technical Report No -7. The end construction of rope for the winch drum is fitted with copper talurit and for two continuous ropes, the end termination in luminaires carriage 3 are with stainless steel thimble and copper splicing and for others with stainless steel thimble and bull dog grips.

(iv) **Power Tool for Winch.** Three phase, single speed, 06 pole high-powered motor of suitable rating as per India Standard Certification are to be provided at the base of mast to facilitate raising & lowering operation of flag/ luminaires carriage. The motors are to be coupled with the winch shaft through chain & sprocket. A mechanical torque limiter is to be mounted on motor shaft to stop transmission of motion from motor to winch in case of excess load and thus prevent the damage to winch and breakage of rope.

(c) **Other Accessories:**

(i) **Lightening Finial.** One number of FRP ornamental finial (DOME) shall be provided for each FLAG mast on the head arrangement is to be provided.

(ii) **Aviation Obstruction Lights.** LED aviation lights are mounted on the lantern carriage to comply to the aviation norms where applicable. The

connection for these aviation obstruction lights shall be made using 3C X 2.5 sq mm copper un armoured cables.

(iii) **Earthing Terminals.** Earth terminal using 12 mm diameter hot dip galvanized bolts are provided on the door stiffener of the mast for lightning and electrical earthing of the mast.

(iv) **Feeder Pillar / Control Box.** Each Mast shall be provided with a panel box , housing 32A TPN MCB incomer along with 2 no. 9A contactors & switches for forward/ reverse operation of motor & to provide supply to the poles The box is constructed of 14 SWG CRCA sheet IS finished with two Coates of red oxide primer & grey enamel paint of shade 631 of IS 5.

(d) **POLES WITH FLOOD LIGHT FITTINGS:** Two numbers of 06 Mtrs Octagonal poles with narrow beam LED Flood Light Luminaries type 350W fittings shall be provided to illuminate the national flag.

(e) **HARDWARES.** Hardwares play a very important role on the overall performance of high flag mast systems. Hardware materials are to be chosen carefully so that there is no compromise on safety or risk to the human lives. Appropriate grade and size of materials are absolutely necessary to ensure full safety. Single & double grooves clamps & W.G clamps are mandatory to ensure the proper operation of raising & lowering systems.

(f) **ELECTRICAL SYSTEM, CABLE AND CABLE CONNECTIONS.** The power cable from base compartment to junction box at the top shall be 1.1 KV grade PVC insulated, fire retardent, PVC sheathed copper conductor of size minimum 3 core X2.5 sqmm wiring from junction box to aviation light is to be done using 3 core 2.5 sqmm PVC insulated, PVC sheathed, copper conductor flexible cable.

(g) **INCOMING POWER CABLE.** The power cable of suitable size upto the feeder pillar from supply point shall be provided by Central University of Jharkhand, Ranchi.

(h) **LUMINARIES.** The flood light luminaries (BJEF 215) power coated die cast aluminium housing with frame, heat resistant clear toughened glass fixed to the frame with silicon gasket with electrochemically brightened, polished and anodized aluminium reflector with cast aluminium control gear box copper ballast with narrow beam LED Flood Light Luminaries type 350W MH T Lamp. This flood light shall be installed on suitable pole on plinth with supply & laying of 3Cx2.5 sqmm copper cable for the individual wiring of the luminaire.

(j) **PU Painting.** Flag mast shall be finished with polyurethane (PU) paint over galvanized surface after application of primer coat.

(k) **Flag .** The national Flag of the size 20 feet x 30 feet in 100% knitted polyester (140 gsm) as relent OS code, with reinforced super strong nylon webbing on all 3 sides & rope / toggle sleeve.

TECHNICAL DETAILS FOR 30.5 MTR. FLAG MAST

High Mast system

Make : Bajaj/Philips/Keselec Schreder or equivalent approved make
Height of Mast : 30.5 Mtr.
No. of sections : Three
Material construction : BS- EN10025 S 355 grade or equivalent
Base dia. and top diameter (A/F): Top: 150 mm, Bottom- 540 mm,
Plate thickness : Top- 3mm, Middle-4mm, Bottom- 4mm

Cross section of Mast : 20 side polygon
Standard for of galvanization : As per BS EN ISO 1461(1400 X 250mm)
(Size of opening and door at base)

Diameter of base plate : 730mm
Thickness of base plate : 30mm

Max. Wind speed : As per IS: 875 (Part-III)

Number of foundation bolts : 12 nos.
Type/diameter/length of foundation bolts : 650mm : TS 600/30mm dia./850mm long

Power cable cable for Aviation : Copper, 3 core, 2.5Sqmm Armored cable

Winch/ Power tool

Type/SWL of winch Method of operation : Double Drum, SWL 70 Kg
(SGDD 30/6 PB) : Integral motor
Motor capacity : 2HP
No of speeds : 4 Pole single speed
Torque limiter : With mechanical tripping facility

Wire rope for flag

Grade/construction : Galvanised
No of ropes : 100mm long X 1 Nos.
Diameter (mm) : 6 mm

Wire rope for balance weights

Grade/construction Number of ropes : Galvanised Diameter(mm) : 6mm
Number of ropes : 100 mm long x 1 nos

Wire rope for balance weights

Grade/ construction number of ropes : Galvanised , 32mm long x 3nos. Diameter(mm)
: 06 mm
Control panel : Custom built panel

LED AOL : Binay Make (Or) Equivalent

SECTION-V

TECHNICAL BID AND UNDERTAKING

(Tenderer may use separate sheet wherever required)

1	Name of the firm/contractors/agency	
2	Address of the firm/contractors/agency	
3	Mobile No.	
4	E-mail	
5	Registration Number and date of registration of company/cooperative/ agency/SHG/Society, if any (Certificate to this effect should be enclosed)	
6	Year of Establishment	
7	Type of Organization: (Whether Proprietorship, Partnership, Private Ltd. Company or Co-operative body etc. In case the applicant is a non-individual, Certified copy of a Partnership deed/Certificate of Incorporation/ Certificate of Registration issued by the Registrar of Cooperative Societies/ as the case should be enclosed)	
8	CST/ST/GST Registration	
9	PAN/TAN Card No.	
10	Annual Turnover (Rs. In Lakh) for the FY 2016-17, 2017-18 & 2018-19. Financial statements showing turnover duly certified by a Chartered Accountant should be furnished.	2016-17 Rs..... 2017-18 Rs..... 2018-19 Rs.....
11	Income Tax Return for last 3 FY 2016-17, 2017-18 & 2018-19. (Copy attached)	Attached / Not Attached
12	Enclose Performance certificates from previous clients with contact no. from 2016-17 to till date separately in respect of works (as applicable)	Attached / Not Attached
13	Have you executed Similar work to any government / or any other organization? If yes, attach the relevant proof.	Yes/No Attached / Not Attached
14	Any other information important in the opinion of the tenderer	
15	Name and Mobile Number of a Key person, who can be contacted at any time.	

(Signature of the Tenderer with stamp of firm)

Dated:

Place:

UNDERTAKING BY THE TENDER

I/We have read and examined the notice inviting tender, schedule A, specifications applicable , Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, special conditions, Schedule of Rate & other documents and Rules referred to in the condition of contract and all other contents in the tender document for the work.

A sum of Rs. 50,000/- is hereby forwarded in demand draft in favour of Central University of South Bihar as earnest money. If I/We fail to furnish the prescribed performance guarantee of tender form within prescribed period. I/We agree that the University, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/we fail to commence work as specified, I/we agree that University shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule "F".

Further I/We agree that in case of forfeiture of earnest money or both earnest money and performance guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in Central University of Jharkhand in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Principal Employer shall be free to forfeit the entire amount of Earnest Money Deposit/ Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/ confidential documents and shall not communicate information derived there from to any person other than a person to whom, I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the state.

Dated _____

Signature of Contractor

Postal Address* _____

Telephone No.* _____

Fax _____

E-Mail _____

Witness**: _____

Address**: _____

Occupation**: _____

(*) To be filled in by the Contractor. (**) To be filled in by the Witness.

SECTION-VI

Financial Bid **(Bill of Quantities)**

Name of Work :- Design, supply, installation & commissioning of 30.5 Mtr. (100 feet) High National Flag Mast at Permanent Campus in Central University of Jharkhand, Ranchi.

SR. NO.	DESCRIPTION OF EQUIPMENTS / ACTIVITIES	UOM	QTY	UNIT RATE (Rs.)	AMOUNT (Rs.)
A	<u>Design & Supply of</u>				
1.1	100 Ft Flag Mast made up of HT Steel Sheet in 3 sections complete with motorised raising lowering system for flag of size 30ftx20ft with motorised operation. The Flag mast shall be galvanised and PU painted in White Color and includes all the accessories. It also includes FRP Decorative Dome on top of the Flag Mast. Provisioning of manual operation of hoisting and lowering of flag by manual handling along with gear box system.	nos	1		
1.2	Foundation bolts manufactured from special steel along with nuts, washers, anchor plate and common template.	Set	1		
1.3	LED Aviation Light	nos	2		
1.4	06 Mtr high hot dip galvenised Octagonal pole suitable to mount 1 nos LED Flood Light fitting at top with suitable mounting arrangements at bottom.	nos	2		
1.5	foundation bolts for 06 Mtr Pole manufactured from special steel along with nuts, washers, anchor plate and common template.	Set	2		
1.6	narrow beam LED Flood Light Luminaries type 350W along with suitable arrangements and supports for mounting luminaries on flag	nos	2		
1.7	National Flag of size 30 ft x 20 ft in 100% Knitted Polyester (140 gsm) with reinforced super-strong nylon webbing on all 3 side & rope/toggle sleeve.	nos	3		

B	Installation, Testing & Commission				
2.1	Construction of shallow foundation with M: 20 grade concrete for the high mast considering the safe soil bearing capacity (10 T/ Sqm @ 2 Mtr Depth at site at suitable depth with all material and labour and soil investigation.	Job	1		
2.2	Erection of the flag mast with the help of suitable equipment and assembly of the operating system and flag supplied by you.	Job	1		
2.3	Provision of GI pipe earthing for high mast with 2.50 mtr long 40 mm dia GI pipe including connection to high Mast earth terminal with 25x3 mm GI flats with all material and labour (2 nos as per mast required)	nos	2		
2.4	Erection of 06 Mtr Pole and 01 no fitting on suitable pole with civil foundation and all labour works	nos	2		
2.5	Electrical and Manual System for Hoisting and Lowering of Flag. It shall have double drum winch 06 mm dia galvanised wire rope and integral power tool for the raising and lowering of Flag. Suitable control panel shall be provided for reversing operation of Power tool motor. Also includes LED aviation system with 3C x 2.5 Sqmm Cu EPR cable.	Job	1		
	TOTAL AMOUNT (A+B) <u>*The Amount should be quoted with inclusive of all taxes like GST etc.</u>				

Total Rs. in words:

Date:

Place:

Tenderers seal with signature

SECTION- VII

STANDARD FORMATS

FORM OF EARNEST MONEY (BANK GUARANTEE)

WHEREAS, contractor.....(Name of contractor) (hereinafter called "the contractor") has submitted his tender dated (date) for the construction of (name of work) (hereinafter called "the Tender")

KNOW ALL PEOPLE by these presents that we (name of bank) having our registered office at (hereinafter called "the Bank") are bound unto(Central University of Jharkhand) (hereinafter called "the Engineer-in-Charge") in the sum of Rs. (Rs. in word.....) for which payment well and truly to be made to the said Engineer-in-Charge the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this day of20.....

THE CONDITIONS of this obligation are:

(1) If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of tender.

(2) If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:

(a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required;

OR

(b) fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor,

OR

(c) fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor,

OR

(d) fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract.

We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first written demand, without the Engineer-in-Charge having to substantiate his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by him is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date* after the deadline for submission of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer-in-Charge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE

WITNESS

(SIGNATURE, NAME AND ADDRESS)

SIGNATURE OF THE BANK

SEAL

*Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.

FORM OF PERFORMANCE SECURITY (GUARANTEE) BANK GUARANTEE BOND

In consideration of the President of India (hereinafter called "The Government") having offered to accept the terms and conditions of the proposed agreement between.....and (hereinafter called "the said Contractor(s)") for the work..... (hereafter called "the said agreement") having agreed to production of a irrevocable Bank Guarantee for Rs.....(Rupees..... only) as a security/ guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

We.....(hereinafter referred to as "the Bank") hereby (indicate the name of the Bank) undertake to pay to the Government in amount not exceeding Rs.....(Rupees..... Only) on demand by the Government.

2) We..... do hereby undertake to pay the amounts due and payable (indicate the name of the Bank) under this Guarantee without any demure, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees... only).

3) We, the said bank further undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.

4). We further agree that the guarantee herein contained(indicate the name of the Bank) shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.

5) We further agree with the Government that(indicate the name of the Bank) the Government shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor (s) and to for bear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6) This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

7) We..... lastly undertake not to revoke this (indicate the name of the Bank) guarantee except with the previous consent of the Government in writing.

8) This guarantee shall be valid upto_. Unless extended on demand by Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. _ (Rs.-----only) and unless a claim in writing is lodged with us within 6 Months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged. Dated the

_____ day of _____ for
_____(indicate the name of Bank)

SECTION-VIII

SCHEDULES FOR SUPPLEMENTARY INFORMATION **PROFORMA OF SCHEDULES**

(Operative Schedules to be supplied to each intending tenderer)

SCHEDULE 'A'

Schedule of Quantities

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

Sl. No.	Description of Item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of Issue
1	2	3	4	5
1.	NIL	NIL	NIL	NIL

(Material required for the work shall be arranged by the contractor)

SCHEDULE 'C'

Tools and Plants to be hired to the contractor

Sl. No.	Description	Hire charges per day	Place of issue
1	2	3	4
		NIL	

(shall be arranged by the contractor)

SCHEDULE 'D'

Extra Schedule for specific requirement/documents for the work, if any.

- 1. Additional conditions**
- 2. Additional specifications**

SCHEDULE "E"

Reference to General Condition of the Contract CPWD 2014.

Name of Work: Design, supply, installation & commissioning of 30.5 Mtr. (100 feet) High National Flag Mast at Permanent Campus at Central University of Jharkhand, Ranchi.

Performance Guarantee : 05% of tendered amount

Security Deposit : 05% of each running bill

Schedule of component of other materials, labour, POL etc, for price escalation.

CLAUSE 10C : **Not Applicable**

CLAUSE 10CA : **Not Applicable**

CLAUSE 10CC : **Not applicable**

SCHEDULE 'F'

General Rules & Directions : General Conditions of Contract for CPWD Works 2014 with amendments upto date of receipt of tender shall read with NIT

Officer Inviting Tender	Registrar, Central University of Jharkhand, Ranchi.
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Definitions:

(i) Engineer-in-Charge	Executive Engineer, Central University of Jharkhand, Ranchi.
(ii) Accepting Authority	Registrar, Central University of Jharkhand, Ranchi.
(iii) Standard Schedule of Rates	CPWD DSR 2018 with up to date correction slips.
(iv) Department	Central University of Jharkhand
(v) Standard CPWD contract Form	GCC 2014, CPWD form 7 as modified and corrected upto the last date of issue of tender.
Clause 1	
i) Time allowed for submission of performance guarantee from the date of issue of letter acceptance.	07 days
ii) Maximum allowable extension beyond the period provided in (i) above.	05 days

Clause 2	
Authority for fixing compensation under clause 2.	Registrar, Central University of Jharkhand.
Clause 2 (A). Whether clause 2 (A) shall be applicable	No
Clause 5	
Number of Days from the Date of issue of letter of acceptance for reckoning date of start.	07 days
Time allowed for execution of work	30 days
Authority to decide:	
(i) Extension of time	Registrar, Central University of Jharkhand, Ranchi.
(ii) Rescheduling of mile stones	Registrar, Central University of Jharkhand, Ranchi.
Clause 6, Clause applicable - (6 or 6A) :	6A
Clause 7	
Gross work to be done together with net payment/adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment.	50 %
Clause 7A Whether clause 7A shall be applicable	Yes
Clause 8A	Applicable
Clause 9	Applicable
Clause 10A	Applicable
Clause 10 B (ii)	
Whether Clause 10 B (ii) shall be applicable	No
Clause 10C	Applicable
Clause 10 CA	Not Applicable
Clause 10CC	NA
Clause 11	
Specifications to be followed for execution of work	Latest CPWD Specification

Clause 18 – As per the requirement of the specialised work.

Clause 25

Constitution of Dispute Redressal committee (DRC): CUJ shall constitute One Chairman and two members.

Competent Authority to Appoint DRC: Hon. Vice Chancellor, Central University of Jharkhand.

Clause 31(A)

Contractor shall have to arrange water supply as well as electricity required for the work.

Clause 37 Applicable

SECTION-IX

Sample Forms for updating qualification, information, and so on

Sl. No.	Details	Yes/No	Page No.
1	Attested copy of Registration certificate or registered partnership deed of firm if firm is in partnership.		
2	PAN No. and GST No.		
3	Experience Certificates of satisfactorily completion of similar nature of works		
4	Self attested list of present clients alongwith their contact numbers and the copies of evidence in respect of the works executed of similar nature.		
5	Last three years Turnover and Balance Sheets/P & L A/c etc. certified by the Chartered Accountant till 31.03.2019		
6	EMD of Rs. 50,000/- through DD favouring Central University of Jharkhand, payable at Ranchi		
7	Tender fee of Rs.2000/- in form of DD, favouring Central University of Jharkhand, payable at Ranchi.		
8	Enlistment Certificate/ Order of the CPWD/ PWD or similar Government Departments		

SECTION- X

INSTRUCTIONS TO CONTRACTORS FOR SUBMISSION OF TENDER

Tenderer to ensure that:-

1. Tender to be witnessed on CPWD 8 of tender documents.
2. The contractor shall quote his rates keeping in mind the specifications, terms and conditions, additional / particular and special conditions etc. And nothing shall be payable extra whatsoever, unless otherwise specified.
3. The contractor whose tender is accepted shall also furnish performance guarantee of 5% of the tendered amount in addition to the other deposits mentioned elsewhere in the contract for proper performance of the agreement. The performance guarantee shall be in the shape of FDR or bank guarantee as per proforma given in General condition of contract.

Documents to be accompanied along with Technical Bid:

1. Attested copy of Registration certificate or registered partnership deed of firm if firm is in partnership.
2. EMD of Rs. 50000/- through DD favouring Central University of Jharkhand, payable at Ranchi.
3. Tender fee of Rs.2000/- in form of DD, favouring Central University of Jharkhand, payable at Ranchi.
4. Self attested list of present clients alongwith their contact numbers and the copies of evidence in respect of the works executed of similar nature.
5. Experience Certificates of satisfactorily completion of similar nature work. However, the contracts going to expired within next 06 months of the last date of submission of tender may be included in the list.
6. Enlistment Certificate/ Order of the CPWD/ PWD or similar Government Departments.
7. Last three financial year audited Accounts and ITRs.

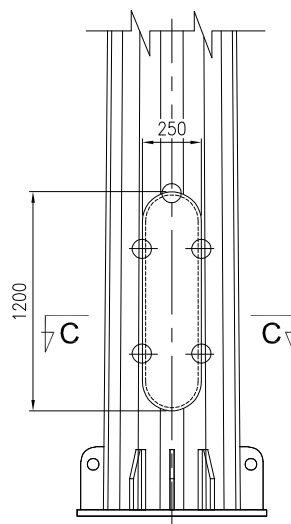
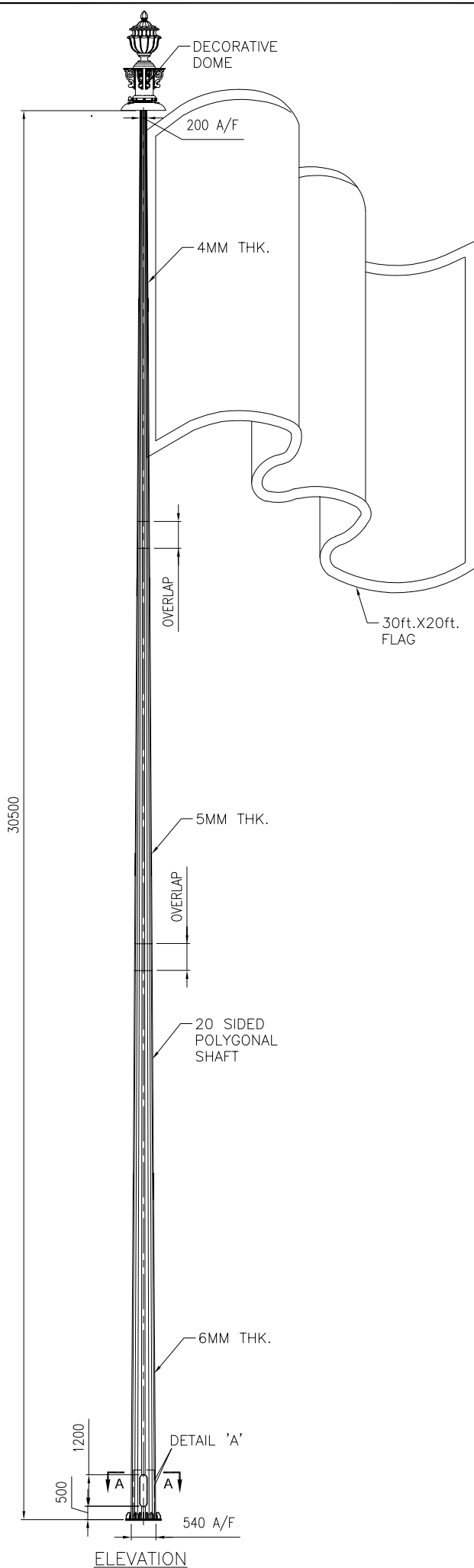
Check list for contractors for submission of tenders:

1. The contractor(s) should also read all the specifications, items & conditions, contract clauses, nomenclature of the items, specifications etc., contained in the bid document very carefully, before quoting the rates.
2. The contractor(s) should also read the General conditions of Contract for CPWD works 2014, which will be a part of the agreement with amendments upto the date of receipt of tenders including the special conditions and particular specifications etc.
3. Rates must be filled in words and figures. Amount should be worked out for all items.
4. The contractor(s) shall quote the rates keeping in mind the specifications, terms & conditions, additional and special conditions etc., and nothing extra shall be payable unless otherwise specified.
5. The Contractor(s) shall have to make his own arrangement for housing facilities for staff at his own cost. No labour huts will be allowed to be constructed in University campus. Any decision in this regard shall rest the Registrar, Central University of Jharkhand.

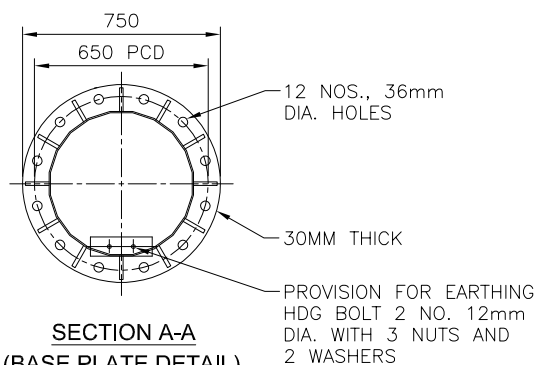
6. The contractor(s) shall quote his rebate if required, mentioning specifically on what component it is applicable otherwise it shall be considered general rebate on total quoted rates.
7. The work required to be executed in occupied buildings. The contractor(s) shall take precaution to ensure quality of workmanship as well as the progress of the work. He shall regulate the labour accordingly.
8. The contractor(s) shall make arrangement for disposal of dismantle materials from upper floors which are environmental friendly.
9. The Contractor shall advice to visit Permanent Campus before submitting the bid.

SECTION – XI

Drawings



DETAIL 'A'



SECTION A-A
(BASE PLATE DETAIL)

NOTE:

- ALL DIMENSIONS ARE IN MM (MILLIMETERS)
- DESIGN CONDITION:
 - DESIGN CODE – ASCE-48 & IS:875 2015(PART 3)
 - FLAG SIZE – 6.1m x 9.15m. (20ft x 30ft)
 - BASIC WIND SPEED (3-SEC GUST) – 50M/SEC
 - MEAN PROBABLE DESIGN LIFE OF THE STRUCTURE IS 25 YEARS.
 - TERRAIN CATEGORY 2
 - TOPOGRAPHY – FLAT
- MATERIALS:
 - POLE SHAFT : S355 AS PER BSEN 10025
 - BASE PLATE : S355 AS PER BSEN 10025
 - ANCHOR BOLT : GRADE 6.8 (12#030x1200L)
TS=600 N/SQ.MM, YS=480 N/SQ.MM
- GALVANIZING AS PER ASTM A-123 AND A-153
- NUMBER OF LONGITUDINAL SEAMS 1/2/3 BASED ON AVAILABLE SHEET WIDTHS.

DESCRIPTION

GENERAL ARRANGEMENT FOR
30.5m FLAG MAST OF SIZE 30'x20'