

INDIAN INSTITUTE OF TECHNOLOGY MADRAS
ENGINEERING UNIT

PRE BID MEETING WITH CONTRACTORS

Name of work: Construction of Additional Wing (G +2 - Floors) for Chemistry Department at IIT Madras.

Reference: T.No 64 /2012-13

Date of meeting: 29.11.2012 at 10:30 AM

Venue: Engineering Unit Conference room, Admin 3rd floor

Members Present:

IIT MADRAS	CONTRACTORS
Prof.K.N.Satyanarayana, Chairman (EU) Prof.U.V.Varadaraju, HOD, Chemistry Er.R.Arumugam, Superintending Engineer Dr.M.Ramachandran, EE,i/c (Civil) Er.P.Soundararaj, Consultant (Electrical) Er.V.Manickavasagam, AE(Elect/DB) Er.S.Padmanaban, AE(Elect/DB) Er. A. Siva Kumar, JE (DB) Er.K.Narayanaperumal, JE(DB)	Shri.S.R.Kapheer Saheb, Project Manager M/s IVRCL LIMITED Shri.S.Paulraj., DGM, M/s RR Thulasi Builders

The following points were discussed and the decisions taken against each.

S No	Points raised	Clarification sought
1	Contractor Requested to Provide 1) Water and 2)Power at Free of Cost at Site	Not agreed. 1. Water has to be arranged by the contractor at their own cost. 2. Temporary power supply will be given at the rate of Rs.10.50 per unit. Also contractor is to requested to arrange for alternative power supply (DG) at their own risk and cost during the absence of Institute's power supply.
2	Requested to provide Layout Drawing	All Set of drawings was already uploaded in the website.
3	Requested to provide sufficient land for Batching plant, Fabrication yard, site office, cement and stores godowns and labour hutments etc.,	Minimum area will be provided as available at the proposed site for RM800, Steel yard, cement godown, stores and site office. No labour hutments permitted inside the campus.
4	Clause 10B (ii) Requested to provide interest free Mobilization Advance @ 10% of contract value.	Not agreed. Mobilization advance will be paid only as per the agreement clause.
5	Requested for Minimum eligible for interim payment as per clause 7A, Schedule F to each RA bill as Rs 25.00 Lakhs. (at least for initial 6 months instead of proposed Rs 50.00 lakhs)	Agreed only for Grosswork to be done together with net Payment / adjustment of advances for material Collected, if any, since the last such payments for being eligible to interim payment of Rs 25 lakhs for initial 3 months from the date of commencement of work.
6	In the Financial bid, item No 15, page no 99, Supplying and filling in plinth with Jamuna sand under floors including, watering, ramming consolidating and dressing complete.	The item shall be read as Supplying and filling in plinth with local river sand under floors including, watering, ramming consolidating and dressing complete.

S No	Points raised	Clarification sought
7	<p>In the Financial bid, item No 25, page no 101</p> <p>Providing and laying in position machine batched and machine mixed design mix M-35 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. Upto Plinth Level.</p>	<p>This item shall be read as</p> <p>Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions (as per IS:9103) to accelerate, retard setting of concrete improve workability without impairing strength and durability as per direction of Engineer-in-charge: M-35 grade reinforced cement concrete by using minimum ordinary portland cement 380kg of cement per cum of concrete with a minimum flyash content of 50kg per cum of concrete. Concrete should be laid within three hours of batching.</p> <p>For all RCC works upto Plinth Level.</p>
8	<p>In the item No 26 page no 101</p> <p>Providing and laying in position machine batched and machine mixed design mix M-35 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. upto floor five level excluding cost of centring, shuttering, finishing and reinforcement :(Site mix) Above Plinth level upto six floor level</p>	<p>This item Shall be read as</p> <p>Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions (as per IS:9103) to accelerate, retard setting of concrete improve workability without impairing strength and durability as per direction of Engineer-in-charge: M-35 grade reinforced cement concrete by using minimum ordinary portland cement 380kg of cement per cum of concrete with a minimum flyash content of 50kg per cum of concrete. Concrete should be laid within three hours of batching.</p> <p>Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. upto floor five level excluding cost of centring, shuttering, finishing and reinforcement : (Site mix)</p>

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9	<p>Item No 27, Page No 102 Providing and laying in position machine batched and machine mixed design mix M-35 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 kg/cum.Excess/less cement used as per design mix is payable/recoverable separately).Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement (Readymix Concrete)</p>	<p>This item shall be read as Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions (as per IS:9103) to accelerate, retard setting of concrete improve workability without impairing strength and durability as per direction of Engineer-in-charge: M-35 grade reinforced cement concrete by using minimum ordinary portland cement 380kg of cement per cum of concrete with a minimum flyash content of 50kg per cum of concrete. Concrete should be laid within three hours of batching. Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement (Readymix Concrete)</p>
10	<p>Item No 28, Page No 102 Providing and laying in position machine batched and machine mixed design mix M-15 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.(for dummy columns)</p>	<p>This item shall be read as Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions (as per IS:9103) to accelerate, retard setting of concrete improve workability without impairing strength and durability as per direction of Engineer-in-charge: M-20 grade reinforced cement concrete by using minimum ordinary portland cement 300kg of cement per cum of concrete with a minimum flyash content of 50kg per cum of concrete. Concrete should be laid within three hours of batching. Reinforced cement concrete work in Dummy columns upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement.</p>

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11	Item No 34, Page No 103 Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete. Thermo-Mechanically Treated bars.	This item shall be read as Reinforcement for R.C.C. works including straightening, cutting, bending, placing in position and binding all complete. Thermo Mechanical Treated Bars (TMT), ISI Fe 500 grade.
12	Item No 39, page 103, Brick edging with 7cm wide Fly ash concrete blocks. Since the width is small, requested to use the conventional bricks.	Not agreed. The item should be executed as per the Agreement specification.
13	Item No 67, Page No 108 Contractor requested to use kota stone slab of 20 mm thick instead of 25mm thick	Not agreed. Shall be executed as per the specification.
14	Item No 68, Page No 108 , Whether this item includes tread or not and also joint free	Yes. This item shall be read as Kota stone slabs 20 mm thick in risers of steps, treads , skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete: Only Single Piece slab shall be laid in each tread/riser (No Joints are permitted)
15	Item No 69 Page No : 108, How to match the border slab with Kota stone flooring (Kota stone 25mm thick but Marble stone 18mm thick over the same bed mortar)	The kota stone slab flooring with marble border stone slab shall be executed by adjusting the bed mortar to match the floor level.
16	Item No 71 Page No : 109 Providing and fixing Johnson Endura 12mm thick acid and or alkali resistant tile or equivalent of approved make and colour using acid and/or alkali resisting mortar bedding, and joints filled with acid and/or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in- Charge. In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand) Acid and alkali resistant tile	This item Shall be read as Providing and fixing Johnson Endura 12mm thick acid and or alkali resistant tile or equivalent of approved make and colour using acid and/or alkali resisting mortar bedding, and joints filled with acid and/or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge. In flooring on a bed of 20 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand) Acid and alkali resistant tile
17	Item No 73 Page No : 109 Providing and fixing chequered anti skid 300mmX 300mm tiles in porch, FHC space etc. whether the tiles are cement based or ceramic tiles?	This item Shall be read as Providing and fixing chequered anti skid 300mmX 300mm cement based (EUROCON / ULTRA) In flooring on a bed of 20 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand).(porch, FHC space)

S No	Points raised	Clarification sought
18	Item No 79, Page No : 110 External plastering item not mentioned 12 mm cement plaster of mix : 1:6 (1 cement : 6 fine sand)	This item shall be read as 18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.(Exterior surfaces)
19	Item No 80, Page No : 110. 15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 cement : 6 fine sand)	This item shall be read as 12 mm cement plaster of mix : 1:4 (1 cement : 4 Coarse sand) Interior walls
20	Item No : 82 Page No : 111 Given Two or more coat are including or excluding primer	Yes. Including Primer only. This item shall be read as Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. Two or more coats of Acrylic Emulsion including a base coat of suitable primer of approved make.
21	Item No : 83 Page No : 111 Providing and applying white cement based putty of average thickness upto 2 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	The item shall be read as Providing and applying cement based putty (JK / BIRLA /Asian / ICI / Berger) of average thickness upto 2 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete. (Note: The item ALTEC mentioned in the approved list is removed and should not be used)
22	Item No : 84, Page No : 111 Given Two or more coat are including or excluding primer	Yes. Including Primer only. This item shall be read as Wall painting with premium acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. Two or more coats of Acrylic Emulsion including a base coat of suitable primer of approved make.
23	Item No : 85 Page No : 111 This item included primer or not	Yes primer included and this item shall be read as Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable primer of approved brand and manufacture
24	Item No : 86 Page No : 111 This item included primer or not	Yes primer included and this item shall be read as Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable primer of approved brand and manufacture

S No	Points raised	Clarification sought
25	<p>Item No : 87 Page No: 111 Contractor raised this item whether the quantity is 3.00 or 1.00 and the unit is Lump sum or Each.</p>	<p>Quantity is 1 (one) only instead of 3. This item shall be read as Dismantling of existing buildings including demolishing of foundation works, brick work, cement concrete work, RCC inclusive of cutting of reinforcement bars, taking out of doors and windows, flexible pavement etc. by manual or mechanical means (usable items like Doors, windows, Steel, wooden frames etc., complete(Buildings to be demolished are as shown in the Demolition drawing. Contractor also requested to inspect the site before quoting the rates) The unit for the item is Lump Sum only.</p>
26	<p>Item No : 95 Page No: 113 Providing Polycarbonate 6mm thick sheet and fixing with polymer coated 'I' or 'L' hooks, bolts and nuts 8 mm diameter self tapping screws G.I. plain and bitumen excluding the cost of purlins, rafters and trusses as directed by Engineer in charge</p>	<p>This item shall be read as Providing and fixing multi wall lexon compact Polycarbonate sheet of 6mm thick over the truss work. The joints shall be treated with Aluminium profile , Rubber beading and silicon sealant every joints with necessary screws including self tapping screws for sheet fixing and etc complete as per the manufacturers specification. The rate inclusive of Labours, material for jointing between each sheet etc complete at all levels.</p>
27	<p>Item No: 112 Page No: 118 Pressure gauge of the pipe is not mentioned for the uPVC pipes</p>	<p>This item shall be read as Supply & Fixing of uPVC as per IS-13592-1992 with O' ring joints, SWR pipe, together uPVC pipe specials of approved make. The pipes shall be duly fixed at site, with necessary cutting & jointing of pipe with approved quality jointing lubricant. The pressure Gauge for the uPVC pipe is 6kg/Cm².</p>

Electrical Works		
28	Additional Conditions :	<ol style="list-style-type: none"> 1. The rising main and horizontal bus bars should be of sandwich type. 2. The electrical works should be carried out by the enlisted electrical contractors of IIT Madras. (List enclosed) 3. The list of approved make for electrical items is enclosed.
29	Last Date of receipt as mentioned in the Tender Document is Date: 06.12.2012 Time : 3.00pm	Revised Date and time of Receipt of Tender is scheduled to Date: 13.12.2012 Time : 3.00pm
30	Date and time of opening of tenders of Eligibility bid (Cover 1) will be on Date: 06.12.2012 Time : 3.10pm	Revised Date and time of opening of Tenders Eligibility bid (Cover 1) will be on Date: 13.12.2012 Time : 3.10pm

List of enlisted electrical contractors of IIT Madras

S.N	Name of the Contractor		
	CLASS I (Tendering Limit-Rs.2 Crore)		CLASS II (Tendering Limit-Rs.60 Lakhs)
1	M/s. Aswathi Power Controls, No:3, Sri Arul Murugan Temple Complex, Sara Nagar, Old Pallavaram, Chennai-600 117.	10	M/s. Tri Linkers, 111, Arcot Road, Kodambakkam, Chennai-24.
2	M/s. Rotmax Engineering Enterprises Pvt Ltd 300/1, Belly Area, Anna Nagar, Chennai- 40.	11	M/s. New Power Electricals, # 64, (63/1) Second Main Road, Gandhi Nagar, Adyar, Chennai-20.
3	M/s. Sabari & Leon Electricals Pvt Ltd Dharma Towers Basement No. 16, 88/150, Nelson Manickam Road, Choolaimedu, Chennai-94.	12	M/s. Priya Enterprises Electricals, New No. 213 (Old No. 143), Valluvarkottam High Road, Nungambakkam, Chennai- 600 034.
4	M/s Shree Vaari Electricals Pvt Ltd C-37, Thiru. Vi. Ka Industrial Estate, Guindy, Chennai-32.	13	M/s. Grouptech Power System, 46/4, K.H.Road, Ayanavaram, Chennai-23.
5	M/s. Delhi Electrical Construction 250, Velachery Main Road, Chennai-42.	14	M/s. Swathi Electrical (India) Pvt Ltd 'O' 27, Periyar Street, Thiru Nagar, Jafferkhanpet, Chennai- 600 083
6	M/s. GOMS Electrical Private Limited, New No. 43, Old No. 113, First Main Road, R.K.Nagar, Mandaveli, Chennai-28.		
7	M/s. Kevin Electricals Pvt Ltd No. 7, (Old No. 1-B), Arunachalapuram, II nd Street, Adyar, Chennai – 600 020.		
8	M/s. Orient Poles, No. 64, Velachery Main Road, Sankaren Avenue, Opp. Gurunanak College, Velachery, Chennai – 600 042.		
9	M/s. M.I Industrial Products (P) Ltd, 3008, Second Colony Street, 'Z' Block, 13 th Main Road, Shanthi Colony, Anna Nagar, Chennai – 600 040		

LIST OF APPROVED MAKE

Sl. No.	Description	Make
1	Copper Conductor Single Core wire-1100v Grade (Multi Stranded) FRLS	Finolex/ RR Kabel / L&T/ Polycob
2	PVC Pipe - 1.8/2.0 mm thick & its accessories	Avonplast / Vasavi / Essorke / Bajaj Plast
3	MS conduit pipes - 1.6mm thick	Gupta / Kalinga
4	GI Pipes	Tata / Jindal / Kalinga
5	Modular type switches, sockets, regulators, RJ-11, RJ-45	Delta Vega (Siemens) / MK (Wraparound plus) / Legrand/ Grabtree
6	Piano type switches, sockets, regulators	Anchor / Record
7	MCCB / MCB Distribution Boards & Accessories	Legrand / Hager / Siemens (Germany) / Merlin Gerin
8	MCCBs upto 160A-Thermomagnetic Release	Legrand / Siemens (Germany) / ABB/Merlin Gerin / Hager
9	MCCBs above 160A-Electronic Release/ Micro processor Release	GE / Legrand / Siemens (Germany) / ABB / Merlin Gerin / L&T
10	Main Switches (AC 23 rating) SFU / FSU	L&T / GE / Siemens (Germany)
11	Change Over Switches	Havells / GEM / L&T / BEMCO
12	Motor Starters	L&T / Siemens
13	Single Phase/Three Phase kWh meter (Static/ Digital)	L&T / HPL-Socomach / BHEL
14	MV panels	CPRI approved panel builders
15	Digital Meters (Ammeters / Voltmeters)	ENERCON / IMP / AE / RISHAB/ SECURE
16	Selector Switches	RISHAB / VAISHNAV / GE / L&T
17	Light fittings, lamps and accessories	Philips / Crompton / Bajaj/ Havels
18	CFL	Philips / Osram/ Havels
19	T5 lamp	Philips/ Crompton/ Bajaj/ Havels
20	Aviation obstruction lights	Binay / Aviads / Supernova / K-Lite
21	Electronic ballast	Philips / Bajaj/ Crompton/ Havels
22	Call Bell/Buzzer	Anchor / MK
23	ACBs	L&T / GE / Siemens (Germany) / Merlin Gerin / ABB/ Legrand
24	LT UG cables - 1100 Volt Grade	Universal / CCI Tropodure / Gloster / Polycab
25	Cable Glands, lugs, sockets (copper & aluminium)	Dowells / Cabend / Jainson

SI. No.	Description	Make
26	Current Transformers	Kappa / Scientific / AE/ Pragati
27	Indication Lamp-LED	RAAS / Rishab / L&T / Siemens
28	Contactors	L&T / Siemens/ Legrand
29	Time Switch	L&T / Legrand/ GE
30	Control fuses & HRC fuses with base	GE / L&T / Siemens / Standard / C&S
31	Geycers	Racold / Bajaj / Venus
32	Inverter/UPS	APC / Numeric
33	Ceiling fans	Orient PSPO (New Breeze) / Polar / Crompton Greaves/ Havels
34	Exhaust fan / Fresh air fan	Khaitan / Almonard / Rallis/ Metal Blade
35	Wall mounting/pedestal mounting fans	Orient PSPO/Rallis / Almonard / Crompton
36	Air Circulator	Almonard / Crompton Greaves
37	Cable management system	MK / Legrand/ Schneider
38	PVC Telephone Cable	Delton / Finolex / FSC
39	Jelly filled telephone cables	Delton / Finolex / HCL
40	Disconnection Modules (Telephone)	Krone
41	PVC/FRP Telephone Junction Box	Krone / Sintex
42	Optical Fiber Cable and accessories	Molex / Avaya / AMP / Krone
43	Telephone instrument	Panasonic
44	Cat6 Cable, I/O and all accessories	Molex / Avaya / Krone
45	Time Switch (PV)	MK/ Legrand/ L&T
46	Rising Main sandwich	GE/C&S/Godrej/ Scheider/ Legrand
47	Casing & Caping	Modi

The above minutes of meeting will become part of the agreement.

**//Sd//
Superintending Engineer**