

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, ANSARI NAGAR, NEW DELHI

Dated: 21.03.2016

AMENDMENT No. - I

Project Name: Tender for "External Electrical Works for OPD block, Masjid Moth Campus at AIIMS, New Delhi"

Tender No.HSCC/AIIMS/OPD/EXT_ELECT/2016; dated: 29.02.2016

(i) The Last date of submission & opening of bids has been extended as follows:

Last date to fill/upload the tender	:	upto 15:00 hrs. on 06.04.2016
through e-Tendering.		

Date of Opening of bids : on 06.04.2016 at 15:30 hrs.

Reply to Pre Bid Queries raised by bidders during pre -bid meeting held on 14.03.2016 at HSCC, Head Office, Noida

S.No.	Points	Tender Provision/Description	Queries	Reply
1	Vol I, NIT & PQ, Page 4, Clause 1		"Similar Works " shall mean Electro- Mechanical works including Supply, installation testing, commissioning of HT substation	No change. As per Tender Conditions.
			We request you that Experience of DG Set work can be submitted in a separate work of value and rating @ 80% of that asked in the Tender BOQ. The same clause has been	



			accepted in other CPWD projects like IIT	
			Ropar & Supreme Court projects.	
2	Vol I, NIT & PQ	Bank Guarantee for EMD	Please provide the Bank Details, Beneficiary Name, IFSC Code, Account details. for furnishing Bank Guarantee.	Name of Bank: Indian Overseas Bank Address: Kribhco Branch, A-10, Sector-1, Noida, UP. Beneficiary Name: HSCC (India) Ltd. Beneficiary A/c No.: 17250-20000- 00151 IFS Code/RTGS No.: IOBA0001725 MICR Code:110020039
3	Vol I, NIT & PQ, Page 22, Clause 2.3.7(i)	These prices should include all costs associated with the Project including any out of pocket / mobilization expenses, taxes, charges, levies, cess, VAT etc. and excluding Service tax as applicable till the date of NIT.	Please clarify about the applicability of labour cess.	Rates/ Price to be quoted without service tax. Service tax as applicable, shall be reimbursed separately on submission of proof of deposition
4	Vol II, GCC, Section 2, Clauses of Contract, Clause 2	Compensation for Delay	We request you to accept the Compensation of delay shall be 0.5% per week subject to maximum of 5% of the contract value.	No change. As per tender condition.
5	Vol II, GCC, Section 1, Conditions of Contract, Clause 8.1, Page 13	 order of preference shall be observed: a) Description of Schedule of Quantities b) Particular specifications and Special Condition, if any. c) Drawings d) CPWD Specifications e) Indian Standard Specifications of B.I.S. 	We presume that addendum / pre-bid response shall get preference over other documents. Please confirm.	(Amendment) Shall be part of contract
6	Vol II, GCC, Section 2, Clauses of Contract, Clause 2	 (i) COMPENSATION FOR DELAY OF WORK @ 1.5 % of tendered value per month of delay to be computed on per day basis Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work or of the Tendered Value of the item or group of items of work for which a separate period of completion is originally given. 	We request you to amend the upper limit as 5% of total contract value.	No change
7	Vol II, GCC,	MOBILISATION ADVANCE	We request you to provide interest free	No mobilization advance is payable.



	Section 2, Clauses of Contract, Clause 10 B (ii)	Mobilization advance not exceeding 10% of the tendered value, The mobilization advance will bear simple interest at the rate of 10 per cent per annum	advance.	Refer Schedule' F of VolII (GCC).
8	Vol II, GCC, Section 2, Clauses of Contract, Clause 10 C	PAYMENT ON ACCOUNT OF INCREASE IN PRICES/ WAGES DUE TO STATUTORY ORDER(S)	Please confirm that Variation / Change of any Existing Taxes / Duties and Imposition of New Taxes / Levies including GST, shall be payable to us on documentary proof.	As per tender condition
9	Vol II, GCC, Section 2, Clauses of Contract, Clause 25	SETTLEMENT OF DISPUTES & ARBITRATION	All disputes to be resolved by one arbitrator from each side and third selected by both the parties. We request you to amend this clause as "Arbitration process shall be by three Arbitrators. First Arbitrator shall be appointed by client, second by contractor and third will be jointly appointed by first and second Arbitrator. Arbitration proceedings will be governed by the provisions of the "The Indian Arbitration and Conciliation Act", 1996 and any re-enactments or statutory modifications thereof for the time being in force".	As per tender condition
10	Vol II, GCC, Section 2, Clauses of Contract, Clause 25	LEVY/ TAXES PAYABLE BY CONTRACTOR	Please confirm that Service Tax to be excluded from our Rates to be quoted and it shall be re-imbursed to us on documentary proof. Please confirm whether Labour Cess to be included in our rates or not.	Rates/ Price to be quoted without service tax. Service tax as applicable, shall be reimbursed separately on submission of proof of deposition. Labour Cess is inclusive in rates.
11	Vol III, SCC, Clause 4(1)	SCOPE OF CONTRACT Fire alarm & smoke detection system, Nurse call bell System, EPABX	But BOQ includes Building Management & Parking Management Systems only. Please clarify.	Item to be executed as per Bill of Quantities (BOQ).
12	Vol III, SCC, Clause 9(e)	STORAGE, CLEANING & DEWATERING Contractor shall be responsible to keep entire site free from water due to water coming from any source at any level	We presume that space shall be provide within site premises for store & site office of contractor. Please confirm. We presume that cleaning of site will be pertaining to our scope of work only. Please confirm.	at their site work.
13	Vol III, SCC,	WATER SUPPLY & POWER SUPPLY	We request you to provide Power and Water at	No change, As per tender condition

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	Clause 42.2.4	The Contractor shall make his own arrangement for water supply at Site for drinking as well as construction purposes at his own cost. The Contractor shall also make his own arrangements for power supply at Site for construction, testing & commissioning of all services and general use at his own cost. Non-availability of power supply and/or water from whatever source shall not entail any additional claims or extension of Contract period in this account. The contractor will provide water &electricity to the Engineer's office free of cost for the required quantity by the engineer's site office.	one point free of cost. Further distribution shall be taken care by us.	
14	Vol III, SCC, ADDITIONAL SPECIFIC CONDITIONS OF CONTRACT , Clause 24	 TERMS OF PAYMENT (Only for items of major electrical equipment) For purposes of estimating the contract value of work executed for certificate of payment under clause 32(d) of section II the following norms shall be followed. a. 70% of BOQ rate on receipt of equipment against receipt of complete material at site & test certificates. b. 15% of BOQ rate on erection and installation of equipment. c. 10% after successful completion of all works including all testing, commissioning & taking over. d. 5% after taking over of all works. 	We request you to accept the following Terms for all Items & Equipment:- a. 70% of BOQ rate on receipt of equipment against receipt of complete material at site & test certificates. b. 15% of BOQ rate on erection and installation of equipment. c. 10% after successful completion of all works including all testing, commissioning & taking over. d. 5% after taking over of all works. Please clarify which Items are covered under Major Electrical Equipment.	No change, as per tender condition only.
15	Vol III, SCC, Clause 31(e)	RETENTION MONEY BG of 2.5%, valid till completion & deduction of 5% from RA bills amounting to 2.5% of contract	Please clarify which option to follow. Also, we request you to allow to submit BG of 5% of contract price valid till DLP so that no deduction shall be made towards retention	No change, as per tender condition only.



		price, to be released on completion. OR: deduction of 10% from RA bills amounting to 5% of contract price, 50% to be released on completion & remaining 50% after DLP.	money.	
16	Vol III, SCC, Clause 45	OPERATION & MAINTENANCE WORK DURING DLP The contractor shall carry operation &maintenance of the entire system for one (01) year after satisfactory completion of entire work.	Please clarify the manpower details required and the number of shifts for operation to be considered. Please also confirm whether this will be considered under Bid Evaluation or not. Please clarify the scope whether it is inclusive of comprehensive annual maintenance contract or labour based operation contract. If it is lab based the please clarify no. of manpower required.	The entire system is to be maintained during defect liability period of one year after completion and handing over of the work. Operation work has been deleted.
17	Vol III, SCC, ADDITIONAL SPECIFIC CONDITIONS OF CONTRACT AND SPECIFICATIO NS, Clause 5.1 (i)	Foundations for equipment and components where required, including foundation bolts	We request you to provide foundations of equipment.	No change
18	Vol III, SCC, ADDITIONAL SPECIFIC CONDITIONS OF CONTRACT AND SPECIFICATIO NS, Clause 25	TRAINING OF PERSONNEL The Contractor shall arrange to train the Employer's personnel	Please provide no. of personnel to be trained & for how many days.	Training will be on the job at the time of installation and commissioning.
19	Vol IV, Technical Specifications, List of Makes	However, HSCC electrical engineer (approving authority) reserves the right to opt for the best preferred listed make	We request you that the Choice of makes from within the approved make list shall be ours. However we shall submit the technical details to you before ordering major items.	No change
20	Vol IV, Technical Specifications, List of Makes	Make of Transformers	We request you to add the make of Voltamp and Kirloskar in your approved make list.	No change
21	Vol IV, Technical	Make of 11 KV Panels	Please approve authorized channel partners of OEMs to quote with.	No change



	Specifications, List of Makes			
22	Vol IV, Technical Specifications, List of Makes	HT/ LT-XLPS cables	Please approve KEI and Polycab as additional makes.	No change
23	Vol IV, Technical Specifications, List of Makes	Lifts & Escalators	Please approve Johnson as additional make.	No change
24	Vol IV, Technical Specifications, List of Makes	Make of Main LT Panel (TTA)/ APFC Panel	Please approve authorized channel partners of OEMs to quote with. We request you to accept the makes specified in MV Panels to be considered for APFC Panels	No change
25	Vol IV, Technical Specifications, List of Makes	Make of Bus Duct / Rising Mains	Please approve C&S and Godrej as additional makes for busducts. We request you to accept the make of C & S in your approved make list.	No change
26	Vol IV, Technical Specifications, List of Makes	Make of Copper Control Cable	We request you to accept the make of KEI / Polycab in your approved make list.	No change
27	Vol IV, Technical Specifications, List of Makes	Make of Cable Tray / Raceways	We request you to accept the make of MEM in your approved make list.	No change
28	Bid Submission	Bid submission date	We request you to extend the bid submission date for another 2 weeks' time i.e. till 12th April 2016.	The last of fill/upload the tender through e-tendering has been extended up to 15:00 hrs. on 06.04.2016.
29	Drawings		Please provide layout drawings & SLDs.	SLD & Drawings will be provided successful bidder only.
30	BOQ, item no. 1.04	Busduct	 There are no detailed specifications for this item. Kindly provide the detailed specs for better understanding & accurate pricing. Please clarify whether bus ducts are indoor or outdoor type. 	Specification of bus duct attached. Partly indoor and partly outside bus duct has been considered. For outdoor installation canopy will be mounted on bus duct for protection.
			Also, please provide technical specification & layout drawings for the same.	

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31	BOQ, item no. 1.15 & 1.16	Cable Tray	We presume that hanging arrangements for these trays shall be covered under item no. 1.14. Please confirm.	Installation, included
32	BOQ, item no. 3, subhead 3.01	Exhaust System	Please incorporate the pipe size, bellow, insulation & MS Steel in the BOQ as separate line items. Please also provide us the site layout.	As per BOQ
33	BOQ, item no. 3, subhead 3.03	Underground Diesel Tank/ Bulk Oil Tank	For 20 KL Bulk Oil Tank for quantity of fuel piping & other accessories. Please share us the piping & instrumentation diagram enable us to quote BOT with its accessories. Please incorporate the piping & related accessories in the BOQ as separate line items. Please also provide us the site layouts and P&I of fuel system to understand the scheme.	As per BOQ
34	BOQ, item no. 6, subhead 6.01 (ii)	90 watts LED street light fixture in die cast aluminum body with 90 watts LED lamp complete with control gear, cover etc. similar to Compton Greeves LSTO45-90/CDL or approved equivalent including its wiring with 2 X 2.5 sq.mm. PVC insulated, FRLS copper conductor and 1.5 sqmm PVC insulated, FRLS copper earth wire from control box complete as required.		Light fixture included, As per BOQ
35	Technical Specifications, item no. 8, subhead 8.02	TECHNICAL SPECIFICATIONS OF DG SET & ASSOCIATED WORKS Exhaust Emission	As per tender, EURO-II / CPCB-II complied DG Set & Catalytic convertor is requirement for 1250KVA DG. Please note CPCBII are applicable on DG set of rating up to 1000KVA (800KW) only. Beyond that only 30mtr structure is required, please clarify.	As per CPWD specifications/ Manufacturers Standard practice
36	Technical Specifications, item no. 8, subhead 8.08	Diesel Engine Construction	Lube oil Priming PumpAs per manufacturer standard & design forCummins engine, there is no requirement ofAC motor driven lube oil priming pump.Governing SystemAs per manufacturer standard & design,electronic governor having automatic speedcontrol. There is no provision for Manuel overspeed setting.	As per CPWD specifications/ Manufacturers Standard practice
37	Technical Specifications,	Heat Exchanger	There is contradiction about cooling system. In Specification, Heat exchanger cooling system	As per BOQ, water cooled radiator type.



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	item no. 8, subhead 8.09		mention where as in DG set BOQ radiator cooling system mention. So we have considered cooling system as per your BOQ that radiator cooled engine.	
38	Technical Specifications, item no. 8, subhead 8.14	Temperature rise restricted to that of class F	Please note that all alternator manufacturers design their machine with class H and temp. rise limited to class H @ 40 deg C ambient. Please confirm class H to H @ 40 deg C will meet your requirement or you have any specific requirement apart from std. one.	As per CPWD specifications/ Manufacturers Standard practice
39	Technical Specifications, item no. 8, subhead 8.16	TEST AT MANUFACTURER'S WORK	Please clarify the no. of hours of testing at manufacturer's works.	As per CPWD specifications/ Manufacturers Standard practice
40	Technical Specifications, item no. 8, subhead 8.17	INSPECTION & TESTING AT SITE	Please clarify the no. of hours of testing at site.	As per CPWD specifications/ Manufacturers Standard practice
41	Technical Specifications, item no. 8, subhead 8.20	Performance Requirement – Guaranteed technical particulars of DG	 (1.2)Diesel Engine As per actual site condition, AIIMS (Delhi) site having altitude of (230m above MSL) we have offered 1250 KVA DG Set which will provide required output rating 1250 KVA without ant deration. (5.2) Insulation As per manufacturer design & standard acoustic lining insulation shall be 75mm thick of 64 Kg/m³ density. (5.3) Air Circulation system As per manufacturer design & standard for Cummins DG set, there is no requirement of axial flow fan for air intake & exhaust system. As per table, 1400 KVA (1200 KW) at 40 Deg. C rating of the alternator however, DG rating is 1250 KVA. Please confirm std. 1250KVA alternator will be supplied or higher rating alternator is required.	AS per Manufacturers Standard practice.
42	Technical Specifications, item no. 8, subhead 8.22.07	Synchronizing components for DG set	 (t & r) 5 Nos. under/ over voltage specified, please clear the quantity of Mains feeder. (w) We have not considered starter coil for oil priming pump same is not applicable for Cummins DG sets. 	AS per BOQ



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			(x-ee) We have considered single multifunction meter in place of separate meter.	
43	Technical Specifications, item no. 8, subhead 8.22.09	Synchronizing Panel	As per manufacturer's standards there is no provision for following alarms. Engine pre glow/ fuel solenoid control/ engine starter control. We have not considered duplicity of protection that is inbuilt in DG controller/ ACB. Please clarify that Mains protection Df/Dt required & Manuel synchronization also required or not? We have considered only mini PLC for auto load management purpose. Please share the synchronizing panel SLD for	As per Manufacturers Standard practice.
			more clarity about its protection & signal.	
44	BOQ, item no. 9	Parking Management System	There are no detailed specifications provided for this item. Kindly provide the detailed specs for better understanding & accurate pricing (details in attached annexure).	Specification already provided in Vol IV. Drawings enclosed.
45	BOQ, item no. 9, subhead 9.01(iv)	Parking Management System Zone Controller	Please provide the Configuration of Zone, detectors per zone controller & Communication Protocol	As per BOQ/ Specification/Drawings enclosed.
46	BOQ, item no. 9, subhead 9.01(v)	Parking Management System Master controller	Please clarify it the same is required as for Zone Controller.	-Do-
47	BOQ, item no. 9, subhead 9.01(vi)	Parking Management System LED direction display in driveways	Please provide the Specification of how many digits-with arrow or without Arrow, Size & Character Height	-Do-
48	BOQ, item no. 9, subhead 9.01(vii)	Parking Management System LED display for parking availability on floors	Kindly provide the Specifications for how many rows,how many Digit, Character Height, Size & Communication Protocol for the line item.	-Do-
49	BOQ, item no. 9, subhead 9.01(viii)	Parking Management System Barcode scanner	Kindly provide the type of barcode scanner(Handheld or Fixed)	-Do-
50	BOQ, item no. 9, subhead 9.01(ix)	Parking Management System Bill printer	Kindly provide the type of printer	-Do-
51	BOQ, item no. 9, subhead 9.01(x)	Parking Management System Outdoor LED fare display	Kindly provide the area where it will be installed.	-Do-
52	BOQ, item no. 9, subhead 9.01(xiii)	Parking Management System Under vehicle scanner with driver cameras,	Kindly provide the type of system required(Video based, Area Scan or line scan	-Do-



		number plate readers etc		
53	BOQ, item no. 9, subhead	Parking Management System	Kindly provide the opening closing time of the barrier and IP rating.	-Do-
	9.01(xv)	Boom barriers including controller, safety sensor		
		etc. complete as required		
54	BOQ, item no. 9, subhead	Parking Management System	Kindly provide the configuration of the PC.	-Do-
	9.01(xvi)	Personal Computer (P4) with LED monitor 18.5 inch		
55	BOQ, item no. 9, subhead 9.01(xvii)	Parking Management System Server for PMS	Kindly provide the server specification.	-Do-
56	<u> </u>		Kindly provide the alternate makes for this	No Change As per Tender conditions
90	BOQ, item no. 7, subhead B(9)	Building Management System	Kindly provide the alternate makes for this item. The mentioned makes doesn't	No Change. As per Tender conditions.
		Ultrasonic Flow Metre	manufacture this item.	
57	BOQ, item no.	Building Management System	Kindly provide the alternate makes for this	No Change. As per Tender conditions.
	7, subhead B(9)		item. The mentioned makes doesn't	
		Level Switch	manufacture this item.	
58	BOQ, item no.	Building Management System	Kindly provide the alternate makes for this	No Change. As per Tender conditions.
	7, subhead B(9)		item. The mentioned makes doesn't	
		Flame Proof Level Switch	manufacture this item.	
59	BOQ, item no.	Lifts	Please approve SS scratch proof-vandal proof	SS Scratch proof finish accepted.
	10, subhead		finish also as both are with scratch proof	
	10.01	Type of doors: Moon rock finish.	finishes.	
60	BOQ, item no.	Lifts	Please approve speed of 1.0 m/s also.	No Change as per tender condition.
	10, subhead			
	10.01	Speed -0.75 MPS		

All other terms & conditions of the tender shall remain unchanged.

Prospective bidders are advised to regularly scan through HSCC e-tender portal http://www.tenderwizard.com/HSCC as corrigendum/amendments etc., if any, will be notified on this portal only and separate advertisement will not be made for this.

-sd-DGM (Electrical), HSCC (India) Ltd. For & on behalf of Director, AIIMS, New Delhi

TECHNICAL SPECIFICATIONS

1.00 BUS TRUNKING/ RISING MAINS

1.1 SCOPE

This section covers manufacture, supply, installation, resting and commissioning of sandwich insulated bus trunking, & rising mains, indoor/ outdoor type.

1.2 Supply voltage

415/440 Volt, 3 phase, 4 wire, 50 Hz AC supply.

1.3 Standards for compliance:

IS: 8623/ 1993 I & II and IEC 60439/ I & II.

1.4 Construction:

The enclosure will be made from 16 SWG GI/ CRCA sheet steel powder coated of approved shade. Bus bars would be of high conductivity aluminium in "Sandwich" construction and the conductors will be individually insulated with halogen free, fire retardant class–B or better insulation. No drilling of Bus bar is permitted. Length of the section will be limited to maximum three metre. Bus bar of one section will be connected to bus bar of adjacent section by uni-block joint system removable as separate sub-assembly, so that it can be inserted or removed without disturbing the adjacent sections.

1.4.1 Technical Parameters:

Bus trunking shall be designed to withstand short circuit current of 50 KA for one second.

Bus bar system should be designed for high temperatures withstand capability.

Insulation voltage 1.1 KV/1.0 KV or as per manufacturer Standard Practices

Bus trunking will be suitably chosen to give permissible voltage drop.

Plug in boxes

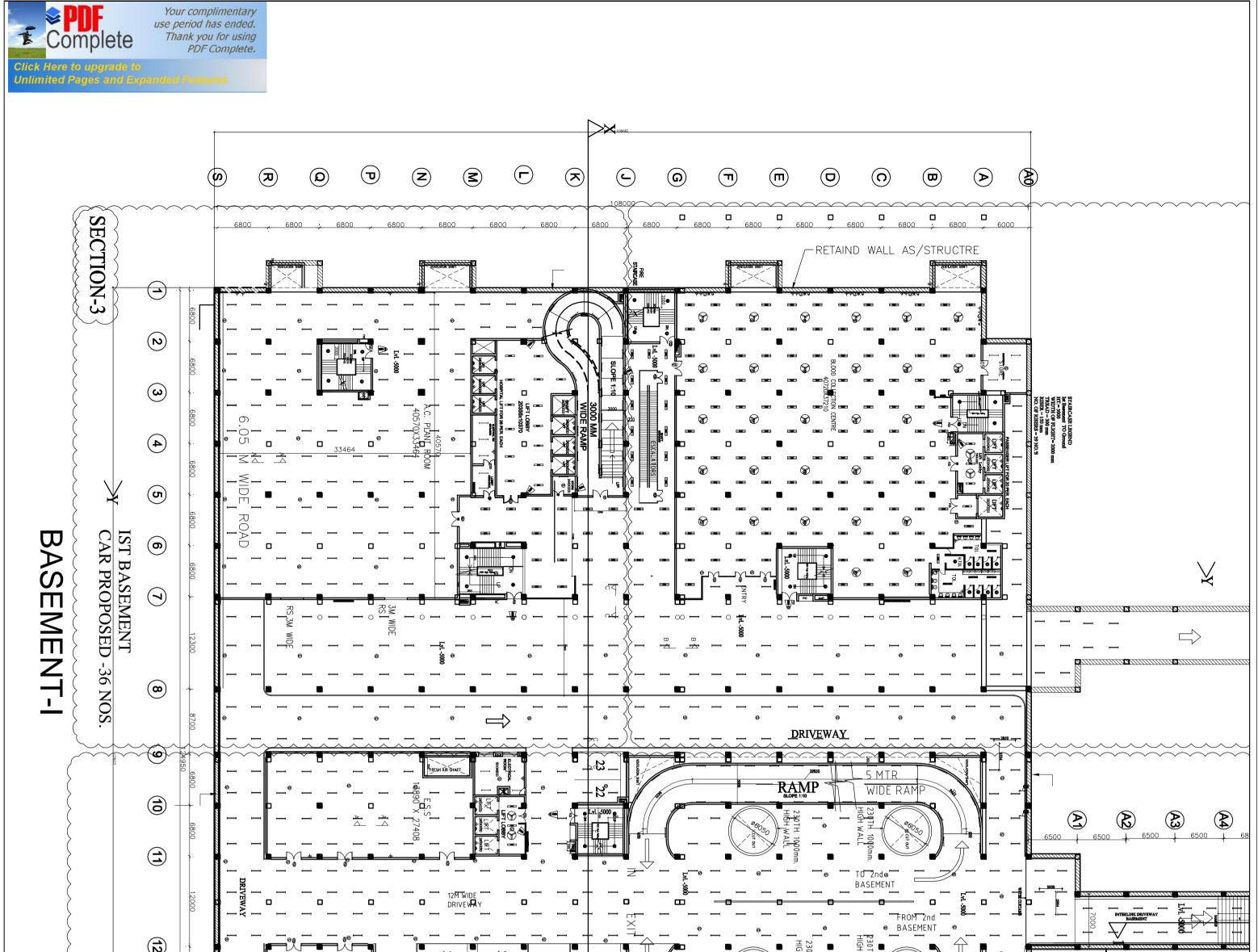
Plug in boxes will be of draw out type. Contacts will be of silver plated copper and spring loaded. Earth connection will be the first to make and last to break during insertion and with drawl. Plug in boxes will be made from 1.6 mm CRCA sheet steel powder coated. Inside the plug in Boxes MCCB with the fuses will be located as per requirements. The operating handle will be interlocked with plug in box cover so that MCCB can be operated only with the suitable cover in closed position. The plug in box will be interlocked with bus bar trunking so that it can not be inserted or removed with the plug in box lid open. MCCB will be of 4 pole

type unless otherwise specified in BOQ. Short circuit breaking capacity of MCCB in PIB should be same as that of bus trunking i.e. 50 KA.

- 1.5 List of test to be carried out:
- 1.5.1 Routine tests:
 - i. Verification of insulation resistance.
 - ii. Inspection of assembly, interlocks, locks etc.
 - iii. Dielectric test.

Copies of the following certificate should be submitted:

- i. Verification of temperature rise limits
- ii. Verification of di-electric properties.
- iii. Verification of short circuit strength.
- iv. Verification of degree of protection.
- v. Insulation resistance test with 500 volt megger. The insulation resistance shall be not less than 100 mega ohm.



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	SECTION-4		 	~~~~							~~~~~	 ~~~~	 	
HSCC (INDIA) LIMITED (A GOVERNMENT OF INDIA ENTERPRISES) NEW DELHI INDIA	HSCC		Job. No. NTS Date: App. By. Rev. By Prep. By	HSCC/D&E/AIIMS-OPD/TD/EL-03 Drawing. No. Revision	BASEMENT PLAN-1 ELECTRICAL LAYOUT	OPD BLOCK AT MASJID MOTH	TITLE TENDER DRAWING	PROPOSED DEVELOPMENT OF MASJID MOTH All India Institute of Medical Science New-Delhi	PROJECT	 PER PROVISION OF NBC OF INDIA. 2. THE BUILDING IS CENTRALLY AIR-CONDITIONED. 3. ALL INTERNAL PARTITION WALLS OF TOILETS TO BE 2100 MM HIGH. 	NOTE : 1. ARTIFICIAL LIGHT & MECHANICAL VENTILATION SHALL BE PROVIDED AS		NOTES :COLUMN 750x750 MM	NORTHThis drawing with all its contents is the sole intellectual property of the Hospital Services Consultancy Corporation (India) Ltd. Copying of this drawing or part thereof,or its use in any form whotover without the written permission of HSCC is prohibited.

