



# केंद्रीय भंडारण निगम

(भारत सरकार का एक उपक्रम)

## **CENTRAL WAREHOUSING CORPORATION**

(A Govt. of India Undertaking)

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E- Tender

**Tender Reference Number: E NIT\_CWC/CO/Engg./23-24/16)**

**For Procurement of Works:**

**Name of Work: Construction of PEB Godown of 15608 sqft & 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair**

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# CENTRAL WAREHOUSING CORPORATION

## (A Govt. of India Undertaking)

### SCHEDULE OF QUANTITY (SCHEDULE-I)

**Name of Work: - Construction of PEB Godown of 15608 sqft & 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair**

Schedule of Quantity						
.Schedule-I (Civil DSR,2021)						
SLNo	DSR 2021 item Ref No.	Description	Qty	Unit	Rate	Amount (Rs.)
<b>SH.Schedule-I (Civil DSR,2021)</b>						
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
1a	2.6.1	All kind of Soil	2271.00	cum	149.00	338379
2	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
2a	2.8.1	All kinds of soil.	711.86	cum	218.60	155612.6
3	2.25	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.	1635.86	cum	161.60	264354.98
4	2.26	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
4a	2.26.1	All kind of soil	543.00	cum	104.50	56743.5
5	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete. For verandah	23.00	cum	2161.20	49707.6
6	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	2750.00	Sqm	14.50	39875
7	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
7a	4.1.4	1:2:4 (1 Cement: 2coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	0.41	Cum	7226.95	2963.05
8	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	320.30	cum	6326.00	2026217.8



9	4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 12.5mm nominal size derived from natural sources)	19.00	sqm	370.85	7046.15
10	4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	19.00	sqm	113.85	2163.15
11	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	134.56	sqm	681.65	91722.82
12	5.1.2	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	152.00	cum	8364.20	1271358.4
13	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement: 1.5 coarse sand(zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources).	1.00	cum	10719.30	10719.3
14	5.9	Centering and shuttering including strutting, propping etc. and removal of form at all level, height and depth				
14a	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	1107.00	sqm	332.10	367634.7
14b	5.9.2	Walls (any thickness) including attached pilasters, butresses, plinth and string courses etc.	2243.00	sqm	702.00	1574586
14c	5.9.3	Suspended floors, roofs, landings, balconies and access platform	72.00	sqm	766.55	55191.6
14d	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	352.00	sqm	608.35	214139.2
14e	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	166.00	sqm	804.25	133505.5
15	5.19	Encasing rolled steel sections, in beams and columns, with cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources) including centering and shuttering complete but , excluding cost of reinforcement.	5.00	Cum	14192.05	70960.25
16	5.22	Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete upto and above plinth level.				
16a	5.22.5	Hard drawn steel wire fabric	6601.00	kg	94.10	621154.1
16b	5.22.6/6A	Thermo-Mechanically Treated bars of grade Fe-500D or more.	124649.00	kg	89.65	11174782.85

17	5.33	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
17a	5.33.1	all works upto plinth level				
	5.33.1.2	Concrete of M30 grade with minimum cement content of 350 kg /cum	1024.00	cum	8825.35	9037158.4
17b	5.33.2	all works above plinth level upto floor V level				
	5.33.2.2	Concrete of M30 grade with minimum cement content of 350 kg /cum	101.00	cum	9106.35	919741.35
17c	5.33	Deduct for not using the pump for placing the concrete as in above item. The rate is based on the analysis of rate of DSR item No. 5.33.1.2 and 5.33.2.2	1125.00	cum	-280.97	-316087.77
18	9.20	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
18a	9.20.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	7.98	sqm	2818.50	22491.63
19	9.92	Providing and fixing chromium plated brass handles with necessary screws etc complete:				
19a	9.92.1	125mm	8.00	each	226.50	1812
20	9.96	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 :				
20a	9.96.2	250x16mm	8.00	each	234.90	1879.2
21	9.97	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				
21a	9.97.3	200x10mm	4.00	each	90.80	363.2
22	10.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. : For Veranadah	10072.43	kg	93.05	937239.61
23	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	4546.00	kg	111.95	508924.7

24	10.6	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.				
25	10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	126.00	sqm	3008.80	379108.8
26	10.7	Providing and fixing ball bearing for rolling shutters.	24.00	Each	424.20	10180.8
27	10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
28	10.16.3	Electric resistance or induction butt welded tubes	28132.20	kg	141.35	3976486.47
29	10.19	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	0.00	kg	88.50	0
30	10.20	Providing and fixing bolts including nuts and washers complete.	469.00	kg	140.15	65730.35
31	10.25	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.				
31a	10.25.1	In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	3677.00	kg	102.25	375973.25
32	10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
32a	10.26.1	M.S. tube	975.00	kg	157.15	153221.25
33	11.3	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.				
33a	11.3.1	40 mm thick with 20 mm nominal size stone aggregate	58.00	sqm	545.00	31610
34	12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes				
34a	12.41.1	75mm diameter	6	metre	213.00	1278.00
34b	12.41.2	110mm diameter	22	metre	319.75	7034.50
35	12.42	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion				
	12.42.3	Single tee with door				
35a	12.42.3.1	75x75x75mm	2	each	141.55	283.10

35b	12.42.3.2	110x110x110mm	2	each	205.45	410.90
35c	12.42.5.1	Bend 87.5° 75 mm bend	2	each	91.80	183.60
35d	12.42.5.2	Bend 87.5° 110 mm bend	2	Each	132.00	264.00
35e	12.42.6.1	Shoe (Plain) 75 mm Shoe	2	each	81.10	162.20
35f	12.42.6.2	Shoe (Plain) 110 mm Shoe	2	Each	115.95	231.90
36	12.43	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
36a	12.43.1	75 mm	4	each	310.85	1243.40
37	13.1	12 mm cement plaster of mix :				
37a	13.1.2	1:6 (1 cement: 6 fine sand)	689.00	sqm	282.00	194298
38	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :				
38a	13.2.2	1:6 (1 cement: 6 fine sand)	1134.00	sqm	324.30	367756.2
39	13.37	White washing with lime to give an even shade :				
39a	13.37.1	New work (three or more coats)	502.00	sqm	32.45	16289.9
40	13.45	Finishing walls with textured exterior paint of required shade :				
40a	13.45.1	a) New work (Two or more coat applied @ 3.28 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	112.00	sqm	245.00	27440
41	13.48A	Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives.				
41a	13.48A.1	New work (Two or more coats applied @ 1.43 litre/ 10 sqm. Over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm.	1088.00	sqm	154.45	168041.6
42	13.52	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.				
42a	13.52.1	On steel work	699.00	sqm	201.70	140988.3
43	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
43a	13.61.1	Two or more coats on new work	405.00	sqm	131.45	53237.25
44	15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
44a	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	5.00	cum	2007.10	10035.5
45	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in - charge.	20.00	cum	2928.10	58562
46	15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				

46a	15.7.4	In cement mortar	50.00	cum	1698.45	84922.5
47	15.18	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	500.00	kg	4.65	2325
48	15.19	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	500.00	kg	3.20	1600
49	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres	1237.00	Sqm	180.50	223278.5
50	16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	4899.00	cum	20.55	100674.45
51	16.53	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length ( total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m 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.) / Springcore (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	96.00	metre	303.65	29150.4
52	16.78.1	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge. : With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30	247.00	cum	2658.10	656550.7
53	16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm ) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achievethe desired density, complete as per specifications and directions of Engineer-in-Charge.	683.00	cum	2803.65	1914892.95
54	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require				
54a	17.7.4	Coloured Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P. brass pillar tap.	2.00	each	1679.60	3359.2
55	17.13.2	Providing and fixing white vitreous china water closet squatting pan (Indian type)	2.00	each	2758.20	5516.4

56	17.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm or 340x410x265 mm sizes respectively.	2.00	each	1382.30	2764.6
57	17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	2.00	each	1411.15	2822.3
58	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes &				
58a	18.7.1	15 mm nominal outer dia .Pipes.	5.00	metre	255.90	1279.5
58b	18.7.3	25 mm nominal outer dia .Pipes.	5.00	metre	408.55	2042.75
59	18.52.1	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.(a)15 mm nominal bore.	4.00	each	594.75	2379
60	18.49.1	Providing and fixing CP Brass bib cock of approved quality confirming to IS: 8931 : a) 15 mm nominal bore	4.00	each	434.20	1736.8
61	17.28.1.1	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.Semi rigid pipe (a) 32 mm dia	2.00	each	90.95	181.9
62	18.21.2.1	Providing and fixing unplasticised PVC connection pipes with brass unions: a) 45 cm length i) 15 mm nominal bore.	2.00	each	85.20	170.4
63	18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end) :(a) 32mm nominal bore				
63a	18.19.2.1	Horizontal	1.00	each	677.55	677.55
63b	18.19.2.2	Vertical	1.00	each	777.90	777.9
64	19.2.1	Providing and laying cement concrete 1: 5: 10 (1 cement: 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all around of SW pipes including bed concrete as per standard design:				
64a		a) 100 mm diameter S.W. Pipe	5.00	metre	895.50	4477.5
65	19.3	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design:		each		
65a	19.30.1.1	Inside dimensions 455x610 mm and 45 cm deep for single pipe line : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	each	6431.30	6431.3
		Total for this schedule (Rs.) =				<b>Rs. 3,87,30,402.74</b>

## **SCHEDULE OF QUANTITY (SCHEDULE-II)**

**Name of Work: - Construction of PEB Godown of 15608 sqft & 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair**

Schedule of Quantity						
SH.Schedule-II (Civil MR items)						
SLNo	MR items	Description	Qty	Unit	Rate	Amount (Rs.)
		<b>SH.Schedule-I (Civil MR items)</b>				
1	MR1	Excavating, supplying and filling of local earth (including royalty) by mechanical transport for all lead and lift also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete	4,061.00	cum	663.14	2693011.54
2	MR2	Providing and spreading non-metallic floor hardener minimum @ 4.5kg/sqm in floor concrete (as per manufactures specifications and approved by Engineer-in-charge). Nothing extra shall be payable if manufacturer specifies extra quantity.	1,553.00	sqm	162.07	251694.71
3	MR3	Providing and fixing channels for preparing panels of required size and then dewatering of the concrete with vaccum dewatering machine finishing with mechanical trowel with trimix matching (thickness of flooring 75 to 150 mm, along with cutting groove joints at appropriate spacing as per direction of engineer in charge (concrete and steel to be paid separately as per relevent item)	233.00	cum	598.26	139394.58
4	MR4	Providing and laying single layer of LDPE sheet of 200 Microns thick approved quality on sub base of flooring with an overlapping Of 150 mm on longitudinal direction & 300mm on transeverse direction joints.	1,451.00	Sqm	79.55	115427.05
5	MR5	Providing and fixing of pre-painted ZINCALUME/GALVALUME roof sheet (Make : Tata Bluescope Steel/ JSW) with minimum five major corrugation, 28 to 32 mm high rib spaced at 180-220 mm c/c (in RAL 9002 colour for roofing and RAL 9007 Color for cladding and shape of profile as approved by the Engineer in charge) with subtle square fluting in the pan and the end rib shall have anti-capillary groove and return leg. The steel sheet shall be fastened with 40µm zinc coated, Hex head M6 50 mm long self-drilling screw with washer and 19 x 2.5mm stitching screw as per pattern approved by Engineer-in-charge. All screws should be sealed with PU sealant to avoind leakage in case of expansion/contraction.				
		Coil Specifications - The base steel of sheet material shall be of minimum 0.52 mm Base	2,771.00	sqm	1043.89	2892619.19

	<p>Metal Thickness (BMT) substrate and 0.6 mm Total Painted Thickness (TPT), coated with hot-dipped Zincolume alloy coating (i.e. 55% Al, 43.4% Zinc, 1.6% Si) AZ200 (i.e. minimum of 200 g per Sqm Al-Zn alloy coating mass total on both sides) having yield strength of 550MPa conforms to IS15961 and factory painted and oven baked with total 35 micron paint DFT confirms to IS15965- class 3. On exposed surface of the sheet shall be having 20-micron DFT of HDCS exterior quality paint system (free from Lead and heavy metals) not leaner than SDP (Super Durable Polyester) paint over 5-micron DFT corrosion inhibitive polyester primer and on reverse side of sheet shall have 5-micron DFT polyester coat over 5-micron corrosion inhibitive polyester primer. The paint system shall be HIGH DURABLE COATED SYSTEM (not leaner than SDP) or equivalent for Corrosive C4 environment for long term durability. The roof's product should be dust proof and GRIHA or IGBC GreenPro certified Product. The steel manufacturer shall provide an Environmentforal Product Declaration (EPD) to the Central Warehousing Corporation, ensuring transparency in the material's environmental impact. The coated steel finish shall be free from defects and shall provide branding on back side with product details such as thickness, grade, coating mass, date, mfg. name and CWC.</p> <p>The steel manufacturers test certificate for the chemical and mechanical properties of steel must be approved by the concerned engineer authorised by Engineer-in-charge prior to installation. Material Warranty: Manufacturer through Contractor shall provide a written warranty 20 yrs against perforation of metal roof panels due to corrosion under normal weather and atmospheric conditions and 12 yrs exterior paint film warranty against film cracking, peeling and color fading for roof and wall panels from coated steel supplier. The color panels shall not fade (Delta E) more than 6 in light color, not more than 9 in intermediate colors and not more than 12 in dark color, confirms to IS 15965:2012. Warranty shall be signed by both the metal roof system manufacturer and the contractor.</p> <p>Weather-tightness warranty: Contractor shall provide a written weather-tightness warranty for a maximum of 3 years against leaks in roof panels, arising out of or caused by ordinary wear and tear under normal weather and atmospheric conditions.</p>				
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6	MR6	Providing and fixing colour coated galvalume sheets roofing accessories (Make-TATA/JSW), 0.60 mm total panted thickness (TPT) with base matal thickness and painting specification and laying/screwing specifications as that of the cladding/roof sheet material as in above item and material yield strength 550 MPa, galvalume AZ-150 GSM (both side inclusive) : Matching Profile ridge in RAL 9002. (upto 900mm).	69.00	metre	763.47	52679.43
7	MR7	Providing and fixing colour coated galvalume sheets roofing accessories (Make-TATA/JSW), 0.60 mm total panted thickness (TPT) with base matal thickness and painting specification and laying/screwing specifications as that of the cladding/roof sheet material as in above item and material yield strength 550 MPa, galvalume AZ-150 GSM (both side inclusive) : in RAL 9002/9007 based on the location : Edge /corner/trim Flashing/ Apron (Upto 600mm).	342.00	metre	706.49	241619.58
8	MR8	Supply & Fixing of 2mm thick Polycarbonate sheet, having length, width and profile in accordance with those of adjoining main cladding/ roofing sheets based on the locations by fixing using 40µm zinc coated, Hex head M6 50 mm long self-drilling screw with washer and 19 x 2.5mm stitching screw as per pattern approved by Engineer-in-charge. All screws should be sealed with PU sealant to avoid leakage in case of expansion/contraction. excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	44.00	Sqm	2,329.56	102500.64
9	MR-9	Providing and laying factory made chamfered edge Cement Concrete paver blocks in Docking roads , parking bays etc of rectangular/dumbell shape as directed by Engineer in charge and in grade M40 and thickness of 100 mm made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.	1,237.00	sqm	2,422.31	2996397.47
10	MR-10	Preparing the detail Fabrication drawings, detail connection designs , getting it approved from CWC , Supply, manufacturing, fabrication, painting and erection of Pre-Engineering building system with high tensile steel of grade E350 in framed structural steel works of columns, beams,girders, rafter, jack beams etc made of				

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		<p>built-up sections connecting with the plates (E350 grade) &amp; bolts of grade 8.8 (connecting bolts) and grade 4.6 (for anchor bolts) including secondary members in cold formed sections, sheet runners, roof purlins and including bracings in tubular sections of grade YST 310 etc. The work includes all activities like shop cutting &amp; welding, primer coat, painting, hoisting, fixing in position as per drawings and Technical Specifications. Finishing works includes surface preparation by shot blasting followed by a coat of approved epoxy zinc phosphate primer and top coat of Epoxy paint (total DFT not less than 105 micron) all complete as per approved structural drawings. Steel material shall be confirming IS-2062 and tender specification. The rate vaild for all works in scope like supply , Fabrication &amp; erection of foundation holding down bolts, base plates, PEB structural portal frames made with the steel columns &amp; rafter including their connecting plates &amp; nut,washers , bolts, stiffeners, intermediate bracings &amp; Lacings etc, sheet runners &amp; roof purlins , sag rods (of grade Fe 250), guard bars, canopies, Framing of opening for Rolling shutters &amp; Louvers , all steel works complete as per Direction of Engineer in charge and Drawings &amp; specifications .</p> <p>For paymnet purpose , weight of Structural steel in Base plate,PEB portal frames, Connecting plates, holding down and connecting /anchor bolts with washers etc , sag rod,bracing, sheet runners,purlins etc shall be measured based on weight erected as per approved drawing and measured as per IS 1200.Part 8.</p> <p>No site fabrication shall be allowed. Final finshing touch up coat at site shall be done without any extra payment to ensure uniform finish.</p>				
	a	<p>Pre- engineered building systems as above. Weight shall be measured for the area supplied and erected excluding wastage, welding etc.</p>	59,421.00	Kg	152.69	9072992.49
		<p>Note for item the 70% payment of item rates as tendered shall be released after satisfactorily supply and fabrication of PEB system and stacking of materials in CW campus as per instruction of engineer in charge along with submission of Third party Lab Test reports duly supported with manufacturer test reports and Indemnity Bond. Balance payment shall be done after satisfactorily installation/erection of PEB</p>				0

		Structure as directed by Engineer in charge tendered shall be released after satisfactorily supply and stacking of materials in CW campus as per instruction of engineer in charge along with submission of Third party Lab Test reports duly supported with manufacturer test reports and Indemnity Bond. Balance payment shall be done after satisfactorily installation/erection of PEB Structure as directed by Engineer in charge				
11	MR-13	Supply & Fixing of 200mm depth square shape Downtake pipe made with 0.60mm thick coated galvalume sheets having yield strength 550 MPa, galvalume AZ-150 GSM (both side inclusive) with regular modified polyester paint and coating of 20-25 micron RMP on exposed surface steel sheet.	215.00	Metre	694.94	149412.1
12	MR-14	Providing and fixing colour coated galvalume sheets roofing accessories (Make-TATA/JSW), 0.60 mm total coated thickness (TCT), material yield strength 350 MPa, galvalume AZ-150 GSM (both side inclusive) with regular modified polyester paint and coating of 20-25 micron rmp on expose surface including primer and 7-10 micron epoxy coating on unexposed surface including primer using stainless steel self drilling/tapping screws of size 6x50 mm with EPDM seal and Stainless steel plain washer complete : Gutter (size 350x450 mm)	207.00	Sqm	3,120.06	319299.57
13	MR-15	Supply & Installation of 4.0 mm thick Air Bubble Reflective Insulation fixed with runners and purlins in wall cladding and roof sheeting with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.	2,959.00	Sqm	226.89	671367.51
14	MR-16	Providing and fixing of 0.50 mm thick S-type PPGI Louvers Systems ,100 mm depth, AZ 150 , Tata /JSW sheet ,With SS 304 Grade Mosquito wire mesh with MS Flat Frame in size from 1 to 1.5m as per drawing all around the building.	126.00	Sqm	3,120.06	393127.56
15	MR-20	Control & Construction Joints: Cutting & filling grooves with PU (Shore A Hardness 28 - 45) based sealant of DCP/BASF MasterFlex 474 / Sika/ Fosroc or Equivalent in construction joints & controlled joints top 10 mm of section filled by sealant and below followed backer rod. The rate includes the cost of all ancillary works as required, as per specifications and instructions of engineer in charge	863.00	rmt	184.39	159128.57
16	MR-23	Supplying and fixing of parts for roofing shutters of size 10' x 12' or more in size/clear opening <b>Worm Wheel set &amp; plates</b>	24.00	Each	3,120.06	74881.44

17	MR-24	Gear box	24.00	Each	3,971.03	95304.6
18	MR-25	Anchoring Work	260.00	Nos	131.92	34298.42
19	MR-26	Providing and laying factory made Precast concrete solid blocks of 200 mm thickness of grade M10 made of approved manufacturer in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	140.00	cum	7,657.65	1072071.28
20	MR-27	Providing and laying factory made Precast concrete solid blocks of 200 mm thickness of grade M10 made of approved manufacturer in superstructure above plinth level up to floor V level; Cement mortar 1:6 (1 cement : 6 coarse sand)	207.00	cum	9,810.78	2030830.84
21	MR-28	Making the Architectural Drawings, Plans, Specifications as per local authority Bye Laws for Buildings in Medak through local authority empanelled Architect/Engineers, submitting the plans to local authority for sanction, commencement approvals ,taking the NOC from local departments, Fire Compliances, Fire NOC WHICH EVER IS APPLICABLE , Liaisoning with Authorities for getting the plans sanctioned , release of NOC etc in a time bound manner. CWC will assist in providing the necessary inputs, Architectural Plans, design, owner documents etc for preparing the Submittals/Plans for Local authority.Statutory Fee towards Plan Approvals, NOC, OC etc shall be paid by CWC upon submission of demand documents by Contractor.	1.00	Job		
22	MR-29	Taking the Completion Certificate /Occupancy Certificate from Local authority after completion of Building work.	1.00	Job		
		<b>Total for this schedule (Rs.) =</b>				<b>2,35,58,058.57</b>

**Note:**

(1) \*\*\*\*Contractor Scope as per Item No. XVX of Schedule above includes Lump Sum Provision. Total 1 % of Gross Value of Work (sum of all schedules) as quoted by Contractor will be withheld from Contractor Dues and will be released to Contractor only upon completion of Contractor Scope of work by Contractor, receipt of Approvals from Authorities as described in Item no. 21

SCHEDULE OF QUANTITY (SCHEDULE-II)

(2) \*\*\*\*\* Contractor Scope as per Item No.XVXI of BOQ includes Lump Sum Provision. Total 0.5 % of Gross Value of Works (sum of all schedules) as quoted by Contractor will be withheld from Contractor final Dues and will be released to Contractor only upon completion of Contractor Scope of work by Contractor and receipt of Certificates from Authorities as described in Item no. 22.

### **SCHEDULE OF QUANTITY (SCHEDULE-III)**

**Name of Work: - Construction of PEB Godown of 15608 sqft & 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair**

<b>Schedule of Quantity</b>						
<b>Electrical DSR-2022 items</b>						
<b>Sr. No.</b>	<b>DSR Ref</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
		<b>Conduit &amp; wiring</b>				
1		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
1a	1.21.2	25 mm	Meter	730	145	1,05,850.00
2		Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/PVC conduit as required.				
2a	1.17.3	3 x 1.5 sq. mm	Meter	368	95	34,960.00
2b	1.17.5	5 x 1.5 sq. mm	Meter	227	155	35,185.00
2c	1.17.12	3 x 2.5 sq. mm	Meter	12	137	1,644.00
2d	1.17.21	3 x 4 sq. mm	Meter	123	206	25,338.00
		<b>Ancillaries</b>				
3	1.33	Supply and fixing 3 pin, 5 Amp ceiling rose on the existing junction box/wooden block including connections etc. as required.	Each	88	87	7,656.00
		<b>MCB Boxes</b>				

4		Supplying and fixing following way, horizontal type three pole and neutrall, sheet steel, MCB distribution board, 415 V, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required.(But without MCB/RCCB/Isolator)				
4a	2.4.1	4 way (4+12), Double Door	Each	1	4091	4,091.00
5		Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
5a	2.3.2	8 way, double door	Each	2	2573	5,146.00
5b	2.3.4	16 way, double door	Each	1	3141	3,141.00
6		Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 KA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the exisitng MCB DB complete with connec,tions, etsting and commissioning, etc. as required.				
6a	2.10.1	Single Pole	Each	26	256	6,656.00
6b	2.10.2	Single Pole and neutral	Each	3	599	1,797.00
6c	2.10.3	Double Pole	Each	3	656	1,968.00
6d	2.10.5	Triple Pole and Neutral	Each	1	1228	1,228.00
7	2.11	Supplying and fixing single pole blanking plate in the exisitng MCB DB complete etc. as required.	Each	6	13	78.00

8	2.19	Supplying and fixing 20 A, 240 V SPN Industrial type socket outlet, with 02 and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.	Each	3	2590	7,770.00
		<b>Cabling work</b>				
9		Supplying and laying of following size DWC HDPE Pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930 Part II complete with fitting and cutting, jointing, etc, direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc. complete as required.				
9a	14.16.1	63 mm dia. (OD-63 mm & ID-51 mm nominal)	Meter	48	247	11,856.00
9b	14.16.2	90 mm dia. (OD-90 mm & ID-76 mm nominal)	Meter	25	292	7,300.00
10		Laying of one number PVC Insulated and PVC sheathed/ XLPE powe cable of 1.1 KV grade of following size in the exisitng RCC/HUME/Metal pipe as required.				
10a	7.5.1	Upto 35 sq. mm	Meter	98	37	3,626.00
11		Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed/XLPE aluminium conductor cable of 1.1 KV Grade as required.				
11a	9.1.33	4 x 16 sq. mm	Each	2	309	618.00
11b	9.1.34	4 x 25 sq. mm	Each	2	315	630.00
		<b>Earthing</b>				

12	DSR E&M 2022 5.4	Earthing with G.I. earth plate 600X600X6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc with charcoal/coke and salt as reqd.	Set	3	7472	14,944.00
13	DSR E&M 2022 5.11	Providing and fixing 25mmX5mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut , bolt, spring, washer excavation and re-filling etc. as reqd.	Meter	15	706	7,060.00
14	DSR E&M 2022 5.15	Providing and fixing 25mmX5mm G.I. strip on surface or in recess for connections etc.as reqd.	Meter	15	244	2,440.00
					<b>Total</b>	<b>2,90,982.00</b>



## **SCHEDULE OF QUANTITY (SCHEDULE-IV)**

**Name of Work: - Construction of PEB Godown of 15608 sqft & 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair**

<b>Schedule of Quantity</b>					
<b>Schedule -IV (Electrical Market Rate)</b>					
<b>Sr. No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
1	Supply and laying of 20 mm dia. Corrugated flexible conduit as required.	Meter	100	30	3,000.00
	<b>Lighting fixtures</b>				
2	Supply, installation, testing & commissioning of 100 Watt rating LED High Bay light fitting made up of pressure die-cast aluminium housing with toughened glass and high powered LED's with secondary optics, IP66 protection having a minimum efficacy of 110 Lumen/watt, cool white and having internal surge protection device on truss of godown with suitable clamping/holding arrangement including wiring the luminaire with 3 core 1.5 sq. mm copper conductor PVC insulated cable etc. complete with accessories including 5mm Dia. steel wire rope, (1/16") Wire Rope Accessory Set, M2 Wire Rope Cable Clip Clamp, M2 Stainless Steel Thimble, 2mm Aluminum Crimping for installation on truss as required as per the instructions of the Engineer-in-Charge. (Make : Bajaj, Havells, Phillips, Crompton, etc.)	Each	15	5936.00	89,040.00
3	Supply and fixing of 50 watt LED Flood light with System Wattage 50W, Luminous flux ( $\pm 10\%$ ) 6,000 lm, Luminaire efficacy 120 lm/W, Correlated Color Temperature 5700K (5665 $\pm$ 355K), Color Rendering Index >70, Maintenance of lumen output 50,000 hrs., Operating Temperature Range -10C to 50C, Input Voltage 120 to 277V AC, Input Frequency 50 Hz, System Current in Amp. @240V AC 0.21A, Power Factor >0.95, THD (@240V) <10%, Built-in Surge protection 4 kV, Ingress Protection IP65, Mechanical impact protection IK07, with complete drive and accessories required to install the light on the wall/ hanged from ceiling as per the instruction of the Engineer-in-charge. (Make : Bajaj, Havells, Phillips, Crompton, etc.)	Each	5	3936.00	19,680.00

4	Supply and fixing of prewired, LED Well Glass Light (40 Watts LED Industrial Lighting), System Wattage : 40W, Luminous flux : 4000 lm, Luminaire efficacy 110 lm/W, Correlated Color Temperature 5665K ±355K, Color Rendering Index >70, Maintenance of lumen output 50,000 hrs. @L70B50, Operating Temperature Range 0C to 50C, Input Voltage 140 to 270V AC, Input Frequency 50 Hz, System Current in Amp. @240V AC 0.192A, Power Factor ≥ 0.95, THD <10%, Ingress Protection IP66, light built driver complete with all accessories including 5mm Dia. steel wire rope, (1/16") Wire Rope Accessory Set, M2 Wire Rope Cable Clip Clamp, M2 Stainless Steel Thimble, 2mm Aluminum Crimping for installation on truss as required as per the instructions of the Engineer-in-Charge. (Make : Bajaj, Havells, Phillips, Crompton, etc.)	Each	18	2871.00	51,678.00
5	Supply, installation, testing and commissioning of 20 Watt LED batten with built-in electronic LED Driver, system efficacy not less than 100 Lumen per Watt, CCT: Cool White including connection with 3 core 1.5 sq. mm FRLS copper conductor flexible cable, supports/clamps and terminal joints etc. as required. Make : Havells/Crompton/ Philips or eq.	Each	50	361.00	18,050.00
	<b>Cabling work</b>				
6	Supply of multi-core armoured aluminium conductor XLPE insulated/ PVC sheathed power cable of 1.1 KV grade conforming to IS-7098 (Part-I) or latest amended of following sizes				
6a	4 x 16 sq. mm	Meter	48	254	12,192.00
6b	4 x 25 sq. mm	Meter	50	312	15,600.00
	<b>High Mast</b>				

7	Supply, installation, testing and commissioning of 25 Meter High Mast, totally hot dip galvanized, continuously tapered polygonal cross section (4/4/3 mm), suitable for wind velocity as per IS 875 Part-3, conforming to BS-EN10-025 in two/three sections, as per enclosed technical specification and consisting of all accessories as per enclosed details- (i) Head Frame (ii) Double movable lantern carriage suitable for 12 Nos. of luminaires in symmetrical arrangement (iii) Double drum winch along with bracket (iv) Stainless steel rope (v) Trailing cable (vi) Foundation Bolts & Nuts (vii) Anchor Plate & Template (viii) Lightning finial & counter weights (if required) (ix) LED type single dome aviation obstruction light (x) Junction box (xi) 1.5/2 HP Integral power tool motor & manual handle, etc.	Each	1	530032.00	5,30,032.00
8	Designing, Manufacturing, supplying, installation, testing and commissioning of MV High Mast control panel made of 14 SWG (2 mm) CRCA Sheet, double door enclosure suitable for outdoor use and internal wired, metal clad, dust, damp and vermin proof, floor standing/ cubical panel board, powder coated with 7-tank treatment, including dismantling of existing feeder panel, complete with following - Incoming - 32 Amp four pole MCB - 'C' curve 10 KA Outgoing - Single pole MCB in each phase Contactor, analog timer for automatic operation Selector switch for manual/ automatic operation selection 3- phase power socket outlet and control switch for motor operation	Each	1	34428.00	34,428.00
9	Supply, installation, testing and commissioning of 240/250 Watt LED flood light made up of powder coated die-cast aluminum housing with toughened glass and high efficiency long life LEDs in PC Lens, luminaire with IP 66 Protection, surge voltage protection, built-in electronic LED Driver, system efficacy > 120 Lumen per Watt, CCT: Cool White including connections to junction box with 3 core 1.5 sq. mm FRLS copper conductor flexible cable etc. as required. Make : Havells Jeta Iris/Crompton/ Bajaj/ Philips or eq.	Each	9	15466.00	1,39,194.00
				<b>Total</b>	<b>9,12,894.00</b>

### **SCHEDULE OF QUANTITY (SCHEDULE-V)**

**Name of Work:** - Construction of PEB Godown of 15608 sqft & 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair

<b>Schedule of Quantity-Fire Fighting</b>						
<b>Sr. No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>	<b>Ref.</b>
1	Designing, supply, installation, testing and commissioning of Fire-fighting system at CW Port Blair					CPWD PAR 2021
	Designing of Wet riser, automatic sprinkler, water curtain, Fire Alarm system, Fire detection system, PA and talk-back system and other ancillary systems as per requirement of NBC-16, CPWD and local Bye-laws including getting statutory approval/recommendation of drawings from local fire department.					
	Supply, installation, testing and commissioning of fire-fighting system as per technical specifications of Fire-fighting system of the tender.					
	Including providing necessary supports to firefighting pipelines in order to mitigate direct load on truss of godown.					
	Obtaining final NOC from Fire Department and handing over the complete fire-fighting system to CWC.					
	All supply and works will be done on EPC basis as per technical conditions of contract complete in all respect. Payment shall be done as per Technical Conditions of Contract on outer to outer wall measurement of Godown building excluding verandaha and any other ancillary infrastructure.	Sqm	1567.40	1800.00	2821320.00	
				<b>Total</b>	<b>28,21,320.00</b>	

**CENTRAL WAREHOUSING CORPORATION  
(A Govt. of India Undertaking)**

**Price Bid  
Schedule-I CIVIL DSR**

<b>Name of Work</b>		<b>Construction of PEB Godown of 15608 sqft &amp; 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair</b>				
<b>NAME OF CONTRACTOR</b>						
Sr.No.	Name of Work	Total Amount as per price schedule (In Rs.)	Quoted rates (Above/Below/At par)	Rate to be quoted in percentage(%)	Quoted % In Words	Quoted amount in figure
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Schedule -I: CIVIL DSR ITEMS	Rs. 3,87,30,402.74				
				<b>TOTAL PRICE=</b>	<b>QUOTED-</b>	
<b>Amount Quoted (In Words)</b>						
<b>Note:</b>	<b>Total CWC estimated Cost for this schedule including labour cess &amp; applicable GST (Rs.) <b>Rs. 5,38,55,445.91</b></b>					

**CENTRAL WAREHOUSING CORPORATION  
(A Govt. of India Undertaking)**

**Price Bid**

**Schedule-II CIVIL MARKET Rate**

<b>Name of Work</b>		<b>Construction of PEB Godown of 15608 sqft &amp; 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair</b>				
<b>NAME OF CONTRACTOR</b>						
Sr.No.	Name of Work	Total Amount as per price schedule (In Rs.)	Quoted rates (Above/Below/At par)	Rate to be quoted in percentage(%)	Quoted % In Words	Quoted amount in figure
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Schedule -II: CIVIL MR ITEMS	<b>Rs. 2,35,58,058.57</b>				-
				<b>TOTAL PRICE=</b>	<b>QUOTED-</b>	
<b>Amount Quoted (In Words)</b>						

<b>Note:</b>	<b>Total CWC estimated Cost for this schedule including labour cess &amp; applicable GST (Rs.) <b>Rs. 2,35,58,058.57</b></b>
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**CENTRAL WAREHOUSING CORPORATION  
(A Govt. of India Undertaking)**

**Price Bid  
Schedule-II ELECTRICAL DSR**

<b>Name of Work</b>		<b>Construction of PEB Godown of 15608 sqft &amp; 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair</b>				
<b>NAME OF CONTRACTOR</b>						
<b>Sr.No.</b>	<b>Name of Work</b>	<b>Total Amount as per price schedule (In Rs.)</b>	<b>Quoted rates (Above/Below/At par)</b>	<b>Rate to be quoted in percentage(%)</b>	<b>Quoted % In Words</b>	<b>Quoted amount in figure</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>
1	Schedule -III ELECTRICAL DSR ITEMS	Rs. 2,90,982.00				-
				<b>TOTAL QUOTED-PRICE=</b>		
<b>Amount Quoted (In Words)</b>						
<b>Note:</b>	<b>Total CWC estimated Cost for this schedule including labour cess &amp; applicable GST (Rs.) <b>Rs. 3,03,238.76</b></b>					

**CENTRAL WAREHOUSING CORPORATION  
(A Govt. of India Undertaking)**

**Price Bid**

**Schedule-II ELECTRICAL MR ITEMS**

<b>Name of Work</b>		<b>Construction of PEB Godown of 15608 sqft &amp; 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair</b>				
<b>NAME OF CONTRACTOR</b>						
<b>Sr.No.</b>	<b>Name of Work</b>	<b>Total Amount as per price schedule (In Rs.)</b>	<b>Quoted rates (Above/Below/At par)</b>	<b>Rate to be quoted in percentage(%)</b>	<b>Quoted % In Words</b>	<b>Quoted amount in figure</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>
1	Schedule -IV: ELECTRICAL MR ITEMS	<b>Rs. 9,12,894.00</b>				
				<b>TOTAL QUOTED-PRICE=</b>		
<b>Amount Quoted (In Words)</b>						
<b>Note:</b>	<b>Total CWC estimated Cost for this schedule including labour cess &amp; applicable GST (Rs.) <b>Rs. 9,12,894.00</b></b>					



**CENTRAL WAREHOUSING CORPORATION  
(A Govt. of India Undertaking)**

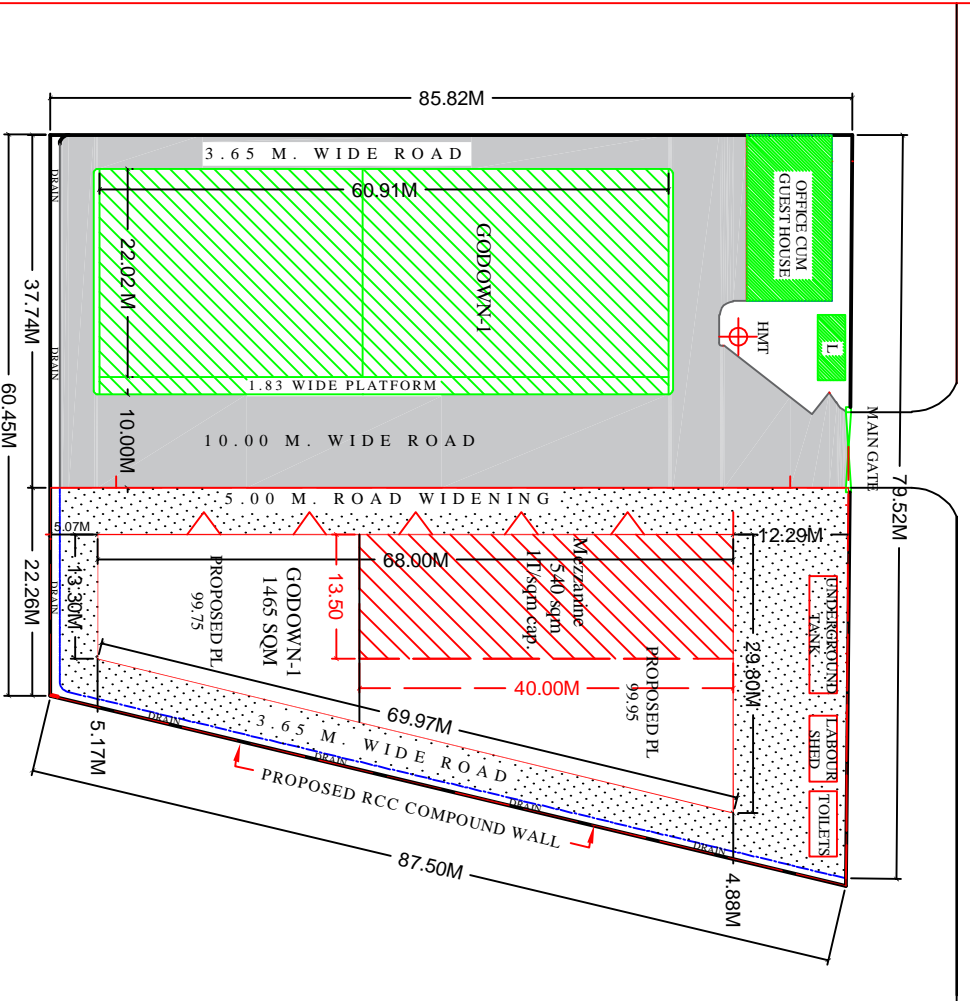
**Price Bid**

**Schedule-V FIREFIGHTING Works**

<b>Name of Work</b>		<b>Construction of PEB Godown of 15608 sqft &amp; 5810 sqft mezzanine Capacity with internal roads, drains, electrification works, etc. for CWC at CW, Port Blair</b>				
<b>NAME OF CONTRACTOR</b>						
<b>Sr.No.</b>	<b>Name of Work</b>	<b>Total Amount as per price schedule (In Rs.)</b>	<b>Quoted rates (Above/Below/At par)</b>	<b>Rate to be quoted in percentage(%)</b>	<b>Quoted % In Words</b>	<b>Quoted amount in figure</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>
1	Schedule-V: FIREFIGHTING ITEM	Rs. 28,21,320.00				-
				<b>TOTAL PRICE=</b>	<b>QUOTED-</b>	
<b>Amount Quoted (In Words)</b>						
<b>Note:</b>	<b>Total CWC estimated Cost for this schedule including labour cess &amp; applicable GST (Rs.) <b>Rs. 39,04,227.26</b></b>					

TO RANGAT

TO PORT BLAIR



1. EXISTING GODDOWNS CONSTRUCTED FROM INCEPTION TO FY 2017-18 SHOWN THUS
2. GODDOWNS WIP OR PLANNED INFY 2021-22 ONWARDS SHOWN THUS
3. BOUNDARY LINE SHOWN THUS
4. ANCHLARKS INCLUDING WEIGH BRIDGE SHOWN THUS
5. EXISTING ROADS SHOWN THUS
6. PROPOSED ROADS SHOWN THUS
7. PROPOSED DRAIN THUS SHOWN

INDEX

S.No.	Name of Centre	CHIEF BLAIR
1	Beater	CHEMNAT
2	Store Union Territory	ANNISLANDS (OT)
3	UT/SEA Road	RURAL
4	Address	Paragang Thaga, Dohyapud
5	Google co-ordinates	11.5969111, 93.67762
6	Nearest Airport	PTWIS/BISS/BLAIR
7	Nearest Railway Station	Port Blair
8	Nearest Highway	NH 4

S.No.	Total Depth of Complex	Value
1	Total Bc Area (Acres)	1.48
2	Actual Ground Coverage (%)	48.43%
3	Permissible Ground Coverage	50
4	Actual FAR	0.49
5	Permissible FAR	1.50

S.No.	Basic Amenities	Year of Construction
1	Existing Covered Storage Capacity	2003
2	Planned Covered Storage Capacity	1450 SQM + Mezzanine 540 sqm (1175sqm)
3	Open Storage area	NIL
4	Office Block	Build-up-YES
5	Weight Bridge	WIP-NO
6	Security Cabin	Build-up-YES
7	Public Toilet	Build-up-PLANNED
8	Labour Shed	Build-up-YES
9	Rain Water Harvesting	RWH-PLANNED
10	High Mast Lighting	HMLT-PLANNED
11	Fire extinguisher & Fire Buckets	PREP-YES
12	State Tank with Pumping Fire Fighting	UGT/PLANNED
13	Boundary Wall with Fencing/ barbed Wire Fencing	6' High- PLANNED
14	CCTV System with Power Backup	YES
15	Internal Roads	POC/PAVER
16	Water Supply	Borewell/Municipal Supply
17	Electricity Connection	YES

CHEKED: - SD - 04/05/21

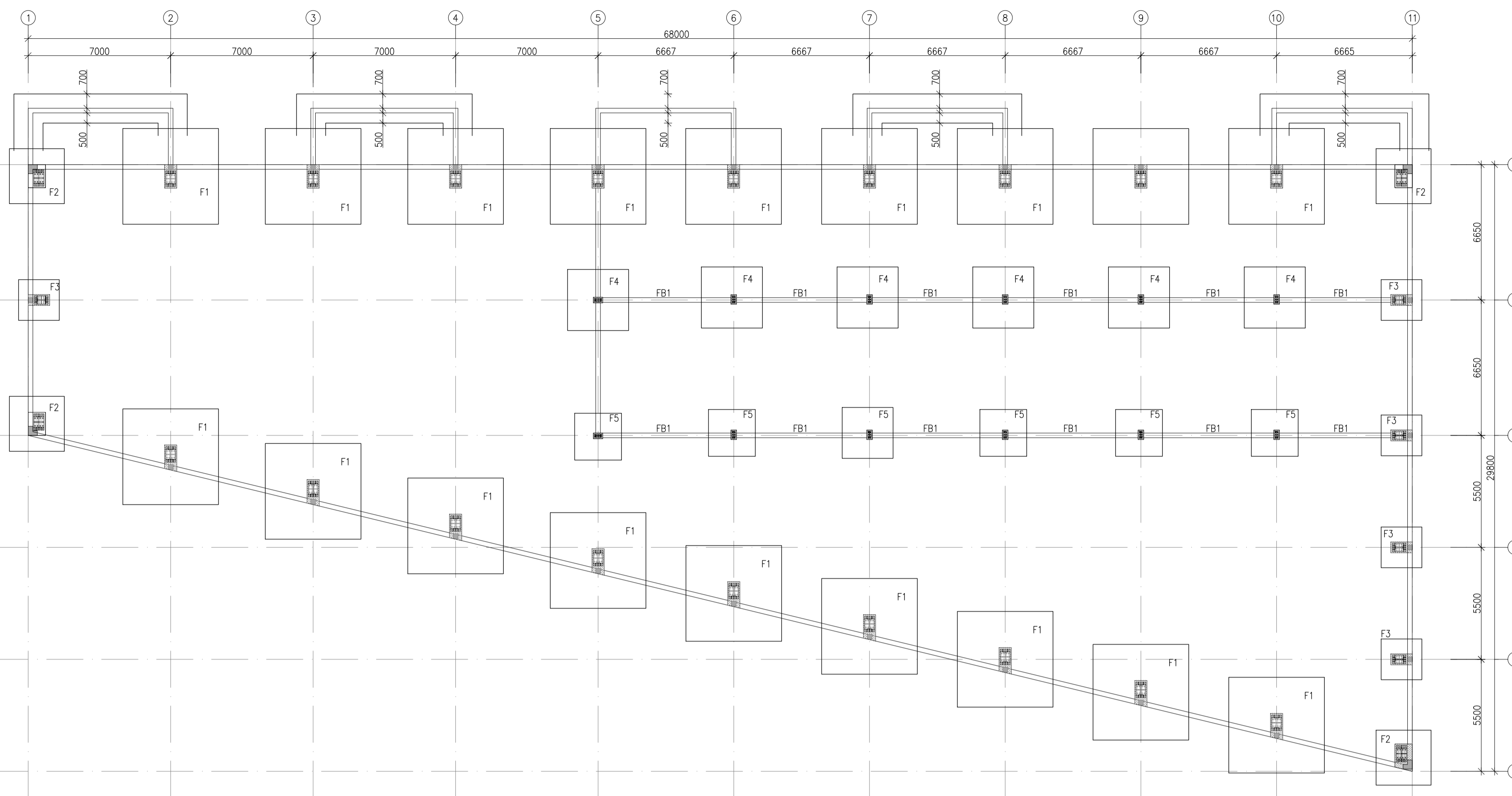
CENTRAL WAREHOUSING CORPORATION  
DRG.NO.CW/CL/OP/4551-AC

LAYOUT PLAN OF CENTRAL WAREHOUSE AT PORT BLAIR (ANN)

EXECUTIVE ENGINEER SUPERINTENDING ENGINEER CHIEF ENGINEER

MAJOR SPECIFICATIONS OF GODDOWNS

No.	Godown Type	Carpet Area (Sq.m)	Capacity (MT)	Plinth Height (m)	Height @ Eaves (m)	Year of Constn.	Dwg No	Roof	Floor	Remarks
1	Conventional	1280.19	1450 + 540 sqm	0.60	5.48	2007	CW/C/P/F/293	AC sheet	CC Floor	GF +
2	Prefab	1450	Mezzanine	1.20	6.50	2024		Galvalume sheet	CC Floor	Mezzanine



FTG. MK'D	DIMENSIONS		THICKNESS		BOTTOM REINFORCEMENT		TOP REINFORCEMENT	
	LX	LY	T1	T2	AX	AY	AX	AY
F1	4700	4700	650	-	#16@125c/c	#16@125c/c	-	-
F2	2700	2700	425	-	#12@125c/c	#12@125c/c	-	-
F3	2000	2000	400	-	#12@125c/c	#12@125c/c	-	-
F4	3000	3000	550	-	#12@100c/c	#12@100c/c	-	-
F5	2300	2300	350	-	#12@100c/c	#12@100c/c	-	-

**NOTES.**

G1. DO NOT SCALE ANY DIMENSIONS FOLLOW ONLY WRITTEN DIMENSIONS.

G2. ALL STRUCTURAL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWINGS. ANY DISCREPANCY OR AMBIGUITY IN EITHER SHOULD BE BROUGHT TO THE NOTICE OF THE DEPARTMENT.

G3. CONCRETE OF GRADE M30 TO BE USED

**CONCRETE**

C1. ALL RCC. WORK SHALL BE CARRIED OUT AS PER IS-456-2000.

**REINFORCING STEEL**

R1. ALL REINFORCING STEEL WILL BE OF TESTED QUALITY CONFORMING TO IS:1786 LATEST.

R2. REFER TO HIGH YIELD STRENGTH DEFORMED BARS WITH CHARACTERISTIC STRENGTH 500N/sq. mm. (Fe 500D)

R3. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE

- \* FOUNDATION 75 mm ALL AROUND
- \* PEDESTAL 40 mm ALL AROUND
- \* COLUMNS 40 mm ALL AROUND
- \* PLINTH BEAMS 25 mm ALL AROUND

R4. LAP LENGTH TO BE 50xØ OF BAR MINIMUM.

R5. SLAB BARS IN SHORTER DIRECTION, SHALL BE BELOW BARS FOR THE LONGER DIRECTION

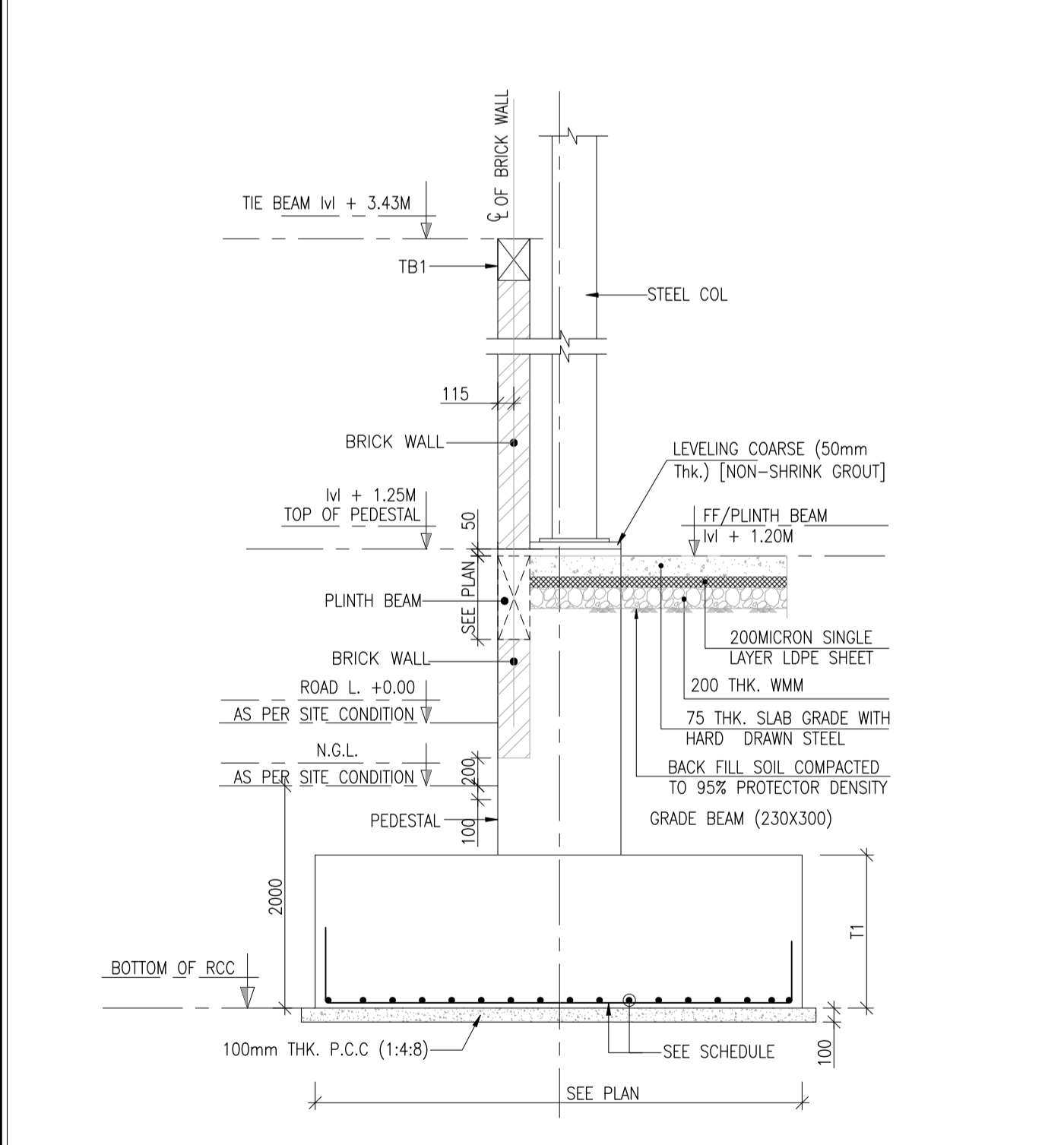
**PROJECT SPECIFIC**

P1. THE NET SAFE BEARING CAPACITY IS TAKEN AS 18.95T/m<sup>2</sup>. AT A DEPTH OF 2.0M FROM NGL. AS PROVIDED BY CWC.

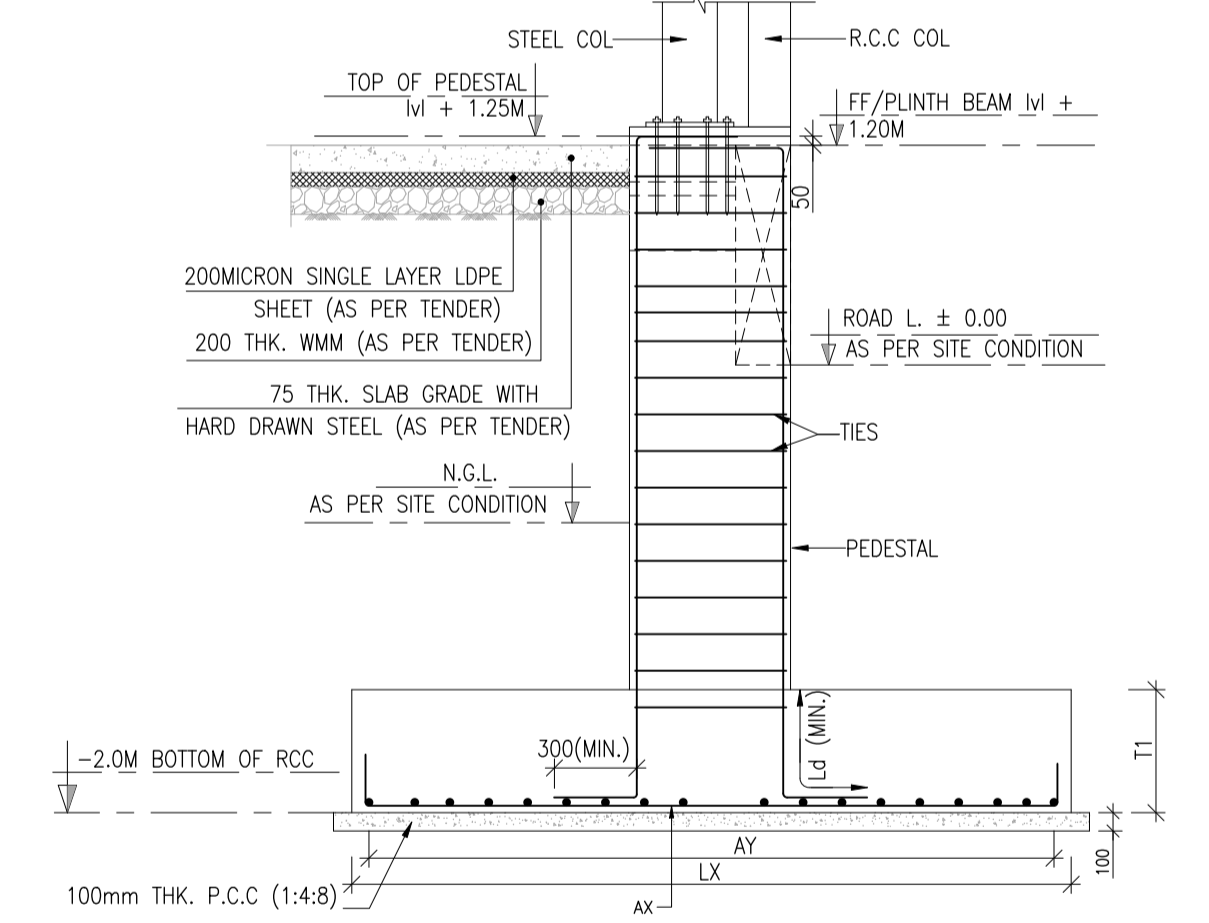
**LEGEND**

PB = PLINTH BEAM  
F = FOOTING

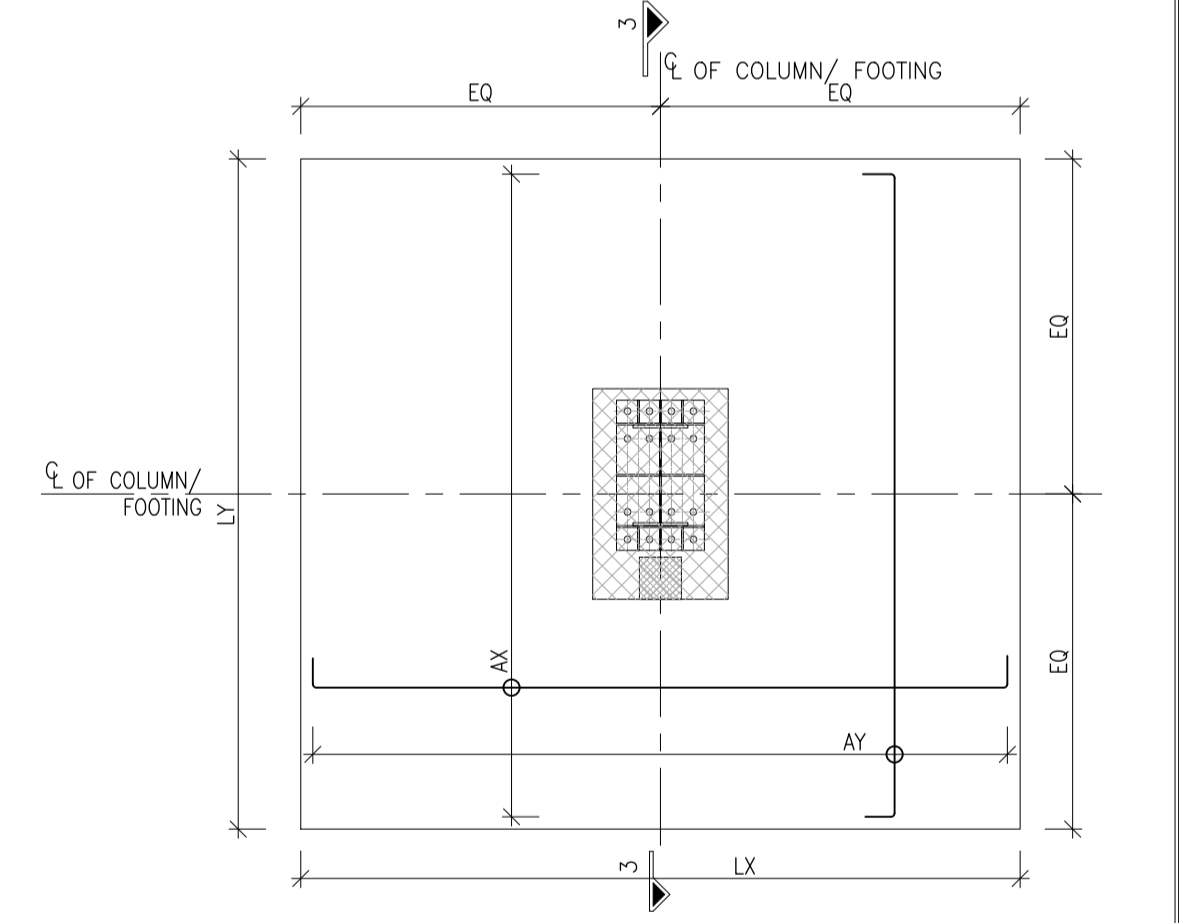
01 FOUNDATION PLAN  
SCALE 1:150



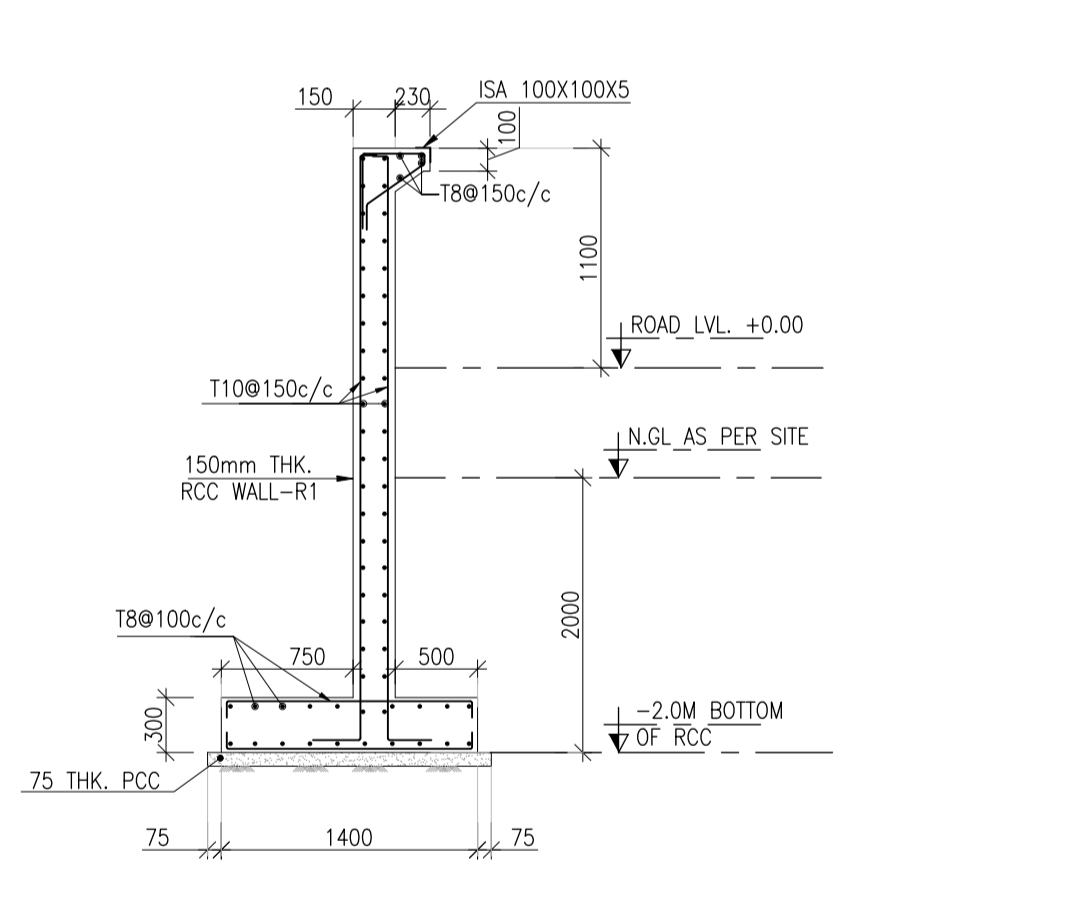
02 TYPICAL WALL/COLUMN SECTION  
SCALE 1:40 (SECTION 2-2)



03 SECTION 3-3  
SCALE 1:40



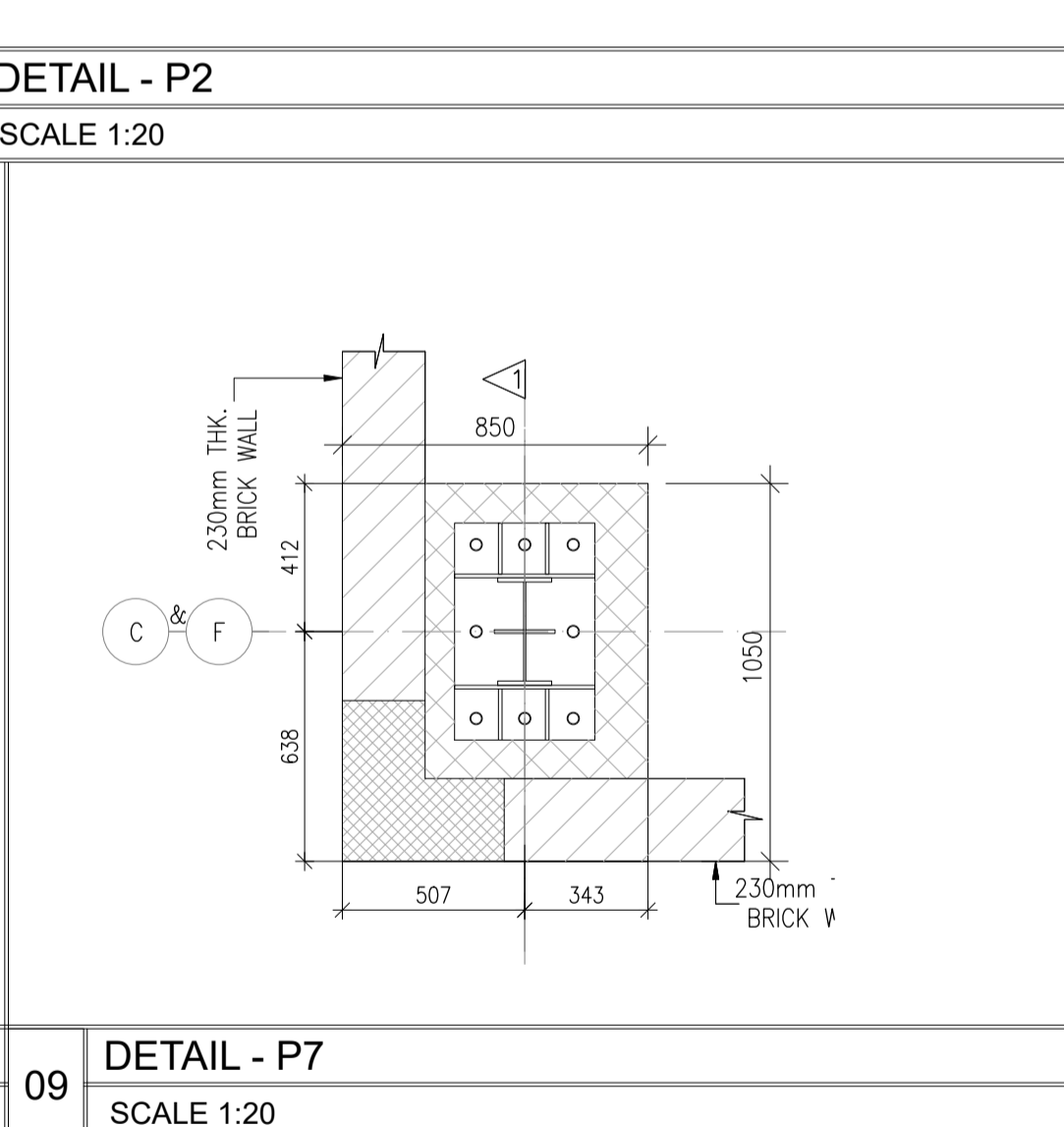
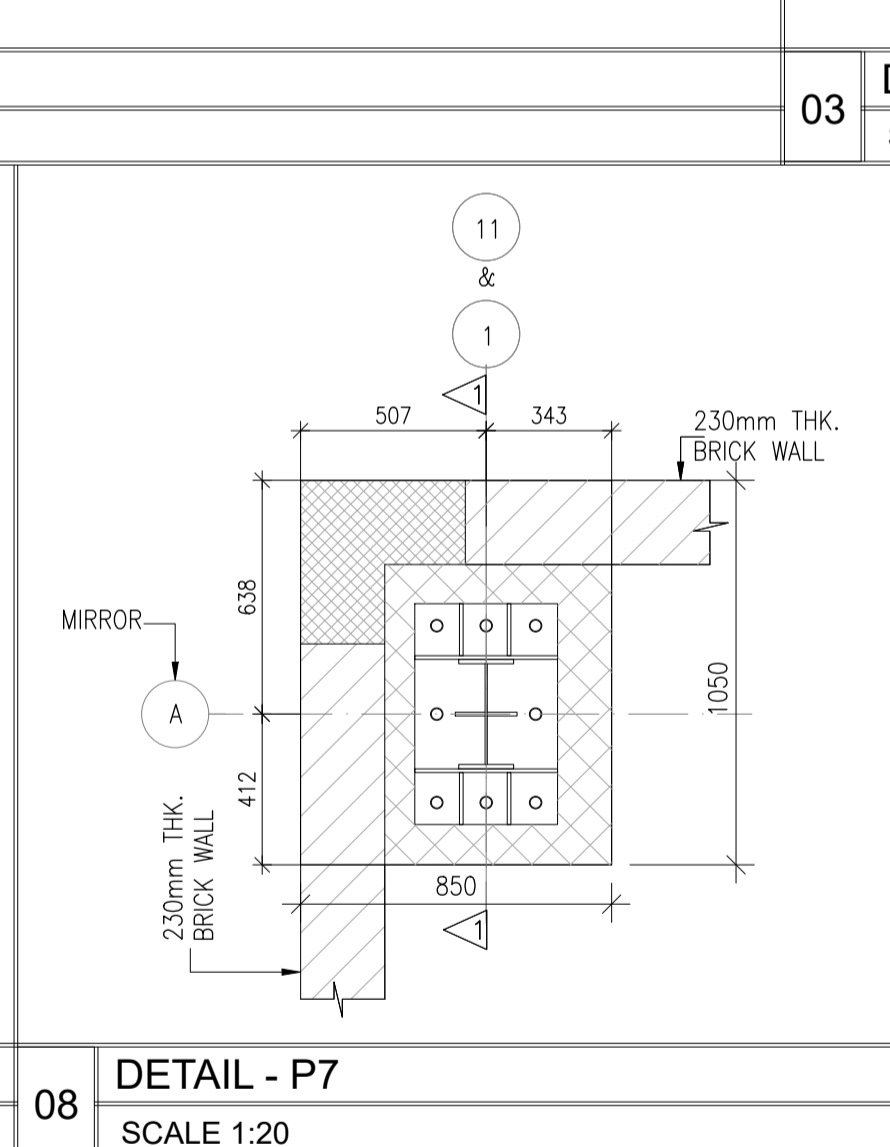
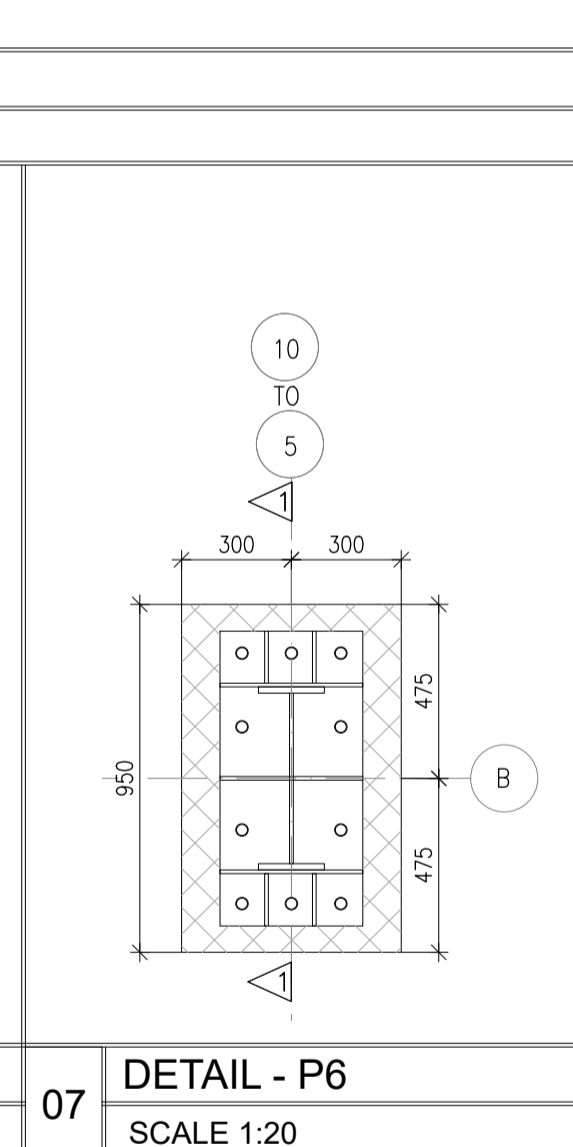
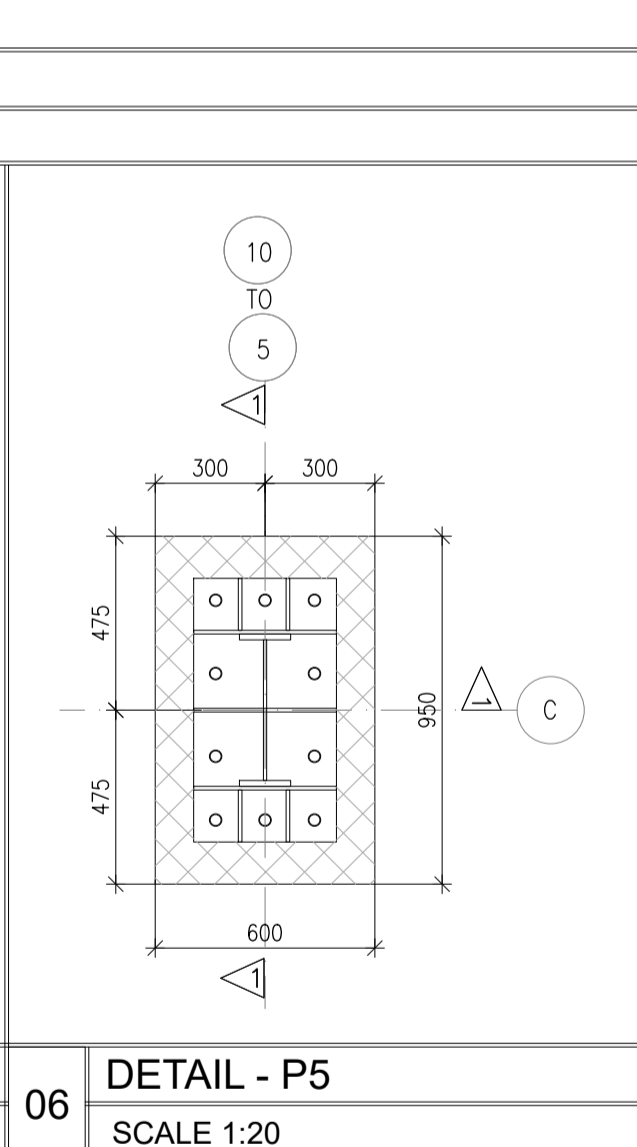
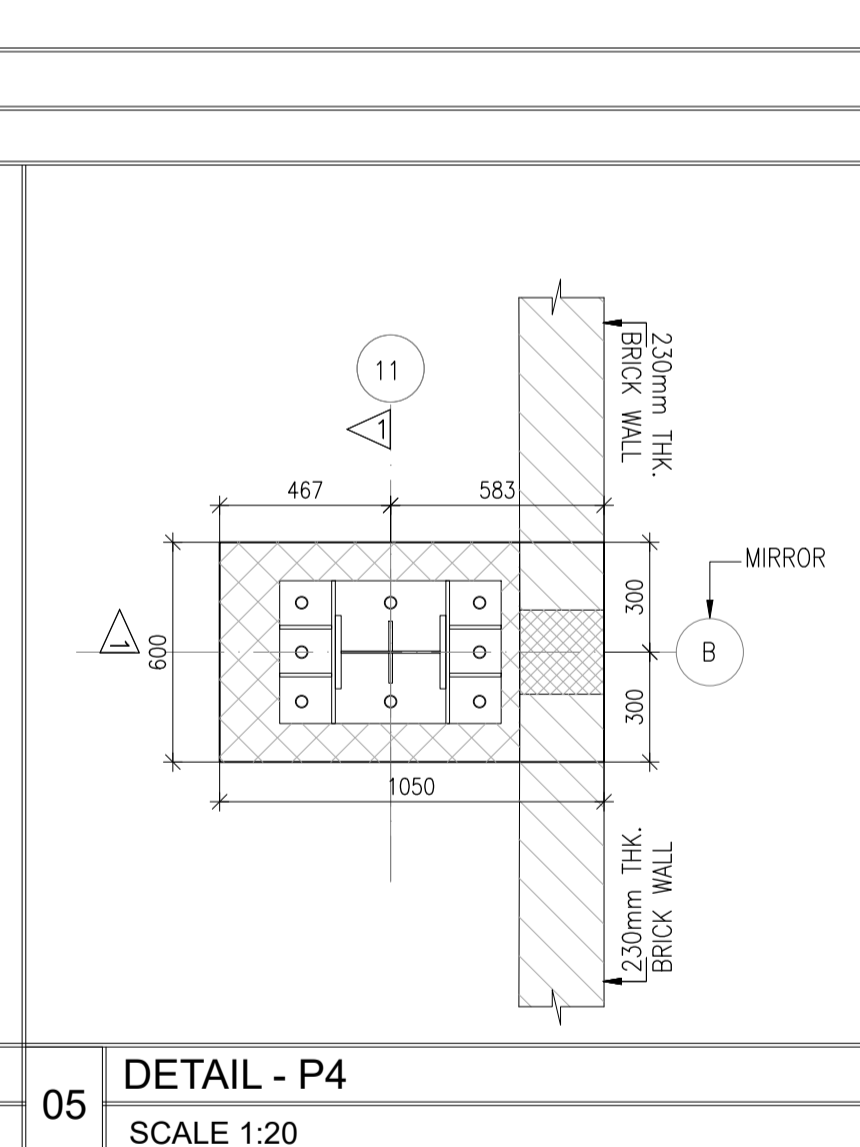
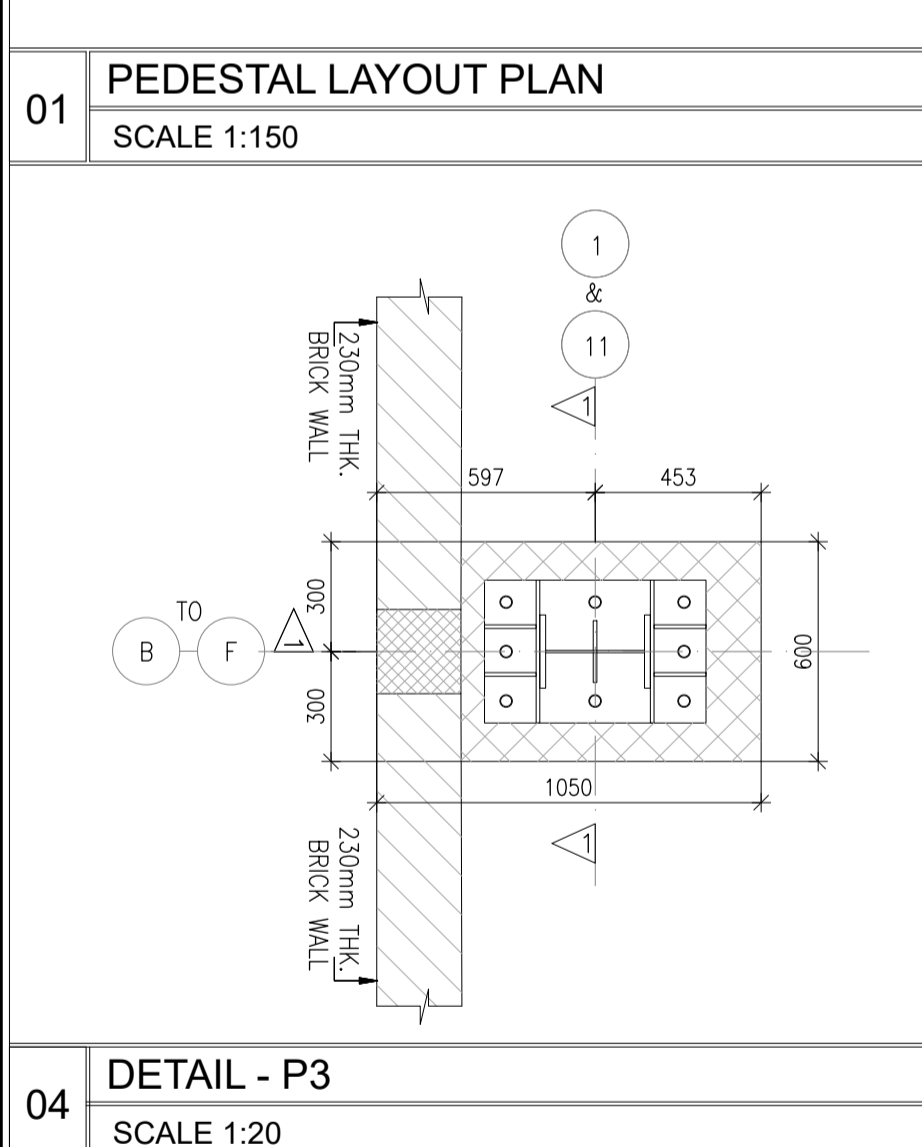
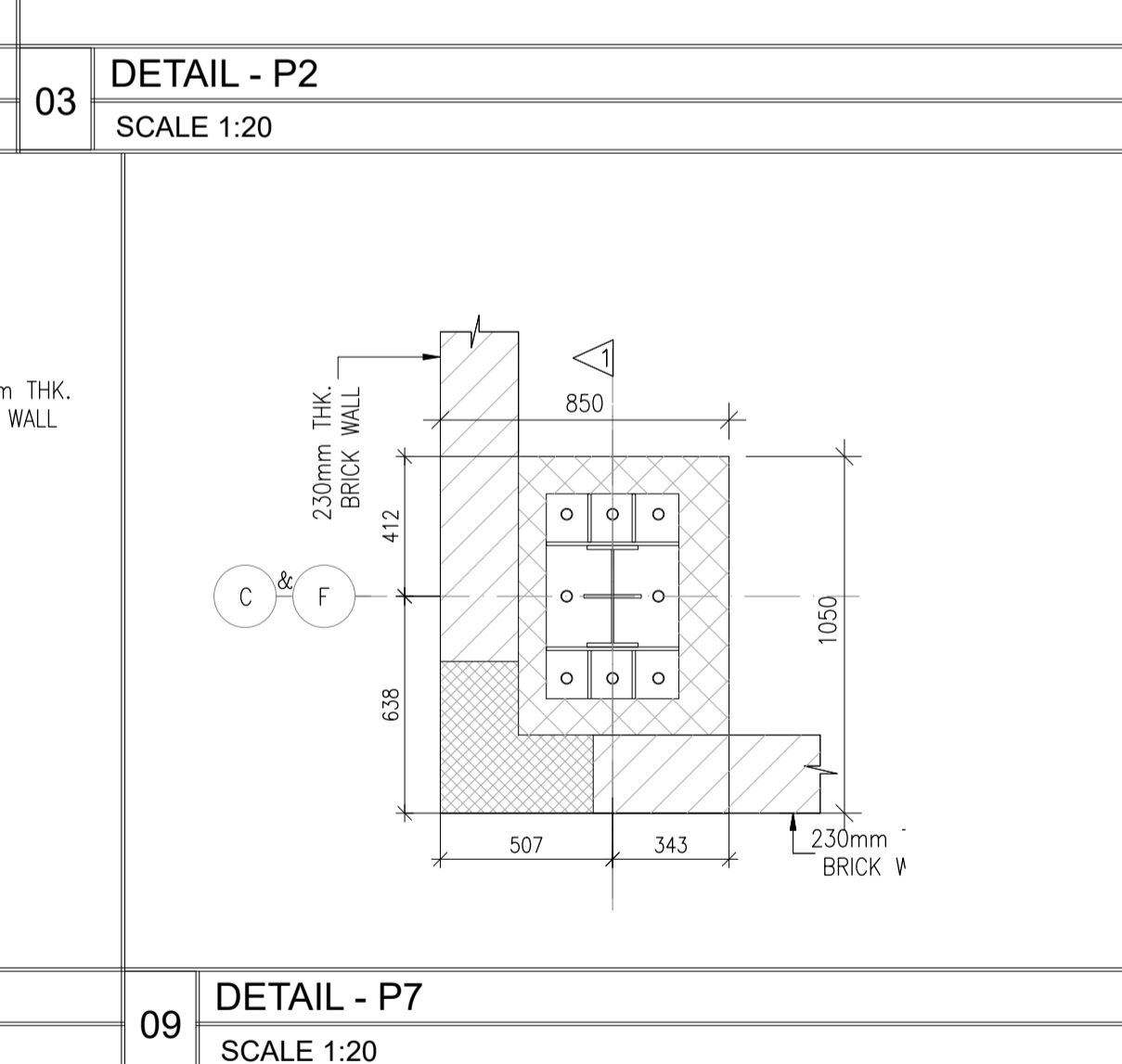
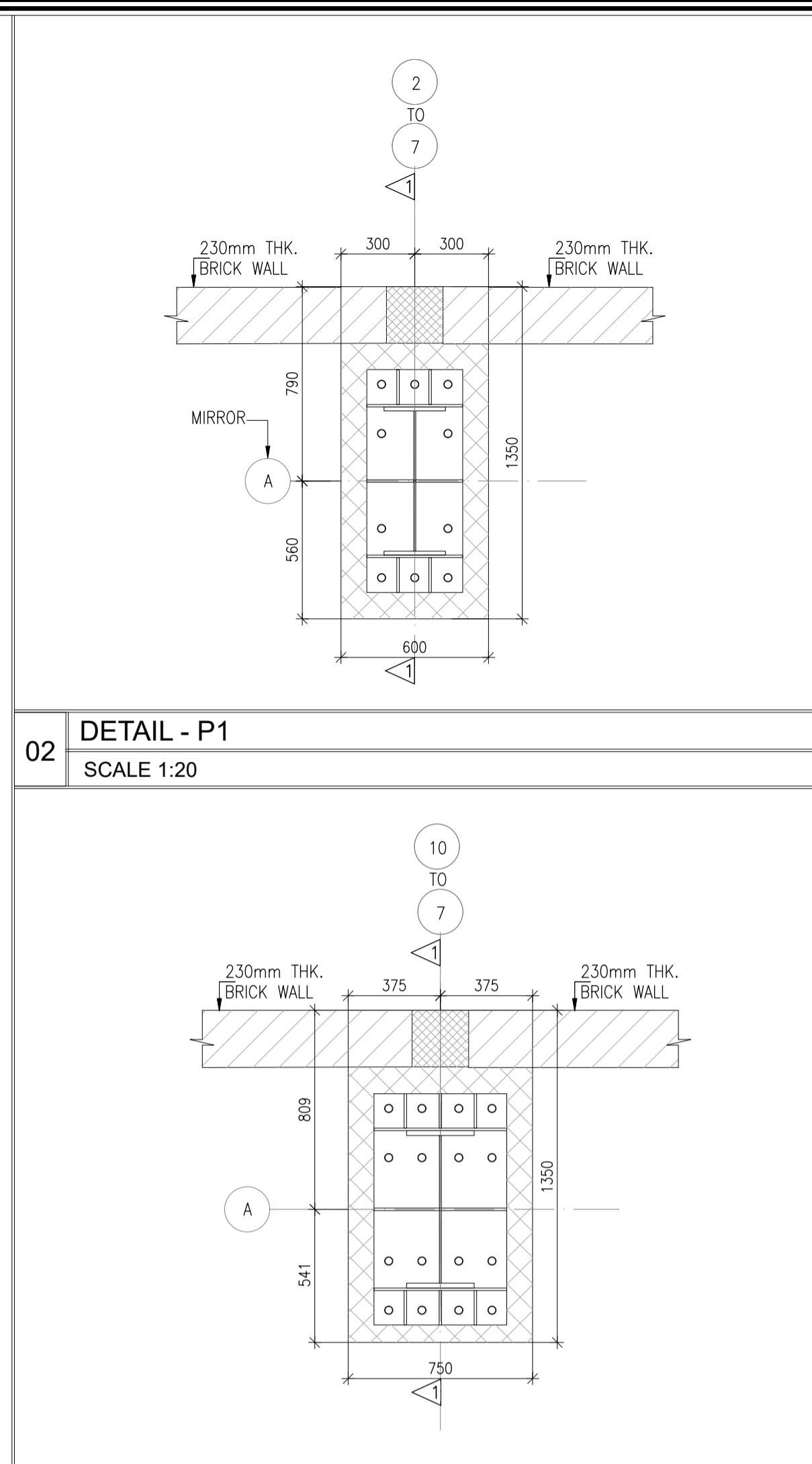
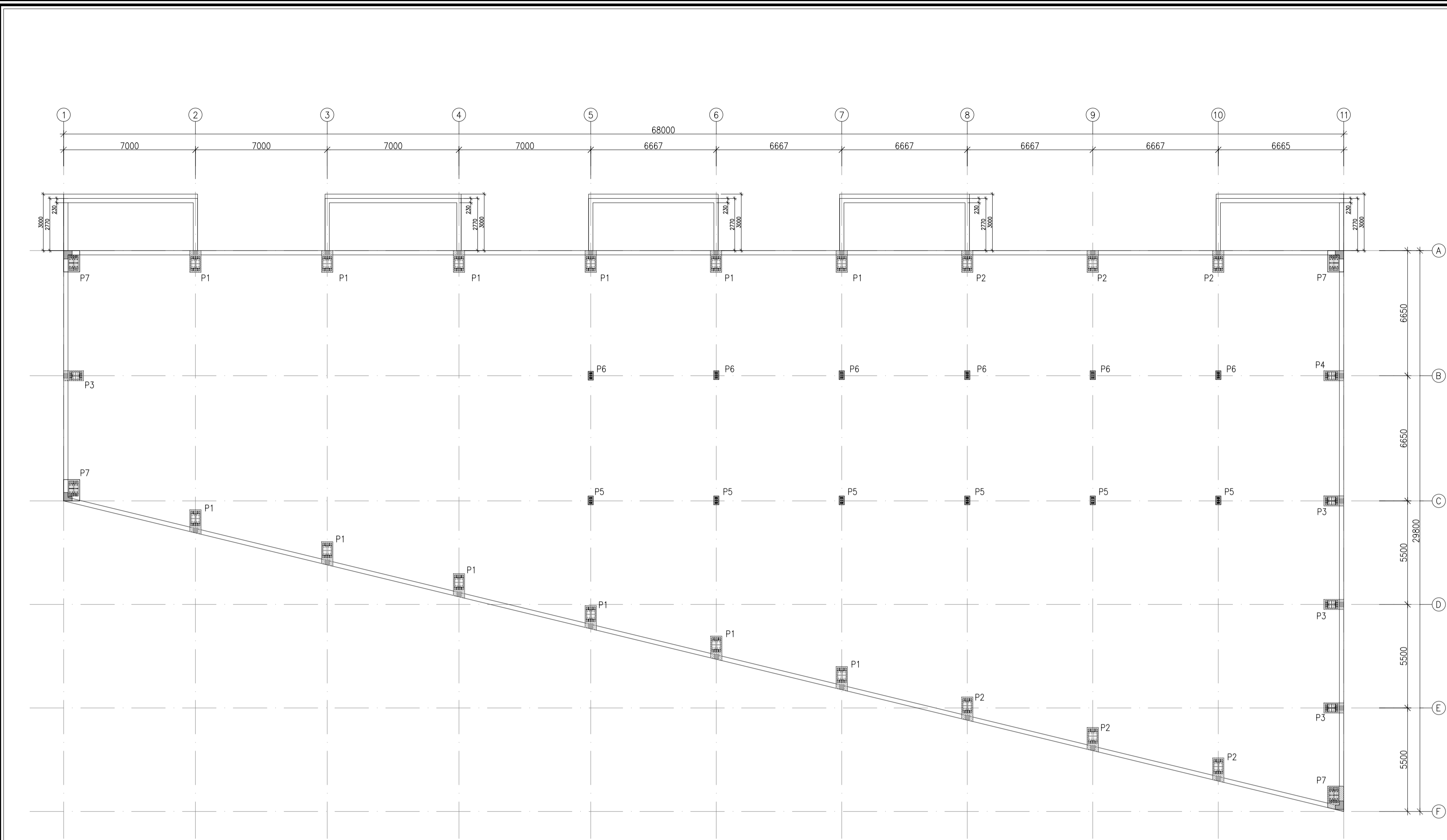
04 TYPICAL FOOTING PLAN  
SCALE 1:40



05 TYP. PLATFORM RCC WALL FOOTING  
SCALE 1:40

ARCHITECT:	ISSUED FOR -	CONSULTANTS AND PROJECT MANAGERS	CLIENT	STRUCTURAL CONSULTANT :	Checked By:	DATE	PROJECT:
	APPROVAL	INFORMATION	CONSTRUCTION		Approved By:	07.03.2024	DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Central Warehousing Corporation	Date:		DRAWING TITLE: FOUNDATION PLAN
REV.No.	Date	Description	Drawn	Chkd	Appd.		SCALE: AS SHOWN
							STATUS: INITIAL DRAWING
							DRG. NO.: SS.CWC.PB.F-01
							SIZE : A1
							REV: R0
							S.NO :





**NOTES.**

G1. DO NOT SCALE ANY DIMENSIONS FOLLOW ONLY WRITTEN DIMENSIONS.

G2. ALL STRUCTURAL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWINGS. ANY DISCREPANCY OR AMBIGUITY IN EITHER SHOULD BE BROUGHT TO THE NOTICE OF THE DEPARTMENT.

G3. CONCRETE OF GRADE M25 TO BE USED

G4. UNLESS MENTIONED OTHERWISE CEMENT SHALL BE PORTLAND POZZOLANA CEMENT CONFORMING TO IS:1489

G5. STEEL SHALL BE HIGH YIELD STRENGTH DEFORMED BARS CONFORMING TO IS:1786 AND SHALL BE OF GRADE Fe500D

G6. 'T' DENOTES TMT BAR.

G7. ALL EARTH SURFACES UPON OR AGAINST WHICH CONCRETE IS TO BE PLACED SHALL BE WELL COMPACTED AND SHOULD BE FREE FROM STANDING WATER, MUD AND DEBRIS

**CONCRETE**

C1. ALL RCC. WORK SHALL BE CARRIED OUT AS PER IS-456-2000.

**REINFORCING STEEL**

R1. ALL REINFORCING STEEL WILL BE OF TESTED QUALITY CONFORMING TO IS:1786 LATEST.

R2. REFER TO HIGH YIELD STRENGTH DEFORMED BARS WITH CHARACTERISTIC STRENGTH 500N/sq. mm. (Fe 500D)

R3. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE

- \* FOUNDATION 75 mm ALL AROUND
- \* PEDESTAL 50 mm ALL AROUND
- \* COLUMNS 40 mm ALL AROUND
- \* PLINTH BEAMS 25 mm ALL AROUND

R4. LAP LENGTH TO BE 50xØA OF BAR MINIMUM.

R5. SLAB BARS IN SHORTER DIRECTION, SHALL BE BELOW BARS FOR THE LONGER DIRECTION

**PROJECT SPECIFIC**

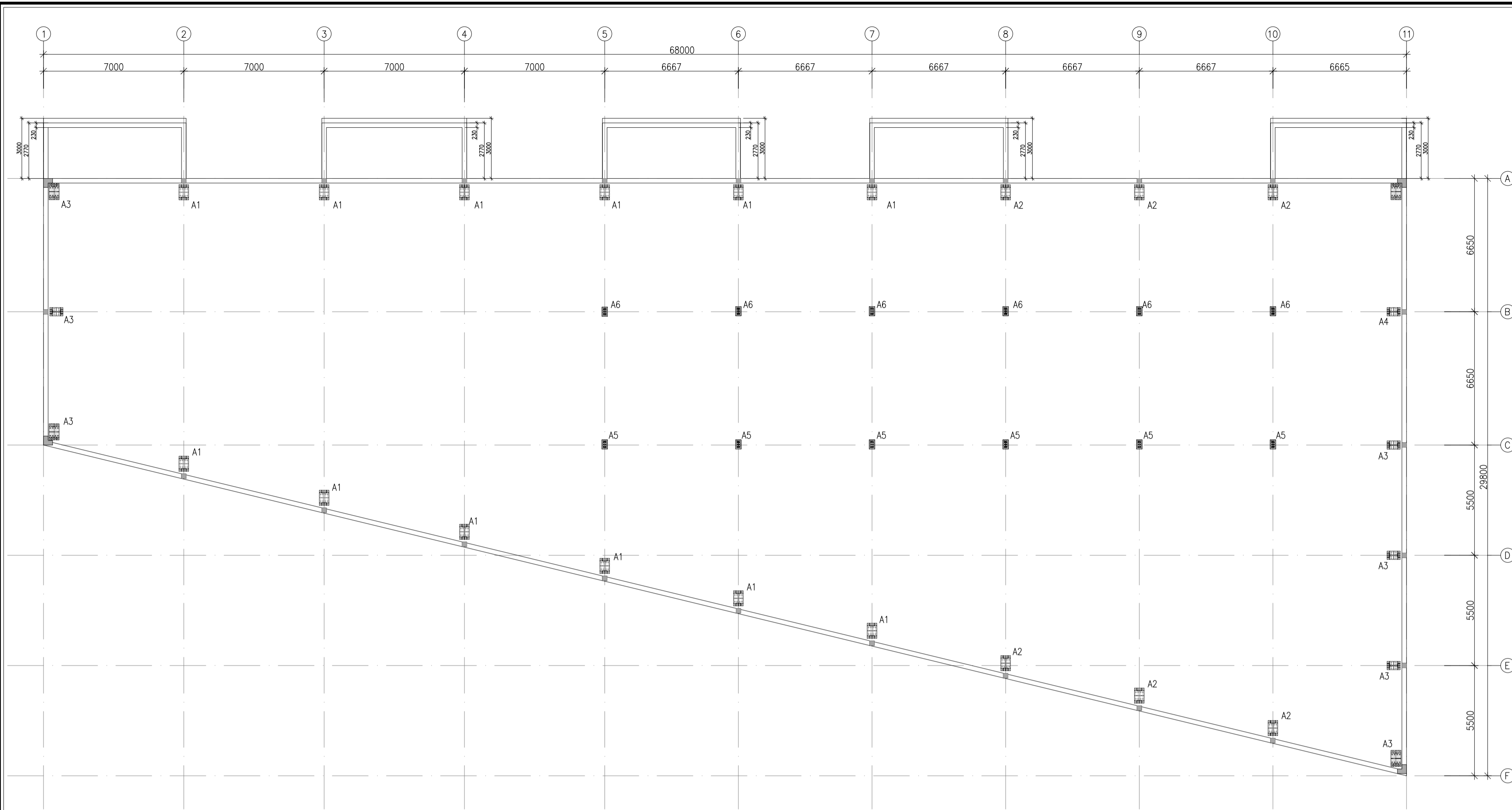
P1. THE NET SAFE BEARING CAPACITY IS TAKEN AS 18.95T/m<sup>2</sup>. AT A DEPTH OF 2.0M FROM NGL. AS PROVIDED BY CWC.

**LEGEND**

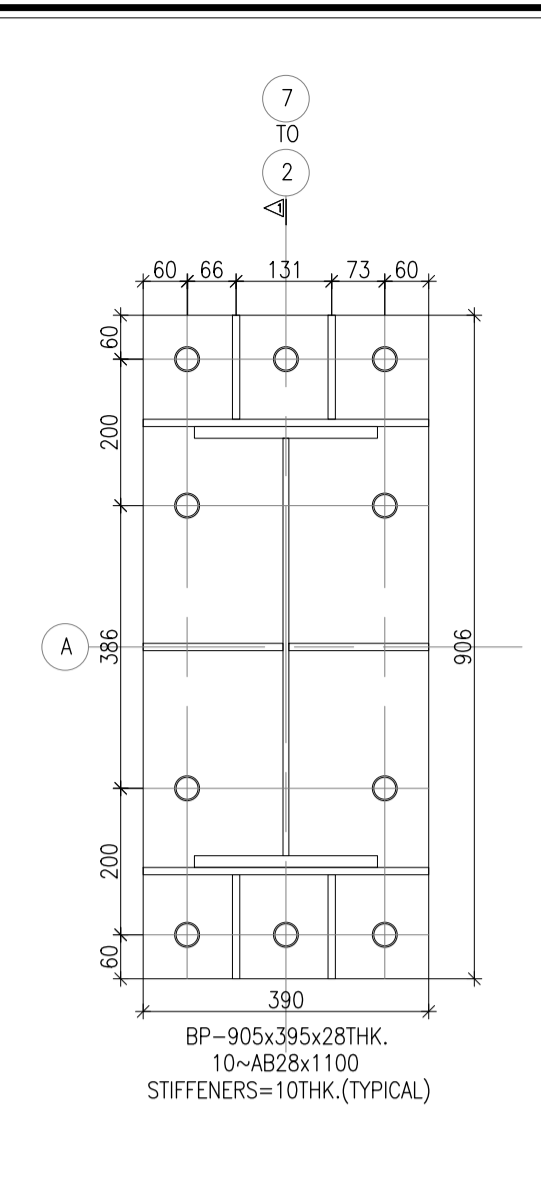
PB = PLINTH BEAM  
 PC = PILE CAP  
 TB = TIE BEAM  
 LB = LINTEL BEAM

04	DETAIL - P3 SCALE 1:20	05	DETAIL - P4 SCALE 1:20	06	DETAIL - P5 SCALE 1:20	07	DETAIL - P6 SCALE 1:20	08	DETAIL - P7 SCALE 1:20	09	DETAIL - P7 SCALE 1:20
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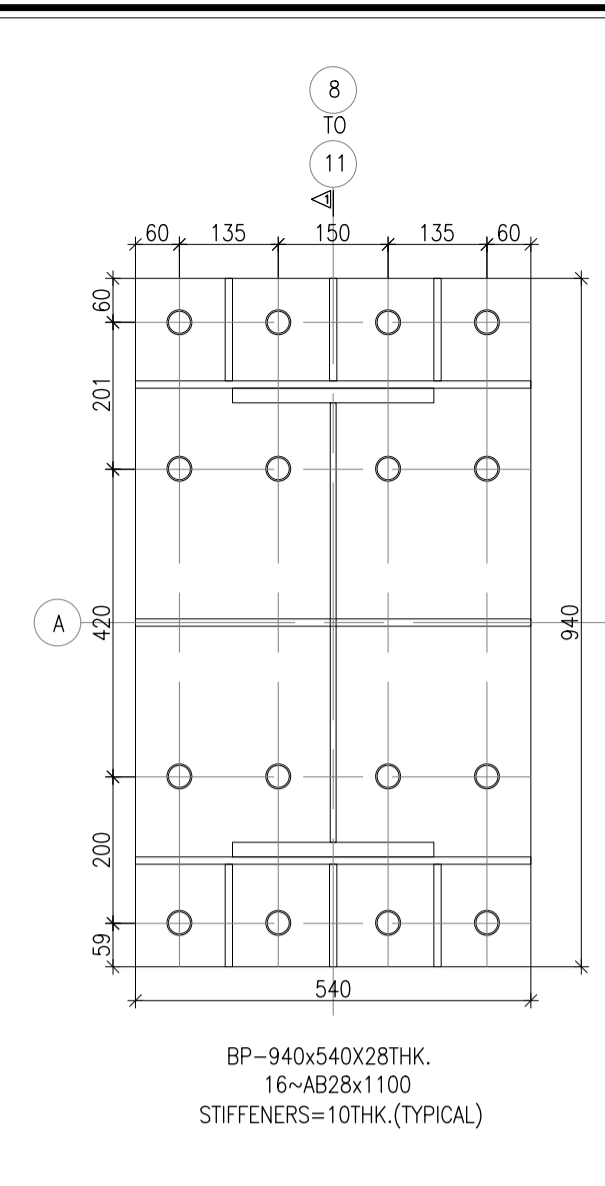
ARCHITECT:	ISSUED FOR -:	CONSULTANTS AND PROJECT MANAGERS:	CLIENT:	STRUCTURAL CONSULTANT:	Checked By:	DATE:	PROJECT:
	APPROVAL	INFORMATION	CONSTRUCTION	Central Warehousing Corporation	AS	07.03.2024	DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)
REV.No.	Date	Description	Drawn	Chkd	Appd.	APPROVED BY:	DRAWING TITLE:
						AS SHOWN	PEDESTAL LAYOUT PLAN AND DETAILS
						INITIAL DRAWING	DRG. NO.:
							SS.CWC.PB.P-02
							SIZE : A1
							REV: R0
							S.NO :



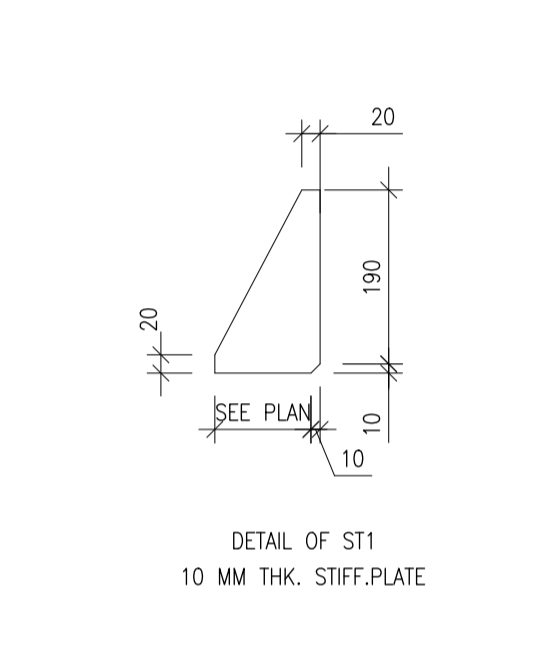
**01 ANCHOR BOLTS LAYOUT PLAN**  
SCALE 1:150



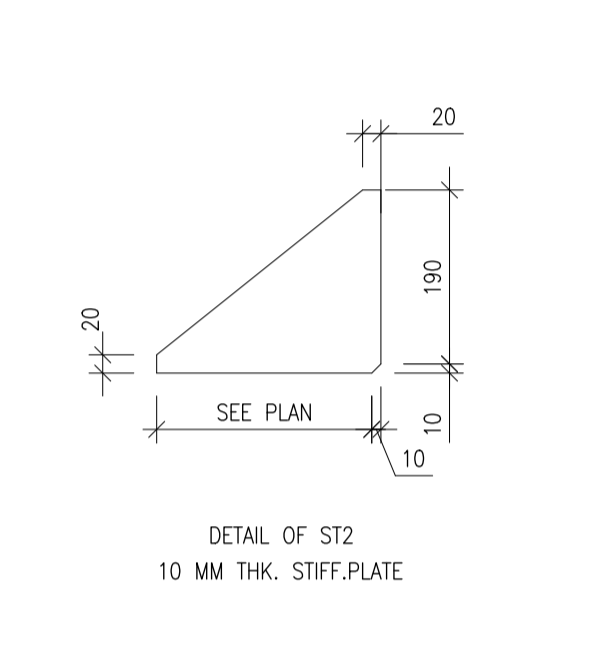
**02 DETAIL - A1**  
SCALE 1:10



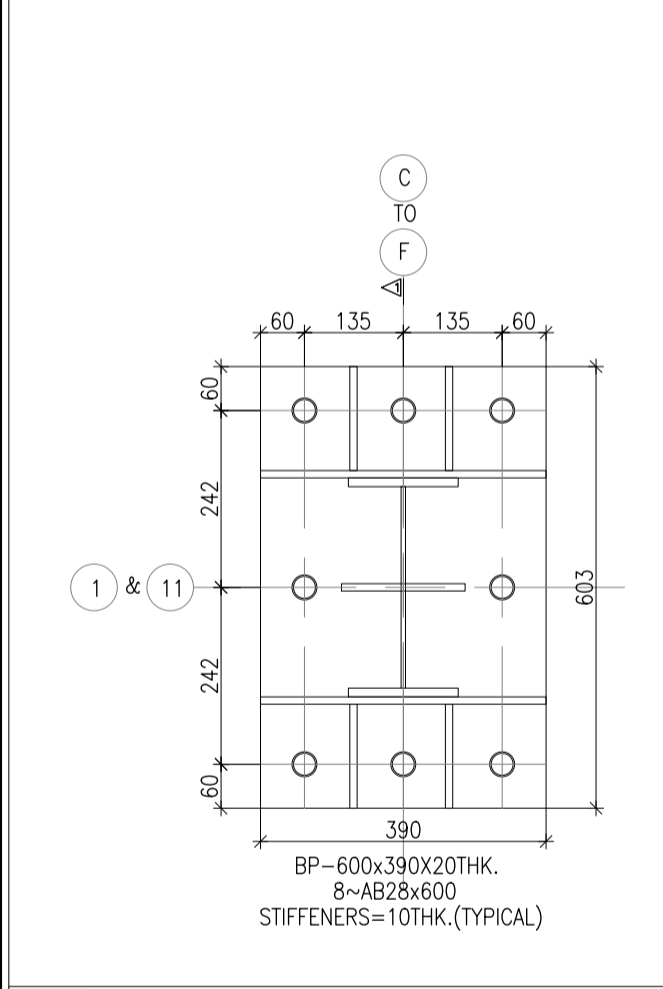
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SCALE 1:10



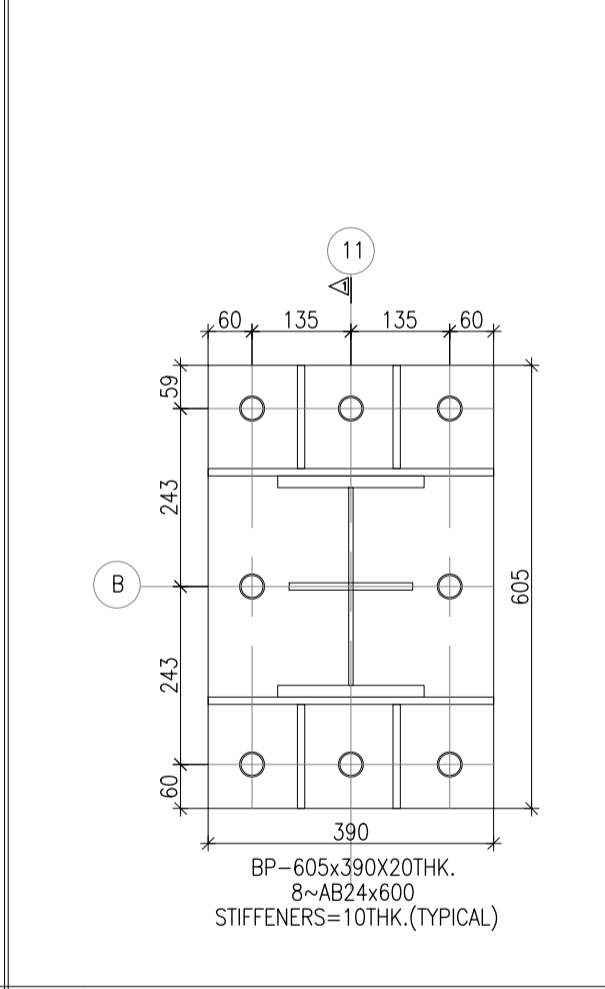
**04 DETAIL - ST1**  
SCALE 1:10



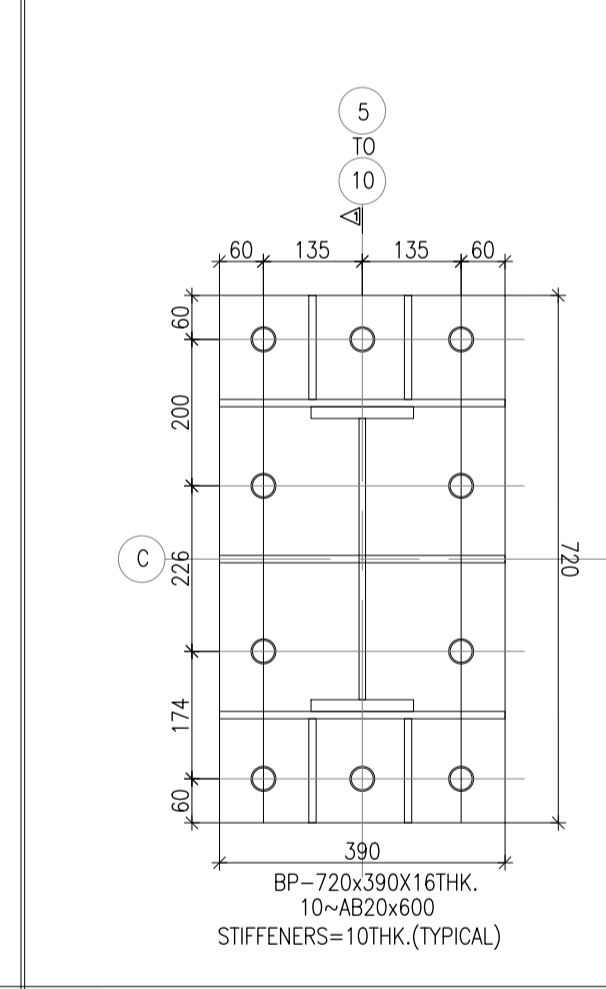
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SCALE 1:10



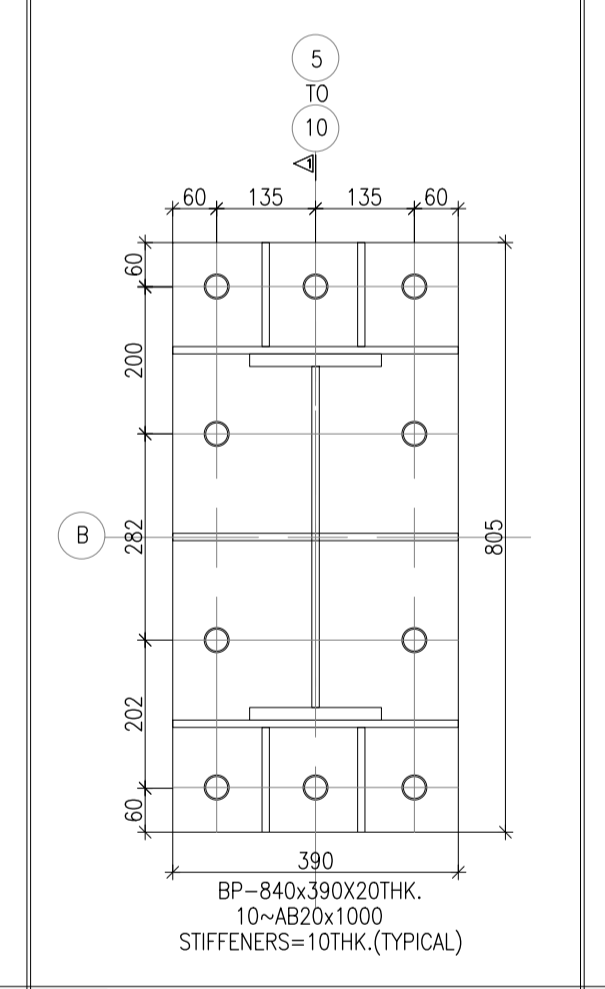
**06 DETAIL - A3**  
SCALE 1:10



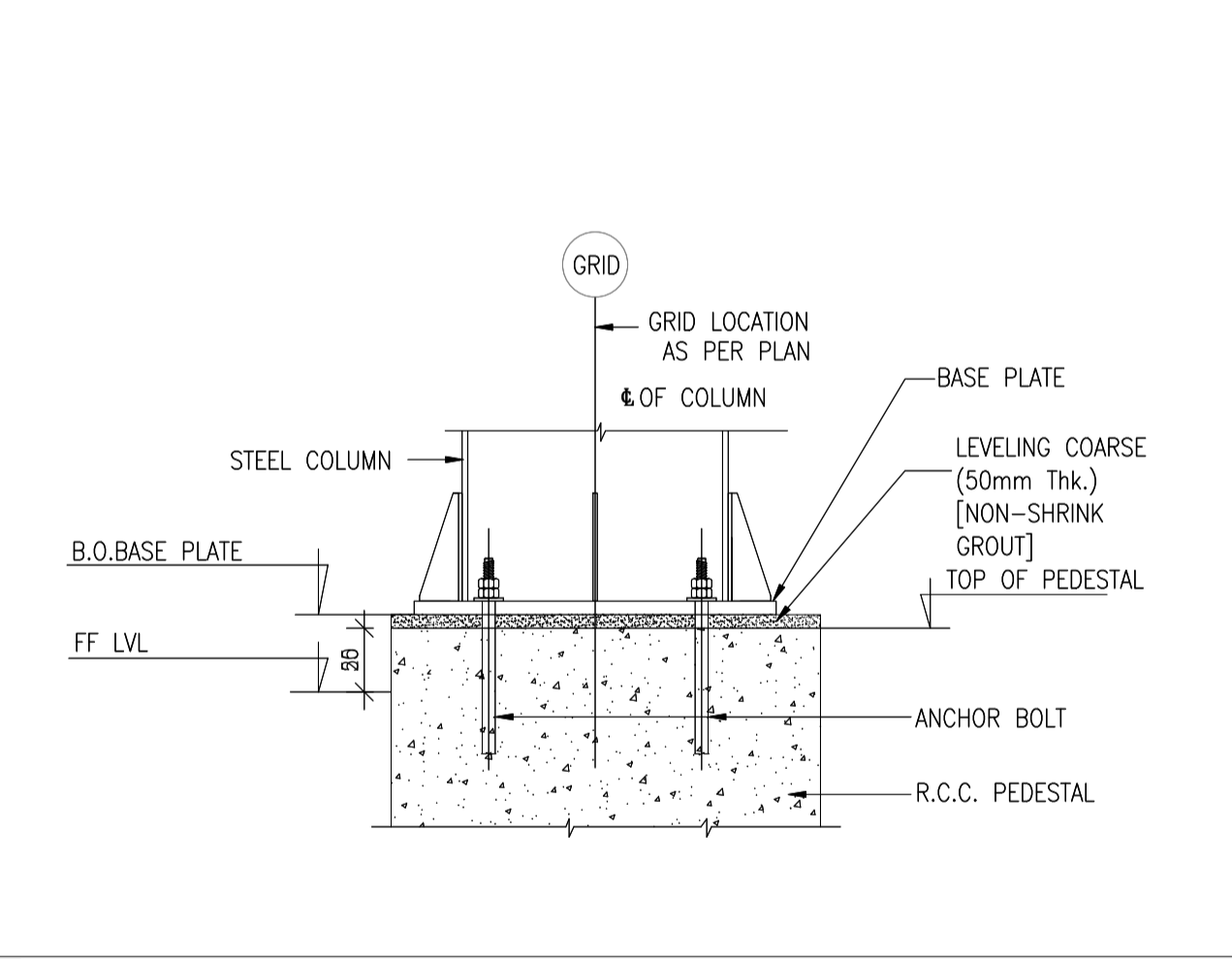
**07 DETAIL - A4**  
SCALE 1:10



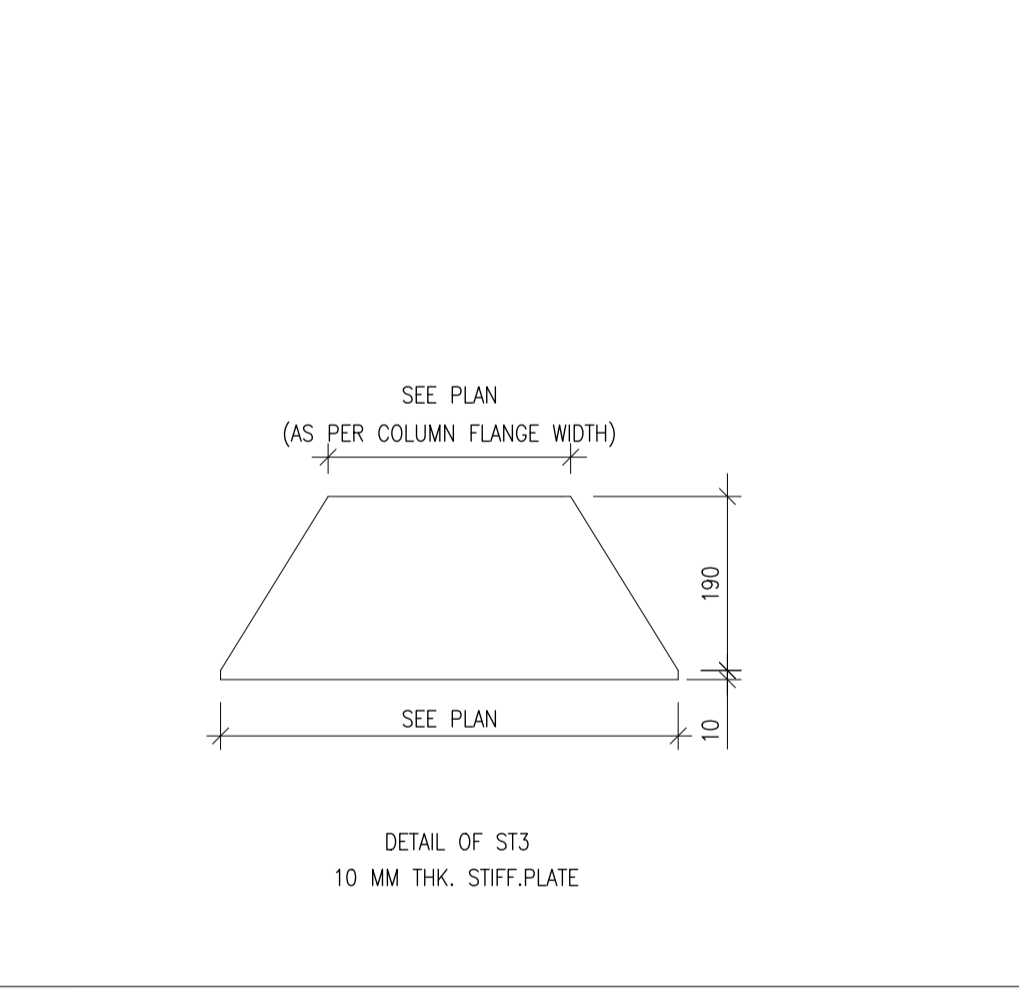
**08 DETAIL - A5**  
SCALE 1:10



**09 DETAIL - A6**  
SCALE 1:10



**10 SECTION-1-1**  
SCALE 1:20



**11 DETAIL - ST3**  
SCALE 1:20

**ANCHOR BOLT SCHEDULE**

S.NO.	BOLT DESCRIPTION	BASEPLATE	DIA.	H	h	R	T
A1	28x1100	BP-905x395x28THK.	28	1100	128	96	150
A2	28x1100	BP-600x390x20THK.	28	1100	128	96	150
A3	28x600	BP-690x500x20THK.	20	600	128	96	150
A4	24x600	BP-605x390x20THK.	24	600	128	96	150
A5	20x600	BP-720x390x16THK.	20	600	128	96	150
A6	20x1000	BP-840x390x20THK.	20	1000	128	96	150

- NOTES.**
- ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
  - MINIMUM PLATE THICKNESS TO BE TAKEN AS 6mm.
  - ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.

- GRADE SPECIFICATIONS OF MATERIALS**
- A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-**
- ALL BUILT UP SECTION & PLATES WITH GRADE-A HAVING A MINIMUM YIELD STRESS OF 350 MPA, CONFORMING TO IS:2062:2011
  - ALL HOLLOW SECTIONS WITH GRADE-A HAVING A MINIMUM YIELD STRESS OF 310 MPA, CONFORMING TO IS:2062:2011
- B) FOR COLD FORMED SECTIONS :-**
- PURLINS AND SIDE CLADDING RUNNERS ONLY SHALL BE MADE FROM COLD FORMED SECTIONS AND SHALL CONFORM TO IS 2062:2011 GRA WITH MINIMUM YIELD STRENGTH OF 310 MPA
  - ALL X-BRACING MEMBERS OR ROD WITH GRADE-A HAVING A MINIMUM YIELD STRESS OF 250 MPA, CONFORMING TO IS:2062:2011
- C) THREADED FASTENER :-**
- ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE-A) AS PER TENDER SPECIFICATION OF IS:1367 AND CONFORMING TO IS:5624.
  - ALL CONNECTION BOLTS AND NUTS COMPLY WITH IS:1367 AND ALL FIELD CONNECTION BOLTED WITH HIGH STRENGTH FRICTION GRIP (HSFG) BOLTS OF PROPERTY CLASS 8.8.
  - PLAIN WASHERS CONFORMING TO IS:5369.
  - ONLY DTI WASHERS SHALL BE USED WITH HSFG BOLTS.
- D) SAG ROD :-**
- SAG ROD SHALL BE OF GRADE FE250, AS PER TENDER SPECIFICATION

- ANCHOR BOLT NOTES**
- ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE B) OF IS:1367 AND CONFORMING TO IS:5624
  - ALL BASE PLATES SHALL BE OF GRADE E250 (B0).
  - ANCHOR BOLTS SHOULD BE SET ACCURATELY AND HELD IN POSITION BY TEMPLATE BEFORE CASTING TO THE GIVEN DIMENSIONS AND PROJECTION, WITH MAXIMUM DEVIATION OF 5mm. ANCHOR BOLT THREADS SHOULD BE PROTECTED DURING CONCRETING OPERATION, OR THOROUGHLY CLEANED AFTER POURING. ALL TEMPLATES SHOULD BE REMOVED AFTER THE ANCHOR BOLTS ARE SET IN CONCRETE TO FULL STRENGTH.
  - ALL ANCHOR BOLT DIAMETERS ARE IN MILLIMETERS. ANCHOR BOLT PROJECTION MUST BE ACCORDING TO DESIGN AND THREADS TO BE CLEAN.
  - THE INSTALLATION OF ANCHOR BOLTS AND EMBEDDED ITEMS MUST BE DONE IN ACCORDANCE WITH THE CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS OF AISC SECTION 7. ANCHOR BOLTS AND FOUNDATION BOLTS SHALL BE SET FOR MAXIMUM ALLOWABLE TOLERANCES AS:
    - 3mm CENTER TO CENTER OR ANY TWO BOLTS WITHIN AN ANCHOR BOLT GROUP.
    - 6mm CENTER TO CENTER OF ADJACENT ANCHOR BOLT GROUP.
    - ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.
    - MAXIMUM ACCUMULATION OF 6mm PER 30 MTRS. ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.
    - 6mm FROM CENTER OF ANY ANCHOR BOLT GROUP TO BE ESTABLISHED COLUMN LINE THROUGH THAT GROUP.
  - THE TOLERANCE OF PARAGRAPHS b, c & d APPLY TO OFFSET DIMENSIONS SHOWN ON THE PLANS., MEASURED PARALLEL AND PERPENDICULAR TO THE NEAREST ESTABLISHED COLUMN LINE FOR ANCHOR BOLTS SHALL BE SET PERPENDICULAR TO THE THEORETICAL BEARING SURFACE UNLESS SHOWN OTHERWISE START FROM THE TOP LEVEL OF CONCRETE PEDESTAL.

- WELDING NOTES**
- ELECTRODES USED FOR METAL ARE WELDING OF MILD STEEL SHALL BE HEAVY COATED TYPE ELECTRODES CONFORMING TO IS:814.
  - AS PER IS:816-1969 CL. 6.2.2 FOR FILLET WELD, THE SIZE OF FILLET WELD SHALL NOT BE LESS THAN 3mm NOT MORE THAN THICKNESS OF THINNER PART JOINED.
  - AUTOMATIC SUBMERGED ARCH WELDING WILL BE USED FOR FABRICATION, WELDING SHALL CONFORM TO IS:816.
  - ELECTRODE ROD SHALL BE CONFORM TO IS:814.
  - LENGTH OF THE ELECTRODE SHOULD BE 450MM ±6MM.
  - THE CONTACT END OF THE ELECTRODE SHALL BE BARE END CLEAN TO A LENGTH OF 20 TO 30MM.
  - THE FLUX COVERING SHALL BE OF UNIFORM IN OUTSIDE DIAMETER AND THICKNESS.
  - THE COVERING SHALL BURN OR FUSE EVENLY.
  - A DEEP PENETRATION ELECTRODES SHALL PROVIDED A MINIMUM PENETRATION OF 4MM BEYOND THE ROOT WHERE THE ELECTRODE IS CONTINUOUSLY DEPOSITED IN A CLOSE SQUARE TEE JOINT BETWEEN TWO PLATES, EACH OF THICKNESS EQUAL TO TWICE THE CORE DIAMETER OF THE ELECTRODE.
  - THE WELDING AND WELDING WORK SHALL CONFIRM TO IS816.
  - ALL PAINTING WORKS SHALL CONFIRM TO IS 1479 PART-I & II AND I.S 8629.

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT:

ISSUED FOR -:

APPROVAL	INFORMATION	CONSTRUCTION
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONSULTANTS AND PROJECT MANAGERS:

CLIENT:

STRUCTURAL CONSULTANT:

Checked By:

Approved By:

Date:

**SATIUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**

Office: Booth no. 31, Phase 9, SAS Nagar  
 Mohali-160062 (PB) Regd. Office:  
 H. no. 1576, Saini Vihar, Phase 3,  
 Bahara, Zirakpur -140604 (PB)  
 Email: info.satuspvt@gmail.com  
 Mob: +91-9646157916

DATE: 07.03.2024

PROJECT: DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)

DRAWING TITLE: ANCHOR BOLT LAYOUT PLAN

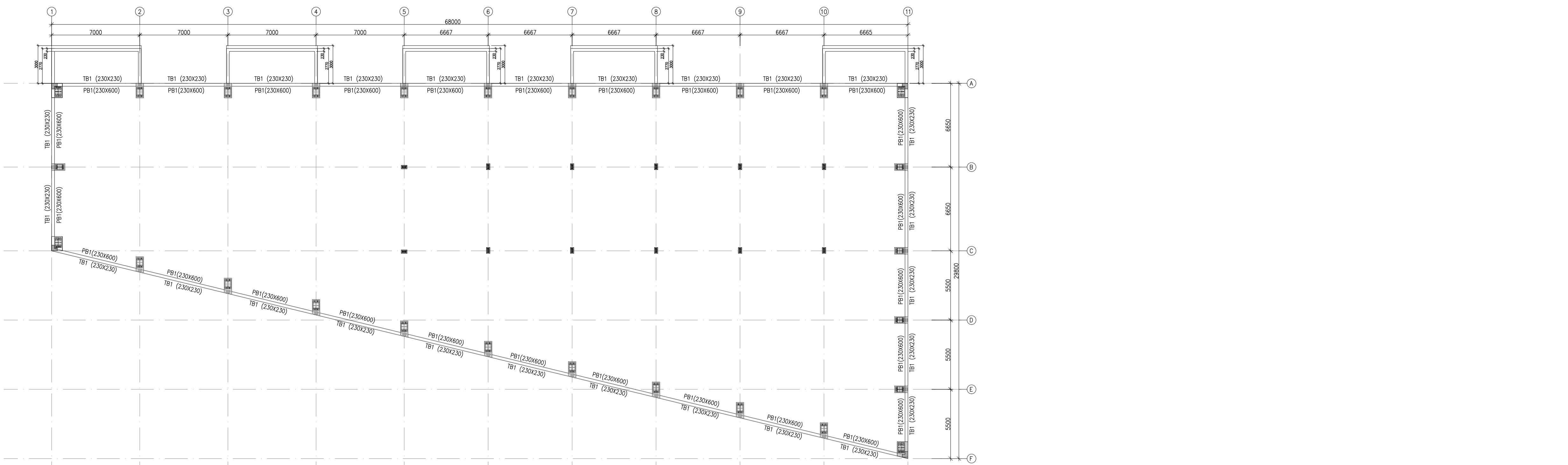
DRG. NO.: SS.CWC.PB.AB-03

SIZE: A1

REV: R0

S.NO:





**NOTES.**

G1. DO NOT SCALE ANY DIMENSIONS FOLLOW ONLY WRITTEN DIMENSIONS.

G2. ALL STRUCTURAL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWINGS. ANY DISCREPANCY OR AMBIGUITY IN EITHER SHOULD BE BROUGHT TO THE NOTICE OF THE DEPARTMENT.

G3. CONCRETE OF GRADE M25 TO BE USED

G4. UNLESS MENTIONED OTHERWISE CEMENT SHALL BE PORTLAND POZZOLANA CEMENT CONFORMING TO IS:1489

G5. STEEL SHALL BE HIGH YIELD STRENGTH DEFORMED BARS CONFORMING TO IS:1786 AND SHALL BE OF GRADE Fe500D

G6. 'T' DENOTES TMT BAR.

G7. ALL EARTH SURFACES UPON OR AGAINST WHICH CONCRETE IS TO BE PLACED SHALL BE WELL COMPACTED AND SHOULD BE FREE FROM STANDING WATER, MUD AND DEBRIS

**CONCRETE**

C1. ALL RCC WORK SHALL BE CARRIED OUT AS PER IS-456-2000.

**REINFORCING STEEL**

R1. ALL REINFORCING STEEL WILL BE OF TESTED QUALITY CONFORMING TO IS:1786 LATEST.

R2. REFER TO HIGH YIELD STRENGTH DEFORMED BARS WITH CHARACTERISTIC STRENGTH 500N/sq. mm. (Fe 500D)

R3. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE

- \* FOUNDATION 75 mm ALL AROUND
- \* PEDESTAL 50 mm ALL AROUND
- \* COLUMNS 40 mm ALL AROUND
- \* PLINTH BEAMS 25 mm ALL AROUND

R4. LAP LENGTH TO BE 50d OF BAR MINIMUM.

R5. SLAB BARS IN SHORTER DIRECTION, SHALL BE BELOW BARS FOR THE LONGER DIRECTION

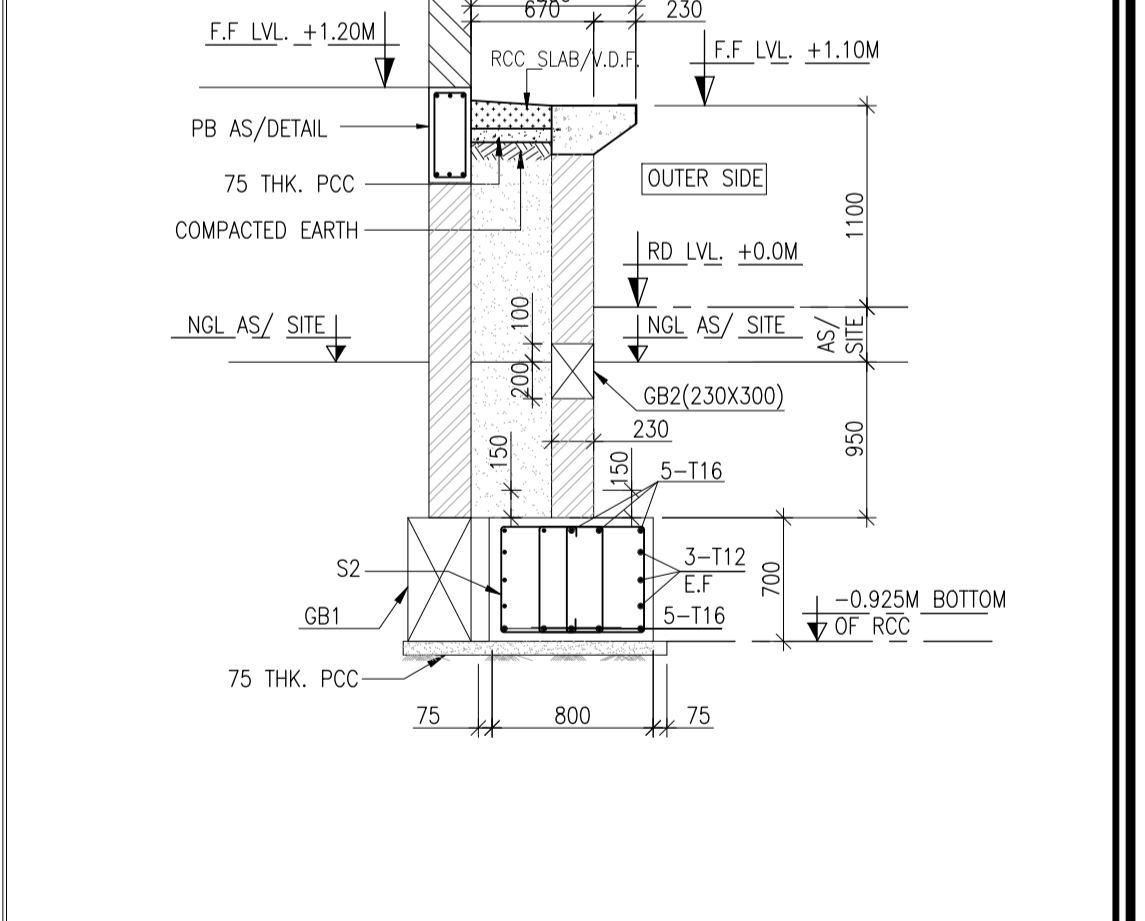
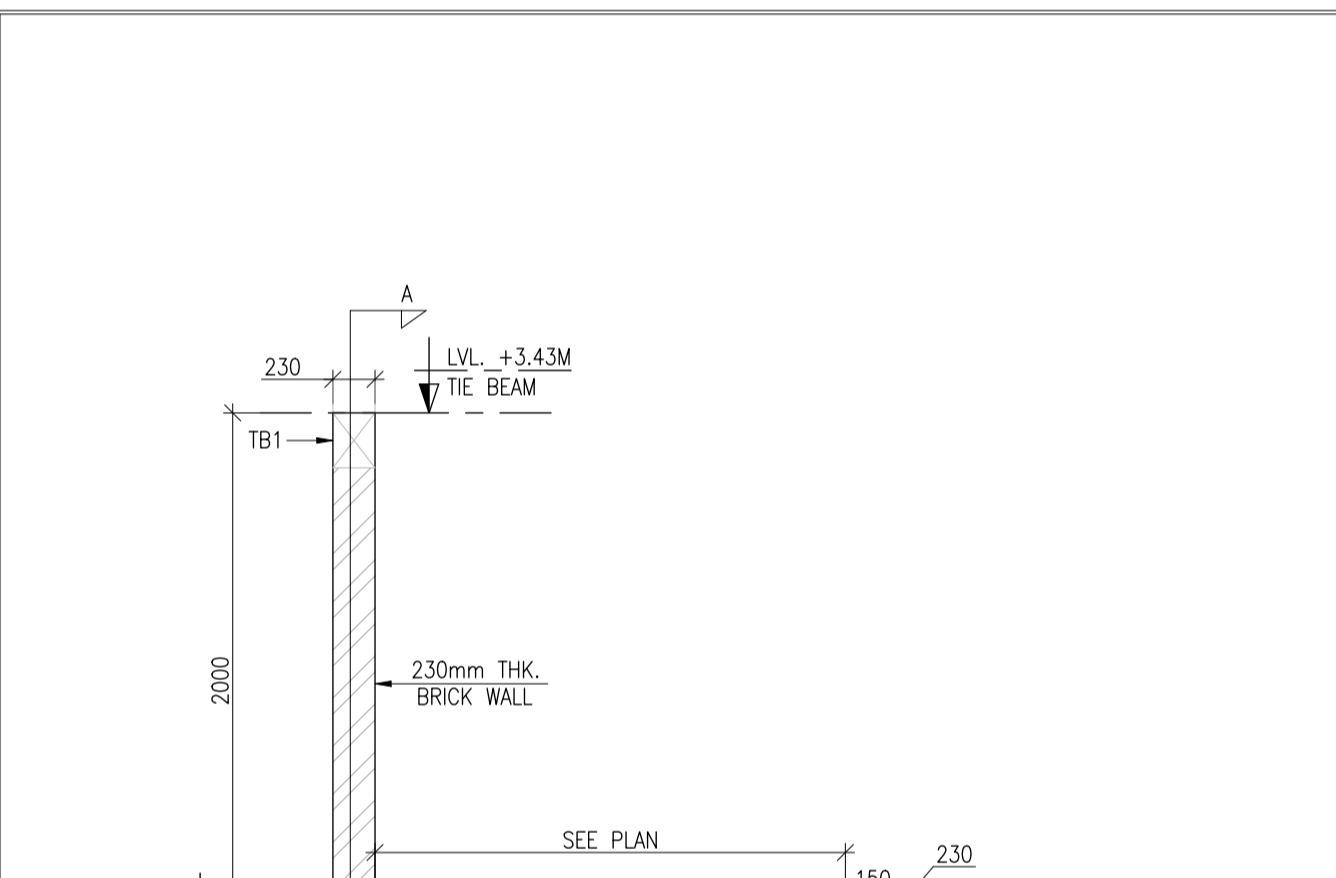
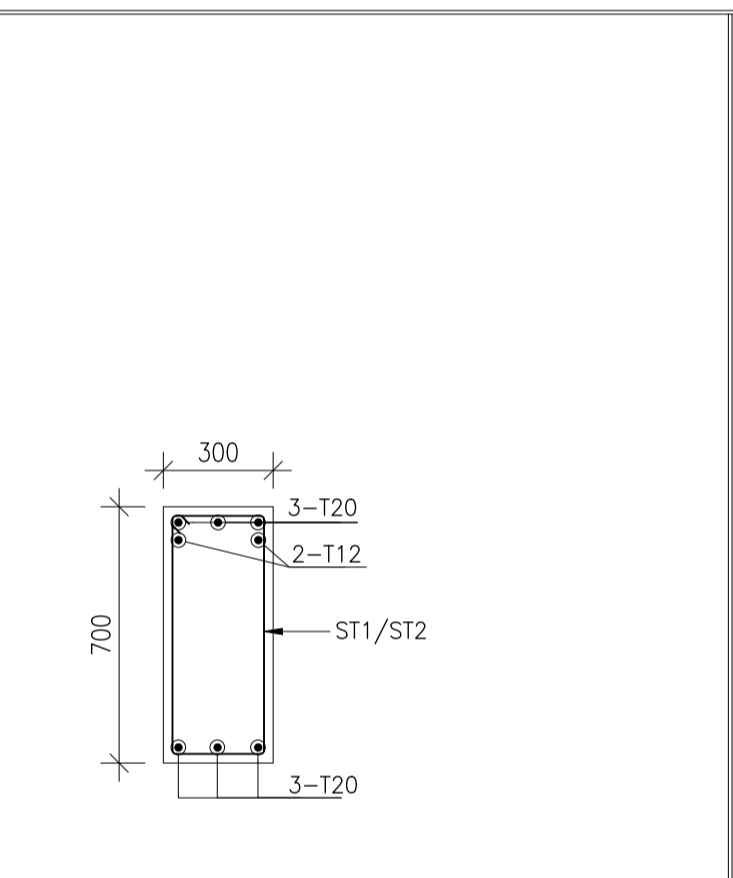
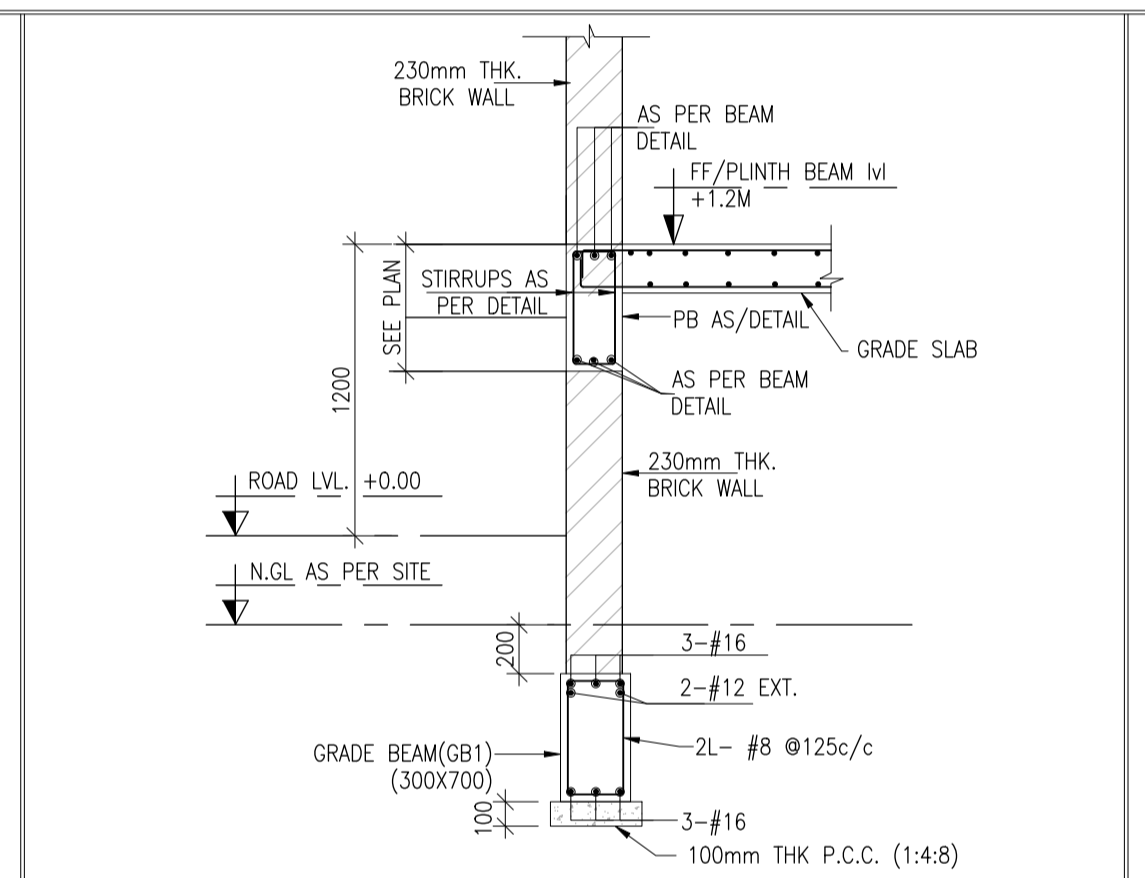
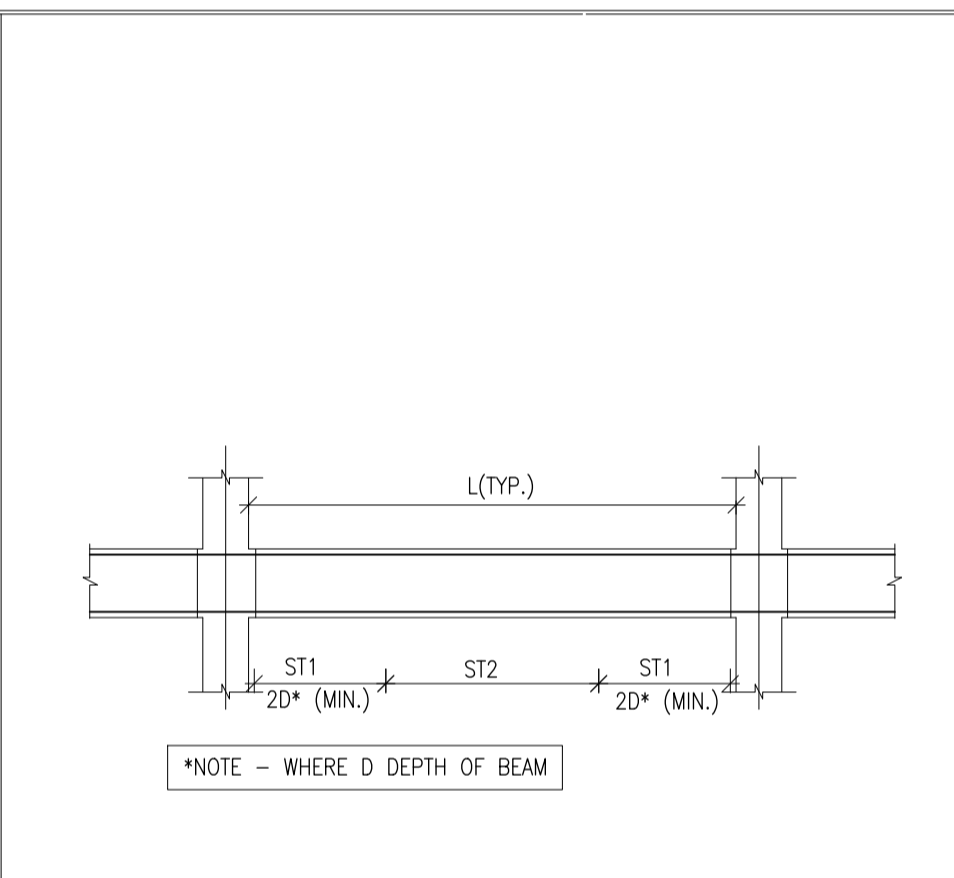
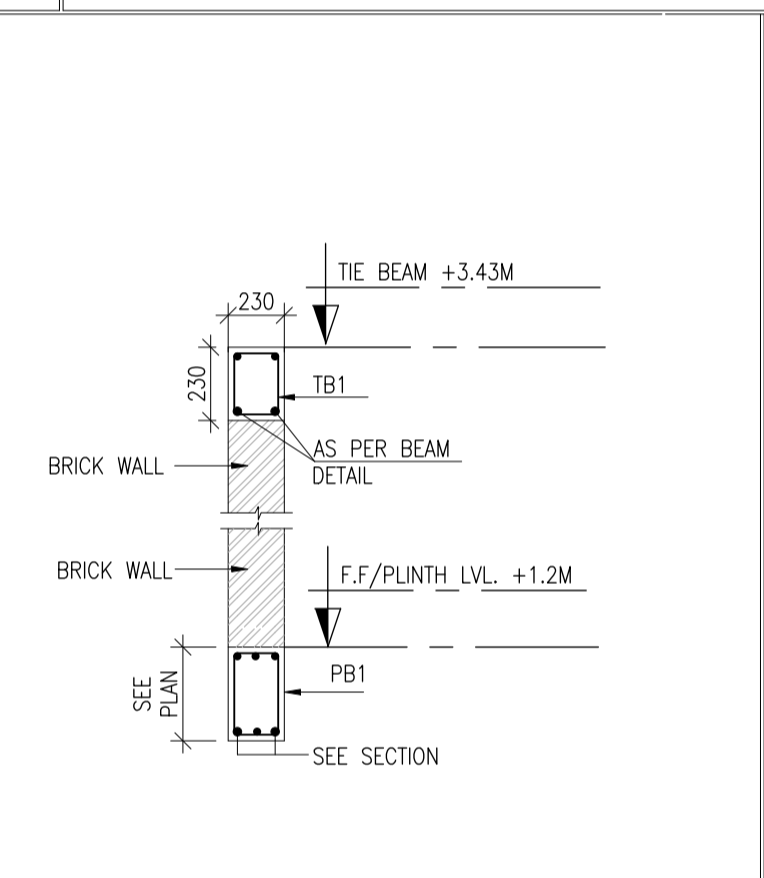
**PROJECT SPECIFIC**

P1. THE NET SAFE BEARING CAPACITY IS TAKEN AS 10.67T/m<sup>2</sup>. AT A DEPTH OF 2.0M FROM NGL, AS PER GEOTECH REPORT SHARED BY CWC DATED-11.07.2022

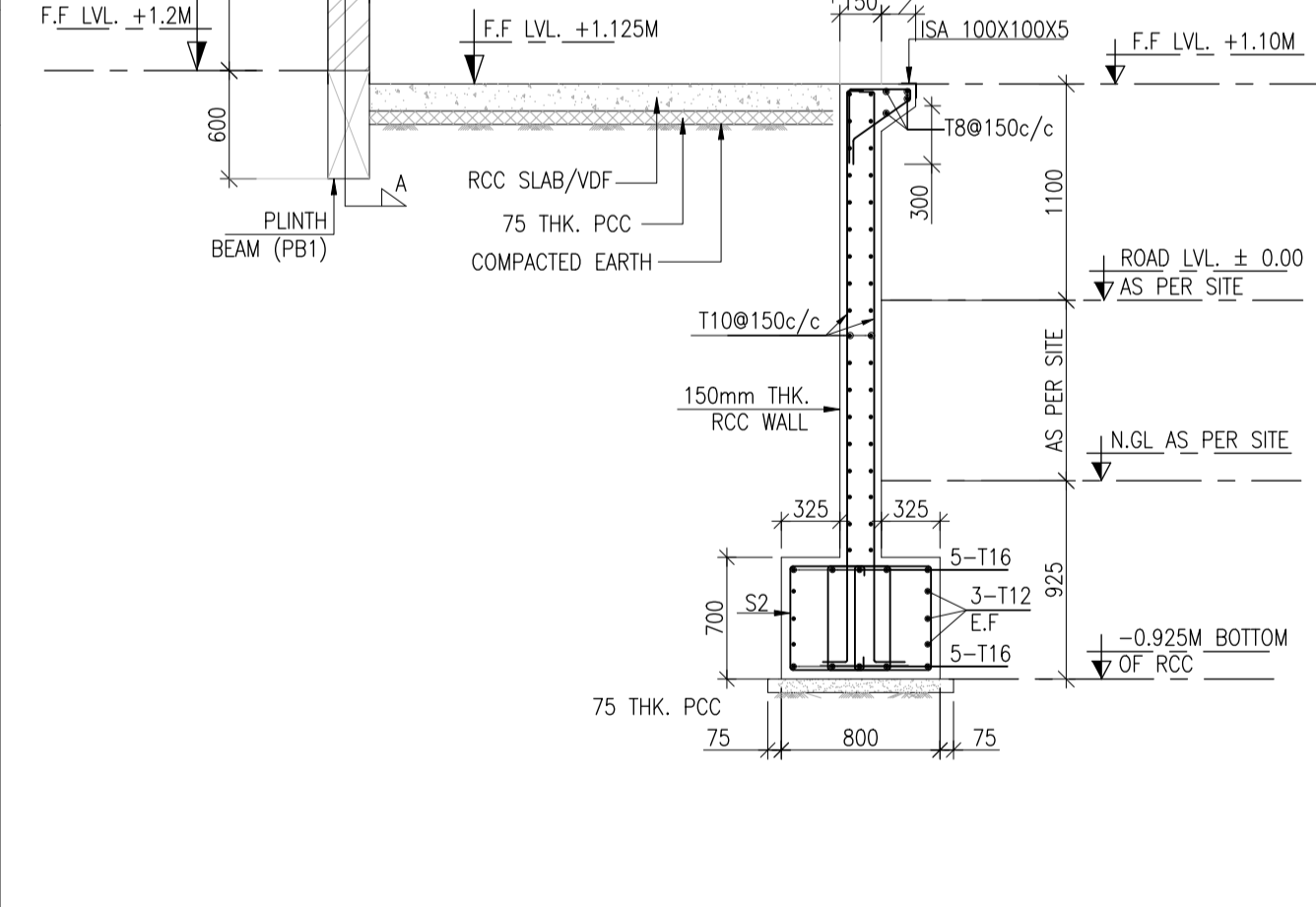
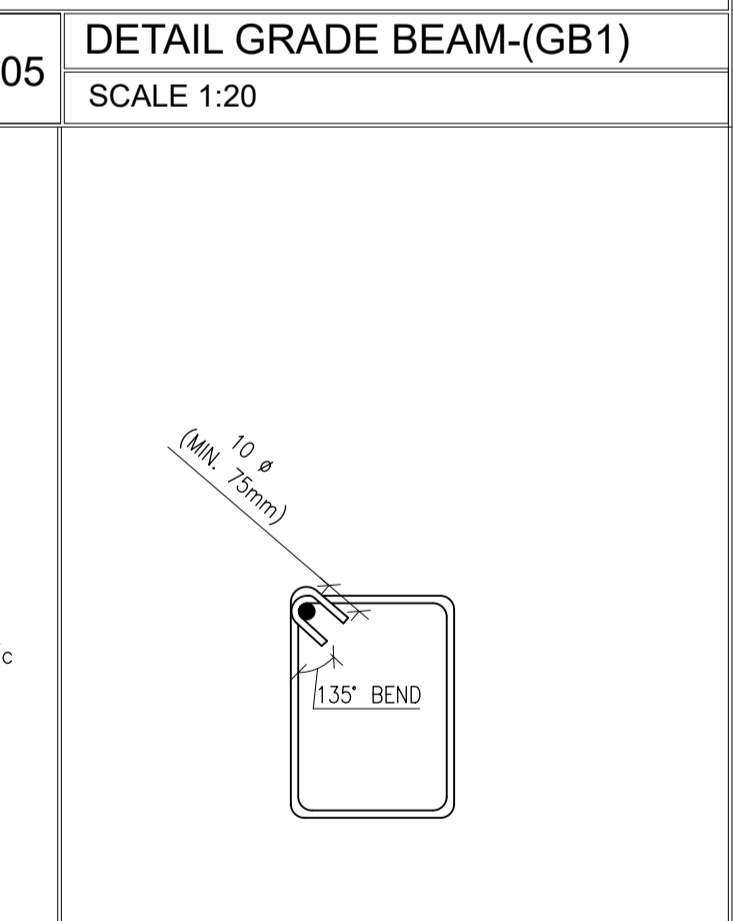
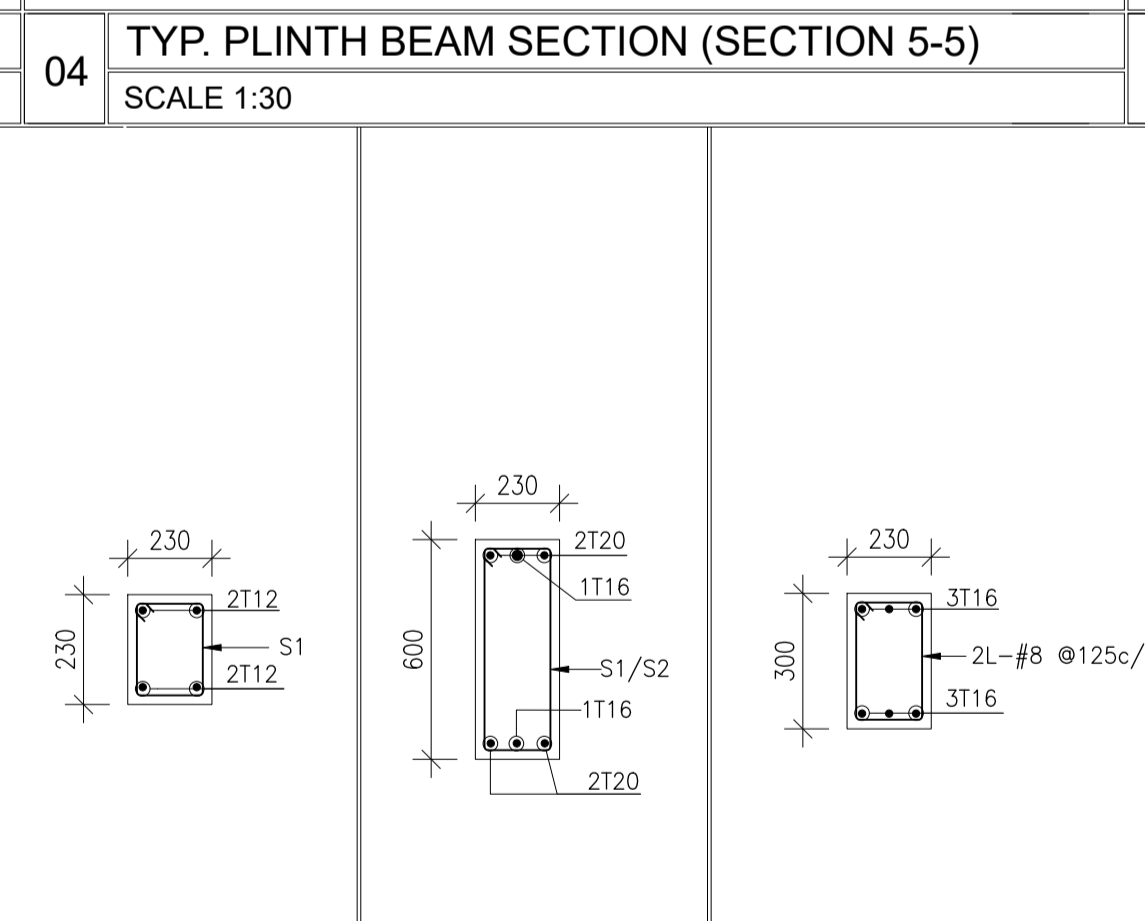
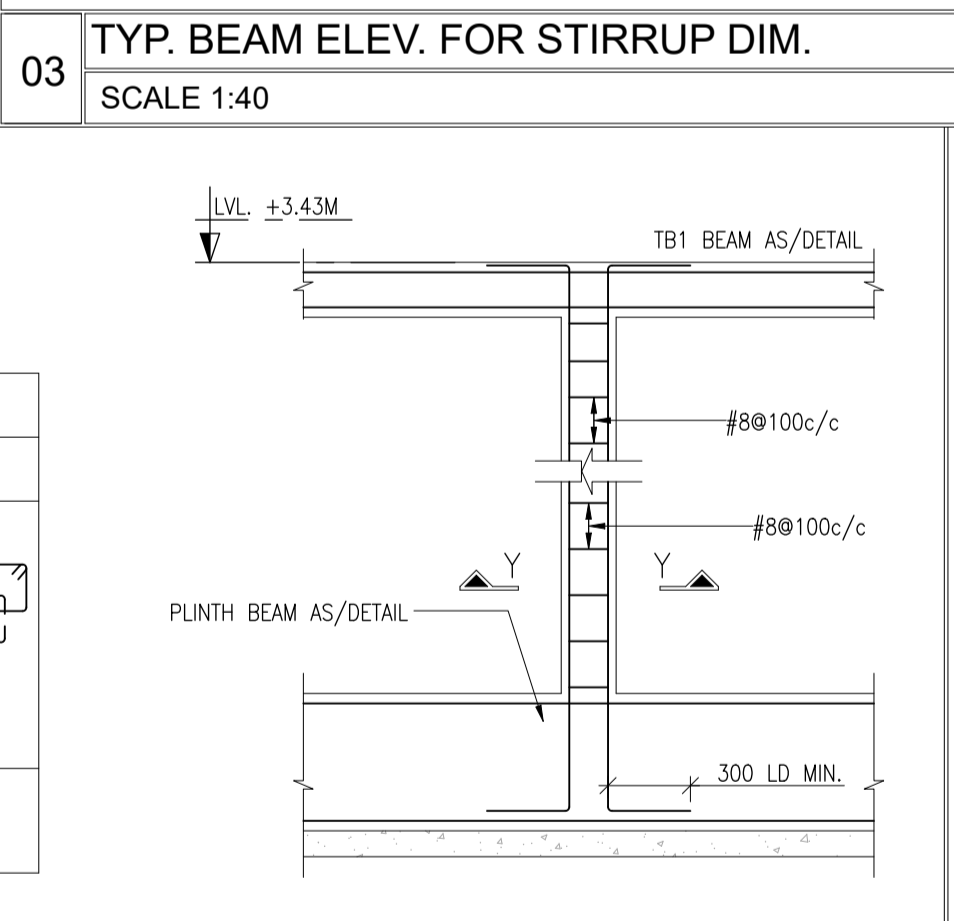
01 PLINTH & TIE BEAM LAYOUT PLAN  
SCALE 1:150

**LEGEND**

PB = PLINTH BEAM  
PC = PILE CAP  
TB = TIE BEAM  
LB = LINTEL BEAM



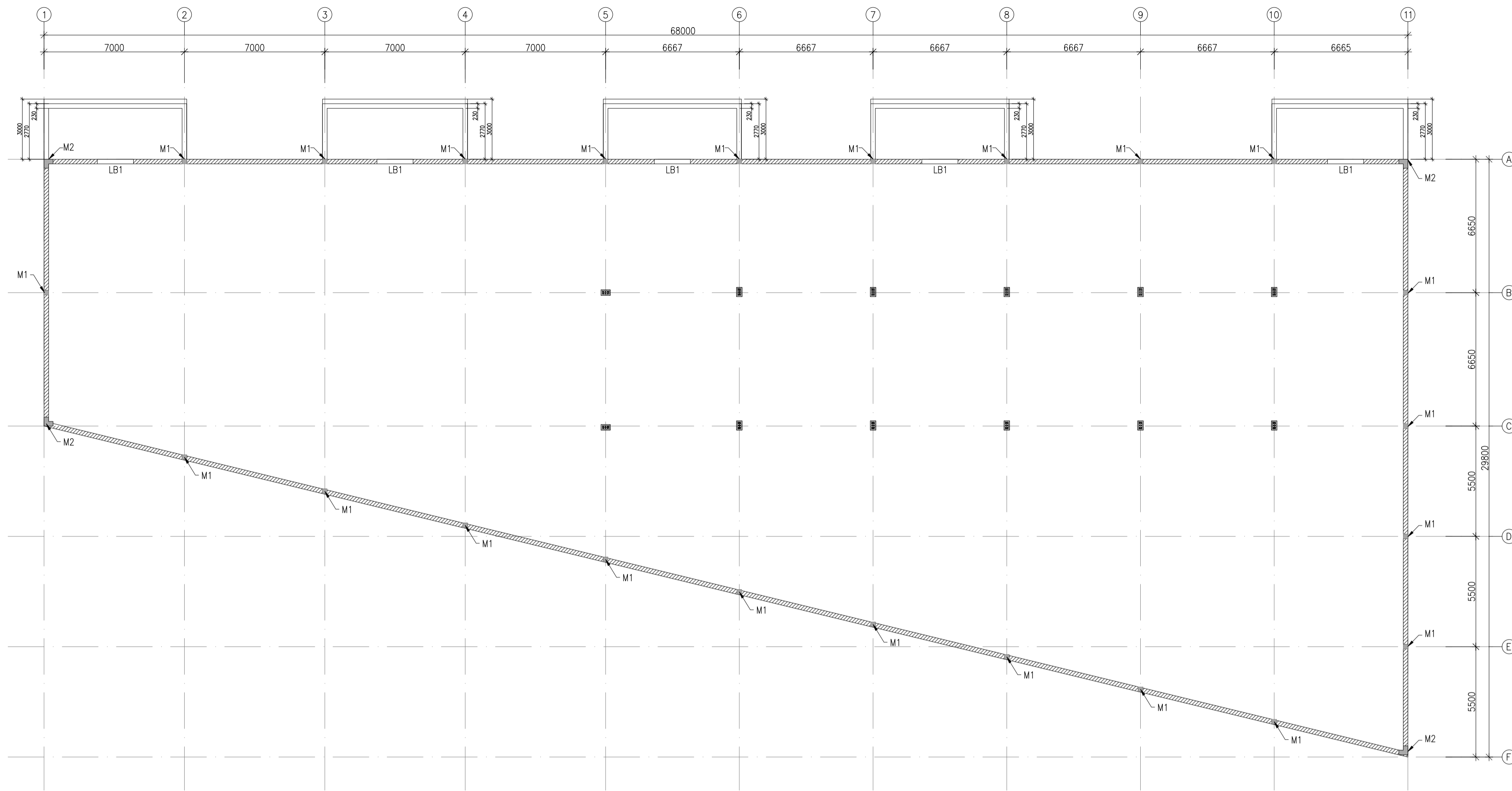
FLOORS	COLUMN	MULLION (M1) SECTION Y-Y	MULLION (M2) SECTION Y-Y



07 DETAIL TB1 SCALE 1:20  
08 DETAIL PB1 SCALE 1:20  
08 DETAIL GB2 SCALE 1:20  
09 TYP. SEISMIC HOOK DETAIL SCALE 1:30  
10 SECTION 6-6 SCALE 1:40  
11 SECTION 7-7 SCALE 1:40

PLINTH BEAM SCHEDULE				TIE/LINTEL BEAM SCHEDULE				SCHEDULE OF STIRRUPS			
S.NO.	BEAM DESCRIPTION	WIDTH	DEPTH	S.NO.	BEAM DESCRIPTION	WIDTH	DEPTH	S.NO.	2L- #8 @100c/c	S.NO.	2L- #8 @150c/c
1	PB1	230	600	1	TB1	230	230	ST1	2L- #8 @100c/c	ST1	2L- #8 @100c/c
								ST2	2L- #8 @150c/c	ST2	2L- #8 @150c/c

ARCHITECT:	ISSUED FOR -:	CONSULTANTS AND PROJECT MANAGERS:	CLIENT:	STRUCTURAL CONSULTANT:	Checked By:	DATE:	PROJECT:
	APPROVAL INFORMATION CONSTRUCTION				Approved By:	07.03.2024	DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)
REV.No.	Date	Description	Drawn	Chkd	Appd.	Date:	DRAWING TITLE: PLINTH AND TIE BEAM LAYOUT PLAN
							SIZE: A1
							REV: RO
							S.NO:



**NOTES:**

- G1. DO NOT SCALE ANY DIMENSIONS FOLLOW ONLY WRITTEN DIMENSIONS.
- G2. ALL STRUCTURAL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWINGS. ANY DISCREPANCY OR AMBIGUITY IN EITHER SHOULD BE BROUGHT TO THE NOTICE OF THE DEPARTMENT.
- G3. CONCRETE OF GRADE M25 TO BE USED
- G4. UNLESS MENTIONED OTHERWISE CEMENT SHALL BE PORTLAND POZZOLANA CEMENT CONFORMING TO IS:1489
- G5. STEEL SHALL BE HIGH YIELD STRENGTH DEFORMED BARS CONFORMING TO IS:1786 AND SHALL BE OF GRADE Fe500D
- G6. 'T' DENOTES TMT BAR.
- G7. ALL EARTH SURFACES UPON OR AGAINST WHICH CONCRETE IS TO BE PLACED SHALL BE WELL COMPACTED AND SHOULD BE FREE FROM STANDING WATER, MUD AND DEBRIS
- G8. UNDER REAMED PILES HAVE BEEN TAKEN IN ACCOUNT AS PER THE RECOMMENDATIONS OF PROVIDED GEOTECH REPORT. HOWEVER, AFTER EXECUTION OF PILE AT SITE CONTRACTOR/CLIENT NEEDS TO VERIFY WHETHER FIT (PILE INTEGRITY TEST) MEET THE PARAMETERS GIVEN IN GEOTECH REPORT IN CONSULTATION WITH STRUCTURAL ENGINEER.

**CONCRETE**

- C1. ALL RCC. WORK SHALL BE CARRIED OUT AS PER IS-456-2000.

**REINFORCING STEEL**

- R1. ALL REINFORCING STEEL WILL BE OF TESTED QUALITY CONFORMING TO IS:1786 LATEST.
- R2. REFER TO HIGH YIELD STRENGTH DEFORMED BARS WITH CHARACTERISTIC STRENGTH 500N/sq. mm. (Fe 500D)
- R3. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE
  - \* FOUNDATION 75 mm ALL AROUND
  - \* PILE CAP 50 mm ALL AROUND
  - \* COLUMNS 40 mm ALL AROUND
  - \* PLINTH BEAMS 25 mm ALL AROUND
- R4. LAP LENGTH TO BE 50xDIA OF BAR MINIMUM.
- R5. SLAB BARS IN SHORTER DIRECTION, SHALL BE BELOW BARS FOR THE LONGER DIRECTION

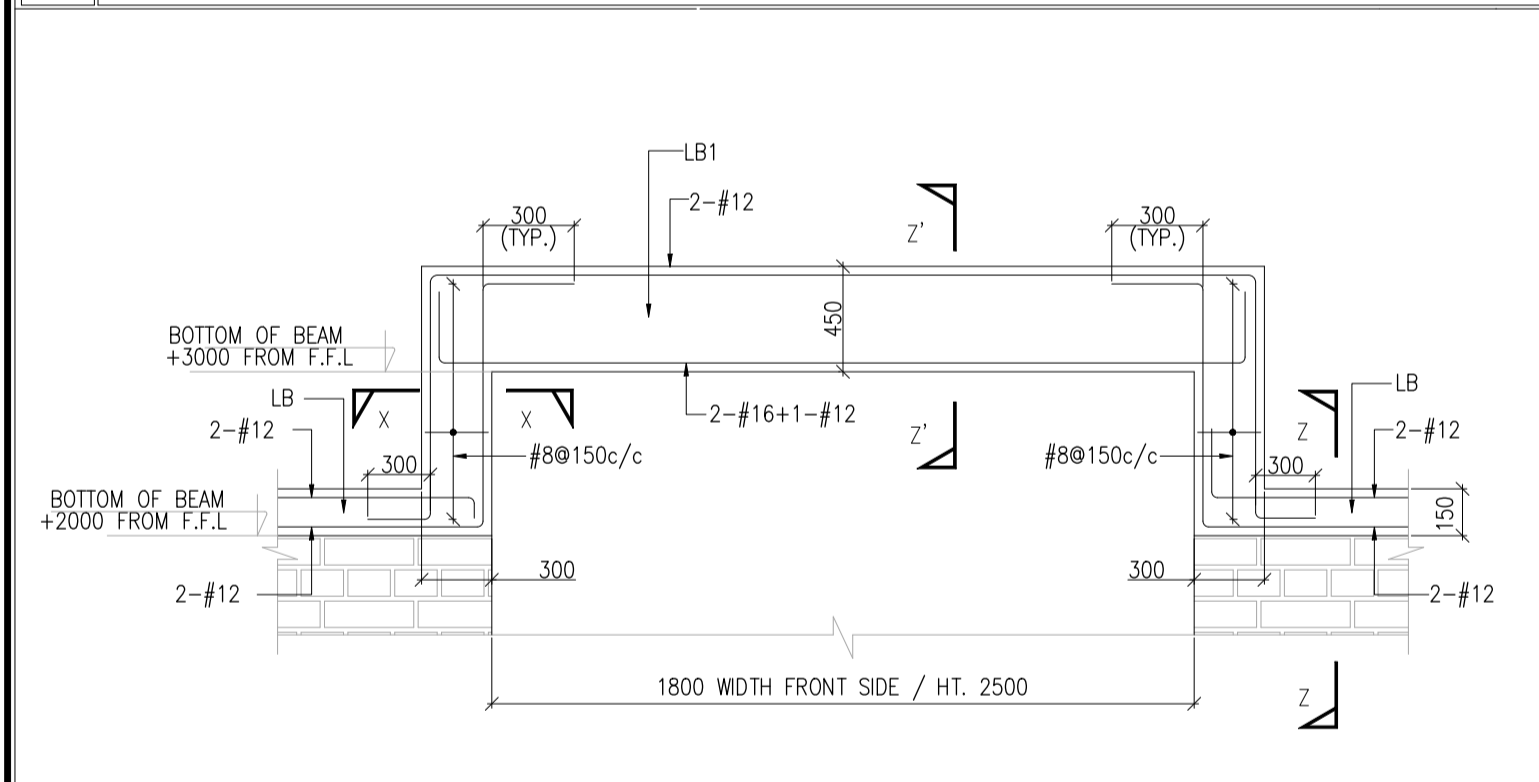
**PROJECT SPECIFIC**

- P1. PILE CAPACITY TAKEN AS PER REPORT PROVIDED BY ESSAR LABORATORY & RESEARCH CENTRE, REPORT NO. ESSAR/CWC/GDC-1:2019/20, DATED- 17/03/2020

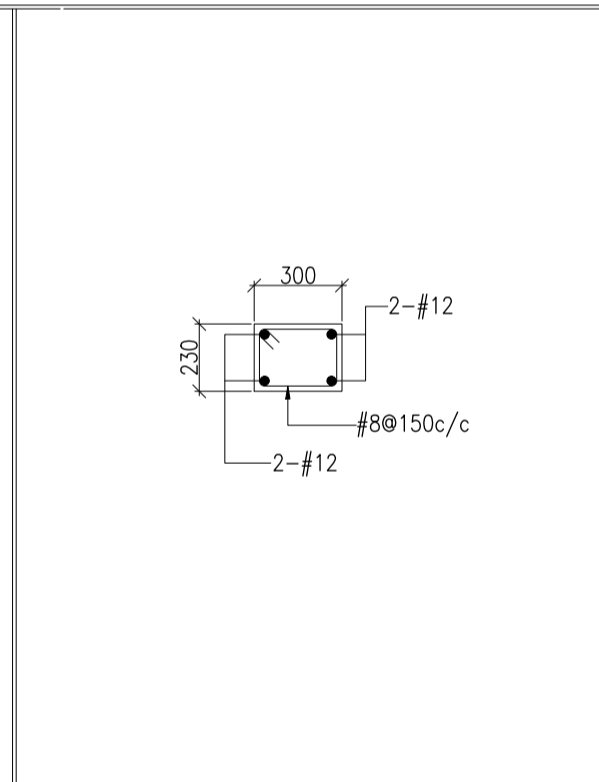
**LEGEND**

- PB = PLINTH BEAM
- PC = PILE CAP
- TB = TIE BEAM
- LB = LINTEL BEAM

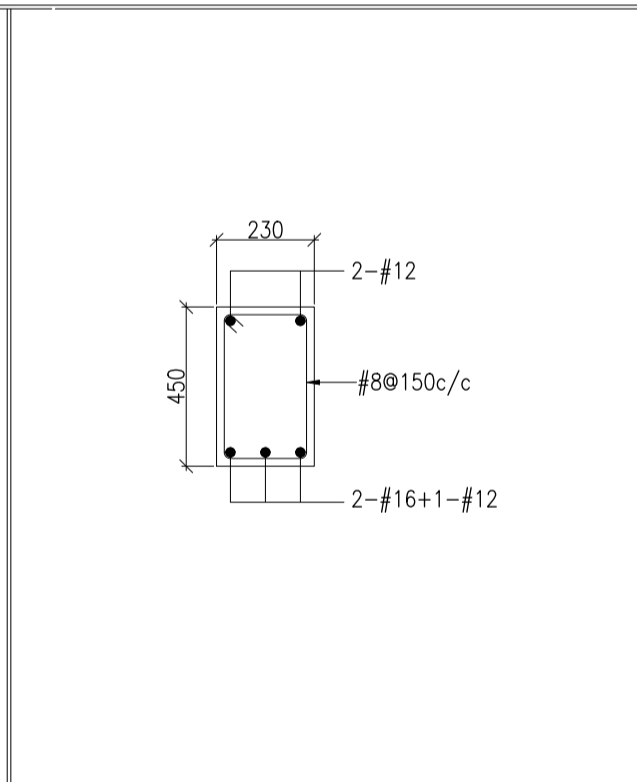
**01 LINTEL BEAM LAYOUT PLAN**  
SCALE 1:150



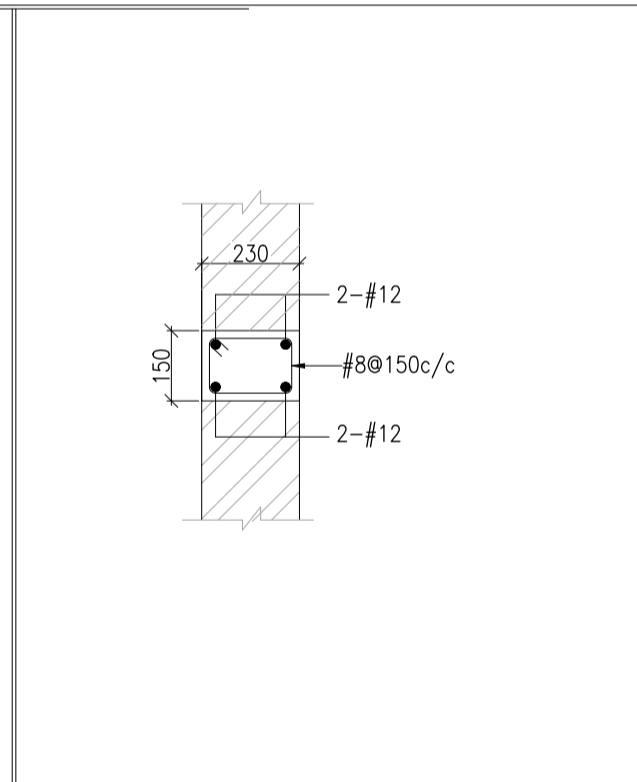
**02 TYP. LINTEL BEAM LB1 ELEVATION**  
SCALE 1:250



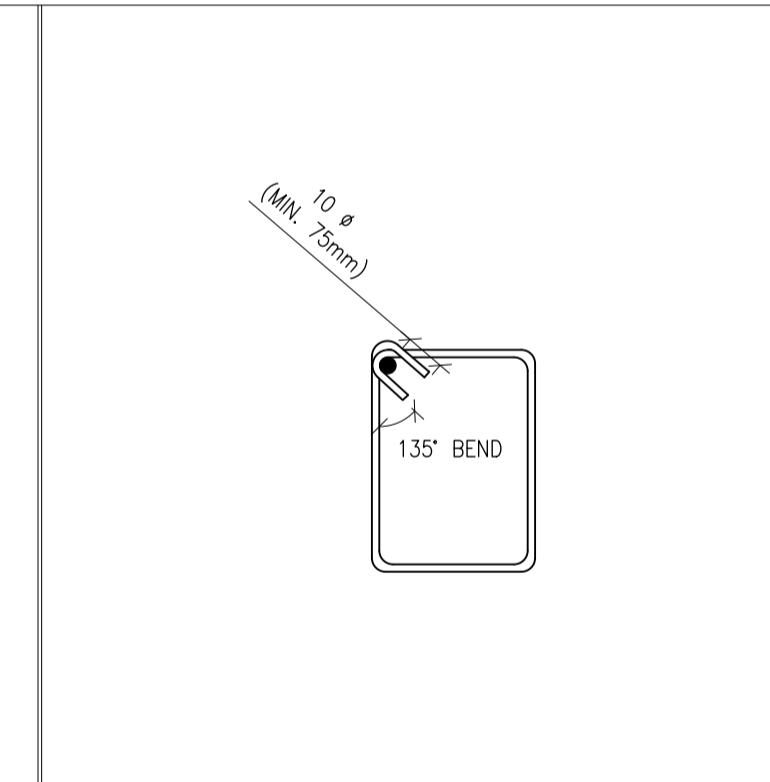
**04 SECTION X-X**  
SCALE 1:250



**05 SECTION Z'-Z'**  
SCALE 1:250



**06 SECTION Z-Z**  
SCALE 1:250



**07 TYP. SEISMIC HOOK DETAIL**  
SCALE 1:250

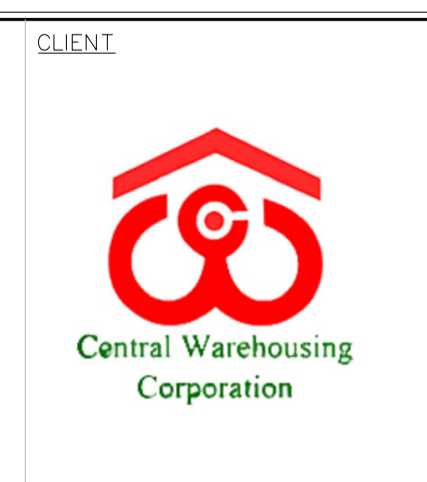
REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT: \_\_\_\_\_

ISSUED FOR —:

APPROVAL	INFORMATION	CONSTRUCTION
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CONSULTANTS AND PROJECT MANAGERS: \_\_\_\_\_



CLIENT: \_\_\_\_\_

STRUCTURAL CONSULTANT : **SATIUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**

Office: Booth no. 31, Phase 9, SAS Nagar Mohali -160062 (PB) Regd. Office: H. no. 1576, Sarni Vihar, Phase 3, Bahana, Zirakpur -140604 (PB)  
Email: info.satuspvt@gmail.com  
Mob: + 91-9646157916

Checked By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

DATE: 07.03.2024

SCALE: AS SHOWN

STATUS: INITIAL DRAWING

PROJECT: DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)

DRAWING TITLE: LINTEL BEAM LAYOUT PLAN & DETAILS

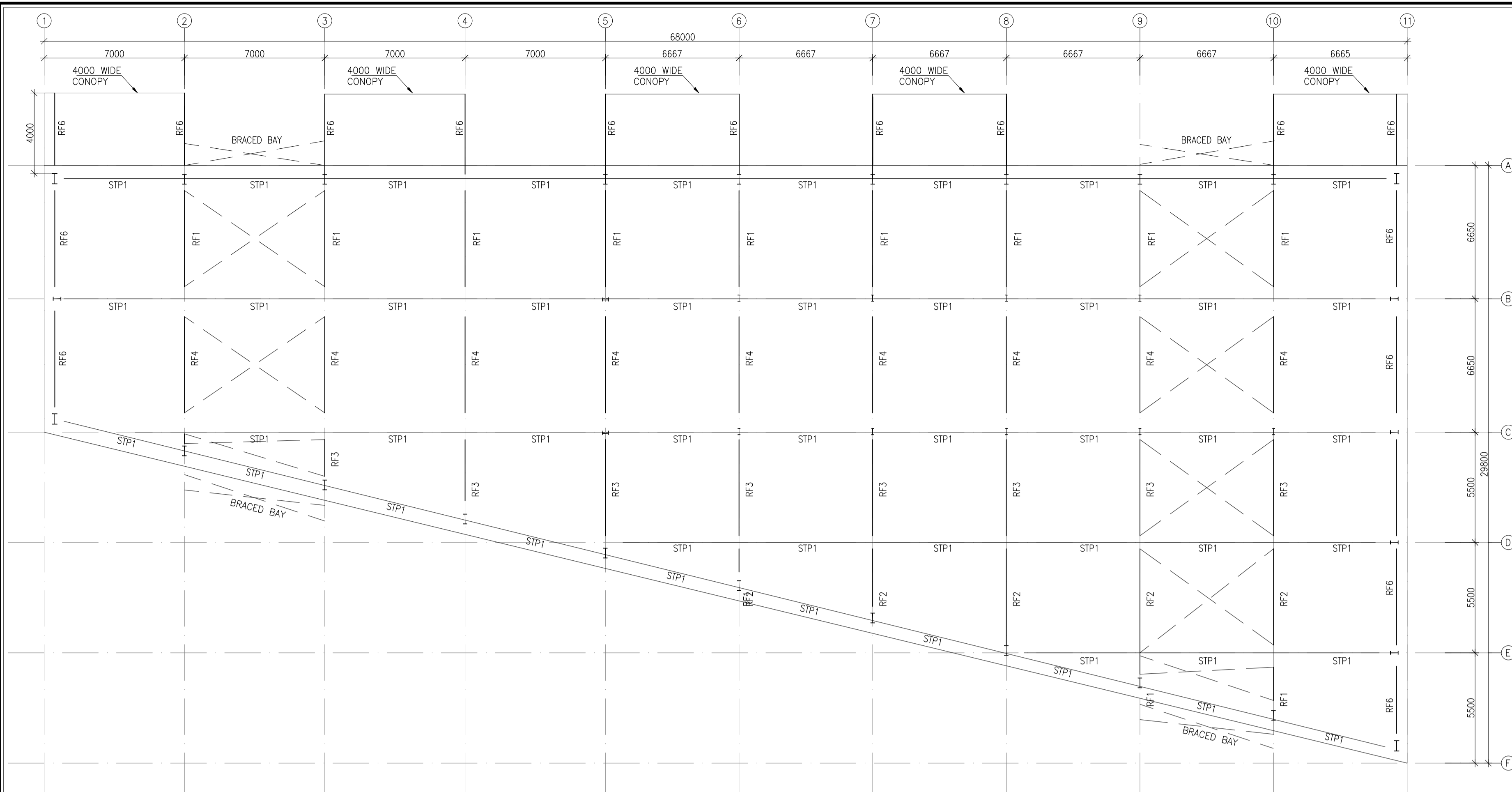
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SIZE : A1

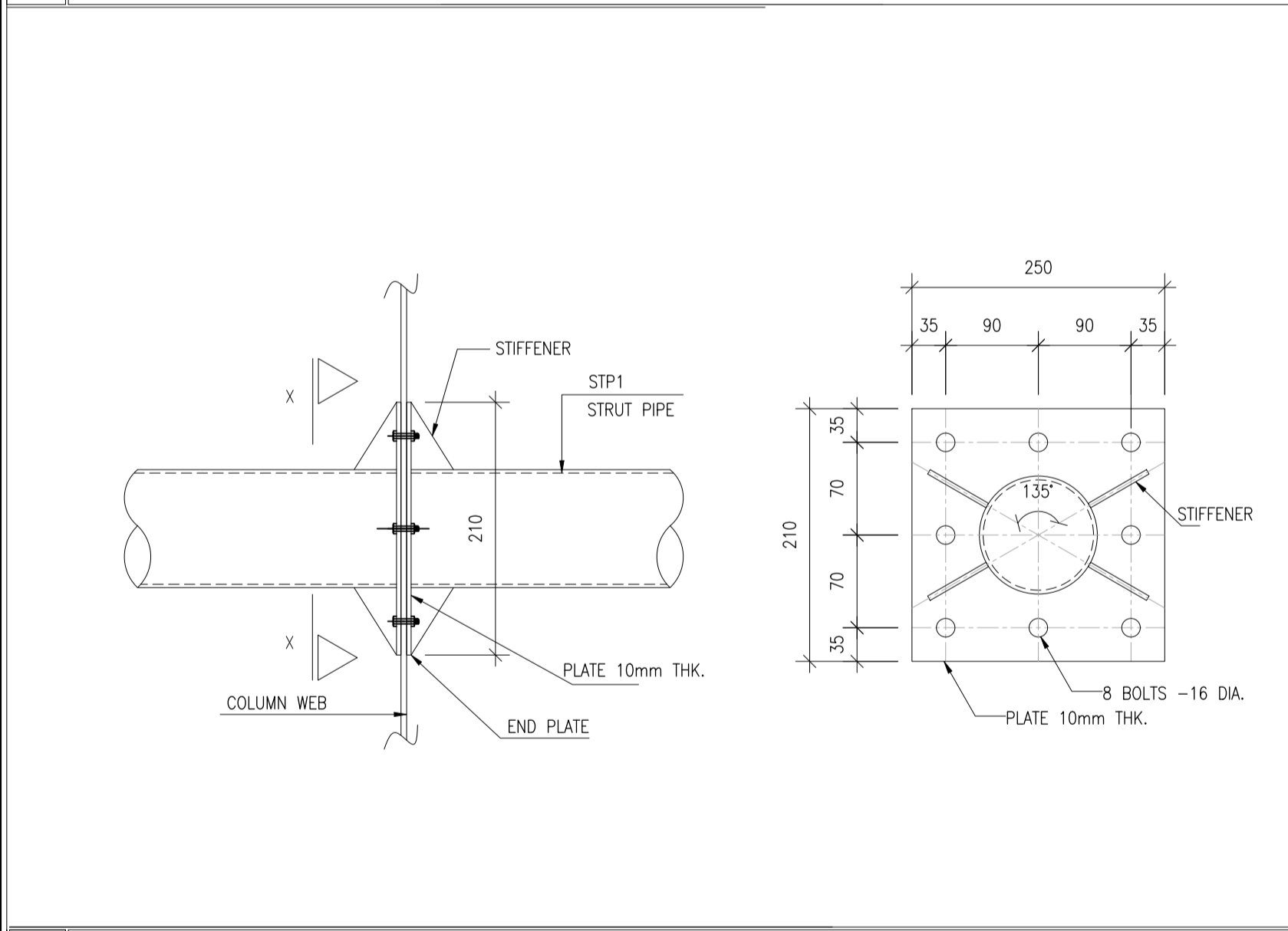
REV: R0

S.NO : \_\_\_\_\_





01 PARTMARK LAYOUT PLAN  
SCALE 1:150



02 STRUT PIPE CONNECTION DETAIL - (8-H16x60)  
SCALE 1:20

- NOTES.**
- ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
  - MINIMUM PLATE THICKNESS TO BE TAKEN AS 6mm.
  - ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.

- GRADE SPECIFICATIONS OF MATERIALS**
- A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-  
 I) ALL HOT ROLLED SECTION & PLATES WITH GRADE-B0 HAVING A MINIMUM YIELD STRESS OF 350 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:2062
- B) FOR COLD FORMED SECTIONS :-  
 I) PURLINS AND SIDE CLADDING RUNNERS ONLY SHALL BE MADE FROM COLD FORMED SECTIONS AND SHALL CONFORM TO ASTM A570 GR 50 WITH MINIMUM YIELD STRENGTH OF 310 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:811.
- C) THREADED FASTENER :-  
 I) ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE-B) AS PER TENDER SPECIFICATION OF IS:1367 AND CONFORMING TO IS:5624.  
 II) ALL CONNECTION BOLTS AND NUTS COMPLY WITH IS:1367 AND ALL FIELD CONNECTION BOLTED WITH HIGH STRENGTH FRICTION GRIP (HSFG) BOLTS OF PROPERTY CLASS 8.8.  
 III) PLAIN WASHERS CONFORMING TO IS:5369.
- D) SHEETING MATERIAL :-  
 I) CLADDING ON THE SIDES OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.50 MM(TCT) TOTAL COATED THICKNESS WITH 50MM PUFF
- E) SAG ROD :-  
 I) SAG ROD SHALL BE OF GRADE FE250. AS PER TENDER SPECIFICATION

- ANCHOR BOLT NOTES**
- ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE B) OF IS:1367 AND CONFORMING TO IS:5624
  - ALL BASE PLATES SHALL BE OF GRADE E250 (B0).
  - ANCHOR BOLTS SHOULD BE SET ACCURATELY AND HELD IN POSITION BY TEMPLATE BEFORE CASTING TO THE GIVEN DIMENSIONS AND PROJECTION, WITH MAXIMUM DEVIATION OF 5mm. ANCHOR BOLT THREADS SHOULD BE PROTECTED DURING CONCRETING OPERATION, OR THOROUGHLY CLEANED AFTER POURING. ALL TEMPLATES SHOULD BE REMOVED AFTER THE ANCHOR BOLTS ARE SET IN CONCRETE TO FULL STRENGTH.
  - ALL ANCHOR BOLT DIAMETERS ARE IN MILLIMETERS. ANCHOR BOLT PROJECTION MUST BE ACCORDING TO DESIGN AND THREADS TO BE CLEAN.
  - THE INSTALLATION OF ANCHOR BOLTS AND EMBEDDED ITEMS MUST BE DONE IN ACCORDANCE WITH THE CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS OF AISC SECTION 7. ANCHOR BOLTS AND FOUNDATION BOLTS SHALL BE SET FOR MAXIMUM ALLOWABLE TOLERANCES AS:  
 a. 3mm CENTER TO CENTER OR ANY TWO BOLTS WITHIN AN ANCHOR BOLT GROUP.  
 b. 6mm CENTER TO CENTER OF ADJACENT ANCHOR BOLT GROUP.  
 c. ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.  
 d. MAXIMUM ACCUMULATION OF 6mm PER 30 MTRS. ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.  
 e. 6mm FROM CENTER OF ANY ANCHOR BOLT GROUP TO BE ESTABLISHED COLUMN LINE THROUGH THAT GROUP.
  - THE TOLERANCE OF PARAGRAPHS b, c & d APPLY TO OFFSET DIMENSIONS SHOWN ON THE PLANS. MEASURED PARALLEL AND PERPENDICULAR TO THE NEAREST ESTABLISHED COLUMN LINE FOR ANCHOR BOLTS SHALL BE SET PERPENDICULAR TO THE THEORETICAL BEARING SURFACE UNLESS SHOWN OTHERWISE START FROM THE TOP LEVEL OF CONCRETE PEDESTAL.

- WELDING NOTES**
- ELECTRODES USED FOR METAL ARE WELDING OF MILD STEEL SHALL BE HEAVY COATED TYPE ELECTRODES CONFORMING TO IS:814.
  - AS PER IS:816-1969 CL. 6.2.2 FOR FILLET WELD, THE SIZE OF FILLET WELD SHALL NOT BE LESS THAN 3mm NOT MORE THAN THICKNESS OF THINNER PART JOINED.
  - AUTOMATIC SUBMERGED ARCH WELDING WILL BE USED FOR FABRICATION, WELDING SHALL CONFORM TO IS:816.
  - ELECTRODE ROD SHALL BE CONFORM TO IS:814.
  - LENGTH OF THE ELECTRODE SHOULD BE 450MM ±6MM.
  - THE CONTACT END OF THE ELECTRODE SHALL BE BARE END CLEAN TO A LENGTH OF 20 TO 30MM.
  - THE FLUX COVERING SHALL BE OF UNIFORM IN OUTSIDE DIAMETER AND THICKNESS.
  - THE COVERING SHALL BURN OR FUSE EVENLY.
  - A DEEP PENETRATION ELECTRODES SHALL PROVIDED A MINIMUM PENETRATION OF 4MM BEYOND THE ROOT WHERE THE ELECTRODE IS CONTINUOUSLY DEPOSITED IN A CLOSE SQUARE TEE JOINT BETWEEN TWO PLATES, EACH OF THICKNESS EQUAL TO TWICE THE CORE DIAMETER OF THE ELECTRODE.
  - THE WELDING AND WELDING WORK SHALL CONFORM TO IS:816.
  - ALL PAINTING WORKS SHALL CONFORM TO IS 1479 PART-I & II AND IS 8629.

ROOF BRACING SCHEDULE		
MARK	DESCRIPTION	SIZE
CHS1	ROOF BRACING	24 DIA STEEL ROD

ROOF STRUT PIPE SCHEDULE		
MARK	DESCRIPTION	SIZE
STP1	STRUT PIPE	65NB(3.2THK.) PIPE
GST **	GUSSET PLATE	---

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT: \_\_\_\_\_

ISSUED FOR :-

APPROVAL	INFORMATION	CONSTRUCTION
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CONSULTANTS AND PROJECT MANAGERS: \_\_\_\_\_

CLIENT: \_\_\_\_\_

STRUCTURAL CONSULTANT :



**SATIUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**  
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 Mohali-160062 (PB) Regd. Office:  
 H. no. 1576, Saini Vihar, Phase 3,  
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 Email: info.satuspvt@gmail.com  
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Checked By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

DATE: 07.03.2024

SCALE: AS SHOWN

STATUS: INITIAL DRAWING

PROJECT: DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)

DRAWING TITLE: PARTMARK LAYOUT PLAN

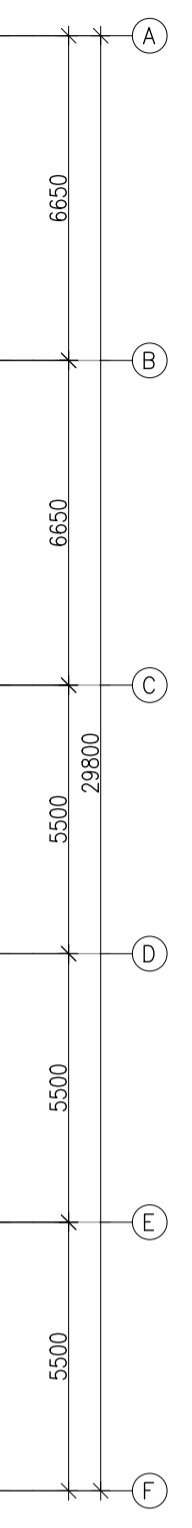
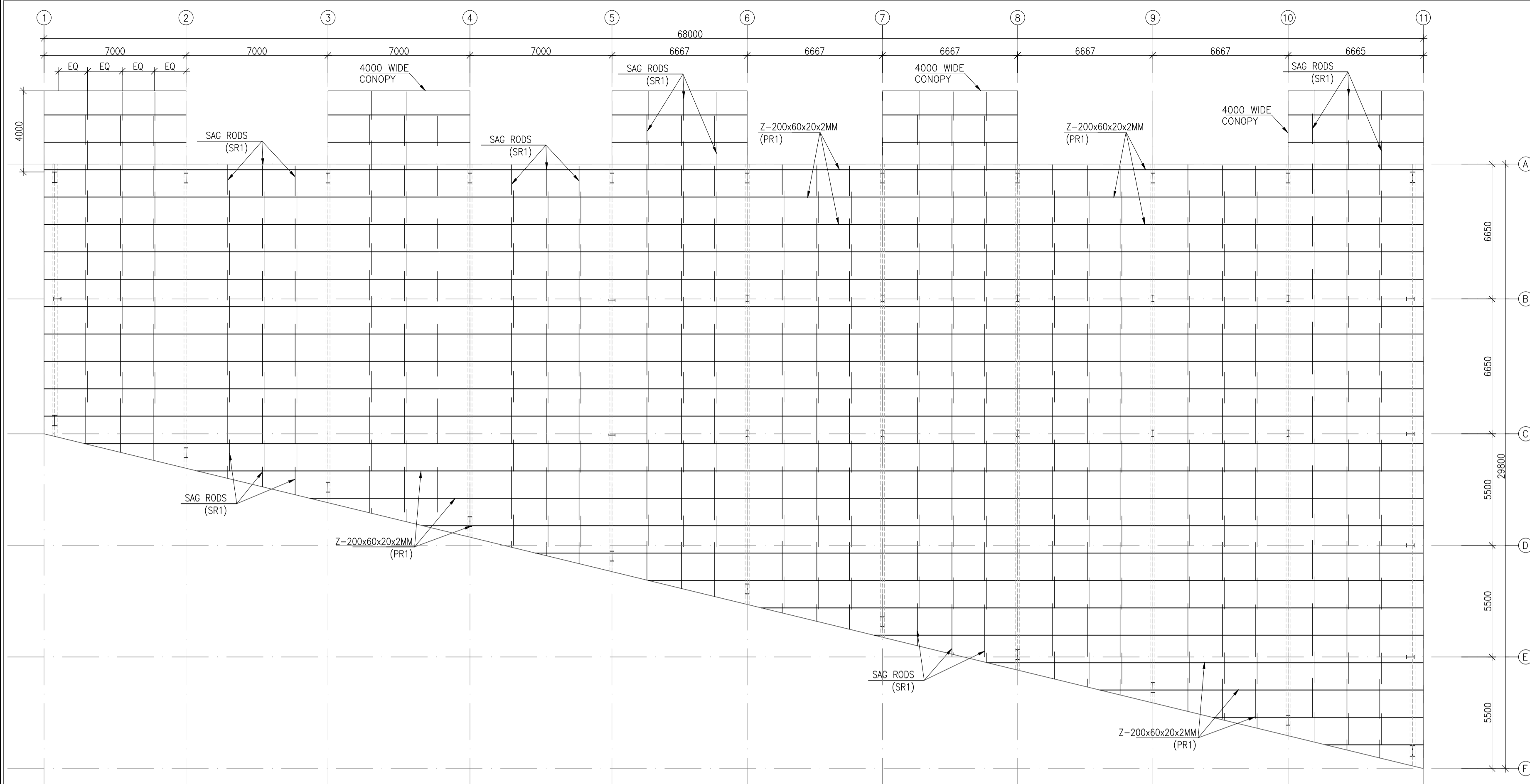
DRG. NO.: SS.CWC.PB.PM-06

SIZE : A1

REV: RO

S.NO :





**NOTES.**

- ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
- FOR CABLE TRAY REFER SEPARATE DRAWING.
- MINIMUM PLATE THICKNESS TO BE TAKEN AS 6mm.
- ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.

**GRADE SPECIFICATIONS OF MATERIALS**

A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-  
 i) ALL HOT ROLLED SECTION & PLATES WITH GRADE-B0 HAVING A MINIMUM YIELD STRESS OF 350 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:2062

B) FOR COLD FORMED SECTIONS :-  
 i) PURLINS AND SIDE CLADDING RUNNERS ONLY SHALL BE MADE FROM COLD FORMED SECTIONS AND SHALL CONFORM TO ASTM A570 GR 50 WITH MINIMUM YIELD STRENGTH OF 310 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:811.

C) THREADED FASTENER :-  
 i) ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE-B) AS PER TENDER SPECIFICATION OF IS:1367 AND CONFORMING TO IS:5624.  
 ii) ALL CONNECTION BOLTS AND NUTS COMPLY WITH IS:1367 AND ALL FIELD CONNECTION BOLTED WITH HIGH STRENGTH FRICTION GRIP (HSFG) BOLTS OF PROPERTY CLASS 8.8.  
 iii) PLAIN WASHERS CONFORMING TO IS:5369.  
 iv) ONLY DTI WASHERS SHALL BE USED WITH HSFG BOLTS.

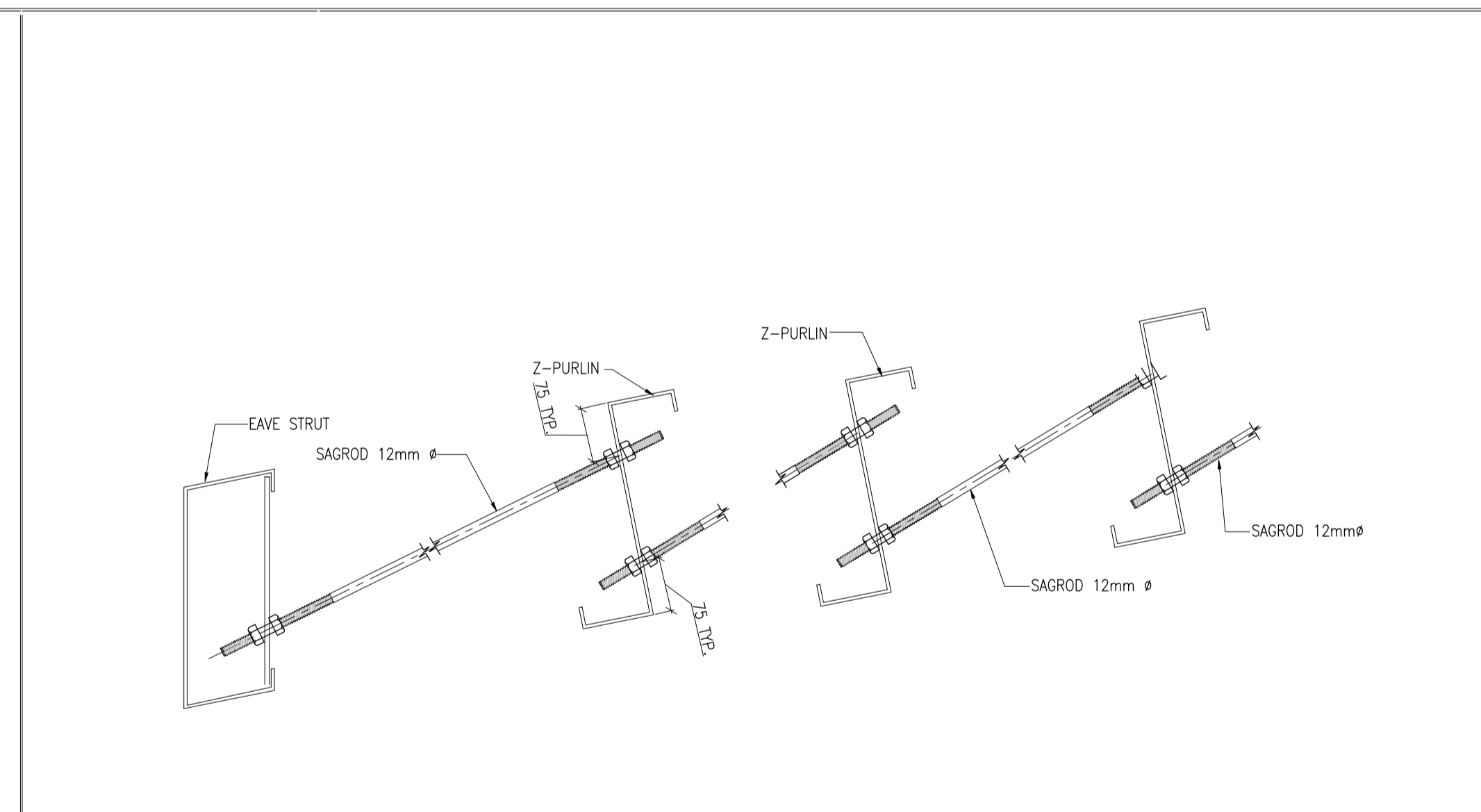
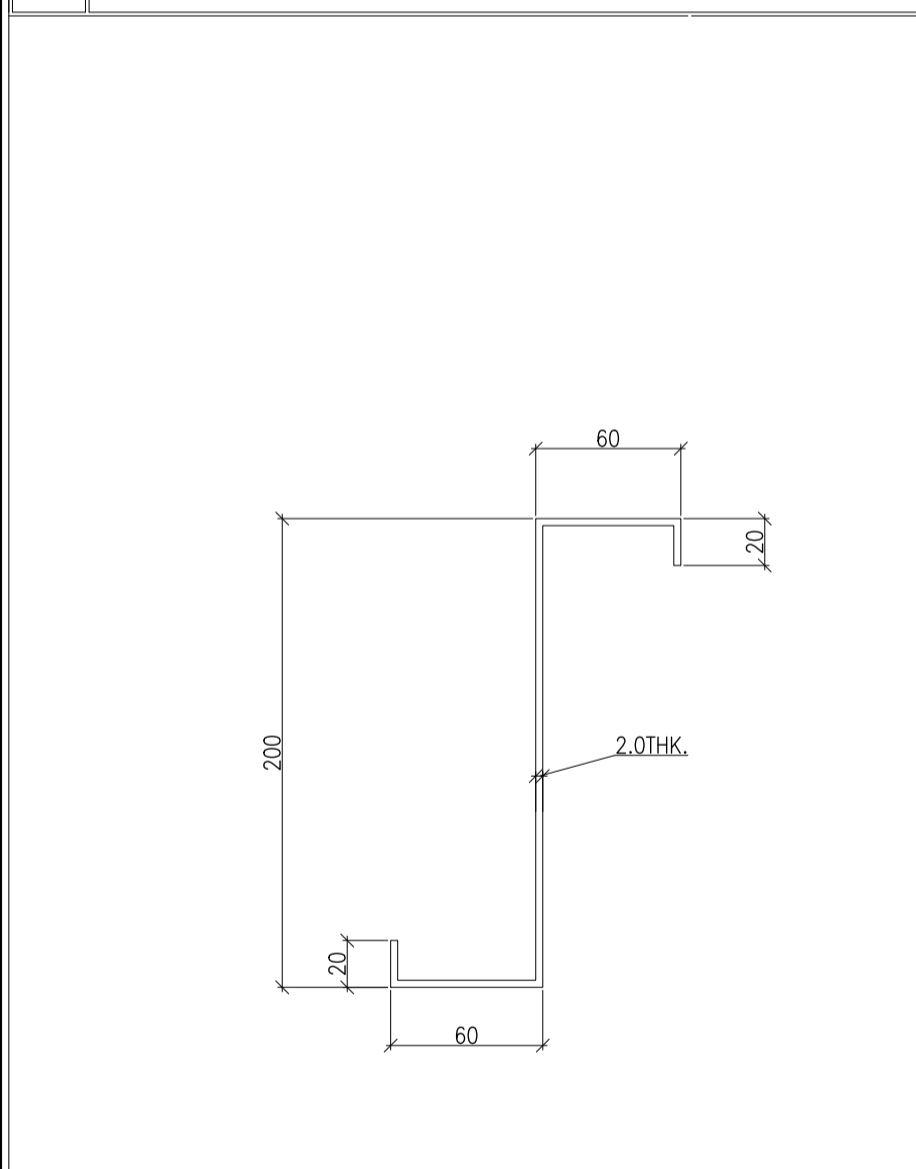
D) SHEETING MATERIAL :-  
 i) CLADDING ON ROOF OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.60 MM(TCT) TOTAL COATED THICKNESS WITH MINIMUM YIELD STRENGTH 550 MPA, GALVALUME AZ-150 GSM AS PER TENDER SPECIFICATION  
 ii) CLADDING ON THE SIDES OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.50 MM(TCT) TOTAL COATED THICKNESS WITH 50MM PUFF

E) SAG ROD :-  
 i) SAG ROD SHALL BE OF GRADE FE250, AS PER TENDER SPECIFICATION

**ANCHOR BOLT NOTES**

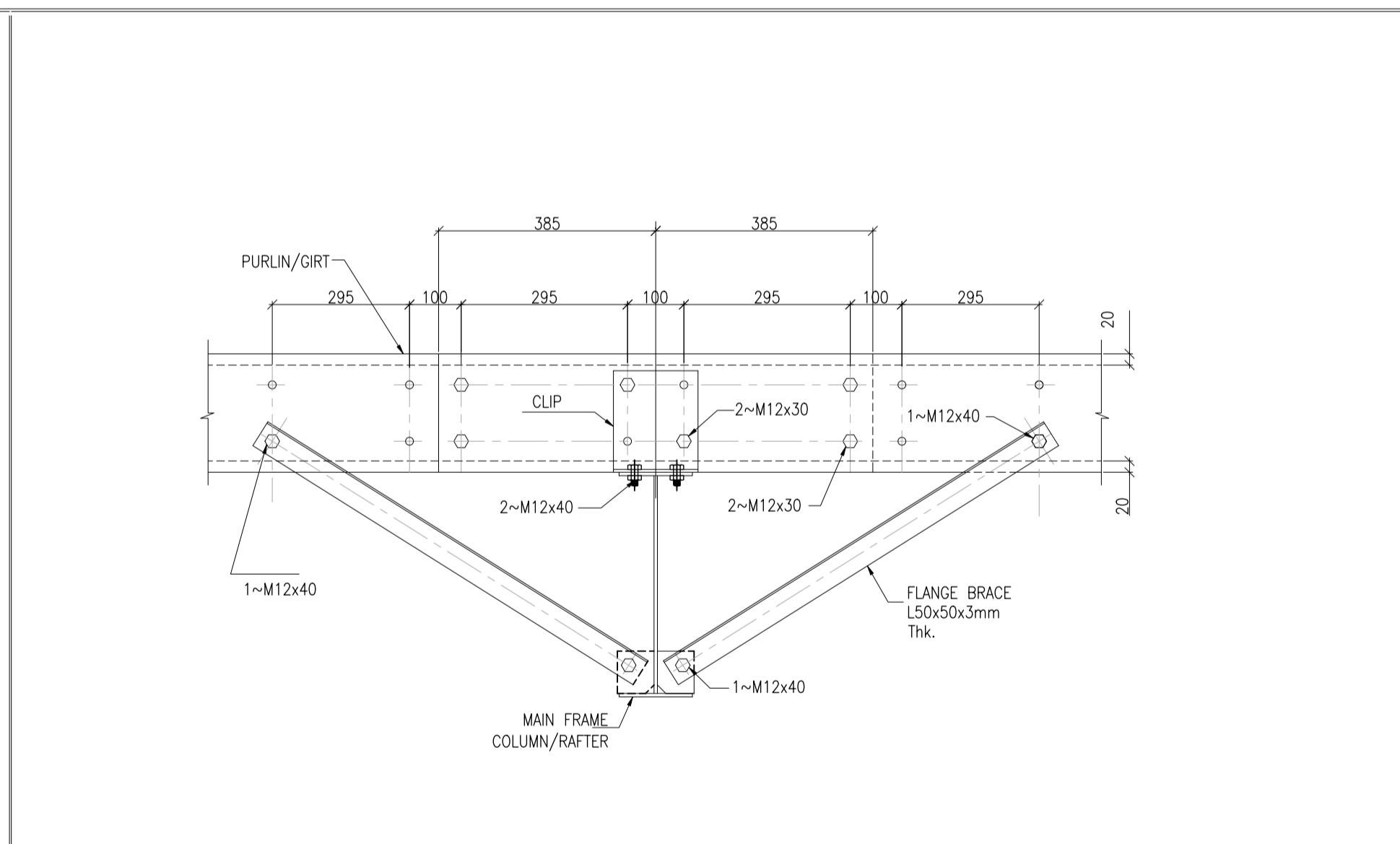
- ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE B) OF IS:1367 AND CONFORMING TO IS:5624
- ALL BASE PLATES SHALL BE OF GRADE E250 (B0).
- ANCHOR BOLTS SHOULD BE SET ACCURATELY AND HELD IN POSITION BY TEMPLATE BEFORE CASTING TO THE GIVEN DIMENSIONS AND PROJECTION, WITH MAXIMUM DEVIATION OF 5mm. ANCHOR BOLT THREADS SHOULD BE PROTECTED DURING CONCRETING OPERATION, OR THOROUGHLY CLEANED AFTER POURING. ALL TEMPLATES SHOULD BE REMOVED AFTER THE ANCHOR BOLTS ARE SET IN CONCRETE TO FULL STRENGTH.
- ALL ANCHOR BOLT DIAMETERS ARE IN MILLIMETERS. ANCHOR BOLT PROJECTION MUST BE ACCORDING TO DESIGN AND THREADS TO BE CLEAN.
- THE INSTALLATION OF ANCHOR BOLTS AND EMBEDDED ITEMS MUST BE DONE IN ACCORDANCE WITH THE CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS OF AISI SECTION 7. ANCHOR BOLTS AND FOUNDATION BOLTS SHALL BE SET FOR MAXIMUM ALLOWABLE TOLERANCES AS:  
 a. 3mm CENTER TO CENTER OR ANY TWO BOLTS WITHIN AN ANCHOR BOLT GROUP.  
 b. 6mm CENTER TO CENTER OF ADJACENT ANCHOR BOLT GROUP.  
 c. ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.  
 d. MAXIMUM ACCUMULATION OF 6mm PER 30 METERS ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.  
 e. 6mm FROM CENTER OF ANY ANCHOR BOLT GROUP TO BE ESTABLISHED COLUMN LINE THROUGH THAT GROUP.  
 f. THE TOLERANCE OF PARAGRAPHS b, c & d APPLY TO OFFSET DIMENSIONS SHOWN ON THE PLANS., MEASURED PARALLEL AND PERPENDICULAR TO THE NEAREST ESTABLISHED COLUMN LINE FOR ANCHOR BOLTS SHALL BE SET PERPENDICULAR TO THE THEORETICAL BEARING SURFACE UNLESS SHOWN OTHERWISE START FROM THE TOP LEVEL OF CONCRETE PEDESTAL.

01 ROOF FRAMING PLAN  
SCALE 1:150



02 ROOF PURLIN  
SCALE 1:250

03 SAG ROD FIXING DETAIL (ALL SAG ROD DIA ARE SAME, MARKING AS PER LENGTH)  
SCALE 1:250



04 TYPICAL FLANGE BRACE DETAIL (PURLIN/GIRT LAP DETAIL)  
SCALE 1:250

**WELDING NOTES**

- ELECTRODES USED FOR METAL ARE WELDING OF MILD STEEL SHALL BE HEAVY COATED TYPE ELECTRODES CONFORMING TO IS:814.
- AS PER IS:816-1969 CL. 6.2.2 FOR FILLET WELD, THE SIZE OF FILLET WELD SHALL NOT BE LESS THAN 3mm NOT MORE THAN THICKNESS OF THINNER PART JOINED.
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- LENGTH OF THE ELECTRODE SHOULD BE 450MM ±6MM.
- THE CONTACT END OF THE ELECTRODE SHALL BE BARE END CLEAN TO A LENGTH OF 20 TO 30MM.
- THE FLUX COVERING SHALL BE OF UNIFORM IN OUTSIDE DIAMETER AND THICKNESS.
- THE COVERING SHALL BURN OR FUSE EVENLY.
- A DEEP PENETRATION ELECTRODES SHALL PROVIDED A MINIMUM PENETRATION OF 4MM BEYOND THE ROOT WHERE THE ELECTRODE IS CONTINUOUSLY DEPOSITED IN A CLOSE SQUARE TEE JOINT BETWEEN TWO PLATES, EACH OF THICKNESS EQUAL TO TWICE THE CORE DIAMETER OF THE ELECTRODE.
- THE WELDING AND WELDING WORK SHALL CONFIRM TO IS:816.
- ALL PAINTING WORKS SHALL CONFIRM TO IS 1479 PART-I & II AND I.S. 8629.

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT:

ISSUED FOR :-  
 APPROVAL INFORMATION CONSTRUCTION

CONSULTANTS AND PROJECT MANAGERS



CLIENT

STRUCTURAL CONSULTANT :  
**SATIUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**  
 Office: Booth no. 31, Phase 9, SAS Nagar  
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Checked By: \_\_\_\_\_  
 Approved By: \_\_\_\_\_  
 Date: \_\_\_\_\_

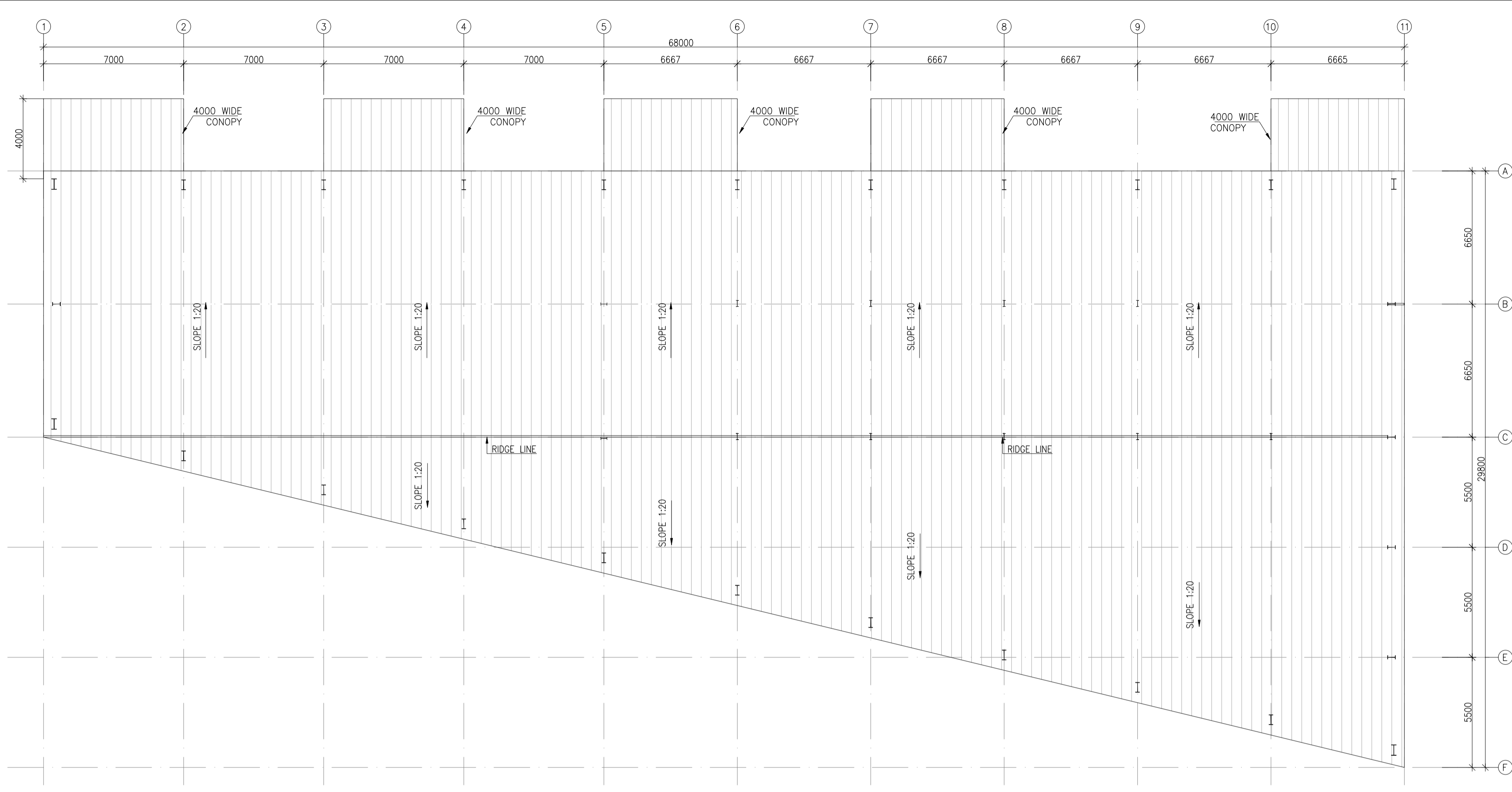
DATE: 07.03.2024

PROJECT: DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)

DRAWING TITLE: ROOF FRAMING PLAN

DRG. NO.: SS.CWC.PB.FP-07

SIZE : A1  
 REV: R0  
 S.NO :



**NOTES.**

1. ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
2. FOR CABLE TRAY REFER SEPARATE DRAWING.
3. MINIMUM PLATE THICKNESS TO BE TAKEN AS 6mm.
4. ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.

**GRADE SPECIFICATIONS OF MATERIALS**

- A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-
- i) ALL HOT ROLLED SECTION & PLATES WITH GRADE-BO HAVING A MINIMUM YIELD STRESS OF 350 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:2062
- B) FOR COLD FORMED SECTIONS :-
- i) PURLINS AND SIDE CLADDING RUNNERS ONLY SHALL BE MADE FROM COLD FORMED SECTIONS AND SHALL CONFORM TO ASTM A570 GR 50 WITH MINIMUM YIELD STRENGTH OF 310 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:811.
- C) THREADED FASTENER :-
- i) ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE-B) AS PER TENDER SPECIFICATION OF IS:1367 AND CONFORMING TO IS:5624.
  - ii) ALL CONNECTION BOLTS AND NUTS COMPLY WITH IS:1367 AND ALL FIELD CONNECTION BOLTED WITH HIGH STRENGTH FRICTION GRIP (HSFG) BOLTS OF PROPERTY CLASS 8.8.
  - iii) PLAIN WASHERS CONFORMING TO IS:5369.
  - iv) ONLY DTI WASHERS SHALL BE USED WITH HSFG BOLTS.
- D) SHEETING MATERIAL :-
- i) CLADDING ON ROOF OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.60 MM(TCT) TOTAL COATED THICKNESS WITH MINIMUM YIELD STRENGTH 550 MPA, GALVALUME AZ-150 GSM AS PER TENDER SPECIFICATION
  - ii) CLADDING ON THE SIDES OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.50 MM(TCT) TOTAL COATED THICKNESS WITH 50MM PUFF
- F) SAG ROD :-
- i) SAG ROD SHALL BE OF GRADE FE250. AS PER TENDER SPECIFICATION

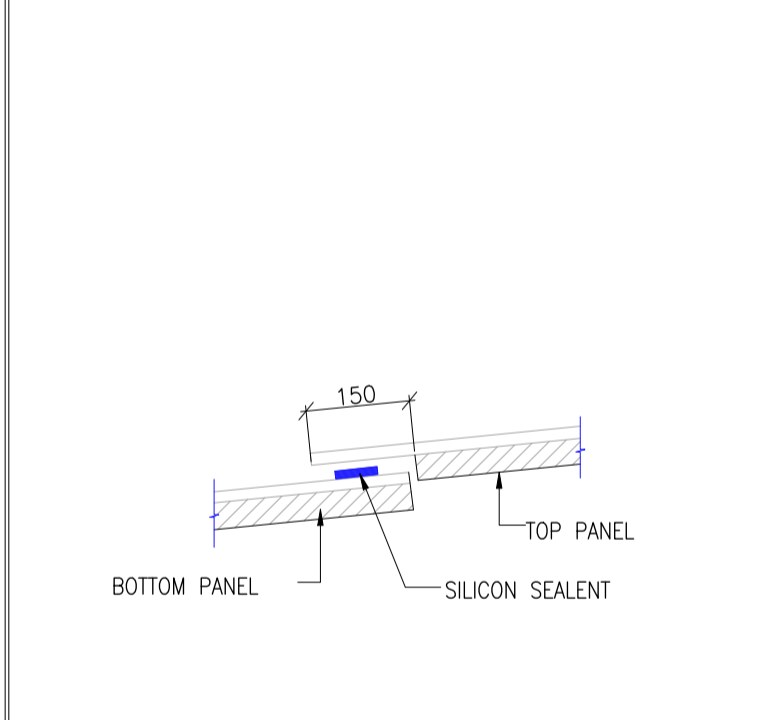
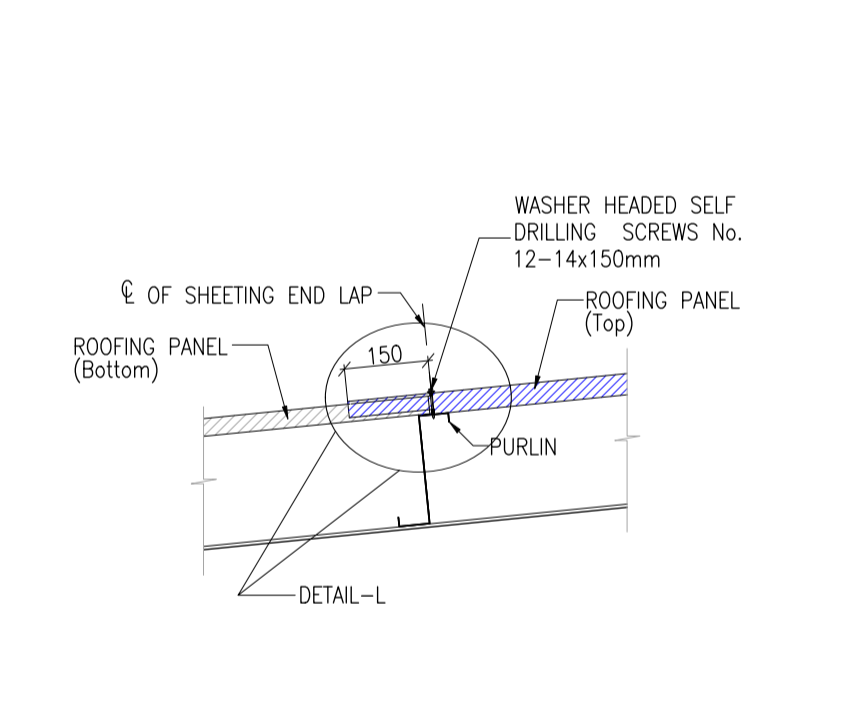
**ANCHOR BOLT NOTES**

1. ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE B) OF IS:1367 AND CONFORMING TO IS:5624
2. ALL BASE PLATES SHALL BE OF GRADE E250 (B0).
3. ANCHOR BOLTS SHOULD BE SET ACCURATELY AND HELD IN POSITION BY TEMPLATE BEFORE CASTING TO THE GIVEN DIMENSIONS AND PROJECTION, WITH MAXIMUM DEVIATION OF 5mm. ANCHOR BOLT THREADS SHOULD BE PROTECTED DURING CONCRETING OPERATION, OR THOROUGHLY CLEANED AFTER POURING. ALL TEMPLATES SHOULD BE REMOVED AFTER THE ANCHOR BOLTS ARE SET IN CONCRETE TO FULL STRENGTH.
4. ALL ANCHOR BOLT DIAMETERS ARE IN MILLIMETERS. ANCHOR BOLT PROJECTION MUST BE ACCORDING TO DESIGN AND THREADS TO BE CLEAN.
5. THE INSTALLATION OF ANCHOR BOLTS AND EMBEDDED ITEMS MUST BE DONE IN ACCORDANCE WITH THE CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS OF AISC SECTION 7. ANCHOR BOLTS AND FOUNDATION BOLTS SHALL BE SET FOR MAXIMUM ALLOWABLE TOLERANCES AS:
  - a. 3mm CENTER TO CENTER OR ANY TWO BOLTS WITHIN AN ANCHOR BOLT GROUP
  - b. 6mm CENTER TO CENTER OF ADJACENT ANCHOR BOLT GROUP.
  - c. ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.
  - d. MAXIMUM ACCUMULATION OF 6mm PER 30 METERS, ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.
  - e. 6mm FROM CENTER OF ANY ANCHOR BOLT GROUP TO BE ESTABLISHED COLUMN LINE THROUGH THAT GROUP.
  - f. THE TOLERANCE OF PARAGRAPHS b, c & d APPLY TO OFFSET DIMENSIONS SHOWN ON THE PLANS, MEASURED PARALLEL AND PERPENDICULAR TO THE NEAREST ESTABLISHED COLUMN LINE FOR ANCHOR BOLTS SHALL BE SET PERPENDICULAR TO THE THEORETICAL BEARING SURFACE UNLESS SHOWN OTHERWISE START FROM THE TOP LEVEL OF CONCRETE PEDESTAL.

**WELDING NOTES**

1. ELECTRODES USED FOR METAL ARE WELDING OF MILD STEEL SHALL BE HEAVY COATED TYPE ELECTRODES CONFORMING TO IS:814.
2. AS PER IS:816-1969 CL. 6.2.2 FOR FILLET WELD, THE SIZE OF FILLET WELD SHALL NOT BE LESS THAN 3mm NOT MORE THAN THICKNESS OF THINNER PART JOINED.
3. AUTOMATIC SUBMERGED ARCH WELDING WILL BE USED FOR FABRICATION, WELDING SHALL CONFORM TO IS:816.
4. ELECTRODE ROD SHALL BE CONFORM TO IS:814.
5. LENGTH OF THE ELECTRODE SHOULD BE 450MM ±6MM.
6. THE CONTACT END OF THE ELECTRODE SHALL BE BARE END CLEAN TO A LENGTH OF 20 TO 30MM.
7. THE FLUX COVERING SHALL BE OF UNIFORM IN OUTSIDE DIAMETER AND THICKNESS.
8. THE COVERING SHALL BURN OR FUSE EVENLY.
9. A DEEP PENETRATION ELECTRODES SHALL PROVIDED A MINIMUM PENETRATION OF 4MM BEYOND THE ROOT WHERE THE ELECTRODE IS CONTINUOUSLY DEPOSITED IN A CLOSE SQUARE TEE JOINT BETWEEN TWO PLATES, EACH OF THICKNESS EQUAL TO TWICE THE CORE DIAMETER OF THE ELECTRODE.
10. THE WELDING AND WELDING WORK SHALL CONFORM TO IS:816.
11. ALL PAINTING WORKS SHALL CONFORM TO I.S 1479 PART-I & II AND I.S 8629.

01 ROOF PLAN  
SCALE 1:150



02 ROOF PANEL LAP DETAIL  
(TYP. PANEL END LAP DETAIL) SCALE 1:250

03 DETAIL-L  
SCALE 1:200

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT: \_\_\_\_\_

ISSUED FOR :-

APPROVAL	INFORMATION	CONSTRUCTION
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONSULTANTS AND PROJECT MANAGERS: \_\_\_\_\_



CLIENT

STRUCTURAL CONSULTANT :

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Checked By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

DATE: 07.03.2024

SCALE: AS SHOWN

STATUS: INITIAL DRAWING

PROJECT: DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)

DRAWING TITLE: ROOF PLAN

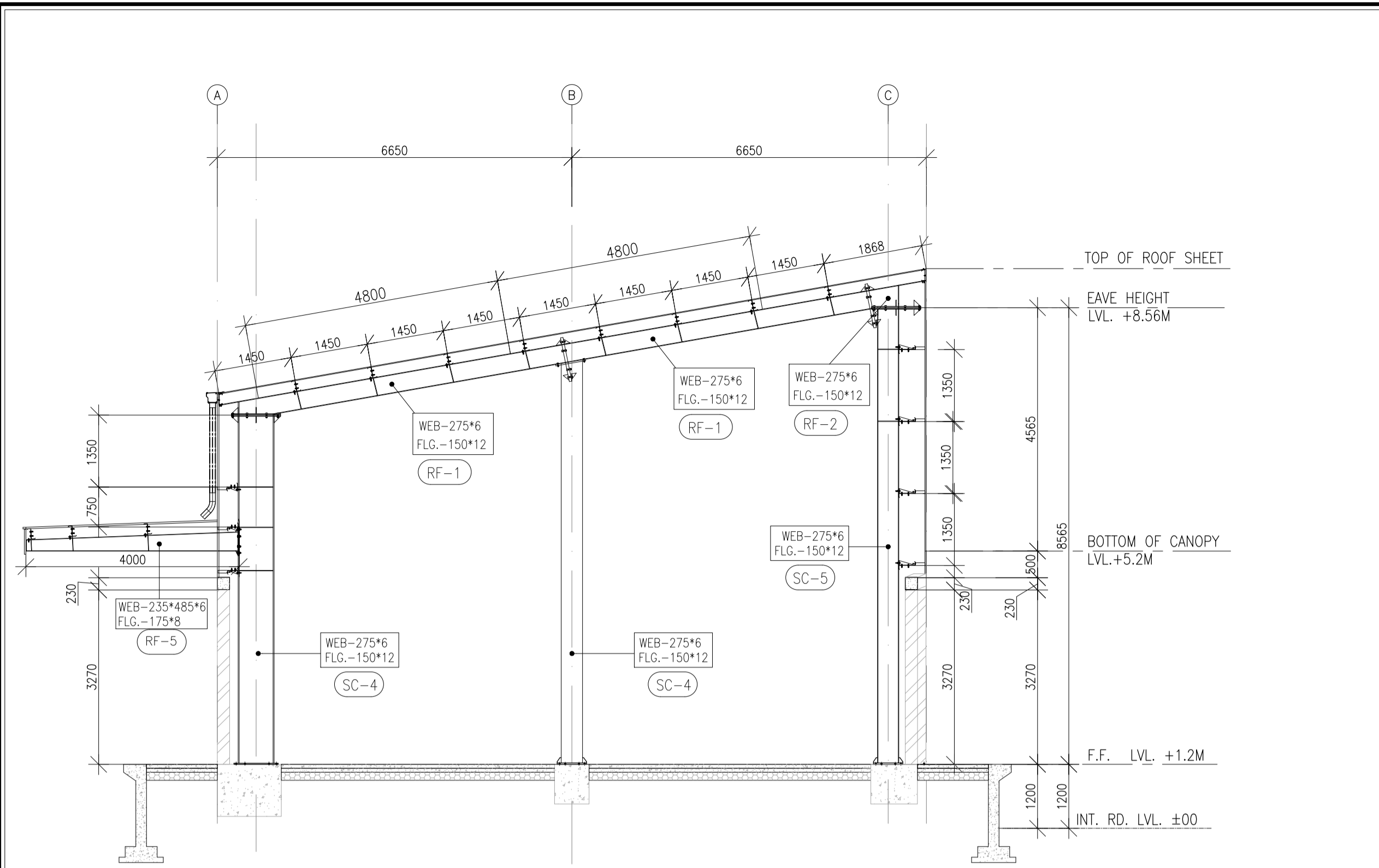
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SIZE : A1

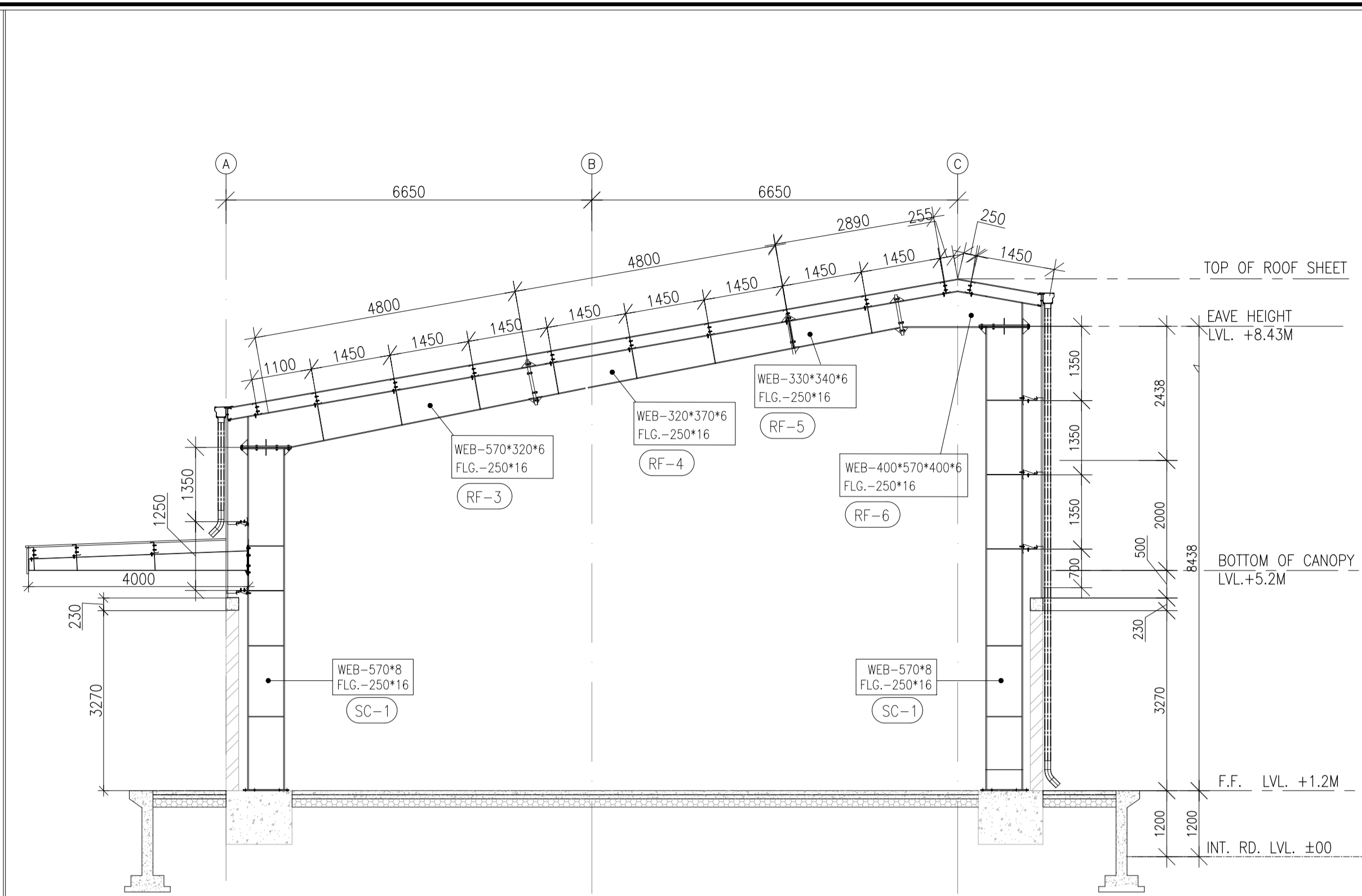
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S.NO :

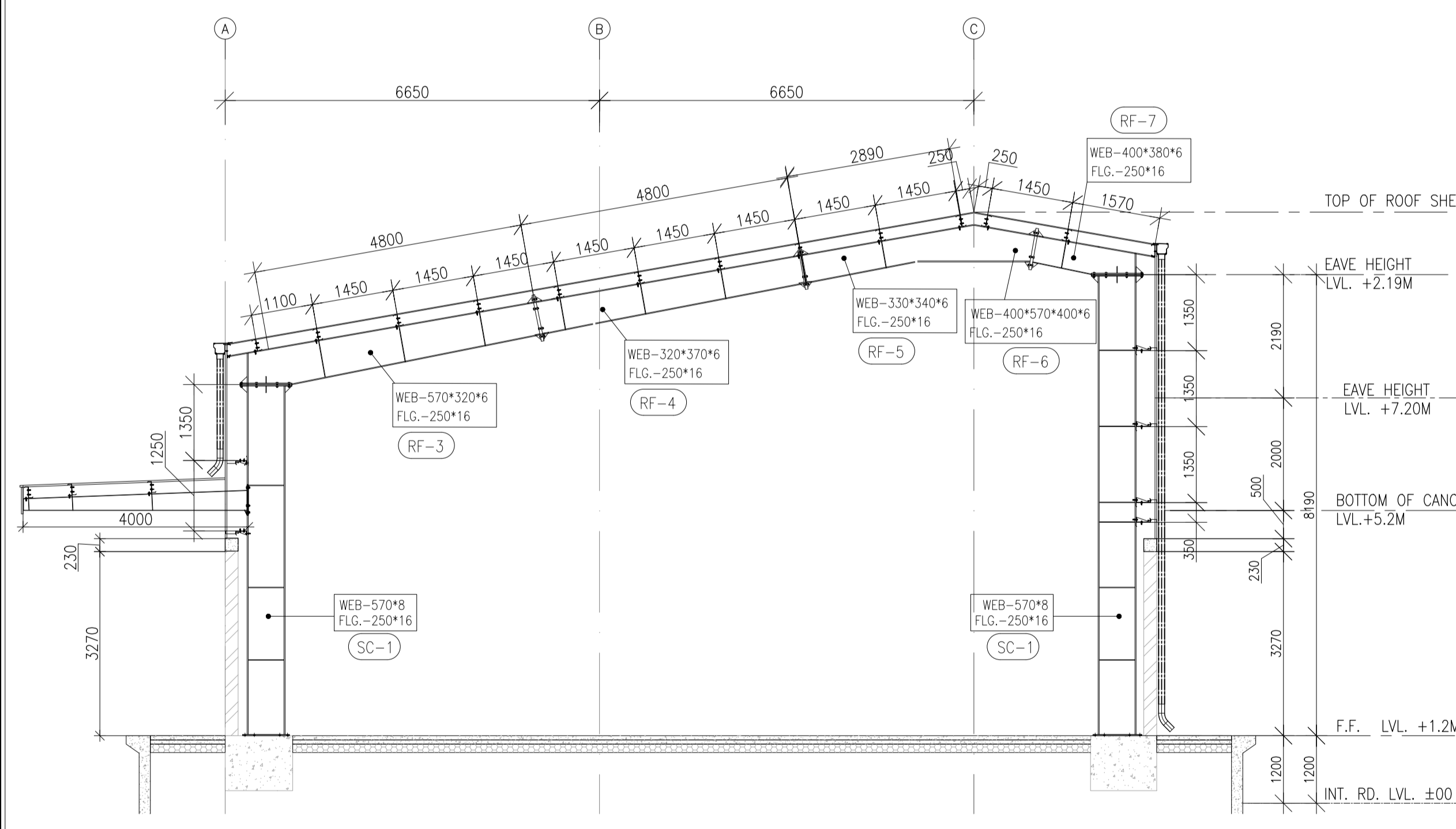




01 ELEVATION ALONG GRID-1  
SCALE 1:75



02 ELEVATION ALONG GRID-2  
SCALE 1:75



03 ELEVATION ALONG GRID-3  
SCALE 1:75

- NOTES.**
- ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
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  - MINIMUM PLATE THICKNESS TO BE TAKEN AS 6mm.
  - ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.
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- A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-
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- B) FOR COLD FORMED SECTIONS :-
- PURLINS AND SIDE CLADDING RUNNERS ONLY SHALL BE MADE FROM COLD FORMED SECTIONS AND SHALL CONFORM TO ASTM A570 GR 50 WITH MINIMUM YIELD STRENGTH OF 310 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:811.
- C) THREADED FASTENER :-
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  - ALL CONNECTION BOLTS AND NUTS COMPLY WITH IS:1367 AND ALL FIELD CONNECTION BOLTED WITH HIGH STRENGTH FRICTION GRIP (HSFG) BOLTS OF PROPERTY CLASS 8.8.
  - PLAIN WASHERS CONFORMING TO IS:5369.
  - ONLY DTI WASHERS SHALL BE USED WITH HSFG BOLTS.
- D) SHEETING MATERIAL :-
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  - CLADDING ON THE SIDES OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.50 MM(TCT) TOTAL COATED THICKNESS WITH 50MM PUFF
- F) SAG ROD :-
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- ANCHOR BOLT NOTES**
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  - ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.
  - MAXIMUM ACCUMULATION OF 6mm PER 30 METERS ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.
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- f. THE TOLERANCE OF PARAGRAPHS b, c & d APPLY TO OFFSET DIMENSIONS SHOWN ON THE PLANS., MEASURED PARALLEL AND PERPENDICULAR TO THE NEAREST ESTABLISHED COLUMN LINE FOR ANCHOR BOLTS SHALL BE SET PERPENDICULAR TO THE THEORETICAL BEARING SURFACE UNLESS SHOWN OTHERWISE START FROM THE TOP LEVEL OF CONCRETE PEDESTAL.


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  - AS PER IS:816-1969 CL. 6.2.2 FOR FILLET WELD, THE SIZE OF FILLET WELD SHALL NOT BE LESS THAN 3mm NOT MORE THAN THICKNESS OF THINNER PART JOINED.
  - AUTOMATIC SUBMERGED ARCH WELDING WILL BE USED FOR FABRICATION, WELDING SHALL CONFORM TO IS:816.
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  - THE WELDING AND WELDING WORK SHALL CONFIRM TO IS816.
  - ALL PAINTING WORKS SHALL CONFIRM TO IS 1479 PART-I & II AND IS 8629.

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT:	ISSUED FOR -:
	APPROVAL
	INFORMATION
	CONSTRUCTION

CONSULTANTS AND PROJECT MANAGERS	CLIENT

STRUCTURAL CONSULTANT :



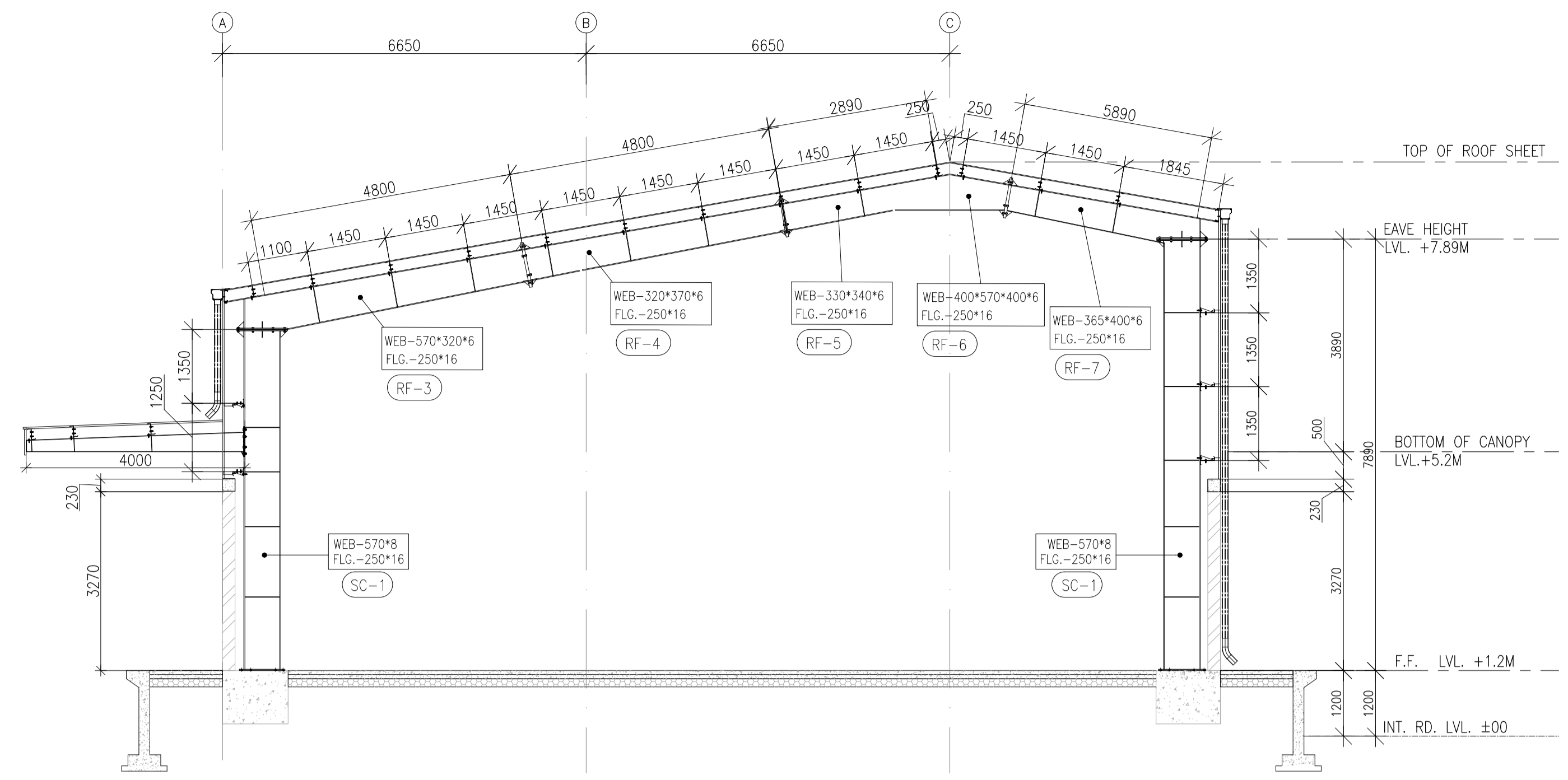
**SATIUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**

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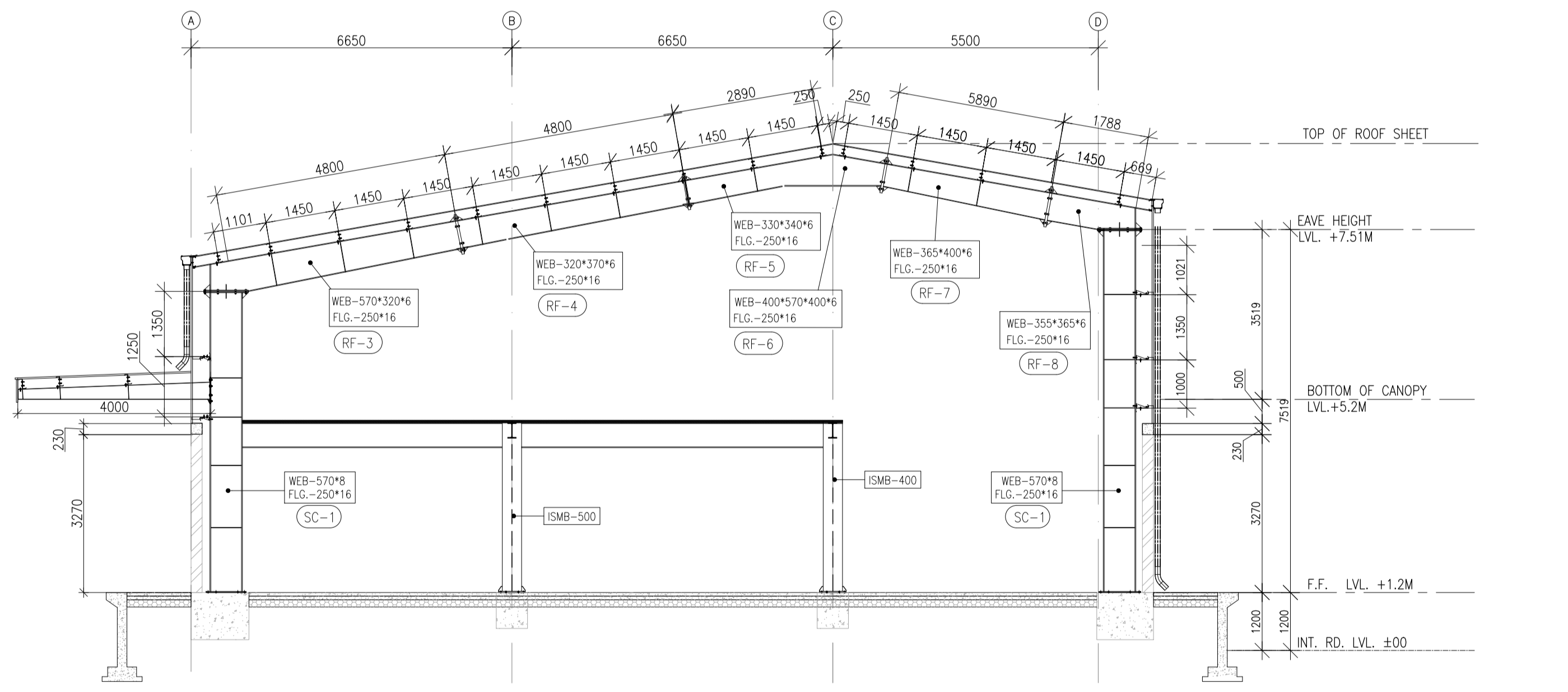
Checked By:	DATE
	07.03.2024
Approved By:	SCALE:
	AS SHOWN
Date:	STATUS:
	INITIAL DRAWING

PROJECT:	
DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)	
DRAWING TITLE:	SIZE : A1
MAIN FRAME ELEVATIONS & DETAILS	REV: RO
DRG. NO.:	S.NO :
SS.CWC.PB.MF-10	





01 ELEVATION ALONG GRID-4  
SCALE 1:75



01 ELEVATION ALONG GRID-5  
SCALE 1:75

**NOTES.**

1. ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
2. FOR CABLE TRAY REFER SEPARATE DRAWING.
3. MINIMUM PLATE THICKNESS TO BE TAKEN AS 6mm.
4. ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.

**GRADE SPECIFICATIONS OF MATERIALS**

- A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-
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- B) FOR COLD FORMED SECTIONS :-
- i) PURLINS AND SIDE CLADDING RUNNERS ONLY SHALL BE MADE FROM COLD FORMED SECTIONS AND SHALL CONFORM TO ASTM A570 GR 50 WITH MINIMUM YIELD STRENGTH OF 310 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:811.
- C) THREADED FASTENER :-
- i) ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE-B) AS PER TENDER SPECIFICATION OF IS:1367 AND CONFORMING TO IS:5624.
  - ii) ALL CONNECTION BOLTS AND NUTS COMPLY WITH IS:1367 AND ALL FIELD CONNECTION BOLTED WITH HIGH STRENGTH FRICTION GRIP (HSFG) BOLTS OF PROPERTY CLASS 8.8.
  - iii) PLAIN WASHERS CONFORMING TO IS:5369.
  - iv) ONLY DTI WASHERS SHALL BE USED WITH HSFG BOLTS.
- D) SHEETING MATERIAL :-
- i) CLADDING ON ROOF OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.60 MM(TCT) TOTAL COATED THICKNESS WITH MINIMUM YIELD STRENGTH 550 MPA, GALVALUME AZ-150 GSM AS PER TENDER SPECIFICATION
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- F) SAG ROD :-
- i) SAG ROD SHALL BE OF GRADE FE250, AS PER TENDER SPECIFICATION

**ANCHOR BOLT NOTES**

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  - c. ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.
  - d. MAXIMUM ACCUMULATION OF 6mm PER 30 MTRS. ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.
  - e. 6mm FROM CENTER OF ANY ANCHOR BOLT GROUP TO BE ESTABLISHED COLUMN LINE THROUGH THAT GROUP.
6. THE TOLERANCE OF PARAGRAPHS b, c & d APPLY TO OFFSET DIMENSIONS SHOWN ON THE PLANS., MEASURED PARALLEL AND PERPENDICULAR TO THE NEAREST ESTABLISHED COLUMN LINE FOR ANCHOR BOLTS SHALL BE SET PERPENDICULAR TO THE THEORETICAL BEARING SURFACE UNLESS SHOWN OTHERWISE START FROM THE TOP LEVEL OF CONCRETE PEDESTAL.

**WELDING NOTES**

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8. THE COVERING SHALL BURN OR FUSE EVENLY.
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10. THE WELDING AND WELDING WORK SHALL CONFIRM TO IS:816.
11. ALL PAINTING WORKS SHALL CONFIRM TO IS 1479 PART-I & II AND IS 8629.

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT: \_\_\_\_\_

ISSUED FOR :-

APPROVAL	INFORMATION	CONSTRUCTION
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONSULTANTS AND PROJECT MANAGERS: \_\_\_\_\_



CLIENT

STRUCTURAL CONSULTANT :

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Mob: +91-9646157916

Checked By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

DATE: 07.03.2024

SCALE: AS SHOWN

STATUS: INITIAL DRAWING

PROJECT: DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)

DRAWING TITLE: MAIN FRAME ELEVATIONS & DETAILS

DRG. NO.: SS.CWC.PB.MF-11

SIZE : A1

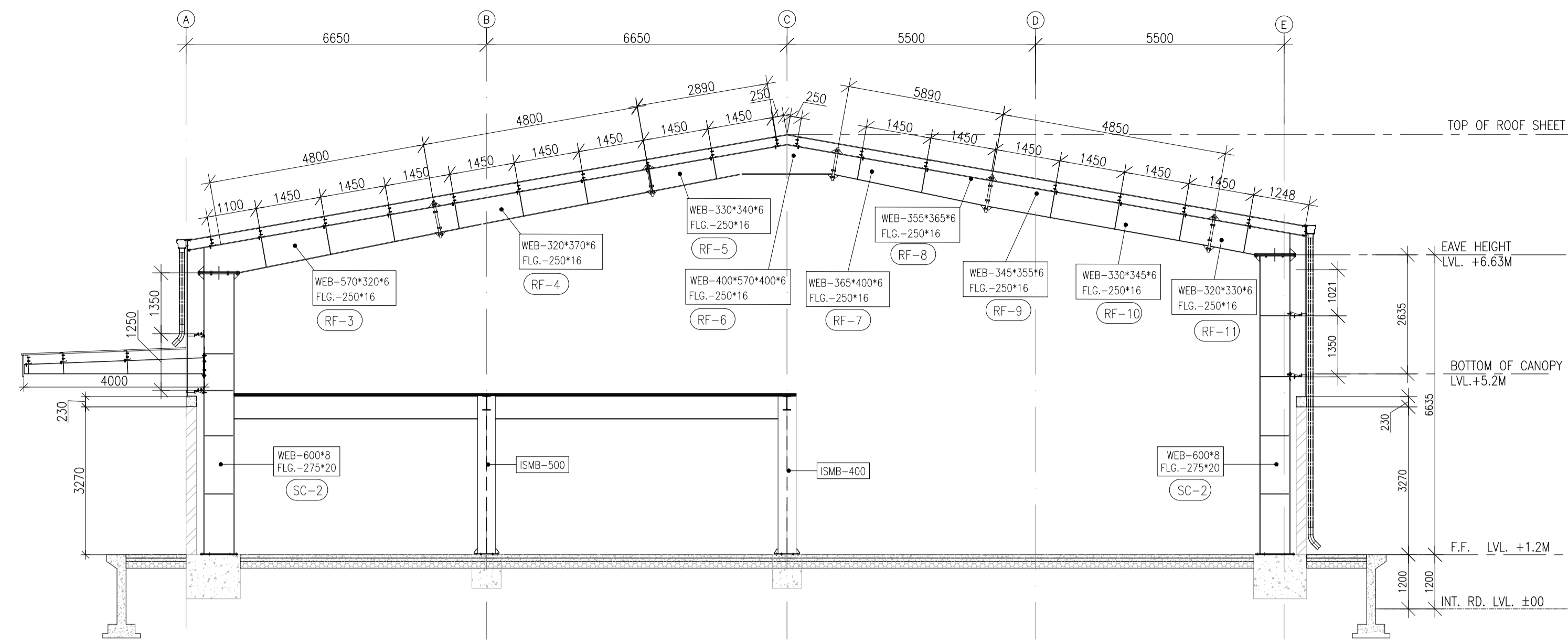
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S.NO :

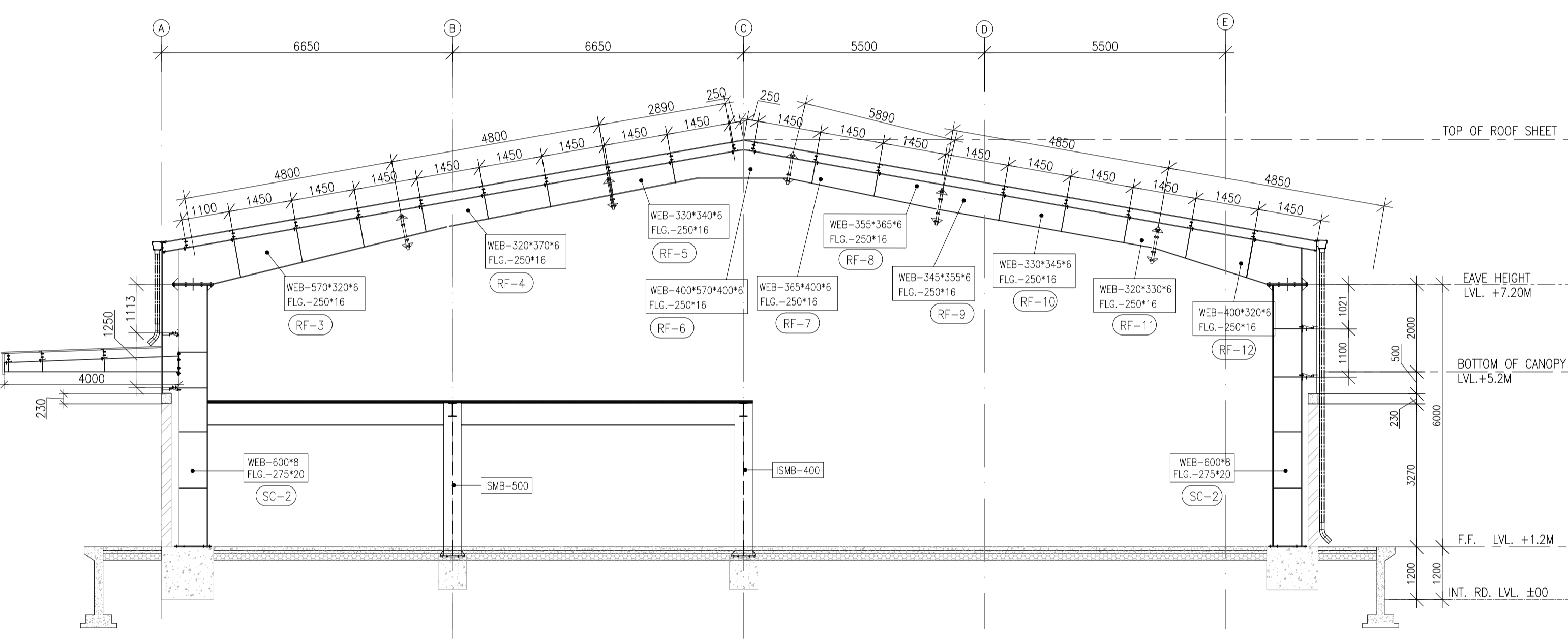








01 ELEVATION ALONG GRID- 8  
SCALE 1:75



01 ELEVATION ALONG GRID- 9  
SCALE 1:75

**NOTES.**

1. ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
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4. ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.

**GRADE SPECIFICATIONS OF MATERIALS**

- A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-**
- i) ALL HOT ROLLED SECTION & PLATES WITH GRADE-B0 HAVING A MINIMUM YIELD STRESS OF 350 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:2062
- B) FOR COLD FORMED SECTIONS :-**
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  - iv) ONLY DTI WASHERS SHALL BE USED WITH HSFG BOLTS.
- D) SHEETING MATERIAL :-**
- i) CLADDING ON ROOF OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.60 MM(TCT) TOTAL COATED THICKNESS WITH MINIMUM YIELD STRENGTH 550 MPA, GALVALUME AZ-150 GSM AS PER TENDER SPECIFICATION
  - ii) CLADDING ON THE SIDES OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.50 MM(TCT) TOTAL COATED THICKNESS WITH 50MM PUFF
- F) SAG ROD :-**
- i) SAG ROD SHALL BE OF GRADE FE250, AS PER TENDER SPECIFICATION

**ANCHOR BOLT NOTES**

1. ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE B) OF IS:1367 AND CONFORMING TO IS:5624
2. ALL BASE PLATES SHALL BE OF GRADE E250 (B0).
3. ANCHOR BOLTS SHOULD BE SET ACCURATELY AND HELD IN POSITION BY TEMPLATE BEFORE CASTING TO THE GIVEN DIMENSIONS AND PROJECTION, WITH MAXIMUM DEVIATION OF 5mm. ANCHOR BOLT THREADS SHOULD BE PROTECTED DURING CONCRETING OPERATION, OR THOROUGHLY CLEANED AFTER POURING. ALL TEMPLATES SHOULD BE REMOVED AFTER THE ANCHOR BOLTS ARE SET IN CONCRETE TO FULL STRENGTH.
4. ALL ANCHOR BOLT DIAMETERS ARE IN MILLIMETERS. ANCHOR BOLT PROJECTION MUST BE ACCORDING TO DESIGN AND THREADS TO BE CLEAN.
5. THE INSTALLATION OF ANCHOR BOLTS AND EMBEDDED ITEMS MUST BE DONE IN ACCORDANCE WITH THE CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS OF IS:800 SECTION 7. ANCHOR BOLTS AND FOUNDATION BOLTS SHALL BE SET FOR MAXIMUM ALLOWABLE TOLERANCES AS:
  - a. 3mm CENTER TO CENTER OR ANY TWO BOLTS WITHIN AN ANCHOR BOLT GROUP.
  - b. 6mm CENTER TO CENTER OF ADJACENT ANCHOR BOLT GROUP.
  - c. ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.
  - d. MAXIMUM ACCUMULATION OF 6mm PER 30 MTRS. ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.
  - e. 6mm FROM CENTER OF ANY ANCHOR BOLT GROUP TO BE ESTABLISHED COLUMN LINE THROUGH THAT GROUP.
6. THE TOLERANCE OF PARAGRAPHS b, c & d APPLY TO OFFSET DIMENSIONS SHOWN ON THE PLANS., MEASURED PARALLEL AND PERPENDICULAR TO THE NEAREST ESTABLISHED COLUMN LINE FOR ANCHOR BOLTS SHALL BE SET PERPENDICULAR TO THE THEORETICAL BEARING SURFACE UNLESS SHOWN OTHERWISE START FROM THE TOP LEVEL OF CONCRETE PEDESTAL.

**WELDING NOTES**


1. ELECTRODES USED FOR METAL ARE WELDING OF MILD STEEL SHALL BE HEAVY COATED TYPE ELECTRODES CONFORMING TO IS:814.
2. AS PER IS:816-1969 CL. 6.2.2 FOR FILLET WELD, THE SIZE OF FILLET WELD SHALL NOT BE LESS THAN 3mm NOT MORE THAN THICKNESS OF THINNER PART JOINED.
3. AUTOMATIC SUBMERGED ARCH WELDING WILL BE USED FOR FABRICATION, WELDING SHALL CONFORM TO IS:816.
4. ELECTRODE ROD SHALL BE CONFORM TO IS:814.
5. LENGTH OF THE ELECTRODE SHOULD BE 450MM ±6MM.
6. THE CONTACT END OF THE ELECTRODE SHALL BE BARE END CLEAN TO A LENGTH OF 20 TO 30MM.
7. THE FLUX COVERING SHALL BE OF UNIFORM IN OUTSIDE DIAMETER AND THICKNESS.
8. THE COVERING SHALL BURN OR FUSE EVENLY.
9. A DEEP PENETRATION ELECTRODES SHALL PROVIDED A MINIMUM PENETRATION OF 4MM BEYOND THE ROOT WHERE THE ELECTRODE IS CONTINUOUSLY DEPOSITED IN A CLOSE SQUARE TEE JOINT BETWEEN TWO PLATES, EACH OF THICKNESS EQUAL TO TWICE THE CORE DIAMETER OF THE ELECTRODE.
10. THE WELDING AND WELDING WORK SHALL CONFIRM TO IS:816.
11. ALL PAINTING WORKS SHALL CONFIRM TO IS 1479 PART-I & II AND IS 8629.

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT:	ISSUED FOR :-
	APPROVAL
	INFORMATION
	CONSTRUCTION

CONSULTANTS AND PROJECT MANAGERS	CLIENT

STRUCTURAL CONSULTANT :



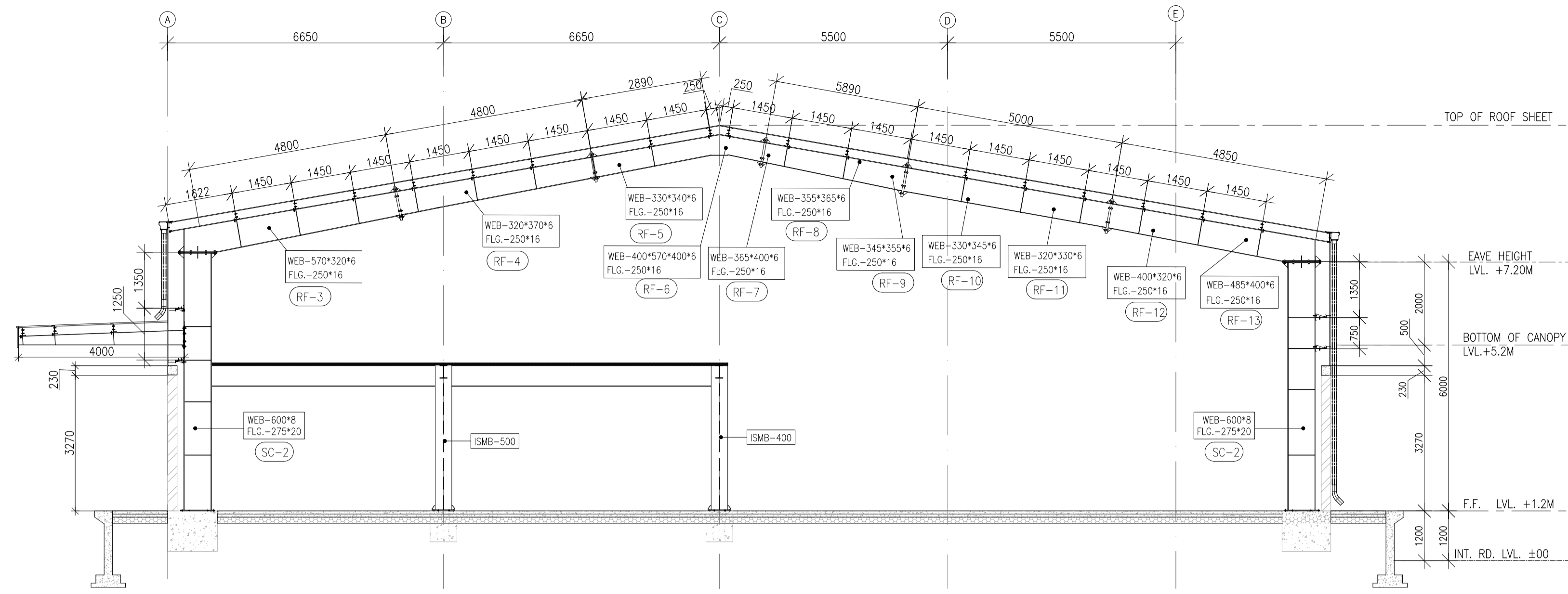
**SATIUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**

Office: Booth no. 31, Phase 9, SAS Nagar  
 Mohali -160062 (PB) Regd. Office:  
 H. no. 1576, Saini Vihar, Phase 3,  
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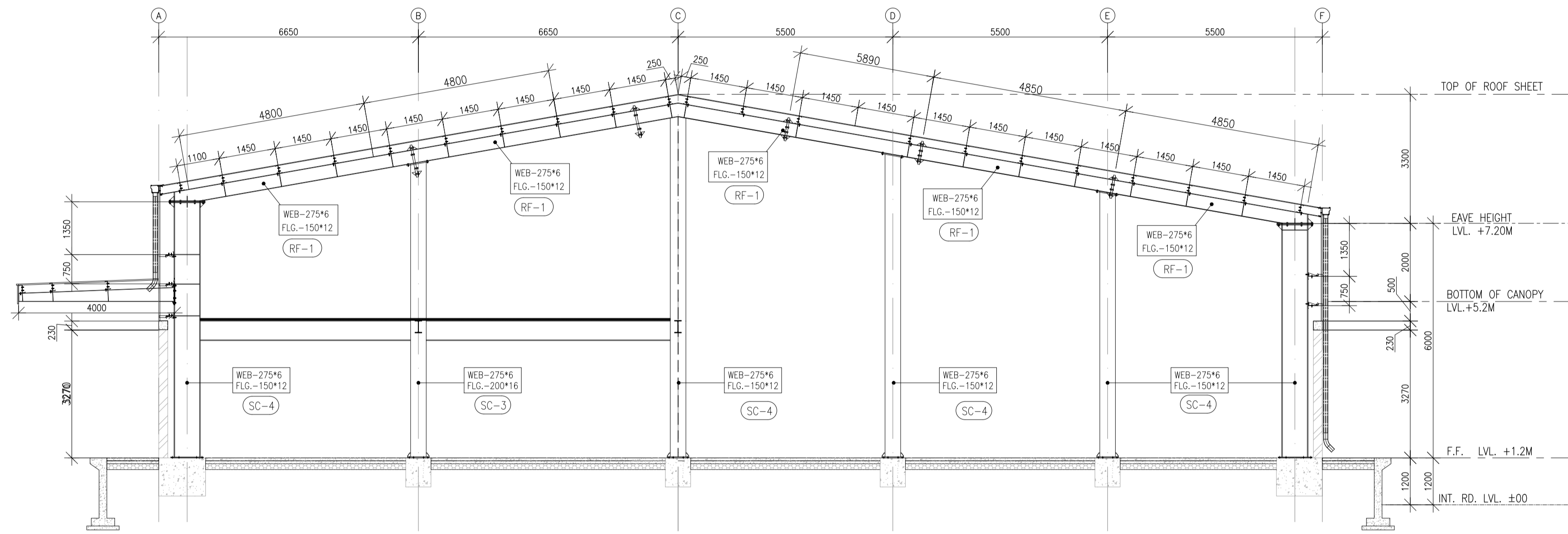
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Approved By:	SCALE
	AS SHOWN
Date:	STATUS:
	INITIAL DRAWING

PROJECT:	SIZE :
DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)	A1
DRAWING TITLE:	REV:
MAIN FRAME ELEVATIONS & DETAILS	RO
DRG. NO.:	S.NO :
SS.CWC.PB.MF-12	





01 ELEVATION ALONG GRID- 10  
SCALE 1:75



01 ELEVATION ALONG GRID- 11  
SCALE 1:75

**NOTES.**

1. ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
2. FOR CABLE TRAY REFER SEPARATE DRAWING.
3. MINIMUM PLATE THICKNESS TO BE TAKEN AS 6mm.
4. ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.

**GRADE SPECIFICATIONS OF MATERIALS**

- A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-
- i) ALL HOT ROLLED SECTION & PLATES WITH GRADE-B0 HAVING A MINIMUM YIELD STRESS OF 350 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:2062
- B) FOR COLD FORMED SECTIONS :-
- i) PURLINS AND SIDE CLADDING RUNNERS ONLY SHALL BE MADE FROM COLD FORMED SECTIONS AND SHALL CONFORM TO ASTM A570 GR 50 WITH MINIMUM YIELD STRENGTH OF 310 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:811.
- C) THREADED FASTENER :-
- i) ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE-B) AS PER TENDER SPECIFICATION OF IS:1367 AND CONFORMING TO IS:5624.
  - ii) ALL CONNECTION BOLTS AND NUTS COMPLY WITH IS:1367 AND ALL FIELD CONNECTION BOLTED WITH HIGH STRENGTH FRICTION GRIP (HSFG) BOLTS OF PROPERTY CLASS 8.8.
  - iii) PLAIN WASHERS CONFORMING TO IS:5369.
  - iv) ONLY DTI WASHERS SHALL BE USED WITH HSFG BOLTS.
- D) SHEETING MATERIAL :-
- i) CLADDING ON ROOF OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.60 MM(TCT) TOTAL COATED THICKNESS WITH MINIMUM YIELD STRENGTH 550 MPA, GALVALUME AZ-150 GSM AS PER TENDER SPECIFICATION
  - ii) CLADDING ON THE SIDES OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.50 MM(TCT) TOTAL COATED THICKNESS WITH 50MM PUFF
- F) SAG ROD :-
- i) SAG ROD SHALL BE OF GRADE FE250, AS PER TENDER SPECIFICATION

**ANCHOR BOLT NOTES**

1. ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE B) OF IS:1367 AND CONFORMING TO IS:5624
2. ALL BASE PLATES SHALL BE OF GRADE E250 (B0).
3. ANCHOR BOLTS SHOULD BE SET ACCURATELY AND HELD IN POSITION BY TEMPLATE BEFORE CASTING TO THE GIVEN DIMENSIONS AND PROJECTION, WITH MAXIMUM DEVIATION OF 5mm. ANCHOR BOLT THREADS SHOULD BE PROTECTED DURING CONCRETING OPERATION, OR THOROUGHLY CLEANED AFTER POURING. ALL TEMPLATES SHOULD BE REMOVED AFTER THE ANCHOR BOLTS ARE SET IN CONCRETE TO FULL STRENGTH.
4. ALL ANCHOR BOLT DIAMETERS ARE IN MILLIMETERS. ANCHOR BOLT PROJECTION MUST BE ACCORDING TO DESIGN AD THREADS TO BE CLEAN.
5. THE INSTALLATION OF ANCHOR BOLTS AND EMBEDDED ITEMS MUST BE DONE IN ACCORDANCE WITH THE CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS OF IS: SECTION 7. ANCHOR BOLTS AND FOUNDATION BOLTS SHALL BE SET FOR MAXIMUM ALLOWABLE TOLERANCES AS:
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  - b. 6mm CENTER TO CENTER OF ADJACENT ANCHOR BOLT GROUP.
  - c. ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.
  - d. MAXIMUM ACCUMULATION OF 6mm PER 30 MTRS. ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.
  - e. 6mm FROM CENTER OF ANY ANCHOR BOLT GROUP TO BE ESTABLISHED COLUMN LINE THROUGH THAT GROUP.
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**WELDING NOTES**

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4. ELECTRODE ROD SHALL BE CONFORM TO IS:814.
5. LENGTH OF THE ELECTRODE SHOULD BE 450MM ±6MM.
6. THE CONTACT END OF THE ELECTRODE SHALL BE BARE END CLEAN TO A LENGTH OF 20 TO 30MM.
7. THE FLUX COVERING SHALL BE OF UNIFORM IN OUTSIDE DIAMETER AND THICKNESS.
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10. THE WELDING AND WELDING WORK SHALL CONFIRM TO IS816.
11. ALL PAINTING WORKS SHALL CONFIRM TO IS 1479 PART-I & II AND IS 8629.

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT:	ISSUED FOR :-
	APPROVAL
	INFORMATION
	CONSTRUCTION

CONSULTANTS AND PROJECT MANAGERS	CLIENT

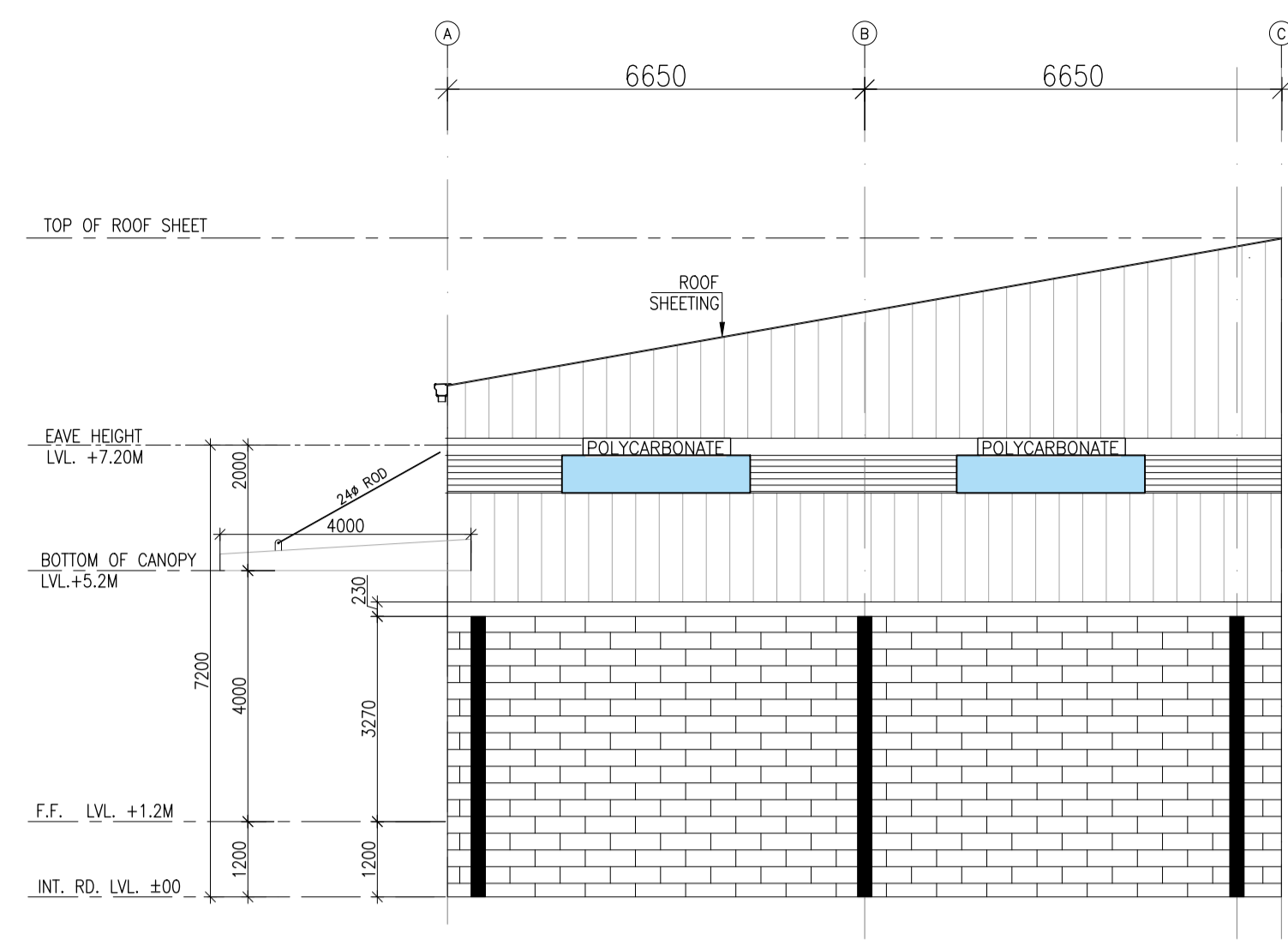
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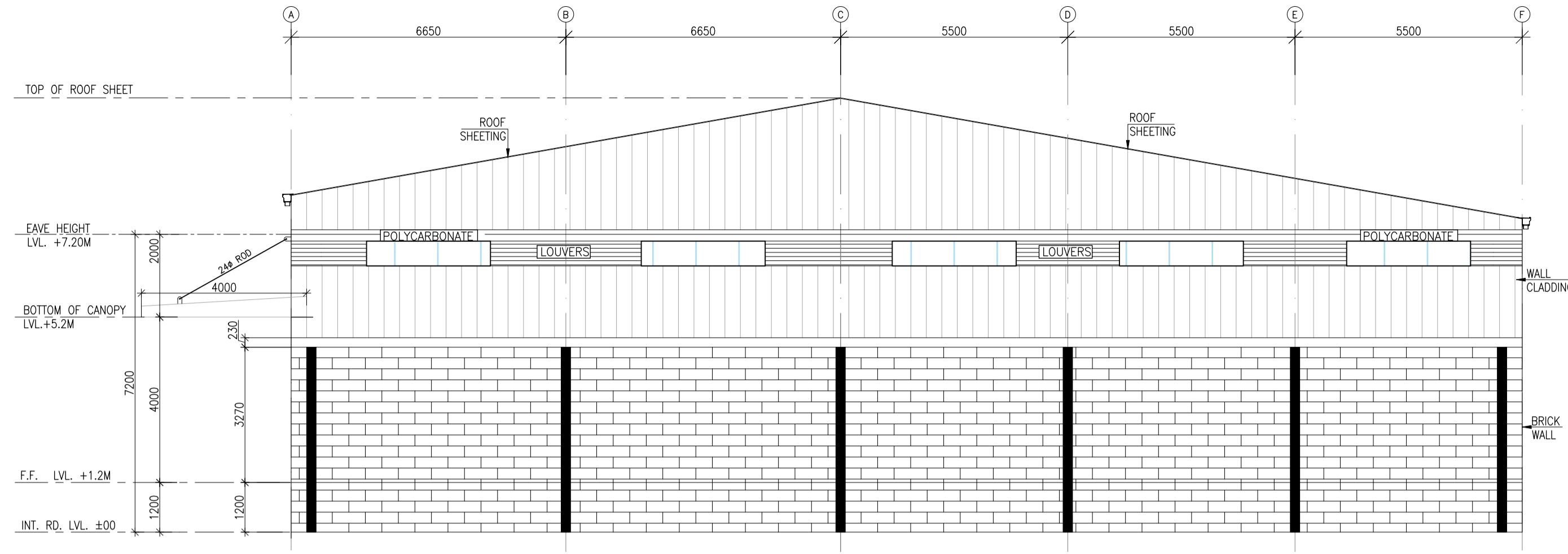
**SATUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**  
 Office: Booth no. 31, Phase 9, SAS Nagar  
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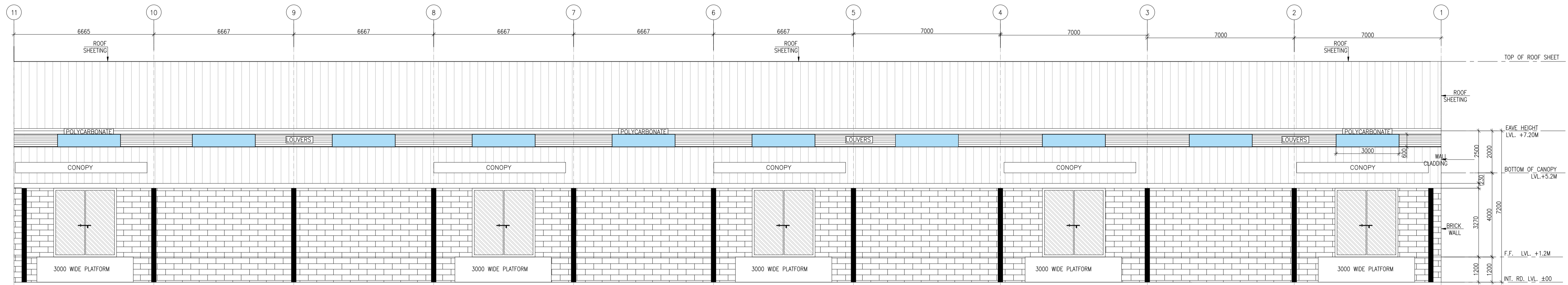
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DRAWING TITLE: MAIN FRAME ELEVATIONS & DETAILS	SIZE : A1
DRG. NO.: SS.CWC.PB.MF-12	REV: RO
	S.NO :



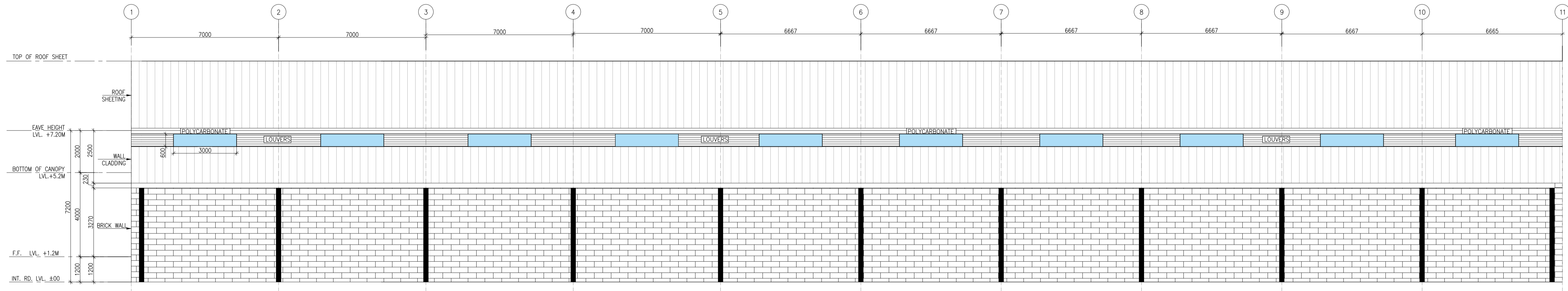
01 ELEVATION ALONG GRID- 1  
SCALE 1:100



02 ELEVATION ALONG GRID- 11  
SCALE 1:100



03 ELEVATION ALONG GRID-A  
SCALE 1:100



04 ELEVATION ALONG TAPPER SIDE  
SCALE 1:100

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT:

ISSUED FOR -:

APPROVAL	INFORMATION	CONSTRUCTION
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CONSULTANTS AND PROJECT MANAGERS

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Checked By:

DATE  
07.03.2024

Approved By:

SCALE:  
AS SHOWN

Date:

STATUS:  
INITIAL DRAWING

PROJECT:  
DEVELOPMENT OF  
WAREHOUSE PORT BLAIR  
(A&N)

DRAWING TITLE:  
SIDE WALL ELEVATIONS

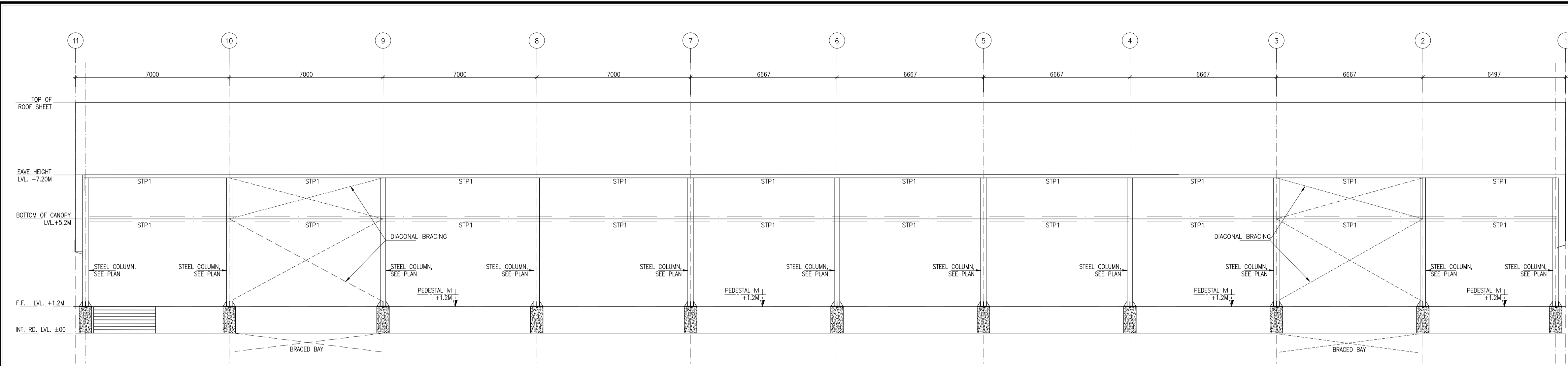
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SS.CWC.PB.SW-13

SIZE : A1

REV: R0

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**NOTES.**

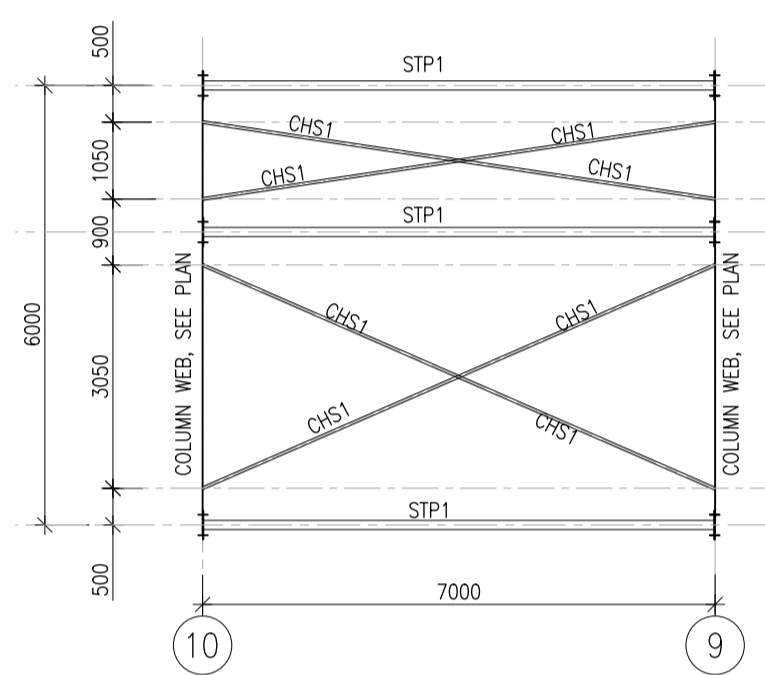
1. ALL CLEARANCE, ROOF PROFILE & CENTER LINE OF FRAME ARE TAKEN AS PER ARCHITECTURE DRAWINGS.
2. FOR CABLE TRAY REFER SEPARATE DRAWING.
3. MINIMUM PLATE THICKNESS TO BE TAKEN AS 6mm.
4. ALL LEVELS SHALL BE CONFIRMED FROM RELEVANT ARCHITECTURAL DRAWINGS.

**GRADE SPECIFICATIONS OF MATERIALS**

- A) FOR STRUCTURAL STEEL SECTIONS (CONFORMING TO IS:2062) :-
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- B) FOR COLD FORMED SECTIONS :-
- I) PURLINS AND SIDE CLADDING RUNNERS ONLY SHALL BE MADE FROM COLD FORMED SECTIONS AND SHALL CONFORM TO ASTM A570 GR 50 WITH MINIMUM YIELD STRENGTH OF 310 MPA AS PER TENDER SPECIFICATION, CONFORMING TO IS:811.
- C) THREADED FASTENER :-
- I) ALL ANCHOR BOLTS AND NUTS ARE OF PROPERTY CLASS 4.6 (GRADE-B) AS PER TENDER SPECIFICATION OF IS:1367 AND CONFORMING TO IS:5624.
  - II) ALL CONNECTION BOLTS AND NUTS COMPLY WITH IS:1367 AND ALL FIELD CONNECTION BOLTED WITH HIGH STRENGTH FRICTION GRIP (HSFG) BOLTS OF PROPERTY CLASS 8.8.
  - III) PLAIN WASHERS CONFORMING TO IS:5369.
  - IV) ONLY DTI WASHERS SHALL BE USED WITH HSFG BOLTS.
- D) SHEETING MATERIAL :-
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  - II) CLADDING ON THE SIDES OF BUILDING SHALL BE DONE WITH COLOUR COATED GALVALUME SHEETS OF 0.50 MM(TCT) TOTAL COATED THICKNESS WITH 50MM PUFF
- F) SAG ROD :-
- I) SAG ROD SHALL BE OF GRADE FE250. AS PER TENDER SPECIFICATION

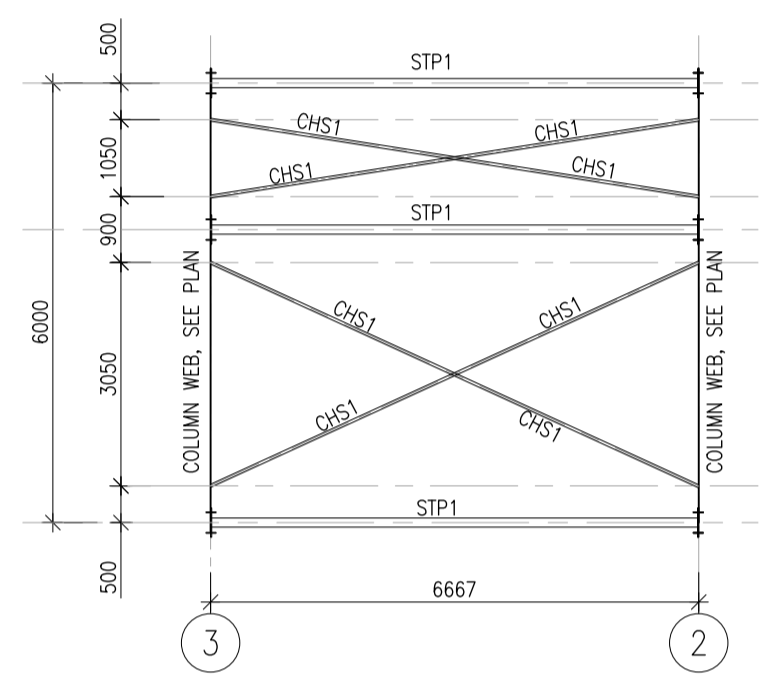
**01 SIDE WALL BRACING ELEVATION**

SCALE 1:100



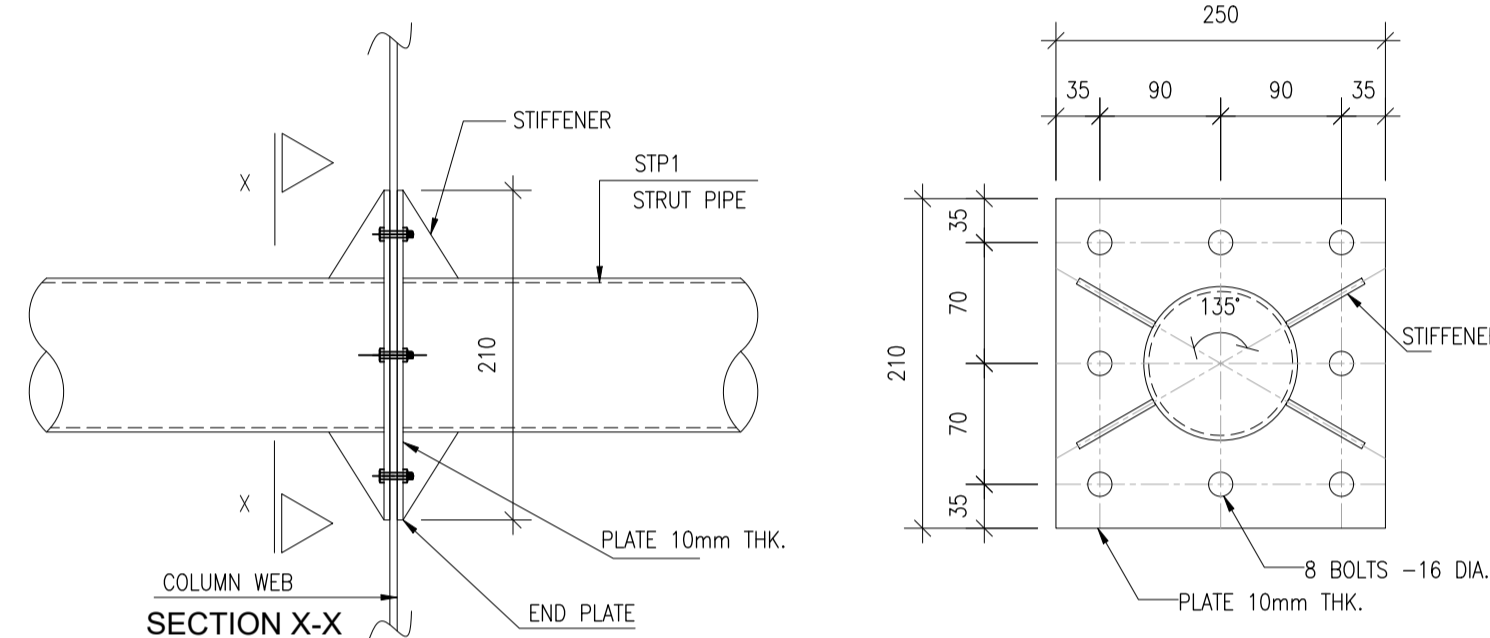
**02 SIDE BRACING AT GRID 9 & 10**

SCALE 1:125



**03 SIDE BRACING AT GRID 2 & 3**

SCALE 1:20



**04 STRUT PIPE CONNECTION DETAIL - 4 BOLTS -20 DIA.**

SCALE 1:20

**ANCHOR BOLT NOTES**

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  - c. ELEVATION OF THE TOP OF ANCHOR BOLTS ± 12mm.
  - d. MAXIMUM ACCUMULATION OF 6mm PER 30 METRS. ALONG THE ESTABLISHED COLUMN LINE OF MULTIPLE ANCHOR BOLTS GROUPS BUT NOT TO EXCEED A TOTAL OF 25mm.
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**WELDING NOTES**

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4. ELECTRODE ROD SHALL BE CONFORM TO IS:814.
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REV.No.	Date	Description	Drawn	Chkd	Appd.

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	INFORMATION
	CONSTRUCTION

CONSULTANTS AND PROJECT MANAGERS	CLIENT

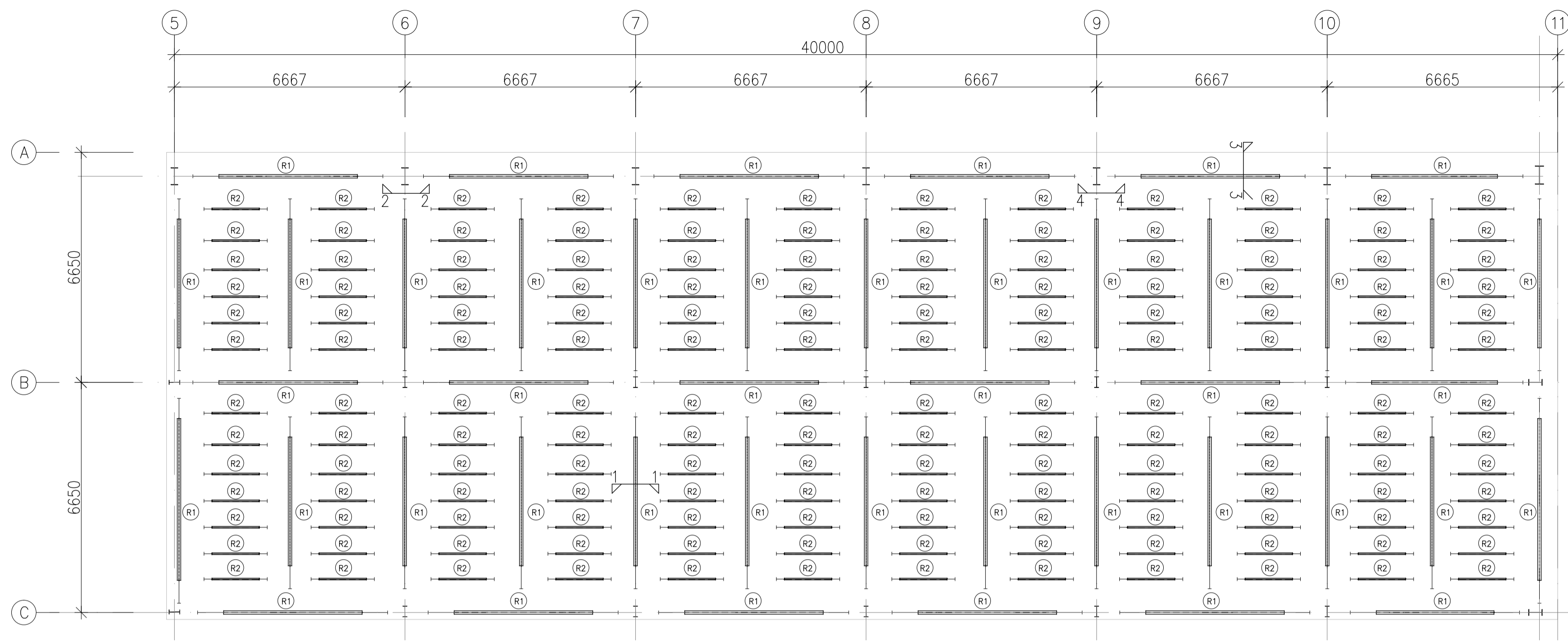
STRUCTURAL CONSULTANT :

**SATIUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**

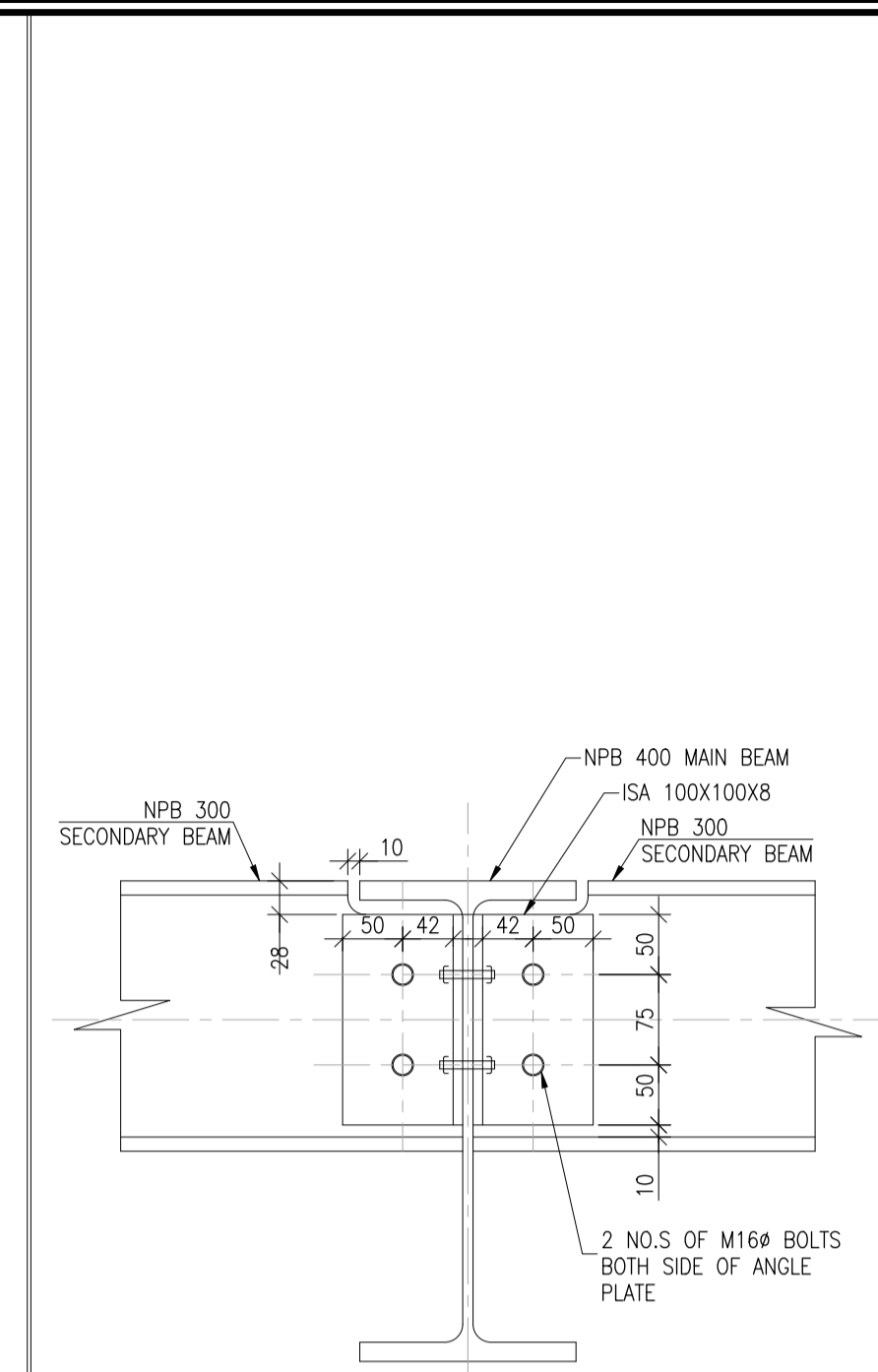
Office: Booth no. 31, Phase 9, SAS Nagar  
 Mohali-160062 (PB) Regd. Office:  
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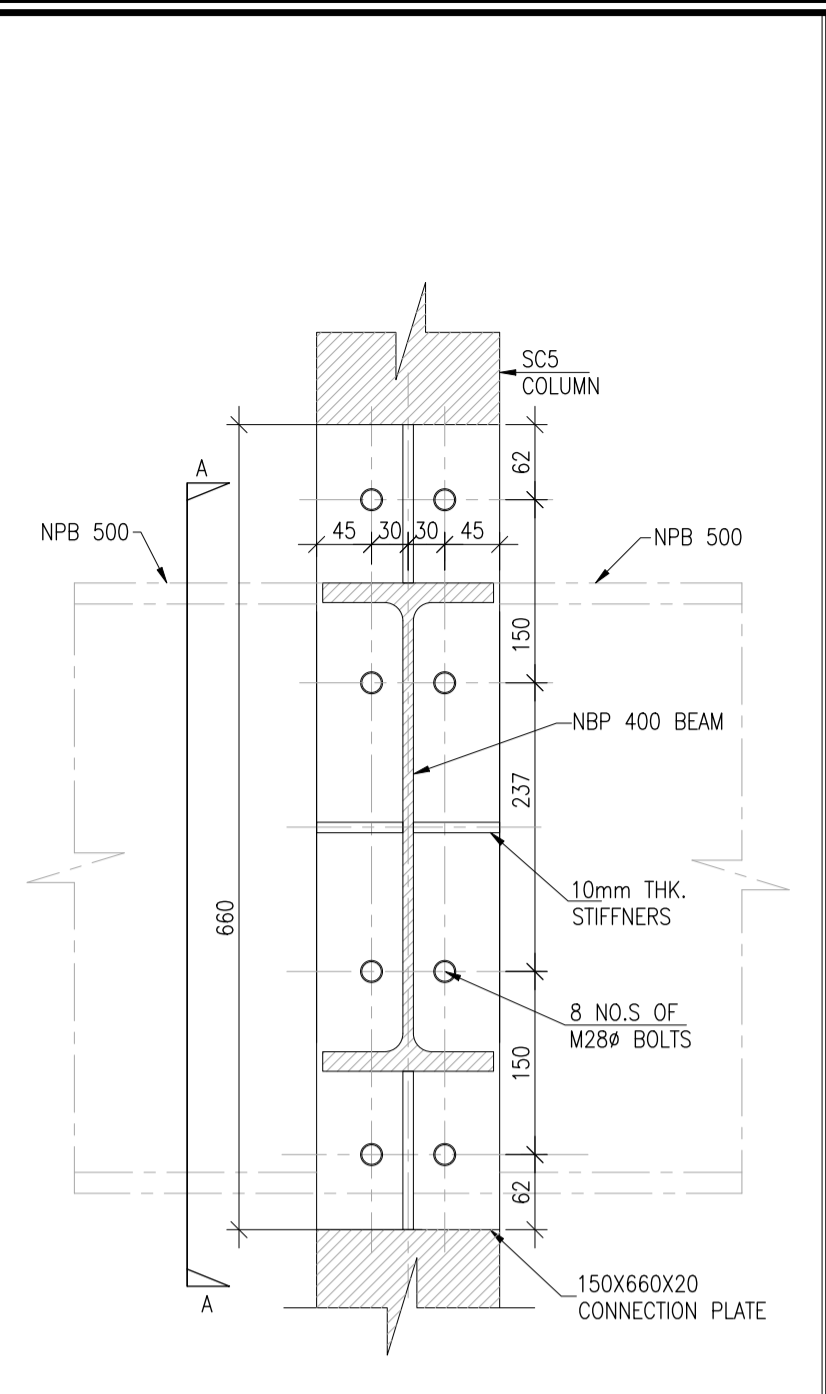
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DRAWING TITLE:	MAIN FRAME ELEVATIONS & DETAILS
DRG. NO.:	SS.CWC.PB.WB-14
SIZE :	A1
REV:	RO
S.NO :	



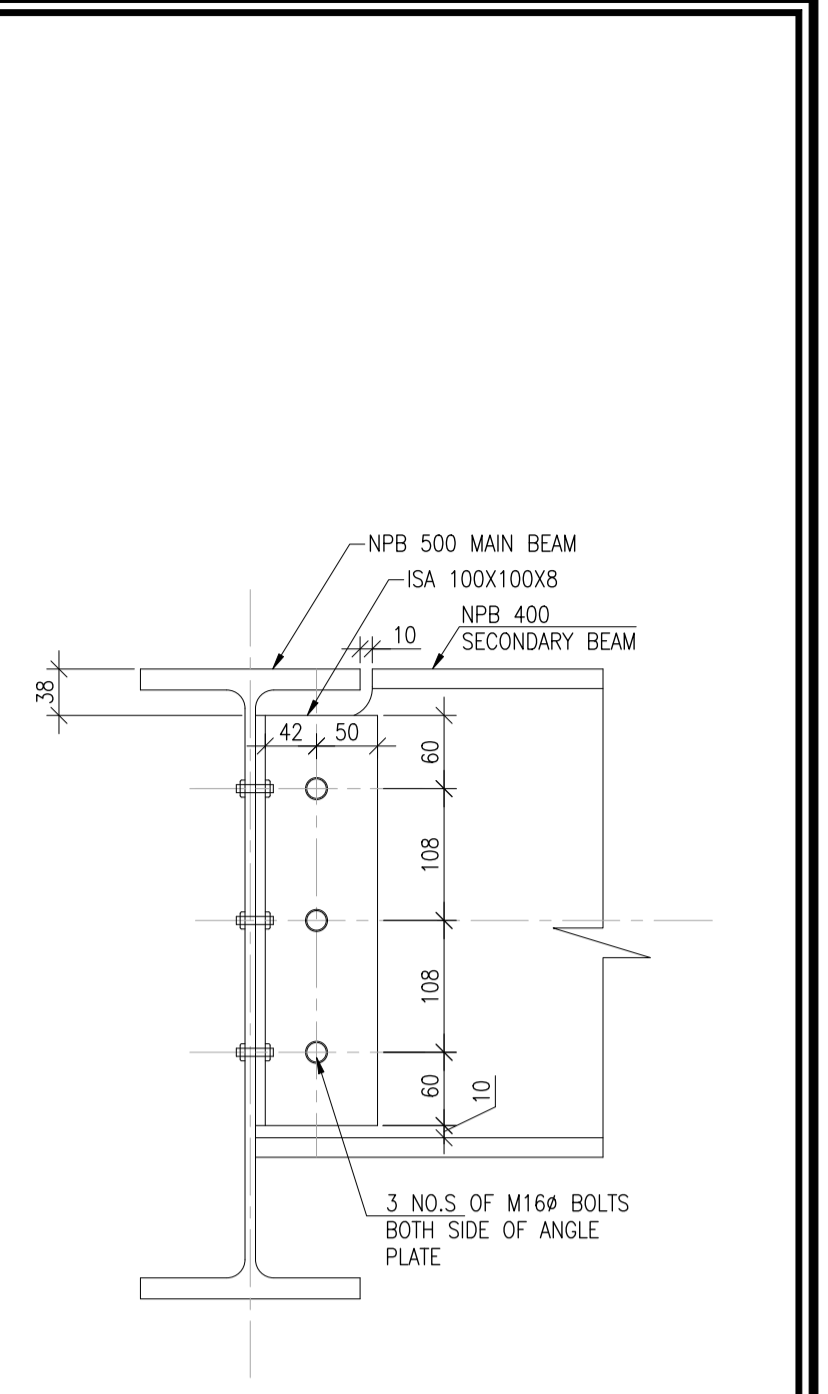
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SCALE 1:100



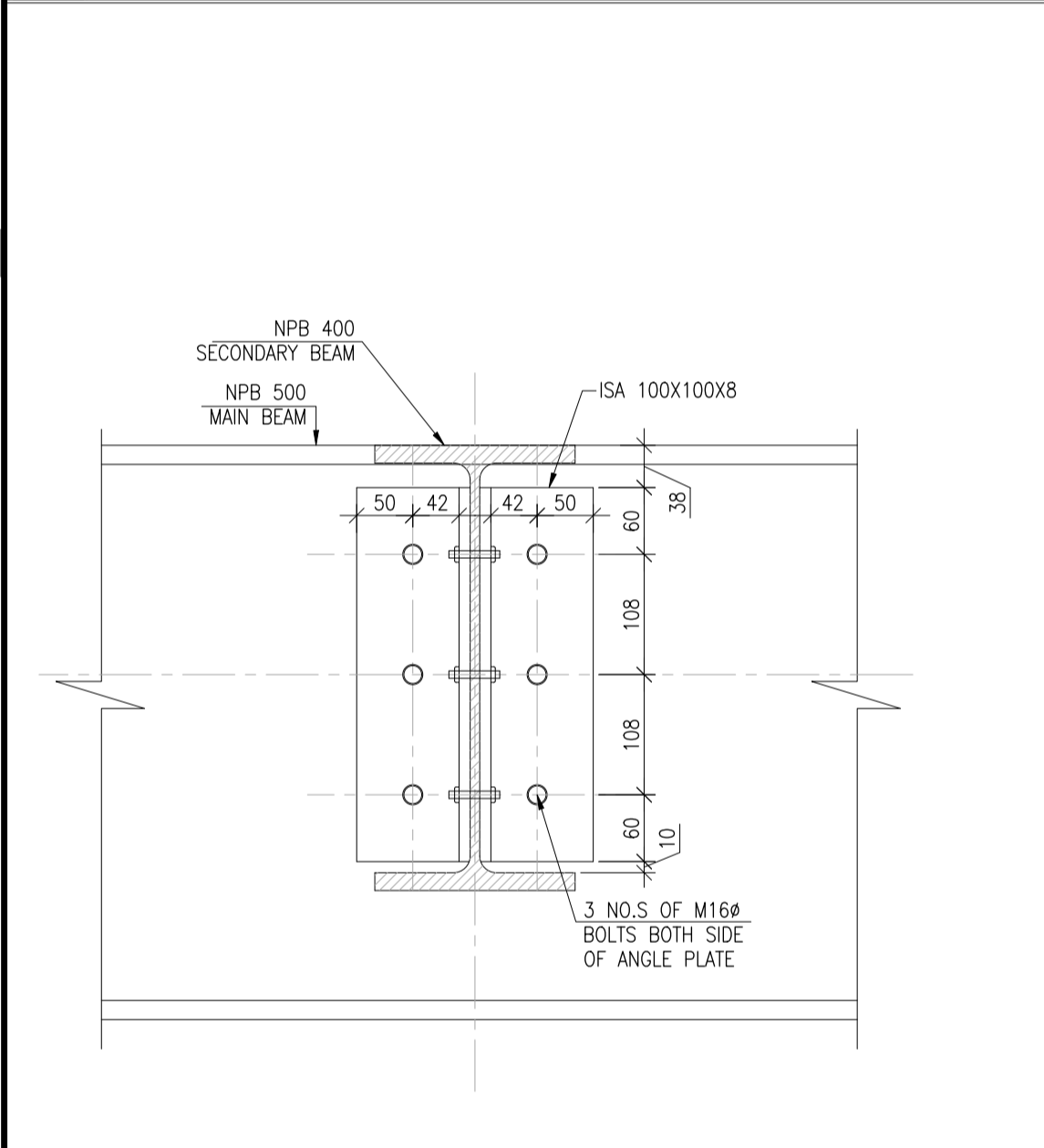
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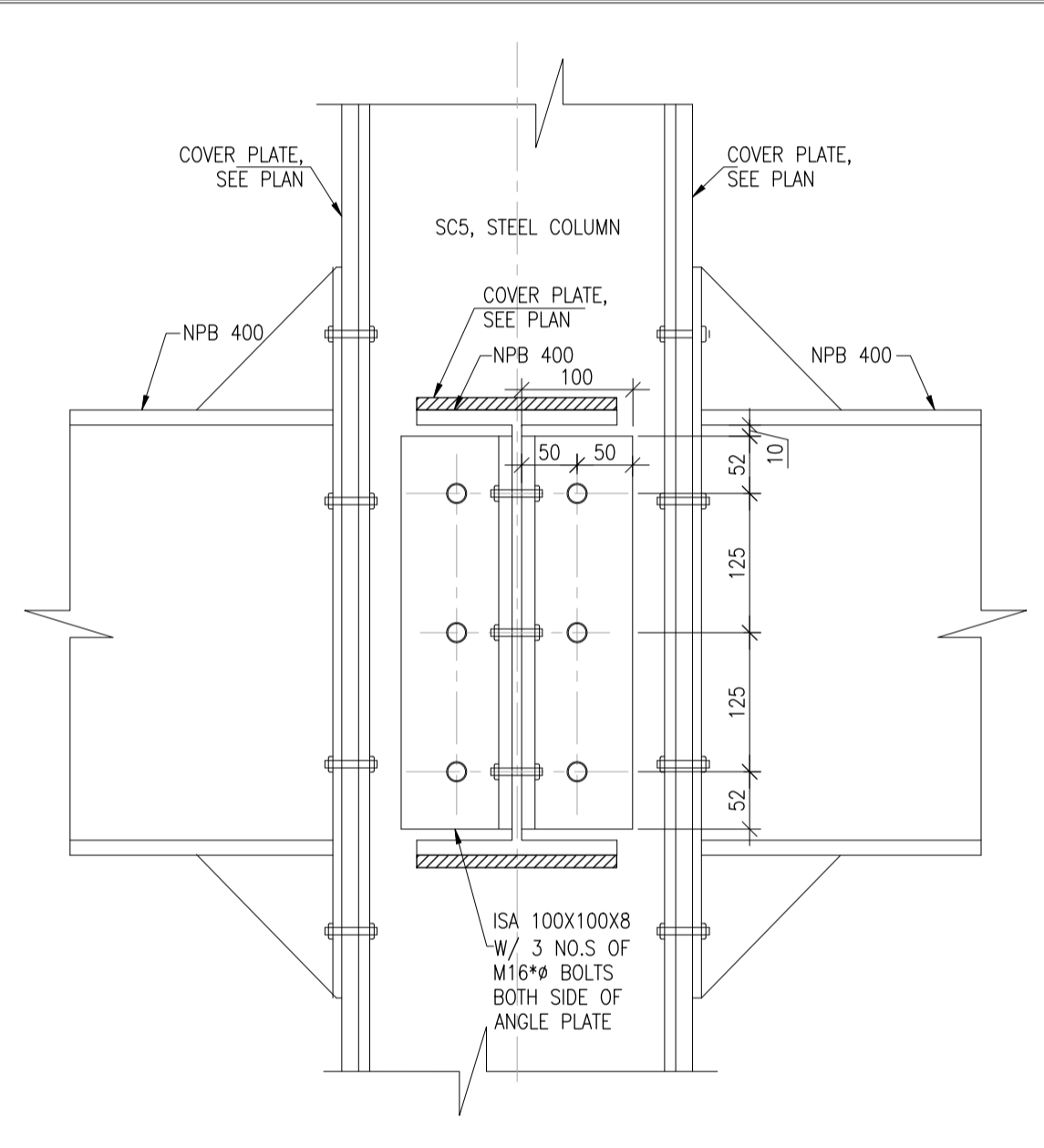
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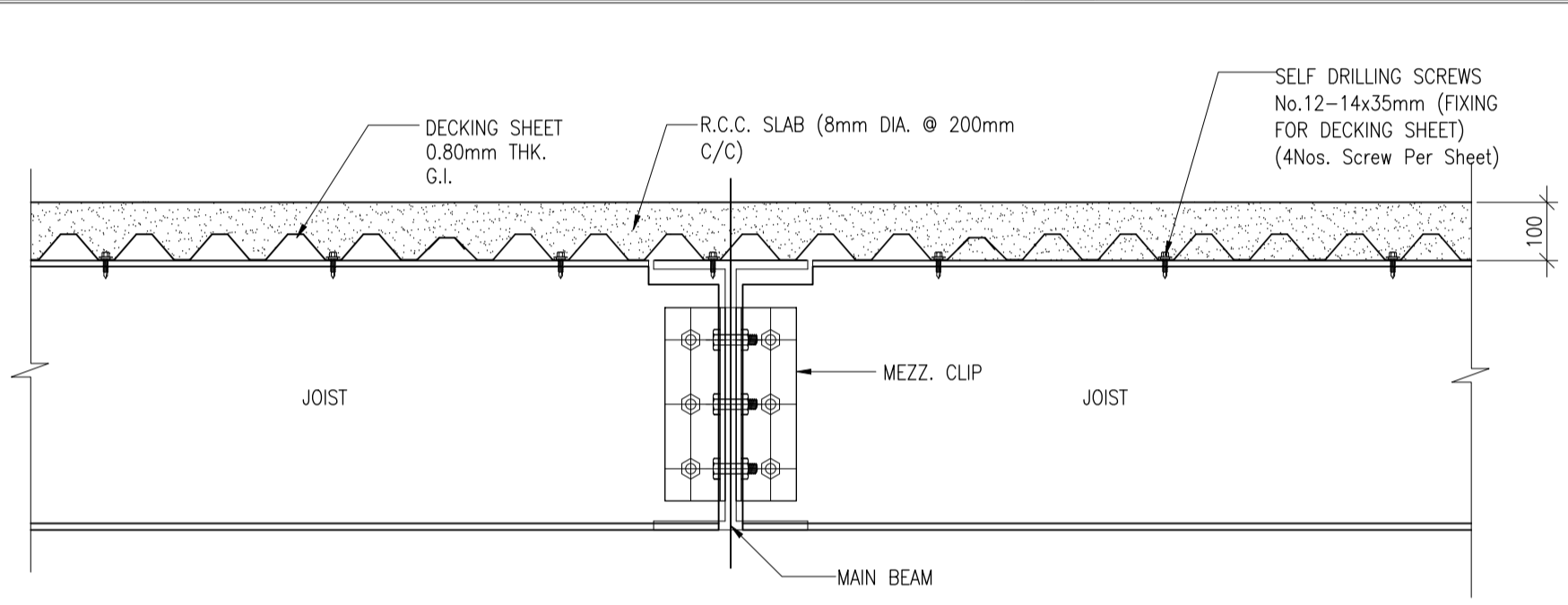
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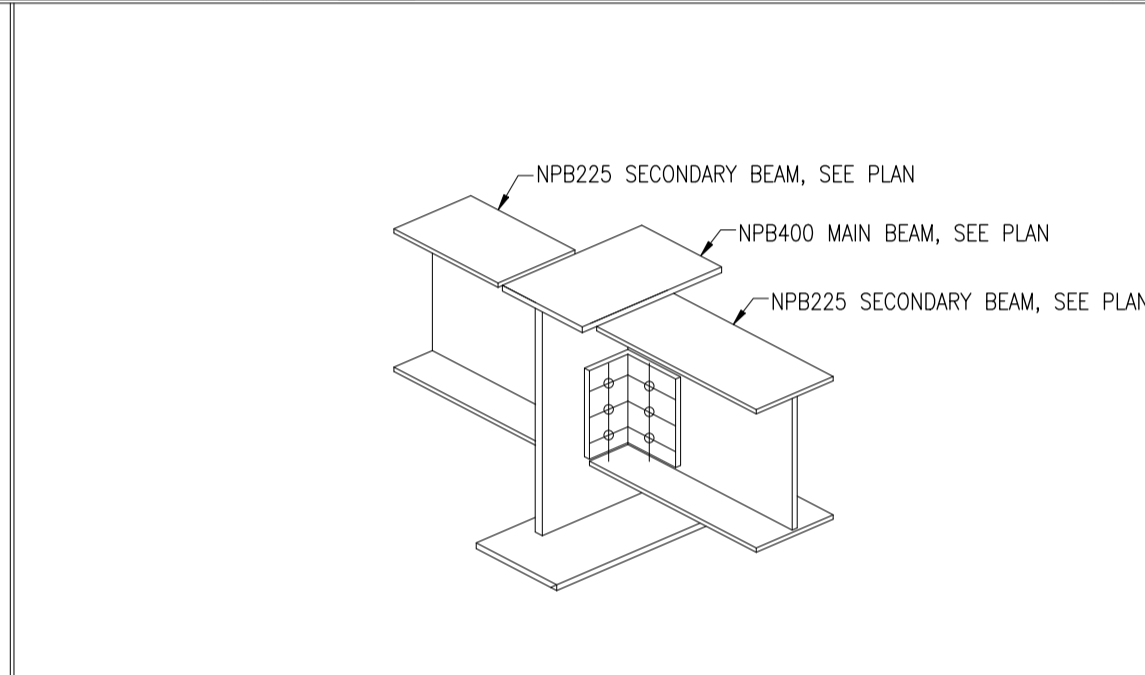
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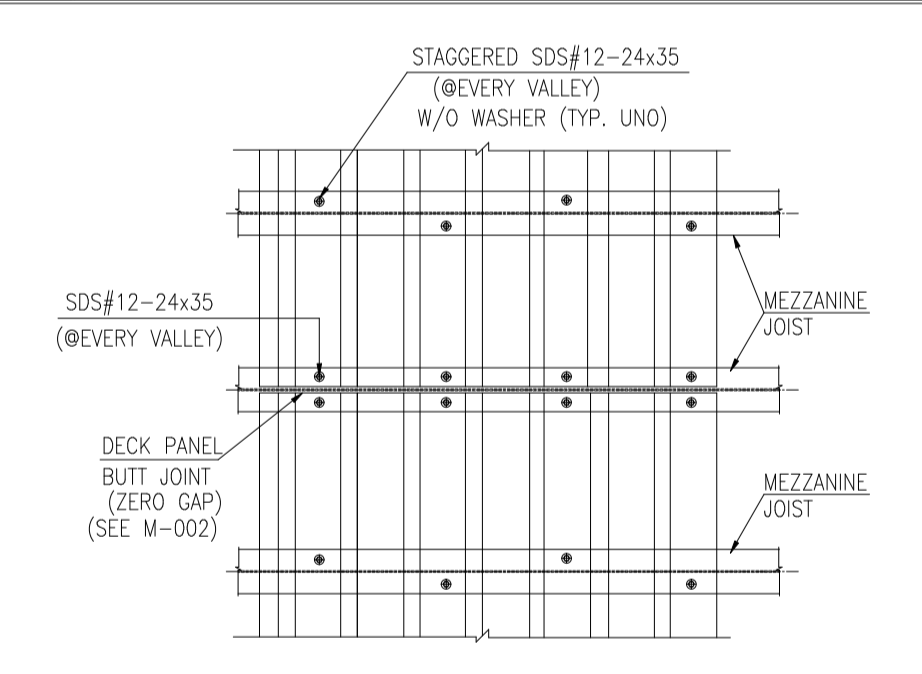
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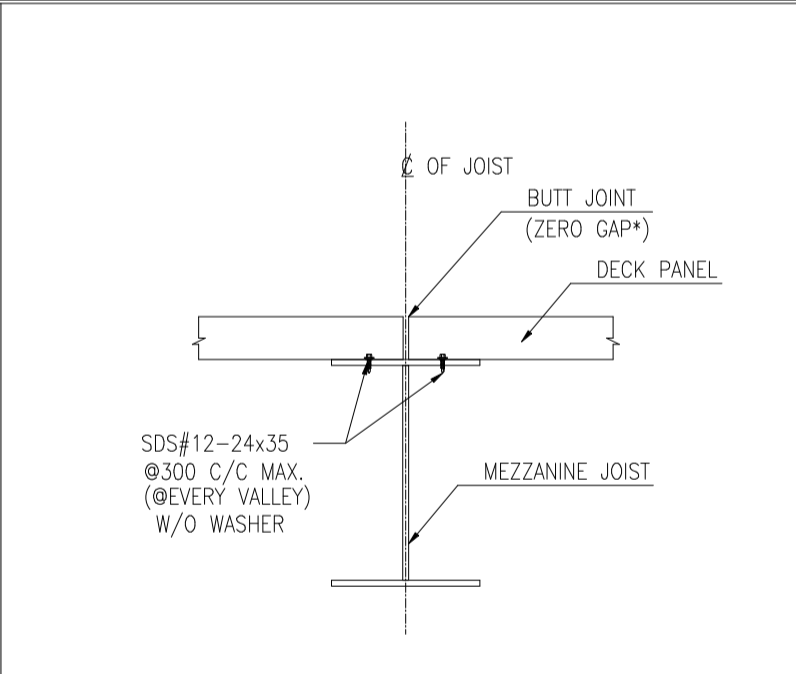
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SCALE 1:6



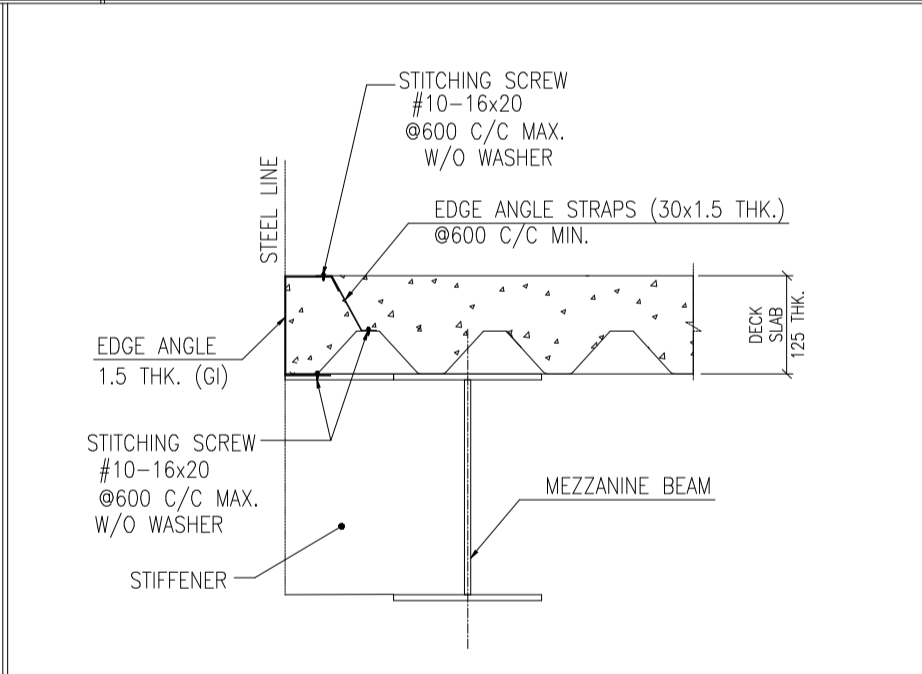
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SCALE 1:6



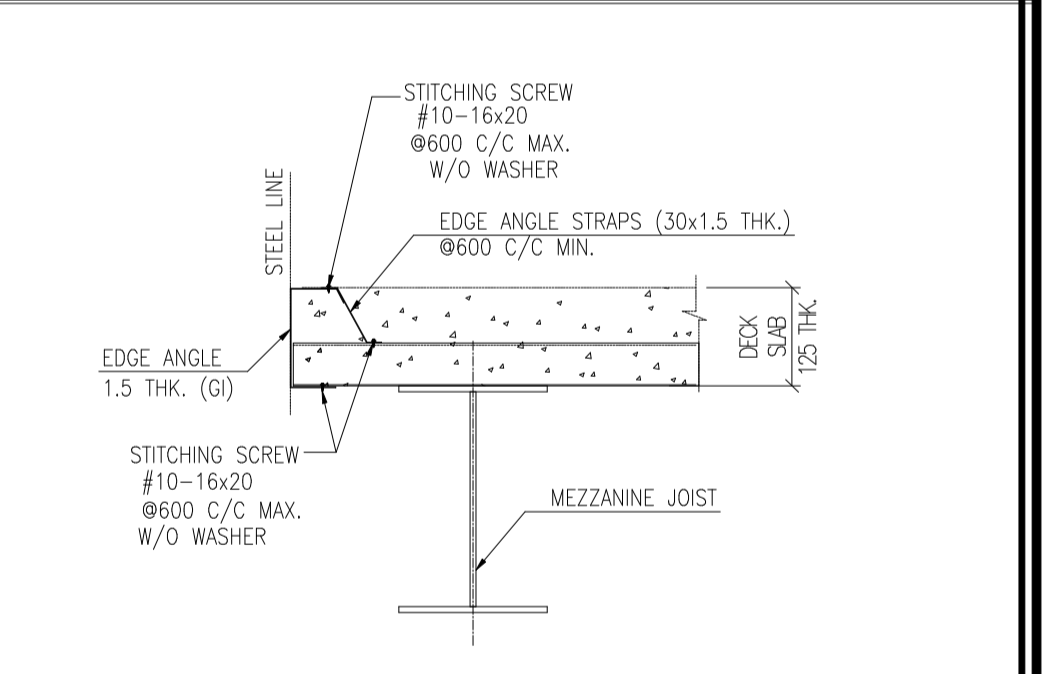
10 DECK PANAL FIXING DETAIL (WITH SDS)  
SCALE 1:75



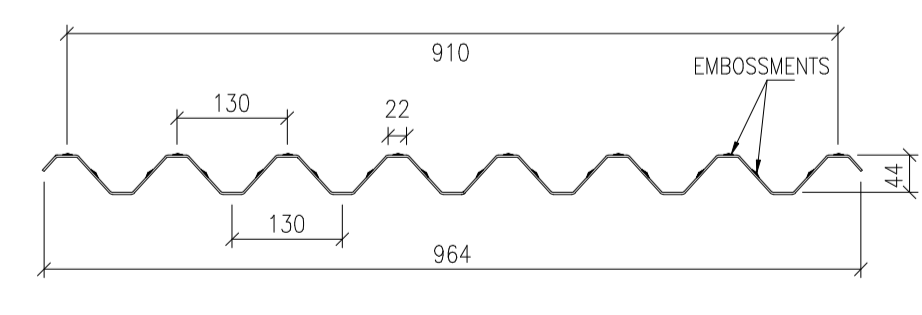
11 DECK PANAL BUTT JOINT  
SCALE 1:75



12 EDGE ANGLE @ BEAM LOCTION  
SCALE 1:75



13 EDGE ANGLE @ BEAM LOCTION  
SCALE 1:75



14 44/130 DECK PROFILE (WITH SDS)  
SCALE 1:75

MEMBER SCHEDULE				
MEMBER MKD.	PROFILE	SECTION	FLANGE WIDTH	WEIGHT KG/M
(R1)	I	ISMB-400	140	61.60
(R2)	I	ISMB-200	100	25.4

REV.No.	Date	Description	Drawn	Chkd	Appd.

ARCHITECT: \_\_\_\_\_

ISSUED FOR -:

APPROVAL	INFORMATION	CONSTRUCTION
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONSULTANTS AND PROJECT MANAGERS: \_\_\_\_\_

CLIENT: \_\_\_\_\_

STRUCTURAL CONSULTANT:

**SATUS STRUCTURAL SOLUTIONS PRIVATE LIMITED**  
 Office: Booth no. 31, Phase 9, SAS Nagar  
 Mohali-160062 (PB) Regd. Office:  
 H. no. 1576, Saini Vihar, Phase 3,  
 Bahara, Zirakpur -160044 (PB)  
 Email: info.satuspvt@gmail.com  
 Mob: +91-9646157916

Checked By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

DATE: 07.03.2024

SCALE: AS SHOWN

STATUS: INITIAL DRAWING

PROJECT: DEVELOPMENT OF WAREHOUSE PORT BLAIR (A&N)

DRAWING TITLE: MEZZANIN FLOORE

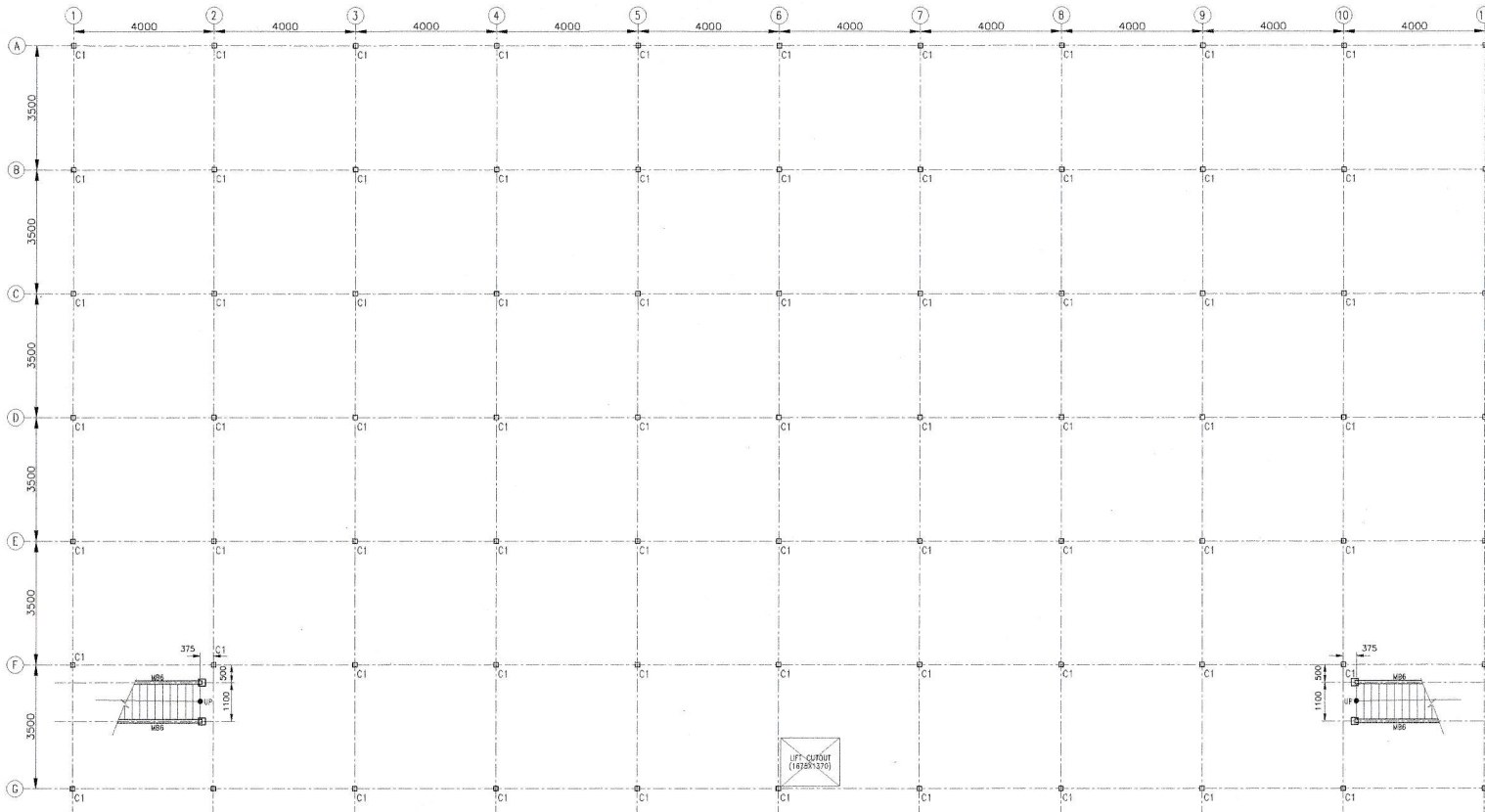
DRG. NO.: SS.CWC.PB.MF-15

SIZE: A1

REV: R0

S.NO: \_\_\_\_\_





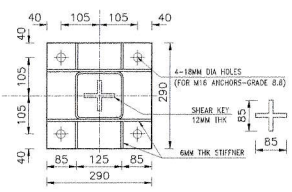
MEMBER SIZE, SHAPE & SCHEDULE:-		
1. MB1	- RHS 200X100X4	
2. MB2	- ISMB 250	
3. MB3	- ISMC 75	
4. MB4	- ISA 40X40X3	
5. MB5	- PIPE 60.3 X 3.6	
6. MB6	- RHS 200X100X5	
7. C1	- SHS 132X132X4.8	
8. GRATING	- 150X38X2.5 (GI SHEET 150GSM)	

*Gurpreet Singh*  
**Gurpreet Singh**  
 B.E. (Civil (Hons)), M.E. (Structures (Hons))  
 Consulting Civil & Structural Engineer  
 Jorhat, Assam.

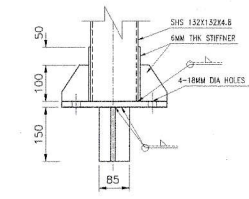
**MEZZANINE FLOOR COLUMN  
 LAYOUT PLAN FOR 1.0 TON/M<sup>2</sup>**  
 (ALL COLUMNS ARE SHS 132X132X4.8 U.N.O.)

- NOTES :-**
- BEFORE COMMENCING FABRICATION THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT SITE INCLUDING CLEARANCES IF ANY. DISCREPANCIES IF ANY, SHALL BE SORTED-OUT WITH THE CONSULTANTS BEFORE COMMENCING THE WORK.
  - ALL WELDS TO BE 6mm. FILLET WELD CONTINUOUS ALL AROUND UNLESS OTHERWISE NOTED.
  - ALL FABRICATION SHALL CONFORM TO IS: 800-2007. (LATEST)
  - ALL WELDING SHALL CONFORM TO IS: 816 & IS: 1323. (LATEST)
  - ALL BOLTS SHALL BE CONFORM TO IS: 1367-PART-3 (LATEST)
  - ALL STEEL SHALL BE OF TESTED QUALITY TO CONFORM TO IS: 226, IS: 1162 OR IS: 2062. (LATEST)
  - ALL STEEL WORK TO RECEIVE ONE COAT OF RED-OXIDE PRIMER BEFORE ERECTION AND SHALL BE PAINTED WITH EPOXY PAINT.
  - TENTATIVE CONNECTIONS ARE SHOWN IN THE DRAWINGS. CONN DESIGN SHALL BE RESPONSIBILITY OF THE FABRICATOR/ CONTRACTOR
  - RHS STANDS FOR RECTANGULAR HOLLOW SECTION.
  - SHS SQUARE HOLLOW SECTION
  - MEZZANINE FLOOR HAS BEEN DESIGNED CONSIDERING LIVE LOAD = 1.0 TON/M<sup>2</sup>
  - GRATING SHALL HAVE A GALVANIZED COATING OF 150GSM.

- NOTES :-**
- THE GRADE OF STEEL SHALL HAVE A MIN YIELD STRESS AS FOLLOWS
    - HOLLOW SECTION -:  $F_y = 310 \text{ MPa}$
    - ROUND STEEL SECTIONS -:  $F_y = 250 \text{ MPa}$
    - MS PLATES -:  $F_y = 250 \text{ MPa}$
    - ALL STRUCTURAL BOLTS SHALL BE OF GRADE = 8.8 UNO.
    - GRATING -:  $F_y = 250 \text{ MPa}$



**BASE PLATE DETAILS**  
 PLATE THICKNESS = 15MM



**GENERAL NOTES:-**

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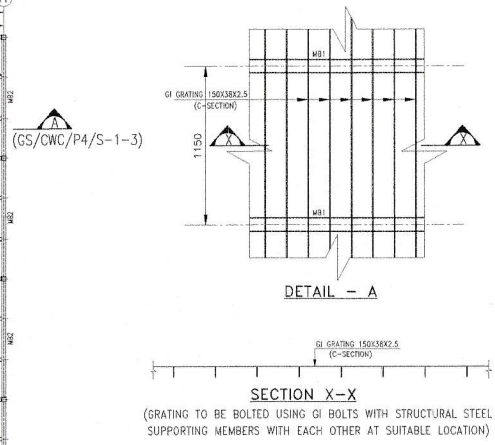
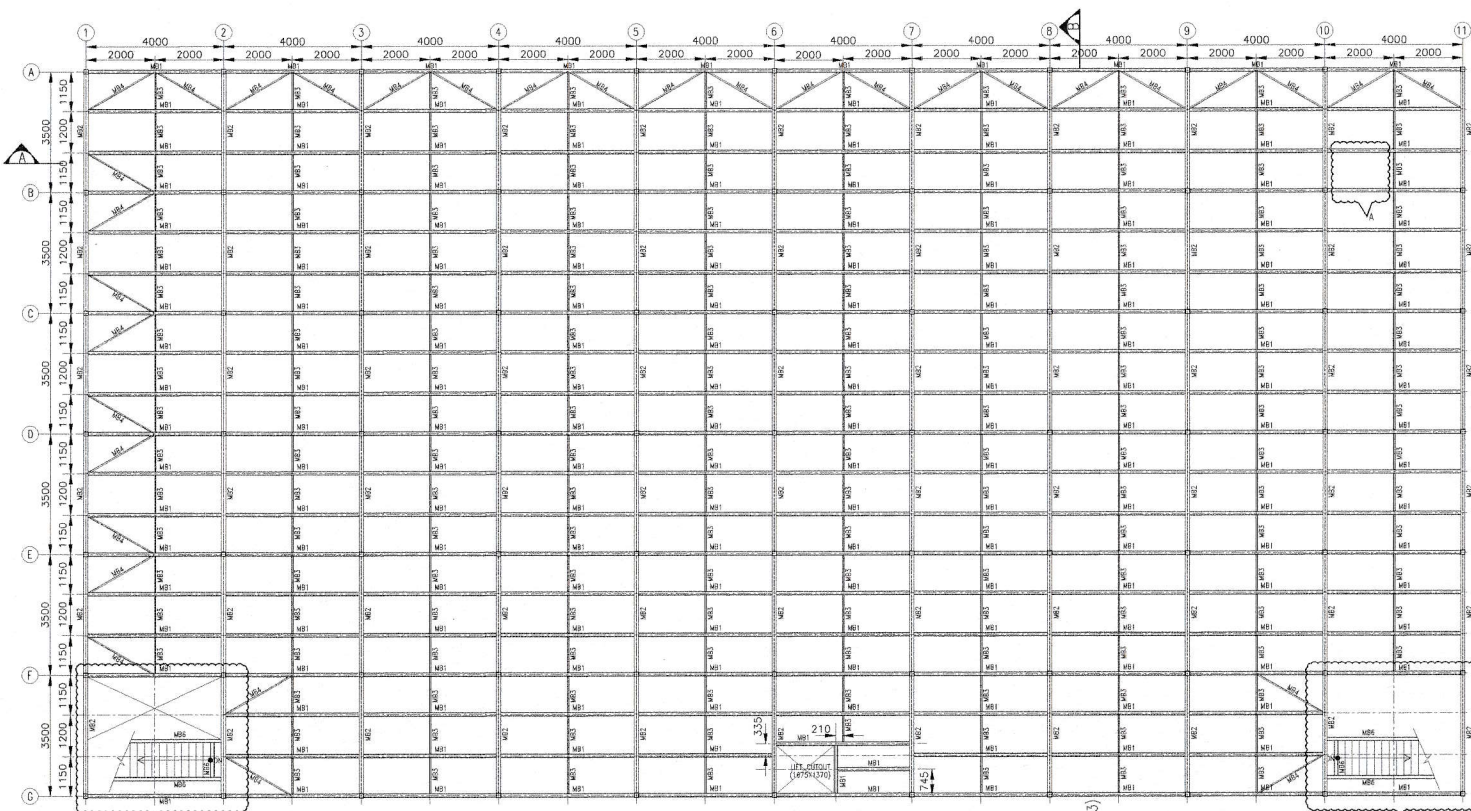
**CLIENT**  
 THE EXECUTIVE ENGINEER  
 ENGINEERING SECTION  
 CENTRAL WAREHOUSING CORP.  
 LAKSHMI NAGAR,  
 NEW DELHI.

**LEAD CONSULTANT**

**STRUCTURAL CONSULTANT**  
**GURPREET SINGH**  
 (B.E. (CIVIL-HONS), M.E. (STR-HONS))  
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 WARD NO 2, PATAUDI,  
 DISTRICT GURGAON, HARYANA  
 HEAD OFFICE  
 C/O BHARAT HOUSE,  
 P.O. RAJABARI,  
 JORHAT, ASSAM. PH. +91 989-147-5896

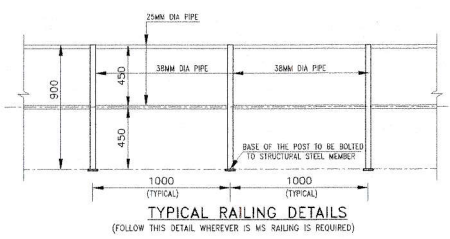
REVISION LOG		
REV. NO	DATE	DESCRIPTION
R0	18-12-2019	GOOD FOR CONSTRUCTION

DRAWING NUMBER		
GS/CWC/P/4/S-1-1		
DRAWING TITLE		
MEZZANINE FLOOR COLUMN LAYOUT PLAN FOR 1.0 TON/M <sup>2</sup>		
SHEET SIZE - A1	SCALE - 1:100	
DEALT BY: SWD	CHKD BY: DKB	APPD BY: GPS
REVISION	JOB NO.	
R0	DATE : 18.12.2019	



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  - RHS STANDS FOR RECTANGULAR HOLLOW SECTION.
  - SHS SQUARE HOLLOW SECTION
  - MEZZANINE FLOOR HAS BEEN DESIGNED CONSIDERING LIVE LOAD = 1.0 TON/M<sup>2</sup>
  - GRATING SHALL HAVE A GALVANIZED COATING OF 150GSM.

MEZZANINE FLOOR LEVEL FOR 1.0 TON/M<sup>2</sup>



- NOTES :-**
- THE GRADE OF STEEL SHALL HAVE A MIN YIELD STRESS AS FOLLOWS
  - HOLLOW SECTION -:  $F_y = 310 \text{ MPa}$
  - ROUND STEEL SECTIONS -:  $F_y = 250 \text{ MPa}$
  - MS PLATES -:  $F_y = 250 \text{ MPa}$
  - ALL STRUCTURAL BOLTS SHALL BE OF GRADE = 8.8 UNO.
  - GRATING -:  $F_y = 250 \text{ MPa}$

*Gurpreet Singh*  
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 Consulting Civil & Structural Engineer  
 Jorhat, Assam.

**MEMBER SIZE, SHAPE & SCHEDULE:-**

1. MB1 - RHS 200X100X4	
2. MB2 - ISMB 250	
3. MB3 - ISMC 75	
4. MB4 - ISA 40X40X3	
5. MB5 - PIPE 60.3 X 3.6	
6. MB6 - RHS 200X100X5	
7. C1 - SHS 132X132X4.8	
8. GRATING - 150X38X2.5 (GI SHEET 150GSM)	

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**CLIENT**

**THE EXECUTIVE ENGINEER**  
 ENGINEERING SECTION  
 CENTRAL WAREHOUSING CORP.  
 LAKSHMI NAGAR,  
 NEW DELHI.

**LEAD CONSULTANT**

**STRUCTURAL CONSULTANT**

**GURPREET SINGH**  
 (B.E. (CIVIL- HONS), M.E. (STR - HONS))  
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 DISTRICT GURGAON, HARYANA

HEAD OFFICE  
 C/O BHARAT HOUSE,  
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 JORHAT, ASSAM, PH. +91 989-147-5896

**REVISION LOG**

REV. NO	DATE	DESCRIPTION
R0	18-12-2019	GOOD FOR CONSTRUCTION

**DRAWING NUMBER**

**GS/CWC/P4/S-1-2**

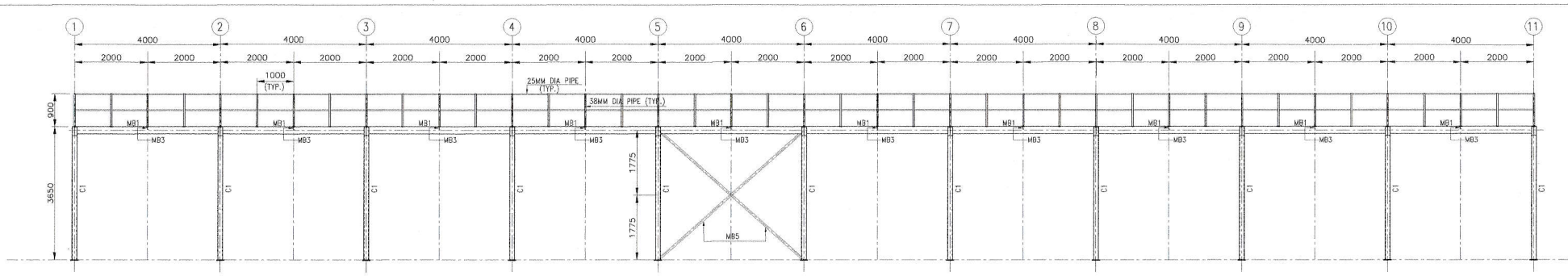
**DRAWING TITLE**

**MEZZANINE FLOOR LEVEL FOR 1.0 TON/M<sup>2</sup>**

**SHEET SIZE - A1**      **SCALE - 1:100**

DEALT BY: SWD	CHKD BY: DKB	APPD BY: GPS
REVISION	JOB NO.	
R0	DATE : 18. 12. 2019	

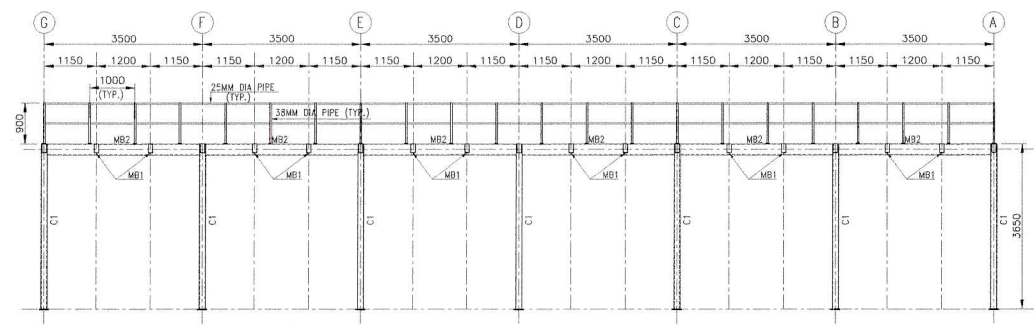




SECTION A-A

**MEMBER SIZE, SHAPE & SCHEDULE:-**

1. MB1 - RHS 200X100X4	
2. MB2 - ISMB 250	
3. MB3 - ISMC 75	
4. MB4 - ISA 40X40X3	
5. MB5 - PIPE 60.3 X 3.6	
6. MB6 - RHS 200X100X5	
7. C1 - SHS 132X132X4.8	
8. GRATING - 150X38X2.5 (GI SHEET 150GSM)	



SECTION B-B

**NOTES :-**

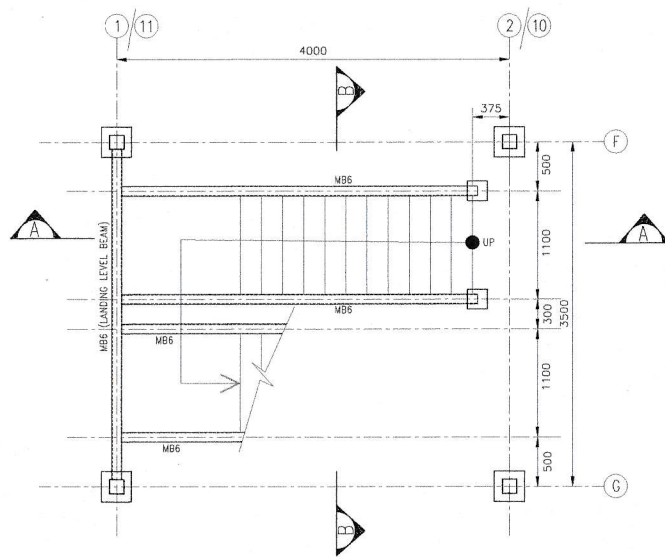
- THE GRADE OF STEEL SHALL HAVE A MIN YIELD STRESS AS FOLLOWS
  - HOLLOW SECTION -:  $F_y = 310 \text{ MPa}$
  - ROUND STEEL SECTIONS -:  $F_y = 250 \text{ MPa}$
  - MS PLATES -:  $F_y = 250 \text{ MPa}$
  - ALL STRUCTURAL BOLTS SHALL BE OF GRADE = 8.8 UNO.
  - GRATING -:  $F_y = 250 \text{ MPa}$
- IN CASE, LESSER FLOOR AREA THAN THAT SHOWN IN THE DRAWING IS CONSTRUCTED, ATLEAST ON SET OF VERTICAL BRACINGS AS SHOWN BETWEEN GRID 5 & 6 HAS TO BE PROVIDED IN EACH OF THE BAYS, THAT IS A, B, C ETC.

*Gurpreet Singh*  
**Gurpreet Singh**  
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 Consulting Civil & Structural Engineer  
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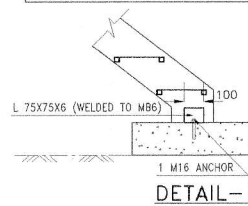
<b>GENERAL NOTES:-</b> 1. STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL AND SERVICES DRAWINGS. 2. DO NOT SCALE. FOLLOW WRITTEN DIMENSIONS ONLY. 3. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE SPECIFIED. 4. UNLESS SPECIFIED OTHERWISE, ALL LEVELS SHOWN IN STRUCTURAL DRAWINGS ARE STRUCTURAL LEVELS ONLY. 5. ANY DISCREPANCY NOTED BETWEEN DETAILS IN THE DRAWINGS/ SPECIFICATIONS, THE MATTER SHALL BE BROUGHT TO THE NOTICE OF CONSULTANT/ ENGINEER-IN-CHARGE PRIOR TO CONSTRUCTION AND GOT RECONCILED BEFORE EXECUTION.	<b>CLIENT</b>  <b>THE EXECUTIVE ENGINEER</b>  ENGINEERING SECTION CENTRAL WAREHOUSING CORP. LAKSHMI NAGAR, NEW DELHI.	<b>LEAD CONSULTANT</b>	<b>STRUCTURAL CONSULTANT</b>  <b>GURPREET SINGH</b> <small>(B.E. (CIVIL (HONS)), M.E. (STR - HONS))</small> BRANCH OFFICE HOUSE NO 330 WARD NO 2, PATAUDI, DISTRICT GURGAON, HARYANA  HEAD OFFICE C/O SHARATI HOUSE, P.O. RAJABARI, JORHAT, ASSAM, PH. +91 989-147-5896	<b>REVISION LOG</b>		<b>DRAWING NUMBER</b> <b>GS/CWC/P4/S-1-3</b>																					
				<table border="1"> <tr> <th>REV. NO</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td>R0</td> <td>18-12-2019</td> <td>GOOD FOR CONSTRUCTION</td> </tr> </table>	REV. NO	DATE	DESCRIPTION	R0	18-12-2019	GOOD FOR CONSTRUCTION	<table border="1"> <tr> <td colspan="3"><b>DRAWING TITLE</b></td> </tr> <tr> <td colspan="3"><b>SECTION A &amp; SECTION B FOR 1.0 TON/M<sup>2</sup></b></td> </tr> <tr> <td colspan="2"><b>SHEET SIZE - A2</b></td> <td><b>SCALE - 1:100</b></td> </tr> <tr> <td><b>DEALT BY: SWD</b></td> <td><b>CHKD BY: DKB</b></td> <td><b>APPD BY: GPS</b></td> </tr> <tr> <td><b>REVISION</b></td> <td><b>JOB NO.</b></td> <td rowspan="2"></td> </tr> <tr> <td>R0</td> <td>DATE: 18. 12. 2019</td> </tr> </table>	<b>DRAWING TITLE</b>			<b>SECTION A &amp; SECTION B FOR 1.0 TON/M<sup>2</sup></b>			<b>SHEET SIZE - A2</b>		<b>SCALE - 1:100</b>	<b>DEALT BY: SWD</b>	<b>CHKD BY: DKB</b>	<b>APPD BY: GPS</b>	<b>REVISION</b>	<b>JOB NO.</b>		R0
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<b>REVISION</b>	<b>JOB NO.</b>																										
R0	DATE: 18. 12. 2019																										



GROUND FLOOR ROOF LEVEL G.A.

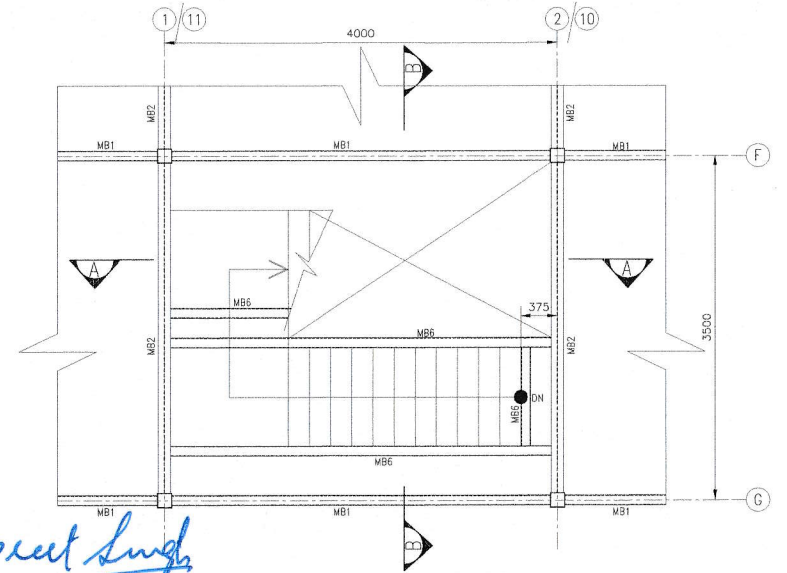
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DETAIL-1

*Gurpreet Singh*  
 Gurpreet Singh  
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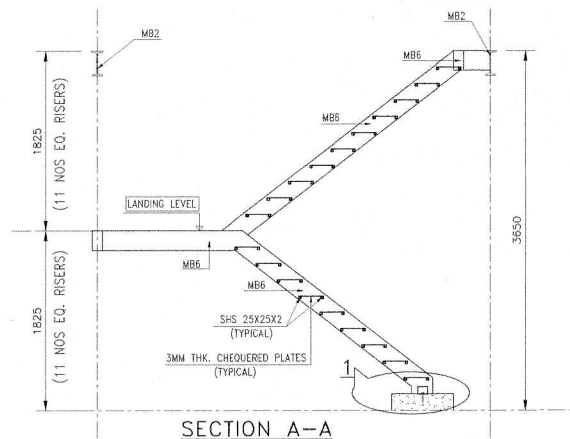
MEZZANINE FLOOR ROOF LEVEL G.A.

**NOTES :-**

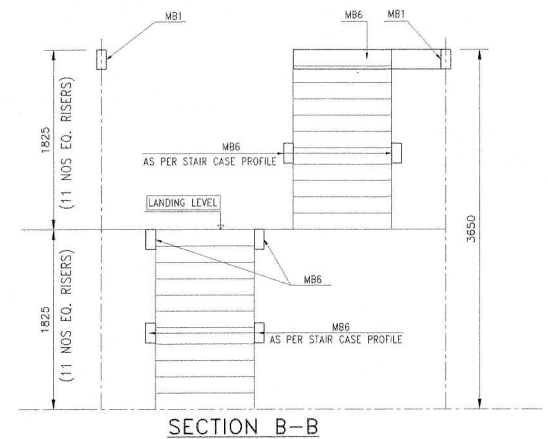
1. THE GRADE OF STEEL SHALL HAVE A MIN YIELD STRESS AS FOLLOWS
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SECTION A-A



SECTION B-B

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**REVISION LOG**

REV. NO	DATE	DESCRIPTION
R0	18-12-2019	GOOD FOR CONSTRUCTION

**DRAWING NUMBER**

GS/CWC/P4/S-1-4

**DRAWING TITLE**

STAIR CASE PLAN & DETAIL  
 FOR  $1.0 \text{ TON/M}^2$

**SHEET SIZE - A2**

SCALE - 1:50

**DEALT BY: SWD**

CHKD BY: DKB

APPD BY: GPS

**REVISION**

JOB NO.

DATE : 18. 12. 2019





