

**DETAILED DRAWING  
AND  
DETAILED ESTIMATE  
OF  
SCREEN HOUSE  
FOR  
SAPLING/SEEDLINGS  
(AREA=209.2819 SQ.M)**



Screen House for Saplings						
S.N.	Description of works	Unit	Rate	Quantity	Amount	Remarks
1	Site Clearance including cutting Shrubs removing trees etc all complete	m <sup>2</sup>	17.25	275.63	4,754.62	
2	Earthwork excavation in foundation in soft and hard soils including disposal upto 10m lead and 1.5m lift	m <sup>3</sup>	618.00	12.72	7,860.96	
3	Dry Brick Soling work in foundation and plinth	m <sup>2</sup>	957.79	241.70	231,497.84	
4	75mm thick PCC work in 1:3:6 in foundation and plinth including lead upto 30m	m <sup>3</sup>	12537.50	19.33	242,349.88	
5	RCC works in 1:1.5:3 in superstructure	m <sup>3</sup>	17605.08	5.09	89,609.86	
6	Reinforcement work (TMT Fe-500) cutting, bending, placing all complete	MT	122065.60	0.63	76,901.33	
7	Providing and fixing Wooden or Steel form work for for all kinds of R.C.C. works and its removal all complete as per instruction of site incharge.	m <sup>2</sup>	556.03	41.41	23,025.20	
8	Brick work in 1:6 C/S mortar all complete	m <sup>3</sup>	13606.03	4.24	57,689.57	
9	Brick work in 1:4 C/S mortar all complete	m <sup>2</sup>	14045.93	4.20	58,992.91	
10	Providing and filling earth material laying in 15 cm layer, spray water with compaction all complete as per instruction of the site incharge	m <sup>3</sup>	376.75	6.36	2,396.13	
11	38mm thick cement concrete flooring work all complete(1:2:4)	m <sup>2</sup>	660.81	207.06	136,827.32	
12	12.5mm thick C/S plaster in 1:4 in floor all complete	m <sup>2</sup>	377.11	61.50	23,192.27	
13	Making and fixing black iron truss post with primer paint all complete	Kgs.	131.26	6124.78	803,938.62	
14	200 micron U.V. stabilized Polyethylene sheet roofing with aluminum profile & zig-zag spring all complete	m <sup>2</sup>	140.00	386.66	54,132.40	
15	Drain Construction					
	i. Earthwork in excavation	m <sup>3</sup>	618.00	1.80	1,112.40	
	ii. Brickwork in 1:6 C/S mortar	m <sup>3</sup>	13606.03	1.20	16,327.24	
	iii. PCC in 1:3:6	m <sup>3</sup>	12537.50	0.48	6,018.00	
	iv. Iron grating	m <sup>2</sup>	2621.14	6.00	15,726.84	
16	Galvanized Iron Chain link Fencing Tray	m <sup>2</sup>	453.92	120.00	54,470.40	
17	Providing and fixing aphid proof mesh Shutter with stainless steel aphid in 90 series for window. (Section thickness 1 mm)	m <sup>2</sup>	2022.88	138.68	280,533.00	
18	Supplying and fitting Aluminium sliding Door 2 track section of (88 x38x1.3)mm & 5mm glass.	m <sup>2</sup>	5380.00	14.10	75,858.00	
19	Supplying and fitting Aluminium Fixed section of (88 x38x1.3)mm & 5mm glass.	m <sup>2</sup>	5380.00	3.86	20,766.80	
				Subtotal	2,283,981.59	
				<b>User's Contribution</b>	<b>1,141,990.80</b>	
				<b>Budget Allocated By Office</b>	<b>1,141,990.80</b>	
				2.5% Contingency	28,549.77	
				<b>Grand Total</b>	<b>2,312,531.36</b>	

**Note:**

1. The Rate is taken from Kathmandu District rate 077/078 and is applicable for Kathmandu district only.
2. 13% VAT is included in required materials.
3. 50% financing is done by National Centre for Fruit Development and 50% by the User.

Prepared by:



Checked by:

*[Signature]*  
Agril. Engineer

Approved by:



Screen House for Saplings								
S.N.	Particulars	Nos.	Length(m)	Breadth(m)	Height(m)	Quantity	Unit	Remarks
1	Site Clearance	1.00	22.50	12.25		275.63	m <sup>2</sup>	
2	<b>Earthwork excavation in foundation</b>							
	Column Section	27.00	0.56	0.56	0.65	5.50		
	Long Wall	2.00	20.50	0.46	0.30	5.66		
	Short Wall	2.00	10.25	0.46	0.30	2.83		
	Deduction for column portion in Long and Short Wall	20.00	0.46	0.46	0.30	1.27		
					<b>Total</b>	<b>12.72</b>	m <sup>3</sup>	
3	<b>One layer flat stone soiling in foundation</b>							
	Column Section	27.00	0.56	0.56		8.47		
	Long Wall	2.00	20.50	0.46		18.86		
	Short wall	2.00	10.25	0.46		9.43		
	Below Plinth	1.00	20.40	10.15		207.06		
	Deduction for column portion in Long and Short Wall	20.00	0.23	0.46		2.12		
					<b>Total</b>	<b>241.70</b>	m <sup>2</sup>	
4	<b>75mm th. PCC work in foundation (1:3:6)</b>							
	Column Section	27.00	0.56	0.56	0.08	0.68	m <sup>3</sup>	
	Long Wall	2.00	20.50	0.46	0.08	1.51		
	Short wall	2.00	10.25	0.46	0.08	0.75		
	3" thick PCC in Plinth	1.00	20.40	10.15	0.08	16.56		
	Deduction for column portion in Long and Short Wall	20.00	0.23	0.46	0.08	0.17		
					<b>Total</b>	<b>19.33</b>	m <sup>3</sup>	
5	<b>RCC work in 1:1.5:3 for foundation</b>							
	Bottom	27.00	0.46	0.46	0.52	2.97	m <sup>3</sup>	
	Top	27.00	0.23	0.23	0.30			
					<b>Total</b>	<b>2.97</b>	m <sup>3</sup>	
	<b>RCC work for Tie-Band (1:1.5:3)</b>							
	Long Wall	2.00	20.50	0.23	0.15	1.41	m <sup>3</sup>	
	Short wall	2.00	10.25	0.23	0.15	0.71		
					<b>Total</b>	<b>2.12</b>	m <sup>3</sup>	
6	<b>Reinforcement works TMT-Fe-415</b>	1.00	5.09	0.015	0.08	628.00	Kgs.	
	"@" 1.5% of RCC Quantity including laps, anchorage wastages							
					<b>Total</b>	<b>0.63</b>	MT	
7	<b>Formwork for Tie-Band/ Foundation</b>							
	In Foundation ( in RCC works)	96	0.46		0.52	22.9832		
	<b>In Tie Band</b>							
	IN SILL/INTEL LEVEL	4.00	20.50		0.15	12.30	m <sup>2</sup>	
		4.00	10.25		0.15	6.15	m <sup>2</sup>	
					<b>Total</b>	<b>41.41</b>	m <sup>2</sup>	
8	<b>Brickwork in 1:6 C/S Mortar(230 mm Thi.)</b>							
	Below Ground Level							
	Long Wall	2.00	20.50	0.23	0.30	2.83	m <sup>3</sup>	
	Short wall	2.00	10.25	0.23	0.30	1.41		
					<b>Total</b>	<b>4.24</b>	m <sup>3</sup>	
9	<b>Brickwork in 1:4 C/S Mortar(230 mm Thi.)</b>							
	Above Ground Level							
	Long Wall	2.00	20.25	0.23	0.30	2.79	m <sup>3</sup>	
	Short wall	2.00	10.25	0.23	0.30	1.41		
					<b>Total</b>	<b>4.20</b>	m <sup>3</sup>	
10	<b>Earthwork in filling</b>							
	filling in foundation					6.36	m <sup>3</sup>	
					<b>Total</b>	<b>6.36</b>	m <sup>3</sup>	50% of excavation
11	<b>38mm thick Screeding work in 1:2:4</b>							
	Plinth	1.00	20.40	10.15		207.06	m <sup>2</sup>	
					<b>Total</b>	<b>207.06</b>	m <sup>2</sup>	
12	<b>12.5mm thick plaster (1:4)</b>							
	Long Wall	2.00	20.50	1.00	-	41.00		
	Short wall	2.00	10.25	1.00	-	20.50		
					<b>Total</b>	<b>61.50</b>	m <sup>2</sup>	
13	<b>Truss Work</b>							
	80x80x4 mm Post at edges	18.00			3.14	56.52	m	
					<b>Total</b>	<b>56.52</b>		
						546.60	Kgs.	
	80x80x4mm Post in middle	9.00			3.14	28.26	m	
					<b>Total</b>	<b>28.26</b>		

Prepared By:



Checked By:

*[Signature]*  
Agril. Engineer

Approved By:



Screen House for Saplings								
S.N.	Particulars	Nos.	Length(m)	Breadth(m)	Height(m)	Quantity	Unit	Remarks
			80x80x4mm mild steel SHS in a 9.67 kg m			330.64	Kgs.	
	Plates (250*250*6)	54.00						foundation and rafter joint
			per piece @ 2.35kg (Medium)			126.90	Kgs.	
	For 1 Truss							
	Rafters							
	50 mm Ms SHS	1.00	24.26	4.45		107.96		
	Ties/Struts- 50mm Ms SHS	1.00	21.10	4.45		93.90		
			50x50x3 mm mild steel SHS @ 4.45 kg m			201.86		
	For 9 Truss sections					1816.74	Kgs.	
	Length wise tie	2.00	20.50	4.45		91.23	Kgs.	
	Purlins and runner-38mm Ms SHS	21.00	22.65	2.62		1246.20	Kgs.	
	For 1 Tray							
	Support/ column	10.00	0.46			4.60		
			38x 38x3 mm mild steel SHS @ 3.29kg/m			15.13	Kgs.	
	Top Frame	2.00	4.00			8.00		
		2.00	1.00			2.00		
	Beam and Intermediate Beams	3.00	4.00			12.00		
		5.00	1.00			5.00		
			Total			27.00		
			25x 25x 3 mm mild steel SHS @ 1.98kg/m			53.46	Kgs.	
			Total for 1 Tray			68.59	Kgs.	
	For 30 Tray	30				68.59	Kgs.	
			Subtotal			6124.78	Kgs.	
			Total			6124.78	Kgs.	
14	200 micron U.V. stabilized Polyethylene sheet roofing with aluminum profile & zig-zag spring all complete	1.00	24.65	14.26	-	386.66	m <sup>2</sup>	
15	Drain construction							
	i. Excavation	1.00	20.00	0.30	0.30	1.80	m <sup>3</sup>	
	ii. B/W in 1:4 C/S	2.00	20.00	0.10	0.30	1.20	m <sup>3</sup>	
	iii. PCC in 1:3:6	1.00	20.00	0.08	0.30	0.48	m <sup>3</sup>	
	iv. Iron Grating	1.00	20.00	0.30		6.00	m <sup>2</sup>	
16	Galvanized Iron Chain link Fencing Tray	30.00	1.00	4.00	-	120.00	m <sup>2</sup>	
			Total			120.00		
17	Aluminium section with Aphid proof mesh net							
		2.00	20.50	2.14	-	87.74	m <sup>2</sup>	
		2.00	10.24	2.14	-	43.83		
	Triangular part	1.00	12.00	1.18	-	14.16		
	Deduction for outer sliding gate	1.00	2.89	2.44	-	7.05		
			Total			138.68	m <sup>2</sup>	
18	Sliding Gate Section	2.00	2.89	2.44	-	14.10	m <sup>2</sup>	
19	Fixed Aluminium Section	1.00	1.58	2.44		3.86	m <sup>2</sup>	

Prepared By:

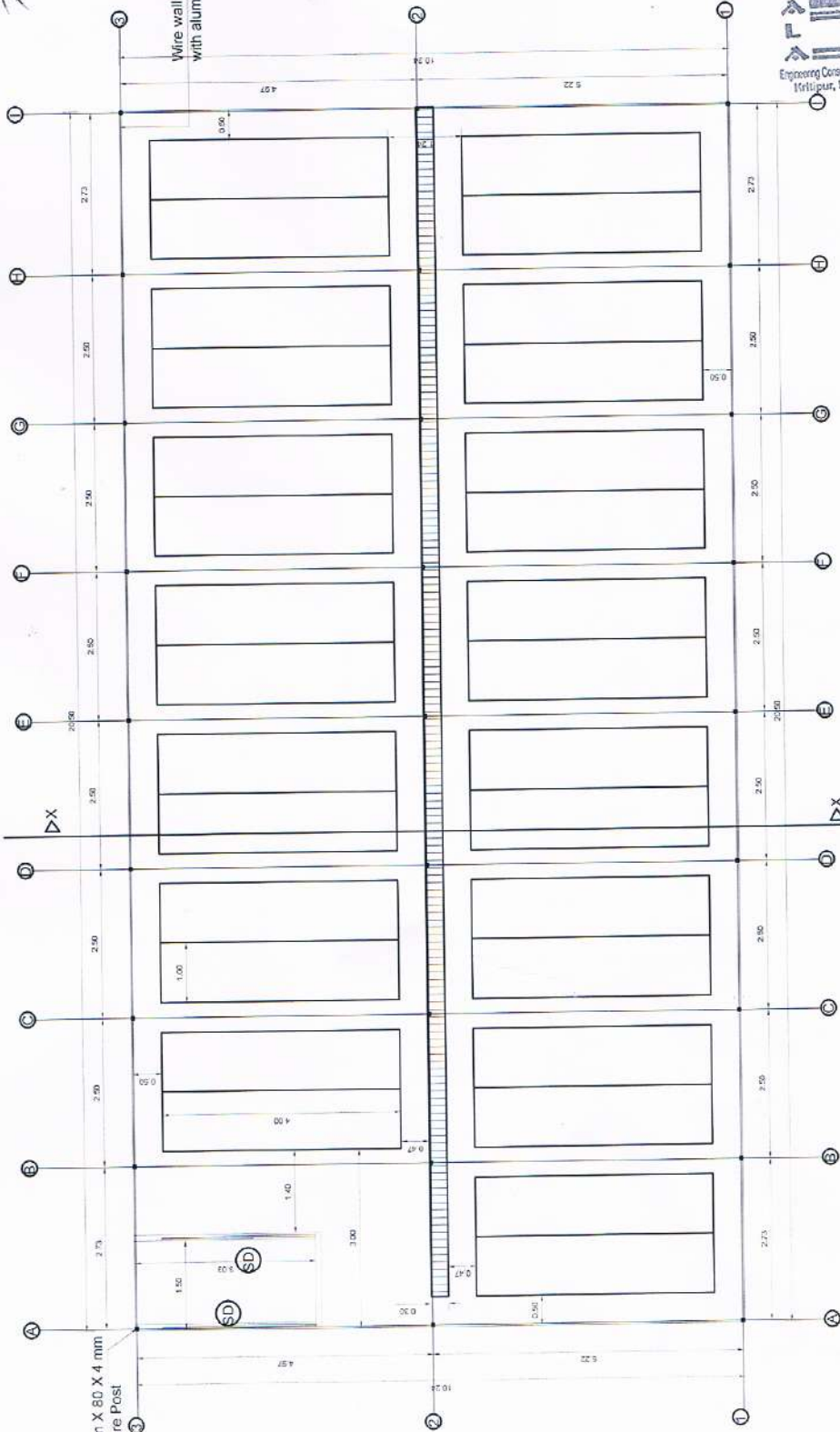


Checked By:

*Sananda*  
Sananda  
Civil Engineer

Approved By:





Wire wall mesh  
with aluminum frame

80 mm X 80 X 4 mm  
Square Post



SCREEN HOUSE PLAN FOR SEEDLINGS/SAPLING  
Area: 209.2819sq.m

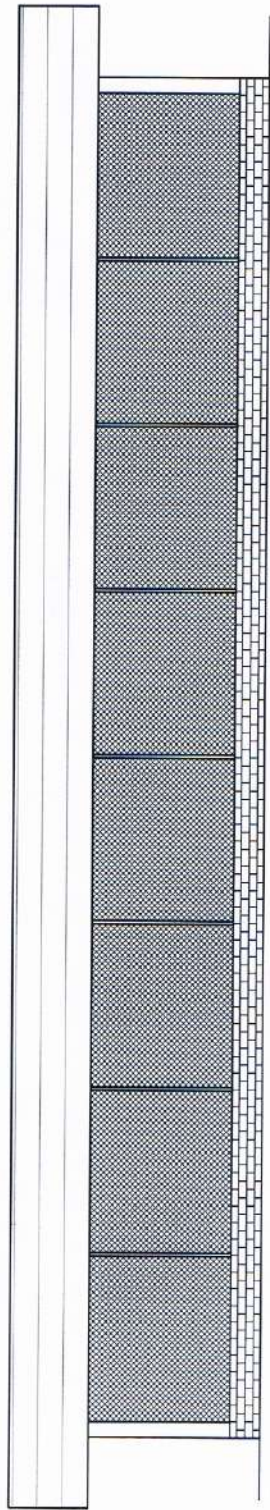


APRIL 2020  
S. Srinivas

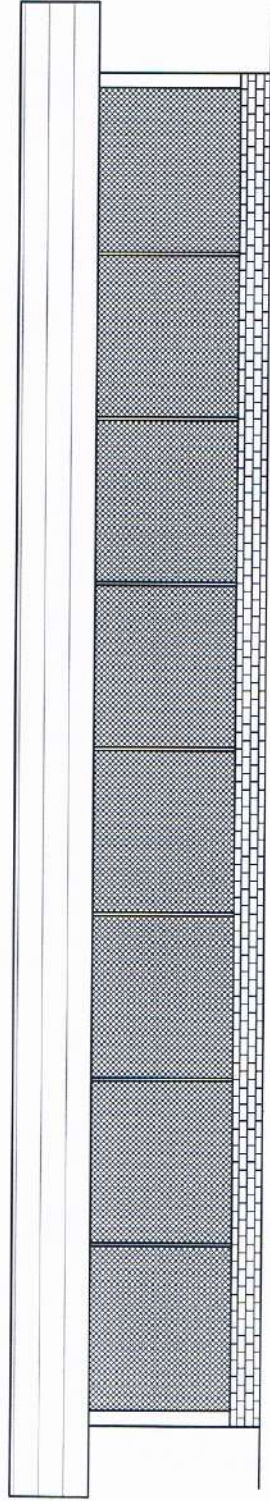
 MANDALA ENGINEERING CONSULTANCY PVT. LTD. KABBIHAWAN, KAHIMANDU E-mail: mandalaconsultancy2@gmail.com Contact: 9851147255, 985150977	CLIENT: National Centre for Fruit Development	SITE :	DESIGNED BY :	SIGNATURE & DATE	SCALE NTS
	PROJECT: SCREEN HOUSE DESIGN	PLAN, SECTION, ELEVATION, DETAIL DRAWINGS	DRAWN BY : SHRADHA KOTEL	DATE : 08/09/2020	REV. NO./DATE :
			CHECKED BY : Ashish Isarima Kattel		DWG. NO. :
			APPROVED BY :		SHEET NO. :



२०७३/०९/११/०४  
 Ashish Kumar Koirala



North Elevation



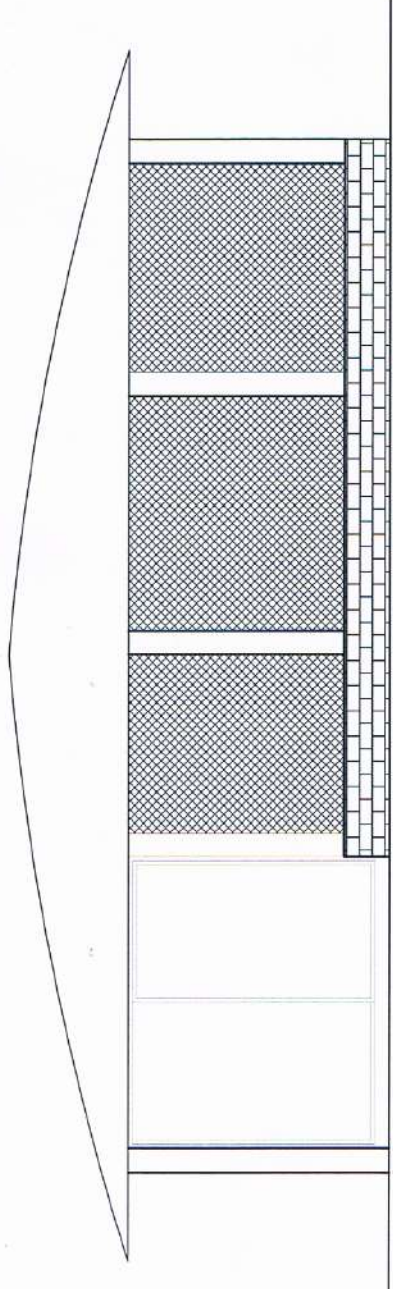
South Elevation

<p style="font-size: small;"> <b>MANDALA ENGINEERING CONSULTANCY PVT. LTD.</b>            #ABIBHAWAN, KATHMANDU            E-mail: mandalacconsultancy2@gmail.com            Contact: 9851147255, 9851150977         </p>	CLIENT: National Center For Profit Development	SITE:	SIGNATURE & DATE:	SCALE: HTS	DATE: 08/09/2020
	PROJECT: MUSEUM HOUSE DESIGN	TITLE: PLAN, SECTION, ELEVATION, DETAIL DRAWINGS	DESIGNED BY: DRAWN BY: SHRADDDHA DOTEL CHECKED BY: Ashish Kumar Koirala APPROVED BY:	REV. NO./DATE:	DWG. NO.:

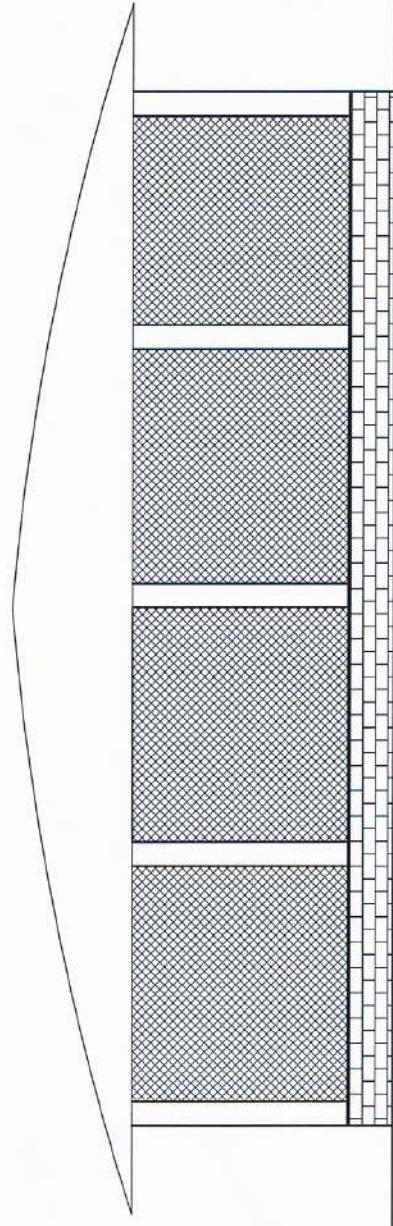
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*Ashish Bhatnagar*  
ASHISH ENGINEERS

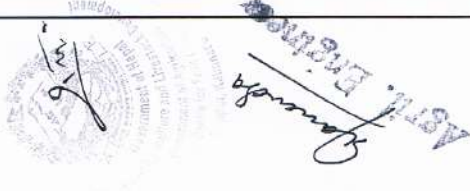


West Elevation

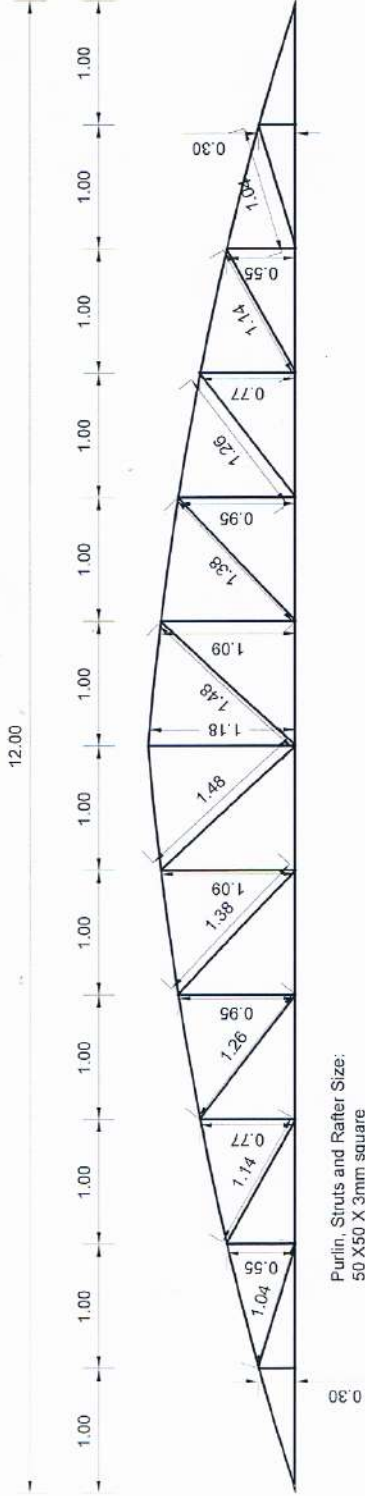


East Elevation

 <b>MANDALA ENGINEERING CONSULTANCY PVT. LTD.</b> RASBIJAYAN KATHAMANOOR E-mail: mandalac consultancy@legmail.com Contact: 9851147255, 985119977	CLIENT: Nutritional Centre For Fruit Development	SITE :	DESIGNED BY : DRAWN BY : CHECKED BY : APPROVED BY :	SIGNATURE & DATE : SHRADDDHA HOTEL Ashish Bhatnagar	SCALE : NTS DATE : 08/09/2020 REV. NO./DATE : DNG. NO. : SHEET NO. :
	PROJECT: SCREEN HOUSE DESIGN	TITLE : PLAN, SECTION, ELEVATION, DETAIL DRAWINGS			

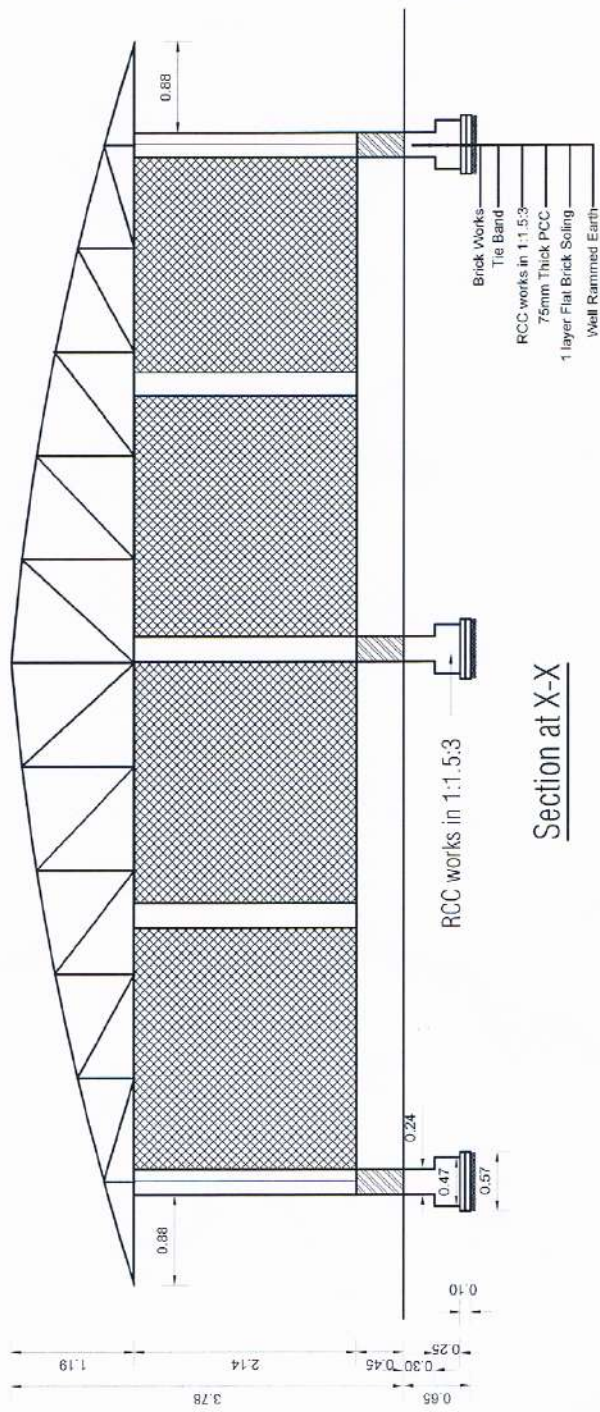


*Ashish Kumar Kattel*  
 ASST. ENGINEER  
 No. 9851158977



Purlin, Struts and Rafter Size:  
 50 X 50 X 3mm square

### Truss Detail



### Section at X-X

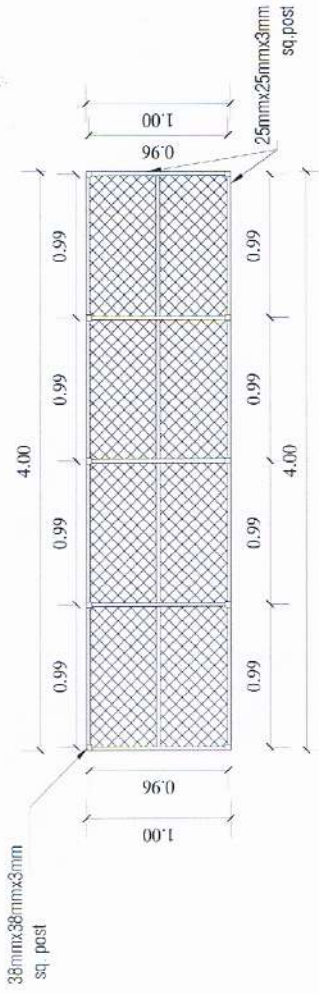
<b>MANDALA ENGINEERING CONSULTANCY PVT. LTD.</b> RAJIBHAWAN, KAHIMANDU E-mail: mandalac consultancy@gmail.com Contact: 9851147255, 9851158977	CLIENT: National Organic Eco Fruit Development	SITE:	SCALE: NTS	
			DESIGNED BY:	SIGNATURE & DATE:
PROJECT: SUREEN HOUSE DESIGN	TITLE: PLAN, SECTION, ELEVATION, DETAIL DRAWINGS	DRAWN BY: SHRADHAHOTEL	DATE: 08/09/2020	REV. NO./DATE:
			CHECKED BY: Ashish Kumar Kattel	DNG. NO.:
			APPROVED BY:	SHEET NO.:



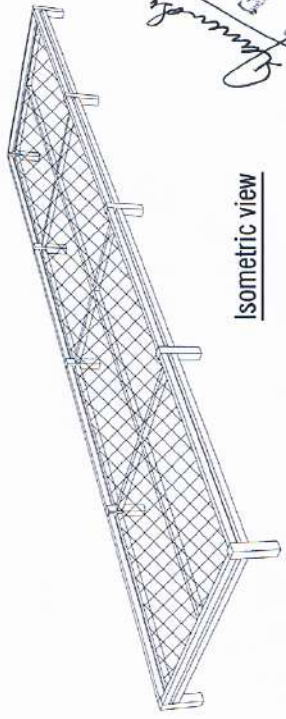




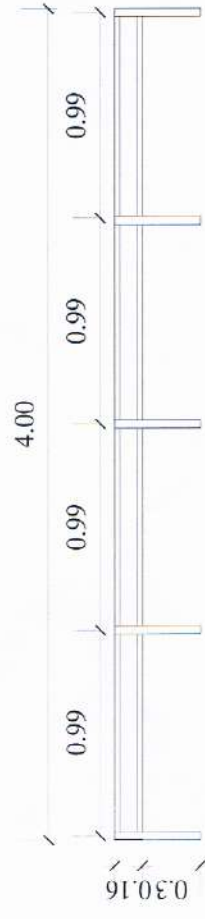
*Handwritten signature and date: Suman, 2071 B.S.*



Top View of Tray



Isometric view



Side View of Tray

<b>MANDALA ENGINEERING CONSULTANCY PVT. LTD.</b> RABIBHAWAN, KATHMANDU E-mail: mandalaconsultancy2@gmail.com Contact: 9851167255, 9851150977	CLIENTS: National Centre For Fault Development	TITLE: PLAN, SECTION, ELEVATION, DETAIL DRAWINGS	SIGNED BY: SHRADDDHA OJEL	SCALE: NTS
	PROJECT: SUBREIN HOUSE DESIGN	CHECKED BY: ALISHA Burma Kattel	DATE: 08/09/2020	REV. NO./DATE:
			APPROVED BY:	DWG. NO.:
				SHEET NO.:

Screen House for Saplings				
S.N.	Description of works	Unit	Rate	Remarks
1	Site Clearance including cutting Shrubs removing trees etc all complete	m <sup>2</sup>	17.25	
2	Earthwork excavation in foundation in soft and hard soils including disposal upto 10m lead and 1.5m lift	m <sup>3</sup>	618.00	
3	Dry Brick Soling work in foundation and plinth	m <sup>2</sup>	957.79	
4	75mm thick PCC work in 1:3:6 in foundation and plinth including lead upto 30m	m <sup>3</sup>	12,537.50	
5	RCC works in 1:1.5:3 in superstructure	m <sup>3</sup>	17,605.08	
6	Reinforcement work (TMT Fe-500) cutting, bending, placing all complete	MT	122,065.60	
7	Providing and fixing Wooden or Steel form work for for all kinds of R.C.C. works and its removal all complete as per instruction of site incharge.	m <sup>2</sup>	556.03	
8	Brick work in 1:6 C/S mortar all complete	m <sup>2</sup>	13,606.03	
9	Brick work in 1:4 C/S mortar all complete	m <sup>2</sup>	14,045.93	
10	Providing and filling earth material laying in 15 cm layer, spray water with compaction all complete as per instruction of the site incharge	m <sup>3</sup>	376.75	
11	38mm thick cement concrete flooring work all complete(1:2:4)	m <sup>2</sup>	660.81	
12	12.5mm thick C/S plaster in 1:4 in floor all complete	m <sup>2</sup>	377.11	
13	Making and fixing black iron truss pipe with primer paint all complete	Kgs.	131.26	
14	200 micron UV polythene sheet roofing with aluminum profile & zig-zag spring all complete	m <sup>2</sup>	140.00	
15	Drain Construction			
	i. Earthwork in excavation	m <sup>3</sup>	618.00	
	ii. Brickwork in 1:6 C/S mortar	m <sup>2</sup>	13,606.03	
	iii. PCC in 1:3:6	m <sup>3</sup>	12,537.50	
	iv. Iron grating	m <sup>2</sup>	2,621.14	
16	Iron Chain link Fencing Tray	m <sup>2</sup>	453.92	
17	Providing and fixing Aphid mesh Shutter with stainless steel Aphid mesh in 90 series for sliding window. (Section thickness 1 mm)	m <sup>2</sup>	2,022.88	
18	Supplying and fitting Aluminium sliding Door 2 track section of (88 x38x1.3)mm & 5mm glass.	m <sup>2</sup>	5,380.00	
19	Supplying and fitting Aluminium Fixed section of (88 x38x1.3)mm & 5mm glass.	m <sup>2</sup>	5,380.00	

**Note:**

1. The Rate is taken from Kathmandu District rate 077/078 and is applicable for Kathmandu district only.
2. 13% VAT is included in required Materials.

Prepared By:



Checked By:

*[Signature]*  
ASTU. ENGINEER

Approved By:

