

RAMP AT RG 5 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
52.2	ii) IInd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.				
52.3	iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area.				
52.4	iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.) complete as per drawing/specification or directed by Engineer In charge.	SQM	284.99	522.90	149,021.00
53.00	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement :3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete as per drawing/specification or directed by Engineer In charge.			186.65	-
54.00	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound@ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound@ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured) complete as per drawing/specification or directed by Engineer In charge.	SQM		390.35	-

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Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
55.00	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cum/sqm thoroughly embedded in the 2nd layer complete as per drawing/specification or directed by Engineer In charge.				
55.10	Using rough kota stone.	SQM		1022.45	-
56.00	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :				
56.10	Using rough Kota stone	SQM		1243.25	-
TOTAL OF WATER PROFFING WORK					149,021.00
STEEL WORK					
57.00	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 -part 1 and M.S. top cover of required thickness for rolling shutters.				
57.10	a) 80x1.25mm M.S. laths with 1.25 mm thick top cover.	Sqm		2142.10	-
57.20	Providing and fixing ball bearing for rolling shutters.	No.		438.95	-
58.00	Extra for providing mechanical device chain and crank operation for operating rolling shutters.				

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Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
58.1	a) Exceeding 10.00 sqm and upto 16.80 sqm in the area.	Sqm		724.85	-
58.2	b) Exceeding 16.80 sqm in area.	Sqm		724.85	-
59.00	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer.				
59.10	E.R.W. tubes.	KG		129.15	-
60.00	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	2427.00	619.40	1,503,284.00
TOTAL OF STEEL WORK					1,503,284.00
JOINERY WORK					
61.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
61.10	For fixed portion				
61.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	KG	370.43	348.50	129,093.00
FOR SHUTTERS WINDOW& DOOR IN ALUMINIUM WORK					

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Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
62.00	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately).				
62.10	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	KG		405.90	-
63.00	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
63.10	B) With float glass panes of 5.50 mm thickness	SQM	2.11	1054.20	2,226.00
64.00	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg., for doors, including cost of cutting floors ,embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
64.10	With stainless steel cover plate minimum 1.25 mm thickness.	EACH		2039.00	-
65.00	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
65.10	B) 255 X 19 mm	EACH		275.25	-
66.00	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
66.10	125x75x4 mm	EACH	33.00	108.85	3,592.00
64.00	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :				
64.10	250x16 mm	EACH	22.00	189.00	4,158.00
65.00	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				

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Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
65.10	200x10 mm	EACH	44.00	79.25	3,487.00
66.00	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
66.10	125 mm	EACH	44.00	69.80	3,071.00
66.20	100 mm	EACH		55.10	-
67.00	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.				
67.10	Single rubber stopper	EACH	5.00	37.50	188.00
67.20	Twin rubber stopper	EACH	5.00	83.95	420.00
68.00	Providing and fixing bright finished brass 100 mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles with necessary screws etc. complete (Best make of approved quality).	EACH	11.00	815.45	8,970.00
69.00	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
69.10	Using M.S. angels 40x40x6 mm for diagonal braces.	SQM	3.00	3073.85	9,222.00
70.00	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size, with top and bottom rail of T-iron 40x40x6mm, with 40mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	SQM	3.00	5291.30	15,874.00
71.00	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :				
71.10	Rectangular or square.	SQM	0.04	139.40	6.00
72.00	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	SQM		104.55	-

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Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
73.00	Providing and fixing fire resistant door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I.sheet (zinc coating not less than 120gm/sqm) duly filled with vermiculite based concrete mix, suitable for mounting 60 minutes fire rated door shutters. The frame is fitted with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistant primer etc. complete as per direction of Engineer-in-charge(Dash fastener to be paid for separately).	RMT		1250.05	-
74.00	Providing and fixing 50 mm thick glazed fire resistant door shutters of 60 minutes fire rating conforming to IS:3614 (Part-II) tested and certified as per laboratory approved by Engineer-in-charge with suitable mounting on doorframe, consisting of vertical styles, lock rail, top rail 100mm wide, bottom rail 200mm wide, made out of 16 SWG G.I.sheet (zinc coating not less than 120 gm/sqm duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistant primer etc. all complete as per direction of Engineer-in charge(pannelling to be paid for separately).	SQM		6268.20	-
75.00	Providing and fixing panic bar / latch (Double point) fitted with a single body, Trim Latch & Lock on back side of the Panic Latch of reputed brand and manufacture to be approved by the Engineer- in- charge, all complete.	EACH		6133.20	-
76.00	Providing and fixing MASONITE FLUSH DOOR SHUTTER MF on both sides, Hot pressed, bonded With BWP Grade Resin, stiles and Rails in Timber, And with Tubular Core filler complete including all necessary fittings etc complete as per direction of Engineer-In- Charge.				
76.10	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	SQM	16.41	10904.16	178,929.00
77.00	Providing and fixing of galvanised M wire gauze with 0.63 mm dia in Aluminium window as per direction of Engineer in Charge.	SQM		740.00	-
TOTAL OF JOINERY WORK					359,236.00

ESTIMATED FOR RAMP AT RG 6 BUILDING OF STADIUM TRIPURA

RAMP AT RG 6 BUILDING		
SL. NO	ITEMS OF WORKS	AMOUNT
A	EARTH WORK	348,163.00
B	CONCRETE WORK	11,646,547.00
C	FORM WORK	1,064,346.00
D	MASONARY WORK	163,949.00
E	FINISHING WORK	747,599.00
F	FLOORING WORK	439,884.00
G	WATER PROFFING WORK	149,021.00
H	STEEL WORK	1,503,296.00
I	JOINERY WORK	359,236.00
	GRAND TOTAL	16,422,041.00

RAMP AT RG 6 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
	EARTH WORK				
1.00	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sum on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
1.10	All kinds of soil	CUM	723.86	155.60	112,632.00
2.00	Extra for every additional lift of 1.5 m or part thereof in excavation/ banking excavated or stacked materials.				
2.10	All kinds of soil.	CUM	289.54	46.25	13,391.00
3.00	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	CUM	18.62	910.25	16,948.00
4.00	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	CUM	487.04	112.40	54,743.00
5.00	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 20% for payment).	CUM	308.00	308.35	94,972.00
6.00	Supplying chemical emulsion in sealed containers including delivery as specified.				
6.10	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	Litre	40.35	185.95	7,503.00
7.00	Diluting and injecting chemical emulsion for POSTCONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
8.00	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :				
8.10	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration	Sqm	403.48	118.90	47,974.00
	TOTAL OF EARTH WORK				348,163.00
	CONCRETE WORK				
9.00	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
9.10	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	CUM	43.97	4004.00	176,070.00

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Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
10.00	Providing and laying in position machine batched and machine mixed design mix M-25 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.				
10.10	All works up to plinth level.	CUM	230.88	6296.15	1,453,625.00
10.20	All works above plinth level up to floor V level.	CUM	368.48	7014.55	2,584,704.00
11.00	Providing M-30 grade concrete instead of M-25 grade BMC/RMC.	CUM	299.68	76.50	22,925.00
12.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
12.10	Thermo-Mechanically Treated bars.	KG	35862.97	68.10	2,442,268.00
13.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
13.10	Thermo-Mechanically Treated bars.	KG	72936.19	68.10	4,966,955.00
	TOTAL OF CONCRETE WORK				11,646,547.00
	FORM WORK				
14.00	Centering and shuttering including strutting, propping etc. and removal of form for :				
14.10	Foundations, footings, bases of columns, etc. for mass concrete.	SQM	106.28	196.45	20,878.00
14.20	Wall (any thickness) including attached pilasters, butteresses, plinth and string course etc	SQM	1156.01	360.80	417,089.00
14.30	Columns, Pillars, Piers, Abutments, Posts and Struts.	SQM	224.73	453.35	101,881.00
14.40	Stairs, (excluding landings) except spiral-staircases	SQM		395.65	
14.50	Extra for shuttering in circular work(20%of respective centering and shuttering items)	SQM	1471.71	73.12	107,811.00
14.60	Lintels, beams, plinth beams, girders, bressumers and cantilevers. with water proof ply 12mm thick.	SQM	545.02	423.65	230,897.00
14.70	Suspended floors, roofs, landings, balconies and access platform. with water proof ply 12mm thick.	SQM	315.70	493.55	155,812.00
14.80	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand).	SQM		134.70	-

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15.00	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured)				
15.10	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).	SQM	189.74	159.05	30,178.00
	TOTAL OF FORM WORK				1,064,346.00
	MASONARY WORK				
16.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
16.10	Cement mortar 1:4 (1 cement : 4 coarse sand)	CUM		4918.65	-
17.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
17.10	Cement mortar 1:4 (1 cement : 4 coarse sand)	CUM	20.50	5667.55	116,182.00
18.00	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in.				
18.10	ceement mortar 1:4 (1 cement : 4 coarse sand)	SQM		584.75	-
19.00	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
19.10	ceement mortar 1:4 (1 cement : 4 coarse sand)	SQM	64.96	665.80	43,252.00
20.00	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry.	SQM	64.96	69.50	4,515.00
	TOTAL OF MASONARY WORK				163,949.00
	FINISHING				
21.00	15 mm cement plaster on rough side of single or half brick wall of mix :				
21.10	1:6 (1 cement: 6 fine sand)	SQM	1043.92	172.80	180,390.00
22.00	12 mm cement plaster of mix :				
22.10	1:6 (1 cement: 6 fine sand)	SQM	983.58	149.45	146,996.00
23.00	6 mm cement plaster of mix :				
23.10	1:3 (1 cement: 3 fine sand)	SQM	860.72	134.70	115,938.00
24.00	Finishing walls with Acrylic Smooth exterior paint of required shade :				

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24.10	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm).	SQM	1139.59	90.00	102,563.00
25.00	Distemping with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.				
25.10	Two or more coats on new work.	SQM	1280.27	50.65	64,846.00
26.00	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
26.10	Water thinnable cement primer.	SQM	1280.27	35.85	45,898.00
27.00	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
27.10	Two or more coats on new work.	SQM	100.00	106.25	10,625.00
28.00	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	SQM	896.19	89.65	80,343.00
	TOTAL OF FINIHING WORK				747,599.00
	FLOORING				
29.00	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : as per drawing/specification or directed by Engineer In charge.				
29.10	25 mm thick.	SQM		1141.60	-
30.00	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete as per drawing/specification or directed by Engineer In charge..	SQM		1191.25	-
31.00	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS :15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	SQM		904.45	
32.00	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete				

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32.10	40mm thick with 20mm nominal size stone aggregate.	SQM	284.99	353.35	100,701.00
33.00	Cement plaster skirting (up to 30 cm height) with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement complete as per drawing/specification or directed by Engineer In charge. .				
33.10	18 mm thick.	SQM	191.84	377.25	72,372.00
34.00	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	SQM		212.85	-
35.00	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete as per drawing/specification or directed by Engineer In charge. .	SQM		836.65	-
36.00	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of fine sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	SQM		602.20	-
37.00	Designing , fabrication, testing, installation, installation and fixing in position curtain wall with Aluminium Composite Panel Cladding with open grooves for linear as well as curvilinear portion of the building, for all heights and all levels etc including				
37.10	a) structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it water tight including checking of all the structural and functional design.				
37.20	b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluropolymer resin coating od approved colour and shade on face #1 and polymer (Service) coating on face#2 as specified steel screw, nuts,bolts,washers,cleats,weather silicone sealent, backer rods etc.				

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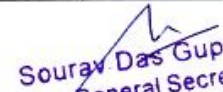
SI. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
37.30	c) The fastening brackets of Aluminium alloy 6005T5/MS with Hot dip. Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchors bolts of approved make in SS316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing.				
38.00	The item includes cost of material & labour component, the cost of all mock ups at site, cost of all sample of individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding till the handing over of the building for occupation.				
38.10	The contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete, as per the Architectural drawing as per item description, as specified, as per the approved shop drawing and as directed by the Engineer- in-Charge.				
38.20	"However for the purpose of payment, only the actual area on the external face of the curtain wall with aluminium composite panel cladding(including width of groove) shall be measured in sqm up to two decimal places."	SQM		3775.30	-
39.00	LAMINATED WOODEN FLOORING Providing and fixing 10 mm thick grade IV laminated floor with HDF base and laminate of approved shade as per manufacturer's catalogue including the cost of PVC sheet, Foam subfloor 2 mm thick and cost of perimeter runner strip and door profile.(Pergo/Armstrong or Equivalent make) The cost to include all materials, labour, lead, lift, wastages, required finishing, etc. complete, as per the instructions and to the satisfaction of the Project Manager.	SQM		1288.00	-
40.00	Providing & fixing 22 mm thick pre-polished colored concrete desiner tiles making by strong vibratory compection technology using 50% white cement & 50% ordinary cement size 300mm x 300mm, laid in footpath & courtyard, on 20 mm thick bed cement mortar 1:4 (1 Cement: 4 fine sand) joined with neat cement slurry mixed with pigment to match the sade of tiles including rubbing and polishing complete as per direction of the Engineer-in-charge.	SQM	118.49	697.70	82,670.00

RAMP AT RG 6 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
41.00	<p>Carpet Flooring Supply and Installing synthetic latex broadloom carpet of 1,77,750 tufts per sq mtr , with thickness of 5mm of approved shade and color , PP base broadloom over underlay of 12 mm thick foam base fixed to exiting floor with rubber based adhesive including smoothing the surface and trimming the edges to give smooth and even finish with no undulations or warps. 10% contingencies to be considered in quantity, however 5% attic stock to be considered over and above. Protecting the material on site is supplier's responsibility. Rate to include all wastage as applicable, freight and handling , installed at site as per design and edge stitching etc. complete as per drawing/specification or directed by Engineer In charge. . Make- Unitex (Melody) or equivalent</p>	SQM		2150.29	-
42.00	Extra for providing pigment in flooring	SQM	476.83	35.00	16,689.00
43.00	Extra for providing floor hardner of Fosroc make Nitoflor-Hardstop standard in approved make @ 4.5 Kg per Sqm or as per the manufaxcturer's specification and as direction of the Engineer-in-Charge.	SQM	284.99	210.99	60,130.00
44.00	<p>Granite Flooring Providing and laying flooring using 18 mm thick Granite of approved size, pattern laid over 20mmthick bed CM 1:4 for flooring, using cement slurry below slabs for packing,asper architectural design, drawing and specifications, including joint filling with approved qualityand colour cement to match the shade of Granite.The work shall include cost of materials,wastage, labour, all lead and lift at all levels, loading and unloading, transportation,cutting, curingetc. and all other incidental charges etc.complete as per drawing/specification or directed by Engineer In charge.</p>	SQM		4528.34	-
45.00	Providing and laying Granite stone using 18 mm thick for skirting , riser and dado , laid over 20mmthick CM 1:4 , using cement slurry,asper architectural design, drawing and specifications, including joint filling with approved qualityand colour cement to match the shade of Granite.The work shall include cost of materials,wastage, labour, all lead and lift at all levels, loading and unloading, transportation,cutting, curingetc. and all other incidental charges etc.complete as per drawing/specification or directed by Engineer In charge.	SQM		6439.64	-
46.00	Extra for making flamed in granite stone as per direction by engineer in charge	SQM		180.00	-
47.00	Extra for making flamed in kota stone as per direction by engineer in charge	sqm		251.83	-

RAMP AT RG 6 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
48.00	40 mm thick stitching slab (1:2:4) with colour pigment and integral water proffing compound and reinforced with welded mesh specification as per drawing complete in all respect as per Engineer In Charge.	SQM		757.00	-
49.00	Supply & Fixing homogeneous & abrasion resistant Poly Vinyl flooring 2mm thick of desired shade & in desired patterns, in all cabins & corridors, cleaning of surface to give smooth & even floor with all labour and material T&P required for proper completion of work.	SQM		1800.00	-
50.00	Chequerred precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete, on 20mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand) complete as per drawing/specification or directed by Engineer In charge.				
50.10	Light shade using white cement.	SQM	118.49	905.75	107,322.00
	TOTAL OF FLOORING WORK				439,884.00
	WATER PROFFING				
51.00	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with waterproofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer in-charge. d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
51.10	With average thickness of 120mm and minimum thickness at khurra as 65 mm.	SQM		786.70	-
52.00	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of :				
52.1	i) 1st course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface.				


Sourav Das Gupta
 Hon'ble General Secretary
 Tripura Cricket Association

RAMP AT RG 6 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
52.2	ii) IInd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.				
52.3	iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area.				
52.4	iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.) complete as per drawing/specification or directed by Engineer In charge.				
		SQM	284.99	522.90	149,021.00
53.00	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement :3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete as per drawing/specification or directed by Engineer In charge. .			186.65	-
54.00	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound@ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound@ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured) complete as per drawing/specification or directed by Engineer In charge.				
		SQM		390.35	-

RAMP AT RG 6 BUILDING

SI. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
55.00	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cum/sqm thoroughly embedded in the 2nd layer complete as per drawing/specification or directed by Engineer In charge.				
55.10	Using rough kota stone.	SQM		1022.45	-
56.00	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm(minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :				
56.10	Using rough Kota stone	SQM		1243.25	-
TOTAL OF WATER PROFFING WORK					149,021.00
STEEL WORK					
57.00	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 -part 1 and M.S. top cover of required thickness for rolling shutters.				
57.10	a) 80x1.25mm M.S. laths with 1.25 mm thick top cover.	Sqm		2142.10	-
58.00	Providing and fixing ball bearing for rolling shutters.	No.		438.95	-
59.00	Extra for providing mechanical device chain and crank operation for operating rolling shutters.				

RAMP AT RG 6 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
59.10	a) Exceeding 10.00 sqm and upto 16.80 sqm in the area.	Sqm		724.85	-
59.20	b) Exceeding 16.80 sqm in area.	Sqm		724.85	-
60.00	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer.				
60.10	E.R.W. tubes.	KG		129.15	-
61.00	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	2427.02	619.40	1,503,296.00
TOTAL OF STEEL WORK					1,503,296.00
JOINERY WORK					
62.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
62.10	For fixed portion				
62.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	KG	370.43	348.50	129,093.00
FOR SHUTTERS WINDOW& DOOR IN ALUMINIUM WORK					

RAMP AT RG 6 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
63.00	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately).				
63.10	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	KG		405.90	-
64.00	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
64.10	B) With float glass panes of 5.50 mm thickness	SQM	2.11	1054.20	2,226.00
65.00	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg., for doors, including cost of cutting floors ,embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
65.10	With stainless steel cover plate minimum 1.25 mm thickness.	EACH		2039.00	-
66.00	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
66.10	B) 255 X 19 mm	EACH		275.25	-
67.00	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
67.10	125x75x4 mm	EACH	33.00	108.85	3,592.00
64.00	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :				
64.10	250x16 mm	EACH	22.00	189.00	4,158.00
65.00	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
65.10	200x10 mm	EACH	44.00	79.25	3,487.00

RAMP AT RG 6 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
66.00	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
66.10	125 mm	EACH	44.00	69.80	3,071.00
66.20	100 mm	EACH		55.10	-
67.00	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.				
67.10	Single rubber stopper	EACH	5.00	37.50	188.00
67.20	Twin rubber stopper	EACH	5.00	83.95	420.00
68.00	Providing and fixing bright finished brass 100 mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles with necessary screws etc. complete (Best make of approved quality).	EACH	11.00	815.45	8,970.00
69.00	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
69.10	Using M.S. angels 40x40x6 mm for diagonal braces.	SQM	3.00	3073.85	9,222.00
70.00	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size, with top and bottom rail of T-iron 40x40x6mm, with 40mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	SQM	3.00	5291.30	15,874.00
71.00	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :				
71.10	Rectangular or square.	SQM	0.04	139.40	6.00
72.00	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	SQM		104.55	-

RAMP AT RG 6 BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
73.00	Providing and fixing fire resistant door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I.sheet (zinc coating not less than 120gm/sqm) duly filled with vermiculite based concrete mix, suitable for mounting 60 minutes fire rated door shutters. The frame is fitted with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistant primer etc. complete as per direction of Engineer-in-charge (Dash fastener to be paid for separately).	RMT		1250.05	-
74.00	Providing and fixing 50 mm thick glazed fire resistant door shutters of 60 minutes fire rating conforming to IS:3614 (Part-II) tested and certified as per laboratory approved by Engineer-in-charge with suitable mounting on doorframe, consisting of vertical styles, lock rail, top rail 100mm wide, bottom rail 200mm wide, made out of 16 SWG G.I.sheet (zinc coating not less than 120 gm/sqm duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistant primer etc. all complete as per direction of Engineer-in charge (pannelling to be paid for separately).	SQM		6268.20	-
75.00	Providing and fixing panic bar / latch (Double point) fitted with a single body, Trim Latch & Lock on back side of the Panic Latch of reputed brand and manufacture to be approved by the Engineer- in- charge, all complete.	EACH		6133.20	-
76.00	Providing and fixing MASONITE FLUSH DOOR SHUTTER MF on both sides, Hot pressed, bonded With BWP Grade Resin, stiles and Rails in Timber, And with Tubular Core filler complete including all necessary fittings etc complete as per direction of Engineer-In- Charge.				
76.10	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	SQM	16.41	10904.16	178,929.00
77.00	Providing and fixing of galvanised M wire gauze with 0.63 mm dia in Aluminium window as per direction of Engineer in Charge.	SQM		740.00	-
	TOTAL OF JOINERY WORK				359,236.00

ESTIMATED FOR T V PRODUCTION AND BROAD CASTING CONTROL BUILDING OF
STADIUM TRIPURA


T V PRODUCTION AND BROAD CASTING CONTROL BUILDING		
SL. NO	ITEMS OF WORKS	AMOUNT
A	EARTH WORK	1,218,261.00
B	CONCRETE WORK	25,925,397.00
C	FORM WORK	3,229,678.00
D	MASONARY WORK	869,444.00
E	FINISHING WORK	1,740,680.00
F	FLOORING WORK	4,509,350.00
G	WATER PROFFING WORK	112,652.00
H	STEEL WORK	13,982,232.00
I	JOINERY WORK	2,653,417.00
J	CEILING WORK	1,208,341.00
K	ROOFING WORK	803,006.00
	GRAND TOTAL	56,252,458.00

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
	EARTH WORK				
1.00	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sum on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
1.10	All kinds of soil	CUM	4428.25	155.60	689,037.00
2.00	Extra for every additional lift of 1.5 m or part thereof in excavation/ banking excavated or stacked materials.				
2.10	All kinds of soil.	CUM	2826.04	46.25	130,704.00
3.00	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	CUM		910.25	-
4.00	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	CUM	1634.80	112.40	183,752.00
5.00	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 20% for payment).	CUM		308.35	-
6.00	Supplying chemical emulsion in sealed containers including delivery as specified.				
6.10	Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	Litre	156.20	185.95	29,045.00
7.00	Diluting and injecting chemical emulsion for POSTCONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
8.00	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :				
8.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration	Sqm	1562.01	118.90	185,723.00
	TOTAL OF EARTH WORK				1,218,261.00
	CONCRETE WORK				
9.00	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
9.10	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	CUM	163.20	4004.00	653,460.00

TV PRODUCTION AND BROAD CASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
10.00	Providing and laying in position machine batched and machine mixed design mix M-25 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.				
10.10	All works up to plinth level.	CUM	1073.75	6296.15	6,760,465.00
10.20	All works above plinth level up to floor V level.	CUM	480.60	7014.55	3,371,184.00
11.00	Providing M-30 grade concrete instead of M-25 grade BMC/RMC.	CUM	777.17	76.50	59,454.00
12.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
12.10	Thermo-Mechanically Treated bars.	KG	145699.72	68.10	9,922,151.00
13.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
13.10	Thermo-Mechanically Treated bars.	KG	75751.59	68.10	5,158,683.00
	TOTAL OF CONCRETE WORK				25,925,397.00
	FORM WORK				
14.00	Centering and shuttering including strutting, propping etc. and removal of form for :				
14.10	Foundations, footings, bases of columns, etc. for mass concrete.	SQM	648.38	196.45	127,374.00
14.20	Wall (any thickness) including attached pilasters, buttresses, plinth and string course etc	SQM	1767.18	360.80	637,597.00
14.30	Columns, Pillars, Piers, Abutments, Posts and Struts.	SQM	1151.09	453.35	521,845.00
14.40	Stairs, (excluding landings) except spiral-staircases	SQM	45.49	395.65	17,998.00
14.50	Extra for shuttering in circular work(20%of respective centering and shuttering items)	SQM	10.98	90.67	996.00
14.60	Lintels, beams, plinth beams, girders, bressumers and cantilevers. with water proof ply 12mm thick.	SQM	2244.28	423.65	950,787.00
14.70	Suspended floors, roofs, landings, balconies and access platform. with water proof ply 12mm thick.	SQM	1491.08	493.55	735,924.00
14.80	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand).	SQM		134.70	-


 Sourav Das Gupta
 HON'ble GENERAL SECRETARY, ICA
 Indian Contractors Association
 New Delhi

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
15.00	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured)				
15.10	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).	SQM	1491.08	159.05	237,157.00
	TOTAL OF FORM WORK				3,229,678.00
	MASONARY WORK				
16.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
16.10	Cement mortar 1:4 (1 cement : 4 coarse sand)	CUM		4918.65	-
17.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
17.10	Cement mortar 1:4 (1 cement : 4 coarse sand)	CUM	109.19	5667.55	618,851.00
18.00	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in.				
18.10	cement mortar 1:4 (1 cement : 4 coarse sand)	SQM		584.75	-
19.00	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
19.10	cement mortar 1:4 (1 cement : 4 coarse sand)	SQM	340.80	665.80	226,907.00
20.00	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry.	SQM	340.80	69.50	23,686.00
	TOTAL OF MASONARY WORK				869,444.00
	FINISHING				
21.00	15 mm cement plaster on rough side of single or half brick wall of mix :				
21.10	1:6 (1 cement: 6 fine sand)	SQM	2425.79	172.80	419,176.00
22.00	12 mm cement plaster of mix :				
22.10	1:6 (1 cement: 6 fine sand)	SQM	1715.90	149.45	256,442.00
23.00	6 mm cement plaster of mix :				
23.10	1:3 (1 cement: 3 fine sand)	SQM	2613.22	134.70	352,001.00
24.00	Finishing walls with Acrylic Smooth exterior paint of required shade :				

TV PRODUCTION AND BROAD CASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
24.10	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm).	SQM	1705.83	90.00	153,525.00
25.00	Distemping with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.				
25.10	Two or more coats on new work.	SQM	3535.30	50.65	179,063.00
26.00	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
26.10	Water thinnable cement primer.	SQM	3535.30	35.85	126,740.00
27.00	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
27.10	Two or more coats on new work.	SQM	300.00	106.25	31,875.00
28.00	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	SQM	2474.71	89.65	221,858.00
TOTAL OF FINIHING WORK					1,740,680.00
FLOORING					
29.00	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : as per drawing/specification or directed by Engineer In charge.				
29.10	25 mm thick.	SQM	239.70	1141.60	273,643.00
30.00	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete as per drawing/specification or directed by Engineer In charge..	SQM	122.62	1191.25	146,069.00
31.00	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS :15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	SQM		904.45	
32.00	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete				

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
32.10	40mm thick with 20mm nominal size stone aggregate.	SQM	1307.17	353.35	461,890.00
33.00	Cement plaster skirting (up to 30 cm height) with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement complete as per drawing/specification or directed by Engineer In charge. .				
33.10	18 mm thick.	SQM	153.03	377.25	57,732.00
34.00	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	SQM	419.31	212.85	89,250.00
35.00	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete as per drawing/specification or directed by Engineer In charge. .	SQM		836.65	-
36.00	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of fine sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	SQM		602.20	-
37.00	Designing , fabrication, testing, installation, installation and fixing in position curtain wall with Aluminium Composite Panel Cladding with open grooves for linear as well as curvilinear portion of the building, for all heights and all levels etc including				
37.10	a) structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it water tight including checking of all the structural and functional design.				
37.20	b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated with kynar 500 based PVDF/Lumiflon based fluropolymer resin coating of approved colour and shade on face #1 and polymer (Service) coating on face#2 as specified steel screw, nuts,bolts,washers,cleats,weather silicone sealent, backer rods etc.				

TV PRODUCTION AND BROAD CASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
37.30	c) The fastening brackets of Aluminium alloy 6005T5/MS wit Hot dip. Galvanised with serrations and serrated washers to arrest the wind load movement, fastners,SS 316 Pins and anchors bolts of approved make in SS316, Nylon seprators to prevent bi-metallic contacts all complete required to perform as per specification and drawing.				
38.00	The item includes cost of material& labour component, the cost of all mock ups at site, cost of all sample of individual components for testing in an approved laboratory,field tests on the assembled working curtain wall with aluminium composite panel cladding till the handing over of the building for occupation.				
38.10	The contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete, as per the Architectural drawing as per item description, as specified, as per the approved shop drawing and as directed by the Engineer- in-Charge.				
38.20	"However for the purpose of payment, only the actual area on the external face of the curtain wall with aluminium composite panel cladding(including width of groove) shall be measured in sqm uo to two decimal places."	SQM	141.79	3775.30	535,300.00
39.00	LAMINATED WOODEN FLOORING Providing and fixing 10 mm thick grade IV laminated floor with HDF base and laminate of approved shade as per manufacturer's catalogue including the cost of PVC sheet, Foam subfloor 2 mm thick and cost of perimeter runner strip and door profile.(Pergo/Armstrong or Equivalent make) The cost to include all materials, labour, lead, lift, wastages, required finishing, etc. complete, as per the instructions and to the satisfaction of the Project Manager.	SQM		1288.00	-
40.00	Providing & fixing 22 mm thick pre-polished colored concrete desiner tiles making by strong vibratorycompection technology using 50% white cement & 50% ordinary cement size 300mm x 300mm, laid in footpath & courtyard, on 20 mm thick bed cement mortar 1:4 (1 Cement: 4 fine sand) joined with neat cement slurry mixed with pigment to match the sade of tiles including rubbing and polishing complete as per direction of the Engineer-in-charge.	SQM	15.14	697.70	10,563.00

TV PRODUCTION AND BROAD CASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
41.00	Carpet Flooring Supply and Installing synthetic latex broadloom carpet of 1,77,750 tufts per sq mtr , with thickness of 5mm of approved shade and color , PP base broadloom over underlay of 12 mm thick foam base fixed to exiting floor with rubber based adhesive including smoothing the surface and trimming the edges to give smooth and even finish with no undulations or warps. 10% contingencies to be considered in quantity, however 5% attic stock to be considered over and above. Protecting the material on site is supplier's responsibility. Rate to include all wastage as applicable, freight and handling , installed at site as per design and edge stiching etc. complete as per drawing/specification or directed by Engineer In charge. . Make- Unitex (Melody) or equivalent	SQM		2150.29	-
42.00	Extra for providing pigment in flooring	SQM	1460.21	35.00	51,107.00
43.00	Extra for providing floor hardner of Fosroc make Nitoflor-Hardstop standard in approved make @ 4.5 Kg per Sqm or as per the manufaxcture's specification and as direction of the Engineer-in-Charge.	SQM	1089.68	210.99	229,912.00
44.00	Granite Flooring Providing and laying flooring using 18 mm thick Granite of approved size, pattern laid over 20mmthick bed CM 1:4 for flooring, using cement slurry below slabs for packing,asper architectural design, drawing and specifications, including joint filling with approved qualityand colour cement to match the shade of Granite.The work shall include cost of materials,wastage, labour, all lead and lift at all levels, loading and unloading, transportation,cutting, curingetc. and all other incidental charges etc.complete as per drawing/specification or directed by Engineer In charge.	SQM	336.78	4528.34	1,525,044.00
45.00	Providing and laying Granite stone using 18 mm thick for skirting , riser and dado , laid over 20mmthick CM 1:4 , using cement slurry,asper architectural design, drawing and specifications, including joint filling with approved qualityand colour cement to match the shade of Granite.The work shall include cost of materials,wastage, labour, all lead and lift at all levels, loading and unloading, transportation,cutting, curingetc. and all other incidental charges etc.complete as per drawing/specification or directed by Engineer In charge.	SQM	82.53	6439.64	531,472.00
46.00	Extra for making flamed in granite stone as per direction by engineer in charge	SQM	6.60	180.00	1,188.00

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
47.00	Extra for making flamed in kota stone as per direction by engineer in charge	sqm	41.99	251.83	10,574.00
48.00	40 mm thick stiching slab (1:2:4) with colour pigment and integral water proffing compound and reinforced with welded mesh specification as per drawing complete in all respect as per Engineer In Charge.	SQM		757.00	-
49.00	Supply & Fixing homogeneous & abrasion resistant Poly Vinyl flooring 2mm thick of desired shade & in desired patterns, in all cabins & corridors, cleaning of surface to give smooth & even floor with all labour and material T&P required for proper completion of work.	SQM	317.72	1800.00	571,893.00
50.00	Chequered precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete, on 20mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand) complete as per drawing/specification or directed by Engineer In charge.				
	Light shade using white cement.	SQM	15.14	905.75	13,713.00
	TOTAL OF FLOORING WORK				4,509,350.00
	WATER PROFFING				
51.00	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of :				
51.1	i) 1st course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface.				
51.2	ii) 2nd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.				
51.3	iii) 3rd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area.				
51.4	iv) 4th course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.) complete as per drawing/specification or directed by Engineer In charge.	SQM	99.36	522.90	51,954.00

TV PRODUCTION AND BROAD CASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
52.00	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1mx1mx400micron, finished with 12mm cement plaster 1:3 (1 cement :3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete as per drawing/specification or directed by Engineer In charge.			186.65	-
53.00	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured) complete as per drawing/specification or directed by Engineer In charge.	SQM		390.35	-
54.00	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cu dm/sqm thoroughly embedded in the 2nd layer complete as per drawing/specification or directed by Engineer In charge.				
54.10	Using rough kota stone.	SQM	28.47	1022.45	29,107.00


Sourav Das Gupta
 Hony. General Secretary
 Tripura Cricket Association

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
55.00	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm(minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1cement : 3 coarse sand) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :				
55.10	Using rough Kota stone	SQM	25.41	1243.25	31,591.00
	TOTAL OF WATER PROFFING WORK				112,652.00
	STEEL WORK				
56.00	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 -part 1 and M.S. top cover of required thickness for rolling shutters.				
56.10	a)80x1.25mm M.S. laths with 1.25 mm thick top cover.	Sqm		2142.10	-
57.00	Providing and fixing ball bearing for rolling shutters.	No.		438.95	-
58.00	Extra for providing mechanical device chain and crank operation for operating rolling shutters.				
58.10	a) Exceeding 10.00 sqm and upto 16.80 sqm in the area.	Sqm		724.85	-
58.20	b) Exceeding 16.80 sqm in area.	Sqm		724.85	-
59.00	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer.				
59.10	E.R.W. tubes.	KG		129.15	-

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
60.00	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	1284.14	619.40	795,396.00
61.00	Providing, fabricating , transporting, assembling & erection in position of Steel members for steel columns, built up beams using structural tubular sections (round, square or rectangular hollow tubes etc. conforming to IS 4923 / IS 1161 .Yield strength 310 MPa as per latest IS Code) to the required profile & shape as called for as per the drawing & specifications. This item also includes the shear connectors /studs & fusion weld to top of horizontal member . This item also includes preparation of shop drawings & their approval, necessary templates, adequate temporary supports, scaffolding & staging, all cutting, grinding, sliding & all labour ,tools, plants & equipments & operations etc. required to complete the job as per drawing & specification. every precaution to be taken to prevent rusting of sections. This item also includes all test on materials & welded fabricated parts as per specification & direction of Engineer - in - Charge . Temporary bolts & nuts (grade EN 8) to be used during assembling & shall be removed before site erection. All site erection bolts shall be HSFSG type only. The item to include cost of sand blasting on materials, application of primer & various coats of internal & external painting in fabrication shop & final painting on site including all touch up works after erection as per technical specification.				
61.1	A) The scope of work for this item includes :				
61.2	a) Design & fabrication of any additional temporary structure including all type of lifting brackets, supporting brackets ,which will be required for transportation & erection in position / launching of fabrication part or complete element in position.				
61.3	b) Making provision & arrangement for required opening / inserts for fixing lights fixtures & running cable conduits .				
61.4	c) All incidentals .labour , equipment & plants required to execute & complete the job from fabrication to erection at final position as per drawing ,specification & direction of Engineer - in -Charge.				
61.5	d) Cleaning & removing of all spoil , temporary arrangements for casting of deck slab.				
61.6	e) All safety measures required to execute & complete the work.				

TV PRODUCTION AND BROAD CASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
61.7	f) Procurement of all materials from approved manufactures & fabrication. Complete methodology for structural steel work . Name of workshop for fabrication works. Testing facilities & erection procedures etc.to be intimated for approval of Engineer - in - Charge.				
61.8	g) The provision of temporary bearing / sand jacks for supporting steel members during erection.				
61.9	h) Provision of stability during erection against wind load or any other type of loading on structural steel members during erection.				
62.0	B) Measurement shall be only for structural steel which is erected & is part of permanent structure & paid as per approved shop drawings.All wastages , temporary works , Jigs ,temporary assembly bolts etc. are deemed to be included in quoted rates . No allowance or increase in weight for welding , nuts & bolts etc will be applicable.	KG	4420.79	115.17	509,142.00
63.00	Providing testing & tightening of high strength friction grip bolts (HSFG bolts) of class / grade EN 8 up to proof load as per IS 4000, including required threading, using automatic calibrated torque wrench at all locations & all heights , & their compitable nuts & washers all complete required to execute the job. All HSFG bolts, nuts & washers conforming to IS 1367, IS 6610 & IS 4000 shall be used . The measurement shall be made for complete assembly of bolt, nut & compitable washers used in permanent works.	KG	21339.56	200.00	4,267,913.00
64.00	Providing,fabricating , transporting, assembling & erection in position of Steel members for steel columns, built up beams using structural builtup sections ((confirming to IS 2062 - 1999 grade B Fe 410, normalized control cooled , yield strength + 250 MPa as per latest IS Cod) to the required profile & shape as called for as per the drawing & specifications.This item also includes the shear connectors /studs & fusion weld to top of horizontal member . This item also includes prepration of shop drawings & their approval, necessary templates,adequate temporary supports, scaffolding & staging,all cutting, grinding,sliding & all labour ,tools,plants& equipments & operations etc. required to complete the job as per drawing & specification. every precaution to be taken to prevent rusting of sections. This item also includes all test on materials & welded fabricated parts as per specification & direction of Engineer - in - Charge . Temporary bolts & nuts (grade EN 8) to be used during assembling & shall be removed before site erection.All site erection bolts shall be HSFG type only. The item to include cost of sand blasting on materials, application of primer & various coats of internal & external painting in fabrication shop & final painting on site including all touch up works after erection as per technical specification.				
64.1	A) The scope of work for this item includes :				

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
64.2	a) Design & fabrication of any additional temporary structure including all type of lifting brackets, supporting brackets ,which will be required for transportation & erection in position / launching of fabrication part or complete in position.				
64.3	b) Making provision & arrangement for required opening / inserts for fixing lights fixtures & running cable conduits .				
64.4	c) All incidentals ,labour , equipment & plants required to execute & complete the job from fabrication to erection at final position as per drawing ,specification & direction of Engineer - in -Charge.				
64.5	d) Cleaning & removing of all spoil , temporary arrangements for casting of deck slab.				
64.6	e) All safety measures required to execute & complete the work.				
64.7	f) Procurement of all materials from approved manufactures & fabrication. Complete methodology for structural steel work . Name of workshop for fabrication works. Testing facilities & erectionprocedures etc.to be intimated for approval of Engineer - in - Charge.				
64.8	g) The provision of temporary bearing / sand jacks for supporting steel members during erection.				
64.9	h) Provision of stability during erection against wind load or any other type of loading during erection.				
65.0	B) Measurement shall be only for structural steel which is erected & is part of permanent structure & paid as per approved shop drawings.All wastages , temporary works , Jigs ,temporary assembly bolts etc. are deemed to be included in quoted rates . No allowance or increase in weight for welding , nuts & bolts etc will be applicable.				
		KG	93442.01	90.00	8,409,781.00
TOTAL OF ROLLING SHUTTERS & STEEL WORK					13,982,232.00
JOINERY WORK					
66.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
67.10	For fixed portion				
67.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	KG	3051.92	348.50	1,063,593.00

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
	FOR SHUTTERS WINDOW& DOOR IN ALUMINIUM WORK				
68.00	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately).				
68.10	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	KG	1072.07	405.90	435,154.00
69.00	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
69.10	B) With float glass panes of 5.50 mm thickness	SQM	153.65	1054.20	161,980.00
70.00	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg., for doors, including cost of cutting floors ,embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
70.10	With stainless steel cover plate minimum 1.25 mm thickness.	EACH	12.00	2039.00	24,468.00
71.00	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
71.10	B) 255 X 19 mm	EACH	128.00	275.25	35,232.00
72.00	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
72.10	125x75x4 mm	EACH	66.00	108.85	7,184.00
73.00	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :				
73.10	250x16 mm	EACH	42.00	189.00	7,938.00

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
74.00	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
74.10	200x10 mm	EACH	66.00	79.25	5,231.00
75.00	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
75.10	125 mm	EACH	132.00	69.80	9,214.00
75.20	100 mm	EACH	63.00	55.10	3,471.00
76.00	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868)transparent or dyed to required colour and shade with necessary screws etc. complete.				
76.10	Single rubber stopper	EACH	33.00	37.50	1,238.00
76.20	Twin rubber stopper	EACH	33.00	83.95	2,770.00
77.00	Providing and fixing bright finished brass 100 mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles with necessary screws etc. complete (Best make of approved quality).	EACH	46.00	815.45	37,511.00
78.00	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
78.10	Using M.S. angels 40x40x6 mm for diagonal braces.	SQM	10.00	3073.85	30,739.00
79.00	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size, with top and bottom rail of T-iron 40x40x6mm, with 40mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	SQM	20.00	5291.30	105,826.00
80.00	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :				
80.10	Rectangular or square.	SQM	0.88	139.40	123.00
81.00	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	SQM	10.40	104.55	1,087.00

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
82.00	Providing and fixing fire resistant door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I.sheet (zinc coating not less than 120gm/sqm) duly filled with vermiculite based concrete mix, suitable for mounting 60 minutes fire rated door shutters. The frame is fitted with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistant primer etc. complete as per direction of Engineer-in-charge (Dash fastener to be paid for separately).	RMT	6.27	1250.05	7,838.00
83.00	Providing and fixing 50 mm thick glazed fire resistant door shutters of 60 minutes fire rating conforming to IS:3614 (Part-II) tested and certified as per laboratory approved by Engineer-in-charge with suitable mounting on doorframe, consisting of vertical styles, lock rail, top rail 100mm wide, bottom rail 200mm wide, made out of 16 SWG G.I.sheet (zinc coating not less than 120 gm/sqm) duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistant primer etc. all complete as per direction of Engineer-in charge (pannelling to be paid for separately).	SQM	3.47	6268.20	21,719.00
84.00	Providing and fixing panic bar / latch (Double point) fitted with a single body, Trim Latch & Lock on back side of the Panic Latch of reputed brand and manufacture to be approved by the Engineer-in-charge, all complete.	EACH	2.20	6133.20	13,493.00
85.00	"Design supply & installation of suspended Spider Glazing system designed to withstand the wind pressure as per IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider & bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener & anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic				

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
	contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion & seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof & dust proof. The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&P, scaffolding, other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete. For the purpose of payment, actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured. "	Sqm	86.65	3429.90	297,201.00
86.00	Providing and fixing MASONITE FLUSH DOOR SHUTTER MF on both sides, Hot pressed, bonded With BWP Grade Resin, stiles and Rails in Timber, And with Tubular Core filler complete including all necessary fittings etc complete as per direction of Engineer-In- Charge.				
86.10	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	SQM	30.59	10904.16	333,569.00
87.00	Providing and fixing of galvanised M wire gauze with 0.63 mm dia in Aluminium window as per direction of Engineer in Charge.	SQM	63.29	740.00	46,838.00
TOTAL OF JOINERY WORK					2,653,417.00
CEILING					
88.00	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5mm dia x 50mm long with 6mm dia bolts other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm or both sides of joint and two coats of primer suitable for board, all as per manufacture's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :				
88.1	12.5 mm thick tapered edge gypsum fire resistant board conforming to IS: 2095- Part I.	SQM	1122.03	1022.95	1,147,784.00

TV PRODUCTION AND BROADCASTING CONTROL BUILDING

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
88.2	12.5 mm thick tapered edge gypsum moisture resistant board.	SQM	57.16	1059.50	60,557.00
86.00	Providing and Fixing 15 mm thick densified regular edged eco friendly light weight calcium silicate false ceiling tiles of approved textures in/one/cosmos / Hexa or equivalent of size 595 x 595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main "T" runner suitably spaced at joints to get required length and of size 24x38mm made from 0.33 mm thick(minimum) sheet, spaced 1200mm centre to centre, and cross "T" of size 24x28mm made out of 0.33mm (Minimum) sheet, 1200mm long spaced between main "T" at 600mm centre to centre to form a grid of 1200x600mm and secondary cross "T" of length 600mm and size 24x28mm made of 0.33mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600mm panel to from grid of size 600x600mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24x3000 mm made of 0.40 mm thick(minimum) sheet with the help of rawl plugs at 450mm centre to centre with 25mm long dry wall screws @ 230mm interval and laying 15mmthick densified edges calcium silicate ceiling tiles of approved texture(Spritone / Cosmos/hexa) in the grid including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required, Main "T" runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200mm centre to centre along main "T", bottom exposed with 24mm of all T-sections shall be pre-painted with polyester baked paint, for all heights, as per specifications, drawings and as directed by engineer-in-charge. Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening(out outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC. value of 0.50(Minimum), light reflection > 85%, non - combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity<0.043 w/m 0 KC.	SQM		1649.15	-
TOTAL OF CEILING WORK					1,208,341.00
ROOF WORK					
87.00	Providing & Fixing Colored coated insulated Metal sheets roofing (curved as per sections /architectural drawings including and all necessary fixture like screw , waasher etc. complete as directed by Engineer in Charge.	SQM	473.33	1400.00	662,662.00
88.00	Providing & Fixing Colored coated NON Insulated Metal sheets roofing (curved as per sections /architectural drawings including and all necessary fixture like screw , waasher etc. complete as directed by Engineer in Charge.	SQM	147.73	950.00	140,344.00
89.00	Providing and fixing 16 mm thick multiwall polycarbonate sheet fixed with specially designed Dornal management system conforming to IS:737 alloy & temper 6063 - T6 with a UTS of 180 to 200 mpa and weight of 1.03 kg/mtr. approx with EPDM rubber gasket of specific gravity as per ISO 2781, age resistant as per ASTM - D573 hardness as per 2240 & tensile strength as per ASTM 412 including the silicon sealant GE Bayer Weathersil NY also include framework at all levels as per drawing and directed by the Engineer in charge. NOTE:- Frame work shuid be 4 kg/sft.	SQM		8512.23	-
TOTAL OF ROOFING WORK					803,006.00

ESTIMATED FOR BOUNDARY WALL OF STADIUM TRIPURA

BOUNDARY WALL		
SL. NO	ITEMS OF WORKS	AMOUNT
A	EARTH WORK	1,347,002.00
B	CONCRETE WORK	46,231,575.00
C	FORM WORK	4,156,593.00
D	MASONARY WORK	1,535,037.00
E	FINISHING WORK	1,649,042.00
F	STEEL WORK	17,458,839.00
	GRAND TOTAL	72,378,088.00

BOUNDARY WALL

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
EARTH WORK					
1.00	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sum on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
1.10	All kinds of soil	CUM	5651.77	155.60	879,415.00
2.00	Extra for every additional lift of 1.5 m or part thereof in excavation/ banking excavated or stacked materials.				
2.10	All kinds of soil.	CUM	2489.28	46.25	115,129.00
3.00	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	CUM	3135.75	112.40	352,458.00
TOTAL OF EARTH WORK					1,347,002.00
CONCRETE WORK					
4.00	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
4.1	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	CUM	372.77	4004.00	1,492,556.00
5.00	Providing and laying in position machine batched and machine mixed design mix M-25 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.				
5.1	All works up to plinth level.	CUM	3258.49	6296.15	20,515,955.00
5.2	All works above plinth level up to floor V level.	CUM	157.18	7014.55	1,102,564.00
6.00	Providing M-30 grade concrete instead of M-25 grade BMC/RMC.	CUM	3415.67	76.50	261,299.00
7.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
7.1	Thermo-Mechanically Treated bars.	KG	311138.75	68.10	21,188,549.00
8.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
8.1	Thermo-Mechanically Treated bars.	KG	24532.33	68.10	1,670,652.00
TOTAL OF CONCRETE WORK					46,231,575.00

BOUNDARY WALL

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
	FORM WORK				
9.00	Centering and shuttering including strutting, propping etc. and removal of form for :				
9.1	Foundations, footings, bases of columns, etc. for mass concrete.	SQM	1427.63	196.45	280,459.00
9.2	Wall (any thickness) including attached pilasters, buttersesses, plinth and string course etc	SQM	8597.76	360.80	3,102,071.00
9.3	Columns, Pillars, Piers, Abutments, Posts and Struts.	SQM	724.09	453.35	328,264.00
9.4	Lintels, beams, plinth beams, girders, bressumers and cantilevers. with water proof ply 12mm thick.	SQM	1052.28	423.65	445,799.00
	TOTAL OF FORM WORK				4,156,593.00
	MASONARY WORK				
10.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
10.10	Cement mortar 1:4 (1 cement : 4 coarse sand)	CUM		4918.65	-
11.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
11.10	Cement mortar 1:4 (1 cement : 4 coarse sand)	CUM	270.85	5667.55	1,535,037.00
	TOTAL OF MASONARY WORK				1,535,037.00
	FINISHING				
11.00	15 mm cement plaster on rough side of single or half brick wall of mix :				
11.1	1:6 (1 cement: 6 fine sand)	SQM	1177.59	172.80	203,488.00
12.00	12 mm cement plaster of mix :				
12.1	1:6 (1 cement: 6 fine sand)	SQM	2943.99	149.45	439,979.00
13.00	Finishing walls with Acrylic Smooth exterior paint of required shade :				
14.00	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm).	SQM	5887.97	90.00	529,917.00
15.00	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
15.1	Two or more coats on new work.	SQM	4476.78	106.25	475,658.00
	TOTAL OF FINIHING WORK				1,649,042.00
	STEEL WORK				

BOUNDARY WALL

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
16.00	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
16.10	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	KG	106967.87	90.10	9,637,805.00
17.00	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m) having 50 no rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y'shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal including necessary bolts or G.I. barbed wire tied to angle iron all complete as per direction of Engineer-in-charge with reinforced barbed tape(R.B.T.) /Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	RMT	1295.38	287.05	371,838.00
18.00	Providing,fabricating , transporting, assembling & erection in position of Steel members for steel columns, built up beams using structural tubular sections (round, square or rectangular hollow tubes etc. confirming to IS 4923 / IS 1161 ,Yield strength 310 MPa as per latest IS Code) to the required profile & shape as called for as per the drawing & specifications.This item also includes the shear connectors /studs & fusion weld to top of horizontal member . This item also includes prepration of shop drawings & their approval, necessary templates,adequate temporary supports, scaffolding & staging,all cutting, grinding,sliding & all labour ,tools,plants& equipments & operations etc. required to complete the job as per drawing & specification. every precaution to be taken to prevent rusting of sections. This item also includes all test on materials & welded fabricated parts as per specification & direction of Engineer - in - Charge . Temporary bolts & nuts (grade EN 8) to be used during assembling & shall be removed before site erection.All site erection bolts shall be HSFG type only. The item to include cost of sand blasting on materials, application of primer & various coats of internal & external painting in fabrication shop & final painting on site including all touch up works after erection as per technical specification.				
18.1	A) The scope of work for this item includes :				
18.2	a) Design & fabrication of any additional temporary structure including all type of lifting brackets, supporting brackets ,which will be required for transportion & erection in position / launching of fabrication part or complete element in position.				
18.3	b) Making provision & arrangement for required opening / inserts for fixing lights fixtures & funning cable conduits .				

BOUNDARY WALL

SI. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
18.4	c) All incidentials .labour , equipement & plants required to execute & complete the job from fabrication to erection at final position as per drawing ,specification & direction of Engineer - in -Charge.				
18.5	d) Cleaning & removing of all spoil , temporary arrangements for casting of deck slab.				
18.6	e) All safety measures required to execute & complete the work.				
18.7	f) Procurement of all materials from approved manufactures & fabrication. Complete methodology for structural steel work . Name of workshop for fabrication works. Testing facilities & erection procedures etc.to be intimated for approval of Engineer - in - Charge.				
18.8	g) The provision of temporary bearing / sand jacks for supporting steel members during erection.				
18.9	h) Provision of stability during erection against wind load or any other type of loading on structural steel members during erection.				
19.0	B) Measurement shall be only for structural steel which is erected & is part of permanent structure & paid as per approved shop drawings.All wastages , temporary works , Jigs ,temporary assembly bolts etc. are deemed to be included in quoted rates . No allowance or increase in weight for welding , nuts & bolts etc will be applicable.	KG	64680.00	115.17	7,449,196.00
	TOTAL OF ROLLING SHUTTERS & STEEL WORK				17,458,839.00


Sourav Das Gupta
 Hony. General Secretary
 Tripura Cricket Association

ESTIMATED FOR OVER HEAD TANK OF STADIUM TRIPURA

OVER HEAD TANK		
SL. NO	ITEMS OF WORKS	AMOUNT
A	EARTH WORK	18,969.00
B	CONCRETE WORK	4,742,634.00
C	FORM WORK	1,658,316.00
D	FINISHING WORK	252,714.00
E	FLOORING WORK	65,007.00
F	JOINERY WORK	29,048.00
G	STEEL WORK	441,352.00
H	PILE WORK	206,327.00
I	MISCELLINIOUS WORK	44,950.00
J	WATER PROFFING WORK	84,171.00
	GRAND TOTAL	7,543,488.00


Sourav Das Gupta
 HONY. GENERAL SECRETARY
 Hon. General Secretary
 Tripura Cricket Association

OVERHEAD TANK

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
EARTH WORK					
1.00	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sum on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
1.10	All kinds of soil	CUM	82.83	155.60	12,888.00
2.00	Extra for every additional lift of 1.5 m or part thereof in excavation/ banking excavated or stacked materials.				
2.10	All kinds of soil.	CUM	13.80	46.25	638.00
3.00	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	CUM	48.43	112.40	5,443.00
TOTAL OF EARTH WORK					18,969.00
CONCRETE WORK					
4.00	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
4.10	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	CUM	13.34	4004.00	53,429.00
5.00	Providing and laying in position machine batched and machine mixed design mix M-25 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.				
5.10	All works up to plinth level.	CUM	37.01	6296.15	233,014.00
5.20	All works above plinth level up to floor V level.	CUM	139.34	7014.55	977,376.00
6.00	Providing M-30 grade concrete instead of M-25 grade BMC/RMC.	CUM	88.17	76.50	6,745.00
7.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
7.10	Thermo-Mechanically Treated bars.	KG	7925.87	68.10	539,752.00
8.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
8.10	Thermo-Mechanically Treated bars.	KG	42702.59	68.10	2,908,046.00
9.00	Extra for RCC/BMC/RMC work above floor V lvl for each four floors or part there off.	cum	139.34	174.20	24,272.00
TOTAL OF CONCRETE WORK					4,742,634.00

OVERHEAD TANK

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
	FORM WORK				
10.00	Centering and shuttering including strutting, propping etc. and removal of form for :				
10.10	Foundations, footings, bases of columns, etc. for mass concrete.	SQM	42.40	196.45	8,329.00
10.20	Wall (any thickness) including attached pilasters, buttresses, plinth and string course etc	SQM	1170.67	360.80	422,376.00
10.30	Stairs, (excluding landings) except spiral-staircases	SQM	184.80	395.65	73,116.00
10.40	Extra for shuttering in circular work(20%of respective centering and shuttering items)	SQM	1170.67	90.67	106,144.00
10.50	Lintels, beams, plinth beams, girders, bressumers and cantilevers. with water proof ply 12mm thick.	SQM		423.65	-
10.60	Suspended floors, roofs, landings, balconies and access platform. with water proof ply 12mm thick.	SQM	57.66	493.55	28,458.00
11.00	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured)				
11.10	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).	SQM	6412.40	159.05	1,019,893.00
	TOTAL OF FORM WORK				1,658,316.00
	FINISHING				
12.00	15 mm cement plaster on rough side of single or half brick wall of mix :				
12.10	1:6 (1 cement: 6 fine sand)	SQM		130.20	-
13.00	6 mm cement plaster of mix :				
13.10	1:3 (1 cement: 3 fine sand)	SQM		101.00	-
14.00	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade				
14.10	New work (two or more coats) over and including water thinnable priming coat with cement primer.	SQM	520.33	89.70	46,674.00
15.00	Finishing walls with textured exterior paint of required shade :				
15.10	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @2.20kg/10 sqm.	SQM	853.05	146.45	124,929.00
16.00	Distempering with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.				

OVERHEAD TANK

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
16.10	Two or more coats on new work.	SQM		50.65	-
17.00	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
17.10	Water thinnable cement primer.	SQM	1373.38	35.85	49,236.00
18.00	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
18.10	Two or more coats on new work.	SQM	300.00	106.25	31,875.00
19.00	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	SQM		89.65	-
TOTAL OF FINIHING WORK					252,714.00
FLOORING					
20.00	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : as per drawing/specification or directed by Engineer In charge.				
20.10	25 mm thick.	SQM		1141.60	-
21.00	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete as per drawing/specification or directed by Engineer In charge..	SQM		1191.25	-
22.00	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete				
22.10	40mm thick with 20mm nominal size stone aggregate.	SQM	183.97	353.35	65,007.00
23.00	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete as per drawing/specification or directed by Engineer In charge. .	SQM		836.65	-

OVERHEAD TANK

Sl. No	Description of Work	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
24.00	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS :15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	SQM		904.45	-
TOTAL OF FLOORING WORK					65,007.00
WATER PROFFING					
25.00	Providing and laying in situ seven course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric membrane over roof consisting of first coat of bitumen primer @ 0.40Kg per sqm, 2nd & 4th&6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd&5th layer of roofing membrane APP modified Polymeric membrane 2.0mm thick of 3.00 Kg/sqm weight consisting of five layers prefabricated with centre core as 100micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film. 5th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12mm layer of cement mortar 1:3 (1 cement: 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).	SQM		572.25	-
26.00	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cudm/sqm thoroughly embedded in the 2nd layer complete as per drawing/specification or directed by Engineer In charge.				
26.10	Using rough kota stone.	SQM		1022.45	-