

Shed-1 & 2 (25.0 m x 90.0 m) (with 3MT Gantry)

		Width : 25 CLEAR SPAN	Length : 90 mt@7.5 C/C		R0 18/12/2014				
It. No	Ra No	Item Description	Nos.		L	B	H	Quantity	Total Qty.
			Wings	Nos					
	1	Anchor bolts(24 mmdia)							
			26	10	0.900			234.000	
								234.000	rmt
								3.853	901.602 kg
		Anchor bolts(20mmdia)	6	4	0.900			21.600	
								21.600	rmt
								2.466	53.266 kg
	2	Baseplate BP1 (25mmthick)	26	1	0.350	0.500	0.025	0.114	
								0.114	cmt
		Baseplate BP2(20mmthick)	6	1	0.250	0.300	0.016	0.007	
								0.007	cmt
								949.458	kg
	3a	sheeting (.45mm for roof)							
		sheeting on roof	1	1	25.000	90.000		2250.000	
								2250.000	sqm
	3b	sheeting for canopy							
		app.	1	2	7.500	1.500		22.500	
		2 rolling shutters with size of canopy							
								22.500	sqm
								Total roof sheeting:	2272.500 sqm
	4	ridge	1	1	90.000			90.000	rmt
	5	sheeting for cladding (0.45 MM) 1.2 MT BRICK							
		(long wall)	1	2	6.800	90.000		1224.000	
		Short wall gable ends	1	2	6.800	25.000		340.000	
		for higher portion above 6mt	1	2	0.600	25.000		30.000	
								1594.000	sqmt
	6	purlin (roof'Z') roof (main)	12	20	8.700			2088.000	
		on canopy						4.522	9441.936
		NO EXTRA LOAD CONSIDERED ON PURLIN	2	3	8.700			52.200	rmt
		ZP 200x70x50x20x1.6 WITH 600 OVER LAP							rmt
		unit weight 4.522 kg /mt						4.552	237.614
								9679.550	Kg
	7	cladding SIDE runner							
		cladding runner (long side)	24	5	8.700			1044.000	
								4.522	4720.968
		cladding runner (long side)							
		ZP 200x70x50x20x1.6 WITH 600 OVER LAP							
		unit weight 4.522 kg /mt							rmt
		higher frame gable end(both side)	8	4	7.450			238.400	
								4.120	982.208
			2	4	7.450			59.600	
								4.120	245.552
								5948.728	Kg
	8	Sag Rod 12 mm dia rods							
		Roof (2 rows of sag rod)	24	18	1.600			691.200	rmt
		cladding long wall (two row)	48	2	1.600			153.600	
		Gable end grid	20	2	1.600			64.000	
		canopy	2	2	1.600			6.400	
								915.200	rmt
								814.528	kg
	9	Main Framing (no EXTRA LOAD ON RAFTER)							
		MAIN FRAME	11	1				2600.850	28609.350 kg
		GABLE FRAME	2	1				2568.300	5136.600 kg
		TIE BEAM 80X80X4	1	2	90.000	1.000		9.200	1656.000 kg
		Weight of Guirder (67 kg/m)	2	1	90.000	1.000		67.000	12060.000 kg
								Main frame weight	47461.950 kg

It. No	Ra No	Item Description	Nos.		L	B	H	Quantity	Total Qty.
			Wings	Nos					
	10	Purlin Cleat							
		ROOF PURLIN (roof)	1	13	20.000			260.000	
		clading runner (long side)	2	13	5.000			130.000	
		clading runner short wall(gable upto straight)	2	5	5.000			50.000	
		Canopy	1	2	2.000			4.000	
								444.000	nos
							2.000	888.000	Kg
	11	Eavves gutter	1	2	90.000			180.000	
								180.000	rmt
	12	flashing	2	90	1.000			180.000	rmt
			2	25	1.000			50.000	rmt
								230.000	rmt
	13	Bracing on roof						0.000	
		Rod Bracing	2	8	8.000	1.000	5.030	643.840	
			4	4	6.000	1.000	5.030	482.880	
								1126.720	
								1126.720	Kg
	14	Purlin stay (L 50*50*2)							
		(roof)	2	12	20.000	1.000		480.000	
		clading runner (long side)	2	12	5.000	1.000		120.000	
		clading runner (gable upto straight)	2	5	5.000	1.000		50.000	
								650.000	rmt
							1.570	1020.500	Kg
		total building Area	25.000	90.000	2250.000	sq,mt			
					2250.000	sq,mt			
		Total weight		Secondary	16516.278	kg			Purlin,cladding runner ,purlincleat , eaves strut,
				Primary	52328.023	kg			Main frame, baseplate, anchor bolts, sag road , purlin stay, bracing on roof,tie beam and connection plates
		Total main + secondary steel			68844	kg			
		Total Sheeting ROOF + CLADING + CANOPY			17399	KG	3866.500	sqmt	
		Total Sheeting GUTTER + RIDGE + FLASHING			1688	kg	500.000	rmt	
		TOTAL STEEL			87931	KG			
		MAIN STEEL + SECONDARY + SHEETING			39.080	KG/SQ MT			
					3.633	KG/SQ ft			

DESIGN DATA

Dead Load for PEB	0.1 kN/m ²				
Live Load for PEB	0.57 kN/m ²				
Collateral	-				
Wind Speed	39m/s & cpi + 0.2 As per IS 875-Part 3 Terrain Category-3, Class C				
Design Codes	AISC				
Serviceability Criteria (AISC)	Frame (H/100,L/180)				
Minimum Plate Thickness	4mm				
Minimum cold form	1.50mm				

Notes:

- Built-up sections are made from hot rolled plates conforming to ASTM A-572 Gr50 (345Mpa) steel.
The plates are joined together on one side of the web by a continuous welding process to produce the section required.
- Hot rolled sections, if any, are mill sections complying with IS: 2062 (240MPa) steel.
- ERW Pipes , sections are mill formed sections conforming IS 1239 for 240MPa yield.
- Cold formed sections of minimum thickness of 1.50 mm are made of hot rolled sheet of Gr50(345MPa) steel.
- Bracing rods and and sag rods are made of steel bars conforming to IS :2062 with a minimum yield strength of 240MPa.
- Primary structural connections are high strength machine bolts conforming to ASTM A325 or equivalent.
- Purlins and girts are connected to their supporting members by machine bolts Gr. 4.6 steel conforming to IS 1363.
- Anchor bolts are made of rods conforming to IS 2062 or equivalent with a minimum yield strength of 250 MPa.

TOTAL NUMBER OF VENTILATORS IS NOT INCLUDED IN ABOVE ESTIMATE
TOTAL NUMBER OF DOWN SPOT IS NOT INCLUDED IN ABOVE ESTIMATE

Shed-3 (25.0 m x 50.0 m) (with 3MT Gantry)										
		Width : 25 CLEAR SPAN	Length : 50 mt@7.2 C/C				R0 19/12/2014			
It. No	Ra No	Item Description	Nos.		L	B	H	Quantity	Total Qty.	
			Wings	Nos						
	1	Anchor bolts(24 mmdia)	16	10	0.900			144.000		
								144.000	rmt	
								3.853	554.832 kg	
		Anchor bolts(20mmdia)	6	4	0.900			21.600		
								21.600	rmt	
								2.466	53.266 kg	
	2	Baseplate BP1 (25mmthick)	16	1	0.350	0.500	0.025	0.070		
								0.070	cmt	
		Baseplate BP2(20mmthick)	6	1	0.250	0.300	0.016	0.007		
								0.007	cmt	
								606.020	kg	
	3a	sheeting (.45mm for roof)								
		sheeting on roof	1	1	25.000	50.000		1250.000		
								1250.000	sqm	
	3b	sheeting for canopy								
		app.	1	2	7.500	1.500		22.500		
		2 rolling shutters with size of canopy								
								22.500	sqm	
								Total roof sheeting:	1272.500 sqm	
	4	ridge	1	1	50.000			50.000	rmt	
	5	sheeting for cladding (0.45 MM) 1.2 MT BRICK								
		(long wall)	1	2	6.800	50.000		680.000		
		Short wall gable ends	1	2	6.800	25.000		340.000		
		for higher portion above 6mt	1	2	0.600	25.000		30.000		
								1050.000	sqmt	
	6	purlin (roof'Z') roof (main)	7	20	8.400			1176.000		
		on canopy						4.522	5317.872	
		NO EXTRA LOAD CONSIDERED ON PURLIN	2	3	8.400			50.400	rmt	
		ZP 200x70x50x20x1.6 WITH 600 OVER LAP							rmt	
		unit weight 4.522 kg /mt						4.552	229.421	
								5547.293	Kg	
	7	cladding SIDE runner								
		cladding runner (long side)	14	5	8.400			588.000		
								4.522	2658.936	
		cladding runner (long side)								
		ZP 200x70x50x20x1.6 WITH 600 OVER LAP								
		unit weight 4.522 kg /mt							rmt	
		higher frame gable end(both side)	8	4	7.450			238.400		
								4.120	982.208	
			2	4	7.450			59.600		
								4.120	245.552	
								3886.696	Kg	
	8	Sag Rod 12 mm dia rods								
		Roof (2 rows of sag rod)	14	18	1.600			403.200	rmt	
		cladding long wall (two row)	28	2	1.600			89.600		
		Gable end grid	20	2	1.600			64.000		
		canopy	2	2	1.600			6.400		
								563.200	rmt	
								501.248	kg	
	9	Main Framing (no EXTRA LOAD ON RAFTER)								
		MAIN FRAME	6	1				2557.800	15346.800 kg	
		GABLE FRAME	2	1				2568.300	5136.600 kg	
		TIE BEAM 80X80X4	1	2	50.000	1.000		9.200	920.000 kg	
		Weight of Guirder (67 kg/m)	2	1	50.000	1.000		67.000	6700.000 kg	
								Main frame weight	28103.400 kg	

It. No	Ra No	Item Description	Nos.		L	B	H	Quantity	Toyal Qty.
			Wings	Nos					
	10	Purlin Cleat							
		ROOF PURLIN (roof)	1	8	20.000			160.000	
		clading runner (long side)	2	8	5.000			80.000	
		clading runner short wall(gable upto straight)	2	5	5.000			50.000	
		Canopy	1	2	2.000			4.000	
								294.000	nos
							2.000	588.000	Kg
	11	Eavves gutter	1	2	50.000			100.000	
								100.000	rmt
	12	flashing	2	50	1.000			100.000	rmt
			2	25	1.000			50.000	rmt
								150.000	rmt
	13	Bracing on roof						0.000	
		Rod Bracing	2	8	8.000	1.000	5.030	643.840	
			4	4	6.000	1.000	5.030	482.880	
								1126.720	
								1126.720	Kg
	14	Purlin stay (L 50*50*2)							
		(roof)	2	8	20.000	1.000		320.000	
		clading runner (long side)	2	8	5.000	1.000		80.000	
		clading runner (gable upto straight)	2	5	5.000	1.000		50.000	
								450.000	rmt
							1.570	706.500	Kg
		total building Area	25.000	50.000	1250.000	sq,mt			
					1250.000	sq,mt			
		Total weight		Secondary	10021.989	kg			Purlin,cladding runner ,purlincleat , eaves strut,
				Primary	31651.986	kg			Main frame, baseplate, anchor bolts, sag road , purlin stay, bracing on roof,tie beam and connection plates
		Total main + secondary steel			41674	kg			
		Total Sheeting ROOF + CLADING + CANOPY			10451	KG	2322.500	sqmt	
		Total Sheeting GUTTER + RIDGE + FLASHING			1013	kg	300.000	rmt	
		TOTAL STEEL							
		MAIN STEEL + SECONDARY + SHEETING			53138	KG			
					42.510	KG/SQ MT			
					3.951	KG/SQ ft			

DESIGN DATA

Dead Load for PEB	0.1 kN/m ²				
Live Load for PEB	0.57 kN/m ²				
Collateral	-				
Wind Speed	39m/s & cpi + 0.2 As per IS 875-Part 3 Terrain Category-3, Class C				
Design Codes	AISC				
Serviceability Criteria (AISC)	Frame (H/100,L/180)				
Minimum Plate Thickness	4mm				
Minimum cold form	1.50mm				

Notes:

- Built-up sections are made from hot rolled plates conforming to ASTM A-572 Gr50 (345Mpa) steel.
The plates are joined together on one side of the web by a continuous welding process to produce the section required.
- Hot rolled sections, if any, are mill sections complying with IS: 2062 (240MPa) steel.
- ERW Pipes , sections are mill formed sections conforming IS 1239 for 240MPa yield.
- Cold formed sections of minimum thickness of 1.50 mm are made of hot rolled sheet of Gr50(345MPa) steel.
- Bracing rods and and sag rods are made of steel bars conforming to IS :2062 with a minimum yield strength of 240MPa.
- Primary structural connections are high strength machine bolts conforming to ASTM A325 or equivalent.
- Purlins and girts are connected to their supporting members by machine bolts Gr. 4.6 steel conforming to IS 1363.
- Anchor bolts are made of rods conforming to IS 2062 or equivalent with a minimum yield strength of 250 MPa.

TOTAL NUMBER OF VENTILATORS IS NOT INCLUDED IN ABOVE ESTIMATE
TOTAL NUMBER OF DOWN SPOT IS NOT INCLUDED IN ABOVE ESTIMATE

Shed-1 & 2 (25.0 m x 50.0 m) (without 3MT Gantry)

		Width : 25 CLEAR SPAN	Length : 90 mt@7.5 C/C			R0 18/12/2014			
It. No	Ra No	Item Description	Nos.		L	B	H	Quantity	Total Qty.
			Wings	Nos					
	1	Anchor bolts(24 mmdia)							
			26	10	0.900			234.000	
								234.000	rmt
								3.853	901.602 kg
		Anchor bolts(20mmdia)	6	4	0.900			21.600	
								21.600	rmt
								2.466	53.266 kg
	2	Baseplate BP1 (25mmthick)	26	1	0.350	0.500	0.025	0.114	
								0.114	cmt
		Baseplate BP2(20mmthick)	6	1	0.250	0.300	0.016	0.007	
								0.007	cmt
								949.458	kg
	3a	sheeting (.45mm for roof)							
		sheeting on roof	1	1	25.000	90.000		2250.000	
								2250.000	sqm
	3b	sheeting for canopy							
		app.	1	2	7.500	1.500		22.500	
		2 rolling shutters with size of canopy							
								22.500	sqm
								Total roof sheeting:	2272.500 sqm
	4	ridge	1	1	90.000			90.000	rmt
	5	sheeting for cladding (0.45 MM) 1.2 MT BRICK							
		(long wall)	1	2	6.800	90.000		1224.000	
		Short wall gable ends	1	2	6.800	25.000		340.000	
		for higher portion above 6mt	1	2	0.600	25.000		30.000	
								1594.000	sqmt
	6	purlin (roof'Z') roof (main)	12	20	8.700			2088.000	
		on canopy						4.522	9441.936
		NO EXTRA LOAD CONSIDERED ON PURLIN	2	3	8.700			52.200	rmt
		ZP 200x70x50x20x1.6 WITH 600 OVER LAP							rmt
		unit weight 4.522 kg /mt						4.552	237.614
								9679.550	Kg
	7	cladding SIDE runner							
		cladding runner (long side)	24	5	8.700			1044.000	
								4.522	4720.968
		cladding runner (long side)							
		ZP 200x70x50x20x1.6 WITH 600 OVER LAP							
		unit weight 4.522 kg /mt							rmt
		higher frame gable end(both side)	8	4	7.450			238.400	
								4.120	982.208
			2	4	7.450			59.600	
								4.120	245.552
								5948.728	Kg
	8	Sag Rod 12 mm dia rods							
		Roof (2 rows of sag rod)	24	18	1.600			691.200	rmt
		cladding long wall (two row)	48	2	1.600			153.600	
		Gable end grid	20	2	1.600			64.000	
		canopy	2	2	1.600			6.400	
								915.200	rmt
								814.528	kg
	9	Main Framing (no EXTRA LOAD ON RAFTER)							
		MAIN FRAME	11	1				1956.150	21517.650
		GABLE FRAME	2	1				2363.550	4727.100
		TIE BEAM 80X80X4	1	2	90.000	1.000		9.200	1656.000
		Weight of Guirder (67 kg/m)	2	1	0.000	1.000		67.000	0.000
								Main frame weight	27900.750 kg

It. No	Ra No	Item Description	Nos.		L	B	H	Quantity	Total Qty.
			Wings	Nos					
	10	Purlin Cleat							
		ROOF PURLIN (roof)	1	13	20.000			260.000	
		clading runner (long side)	2	13	5.000			130.000	
		clading runner short wall(gable upto straight)	2	5	5.000			50.000	
		Canopy	1	2	2.000			4.000	
								444.000	nos
							2.000	888.000	Kg
	11	Eavves gutter	1	2	90.000			180.000	
								180.000	rmt
	12	flashing	2	90	1.000			180.000	rmt
			2	25	1.000			50.000	rmt
								230.000	rmt
	13	Bracing on roof						0.000	
		Rod Bracing	2	8	8.000	1.000	5.030	643.840	
			4	4	6.000	1.000	5.030	482.880	
								1126.720	
								1126.720	Kg
	14	Purlin stay (L 50*50*2)							
		(roof)	2	12	20.000	1.000		480.000	
		clading runner (long side)	2	12	5.000	1.000		120.000	
		clading runner (gable upto straight)	2	5	5.000	1.000		50.000	
								650.000	rmt
							1.570	1020.500	Kg
		total building Area	25.000	90.000	2250.000	sq,mt			
					2250.000	sq,mt			
		Total weight		Secondary	16516.278	kg			Purlin,clading runner ,purlincleat , eaves strut,
				Primary	32766.823	kg			Main frame, baseplate, anchor bolts, sag road , purlin stay, bracing on roof,tie beam and connection plates
		Total main + secondary steel			49283	kg			
		Total Sheeting ROOF + CLADING + CANOPY			17399	KG	3866.500	sqmt	
		Total Sheeting GUTTER + RIDGE + FLASHING			1688	kg	500.000	rmt	
		TOTAL STEEL							
		MAIN STEEL + SECONDARY + SHEETING			68370	KG			
					30.387	KG/SQ MT			
					2.824	KG/SQ ft			

DESIGN DATA

Dead Load for PEB	0.1 kN/m ²				
Live Load for PEB	0.57 kN/m ²				
Collateral	-				
Wind Speed	39m/s & cpi + 0.2 As per IS 875-Part 3 Terrain Category-3, Class C				
Design Codes	AISC				
Serviceability Criteria (AISC)	Frame (H/100,L/180)				
Minimum Plate Thickness	4mm				
Minimum cold form	1.50mm				

Notes:

- Built-up sections are made from hot rolled plates conforming to ASTM A-572 Gr50 (345Mpa) steel.
The plates are joined together on one side of the web by a continuous welding process to produce the section required.
- Hot rolled sections, if any, are mill sections complying with IS: 2062 (240MPa) steel.
- ERW Pipes , sections are mill formed sections conforming IS 1239 for 240MPa yield.
- Cold formed sections of minimum thickness of 1.50 mm are made of hot rolled sheet of Gr50(345MPa) steel.
- Bracing rods and and sag rods are made of steel bars conforming to IS :2062 with a minimum yield strength of 240MPa.
- Primary structural connections are high strength machine bolts conforming to ASTM A325 or equivalent.
- Purlins and girts are connected to their supporting members by machine bolts Gr. 4.6 steel conforming to IS 1363.
- Anchor bolts are made of rods conforming to IS 2062 or equivalent with a minimum yield strength of 250 MPa.

TOTAL NUMBER OF VENTILATORS IS NOT INCLUDED IN ABOVE ESTIMATE
TOTAL NUMBER OF DOWN SPOT IS NOT INCLUDED IN ABOVE ESTIMATE

Shed-3 (25.0 m x 50.0 m) (without 3MT Gantry)

		Width : 25 CLEAR SPAN	Length : 50 mt@7.2 C/C		R0 19/12/2014			
It. No	Ra No	Item Description	Nos.	L	B	H	Quantity	Total Qty.
			Wings	Nos				
	1	Anchor bolts(24 mmdia)	16	10	0.900		144.000	
							144.000	rmt
							3.853	554.832 kg
		Anchor bolts(20mmdia)	6	4	0.900		21.600	
							21.600	rmt
							2.466	53.266 kg
	2	Baseplate BP1 (25mmthick)	16	1	0.350	0.500	0.025	0.070
							0.070	cmt
		Baseplate BP2(20mmthick)	6	1	0.250	0.300	0.016	0.007
							0.007	cmt
							606.020	kg
	3a	sheeting (.45mm for roof)						
		sheeting on roof	1	1	25.000	50.000		1250.000
								1250.000 sqm
	3b	sheeting for canopy						
		app.	1	2	7.500	1.500		22.500
		2 rolling shutters with size of canopy						
							22.500	sqm
							Total roof sheeting:	1272.500 sqm
	4	ridge	1	1	50.000			50.000 rmt
	5	sheeting for cladding (0.45 MM) 1.2 MT BRICK						
		(long wall)	1	2	6.800	50.000		680.000
		Short wall gable ends	1	2	6.800	25.000		340.000
		for higher portion above 6mt	1	2	0.600	25.000		30.000
								1050.000 sqmt
	6	purlin (roof'Z') roof (main)	7	20	8.400			1176.000
		on canopy					4.522	5317.872
		NO EXTRA LOAD CONSIDERED ON PURLIN	2	3	8.400			50.400 rmt
		ZP 200x70x50x20x1.6 WITH 600 OVER LAP						rmt
		unit weight 4.522 kg /mt					4.552	229.421
								5547.293 Kg
	7	cladding SIDE runner						
		cladding runner (long side)	14	5	8.400			588.000
							4.522	2658.936
		cladding runner (long side)						
		ZP 200x70x50x20x1.6 WITH 600 OVER LAP						
		unit weight 4.522 kg /mt						rmt
		higher frame gable end(both side)	8	4	7.450			238.400
							4.120	982.208
			2	4	7.450			59.600
							4.120	245.552
								3886.696 Kg
	8	Sag Rod 12 mm dia rods						
		Roof (2 rows of sag rod)	14	18	1.600			403.200
		cladding long wall (two row)	28	2	1.600			89.600
		Gable end grid	20	2	1.600			64.000
		canopy	2	2	1.600			6.400
								563.200 rmt
								501.248 kg
	9	Main Framing (no EXTRA LOAD ON RAFTER)						
		MAIN FRAME	6	1			1956.150	11736.900
		GABLE FRAME	2	1			2363.550	4727.100
		TIE BEAM 80X80X4	1	2	50.000	1.000	9.200	920.000
		Weight of Guirder (67 kg/m)	2	1	0.000	1.000	67.000	0.000
							Main frame weight	17384.000 kg

It. No	Ra No	Item Description	Nos.		L	B	H	Quantity	Total Qty.
			Wings	Nos					
	10	Purlin Cleat							
		ROOF PURLIN (roof)	1	8	20.000			160.000	
		clading runner (long side)	2	8	5.000			80.000	
		clading runner short wall(gable upto straight)	2	5	5.000			50.000	
		Canopy	1	2	2.000			4.000	
								294.000	nos
							2.000	588.000	Kg
	11	Eavves gutter	1	2	50.000			100.000	
								100.000	rmt
	12	flashing	2	50	1.000			100.000	rmt
			2	25	1.000			50.000	rmt
								150.000	rmt
	13	Bracing on roof						0.000	
		Rod Bracing	2	8	8.000	1.000	5.030	643.840	
			4	4	6.000	1.000	5.030	482.880	
								1126.720	
								1126.720	Kg
	14	Purlin stay (L 50*50*2)							
		(roof)	2	8	20.000	1.000		320.000	
		clading runner (long side)	2	8	5.000	1.000		80.000	
		clading runner (gable upto straight)	2	5	5.000	1.000		50.000	
								450.000	rmt
							1.570	706.500	Kg
		total building Area	25.000	50.000	1250.000	sq,mt			
					1250.000	sq,mt			
		Total weight		Secondary	10021.989	kg			Purlin,cladding runner ,purlincleat , eaves strut,
				Primary	20932.586	kg			Main frame, baseplate, anchor bolts, sag road , purlin stay, bracing on roof,tie beam and connection plates
		Total main + secondary steel			30955	kg			
		Total Sheeting ROOF + CLADING + CANOPY			10451	KG	2322.500	sqmt	
		Total Sheeting GUTTER + RIDGE + FLASHING			1013	kg	300.000	rmt	
		TOTAL STEEL							
		MAIN STEEL + SECONDARY + SHEETING			42418	KG			
					33.935	KG/SQ MT			
					3.154	KG/SQ ft			

DESIGN DATA

Dead Load for PEB	0.1 kN/m ²				
Live Load for PEB	0.57 kN/m ²				
Collateral	-				
Wind Speed	39m/s & cpi + 0.2 As per IS 875-Part 3 Terrain Category-3, Class C				
Design Codes	AISC				
Serviceability Criteria (AISC)	Frame (H/100,L/180)				
Minimum Plate Thickness	4mm				
Minimum cold form	1.50mm				

Notes:

- Built-up sections are made from hot rolled plates conforming to ASTM A-572 Gr50 (345Mpa) steel.
The plates are joined together on one side of the web by a continuous welding process to produce the section required.
- Hot rolled sections, if any, are mill sections complying with IS: 2062 (240MPa) steel.
- ERW Pipes , sections are mill formed sections conforming IS 1239 for 240MPa yield.
- Cold formed sections of minimum thickness of 1.50 mm are made of hot rolled sheet of Gr50(345MPa) steel.
- Bracing rods and and sag rods are made of steel bars conforming to IS :2062 with a minimum yield strength of 240MPa.
- Primary structural connections are high strength machine bolts conforming to ASTM A325 or equivalent.
- Purlins and girts are connected to their supporting members by machine bolts Gr. 4.6 steel conforming to IS 1363.
- Anchor bolts are made of rods conforming to IS 2062 or equivalent with a minimum yield strength of 250 MPa.

TOTAL NUMBER OF VENTILATORS IS NOT INCLUDED IN ABOVE ESTIMATE
TOTAL NUMBER OF DOWN SPOT IS NOT INCLUDED IN ABOVE ESTIMATE

ESTIMATE QUANTITY SUB STRUCTURE OF STEM LESS PIPE SHED

R.C.C. Quantity

	No.	B (m)	D (m)	L (m)	Total	Unit
Excavation	54	2.0	3.0	1.5	486	m ³
Filling					274.104	m ³
R.C.C Quantity of Footing	54	2.0	3.0	0.6	194.4	m ³
R.C.C Quantity of Pedestal	54	0.6	0.6	0.9	17.496	m ³
R.C.C Quantity of Ground Beam	1	0.3	0.6	560	100.8	m ³
Grade Slab (150 mm Thick)	2	90	25	0.15	675	m ³
	1	50	25	0.15	187.5	m ³
Compacted Filling Below Grade Slab (Gravel (300mm thick) + Sand Filling (100 mm thick))	2	90	25	1	4500	m ²
	1	50	25	1	1250	m ²
1.2m Height Brick wall (230 thick)	2	90	1.2	2	432	m ²
	1	50	1.2	2	120	m ²
	3	25	1.2	2	180	m ³
Total R.C.C. Quantity					1175.2	m³

Steel Quantity

Footing	11.66	MT
Pedestal	2.62	MT
Ground Beam	15.12	MT
Grade Slab	51.75	MT
Total Reinforcement Steel		81.16 MT

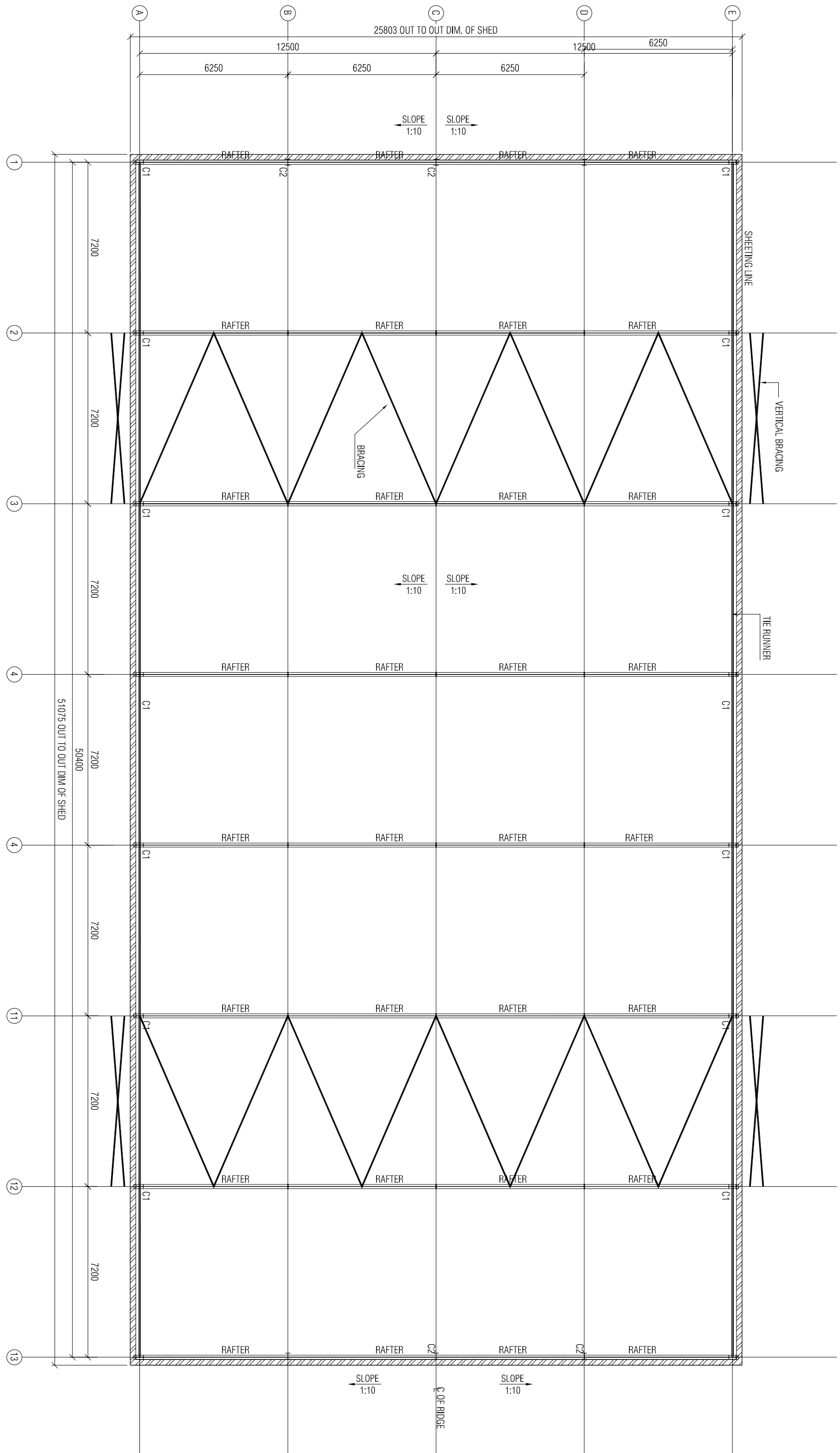
ESTIMATE QUANTITY SUPER STRUCTURE OF STEM LESS PIPE SHED

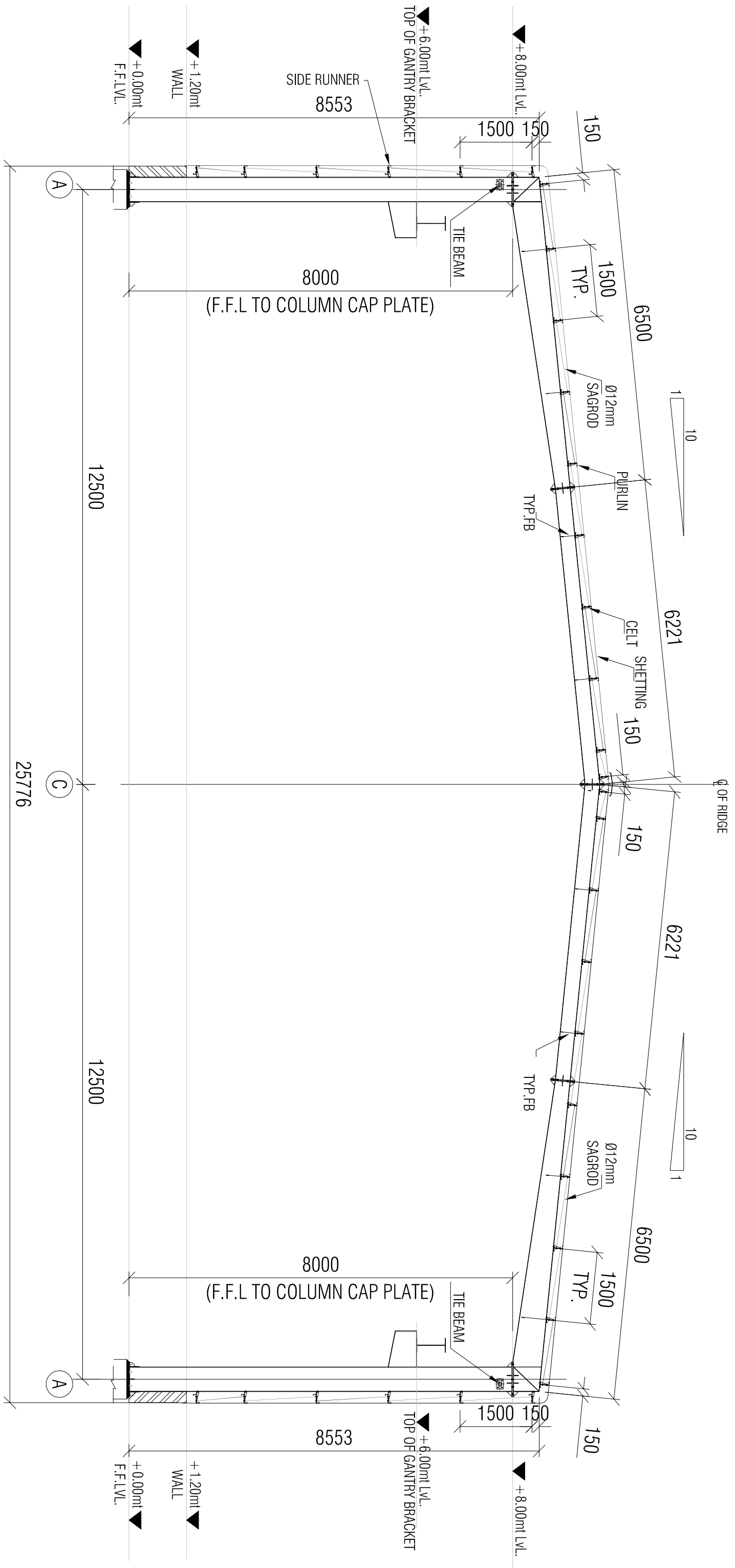
	Area (m ²)	WITH 3T GANTRY			
		Without Sheeting (MT)	Sheeting (m ²)	Total weight with Sheeting (MT)	kg / m ²
Shed 1 - (25m x 90m)	2250	70.53	3866.5	87.93	39.08
Shed 2 - (25m x 90m)	2250	70.53	3866.5	87.93	39.08
Shed 3 - (25m x 50m)	1250	42.69	2322.5	53.14	42.51
Total	5750	184	10056	229	40

	Area (m ²)	Without Gantry			
		Without Sheeting (MT)	Sheeting (m ²)	Total weight with Sheeting (MT)	kg / m ²
Shed 1 - (25m x 90m)	2250	49.28	3866.5	68.37	30.39
Shed 2 - (25m x 90m)	2250	49.28	3866.5	68.37	30.39
Shed 3 - (25m x 50m)	1250	31.97	2322.5	42.42	33.93
Total	5750	131	10056	179	31

ESTIMATE QUANTITY SUB STRUCTURE OF STEM LESS PIPE SHED

Excavation	486	m ³
Filling	274	m ³
R.C.C.	1175	m ³
Steel	81.16	MT
Brick wall	732	m ²
Compacted Filling Below Grade Slab (Gravel (300mm thick) + Sand Filling (100 mm thick))	5750	m ²





TYPICAL SECTION ON GRID
 SCALE - 1:90