

SECTION- 5

Name of the Work: - "Construction of Regional office Building Navodaya Vidyalaya Samiti Shillong Meghalaya".

Scope of Work: - The scope of work includes all required activities for proper completion of the aforesaid work as directed by the Engineer-in-Charge in accordance to the BOQ. Scope of Works majorly includes:

1. Construction of Regional office Building of RCC framed structure with plinth area as 1077.21 Sqm in accordance with approved drawings , Layout plan and BOQ.
2. Construction of Electrical Substation RCC framed structure with plinth area as 40 Sqm accordance with approved drawings , Layout plan and BOQ.
3. Construction of Pump house RCC framed structure with plinth area as 12 Sqm in accordance with approved drawings , Layout plan and BOQ.
4. Supply and Construction of furniture, interior works , Gate, Guard room , external services including Retaining wall as per the approved drawings , Layout plan and BOQ.
5. Construction of Guest House(Single Storey) of RCC framed structure with plinth area as 80.00 Sqm in accordance with approved drawings , Layout plan and BOQ.

All works shall be carried out as per the standard technical specifications, BOQ and related details as per instructions of Engineer-in charge of TCIL. The work is to be performed as per the specifications and directives from time to time by the Project Director.

The work under proposal is to be completed in all respects for the successful completion and handing over the completed works to owner. All safety precautions are required to be taken during the construction period. On award of work, the contractor will carry out the Total station survey and initial site levels, wherever necessary/ as directed by Engineer-in-Charge.

Specifications:

- (A) The design and specifications prescribed are those for building, of "National Building Code of India specifications and all related Indian Building Congress manuals and publications", and Meghalaya Building By-laws as amended till the date of issue of the notice inviting Tender. Building Materials for use on Building shall also conform to the specifications given in Building & road Manual and the work has to be carried out as per sound engineering practices & codes of building construction engineering.
- (B) The GOI, IS Specifications for Urban Building shall be followed in addition to State PWD / CPWD specifications.
- (C) For purposes of design, specification and quality control the Building & Manual, IRC publications for Building works including particular specifications shall form part of the Agreement.
- (D) For items not covered in Building Manual or IS-specifications for either BIS specification, or State/ District specification or Sound engineering practice, as determined by the Engineer, in that order should be followed.
- (E) Third Party Quality Assurance (TPQA) shall be carried out in accordance with the CPWD work manual through IIT/NIT/Reputed Govt. Engineering college at the stage of 30%, 60%, 90% & 100% and report shall be submitted to NVS (HQ) with building wise recommendations /suggestions.
- (F) If required under the contract, the Contractor shall carry out the work of water proofing treatment through specialized firm, who shall submit the 10 years guarantee bond against leakages/ dampness on a Rs. 100/- stamp paper to the TCIL as per Performa specified by TCIL/ Client. The guarantee shall include rectification of works within the

guarantee period of 10 years free of cost if leakage/ dampness is reported by the TCIL. Guarantee bond shall be tripartite agreement form.

Note:

1. The design, drawings, standards and guidelines of the IS Codes / PWD / CPWD/ NVS Circular (if any) are to be followed for works

2. List of Makes are attached separately. Contractor is bound to follow the list of makes/ specifications of the various materials. Any change shall be after written approval from Engineer-in-charge only.

Note: The preferred makes are not restrictive in nature and can accommodate any local brand/makes as per the site or project condition. The usage of these alternative brands/makes would be subject to meeting technical parameters as per relevant IS Code/ CPWD approval and the approval of competent authority.

Specifications:

- A. The design and specifications prescribed are those for building, of "National Building Code of India specifications and all related Indian Building Congress manuals and publications", as amended till the date of issue of the notice inviting Tender. Building Materials for use on Building shall also conform to the specifications given in Building , road Manual & as per approved Make List and the work has to be carried out as per sound engineering practices & codes of building construction engineering.
- B. The GOI, IS Specifications for Urban Building shall be followed in addition to CPWD specifications.
- C. For purposes of design, specification and quality control the Building & Manual, IRC publications for Building works including particular specifications shall form part of the Agreement.
- D. For items not covered in Building Manual or IS-specifications for either BIS specification, or State/ District specifications or Sound engineering practice, as determined by the Engineer, in that order should be followed.

Note: The approved design, drawings, standards and guidelines of the IS Codes /CPWD are to be followed for works.

LIST& MAKE OF VARIOUS ITEMS/PRODUCTS TO BE USED:-**A. Civil Works:-**

S.No.	Material /article	Confirming IS Code	Manufactures/agencies/brand/make
1.	Cement	IS8112:1989	OrdinaryPortlandCement43grade (Con formingtoIS:8112)from reputed manufactures of cement such as A.C.C. Jaypee Cement, J.K.Cement, Ultratech, Shree Cement, Gujarat Ambuja Cement and Cement Corporation of India etc. as approved by Ministry of Industry, Government of India, and holding license to use ISI certification mark for their productwhose name shall be got approved From Engineer-in-charge.
2.	Steel Reinforcement	IS1786:2008	Steel reinforcement bars confirming to relevant BIS codes from main producers as approved by the Ministry of steel, Thermomechanically treatedbarsFe-500Grade confirmingtoIS1786:2008 from approv ed brands like SAIL, TISCO, RINL, Shyam Steel (Shyam Steel Industries Limited)
3.	Structure Steel		SAIL, TISCO, RINL
4.	Corrugated GI Sheet	IS277:2003	TATA, ESSAR, SAIL
5.	Float Glass(transparent)	IS14900:2000	TATA, Modiguard, Saint Gobain
6.	Aluminum extrudedsections	IS733:1983& IS1285:2002	Jindal, Indal, Hindalco
7.	Aluminum plain sheets	IS733:1983& IS1285:2002	Jindal, Indal, Hindalco
8.	Pre laminated Particleboard	IS12823:1990	GVK, Novopan, Ecoboard, Archid, Century
9.	Block Board	IS1659:2004	Century, Greenply, Archid
10.	CommercialPly	IS303:1989	Century, Greenply, Archid
11.	Aluminumslidingdoorbolt	IS2681:1993	Jyoti, Argent, Everest

12.	Aluminum Tower bolt	IS204(Part-1): 1991	Jyoti, Argent, Everest
13.	Aluminum Handles	IS208:1996	Jyoti, Argent, Everest
14.	PVC Rigid foamsheet		Rajshri req.
15.	Hydraulic floor Spring	IS6315:1992	Hitech, Sandhu, Hardwyn
16.	Pre-cast terrazzo tiles	IS1237:1980	NTC, A-1, GTC
17.	PVC pipe	IS4985:2000	Supreme, Finolex, Prince
18.	PVC fittings	IS14233:1999	Supreme, Finolex, Prince
19.	Ceramic glazed wall tiles	IS13712:1993	HR Johnson, Kazaria, Orient, Somany

B. ELECTRICAL WORKS:

S. No.	Items	Conforming IS Code	Make
1	FRLS PVC insulated copper conductor	IS 694:1990/IEC 60227-1 to 5 (1979)	Havells/RR Kabels/KEI/Polycab/Skytone
2	PVC / Steel Conduit (duly ISI marked)	IS 9537 (Part 1): 1980/ IEC 60614-1 (1978)	Setia/ AKG/ BEC
3	Piano type switch / socket	IS 3854:1997	Havells/Kinjal/Anchor
4	Phenolic laminated sheet cover		Hylem/Formica/ Skylam
5	MCB Distribution board	IS 2675:1983	Havells/ Legrand/ C&S/ L&T/ Siemens
6	MCB / MCCB	IS 13032:1991	Havells/ Legrand/ C&S/ L&T
7	Brass compression gland/ Thimble		Dowells/ Comet/ Action
8	G.I. Wire/ G.I. strip		Hot dipped galvanized wire
9	Indoor cubical type panel board	IS 5039:1983	Tricolite / Advance Panel & Switchgear Pvt. Ltd/ Neptune/ ASPL/ Risha (All Duly CPRI approved workshop)
10	G.I. Pipe (duly ISI marked)	IS 1239 (Part1)	Jindal Hisar/ ITC/ TATA STEEL
11	Bend, elbow, socket, union, clamp		Duly ISI Marked
12	Indicating LED Lamp	IS 16102 (Part I & II)	L&T /Siemens/ ABB/ Schneider/ Rishab/ Philips
13	Various wattages Energy efficient LED luminaries.	IS 10322 (Part 1) : 1982/ IEC 598-1 (1979)	Crompton/ Havells/ Philips

14	LT armoured power cables- Aluminium conductor	IS 694:1990/IEC 60227-1 to 5 (1979)	Finolex/ Havells/ Universal/ Polycab
15	Inverter system	IS 13314	Sukam/ Microtek/ Luminous
16	Heavy duty ceiling fan/ exhaust fan	IS 374:1979	Almonard/ Crompton/ Havells/ Usha
17	Pressure type fire extinguishers	IS 15683:2006	Lifeguard/ Omex/ Ceasefire
18	Submersible pump set	IS 8034-1989	KSB/ Kirloskar/ Grundfos
19	Copper conductor flat submersible cable	IS 694:1990/IEC 60227-1 to 5 (1979)	Finolex / Havells / Universal / Polycab / Skytone
20	DOL starter	IS 8544 (Part 1): 1977	Havells / L&T / Rishabh / KSB
21	Ammeter/ Voltmeter	IS 1248 (Part 2): 2003/ IEC 60051-2 (1984)	L&T / Rishabh / HPL / Vaishno / AE
22	Overload relay/ Power contactor		L&T/BCH/GE /Havell's / HPL
23	Single phase Preventer		Minilec /L&T/ HPL
24	Lead Acid SMF battery	IS 14257	Exide/ SF/ AMRA RAJA
25	Motor/ Pumps	IS 9542-1980	Kirloskar/ Havells/ Crompon Green/KSB
26	25 KVA DG Set (Air cooled/ water cooled)	Engine- IS10001 Alternator- IS 13364 (part-1)	Kirloskar / Cummins/Eicher
27	Fluorescent luminaries	IS 10322 (Part 1): 1982/ IEC 598-1 (1979)	Crompton/ Havells/ Philips

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