



Bharat Heavy Electricals Limited

Industry Sector, Transmission Business Group

Integrated Office Complex

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AMENDMENT NO-1 TO NIT

DATE: 05.01.08

SUB : AMENDMENT- 01 To NIT 3514 For ETC Works

REF: TENDER SPECIFICATION. No.– TBSM/TROMBAY/ETC/TENDER, DATED: 01.10.07

With reference to above tender for ETC works for 220kV switchyard extension at Trombay in Mumbai, following amendments/Clarifications may be noted.

1. Qualifying requirements

Definition of similar work given in qualifying requirements shall be read as under.

Similar job shall mean successfully executed/executing erection, testing and commissioning of at least one bay of 220kV substation OR at least one 132kV complete substation.

2. BOQ

- a) Item No.16.1-16.4 (Illumination) of the earlier BOQ has been deleted from the scope of bidders and new illumination BOQ (supply & ETC) is now being added to the bidder's scope as per the enclosed BOQ.
- b) New items 24(a) (Open Stores) & 24(b) (Closed Stores) is now being added to the bidder's scope as per the enclosed BOQ.

- All other terms & conditions of the tender specifications remain unchanged.
- BOQ for Illumination (item No.16) and Stores (item No. 24(a) & 24(b)) is enclosed.
- Specifications for open & closed stores are enclosed.
- Please enclose with your Technical Bid a copy of this amendment-01 duly signed by your authorized signatory and stamped.
- Vendors, who have already submitted their offer, may submit Revised Price offer in a sealed cover. This duly signed letter is to be submitted in a separate sealed cover. Both these cover shall be kept in a separate envelope superscribing "Revised price offer due to amendment in NIT" and also indicating tender specification No.

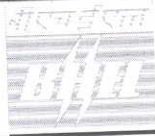
(R.Lodwal)
SDGM/TBSM

ADDENDUM TO BOQ

SI.No	Description of Item	Unit	Qty	Rate	Amount
16	SUPPLY and ETC of Illumination System (PI refer note no. 1 below)				
1.1	Control Room				
1.1.2	Lighting fixtures and Receptacles				
(i)	Lighting Fixtures				
	(a) 2x36W flourescent lamps in decorative lighting fixture with widespread mirror optics suitable for pendent mounting with twin tube complete with all accessories: similar to philips cat-No. TCS-306/236 and Bajaj Cat.No. BJSM-236/ Crompton Greaves Cat No.CSB W 1124 HSB (Type FL)	Nos.	12		
(ii)	Receptacles				
	(a) 32A, 240V: indoor Receptacle 3-pin type	Nos.	4		
1.1.4	Switchboards				
	(i) Modular swichboard with 4 nos. 5 Amp. Switches and 1 no. 5/15 Amp. Receptacle	Nos.	2		
24	Construction of Stores (PI refer note no. 2 below)				
(a)	Open Store as per specification	Sq. feet	500		
(b)	Covered Store Type C (100 Sq.meter) as per specification.	Sq. meter	100		

Note:

- Quantities for item No. 16 given above may increase/decrease. Supply and ETC for the above items and surface wiring complete in all respect shall be provided by the contractor.
- For item no. 24(a) & (b) BHEL reserve right to increase/decrease the quantity upto any extent or may delete whole quantity for price evaluation purpose as per BHEL's requirement.



TRANSMISSION BUSINESS GROUP (Subcontracts Management)

Doc. No. TBSM/Std-Spec/Cov-Str/01

Rev. 00

SPECIFICATIONS OF COVERED STORE FOR SWITCHYARD

1. The stores shall have a tubular truss of span 10M. at an interval of 5M. The length of the store shall be 20/15/10 Mtrs. depending on the scope of work. The truss material shall be procured from reputed manufactures conforming to the requirement of IS: 1161-1979 and as approved by Engineer-in-charge. The specific technical requirement for the execution of work shall be as per latest CPWD/IS specifications. The rate shall include the cost of labour and materials involved in all the operations including one coat of approved steel primer i.e. redoxide zinc chrome primer conforming to IS 2074: 1979.
2. Roof shall be made with GS corrugated sheets (24G) fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. Limpet washers or with G.I. limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to a pitch of 60 degrees). The materials shall be procured from reputed manufacture and as approved by Engineering Incharge. The roof shall be made with proper arrangements to prevent water leakage.
3. Bottom of the truss shall be 4.5 Mtrs. above floor level. Sidewalls shall be brick work (1:6) for the bottom 1.5 Mtrs. level and balance with GS Corrugated sheets.
4. The floor of the store shall be made with 75mm PCC (1:4:8) over hard compacted ground/surface. If the ground available at site is not hard enough, 150mm thick boulder soling or some other suitable alternative arrangement as directed by Engineering Incharge shall be done before PCC work.
5. The store shall be provided with a 3 M wide lockable rolling shutter with all accessories as required. The material used for rolling shutter shall be procured from reputed manufacturer and as approved by Engineering Incharge.
6. Adequate no. of fire extinguishers (min. 4 nos. Co₂ and 2 nos. foam type) and sand & water buckets shall be provided in the stores area.
7. These specifications shall be read in conjunction with drawing no. TBSM/TRUSS/01 Rev.00 enclosed with the tender.



**TRANSMISSION BUSINESS GROUP
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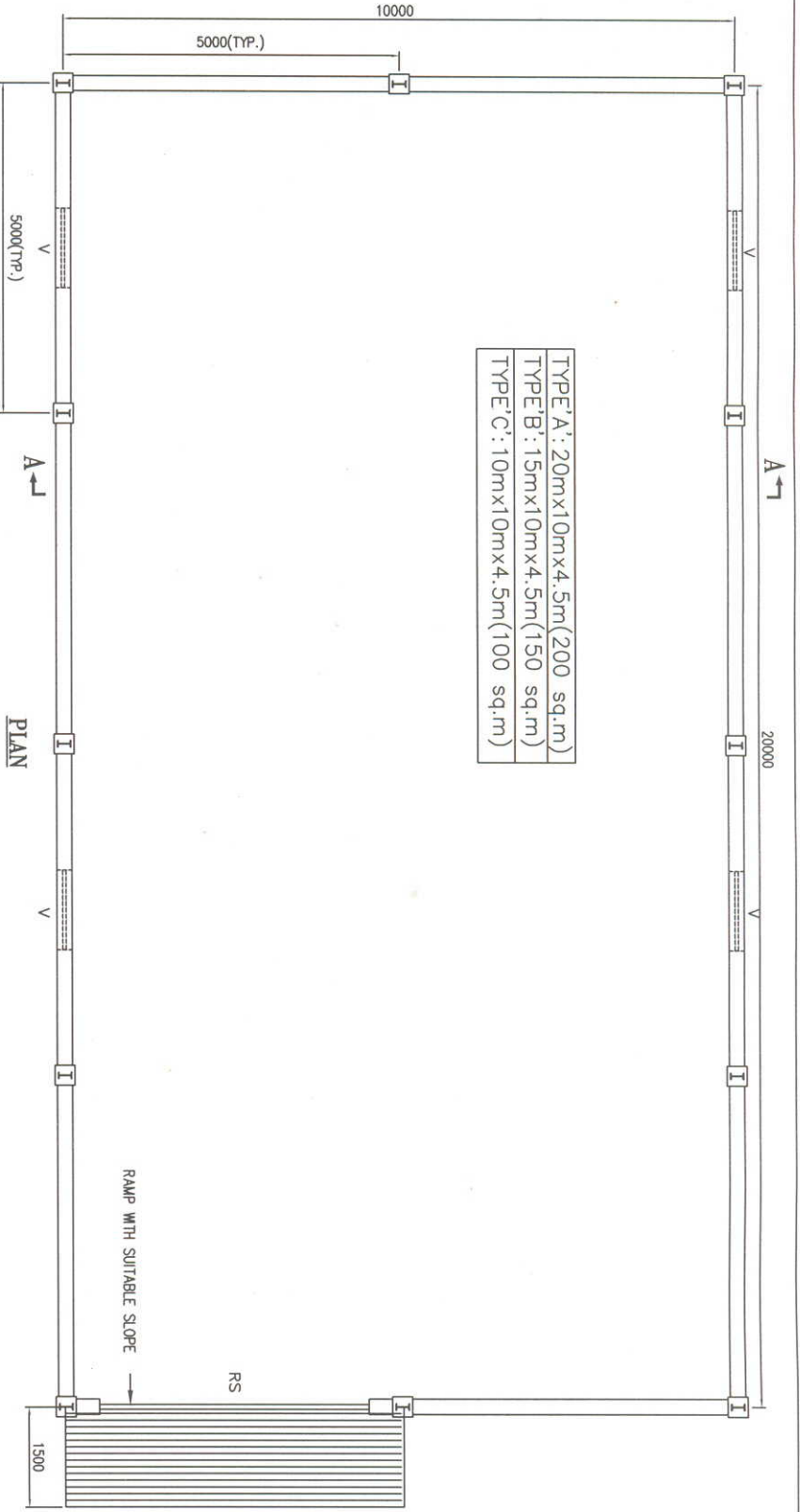
Doc. No. TBSM/Std-Spec/Open-Str/02

Rev. 00

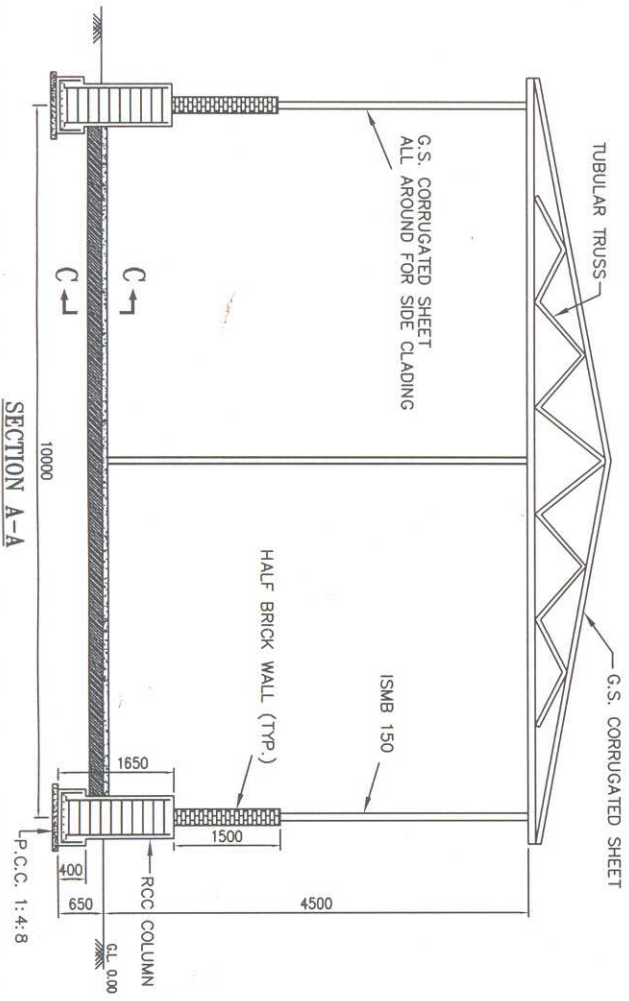
SPECIFICATIONS OF OPEN STORE FOR SWITCHYARD

1. Area around the open stores to be surrounded with barbed wire fencing- 1.8 M high above ground level with 8 strands of horizontal and two diagonal barbed wires. The posts shall be of medium M.S. tubes of 50mm dia/ angle 50x50x6 conforming to IS: 1161/IS 806. A M.S. base plate of size 160x160x6mm thick shall be welded with the tubular posts. All posts shall be 3.0m apart and shall be set in 1:2:4 PCC block of 0.40x0.40x0.6m depth. 75mm thick plain cement concrete 1:4:8 shall be provided below concrete block. The material shall be procured from reputed manufacture and as approved by Engineering Incharge.
2. One wide gate (5m.) for trucks / trailers and one wicket gate for personnel to be installed. The gate shall be of pipe framework with suitable stiffness, with weld mesh and with locking arrangement. The materials shall be procured from reputed manufacturer and as approved by Engineering Incharge.
3. One security cabin shall be provided inside the fence adjacent to the gate. The cabin shall be of size 2.0m x 2.0m.
4. The area of the open stores shall be raised 150mm above the surrounding ground level with brick soling / boulder soling or some other suitable inexpensive alternative arrangement & is to be compacted properly to prevent water logging and flow of water from surrounding area in to this area.
5. The area shall be adequately illuminated for clear visibility at night.

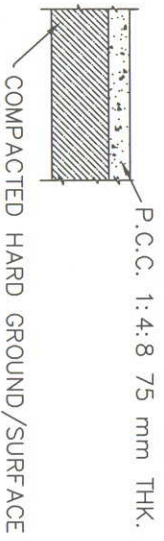
TYPE 'A': 20m x 10m x 4.5m (200 sq.m)
TYPE 'B': 15m x 10m x 4.5m (150 sq.m)
TYPE 'C': 10m x 10m x 4.5m (100 sq.m)



PLAN



SECTION A-A



SECTION C-C

LEGEND :-

- V - VENTILATION (1200Lx500H)
- RS - ROLLING SHUTTER (4000Lx4500H)

NOTE :-

1. ALL DIMENSIONS ARE IN MM.

		
SKETCH NO.	REV.	SCALE
TSM/TRUSS/01	00	1:100