OVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
LOCAL GOVERNMENT ENGINEERING DEPARTMENT

PLAN-DESIGN & COST ESTIMATE
FOR
CONSTRUCTION OF UPAZILA RESOURCE CENTRE (URC)
INCLUDING SUPPLY OF FURNITURE

DECEMBER, 2004

COST ESTIMATE FOR
UPAZILA RESOURCE CENTRE (URC)

SUMMARY

1. CONSTRUCTION OF CIVIL WORKS	= TK.	12,90,000.00
2. FURNITURE SUPPLY	= TK.	3,50,000.00
TOTAL	=TK.	16,40,000.00

(TAKA SIXTEEN LAKH & FORTY THOUSAND ONLY)

(Md Mustafizur Rahman)	(Md. Monjur Ali)	(Md. Ataullah Bhuiya)	(Akhund Habibul Alam)
Sub-Assistant Engineer	Assistant Engineer	Project-Coordinator	Additional Chief Engineer
LGED	LGED	LGED	LGED

COST ESTIMATE FOR CONSTRUCTION OF UPAZILA RESOURCE CENTER'S.

SUMMARY

1. CONSTRUCTION OF CIVIL WORKS	(PART-A)	= TK.	11,07,500.00
2. SANITARY LATRINE AND WATER SUPPLY	(PART-B)	= TK.	96,500.00
3. SINKING OF 1.5" DIA SHALLOW TUBE WELL	(PART-C)	= TK.	15,000.00
4. ELECTRIFICATION WORKS	(PART-D)	= TK.	71,000.00
	TOTAL	= TK.	12,90,000.00

(TAKA TWELVE LAKH NINTY THOUSAND ONLY.)

(Md Mustafizur Rahman)
Sub-Assistant Engineer
LGED

(Md Monjur Ali)
Assistant Engineer
LGED

(Md. Ataullah Bhuiyan)
Project Co-ordinator
LGED

(Akhund Habibul Alam)
Additional Chief Engineer
LGED

DETAIL COST ESTIMATE AND TECHNICAL SPECIFICATION FOR CONSTRUCTION OF UPAZILA RESOURCE CENTER.

PART-A

(Taka)

S.L No.	Description of Items	Quantity	Rate	Amount
1	2	3	4	5

1. (5.001) Earth work in excavation of canal, ponds, drains, foundation trenches etc. by excavating earth to the lines grades and elevation as shown in the drawing, filling baskets, carrying and disposing of all excavated materials at a safe distance designated by the E-I-C. in all types of soils except rocky, gravelly, slushy or organic soil, leveling, dressing etc. all complete for an initial excavation depth of 2m & an initial lead not exceeding 20m including arranging for a supplying all necessary tools and equipment as work site etc. complete as direction of the Engineer-in- charge.

F1	= 4 ×7'-4"x7'-4"x3'-6"	= 752.20 cft.
F2	= 12×7'-9"×7'-9"x3'-6"	= 2522.62 cft.
F3	= 2×5'-6"×5'-6"x3'-6"	= 211.75 cft.
F4	= 2×3'-0"×3'-0"x1'-10"	= 32.94 cft.
Drop wall	= 2×5x4'-3"×0'-10"x2'-0"	= 70.55 cft.
	= 2×2x4'-6"×0'-10"x2'-0"	= 29.88 cft.
	= 2×1x14'-1"×0'-10"x2'-0"	= 46.75 cft.
Step	= 1×9'-2"×2'-6"x1'-0"	= 22.92 cft.
		= 3689.61 cft.
Earth filling		
1/3rd of excavation		= 1229.87 cft.
Total		= **4919.48 cft** 139.32 m3 31.58 4399.81

2. (5.002) Single layer brick flat soling with 1st class or picket jhama bricks, true to level, camber/super elevation and grade including carrying bricks, filling the interstices tightly with sand of minimum FM=0.80 etc. all complete as per direction of the Engineer-in-charge.

(A) Floor:

	= 70'-0"×18'-2"	= 1271.90 sft.
Toilet	= 10'-5"x6'-0"	= 62.52 sft.
Stair	= 2×2'-0"×2'-0"	= 8.00 sft
		= **1342.42 cft** 124.76 m2 130.16 16238.79

3. (5.007.01) Sand filling in foundation trenches and inside plinth with sand (minim FM=0.80) in 150 mm layers in/c leveling, watering and consolidating each layer up to finished level etc. al complete as per direction of the Engineer-in- charge.

Dry density after compaction shall not be less than 95% of MDD.

	= 1271.90x1'-0"	= 1271.90 cft
F1	= 4x6'-4"x6'-4"x 0'-6"	= 107.45 cft
F2	= 12x6'-9"x6'-9"x0'-6"	= 306.37 cft
F3	= 2×4'-6"×4'-6"x0'-6"	= 30.25 cft.
Toilet floor	= 10'-5"×6'-0"x1'-0"	= 62.52 cft.
		= **1778.49 cft** 50.37 m3 410.79 20690.62

S.L No.	Description of Items	Quantity
1	2	3

4. (5.008.02) Carted earthwork with sleeted earth in road embankment, bridge approach, site improvement, ditch filling etc. earth being supplied by contractor at this own cost & arrangement including loading, unloading, carriage throwing in layers of 150 mm, breaking clods to 75mm maximum size, leveling. Dressing, etc all complete as per direction of the engineer-in- charge.

Front	=1x80'-2"x(20'-0"+22'-0")x1.2x1'-0"	= 1683.57 cft.
Back	= 1x80'-2"x(5'-0"+7'-0")x1.2 x1'-0"	= 481.02 cft.
Side	= 2x20'-8"x(5'-0"+7'-0")x1.2x1'-0"	= 248.04 cft
Floor	=1334.42x1'-0"	= 1334.42 cft.
		= **3747.05 cft**

106.12 m3 130.08

5. (5.018) 75 mm thick cement concrete (1:3:6) in floor with Portland cement, best quality coarse sand (minimum F.M.1.2) and 20mm down graded picked jhama chips in/c chips screening, mixing, laying, competing, washing of sand, curing for requisite period, etc.. All complete as per direction of the Engineer-in- charge.

Footing:

F1	=4x6'-4"x6'-4"	= 160.27 sft.
F2	=12x6'-9"x6'-9"	= 546.75 sft.
F3	=2x4'-6"x4'-6"	= 40.50 sft.
Same as Item 2(A)		= 1336.42sft
		= **2083.94 sft**

193.67 m2 211.7

6. **(5.006.02)** 38mm thick Damp proof course (DPC) with cement concrete (1:2:4) with Portland cement, coarse sand (minimum FM 1.80) and 10mm down graded 1st class picked jhama bricks chips(maximum LAA40) including casting, compacting, curing, coal tar bitumen painting, etc. all complete as per drawing and direction

Rate

S.I No.	Description of Items	Quantity	Rate	Amount
1	2	3	4	5

7. (5.030.01). Reinforced cement concrete (RCC) work (1:2:4) having minimum cylinder crushing 170 kg/ cm2 at 28 days with portland cement (conforming to BDS 232). Best quality coarse sand (50% quantity of sand of minimum F.M.1.2. and 50% quantity of course sand of minimum F.M. 2.5) 20mm down graded picked jhama brick chips in/c breaking chips and screening, centering, shuttering, making shuttering fully leak proof, placing of rod in position, mixing the aggregates with mixer machine, pouring, casing, Compacting by vibrator machine and curing at least for 28 days (excluding the cost of reinforcement and its fabrication) etc.. All complete direction of the Engineer-in- charge.

Column:

F1	= 4x6'-4"x6'-4"x1'-1"	= 173.09 cft.			
C1	= 4x1'-1"x1'-6"x4'-2"	= 27.02 cft.			
F2	= 12x6'-9"x6'-9"x1'-2"	= 639.69 cft.			
C2	= 12x1'-1"x1'-6"x4'-1"	= 79.31 cft.			
F3	= 2x4'-6"x4'-6"x0'-10"	= 33.61 cft.			
C3	= 2x1'-1"x1'-1"x4'-5"	= 10.31 cft.			
F4	= 2x2'-0"x2'-0"x0'-8"	= 5.36 cft.			
C4	= 2x1'-1"x1'-1"x0'-11"	= 2.15 cft.			
W. Slab	= 1x5'-10"x10'-0"x0'-6"	= 29.15 cft.			
Step	= 4x0.5x0'-10"x0'-6"x10'-0"	= 8.30 cft.			
GB (Stair)	= 2x10'-0"x0'-10"x0'-10"	= 13.78 cft.			
Grade Beam:-					
GB-1	= 2x7x9'-2"x0'-10"x1'-2"	= 124.67 cft.			
GB-2	= 3x9'-2"x0'-10"x1'-0"	= 22.83 cft.			
GB-3	= 8x18'-2"x0'-10"x0'-10"	= 100.14 cft			
GB-2 (Toilet)	= 2x5'-5"x0'-10"x1'-0"	= 8.99 cft			
GB-2 (Toilet)	= 1x6'-5"x0'-10"x1'-0"	= 5.39 cft			
Drop Wall	= 2x7x9'-2"x2'-0"x0'-4"	= 84.73 cft			
	= 2x18'-2"x2'-0"x 0'-4"	= 23.98 cft			
		= **1392.51 cft**	39.44 m3	3752.68	147993.33

8. (5.017.01) 125mm thick brick work with 1st class bricks in cement mortar(1:4) and making bond with connected walls in/c necessary scaffolding, racking out joints, cleaning and soaking the bricks at least for 24 hours before use, washing of sand curing for requisite period etc.. all complete as per direction of the Engineer-in-charge. for all floors (minimum F.M. of sand: 1:2)

A)

Drop wall	= 13x9'-2"x1'-7"	= 188.35 sft.
	= 2x18'-2"x1'-11"	= 69.77 sft.
		= **258.12 sft**

B)

Main wall:	= 2x7 x 9'-2"x8'-7.5"	= 1107.27 sft.
	= 4x18'-2"x8'-1.5"	= 590.52 sft.
Verandah:	= 2x9'-2"x2'-6"	= 45.85 sft.
	= 3x9'-2"x2'-0"	= 55.02 sft.

S.L No.	Description of Items	Quantity	Rate	Amount
1	2	3	4	5

Pump wall:	= 2x3'-5"x9'-6"	= 65.17 sft.			
Latrin wall:	= 3x5'-0"x8'-7.5"	= 129.37 sft.			
Latrin wall:	= 1x13'-3"x8'-7.5"	= 114.28 sft.			
Deduction:					
D1	= 2x3'-4"x7'-0"	= (-) 46.62 sft			
Door: D	= 1x4'-2"x7'-0"	= (-)29.19 sft			
D2	= 3x2'-6"x7'-0"	= (-) 52.50 sft			
Window:	= 11x4'-2"x4'-6"	=(-) 206.41 sft.			
H/W:	= 2x2'-0"x1'-6"	= (-) 6.00 sft.			
		= 1766.76sft			
(A+B) = (258.12+ 1766.76)		= 2024.88 sft	188.19 m2	325.17	61192.40

9. (5.034.01) Reinforced cement concrete **(RCC)** works (1:2:4) having minimum cylinder crushing 17 MPa at 28 days with port land cement(conforming to BDS 232) best quality coarse sand (50% quantity of sand of minimum F.M.1.2 and 50% quantity of course sand of minimum F.M. 2.5) 20mm down graded picked jhama brick chips in/c breaking chips and screening, centering, shuttering, making shuttering fully leak proof, placing of rod in position, mixing the aggregates with mixer machine, pouring, casing, Compacting by vibrator machine and curing at least for 28 days(excluding the cost of reinforcement and its fabrication) etc. all complete direction of the Engineer-in- charge. all complete direction of the I/C.

Column:

Fales Column

	= 6x0'-6"x0'-5"x7'-6"	= 9.45 cft.		
C1	= 4x0'-10"x1'-3"x11'-10.5"	= 49.28 cft.		
C2	= 12x0'-10"x1'-3"x11'-10.5"	= 147.84 cft.		
C3	= 2x0'-10"x0'-10"x10'-0"	= 13.78 cft.		
Lintel:	= 11x9'-2"x0'-5"x0'-6"	= 21.18 cft.		
	= 4x18'-2"x0'-5"x0'-6"	= 15.26 cft.		
	= 1x28'-4"x0'-5"x0'-6"	= 5.94 cft.		
Lintel: Beam:	= 3x9'-2"x0'-5"x1'-0"	= 11.55 cft.		
Pump House Lintel	= 2x3'-5"x0'-5"x0'-6"	= 1.43 cft.		
Latrine Lintel	= 3x5'-5"x0'-5"x0'-6"	= 3.41 cft.		
	= 1x7'-11"x0'-5"x0'-6"	= 1.66 cft.		
Beam:				
B1	= 2x18'-2"x0'-10"x1'-5"	= 42.83 cft.		
B2	= 6x18'-2" x 0'-10"x1'-5"	= 128.49 cft.		
B3	= 2x7x9'-2"x0'-10"x0'-11"	= 98.03 cft.		
B3 (Latrine)	= 2x5'-0"x0'-10"x0'-11"	= 7.65 cft.		
B3 (Latrine)	= 1x8'-4"x0'-10"x0'-11"	= 6.36 cft.		
Roof slab:	= 74'-10"x23'-10"x0'-4.5"	= 659.78 cft		
Sunshade:	= 8x4'-8"x1'-3"x0'-3"	= 11.68 cft		
	= 3x4'-5"x1'-3"x0'-3"	= 4.14 cft		
Verandah	= 1x28'-4"x1'-3"x0'-3"	= 8.85 cft.		
Latrine slab:	= 1x13'-7"x5'-5"x0'-4.5"	= 27.23 cft.		
		1275.82 cft.	36.13 m3	4864.59	175767

S.L. No:	Description of Items	Quantity	Rate	Amount
1	2	3	4	5

10. (5.048.02) Supplying & fabrication of M.S high strength deformed bar/Twisted bar reinforcement of required size and length for all types of R.C.C work in/c straightening the rod, removing ruts, cleaning, cutting, hooking, bending, binding with supply of 22 B.W.G. G.I wire, placing in position, in/c lapping, spacing and securing them in position by concrete blocks (1:1), metal chairs, etc. complete in/c cost of all materials, labour, local handling incidentals necessary to complete the work as per specifications, drawing and direction of the Engineer-in- charge. (Measurement will be based on standard weight of 490 lbs./ft3 chairs, laps and separators will not be measures for payment . The cost of these will be included in the unit rate).High strength deformed bar (grade 40).

(a) 1/2" dia rod :(12mm Ø)

Column base:

F1	= 4x2x18x5'-10"	= 839.52 rft.
F2	= 2x12x20x6'-3"	= 3000.00 rft.
F3	= 2x11x4'-0"	= 88.00 rft.
F4	= 2x10x1'-6"	= 30.00 rft.
W. Slab	= 1x30x5'-10"	= 174.90 rft.
Ext. Top	= 2x30x2'-0"	= 120.00 rft.
GB (Top)	= 2x2x10'-5"	= 41.68 rft.
GB (Bott)	= 2x2x9'-9"	= 39.00 rft.
GB2	= 4x30'-10"	= 123.32 rft.
GB2 (Toilet)	= 2x4x5'-10"	= 46.64 rft.
GB2	= 1x4x10'-0"	= 40.00 rft.
Lintel	= 11x4x10'-10"	= 476.52 rft.
Lintel Beam	= 3x4x10'-10"	= 129.69 rft.
Lintel	= 4x4x20'-5"	= 326.72 rft.
Lintel	= 2x4x3'-10"	= 30.64 rft.
Lintel	= 1x4x29'-2"	= 116.68 rft
		= 5623.31 rft.
		= 1518.29 kg.

(b) 16mm Ø

C1	= 4x8x18'-8"	= 597.44 rft.
C2	= 12x8x18'-8"	= 1792.32 rft.
GB1	= 2x5x71'-10"	= 718.30 rft.
GB2 Ckd.	= 1x1x36'-4"	= 36.33 rft.
GB2 (Toilet)	= 1x4x5'-10"	= 23.32 rft.
GB2	= 1x10'-2"	= 10.17 rft.
GB3 St.	= 8x2x21'-8"	= 346.72 rft.
GB3 Ckd	= 8x2x23'-0"	= 368.00 rft.
B1 Hanger:	= 2x2x21'-8"	= 86.68 rft.
B1 Ckd:	= 2x3x25'-0"	= 150.00 rft.
Fales Col.:	= 6x4x9'-2"	= 220.08 rft.
B3. St :	= 2x4x71'-7"	= 572.64 rft.
B2 ckd	=2x24x85'-7"	= 342.32 rft.
C3.(Latrine) :	= 2x4x18'-8"	= 149.36 rft.
B3 :	= 2x4x8'-8"	= 69.36 rft.
B3. :	= 1x4x12'-1"	= 48.33 rft.
Ckd. :	= 2x2x10'-4"	= 41.32 rft.
Ckd. :	= 1x2x13'-9"	= 27.50 rft.
	Total	= 5600.19 rft.
		= 2697.65 kg.

Sl. No.	Description of Items	Quantity	Rate
1	2	3	4

(c) 3/4" dia rod:- : (20mm Ø)

GB3 = 8x3x21'-8" = 520.08 rft.
B1 Sl. = 2x3x21'-8" = 130.02 rft.
B2 Sl. = 6x3x21'-8" = 390.06 rft.
B2 Chd. = 6x3x25'-0" = 450.00 rft.
= 1490.16 rft
= 1119.11 Kg.

(d) 7/8" dia rod:- (22mm Ø)

B2 = 6x2x21'-7" = 258.96 rft.
= 258.96 rft
= 235.39 kg

(1) 3/8" dia rod (10mm Ø)

Roof Slab

Main distance @ 5" c/c allternate cranked

= 23x74'-7" = 1715.34 rft.
= 22x77'-3" = 1699.50 rft.
= 2x5x74'-7" = 745.50 rft.
= 61x3x1'-4" = 243.39 rft.
= 6x2x22x6'-4" = 1671.12 rft.
= 1x2x28x5'-6" = 308.00 rft.
= 2x8x74'-7" = 1193.28 rft.

= 7x8x23'-7" = 1320.48 rft.
= 4x6x23'-7" = 565.92 rft.
= 2x4x23'-7" = 188.64 rft.
= 7x7x23'-11" = 1172.08 rft.
= 2x1x7x7x7'-3" = 710.50 rft.
B2 = 8x46x4'-6" = 1656.00 rft.
= 2x7x18x3'-7" = 902.16 rft.
= 2x8x3'-7" = 57.28 rft.
= 1x13x3'-7" = 46.54 rft.
= 2x7x20x3'-4" = 932.40 rft.
= 1x3x20x3'-0" = 180.00 rft.
= 2x11x2'-9" = 60.50 rft.
= 1x19x2'-9" = 52.25 rft.
= 8x1x38x2'-7" = 784.32 rft.
= 2x7x20x2'-7" = 722.40 rft.
= 2x1x38x2'-7" = 196.08 rft.
Bundler = 2x5x70'-10" = 708.30 rft.
= 2x5x20'-8" = 206.70 rft.
= 14x15x1'-5" = 298.20 rft.
= 4x27x1'-5" = 153.36 rft.
Ring = 3x18x2'-4" = 125.82 rft.
Main = 11x8x2'-0" = 176.00 rft.
= 1x55x2'-0" = 110.00 rft.
= 11x2x4'-5" = 97.24 rft.
= 1x2x28'-2" = 56.34 rft.
= 17x9'-0" = 153.00 rft.
= 17x9'-4" = 158.61 rft.

S.I No.	Description of Items	Quantity	Rate	Amount
	2	3	4	5
	5x15'-1"	= 75.40 rft.		
	4x15'-5"	= 61.68 rft.		
	= 2x17x4'-3"	= 144.50 rft.		
	= 2x7x5'-5"	= 75.88 rft.		
C3 (Latrine) Stirrup	= 2 x21x2'-9"	= 115.5 rft		
Column Stirrup C1	= 4x26x3'-6"	= 364.00 rft.		
C2	= 12x26x3'-6"	= 1092.00 rft.		
False Col.	= 6x12x1'-6"	= 108.00 rft.		
Stirrup (Stair)	= 2x18x2'-10"	= 101.88 rft.		
Binder	= 2x10x9'-9"	= 195.00 rft.		
		= 21701.09 rft.		
		= 4079.80 Kg.		
	Total	= 9650.24 Kg		
	Say	=9700.00 Kg	39.49	383053.00

11. (5.065) Supplying, fitting and fixing door frame with angle (38 mm x 38 mm x 6 mm), fixing, 250 mm 6 nos. of iron clamps of same size (one end bifurcated) with vertical member of the frame, fixing the frame in wall with cement concrete (1:2:4), mending good damages, fixing 3 nos. of 100 mm size iron hinges with the vertical members of the frame for single leaf shutter, painting all iron faces in 2 coats over a coat of priming with enamel paint of approved colour and quality, in/c cutting, sizing, welding, etc. all complete as per directions of the Engineer-in- charge.

D	= 1x18'-2"	= 18.17 rft		
D1	= 2x17'-4"	= 34.66 rft		
D2	= 3x16'-6"	= 49.50 rft		
		= **102.33 rft** x3.28		
		=31.20 rm	301.19	9396.98

12. (5.070.02) Supplying, fitting and fixing 38 mm thick well matured wood panel door shutters(minimum 250 mm wide plank), top. rail and styles of sections (100mmx 38mm), lock rail(125mmx38mm) and bottom rail (225mmx38mm) paneling 38mm thick both sides raised, provided with best quality 6 nos. 100,mm iron hinges, 2 nos. best quality 12 mm dia 300 and 225 mm long iron tower and socket bolts 2 nos. heavy type nickel plated handle, hinge cleats, buffer blocks and finished with sand papering for all floors etc. all complete as per direction of the E-I-C(double leaf. all sizes of wood are finished)

D	= 1x4'-2"x7'-0"	= 29.19 sft		
D1	= 2x3'-4"x7'-0"	= 46.62 sft		
D2	= 3x2'-6"x7'-0"	= 52.50 sft		
	Total	= **128.31 sft.**		
		11.92 m2	2462.53	29364.98

S.L No.	Description of Items	Quantity	Rate	
1	2	3	4	

13. Supplying fitting and fixing steel window shutters including frame & grill having requisite No.s of vertical and Horizonrtal standard M.S. Angles (25mm x 25mm x3mm) and (19 mm x 19mm x 3mm) and M.S flatbar 25 mm x 5 mm and 19 mm x 5 mm (Grill) with grill F.I. Clamps 225 mm x 3 mm duly embeded in cement concrete (1:2:4) including making necessary arrangements of fabrication, welding etc. and fixing the handles, catch hooks, 3 No.s hings for each shutter etc. and 18 Gauge M.S. Sheet in position welded to steel shutter with 19mm x 5 mm M.S flat bar stiffencern and providing a coat of anticorrosive paint immediatly after fabrication and before fixing in position. All complete as per direction of the E-I-C and as per drawing and design.

= 14×4'-0"×4'-6"	=	252.00 sft.		
= 2×2'-0"×1'-6"	=	6.00 sft.		
	=	**258.00 sft**	23.98 m2	1660.00

14. **(5.019.01)** 25mm thick artificial Patent stone floor (1:2:4) with portland cement, best quality coarse sand (50% minimum F.M. 1.2 and 50% minimum F.M. 2.5) and 10 mm down graded picked jhama chips in/c chips screening, mixing, laying the concrete in alternate panels, compacting and finishing the top with neat cement, curing, etc. al complete as per direction of the Engineer-in- charge.

Floor area :

		= 1334.42 sft.		
Stair	= 5'-10"×10'-0"	= 50.00 sft.		
	Total	= **1384.42 sft**		
			128.66 m2	116.23

15. **(5.102.01)** Minimum 12mm thick Sand cement plaster (1:4) to dado and plinth wall up to 150mm below ground level with neat cement finishing in/c washing of sand, finishing the edges and corners and curing of the requisite period etc. all complete as per direction of the Engineer-in- charge.(Sand of minimum F.M 1.2 be used).

Dado	= 2×70'-10"×3'-0"	=	424.99 sft.	
	= 2×20'-8"×3-'0"	=	124.02 sft.	
Toilet	= 2×5'-5"×3-'0"	=	32.52 sft.	
Scarting	= 2×(30'-0"+18'-2")x0-'9"	=	72.25 sft.	
	= 2×(29'-2"+11'-9")x0-'9"	=	61.38 sft.	
	= 2×(10'-0"+18'-2")x0-'9"	=	42.25 sft.	
	= 2×(29'-2"+6'-0")x0-'9"	=	52.75 sft.	
Step	=2x0'-6"x10'-0"	=	30.00 sft	
	=2x0'-9"x5'-10"	=	8.75 sft	
		=	**869.93 sft.**	
			80.85 m2	88.62

S.I. No.	Description of Items	Quantity	Rate	Amount
1	2	3	4	5

16. (5.102.02) Minimum 12 mm thick cement plaster (1:4) to wall both inner and outer surface, finishing the corner and edges in/c washing of sand clearing the surface, scaffolding and curing of the requisite period etc. All complete as per direction of the Engineer-in-charge.(sand of minimum F.M 1.2 be used).

Same as item No 10 (B) (5" Thick B/Wx2)

= 1766.76x2 sft. = 3533.52sft.

Deduct (toilet wall NCF) = 2×2x(4'-2"+5'-0")×5'-0" = (-) 183.40 sft.

= **3350.12 sft.**

311.35 m2 67.63 21056.56

17. (5.103.03) Minimum 6 mm thickness cement plaster (1:4) to ceiling RCC columns, Beams, Surface of stair case, sunshade, cornice, railing, drop wall , louvers, fins and finishing the cornice and edges in/c washing of sand clearing the surface, scaffolding and curing of the requisite period etc. All complete as per directions of the Engineer-in- charge.(Sand of minimum F.M 1.2 be used)

Ceiling:-

	= 1x74'-10"x23'-10"	= 1783.19 sft.
C1	= 4x4'-2"x12'-0"	= 200.16 sft.
C2	= 12x4'-2"x12'-0"	= 600.48 sft.
Roof Beam B1,B2	= 2x8x1'-4"x18'-2"	= 386.65 sft.
B3	= 2x2x7x0'-10.5"x9'-2"	= 223.38 sft.
Lintel :	= 4x2x18'-2"x0'-6"	= 72.68 sft.
	= 1x2x28'-4"x0'-6"	= 28.33 sft.
Lintel :	= 2x14x9'-2"x0'-6"	= 128.38 sft.
Lintel Beam:	= 3x2x9'-2"x1'-0"	= 55.02 sft.
Toilet lintel	= 2x2x5'-5"x0'-6"	= 10.84 sft
	= 2x10'-5"x0'-6"	= 10.42 sft
	= 2x2x3'-5"x0'-6"	= 6.84 sft
	= 1x14'-5"x8'-0"	= 115.36 sft
Sunshade :	= 6x2x1'-5"x4'-5"	= 75.31 sft.
	= 5x2x1'-5"x4'-4"	= 61.48 sft.
		= **3758.52 sft**

349.30 m2 57.61 20123.45

18. (5.107). White washing three coats over a coat of priming with slacked stone lime mixed with gums, blue in/c scaffolding and necessary clearing before and after the wash, polishing the surface with sand paper etc. All complete for all floors as per direction of the Engineer-in- charge.

Same as Item No (16+17) = 3350.12+3758.52

= **7108.64 sft.**

660.65 m2 5.52 3646.81

S.L No.	Description of Items	Quantity	Rate	Amount
1	2	3	4	5

19. (5.115). Painting to door and window frames and shutters in Three coats with synthetic enamel paint of best quality and approved colour over a coat of priming in/c clearing, finishing and polishing with sand paper, necessary scaffolding etc. All complete in all floor as per directions of the Engineer-in- charge.

Door D	= 1×2.5×4'-2"×7'-0"	= 72.97 sft.			
D1	= 2×2.5×3'-4"×7'-0"	= 116.55 sft.			
D2	= 3×2.5×2'-6"×7'-0"	= 131.25 sft.			
Window	= 14×2.5×4'-2"×4'-6"	= 656.77 sft.			
Ver. Grill	= 2×1.5×9'-2"×4'-6"	= 123.79 sft.			
Collapsible	= 1×2.5×9'-2"×7'-0"	= 160.47 sft.			
		= 1261.80 sft.	117.27 m2	75.69	8875.99

20. Providing chalk board **(12'-0"×4'-0")** and **(8'-0"×3'-0")** made of 1/2" thick sand cement plaster of proportion (2:1) mixed with black oxide (Germany) on walls finished smooth cutting with pumice stone (No 80 & 120) including curing etc. all complete as per specification and direction of the Engineer-in- charge.

For teacher	= 1×12'-0"×4'-0"	= 48.00 sft.			
		= 48.00 sft	4.46 m2	140.00	624.54

21. 1.5" thick roof top Concrete Screening) Patent stone flooring, 38mm (average) thick, in cement concrete (1:1.5:3) with port land cement, coarse sand (minimum FM=1.80) and 10mm down graded picked Jhama chips with neat cement finishing at the top wop with Grey cement including casting, curing and maintaining proper, slope etc. all complete including supply, carrying & cost materials and labour etc. all complete direction of the Engineer-in- charge.

Roof Slab	= 1x74'-10"x23'-10"	= 1783.19 sft.			
Toilet slab	= 1x13'-7"x7'-5"	= 100.76 sft.			
		= 1883.95 sft	175.09 m2	202.79	35506.15

22. (5.106) Providing Drip Course/ nosing /throating at the edge of sunshade or cornice with cement mortar (1:2) including scaffolding, curing at least for 7 days etc. all complete for all floors as per direction of the Engineer- in-charge.(Sand of minimum F.M 1.2 be used.)

Cornice :	= (74'-10"x2) + (23'-0"x2)	= 195.66 rft.			
Toilet	= (2x7'-5")+13'-7"	= 28.42 rft.			
Sunshade :	= 11x7'-2"	= 78.87 rft.			
		= 302.95 rft.	92.36 m	31.26	2887.26

S.L. No.	Description of Items	Quantity	Rate	Amount
1	2	3	4	5
23.	Supplying 4" size pad lock and key in duplicate as per direction (China/Globe) of the E/C.	09 Nos.	100.00	900.00
24.	Inscribing (writing) the name and inauguration of the school with the year of establishment and construction of school building in Bengal on out side front face of the building with sand cement mortar of proportion 2:1 including painting the letters with approved quality of paint as per direction (Size of letters shown in the drawing) as per standard design.		2000.00	2000.00
25.	Supplying fitting and fixing of Hexagonal pre-cast Double(inside & out Side) ventilator of approved quality etc. all complete as per drawing, design & direction of the E/C. =2x17×1'-0"×0'-10" = 28.22 sft.	2.62 m2	579.88	1520.84
26.	Supplying fitting and fixing 1/2" dia 1'-6" long G I pipe and cutting and fixing in position inside the wall with 4" long vertical clamp with M.S. flatbar (1"x1/8") welded at both ends of the pipe at midway of ventilator etc. all complete as per drawing, design & direction of the E/C. = 17×1'-6" = 25.5 rft.	7.77 m	81.61	634.47
27.	(5.121) Manufacturing Supplying fitting & fixing collapsible gate made of 20mm x9mm x 3mm MS Angle placed @ 112 mm c/c vertically and connecting the same with each other with 20mm x 3 mm M.S. flat bar scissors 525mm/600 mm long provided in three rows including cutting the different M.S members to required size fabricating welding riveting with required size rivets providing required size wheels, pulling handles on both sides, suitable looking arrangements and finally placing the in position in between two nos 50mmx 50mm x 6mm M.S Tee rail made by welding two nos 50 mm x 60mm M.S flat bar fitted and fixed at top and bottom with RCC lintel/ roof slab floors and side wall with required nos 150mm to 225 mm long 38mm x 6mm M.S flat bar clams one in welded with the gate member and the other end bifurcated and embedded in c/c (1:2:4) including holes and mending good the damage painting two coats with approve synthetic enamel paint over a coat of anticorrosive painting etc. All complete as par drawing & direction of the Engineer- in-charge. =1 ×9'-2"×7'-0" = 64.19sft	5.97 m2	1962.71	11708.77

S.L No.	Description of Items	Quantity	Rate	Amount
1	2	3	4	5

28. Supplying fitting, fixing in position flag stand with 40mm dia GI pipe with flag hook and standard size Bangladeshi flag. Bottom Fixed in CC base in proportion (1:2:4) flag stand painting three coats with approved synthetic Enamel paint over a coat of anticorrosive Painting Etc. all complete as per drawing, design and direction of the E/C.

Flag Stand — 1 No — 2500.00 — 2500.00

29. (5.090) Supplying fitting and fixing verandah grill made of 10mm dia M.S rods provided 75mm c/c in any position both ways as per design with all side's G.I. Pipe in/c fabricating welding. Painting 2 coats of synthetic enamel paint over a coat of anticorrosive priming in/c cutting grooves in the R.C.C or brick work. Mending good the damages with C.C (1:2:4) etc. all complete as per design and direction of the E-I-C.

=2 ×9'-2"×4'-6" = 82.53sft
= 82.53 sft — 7.67 m2 — 1160.50 — 8901.12

30. (5.023.04) Supplying fitting and fixing glazed wall tiles (local made) on 20mm thick cement mortar (1:3)-base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care, etc. all complete as per direction of the E-I-C. Sand of minimum FM 1.2 to be used. (Size: 200mm x 300mm)

Wall tiles

Wall- =2x(2×4'-2")+(5'-0"×5'-0") = 183.40 sft.

Deduction-

D2 =2×2'-6"×5'-0" =(-)25.00 sft.

= 158.4 sft

14.72 m2 — 568.22 — 8364.87

31. Supplying fitting and fixing homogeneous quartz (non-skid) floor tiles (local made) on 20mm thick cement mortar (1:3) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care, etc. all complete as per direction of the E-I-C. Sand of minimum FM 1.2 to be used. (size 300mm x 300mm).

Floor = 2×4'-2"×5-0" = **41.70 sft.**

3.88 m2 — 783.30 — 3035.65

9025.72

32. Unforeseen work

Sub-Total for (Part-A) TK. =11,07,500.00

(TAKA ELEVEN LAKH SEVEN THOUSAND & FIVE HUNDRED ONLY)

Technical Specifications and cost Estimate

for Sanitary Latrine and water supply for URC'S

PART-B

(Taka)

Item No.	Description of Items	Quantity of works	Unit rate (In Taka)	Amount (In Taka)
1	2	3	4	5
	(7.02) Supplying fitting and fixing Bangladesh pattern "BISF STANDARD" long oriental pan (Model-320,size 510 mmx410 mmx275 mm, Bowl size-390 mmx210 mmx190 mm) with foot rest of vitreous China and preparing the base of pan with cement concrete and with wire net or rods including making holes wherever required and mending good the damages, supplying 13.60 liters capacity C.I cistern and fitting fixing the same in position with C.I brackets including supplying best quality 40mm dia PVC flush pipe with brass coupling (not exceeding 1.80m in length). 12mm dia plastic connection pipe with brass coupling.12mm complete as per direction of the Engineer-in-charge. (7.02.01) White "BISF STANDARD"	02 nos	3030.06	6060.12
2.	(7.20.02) Supplying, fitting and fixing 5.49m long 100mm dia (inner) PVC "B" class soil pipe water grade (LIRA \ AZIZ \ NATIONAL POLYMER brand or equivalent) with all HCI fittings and specials like plain bend, tees, reducing sockets, Junctions door bends 100mm dia cowels anti-siphon (MAANCO BRAND) including gasket and cement joints. , PVC solution making holes in walls and mending good the damages etc all complete as per direction of the Engineering-in –charge.	20.00 m	353.14	7062.80
3.	(7.21.02) Supplying, fitting and fixing (3.66 m long) 50mm dia PVC Ventilation pipe with all fittings and specials like 50mm plain bends tees 50mm dia cowels etc m including gasket with cement joints and mending good the damages etc. all complete as per direction of the Engineer-in-charge.	01 nos	598.40	598.4
4.	(7.05) Supplying fitting and fixing "BISF STANDARD" glazed vitreous wash Hand Basin (Model-218,size-560 mmx470 mmx185 mm size) including fitting fixing the same in position with heavy type C.I brackets, 44nm dia PVC waste water pipe with brass coupling (not exceeding 750mm in length), 12mm dia plastic connection pipe with brass coupling, 12mm dia C.P pillar cock, 30mm dia C.P. Basin waste with chain plug including making holes in walls and floors and fitting with wooden blocks screws and mending good the damages etc, all complete as per direction of the Engineer in charge	02 Nos	1519.08	3038.16

Item No.	Description of Items	Quantity of works	Unit rate (In Taka)	Amount Taka)
1	2	3	4	5
5.	(7.16) Supplying, fitting and fixing toilet paper holder (150mm x 150mm x 126mm) including making holes in walls and mending good the damages etc all complete as per direction of the Engineer in charge. (7.16.02) stainless steel type	02nos	196.81	395.62
6.	(7.17) Supplying, fitting and fixing Glass plate shelf (600mm x 125 mm) of 5mm thick glass with fancy C.P brackets screws and frames including making holes in walls and mending good the damages etc. all complete as per direction of the Engineer-in-charge . (7.17.01) super quality	02 nos	291.11	582.22
7.	(7.18) Supplying, fitting and fixing C.P Towel rail (Size : 600mm x 20mm) with C.P holder including making holes in walls and mending good the damages etc. all complete as per direction of the Engineering-in –charge. (7018.01) super quality	02 nos	286.94	573.88
8.	Supplying, fitting and fixing G.I. pipe with all special fittings such as bends, elbows, sockets, reducing sockets, Tess unions, Jumnuts etc. including cutting trenches where necessary and fitting the same with earth duly rammed and fixing in walls with holder bats and making holes in floors and walls and mending good the damages etc. All complete in all respects as per direction of the Engineering-in –charge.			
	20mm Dai G.I. pipe	75 m	99.53	7464.75
	12 mm dia G.I. pipe	50 m	81.39	4069.5
9.	12mm dia C.I concealed Bib Cock	02 nos	190.56	381.12
10.	12mm dia stop Cock (Special Quality)	04 nos	337.70	1350.80
11.	(7.30) Supplying fitting and fixing 12mm dia C.P. Pillar cock. (7.30.01)Best quality	02 nos	251.87	503.74
12.	(7.19) Supplying, fitting and fixing supper quality Mirror with hard boards at the back with all necessary fittings including making holes in walls and mending good the damages etc all complete as paper direction of the Engineering-in –charge. (7.19.02) Belgium made Mirror (Size : 450mm x 300mm)	02 nos	257.51	515.02
13.	(7.20.02) Supplying, fitting and fixing 5.49m long 100mm dia (inner)PVC "B" class rain water down pipe water grade (LIRA \ AZIZ \ NATIONAL POLYMER brand or equivalent) with all HCI fittings and specials like plain bend, tees, reducing sockets, Junctions door bends 100mm dia cowels anti-siphon (MAANCO BRAND) including gasket and cement joints. , PVC solution making holes in walls and mending good the damages etc all complete as per direction of the Engineering-in –charge.	22 m	353.14	7769.08

Item No.	Description of Items	Quantity of works	Unit rate (In Taka)	Amount (In Taka)
1	2	3	4	5
13	(7.23) Supplying, fitting and fixing 125 mm dia C.P Gratings in traps or in drains including making holes in walls and floors and mending good the damages etc all complete as per direction of the Engineer-in-charge.	02 nos	34.10	68.20
14	Supplying, fitting and fixing best quality GM Pet valve	02 Nos.	122.32	244.64
15	Supplying, fitting and fixing 500 Liters capacity "GAZI TANK" with necessary fittings including making holes in walls and floors mending good the damages etc. All complete as per direction of the engineer-in-charge	1	7000.00	7000.00
16	Unforeseen work			323.71
	Sub-Total for water supply & sanitary system Tk = 48,000.00			

Technical Specifications and cost Estimate
for Construction of (Septic tank) for URC.

PART-B

Item No	Description of Items	Quantity of works	Unit rate (In Taka)	Amount (In Taka)
1	2	3	4	5
01	Earth work in excavation of foundation trenches of required width in all kinds of soils up to a depth as required preparing bed bailing out of water. Removal of spoils etc. And shoring wherever necessary, back filling of the trenches in layers including consolidating , leveling etc. All complete as per drawing and directions of the Engineer-in Charge.			
	= 1×17'-6"×6'-8"x7'-8"	= 895.28 cft.		
	= 1×4'-8"×4'-8"x2'-0"	= 43.61 cft.		
	= 1×3.14x4x8'-4"	= 104.62 cft.		
	= 1/3x1043.51	= 347.83 cft.		
Earth filling		= 1391.34 cft.		
		= 3943 m3.	31.58	1245.19
02.	Single layer brick flat Soling with Kiln burnt 1st Class bricks, filling the joints with sand wherever necessary including leveling and dressing etc. All complete as per drawings, and direction of the Engineer-in-charge.			
	= 1×16'-6"×5'-8"	= 93.55 sft.		
	= 1×3'-8"×3'-8"	= 13.46 sft.		
		= 107.01 sft.		
		= 9.94 m2.	130.16	1293.79
03.	Cement concrete work with Portland cement Coarse sand and 3/4" down graded picked jhama chips in the proportion of (1: 2: 4) including proper mixing , placing, curing etc. All complete in foundation or floor or wherever necessary as per drawings, Specifications and directions of the E/C.			
	= 1×16'-6"×5'-8"x0'-5"	= 39.29 cft.		
	= 1×3'-8"×3'-8"x0'-3"	= 3.36 cft.		
		= 42.65 cft.		
		= 1.20 m3.	3509.89	4211.86

Item No.	Description of Items	Quantity of works	Unit rate (In Taka)	Amount (In Taka)
1	2	3	4	5

04. Reinforced cement concrete work with best quality of 3/4" down graded picked jhama chips , coarse sand and Portland cement in the proportion of 4:2:1 as per design, drawings including the cost of all materials, Shuttering , casting curing labour charges for breaking chips and all incidental charges etc. All complete (including the cost of all reinforcement and its fabricating) as per drawings , specifications and directions of the E/C.

Slab

= 1×16'-6"×5'-8"x0'-4" = 30.87 cft.
= 1×3'-8"×3'-8"x0'-3" = 3.36 cft.
= 34.23 cft.
= 0.97 m3. 3752.68 3640.09

05. Brick work in 5" thick walls with kith burnt 1st Class bricks in sand cement mortar of proportion 4:1 including curing etc., complete in superstructure walls as per drawings and direction of the E/C.

= 2×4'-0"×8'-8" = 69.36 sft.
= 69.63 sft.
= 6.47 m2. 325.17 2103.84

06. **10 " Brick work:**

= 2×16'-6"×0'-10"x8'-8" = 237.47 cft.
= 2×4'-0"×0'-10"x8'-8" = 57.56 cft.
= 4×2'-10"×0'-10"x2'-6" = 23.48 cft.
= 318.51 cft.
= 9.02 m3. 2269.75 20473.14

07. Reinforcement work in floors all types of RCC work with standard mild steel bar of required sizes and length including straightening the bars , hooking, bending and placing them in position on properly installed from works, spaced and secured with 22 gauge galvanized iron wires and supported on concrete block metal chairs and hangers as per specifications , drawings and direction (measurement will on standard weight per linear foot) of the E/C.

(10 mm Ø)

= 1×34x5'-6" = 187.00 rft.
= 1x10x16'-4" = 163.30 rft.
= 2×5x3'-6" = 35.00 rft.
= 385.30 rft.
= 72.43 kg 39.49 2860.26

Item No.	Description of Items	Quantity of works	Unit rate (In Taka)	Amount (In Taka)
1	2	3	4	5
08.	1/2" thick Sand cement plaster of proportion 4:1 finished smooth with neat cement finishing to dado skirting and on plinth wall, floor or wherever directed in/C rounding of corners and junction, curing etc all complete as per drawing specification and directions of the E/C. = 1×16'-6"x5'-8" = 93.56 sft. = 2×2'-2"×16'-6" = 71.61 sft. = 2×2'-2"×5'-8" = 24.60 sft. = 2×7'-0"×8'-8" = 121.38 sft. = 8×4'-0"×8'-8" = 277.44 sft. = 2×3'-0"×8'-8" = 52.02 sft. = 640.61 sft. = 59.53 m2.		88.62	5275.54
09.	Supplying, fitting and fixing, and laying 150mm dia RCC pipe over 100mm thick cement concrete (1:3.6) at base and sides including single layer brick flat soling and gasket with cement mortar Joints, cutting and filling trenches up to required depth etc. all in all repeat as per type plan and direction of the Engineer-in-charge.	5.48rm	494.06	2707.44
10.	Manhole cover (R.C.C)18"Dia as per drawing and direction of the E/C.	3nos	700.00	2100.00
11.	Construction of soak pit 3'-0" dia having 10'-0" depth made with R.C.C ring, shell thickens minimum 1" and to be prepared as surrounding including excavation of earth filling sides after placement of rings providing 2" thick R.C.C slab on top making good damages etc. (1'-6" depth filling with 25mm dia brick khoa) All complete as per drawing and direction of the E/C.	1 no	2000.00	2000.00
12.	Unforeseen work			588.85

Sus-Total for (Septic tank) TK. = 48500.00

Sus-Total for water supply & sanitary system TK= 48000.00

Sus-Total for (Part-B) TK. = 96,500.00

(TAKA NINTY SIX THOUSAND FIVE HUNDRED ONLY).

NAME OF WORK : COST ESTIMATE OF 1.5" DIA SHALLOW TUBE-WELL FOR URC

Item no	Description of Items	Quantity	Rate (Taka)	Amount (Taka)
1	2	3	4	5
01.	(10.02) Boring using dia cutter and 38 mm dia G.I pipe and other equipment capable of drilling up to a depth of 500 by water jet system through all sorts of strata. protection of caving by supplying necessary casing pipe.Collection of soil samples at every 3m interval and at every change of strata and preserve for analysis, withdrawal of boring pipes & casing pipes etc. all complete as per specification and direction of the Engineer-in Charge.			
(10.02.01)	From 0.0m to 50m =50m	50m	60.70	3035.00
(10.02.02)	From 50m to 76.04m =26.04 m	26.04 m	66.77	1738.43
02.	(10.03) Supplying and lowering 38mm dia water grade PVC pipe having wall thickness 2.5m to 3.0mm ('D" Class Aziz pipe/equivalent), PVC sand trap of length 3.0m with cap, PVC strainer of desired slot installing at the middle of the most suitable water bearing strata. 38mm dia GI pipe of best quality of length 1.52m with M.S welded flat bar on each side to prevent from rotation up to the desired depth, fitting fixing the hand pump No 6 etc. Including the cost of solvent cement, socket adapter, filling medium sand up to 18.0m above strainer and the remaining portion with available soil from boring etc. All complete as per drawings, and direction of the Engineer-in-charge.			
03. (10.03.01)	Hand pump No. 6 complete set (EPL/RFL) (Medium/equivalent brand)	01 no	1034.08	1034.0
04. (10.03.02)	38 mm dia G.I pipe2.9mm thick (National Tubes/equivalent)	3.04 m	308.00	936.00
05.(10.03.03)	38mm dia water graded PVC pipe having thickness 2.5-3.00mm ('D') class Aziz brand/equivalent) pipe sand trap with blank pipe (5.00m long)	68 m	69.16	4702.8
06. (10.03.04)	38mm dia water graded PVC strainer having thickness 2.5-3.00mm ('D) class aziz brand/equivalent) of recommended slot size	5.00 m	78.80	394.(
07. (10. 03.06) 40.47	Best quality 38mm dia PVC cap		01 no	40
08.	(10.08) Construction of C.C. (1:2:4) platform of size 1.40mx1.00m and 1.00m long drain as per design and standard specification including cost of sanitary seal, neat cement finishing ,transport etc. all complete as per specifications and direction of the Engineer-in-charge.	01 No	1922.00	192
09.	(10.06) Furnishing design of the production well by testing of water and soil complete collected from the observation well in/c. test for 'Arsenic' etc.All complete as per direction of the Engineer-in-charge. (Including the cost of actual fees for testing which will be paid to the contractor separately by the department).	each	750.00	7:
				44
10. Unforeseen work (Site Developement)				Sub Total for Tk.=150(

(TAKA FIFTEEN THOUSAND ONLY)

Technical Specifications and cost Estimate for Electrification works for Upazila Resource Centre:

PART-D

Sl. NO	DESCRIPTION OF ITEMS	QTY.	UNIT	RATE	AMOUNT
1.	PVC CONDUIT supply & installation of water grade PVC conduit (LIRA or equivalent) of following sizes as per routing shown if the drawing and details in the specification in roof slabs, floors, columns, walls, beams immediately after the placement of rein forcemeat steel bar and all other works such as cutting, groove on brick wall etc. required to be done before installation of conduit as per drawing within such a time as not to retard the progress of civil works. The rate should be inclusive of cost of all PVC pipe accessories such as PVC circular boxes, bend, tee pull box with cover, pull wire etc. the conduits are to be tied with the reinforcement steel bars at I mortar spacing using 20 SWG GI wire. No aluminum accessories shall be used, The rate should be inclusive of all costs required for tracing out outlets after the shuttering are removed and cleaning the outlets and mending the damages ass per direction of the Engineering-in-Charge.				
	a) 19 mm dia	37.00 rm		39.24	1451.88
	b) 25 mm dia	6.00 rm		51.01	306.06
	c) 12 mm dia	70.00 rm		29.45	2061.50
2.	G.I PIPE Supply & laying G.I pipes of following sizes in underground trenches of size width 30 cm & depth 75 cm including cutting trench and refilling the trench with earth duly rammed/through G.I pipe in concealed system by cutting wall/floor/ceiling etc. for main supply as per drawing and approved of the Electrical Engineer.				
	a) 19 mm	10.00rm		80.00	800.00
3.	CABLE Work (single/multi core) supply & installation including termination of following size of PVC insulated/PVC insulated & PVC sheathed single core/multi core cable (Eastern cable of Equivalent)with copper conductors on preinstalled. PVC pipes and also in cable trench as per drawing and specification and direction of Engineer.				
	a) lc-105 (3/036)(BYA)Eastern, cable	200.00rm		18.81	3762.00
	b) lc-2.5 (7/029) " " "	50.00rm		24.19	1209.50
	c) lc-4 (7/036) (BYM) " "	10.00rm		34.48	344.80
	d) 4c-10 (7/052) NYY " "	10.00rm		90.37	903.70
4.	EARTH CONTINUTY CONDUTT Supply & installation of the following sizes of copper earth continuity along with the cable in preinstalled conduit and connection to various metallic parts as per drawing and direction of the Engineer.				
	a) 16 SWG	112.00rm		6.19	693.28

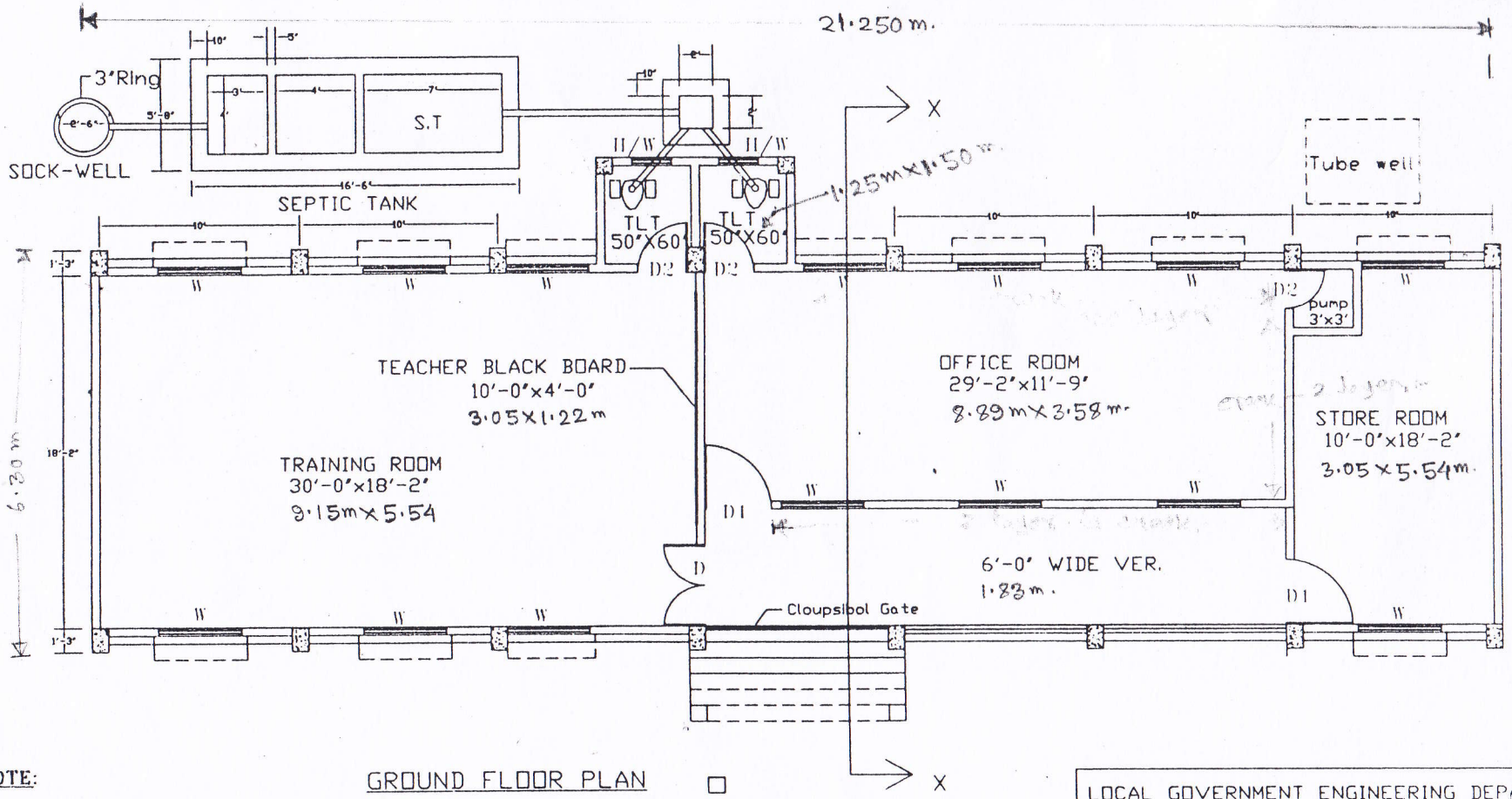
SL NO	DESCRIPTION OF ITEMS	QTY.	UNIT	RATE	AMOUNT
5.	DISTRIBUTION BORARDS Supply, fabrication and installation / adjustment as per requirement of following MCCB / MCB / cutout (Made in Bangladesh best quality) Distribution board by 14 SWG Sheet steel enclosed box, hammer painted with hinged cover with luck and directly for floor standing wall mounting recessed type having outs for conduit entry and exit for 400V / 220V TP & N operation. The board should have has on best quality porcelain insulators. The MCCBS / MCBS / cutout to be so arranged as to keep the Kong only projected over the coverings, through neatly cut slots having all sharp edges rounded and painted. Each board should have one copper earthling block of size 110mm X 20mm X20mm (nominal). The name of manufacturer of circuit breakers along with country of origin must be mentioned in the offer. prior approval from the Engineer must be obtained before fabrication of the distribution boards.				
	FDD: Incoming 1x30A Cut out 60A TP bus bar with steel box	1set		4000.00	4000.00
6.	SWITCH/REGULATOR BOARDS Supply & installation of following size switch and regulator boards made of 16 SWG sheet steel & 14 SWG corners with 3mm thick ebonite cover (if required)having one earthling block of required sizes, The box shall have minimum depth of 38mm with meaty cut and rounded knockouts for conduit pipes and switch plates. The switch and regulator types & direction of Engineer.				
	a) 4"x6" Steel box	2	Each	70.00	140.00
	b) 6"x8" Steel box	8	Each	120.00	800.00
	c) 8"x10" Steel box	5	Each	170.00	850.00
	d) 2"x3" Steel box	36	Each	30.00	1080.00
7.	SWITCH/SOCKET Supplying & fixing 5 amps 250 Volts 50 Hz. grade piano type S.P. switch/socket/combined socket (combined socket shall be 15 Amps.3 pin 250 Volts 50 Hz).the switch & socket made of bakelite complete. Jamuna or other local best quality as approved by the Engineering-in- Charge.				
	(a) 5A 250V piano type switch	44	Piece	15.00	660.00
	(b) Pandect holder	04	piece	55.17	220.68
8.	Supplying, fitting and fixing 250 volts single phase 15 amps 3-pin combined switches and socket outlet (surface type) mounted on beast quality locally made required size 18 SWG galvanized plain sheet board (75mm depth) etc. all complete as per drawings and direction of the Engineer-in-charge.				
	15A 3-pin socket combined switch	05	Nos	337.12	1685.60

SL NO	DESCRIPTION OF ITEMS	QTY.	UNIT	RATE	AMOUNT
9	Supplying, fitting and fixing 5 Amps 2-pin socket with control switch etc. complete as per drawing & directions of the Engineer-in-charge.				
	5A 2-pin socket combined switch	05	Nos	197.60	988.00
10.	LIGHT FITTING				
	Supplying, fitting & fixing 1.22m (4')long 40 watt fluorescent tube light complete with necessary chock, coil, starter, one way tumbler switch, condensers holders and tin days etc. Each lamp operated by one way switch as per drawing and direction of the Engineering in-charge.				
	a) 1x100				
	b) 1x40w tube light with fitting	04	Each	27.02	108.08
	c) 1x100w security light with fitting	17	Each	383.38	6517.46
		04	Each	200.00	800.00
11	CEILING FAN				
	Supply & installation of "U" type fan clamps of 12mm dia M.S. rod as per direction, drawing and specification, during roof casting such that the canopy of the fan must covet the clamps. The circular box and the cable connectors shall be placed at the center of U-clamp. Supply & fittings of 230V 50 Hz. capacitor type A/C ceiling fan(G.E.C or equivalent) to be completed with electronic regulator, porcelain/resin cable connector, canopy and suspension rod of required length and connection the fan motor terminal to connector all complete as drawing & direction of the Engineer				
	a) 56" Sweep ceiling fan	10	Each	1433.68	14336.80
12.	MAIN EARTHING				
	a) Earthling lead:				
	b) Supply & installation of solid copper were earthling lead 2x2/0 SWG in 30mm dia GI pipe from main earthling block located n the MDB in the good floor up to the earth electrode as per as specification and direction of the Engineer.				
	Earthling lead 2x2/0 SWG in 38mm dia G.I pipe	9	rm	250.00	2250.00
	b) Earth electrode:				
	Supply & installation of 38mm dia G.I pipe for main earth electrode not less than 13 m & maximum earth resistance 2.0 ohms as per direction of the Engineer.				
	Earth electrode 38 mm dia G.I pipe	1	Each	1800.00	1800.00
	c) Earth inspection pit ;				
	construction of 450mmx450x450mm earth resistance 2.0 ohms as per direction of the Engineer.				
	Earth inspection pit 450x450x450 mm	1	Each	1200.00	1200.00
	d) Copper earthling block :				
	Supply & installation of copper earthling block, 300mm x 50mm x 12mm size in main DB. All the earth wires from DB in the building shall be connected to this block as per drawing and direction of the Engineer. Copper earthling block 300mmx50mmx12mm				
	Copper earthling block 300mmx50mmx15mm	1	Each	1000.00	1000.00

SL NO	DESCRIPTION OF ITEMS	QTY.	UNIT	RATE	AMOUNT
13.	Meter Board Supply & installation of Meter Board with connection from main line complicate with 3phase, 4 wire meter of following ratings including MCCB / MCB of adequate ratings housed in a 16 SWG sheet steel box with hinged cover and lock and hammer painted meter, wire & PDB charge including as per specification and direction of the Engineer.				
	30A-60A TPN Energy meter	1	Each	13000.00	13000.00
14.	Supply & installation of centrifugal pump with motor to lift water from underground reservoir/deep tube-well to different building. The motor with pump installed on concrete foundation and supplying necessary anchor bolts, nuts and other fixers including fitting and fixing the pump and motors in position etc. All complete as per direction of the engineer-in-charge.				
	1.00 HP	01	No	6670.27	6670.27
15	Supplying fitting & fixing 3 phase starter for electric motor etc. All complete as per direction, (MEM of England or any equivalent prior approved quality) of the engineer-in-charge.				
	15 Amps	01	No	1200.39	1200.39

Sub- Total for (Part- D) Tk **71,000.00**

(TAKA SEVENTY ONE THOUSAND ONLY)

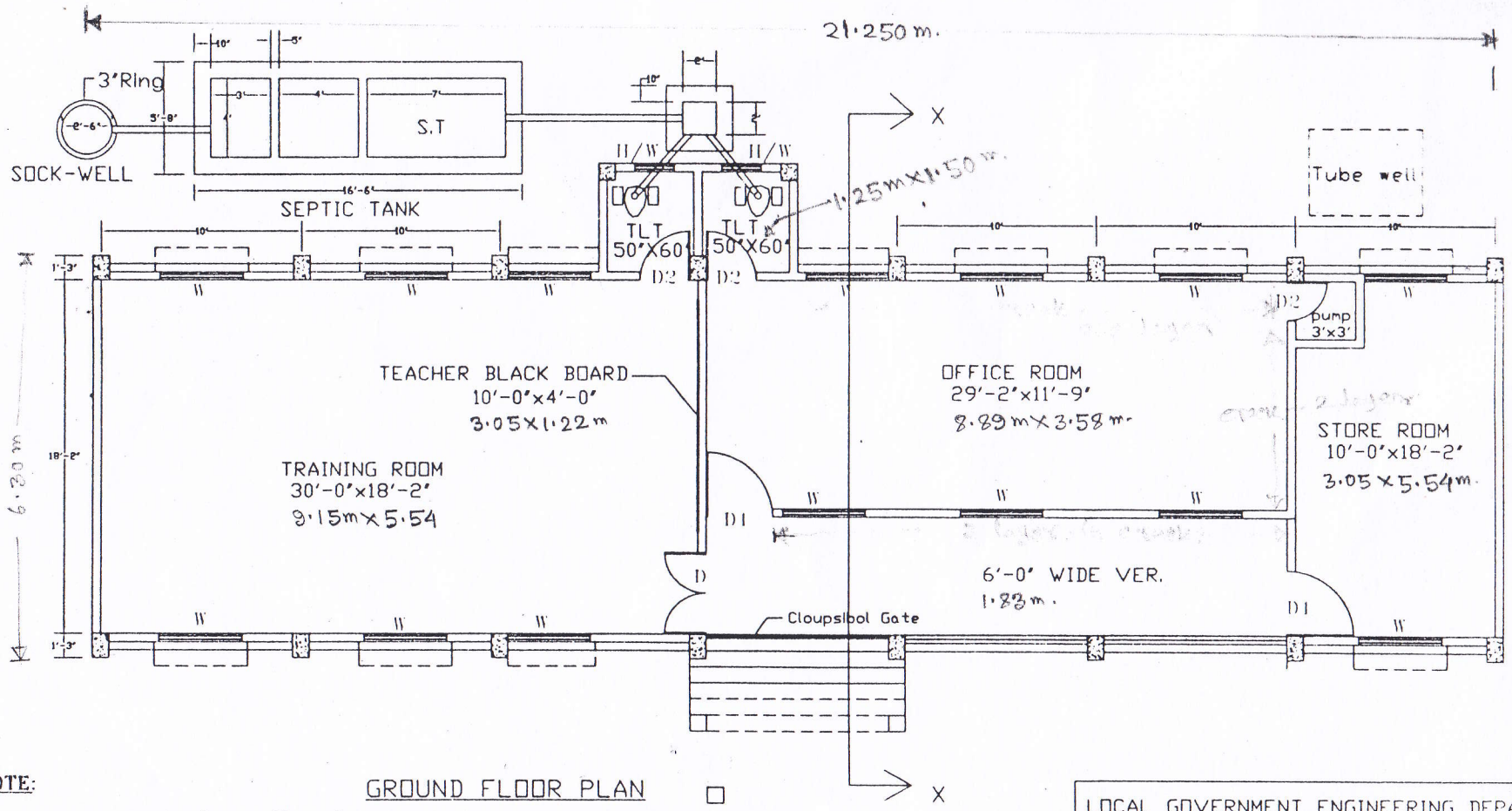


NOTE:

GROUND FLOOR PLAN

D = 4'-2"X7'-0" = 1·27m x 2·13m.
D1 = 3'-4"X7'-0" = 1·02 m x 2·13 m
D2 = 2'-6"X7'-0" = 0·75m x 2·13 m
W = 4'-0"X4'-6" = 1·20m x 0·450m
H/W = 2'-0"X1'-6". = 0·60m x 0·450m.
VENTILATOR = 12"x10" = 0·30 x 0·250

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date: 12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-

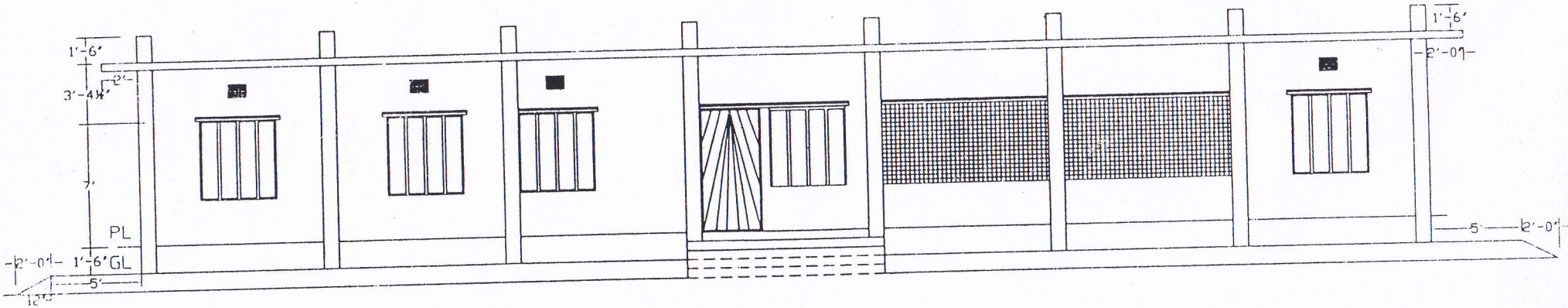


NOTE:

GROUND FLOOR PLAN

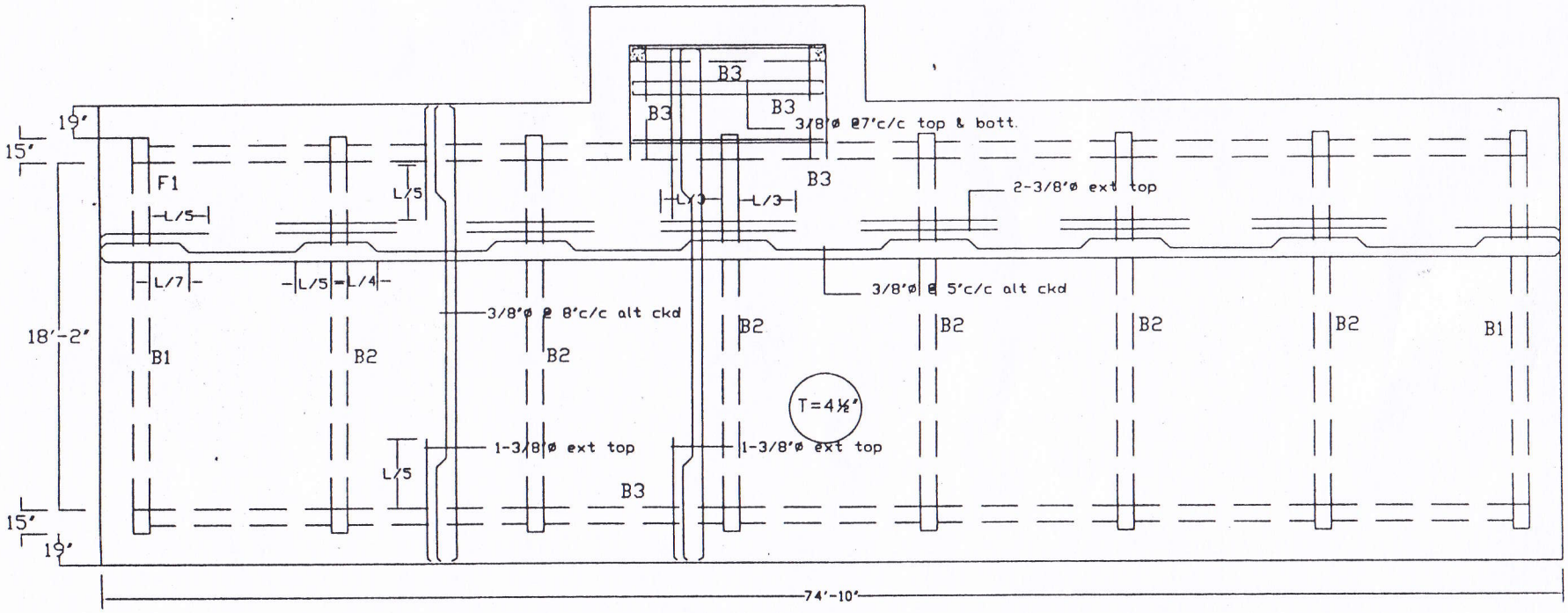
D = 4'-2"X7'-0" = 1·27m X 2·13m.
D1 = 3'-1"X7'-0" = 1·0 m X 2·13 m
D2 = 2'-6"X7'-0" = 0·75m X 2·13 m
W = 4'-0"X4'-6" = 1·20m x 0·450m
H/W = 2'-0"X1'-6" = 0·60m x 0·450m.
VENTILATOR = 12"x10" = 0·30 X 0·250

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date: 12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-



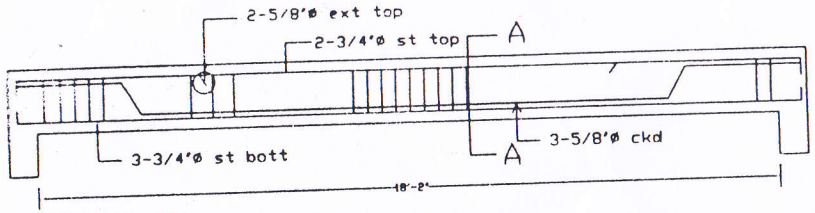
FRONT ELEVATION

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date: 5-09-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO:-

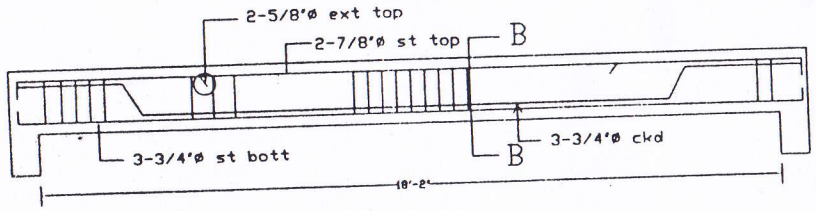


SLAB REINFORCEMENT

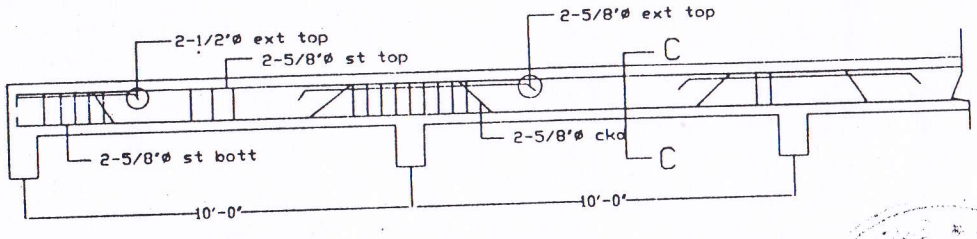
LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date: 12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-



BEAM-B1



BEAM-B2



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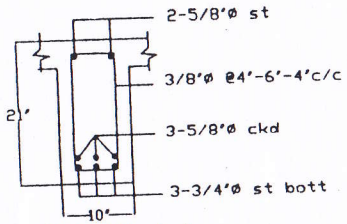

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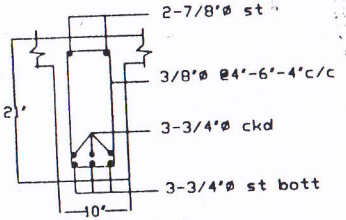

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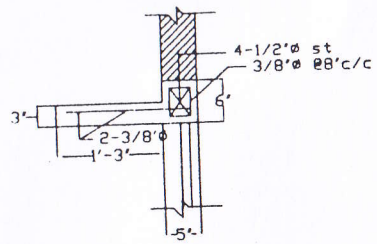
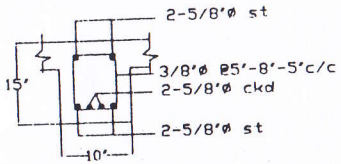


LINTEL WITH SUNSHED



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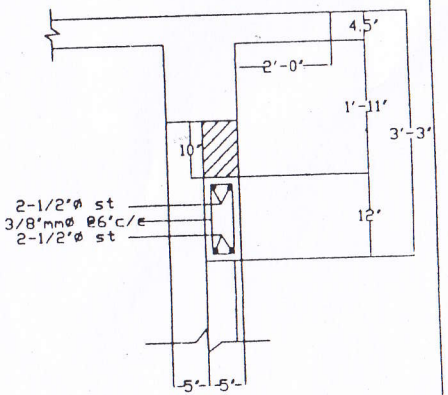
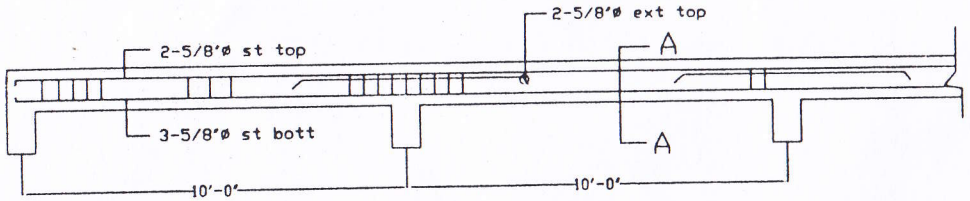
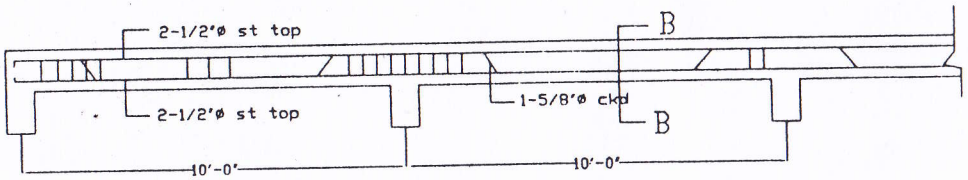


LINTEL WITH DROP WALL AT VRRANDHA

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date: 12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-



GRADE BEAM-GB1



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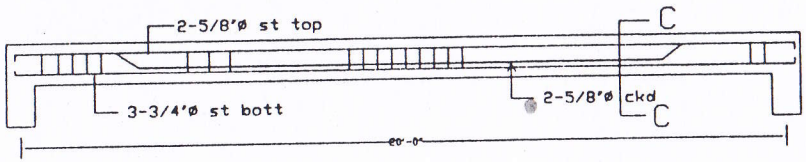

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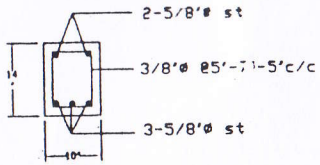

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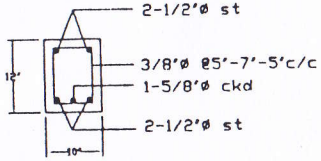

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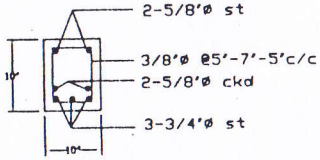
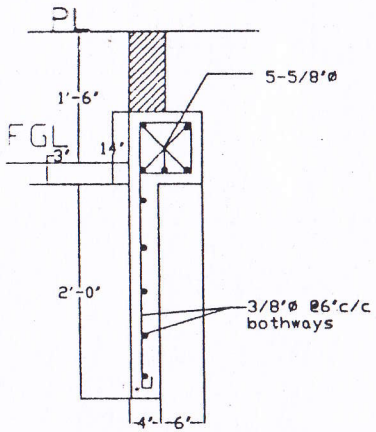
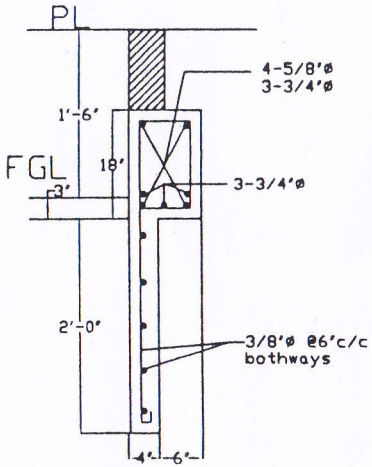


SECTION : C-C

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date: 12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-



SECTION : 2-2



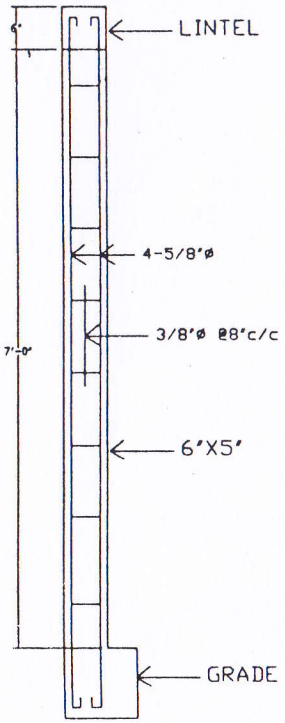
SECTION : 1-1

COLUMN SCHEDULE

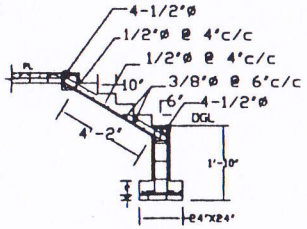
ITEM	SIZE BELOW GB	SIZE ABOVE GL	ROD	TIE
C1	18" x 13"	10"x15"	8-5/8"ø	3/8"ø @ 10"c/c
C2	18" x 13"	10"x15"	8-5/8"ø	3/8"ø @ 10"c/c
C3	13" x 13"	10"x10"	4-5/8"ø	3/8"ø @ 10"c/c
C4	13" x 13"	——	4-1/2"ø	3/8"ø @ 10"c/c

FOOTING SCHEDULE

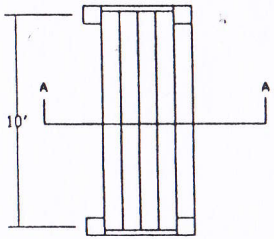
ITEM	SIZE (xy)	DEPTH (d)	ROD
F1	6'-4"X6'-4"	13"	18x2-1/2"ø Both ways
F2	6'-9"X6'-9"	14"	20x2-1/2"ø Both ways
F3	4'-6"X4'-6"	10"	11x2-1/2"ø Both ways
F4	2'-0"X2'-0"	8"	4x2-1/2"ø Both ways



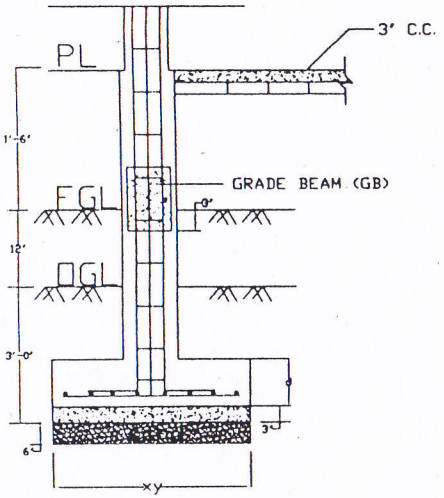
FALSE COLUMN



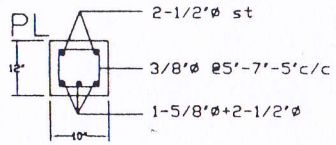
FRONT STAIR SECTION OF A-A



STAIR PLAN



SECTION OF COLUMN WITH FOOTING



SECTION : 3-3

LOCAL GOVERNMENT ENGINEERING DEPARTMENT

PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II

UPAZILA RESOURCE CENTRE
UNDER PEDP-II

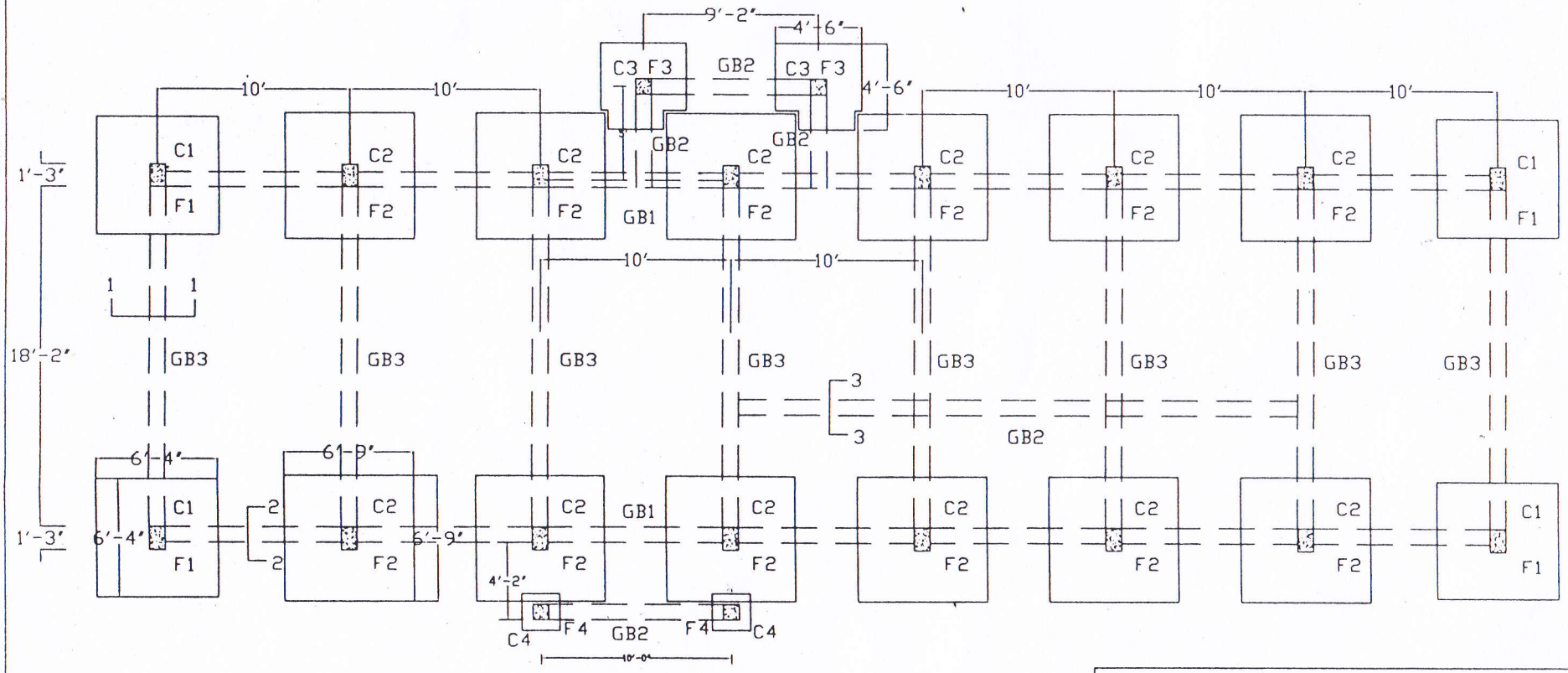
Design by: A.B.M. Nazrul Islam

Drawn by: Md. Mahbub Hossain
SAE, PEDP, H.Q, DHAKA.

APPROVED BY

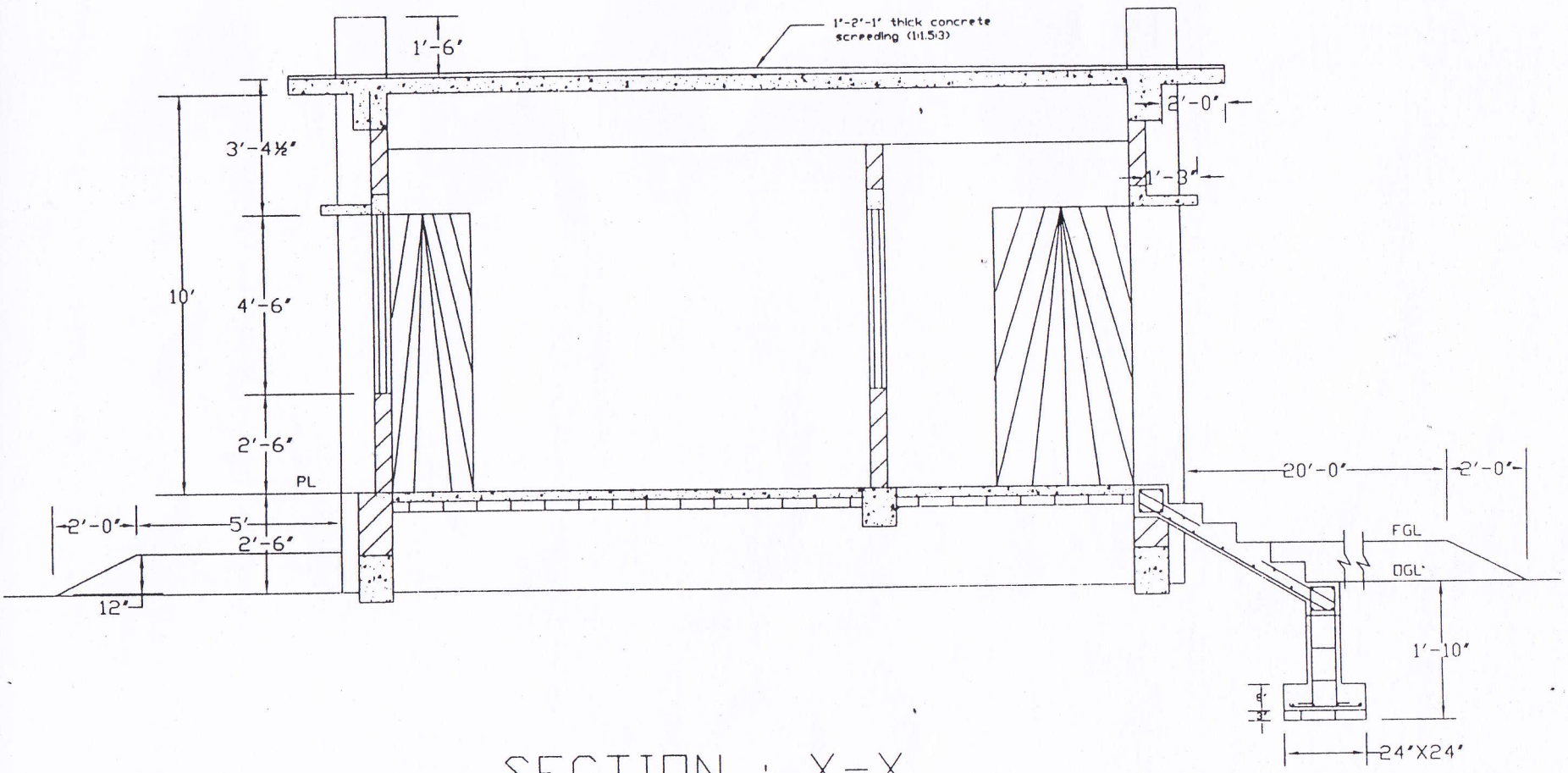
Date: 12-04-2004

DRG NO-



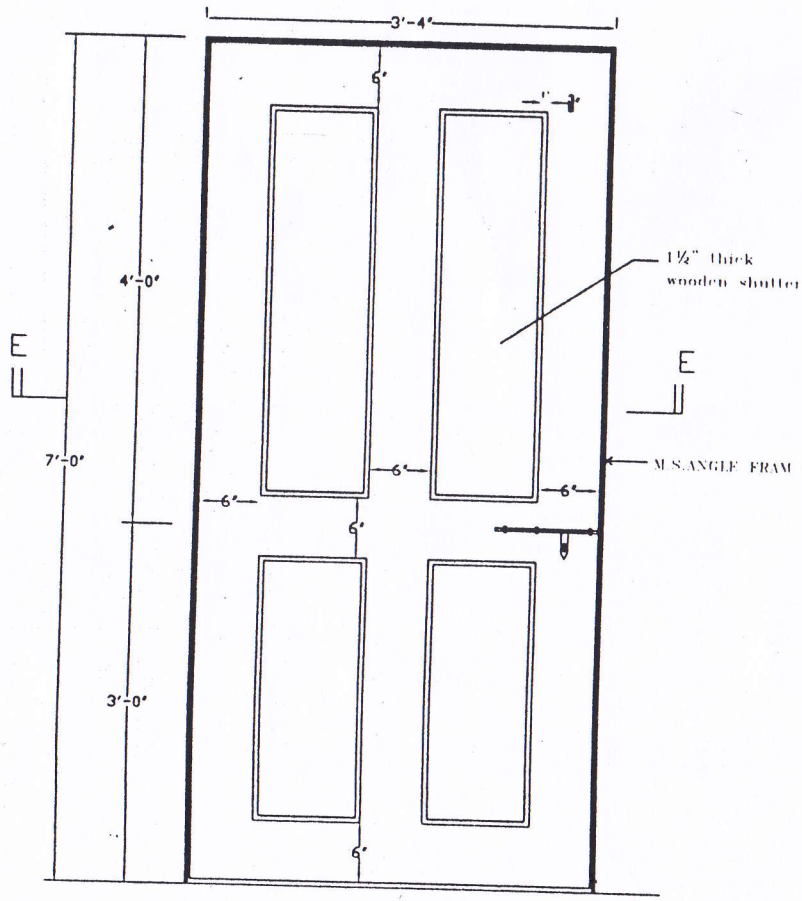
FOUNDATION TREENCH PLAN

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date:15-09-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-

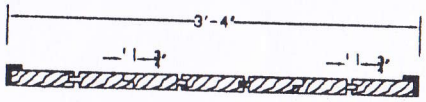


SECTION : X-X

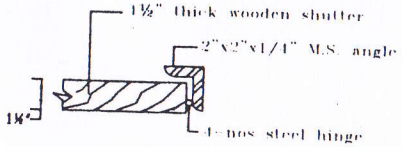
LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date:12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-



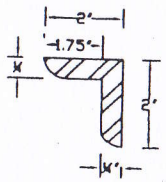
ELEVATION OF DOOR (INSIDE)



SECTION - E-E

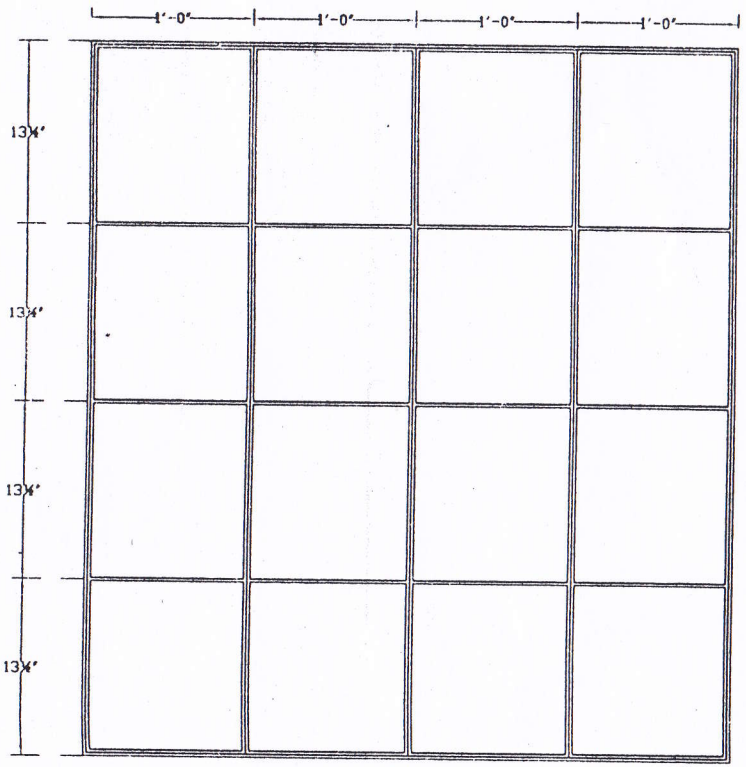


DETAIL-C

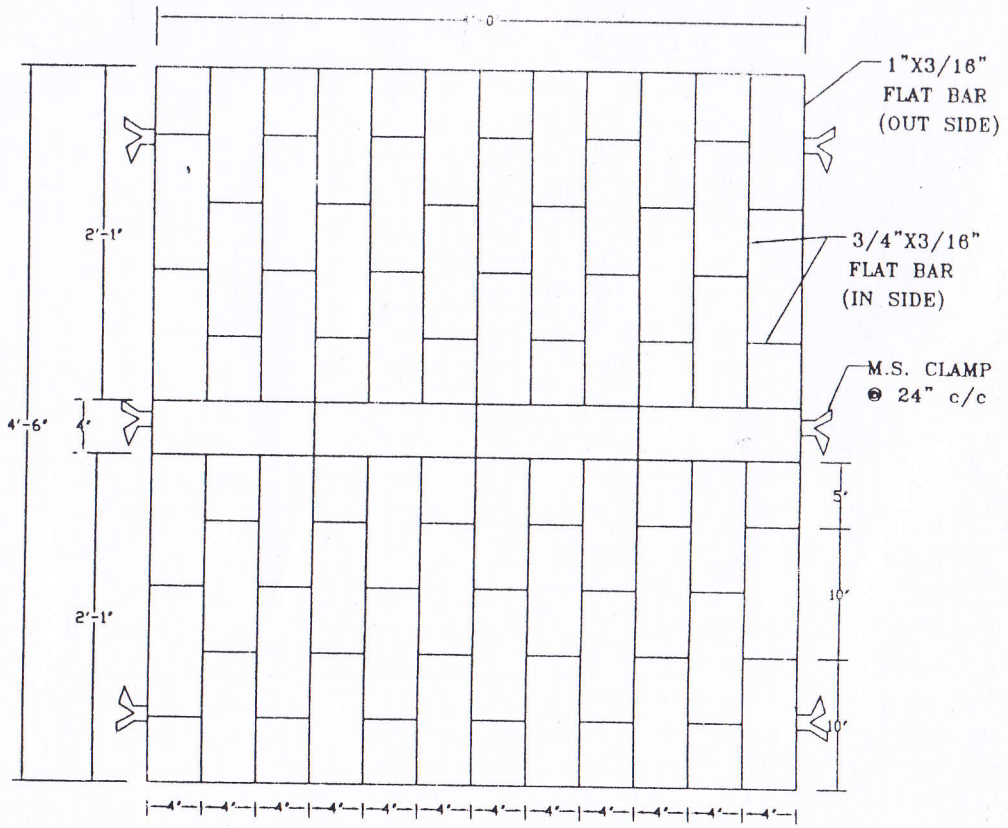


ANGLE TYPE-4

LOCAL GOVT. ENGINEERING DEPARTMENT		
PRYMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURSE CENTRE		
Design by: A.B.M. Nazrul Islam SBDS. LGED, H.Q, DHAKA.	APPROVED BY	Date:15-09-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-

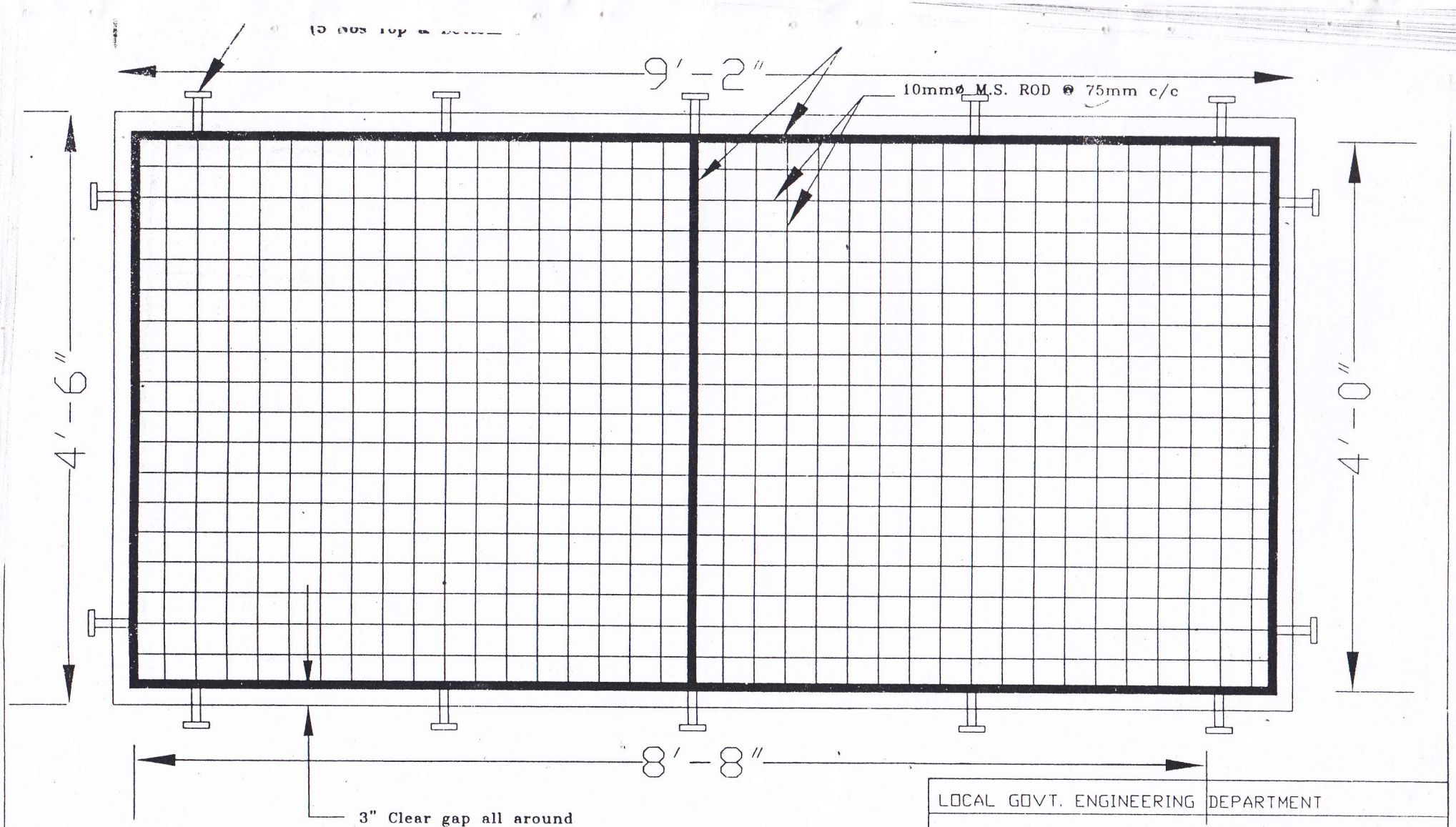


WINDOW ELEVATION



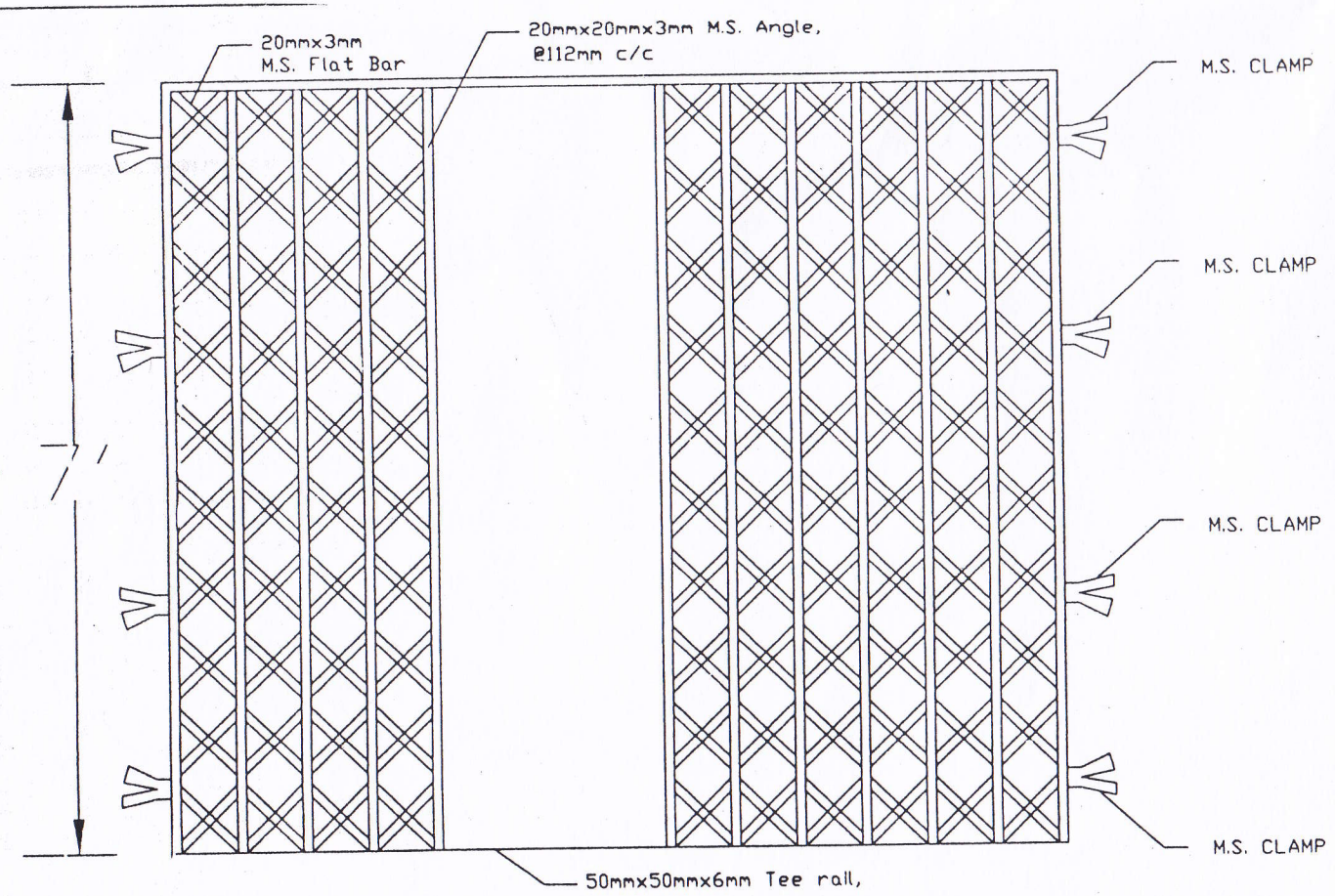
WINDOW GRILL

LOCAL GOVT. ENGINEERING DEPARTMENT		
PRYMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE		
Design by: A.B.M. Nazrul Islam SBDS. LGED, H.Q, DHAKA.	APPROVED BY	Date:16-09-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-



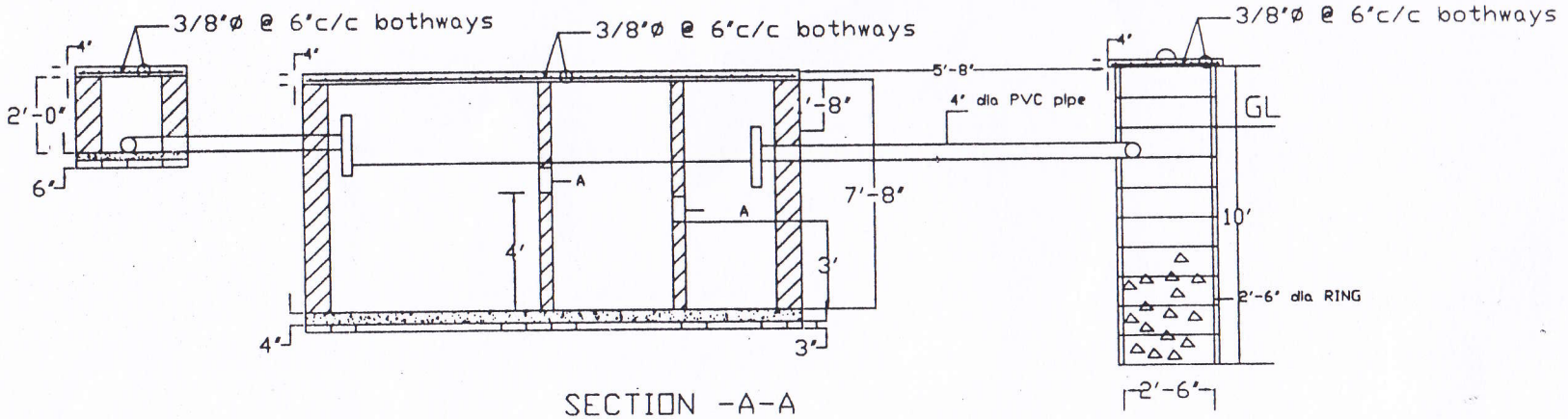
VERANDHA GRILL

LOCAL GOVT. ENGINEERING DEPARTMENT		
PRYMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURSE CENTRE		
Design by: A.B.M. Nazrul Islam SBDS. LGED, H.Q, DHAKA.	APPROVED BY	Date:15-09-2004
Drawn by: Md. Mahbub Hossain		DRG NO-

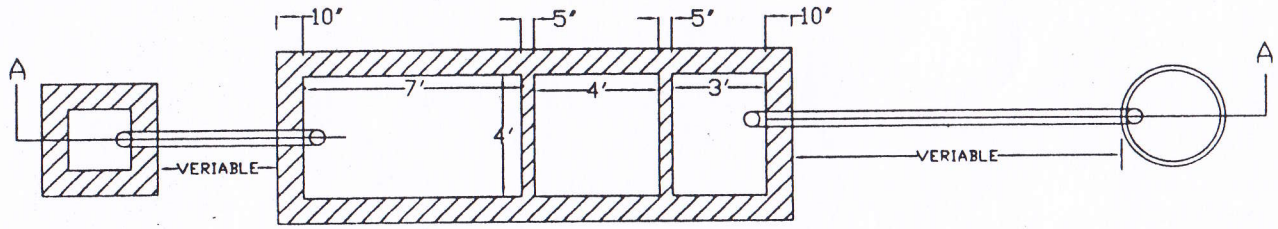


COLLAPSIBLE GATE

LOCAL GOVT ENGINEERING DEPARTMENT		
PRYMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURSE CENTRE		
Design by: A.B.M. Nazrul Islam SDS, LGED, H.Q, DHAKA.	APPROVED BY	Date:15-09-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP-II, LGED.		DRG NO-



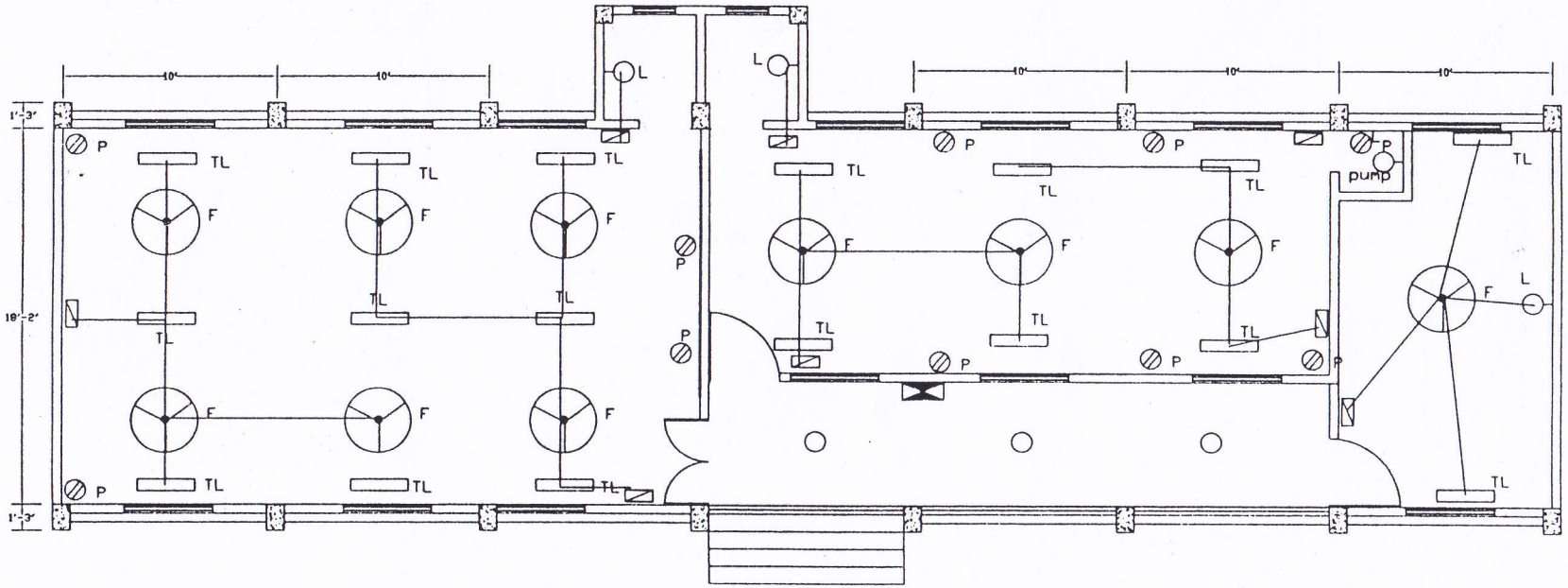
SECTION -A-A



PLAN OF SEPTIC TANK

NOTE:- A = 10'X10' HOLE

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date:12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-



GROUND FLOOR PLAN

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
UPAZILA RESOURCE CENTRE UNDER PEDP-II		
Design by: A.B.M. Nazrul Islam	APPROVED BY	Date: 12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-

LEGEND

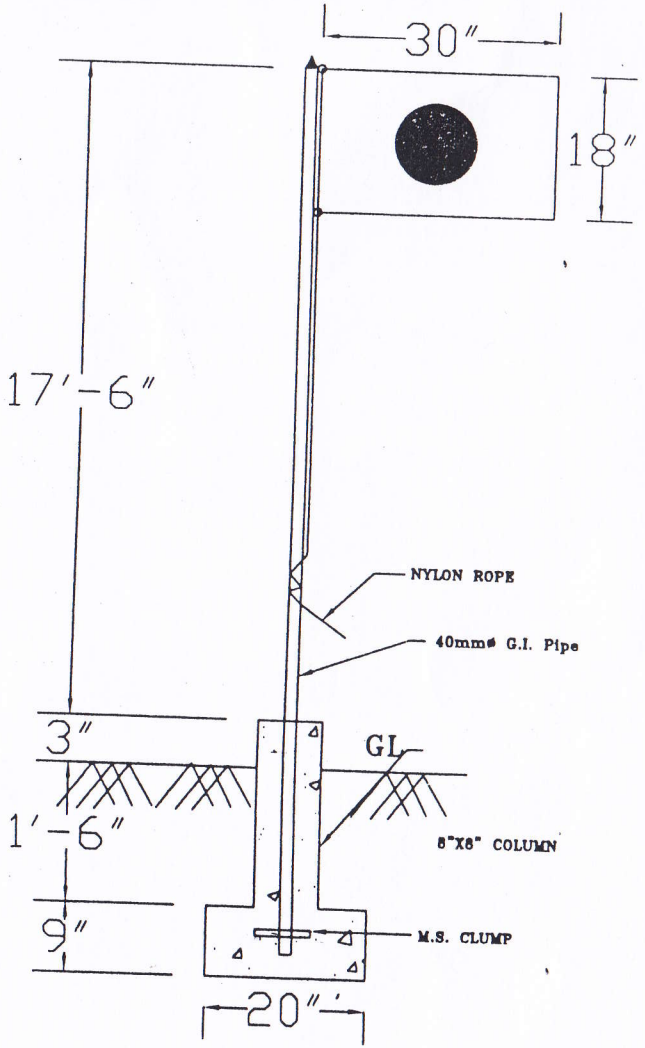
1.		MDB	MAIN DISTRIBUTION BOARD
2		SDB	SUB– DISTRIBUTION BOARD
3		SB	SWITCH BOARD
4		F	56" SWEEPT FAN
5		TL	40W TUBE LIGHT
6		L	100W WALL MOUNTED LIGHT
7		L	100W CEILING MOUNTED LIGHT
8		P	15A COMBINED SWITCH WITH 3–PIN SOCKET
9	M	–	3–PHASE 40A ENERGY METER
10	A	–	20A 3–PIN SOCKET WITH 20A SP MCB
11	B	–	5A 2–PIN SOCKET WITH 5A PIANO SWITCH
12	MCB	–	MINIATURE CIRCUIT BREAKER
13	MCCB	–	MOULDED CASE CIRCUIT BREAKER
14	SP	–	SINGLE POLE
15	S	–	SPARE
16	--------	–	CONDUIT AND WIRING
17	xxxxxx	–	MAIN SUPPLY
18	WP		WATER PUMP
19			EARTHING POINT
20		L/A	LIGHTENING ARRESTER
21		E	EXHAUST FAN

NOTE:

1) COPPER EARTH ELECTRODE (0.25" DIA COPPER WIRE) AND 1" DIA GI PIPE TO BE BORED AT THE DEPTH OF 30' UNDER THE GROUND. ALL MDB, SDB, SB, JUNCTION BOX ETC TO BE CONNECTED WITH COPPER WIRE SWG–12 OR SWG–18.

2) LIGHTENING ARRESTER TO BE FIXED AT THE ROOF AND TO BE CONNECTED WITH A EARTHING POINT.

LOCAL GOVERNMENT ENGINEERING DEPARTMENT	
PRIMARY EDUCATION DEVELOPMENT PROGRAMME–II	
UPAZILA RESOURCE CENTRE UNDER PEDP–II	
Design by: A.B.M. Nazrul Islam	Date: 12-04-2004
Drawn by: Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA	APPROVED BY / DRG NO-



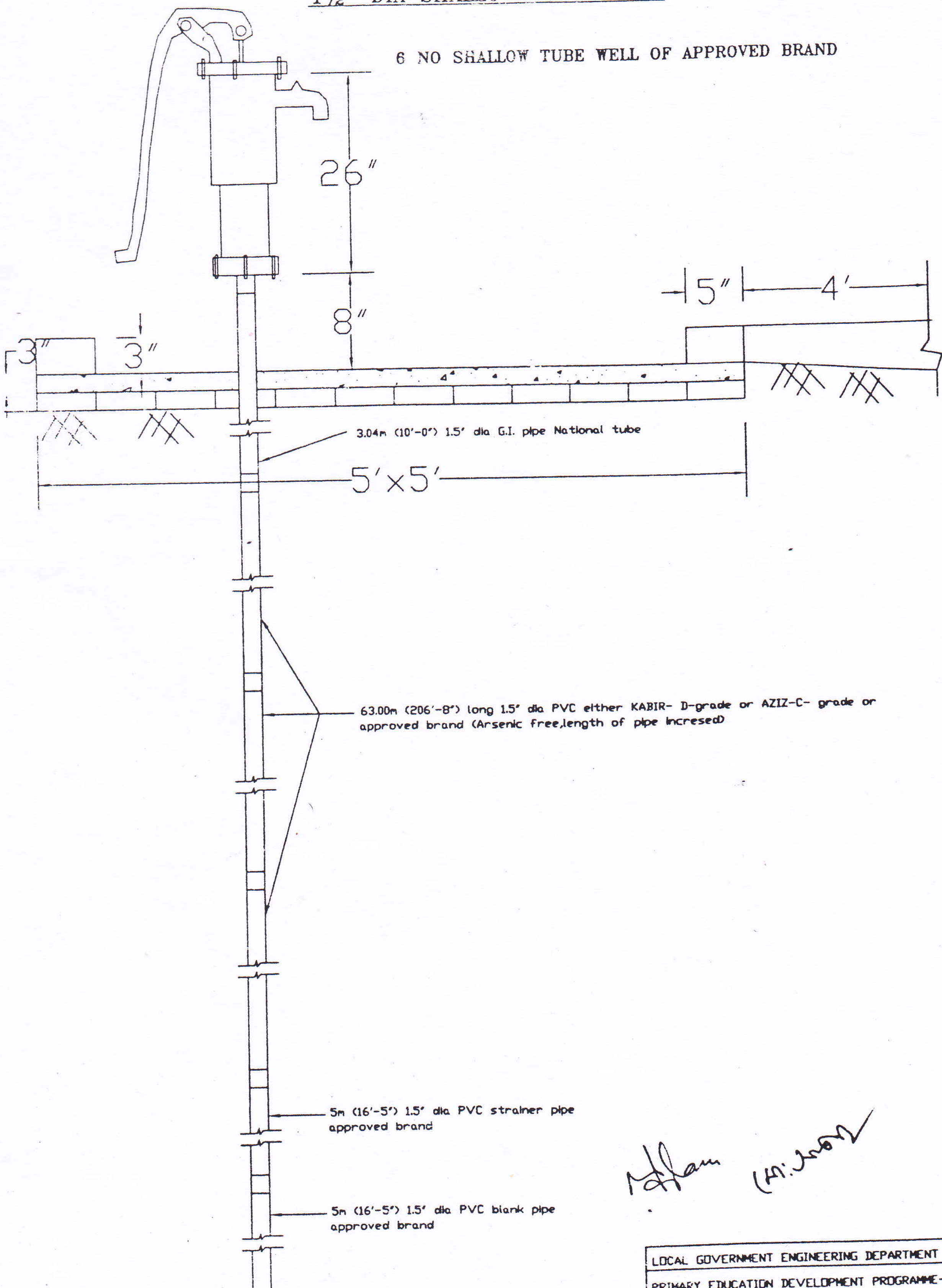
FLAG STAND

LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
FLAG STAND		
Design by A.B.M. Nazrul Islam SDDS, LGED, H.Q, DHAKA.	APPROVED BY	Date:08-09-2004
Drawn by Md. Mahbub Hossain SAE, PEDP, H.Q, DHAKA.		DRG NO-

PLAN-DESIGN & COST ESTIMATE
FOR
SUPPLY OF FURNITURE FOR UPAZILA RESOURCE CENTRE (URC)

1½" DIA SHALLOW TUBE WELL

6 NO SHALLOW TUBE WELL OF APPROVED BRAND



LOCAL GOVERNMENT ENGINEERING DEPARTMENT		
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II		
SHALLOW TUBE WELL DETAILS		
Design by A.B.M. Nazrul Islam, IGED, H.Q, DHAKA	APPROVED BY	Date 25-08-2004
Drawn by Md. Mahbub Hossain, PEDP, H.Q, DHAKA		DRG NO-

Technical Specifications for supply of furniture for URC'S:

Project Name : **Primary Education Development Program-II**

Name of Work: **Manufacturing and supply of Trainee Chair, Arm Cushion Chair, Steel Almirah, Steel File Cabinet (4 Drawer), Computer Table, Full Secritariate table, Half Secritariate table, Trainee's table, Shelves, Writing Desk, Ladders, Moveable Pin Board & Fixed Pin Board to selected Upazila Resource Centre.**

This work will include manufacturing and supply of all materials and labour including delivery of the furniture to the respective URC sites as per order by the respective Upazila engineer, LGED.

1. **Trainee Chair :** Manufacturing & supplying of trainee chair.
Size: 460(L)x420(B)x820(H)mm.
Seat Height : 390mm.
Structure: Chemically derusted, zinc phosphate coated, oven back powder coating paint finished mild steel round tube structure with PVC stopper.
Tube Specification: 22mm dia , 1mm thick steel.
Seat Back : Made of 12mm thick ply wood with 75mm P.U foam cushioning and rexine upholstery.
Colour: Structure - Black.
Seat Back : Black Rexene.
Metal inert gas arc welding.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

2. **Arm Cushion chair** :
Size: 460(L)x480(B)x430(H)mm.(Back seat height)
Total height: 795 mm.
Foam cushioning with rexine upholstery chemically derusted zinc phosphate coated oven backed elctro static powder paint finished mild steel 1.25" dia tubular structure with PVC stopper's. MS thickness 1 mm.
Seat back 18mm thick plywood 50mm poly euorothin foam cushion & back 37.5mm PU foam.
Colour : Black.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

3. **Steel Almirah**:
Size : 970(L)x483(D)x1830(H)mm.
Made of high quality .9mm x .7mm thick cold rolled steel sheet reinforced with imported S-type locking system. All steel parts chemically derusted zinc phosphate coated with oven backed stoving paint finished.
Shelves : 4 Nos. and adjustable in any position.
Colour : Black.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

4. **Steel File cabinet (4 Drawer)**:
Size : 476(L)x610(D)x1390(H)mm.
Made of high grade cold rolled steel sheet of .8mm thickness reinforced with stiffener's equipped with caster's made high strength drawer channels nylon drawer grip and imported central locking system. All steel parts oven backed electro static paint finished.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

5. **Computer Table:**
Size : 1370(L)x610(W)x720(H)mm.
Top & Shelves : 18mm thickness melamine coated laminated board.
Tube : 38 x 38mm Squire tube structure with 1.0 mm thickness mild steel structure.
Drawer : Made of melamine coated laminated board (One No.) with locking system.
Size: 585(L)x500(D)x95(H)mm.
Shelves : 2 Nos.
Size : 660(L) x 500(W) mm with stopper.
Colour : Black/Graphite.
All steel components are zinc phosphatecoated, Chemically de-rusted and oven backed stoving paint finished.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

6. **Full secritariate table:**
Size : 1520(L)x910(W)x720(H)mm.
Structure : Chemically de-rusted, Zinc phosphate coated, stoving paint finished mild steel structure with PVC stopper.
Tube Specification : 25x25mm square tube, 1mm thick steel.
Table top : (16+16)=32mm melamine laminated wood particle board with 32mm PVC edging finished.
Others : Front cover.
Drawer : 2 drawer unit with locking system.
Side cabinet : 1 No.
Colour : Black / Graphite.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

7. **Half Secritariate table:**
Size : 1200(L)x750(W)x720(H)mm.
Structure : Chemically de-rusted, Zinc phosphate coated, stoving paint finished mild steel structure with PVC stopper.
Tube Specification : 25x25mm square tube, 1mm thick steel.
Table top : (16+16)=32mm melamine laminated wood particle board with 32mm PVC edging finished.
Others : Front open.
Drawer : 3 drawer unit with left side with locking system.
Colour : Black/ Graphite.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

8. **Trainee's table:**
Size : 750(L)x450(W)x750(H)mm.
Structure : Chemically de-rusted, Zinc phosphate coated, stoving powder coating paint finished mild steel round tube structure with PVC stopper.
Tube Specification : 19/22mm dia, 1.0mm thick steel.
Table top : 16mm melamine laminated wood particle board.
Colour : Structure- Black.
Top : Black/Graphite.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

9. **Book Shelves:**
Size : 2400(L)x(400-300)mmx2400(H)mm.
Made of scratch proof pesticide treated melamine coated laminated board. Top 30mm side & door 18mm thickness. Edges of panels and top are to be sealed with PVC edging by automatic edging banding machine. Top and panels should be joined by using housing dowel, bolt, screw, T-nut and pneumatic nailing where necessary. PVC stopper and knock down facility with proper packing. All door have locking facility.
Colour : Black/ Graphite.
Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design & drawing.

14. All corners of the furniture should be rounded and there should not be any sharp edge, which can injure the students. Bottom of all legs will be provided with PVC shoe/cap as per drawing. Timber top shall have smooth finishing before enamel painting.

15. All furniture must be proper size & thickness of MS pipe (25mm dia, 1.5mm thick steel) and other materials used should treat with zinc phosphate painting.

16. The size & dimension of different members shown in the drawings are finished sizes.

17. All furniture must be supplied by the real manufacture having VAT registration.

SCHEDULE OF WORKS

Project Name: **Primary Education Development Program-II**

Name of Work: **Manufacturing and supply of Trainee Chair, Arm Cushion Chair, Steel Almirah, Steel File Cabinet (4 Drawer), Computer Table, Full Secritariate table, Half Secritariate table, Trainee's table, Shelves, Writing Desk, Ladders, Moveable Pin Board & Fixed Pin Board to _____ Upazila Resource Centre.**

This work will include manufacturing, supply and. carriage of all materials and labour unless other wise specially mentioned item of work.

SL NO.	DESCRIPTION OF WORK	QUANTITY	UNTT PRICE (TK.)	AMOUNT (TK.)
1.	**Trainee Chair :** Manufacturing & supplying of trainee chair. **Size:** 460(L)x420(B)x820(H)mm. **Seat Height** : 490mm. **Structure**: Chemically derusted, zinc phosphate coated, oven back powder coating paint finished mild steel round tube structure with PVC stopper. **Tube Specification**: 22mm dia , 1mm thick steel. **Seat Back** : Made of 12mm thick ply wood with 75mm P.U foam cushioning and rexine upholstery. **Colour**: Structure - Black. **Seat Back** : Black Rexene. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	30 Nos	1,804.00	54,120.00
2.	**Arm Cushion chair** : **Size**: 460(L)x480(B)x430(H)mm.(Back seat height) Total Height: 795 mm. Foam cushioning with rexine upholstery chemically derusted zinc phosphate coated oven backed elctro static powder paint finished mild steel 1.25" dia tubular structure with PVC stopper's. MS thickness 1 mm. Seat back 18mm thick plywood 50mm poly euorothin foam cushion & back 37.5mm PU foam. **Colour** : Black. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	7 Nos	3,040.00	21,280.00
3.	**Steel Almirah**: Size : 970(L)x483(D)x1830(H)mm. Made of high quality .9mm x .7mm thick cold rolled steel sheet reinforced with imported S-type locking system. All steel parts chemically derusted zinc phosphate coated with oven backed stoving paint finished. **Shelves** : 4 Nos and adjustable in any position. **Colour** : Black. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	3 Nos	11,448.00	34,344.00

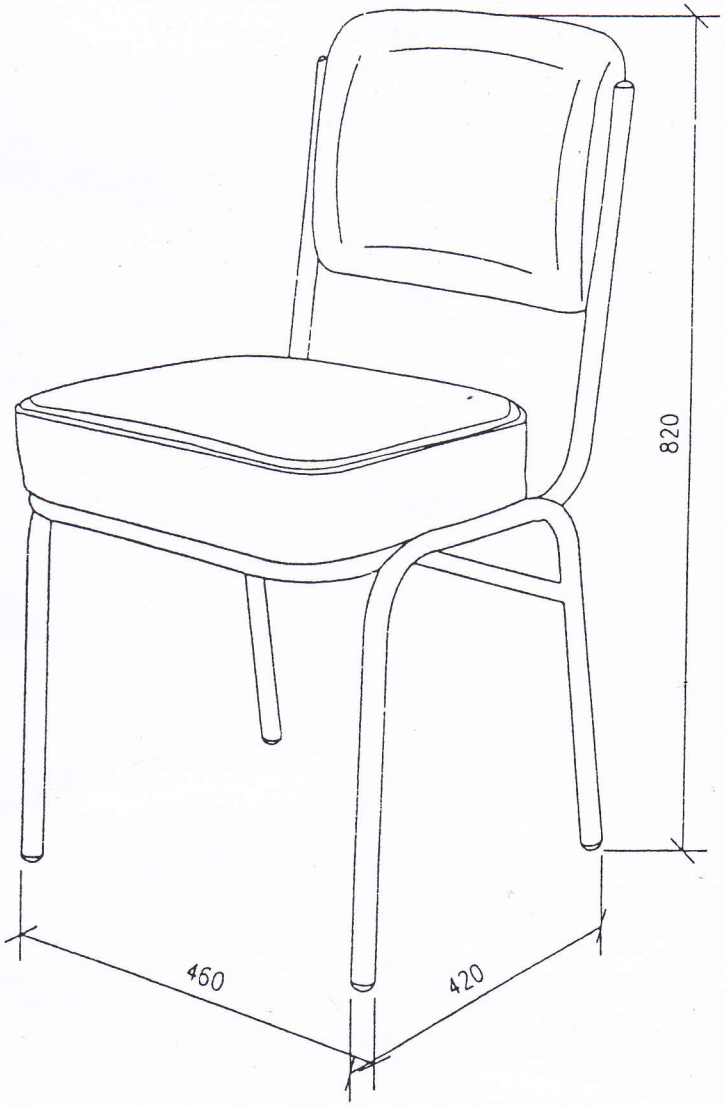
SL NO.	DESCRIPTION OF WORK	QUANTITY	UNTT PRICE (TK.)	AMOUNT (TK.)
4.	**Steel File cabinet (4 Drawer):** **Size** : 476(L)x610(D)x1390(H)mm. Made of high grade cold rolled steel sheet of .8mm thickness reinforced with stiffeners equipped with caster's made high strength drawer channels nylon drawer grip and imported central locking system. All steel parts oven backed electro static paint finished. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	2 Nos.	10,676.00	21,352.00
5.	**Computer Table:** **Size** : 1370(L)x610(W)x720(H)mm. **Top & Shelves** : 18mm thickness melamine coated laminated board. **Tube** : 38 x 38mm Squire tube structure with 1.0 mm thickness mild steel structure. **Drawer** : Made of melamine coated laminated board (One No.) with locking system. **Size**: 585(L)x500(D)x95(H)mm. **Shelves** : 2 Nos. **Size** : 660(L) x 500(W) mm with stopper. **Colour** : Black/ Graphite. All steel components are zinc phosphate coated, Chemically de-rusted and oven backed stoving paint finished. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	1 Nos.	9,500.00	9,500.00
6.	**Full secritariate table:** **Size** : 1520(L)x910(W)x720(H)mm. **Structure** : Chemically de-rusted, Zinc phosphate coated, stoving paint finished mild steel structure with PVC stopper. Tube Specification : 25x25mm squire tube, 1mm thick steel. **Table top** : (16+16)=32mm melamine laminated wood particle board with 32mm PVC edging finished. **Others** : Front cover. **Drawer** : 2 drawer unit with locking system. **Side cabinet** : 1 No. **Colour** : Black/ Graphite. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	1 Nos.	10,388.00	10,388.00
7.	**Half Secritariate table:** **Size** : 1200(L)x750(W)x720(H)mm. **Structure** : Chemically de-rusted, Zinc phosphate coated, stoving paint finished mild steel structure with PVC stopper. **Tube Specification** : 25x25mm square tube, 1mm thick steel. **Table top** : (16+16)=32mm melamine laminated wood particle board with 32mm PVC edging finished. **Others** : Front open. **Drawer** : 3 drawer unit with left side with locking system. **Colour** : Black/ Graphite. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	2 Nos.	7,330.00	14,660.00

SL NO.	DESCRIPTION OF WORK	QUANTITY	UNTT PRICE (TK.)	AMOUNT (TK.)
8.	**Trainee's table:** **Size** : 750(L)x450(W)x750(H)mm. **Structure** : Chemically de-rusted, Zinc phosphate coated, stoving paint finished mild steel round tube structure with PVC stopper. **Tube Specification** : 22mm dia, 1.0 mm thick steel. **Table top** : 18mm melamine laminated wood particle board. **Colour** : Structure- Black. **Top** : Black/Graphite. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	30 Nos.	2,695.00	80,850.00
9.	**Book Shelves:** Size : 2400(L)x(400-300)mmx2400(H)mm. Made of scratch proof pesticide treated melamine coated laminated board. Top 30mm side & door 18mm thickness. Edges of panels and top are to be sealed with PVC edging by automatic edging banding machine. Top and panels should be joined by using housing dowel, bolt, screw, T-nut and pneumatic nailing where necessary. PVC stopper and knock down facility with proper packing. All door have locking facility. **Colour** : Black/ Graphite. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	2 Nos.	31,993.00	63,986.00
10.	**Writing Desk:** **Size** : 750(L)x450(W)x750(H)mm. Structure : Chemically de-rusted, Zinc phosphate coated, stoving paint finished mild steel structure with PVC stopper. Tube Specification : 22mm dia, 1.0mm thick steel. Desk top : 18mm melamine laminated wood particle board. Colour : Structure- Black. Top : Black/Graphite. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	1 Nos.	2,590.00	2,590.00
11.	**Ladders:** Manufacture & supply of laders Size : 450mm(L)x600mm(W)x1050mm(H). • Made of best quality of aluminium frame structure. • colour : Silver. • Square shape tube. • Structure thickness : 3mm. • PVC stopper. Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.	1 Nos.	7,350.00	7,350.00

SL NO.	DESCRIPTION OF WORK	QUANTITY	UNTT PRICE (TK.)	AMOUNT (TK.)
12.	**Moveable Pin Board:** Manufacture & supply of Moveable pin board. Size : 2100mm(L)x1200mm(W). • Made of prime quality cold rolled mild steel structure. • Square shape tube structure • Chemically de-rusted • Zinc phosphate coated • Stoving powder coating paint • Plywood, velvet cloth • Plywood+velvet cloth thickness : 18.75mm • Movable two stand, 4 Nos. Wheel • Mild steel sheet thickness : 18 to 22 gaze Sample of the same must be supplied to get approval before manufacturing of the lot. All complete including manufacture and delivery at site as per design.			
13.	**Fixed Pin Board:** Manufacture & supply of Fixed pin board. Size: (a) 5450mm(L) x 1425mm(B), (b) 2400mm (L) x 1200mm(B). • Made of prime quality cold rolled mild steel structure. • Plywood, velvet cloth • Plywood+velvet cloth thickness : 18.75mm • 2 Nos. of fixed pin board will be installed separately in 2 rooms. Sample of the same must be supplied to get approval before manufacturing of the of the lot. All complete including manufacture and delivery at site as per design.	2 Nos.	11,640.00	23,280.00
		70 sft.	90.00	6,300.00
				3,50,000.00

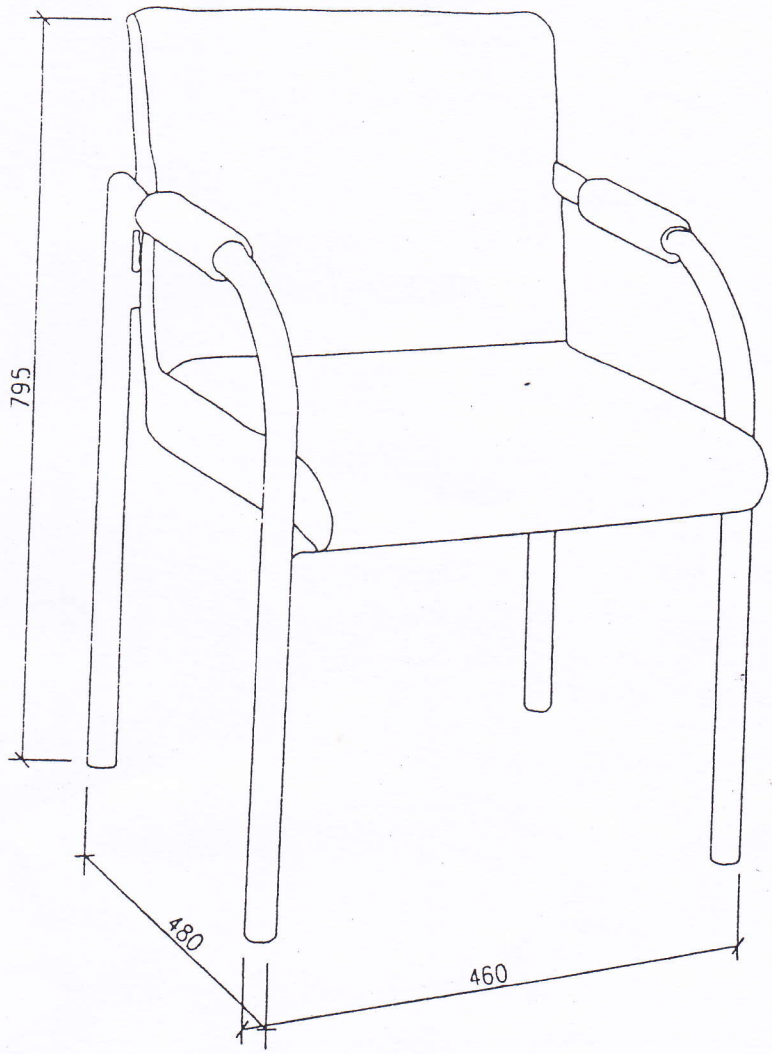
(Taka Three Lakh and Fifty Thousand only)

TRAINEE CHAIR



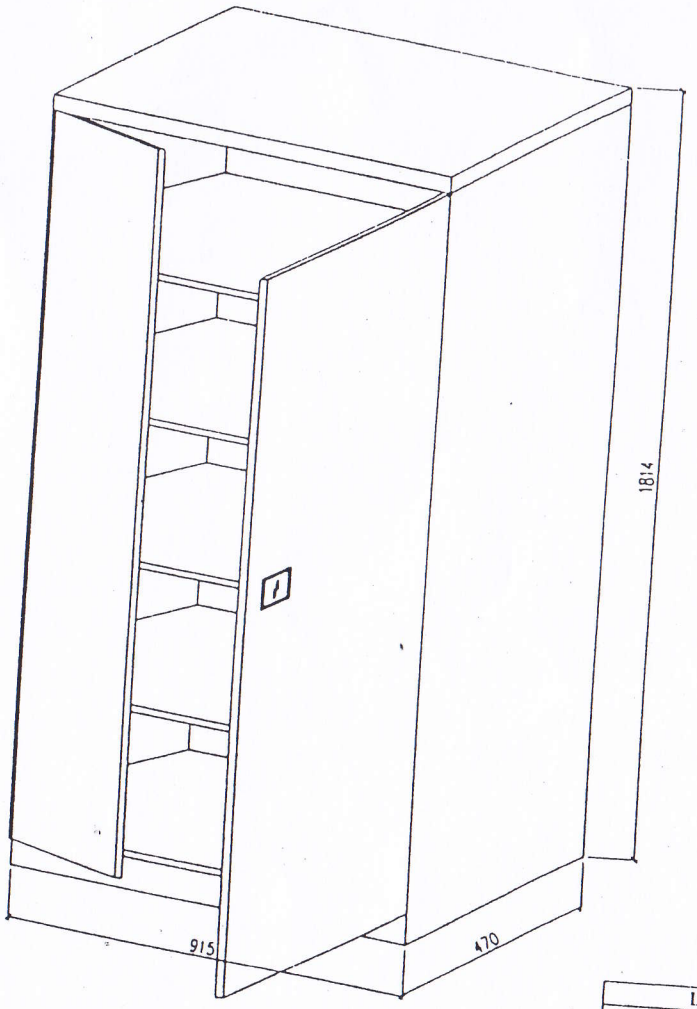
LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF TRAINEE'S CHAIR FOR UPAZILA RESOURCE CENTRE
APPROVED BY

ARM CUSHION CHAIR



LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF ARM CUSHION CHAIR FOR UPAZILA RESOURCE CENTRE
APPROVED BY

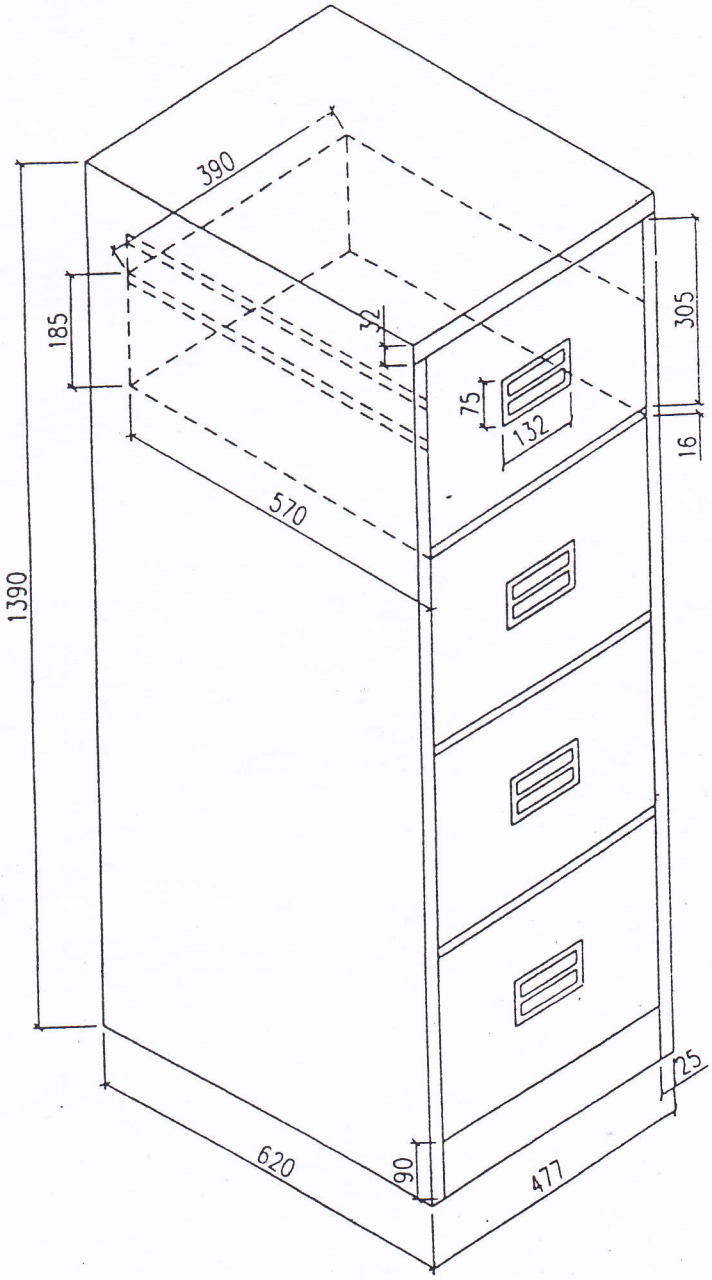
OFFICE ALMIRAH



LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF STEEL ALMIRAH FOR UPAZILA RESOURCE CENTRE

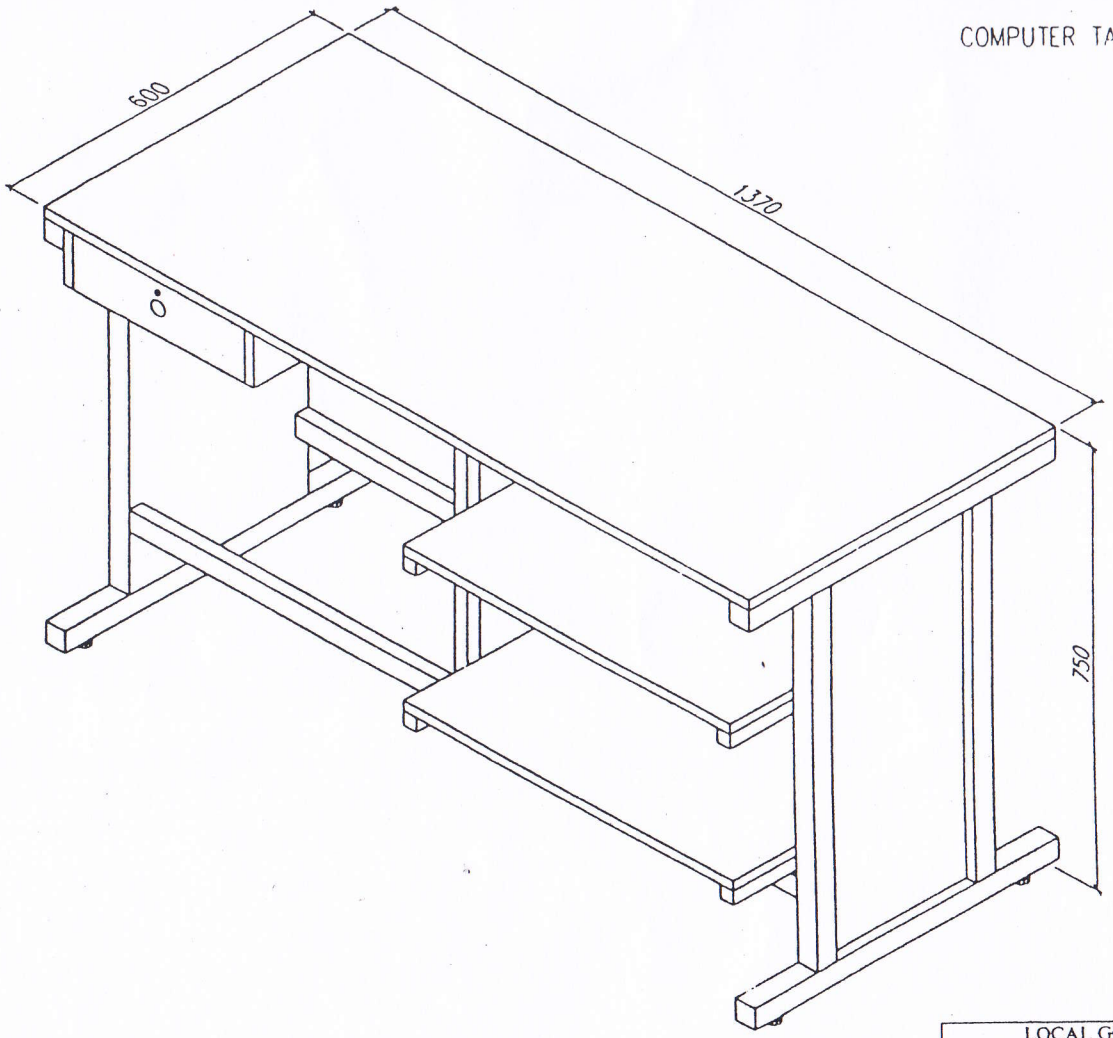
APPROVED BY

FILE CABINET



LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF FILE CABINET FOR UPAZILA RESOURCE CENTRE
APPROVED BY

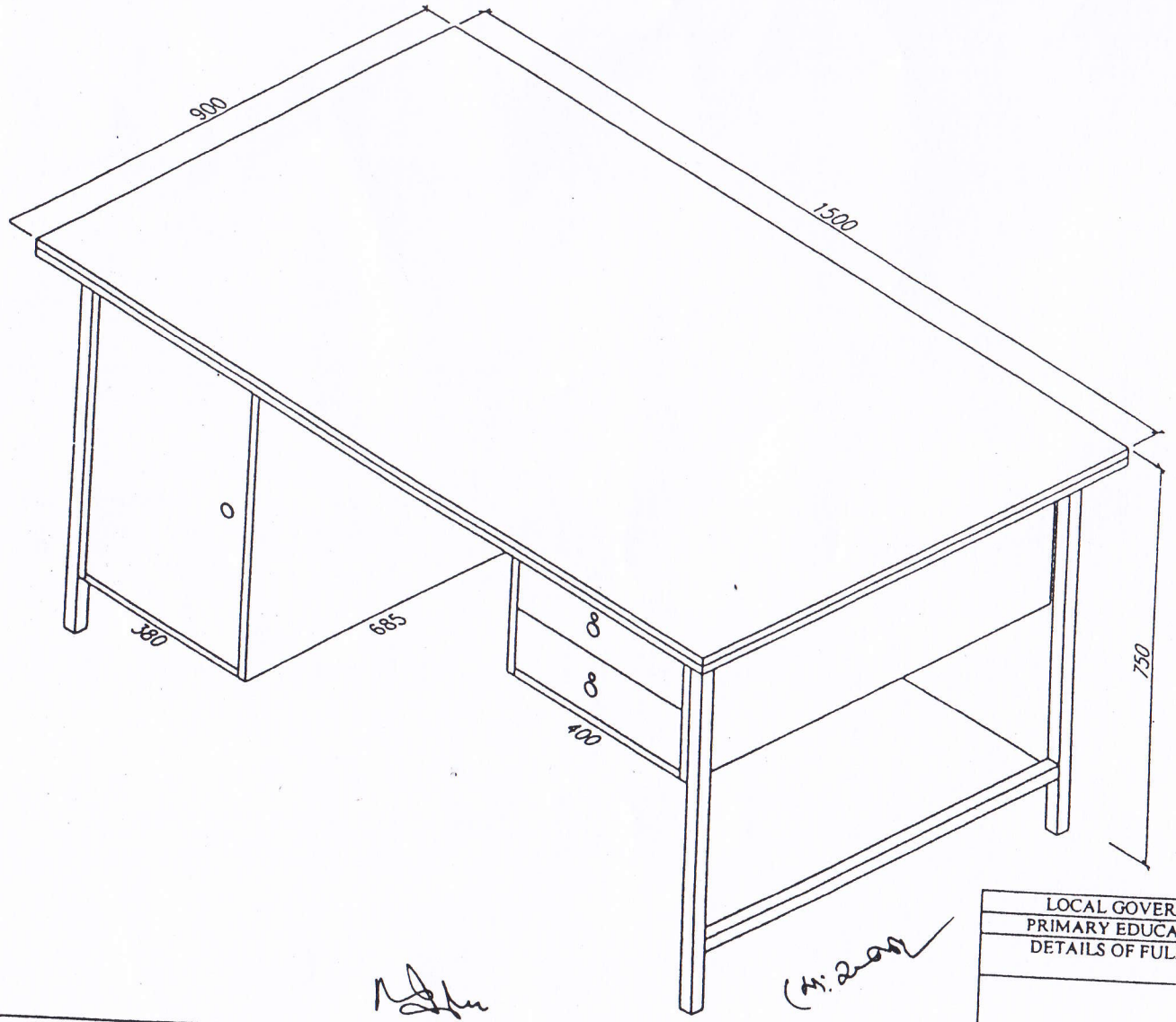
COMPUTER TABLE



LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF COMPUTER TABLE FOR UPAZILA RESOURCE CENTRE

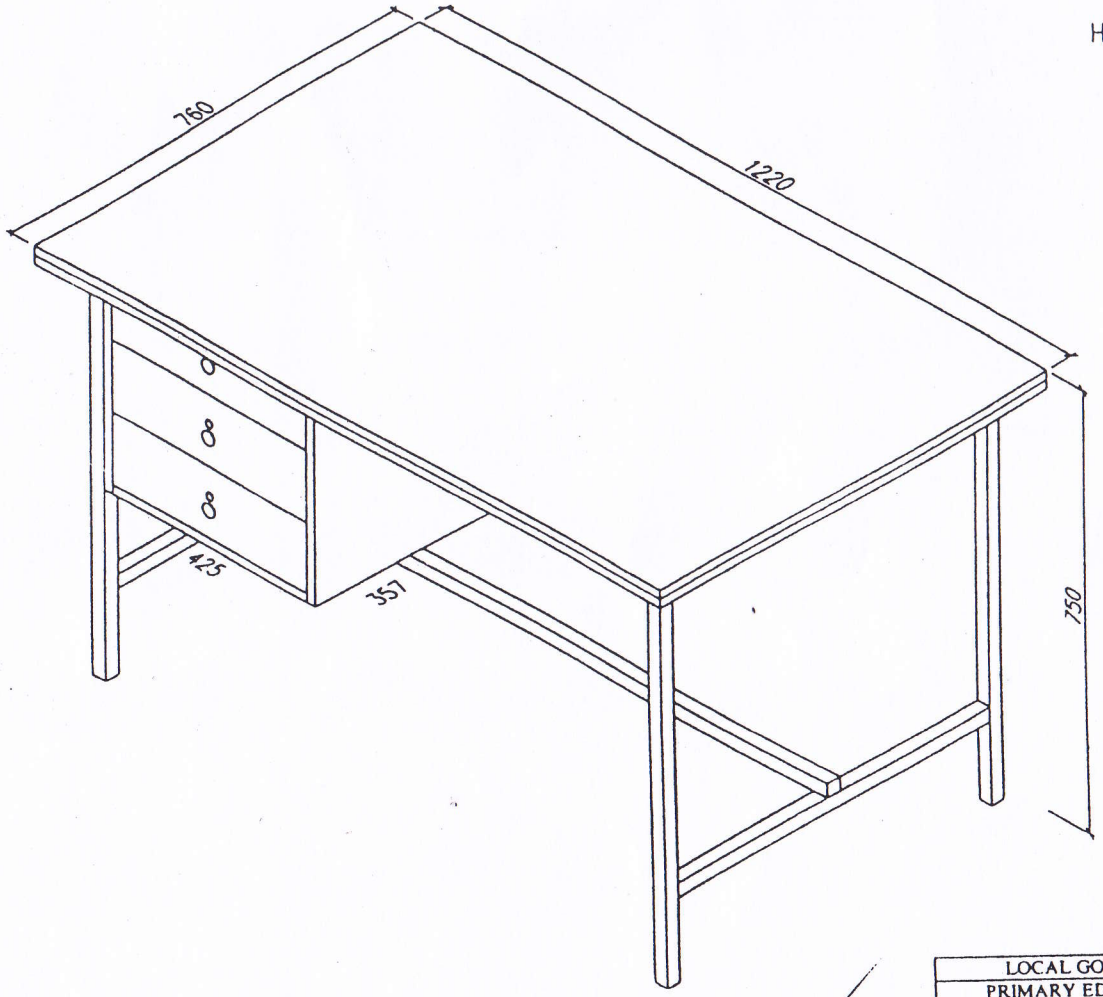
APPROVED BY

FULL SECRETERIATE TABLE



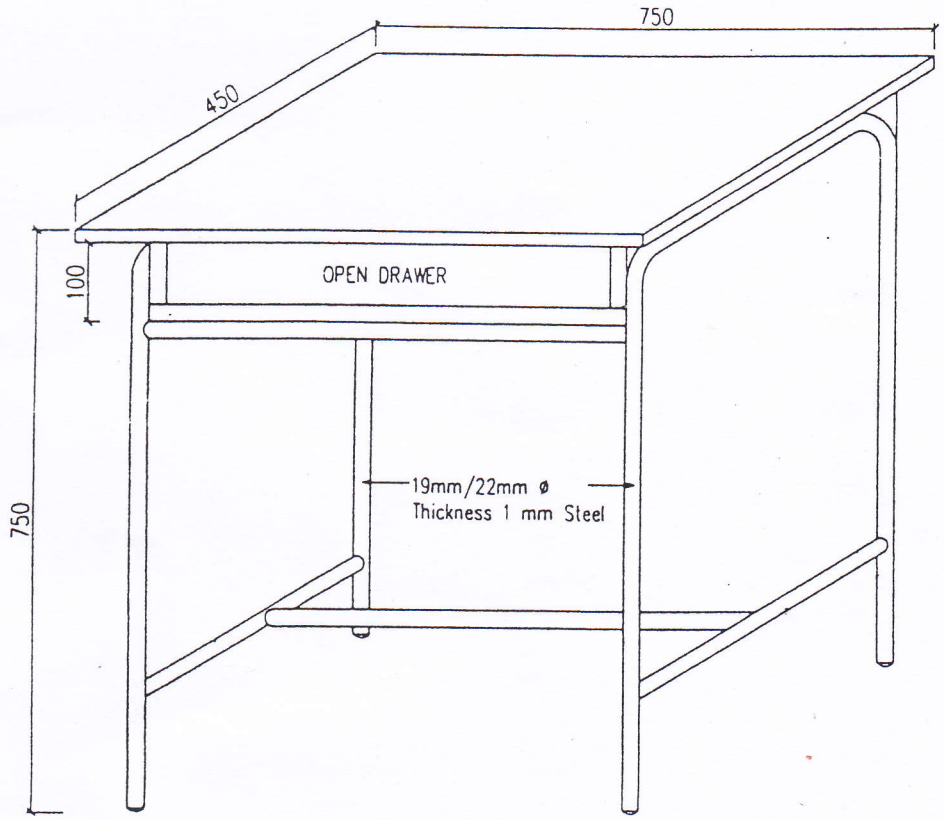
LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF FULL SECRETERIATE TABLE FOR UPAZILA RESOURCE CENTRE
APPROVED BY

HALF SECRETERIATE TABLE

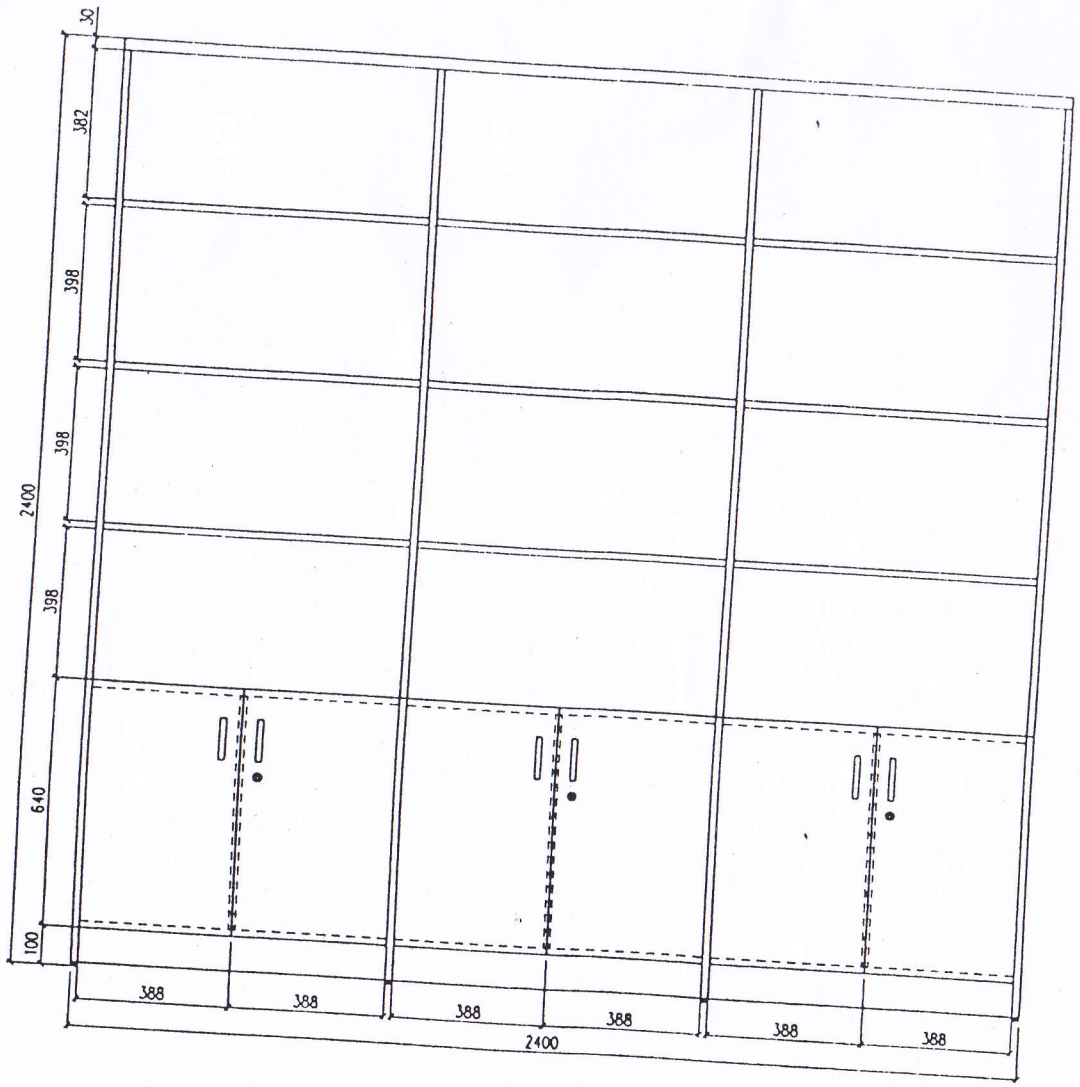


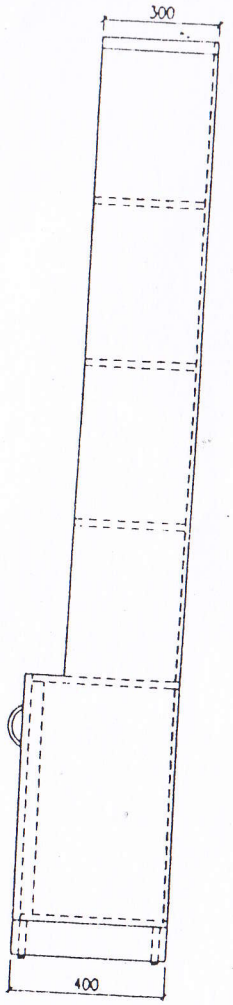
LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF HALF SECRETERIATE TABLE FOR UPAZILA RESOURCE CENTRE
APPROVED BY

TRAINEE'S TABLE



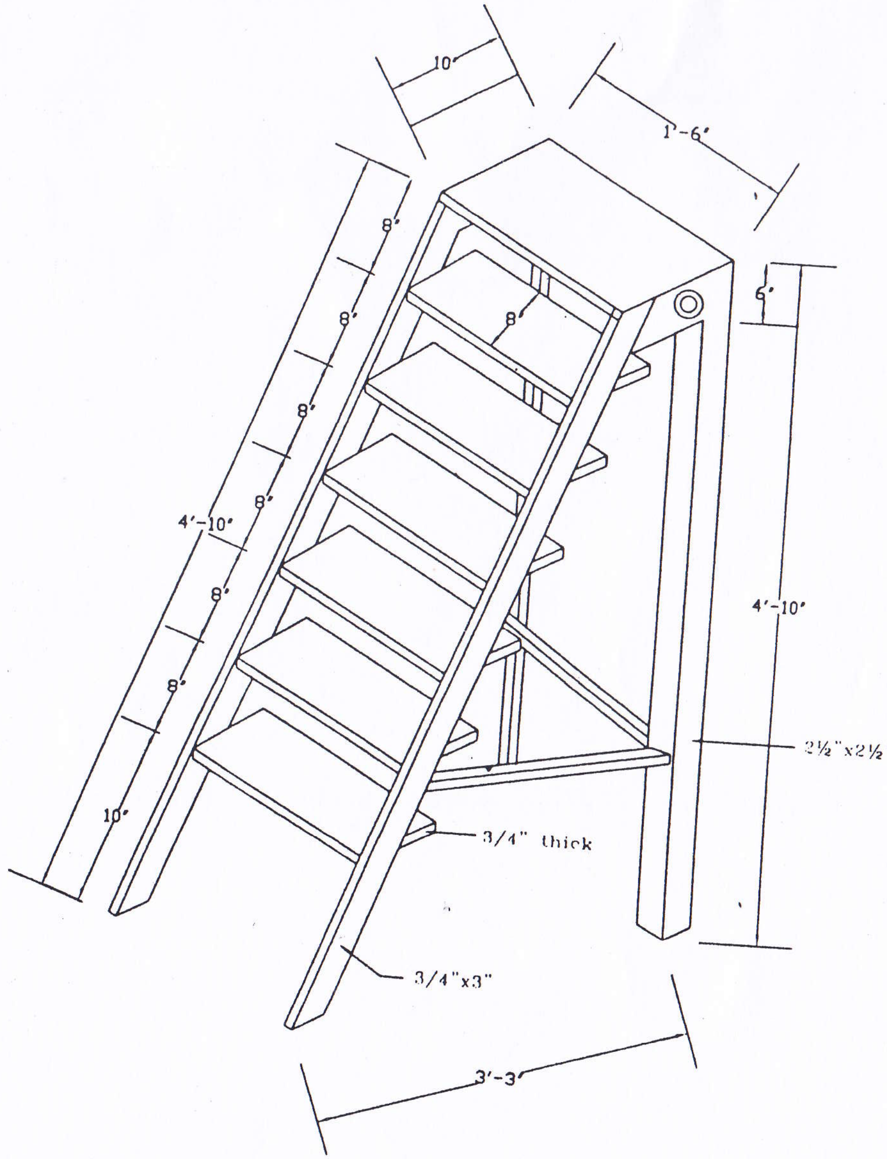
LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF TRAINEE'S TABLE FOR UPAZILA RESOURCE CENTRE
APPROVED BY





LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF BOOK SHELVES FOR UPAZILA RESOURCE CENTRE

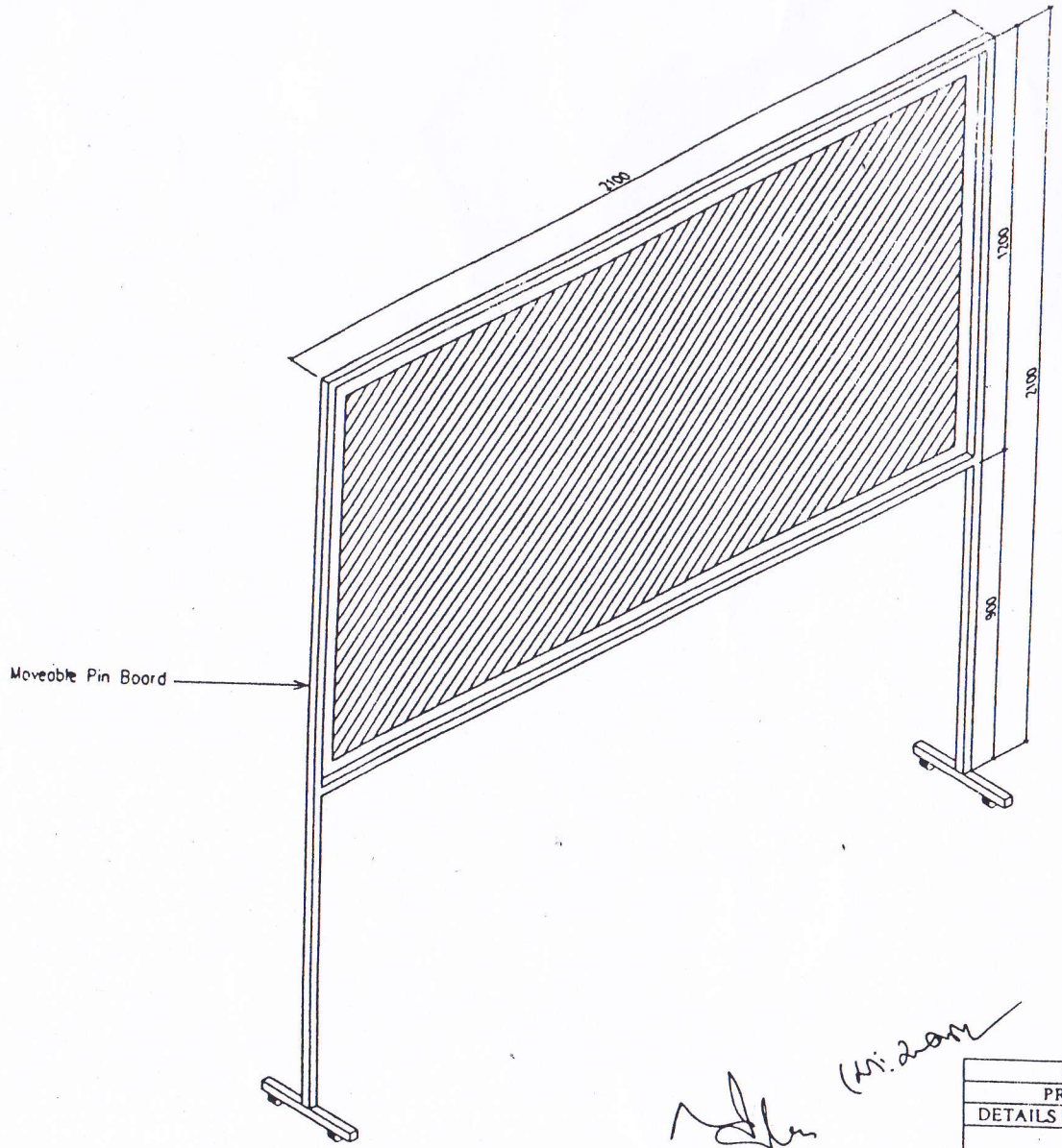
APPROVED BY



LADDER

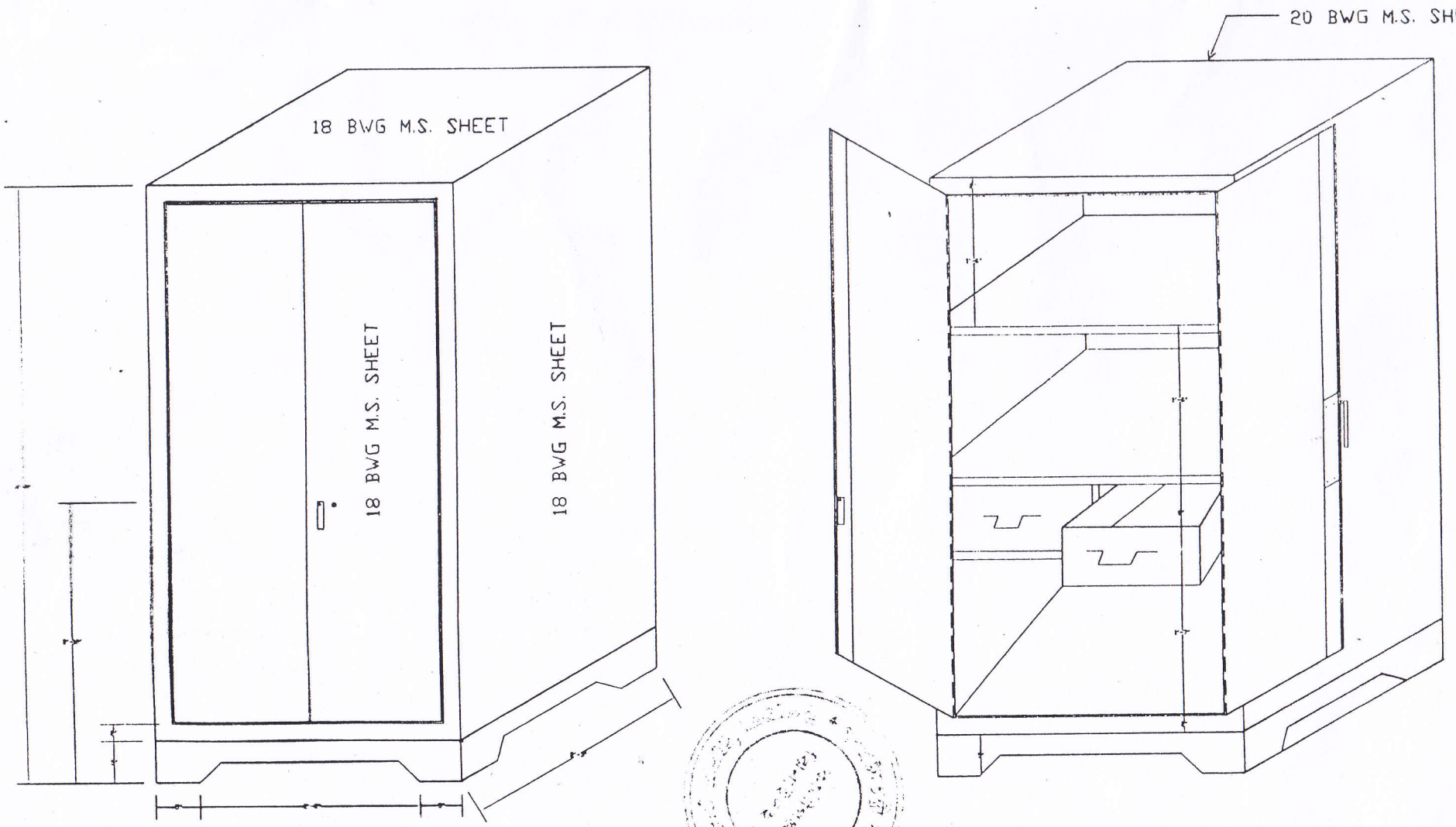
LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II
LADDER DETAILS
Design by A.B.M Nazrul Islam
Drawn by Md. Mahbub Hossain SAE, PEDP, H.Q. DHAKA
APPROVED BY

Moveable Pin Board



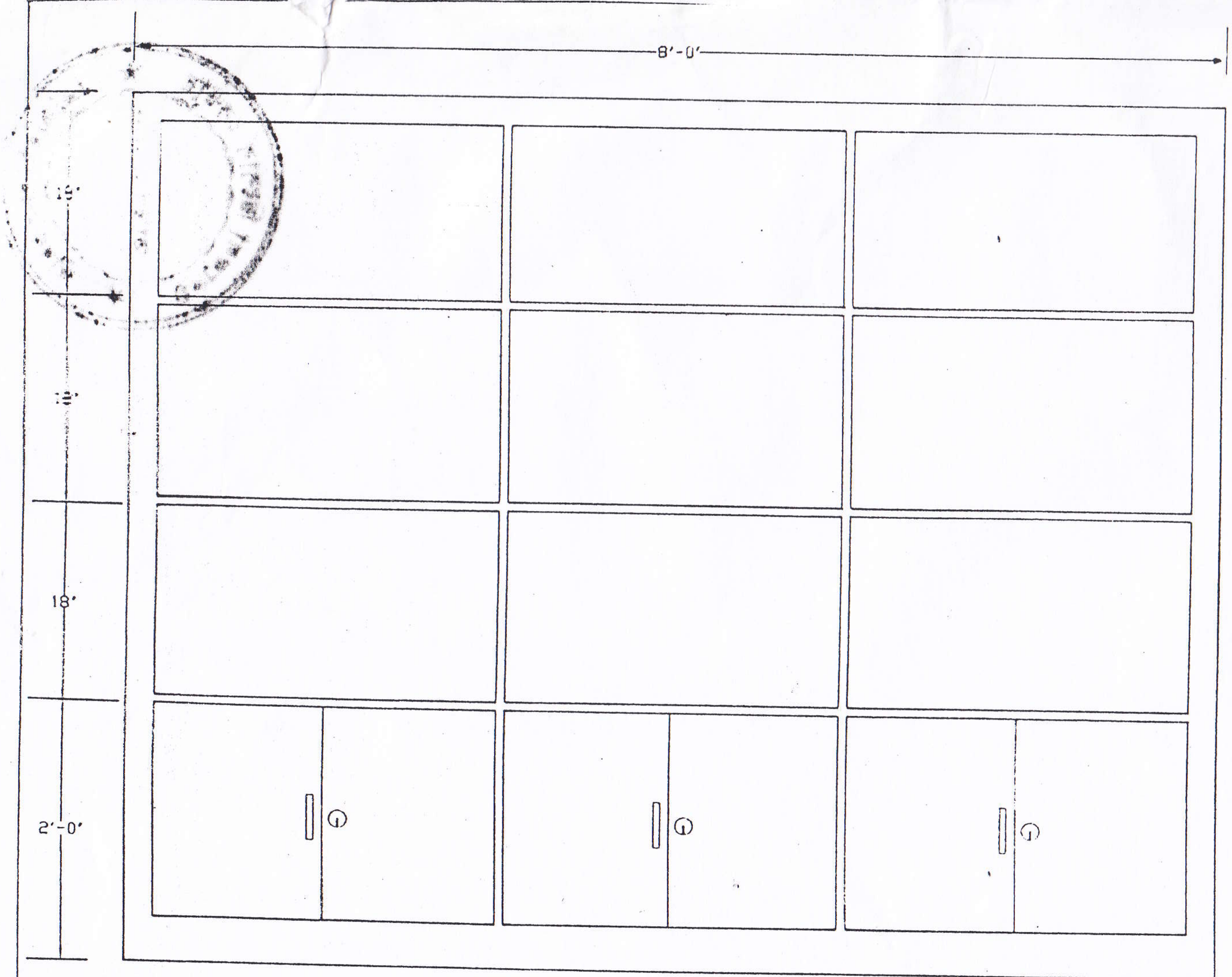
LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPEMENT PROGRAMME-II
DETAILS OF MOVEABLE PIN BOARD FOR UPAZILA RESOURCE CENTRE

APPROVED BY

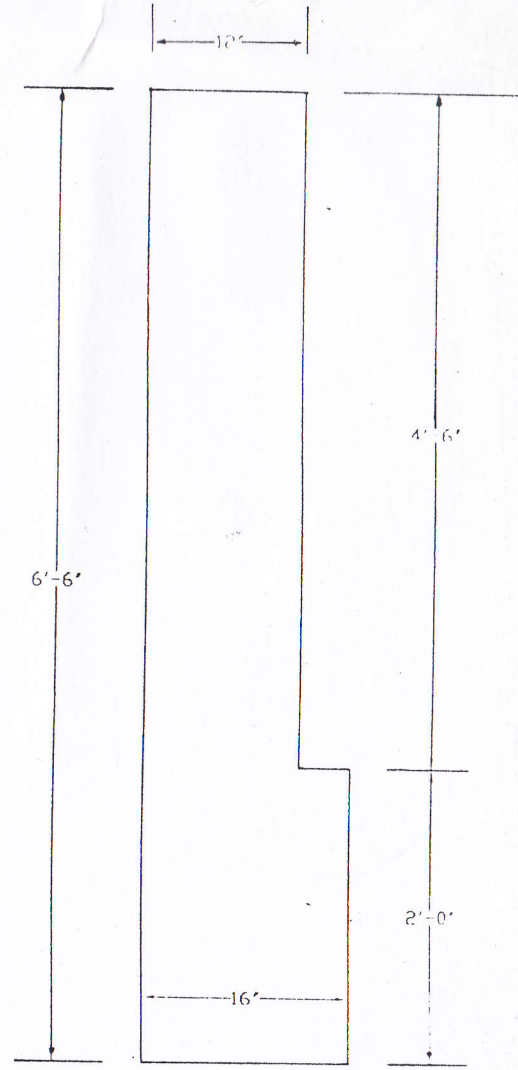


ISOMETRIC VIEW OF A STEEL ALMIRAH

LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II
DETAILS OF STEEL ALMIRAH



FRONT ELEVATION OF SHELVES



SIDE ELEVATION

LOCAL GOVERNMENT ENGINEERING DEPARTMENT
PRIMARY EDUCATION DEVELOPMENT PROGRAMME-II
DETAILS OF BOOK SHELVES
Design by: A.B.M. [illegible]
Drawn by: Md. [illegible] SAE, PEDP, H.Q. DHAKA
APPROVED BY
Date-20-09-[illegible]
DRG NO-