

THE UNITED REPUBLIC OF TANZANIA



PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

## REHABILITATION OF HEALTH CENTER'S

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Schedule of Material, Labour & Drawings for OPD Block

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### PROJECT AREA

#### TANZANIA MAINLAND

Ministry of Health, Community,  
Deleopment Gender, Elderly and Children,  
University of Dodoma,  
College of Humanities,  
&Social Science 11<sup>th</sup> Building,  
P.O.Box 743,  
40478 DODOMA.

President's Office,  
Regional Administration,  
& Local Government,  
Mkapa House,  
Mlezi Road,  
P.O.Box 1923,  
41185 DODOMA.

APRIL, 2018

PO-RALG

# **Schedule of Materials**

ITEM	DESCRIPTION	QTY	UNIT	PRICE-TZS	AMOUNT
	<b><u>MATERIALS</u></b>				
<b>A</b>	<b>SUB-STRUCTURE -PROVISIONAL</b>				
1	<b><u>Strip Foundation - Grade 15 Plain</u></b>				
	Aggregate (3/4")	32	M <sup>3</sup>		
	Sand	16	M <sup>3</sup>		
	Cement-50kgs	144	Bags		
2	<b><u>Foundation Walls</u></b>				
	6" Cement & Sand Block	1,946	No		
	Sand	7.0	M <sup>3</sup>		
	Cement -50kgs	33	Bags		
3	<b><u>Moram, Hardcore &amp; Site sterilization</u></b>				
	Moram (4.5m <sup>3</sup> lorry)	28	Trips		
	Hadcore (4.5m <sup>3</sup> lorry)	18	Trips		
	Sand	10	M <sup>3</sup>		
	Aldrin solution or equal and approved	3,074	Litres		
4	<b><u>Oversite Concrete (100mm thick - 15 grade) &amp; Ground Beam - 20 grade</u></b>				
	DPM	367	M <sup>2</sup>		
	Cement -50kgs	270	Bags		
	Aggregates (1/2")	48	M <sup>3</sup>		
	Sand	24	M <sup>3</sup>		
	Reinforcement - 16mm diameter high tensile	94	PC'S		
	Reinforcement - 12mm diameter high tensile	0	PC'S		
	Reinforcement - 8mm diameter	95	PC'S		
	Timber 1" X 8" (5.2m long)	23	PC'S		
	Timber 2" X 2"	26	PC'S		
	Nails-4"	20	Kgs		
	Nails-3"	20	Kgs		
	Supporting props	15	PC'S		
	<b>SUB-TOTAL SUBSTRUCTURE</b>				

ITEM	DESCRIPTION	QTY	UNIT	PRICE-TZS	AMOUNT
<b>B.</b>	<b>SUPERSTRUCTURE</b>				
1	<b><u>Walls &amp; Ring beam &amp; Columns</u></b>				
	6" Cement & Sand Block	4,433	No		
	Cement & Sand hollow Block	406	No		
	DPC (20m long)	9	Roll		
	Sand	26	M <sup>3</sup>		
	Cement-50kgs	215	Bags		
	Aggregates (1/2")	12	M <sup>3</sup>		
	Reinforcement - 12mm diameter high tensile	65	PC'S		
	Reinforcement - 8mm diameter	67	PC'S		
	Binding Wire - 1kg	30	Bundle		
	Timber 1" X 8" to Sides (5.2m long)	44	PC'S		
	Timber 1" X 5" (Plates)	10	PC'S		
	Timber 2" X 2"	40	PC'S		
	Supporting Props	88	PC'S		
	Mild steel Iron black pipe 100mm diameter; 4000mm high	12	Nrs		
	Bolts with nuts and washers(16-12mm)	72	Nrs		
	u shape plates 6mm thick	12	Nrs		
	Mild steel plate size 400x400x4mm thick	12	Nrs		
	<b>SUB-TOTAL SUPER STRUCTURE</b>				
<b>C.</b>	<b>ROOF STRUCTURE &amp; COVERING</b>				
1	<b><u>Roof Structure - Provisional</u></b>				
	Timber 2 " X 3" Purlins	1,155	FT		
	Timber 2" X 4" King Post, wall plate and struss	2,229	FT		
	Timber 2" X 6" Rafter and Tie beam	2,298	FT		
	Fascia board 1" X 10" (5.2m long)	33	PC'S		
	Nails -5"	70	Kgs		
	Nails -4"	50	Kgs		
	Nails -3"	30	Kgs		
	<b>NOTE:</b> The above softwood timber structure should be pressure impregnated treated				
2	<b><u>Roof Covering -as per ALAF or equal and approved</u></b>				
	28G IT resincoated sheet	585	M <sup>2</sup>		
	Hips/Ridge and valley - 28 G	25	PC'S		
	Roofing Nails	30	Packet		
	<b>TO COLLECTION</b>			<b>C/F</b>	

ITEM	DESCRIPTION	QTY	UNIT	PRICE-TZS	AMOUNT
	<b>ROOF STRUCTURE &amp; COVERING CONT...</b>				
				<b>B/F</b>	
1	<b>Gutter's</b>				
	Upvc 150mm half round (6m long)-5"	14	PC'S		
	Upvc 100mm diametre down pipe; Class B	4	PC'S		
	PVC outlet	4	PC'S		
	PVC bend 90'	4	PC'S		
	PVC bend 45'	8	PC'S		
	Gutter support bracket	60	PC'S		
	Gutter Clamp 3"	12	PC'S		
	Connector/reducer	12	PC'S		
	Gutter corner 90'	4	PC'S		
	<b>SUB-TOTAL ROOF STRUCTURE &amp; COVERING</b>				
<b>E.</b>	<b>CEILING</b>				
	Gypsum board -9mm thick	162	PC'S		
	Plain Cornice (8ft)	154	PC'S		
	Gypsum Screw 1" 800pcs/box	32	Box		
	Screw 1.25" 800pcs/box	6	Box		
	Gypsum powder	30	Bags		
	Fibre tape	6	Pcs		
	Treated softwood Timber 2" X 2"	3,897	FT		
	Nails 4"	60	Kgs		
	Nails 3"	30	Kgs		
	PVC ceiling with its fittings	87	Pc's		
	<b>SUB-TOTAL FOR CEILING</b>				

ITEM	DESCRIPTION	QTY	UNIT	PRICE-TZS	AMOUNT
<b>F.</b>	<b>DOOR</b>				
1	<b><u>40mm thick hardwood paneled door shutter</u></b>				
	900 x 2100 mm high	23	PC'S		
	2000 x2100mm high	1	PC'S		
2	<b><u>Frames (hardwood),Varnish, Glass &amp; Burglar bar</u></b>				
	900 x 2750mm high	23	PC'S		
	2000 x 2750mm high	1	PC'S		
	4mm thick clear glass to Vents	16	M <sup>2</sup>		
	16 mm burglar bars	3	PC'S		
	Brush 3"	4	Pcs		
	Sand paper (msasa) No.80	6	LM		
	Clear Varnish - 4Litres	5	TIN		
	Thinner for Varnish -4Litres	3	Litres		
3	<b><u>IronMongeries</u></b>				
	Mortice lock Three lever - ref: union	24	No		
	Brass hinges - 100mm	37.5	Pairs		
	Wood Screw	5	Box		
	<b>SUB-TOTAL FOR DOORS</b>				

ITEM	DESCRIPTION	QTY	UNIT	PRICE-TZS	AMOUNT
<b>G.</b>	<b>WINDOWS</b>				
1	<u>Supply and fix Aluminium Windows 2mm thick frem with fibre glass, Mosquitor gauze and its ironmongeries</u>				
	1800 X 1500mm high	21	PC'S		
	1200 X 1500mm high	6	PC'S		
	900 X 1500mm high	2	PC'S		
	600 X 900mm high	2	PC'S		
2	<u>Supply and fix 4mm thick flat bar grill painted red-oxide</u>				
	1800 X 1500mm high	21	PC'S		
	1200 X 1500mm high	6	PC'S		
	900 X 1500mm high	2	PC'S		
	600 X 900mm high	2	PC'S		
	<b>SUB-TOTAL FOR WINDOWS</b>				
<b>H.</b>	<b>FINISHING</b>				
1	<u>Floor finishing - (ratio 1:6)</u>				
	Sand	17	M <sup>3</sup>		
	Cement-50kgs	106	Bags		
	600 x 600Non slippery Porcelain floor tiles (1.46 Sqm/Box)	200	Box		
	Skirting (600 mm long; 25No/Box)	24	Box		
	Grout (1kg/packet)	10	Packet		
	Spacer	5	Packet		
2	<u>Wall Finishing</u>				
	Sand	26	M <sup>3</sup>		
	Cement-50kgs	160	Bags		
	White cement - 50kg	20	Bags		
	Gypsum powder	22	Bags		
	300 x 300mm ceramic wall tiles (1.08 Sqm/Box)	26	Box		
	Sand paper Msasa No.120	1.0	Roll		
	<b>SUB-TOTAL FOR FINISHING</b>				

ITEM	DESCRIPTION	QTY	UNIT	PRICE-TZS	AMOUNT
<b>J.</b>	<b>PAINTING &amp; DECORATION</b>				
	Emulsion Paint - 20 LTRS	6	buckets		
	Weather guard Paint - 20 LTRS	5	buckets		
	Washable paint -20 LTRS (Light blue green)	4	buckets		
	Primer paint -20 LTRS	4	buckets		
	Solvent - 5LTRS	2	TIN		
	Brush 3"	4	Pcs		
	Roller	4	Pcs		
	Gloss paint-4LTR	3	TIN		
	Bitumen paint - 4Litres	4	TIN		
	<b>SUB-TOTAL FOR PAINTING&amp;DECORATION</b>				



ITEM	DESCRIPTION	QTY	UNIT	PRICE-TZS	AMOUNT
<b>K.</b>	<b>ELECTRICAL INSTALLATION</b>				
1	Single flourescent fiiting, approved philips or equal	34	No		
2	Double flourescent fiiting, approved philips or equal	0	No		
3	Double switch sorcket	25	No		
4	Main switch 12way,3PH with intergral RCD as MEM or equal	1	No		
5	Single core wire 1.5sqmm -Red	5	Roller		
6	Single core wire 1.5sqmm -Black	5	Roller		
7	Single core wire 1.5sqmm -green	3	Roller		
8	Single core wire 2.5sqmm -Red	4	Roller		
9	Single core wire 2.5sqmm -Black	4	Roller		
10	Single core wire 2.5sqmm Green	4	Roller		
11	Ceilling fan, approved National or equal	15	PC'S		
12	16mmsq 4 core cable	30	M		
13	1gang one way switch	3	No		
14	2gang two way switch	24	No		
15	20A DP switch	0	No		
16	Lan socket	7	No		
17	Gypsum light complete with energy saver 18w	0	No		
18	Earth rod approved copper not less than 1200mm	2	No		
19	Earth wire 4sqmm	30	M		
20	Plastic clips (22mm)	7	BOX		
21	Conduit pipe	220	PC		
22	Square box metal	1	PC		
23	Double box metal	25	PC		
23	Metal box single	34	PC		
24	Round cover	70	PC		
25	Junction box	80	PC		
26	Elbow	80	PC		
27	Conduit coupling	45	PC		
28	Fine screw	3	Packet		
29	Round Box	70	PC		
30	TV Socket	1	PC		
	<b>SUB-TOTAL FOR ELECTRICAL INSTALLATION</b>				

ITEM	DESCRIPTION	QTY	UNIT	PRICE-TZS	AMOUNT
<b>L.</b>	<b>PLUMBING &amp; SANITARY INSTALLATION-PROVISIONAL</b>				
1	IPS pipe 1/2	2	M		
2	IPS pipe 3/4"	60	M		
3	IPS Elbow 1/2"	2	PC'S		
4	IPS Elbow 3/4"	10	PC'S		
5	Angle valve	5	PC'S		
6	IPS nipple 1/2"	5	PC'S		
7	IPS nipple 3/4"	10	PC'S		
8	IPS reducing socket 1" - 3/4"	1	PC'S		
9	IPS reducing bush 3/4" - 1/2"	6	PC'S		
10	IPS runion 3/4"	10	PC'S		
11	Tee connector 3/4"	8	PC'S		
12	connector 3/4"	2	PC'S		
13	Connector 1"	1	PC'S		
14	Angle valve 1/2"	1	PC'S		
15	IPS socket 1/2"	5	PC'S		
16	Bib tape pex 1/2"	10	PC'S		
17	Stop cock pex '1"	1	PC'S		
18	Thread seal tape	20	PC'S		
19	Kitchen Sink single bowl complet with all necessary accessories and its fittings	2	PC'S		
20	PVC pipe 1 <sup>1/2</sup> "	1	PC'S		
21	PVC pipe 1 <sup>1/4</sup> "	2	PC'S		
22	PVC pipe 4'	1	PC'S		
23	PVC tee 1 <sup>1/4</sup> "	5	PC'S		
24	PVC tee 1 <sup>1/2</sup> "	4	PC'S		
25	PVC bend 1 <sup>1/2</sup> "	5	PC'S		
26	PVC bend 1 <sup>1/4</sup> "	4	PC'S		
27	PVC plug 1 <sup>1/4</sup> "	5	PC'S		
28	PVC plug 1 <sup>1/2</sup> "	4	PC'S		
29	P- trap 4'	5	PC'S		
30	Tangit	1	TIN		
31	PVC socket with Female threads 1 <sup>1/4</sup> "	5	PC'S		
32	PVC socket with Female threads 1 <sup>1/2</sup> "	4	PC'S		
	<b>SUB-TOTAL FOR PLUMBING AND SANITARY INSTALLATION</b>				

	<b><u>GENERAL SUMMARY</u></b>	<b>AMOUNT</b>
		<b>TZS</b>
	<b><u>OPD BUILDING--HEALTH CENTER</u></b>	
A.	SUB-STRUCTURE -PROVISIONAL	
B.	SUPERSTRUCTURE	
C.	ROOF STRUCTURE & COVERING	
D.	CEILING	
E.	DOOR	
F.	WINDOWS	
G.	FINISHING	
H.	PAINTING & DECORATION	
J.	ELECTRICAL INSTALLATION	
K.	PLUMBING & SANITARY INSTALLATION-PROVISIONAL	
	<b>TOTAL MATERIALS COST</b>	<b>TZS</b>

# **Schedule of Labour**

Na.	AINA YA KAZI	BEI YA UFUNDI - Shs
<b>A</b>	<b><u>Msingi wa Jengo (Sub-structure)</u></b>	
1	Kuseti jengo	
2	Uchimbaji wa msingi	
3	Kufukia	
	<b><u>Kufunga mbao</u></b>	
4	Pembezeni mwa jamvi	
5	Pembezeni mwa nguzo	
6	Kuondoa mbao	
	<b><u>Kumwaga zege</u></b>	
7	Chini kwenye msingi wa tofali	
8	Chini kwenye msingi wa nguzo	
9	katika nguzo ya awali	
10	kwenye jamvi	
11	Ujenzi wa tofali za msingi (1946 No)	
	<b><u>Mawe</u></b>	
12	Upangaji wa mawe na utandazaji wa DPM	
13	Umwagiliaji wa maji	
	<b>Jumla ndogo msingi wa jengo</b>	
<b>B.</b>	<b><u>Kunyanyua jengo (Super-structure)</u></b>	
1	Ujenzi wa tofali za kuta na uwekaji DPC (4433 No)	
	<b><u>Kufunga mbao katika:</u></b>	
2	Nguzo mlalo	
3	Nguzo wima	
	<b><u>Kusuka nondo katika:</u></b>	
4	Nguzo mlalo	
5	Nguzo wima	
	<b><u>Kumwaga zege katika:</u></b>	
6	Nguzo mlalo	
7	Nguzo wima	
8	Umwagiliaji wa maji	
<b>C.</b>	<b><u>Kuezeka (Roof structure and covering)</u></b>	
1	Kuezeka na ufungaji wa gata	
	<b>Jumla ndogo kunyanyua jengo</b>	
<b>D.</b>	<b><u>Milango</u></b>	
1	Kufitisha fremu za milango	
2	Kufitisha shata za milango pamoja na vitasa	
3	Upakaji wa Varnishi katika milango na fremu	
<b>E.</b>	<b><u>Umalizaji (Finishing)</u></b>	
	<i>Upigaji wa lipu pamoja na kutengeneza koplo:</i>	
1	Nje ya jengo	
2	Ndani ya jengo	
	<b><u>Sakafu</u></b>	
3	Uwekaji wa sakafu ya kupokea vigae (beds)	
4	Uwekaji wa vigae pamoja na grauti katika sakafu (floor tiles) -	

Na.	AINA YA KAZI	BEI YA UFUNDI - Shs
	<b>Dali:</b>	
6	Ufungaji wa mbao za dali (Branding)	
7	Uwekaji wa dali na mikanda ya gypsum	
8	Uwekaji wa dali ya pvc kuzunguka nyumba kwa nje	
9	Uwekaji wa vigae katika kuta na upakaji grout	
	<b>Jumla ndogo umalizaji(finishing)</b>	
<b>F.</b>	<b><u>Rangi na Mapambo (Painting &amp; Decoration)</u></b>	
	<b><u>Kupaka rangi mikono mitatu pamoja na skimming katika:</u></b>	
1	Kuta za nje	
2	Kuta za ndani	
3	Dali	
	<b><u>Kupaka rangi mikono mitatu katika:</u></b>	
4	Msingi wa nyumba	
5	Grill za milango na madirisha	
	<b>Jumla ndogo Rangi na mapambo</b>	
<b>G.</b>	<b><u>Umeme (Electrical installation)</u></b>	
1	Usukaji wa umeme awamu ya kwanza - Conduit na Box	
2	Usukaji wa umeme awamu ya pili (2nd fix)-fittings	
	<b>Jumla ndogo Umeme</b>	
<b>H.</b>	<b><u>Mifumo ya maji safi na taka (Water Supply and Sewage system)</u></b>	
1	Ufungaji bomba awamu ya kwanza (Kuchimbia bomba)	
2	Ufungaji bomba awamu ya pili (2nd fix) -fittings	
3	Ufungaji wa Mifumo ya maji ya mvua kwenda kwenye tanki	
	<b>Jumla ndogo Mifumo ya maji safi na taka</b>	

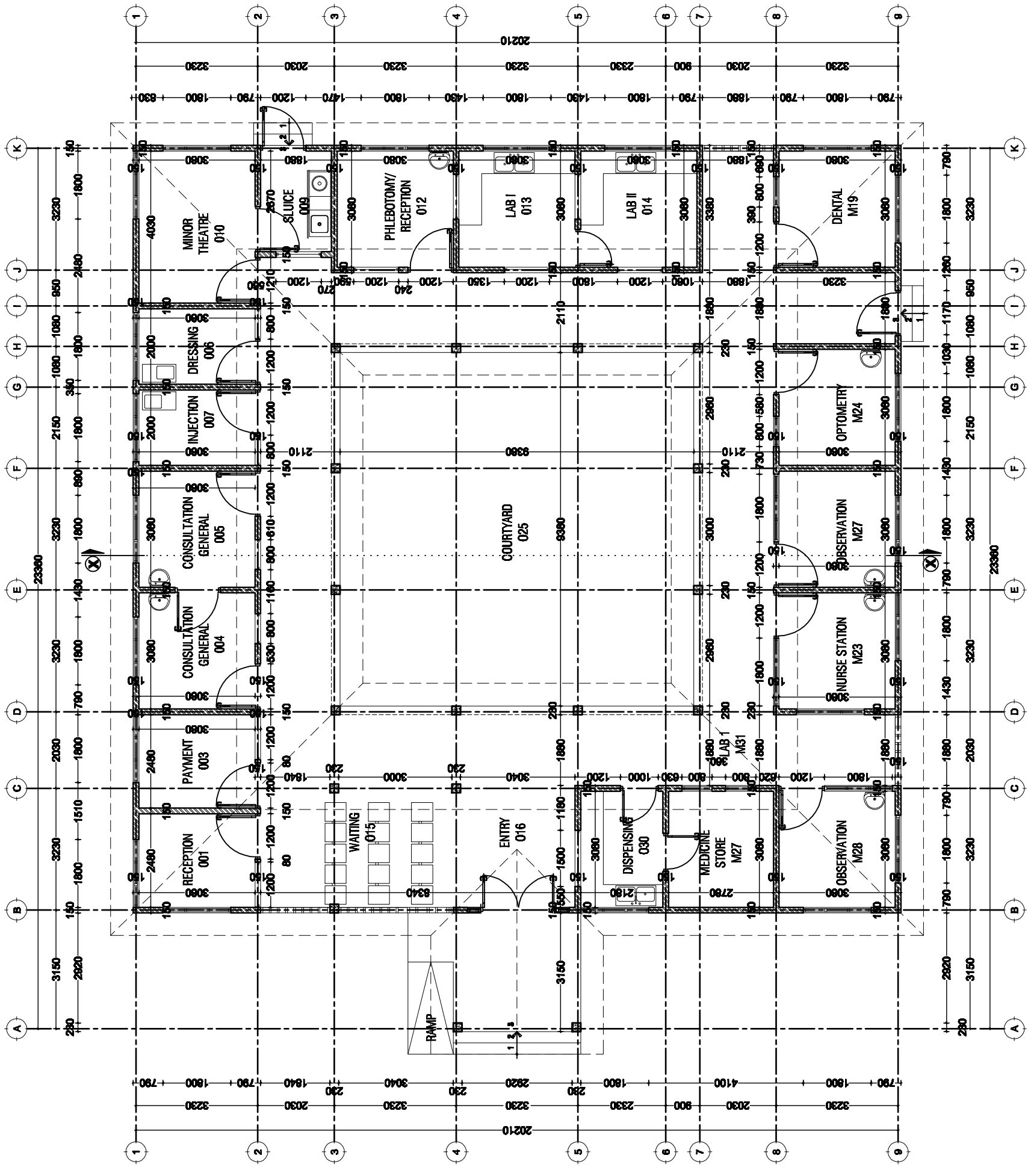
<b>MAJUMUISHO (SUMMARY)</b>		<b>Shs</b>
A.	Msingi wa Jengo (Sub-structure)	
B.	Kunyanyua jengo (Super-structure)	
C.	Kuezeka (Roof structure and covering)	
D.	Milango	
E.	Umaliziji (Finishing)	
F.	Rangi na Mapambo (Painting & Decoration)	
G.	Umeme (Electrical installation)	
H.	Mifumo ya maji safi na taka (Water Supply and Sewage system)	
<b>JUMLA KUU Shs.</b>		

**ANGALIZO:**

Fundi anatakiwa kujaza hii fomu kwa kupitia mchoro wa jengo husika

# Drawings





**GROUND PLAN**  
**SCALE: 1:100**

Building Section  
 Policy and Planning Department  
 Ministry of Health, Community Development,  
 Gender, Elderly and Children  
 University of Dodoma  
 College of Humanities and Social Science 11th  
 Building,  
 P. O. Box 743,  
 40476 DODOMA

Approved

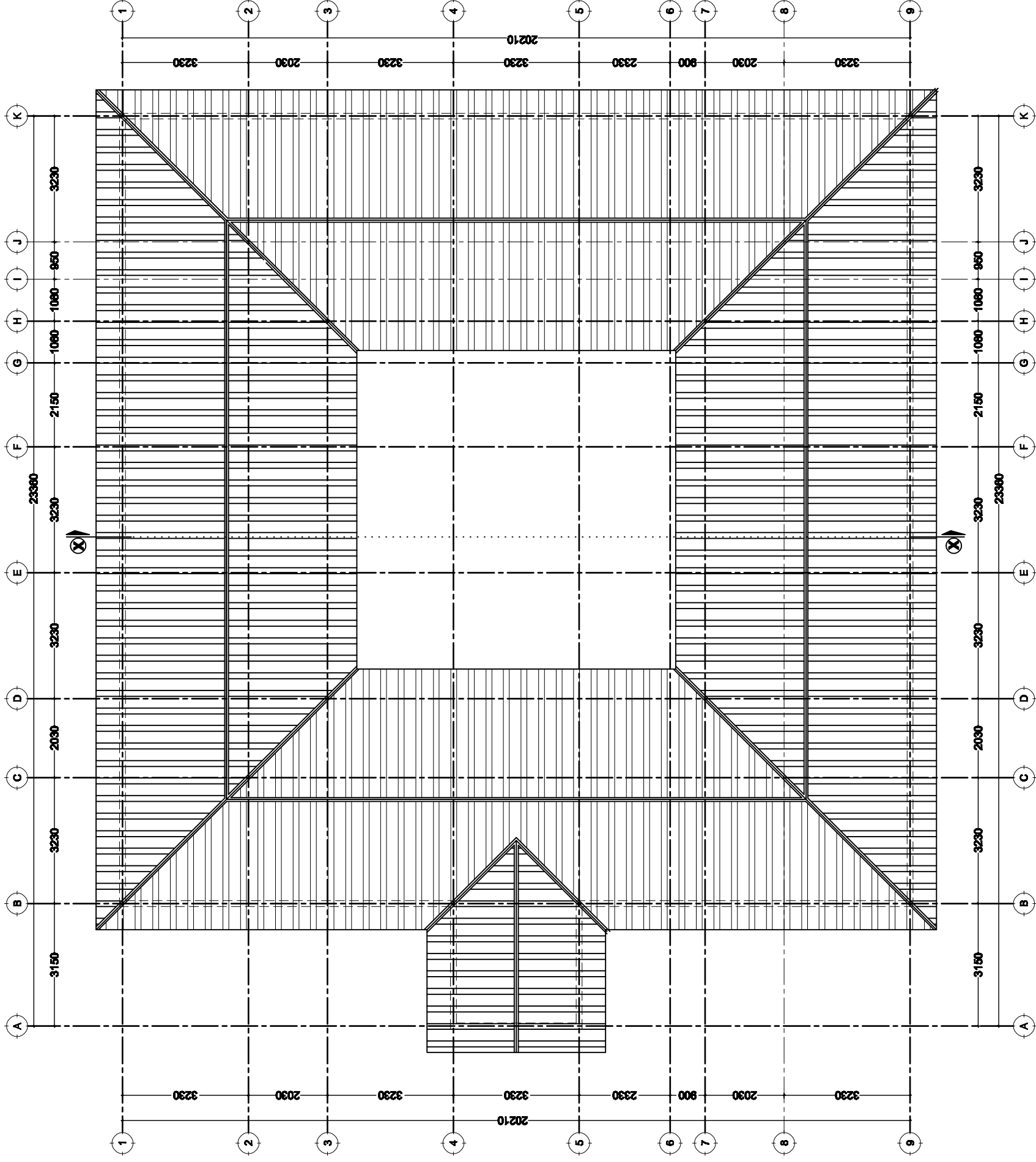
No.	Description	Date

Client:  
**MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT,  
 GENDER, ELDERLY AND CHILDREN**  
 Project:  
**PROPOSED RURAL HEALTH CENTER**

**OPD BUILDING  
 Ground Floor Plan**

Project number	2017 / 05 / 02
Date	18 OCTOBER 2017
Drawn by	DCNM
Checked by	DCNM
Scale	1:100

A102



# ROOF PLAN

## SCALE: 1:100

Building Section  
 Policy and Planning Department  
 Ministry of Health, Community Development,  
 Gender, Elderly and Children  
 University of Dodoma  
 College of Humanities and Social Science | 11th  
 Building,  
 P. O. Box 743,  
 40476 DODOMA

Approved

No.	Description	Date

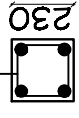
Client:  
**MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT,  
 GENDER, ELDERLY AND CHILDREN**  
 Project:  
**PROPOSED RURAL HEALTH CENTER**

### OPD BUILDING Roof Plan

Project number	2017 / 05 / 02
Date	18 OCTOBER 2017
Drawn by	DCNM
Checked by	DCNM
Scale	1:100

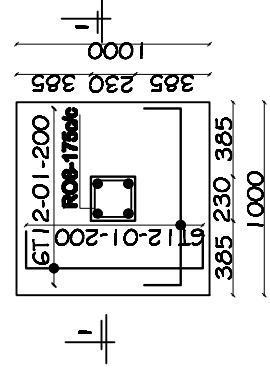
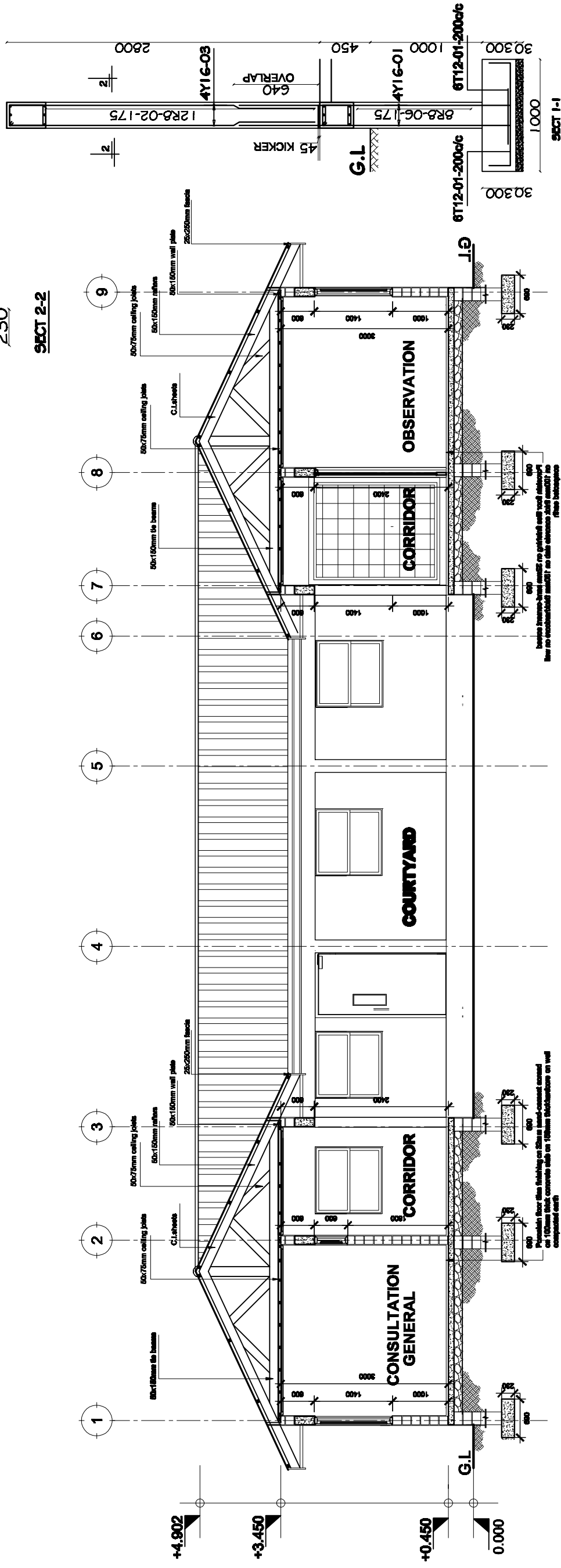
A103

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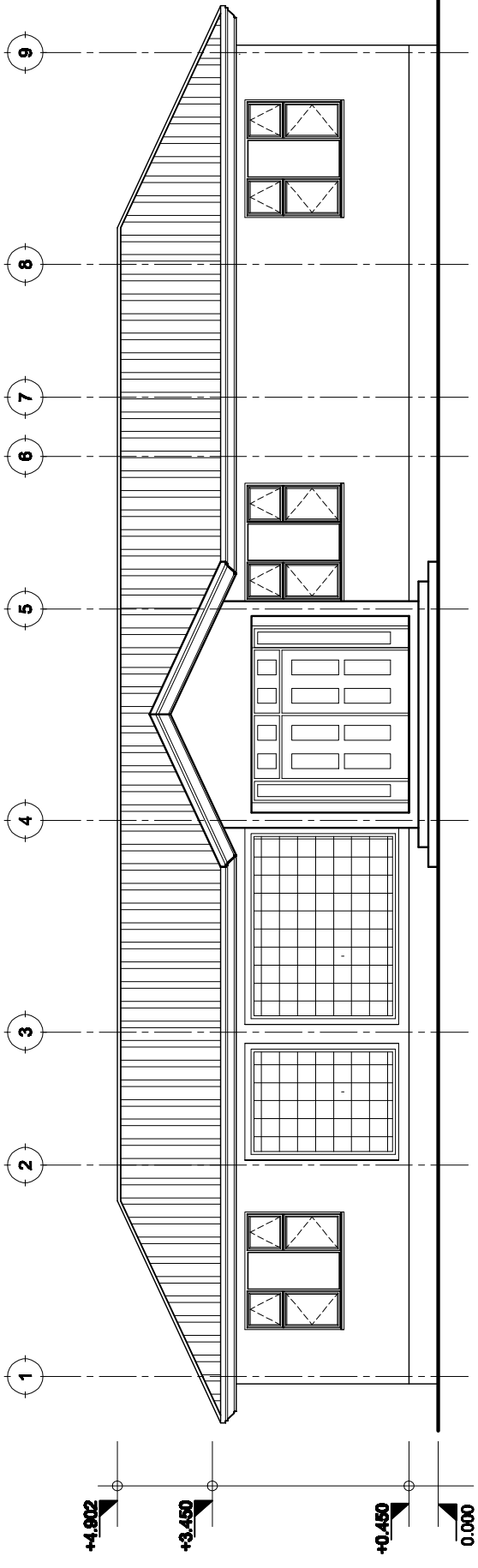
SECT 2-2



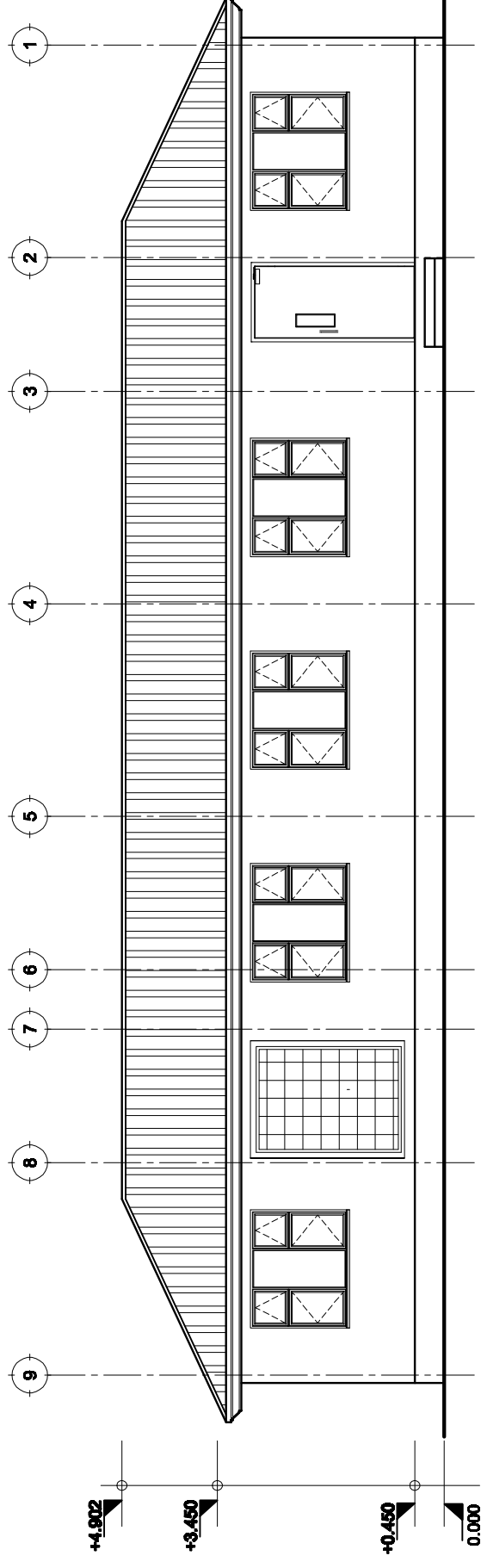
COLUMN DETAILS: 1000X1000X300 (17N9)

SECTION X:X  
SCALE: 1:75

Building Section Policy and Planning Department Ministry of Health, Community Development, Gender, Elderly and Children University of Dodoma College of Humanities and Social Science 11th Building, P. O. Box 743, 40476 DODOMA	Approved	No.	Description	Date	Client MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT, GENDER, ELDERLY AND CHILDREN Project PROPOSED RURAL HEALTH CENTER		
					OPD BUILDING Section X:X		
		Project number 2017/05/02		Date 18 OCTOBER 2017		A104	
		Drawn by DCNM		Checked by DCNM		Scale 1:75	



FRONT ELEVATION



REAR ELEVATION

**ELEVATIONS**  
**SCALE: 1:100**

Building Section  
Policy and Planning Department  
Ministry of Health, Community Development,  
Gender, Elderly and Children  
University of Dodoma  
College of Humanities and Social Science | 11th  
Building,  
P. O. Box 743,  
40476 DODOMA

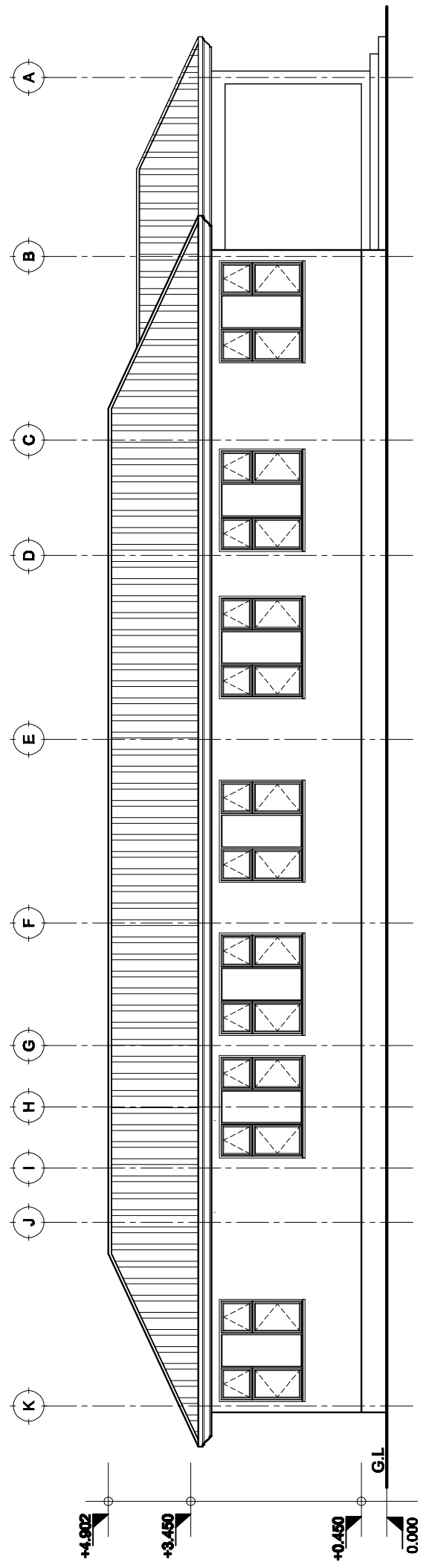
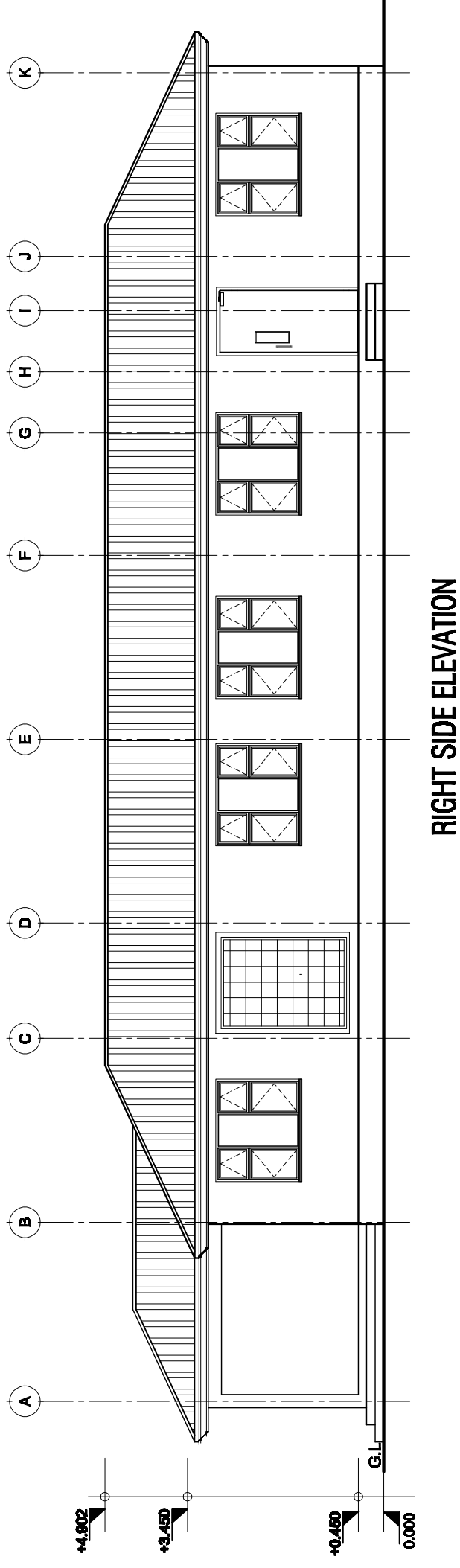
Approved

No.	Description	Date

Client:  
**MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT,  
GENDER, ELDERLY AND CHILDREN**  
Project:  
**PROPOSED RURAL HEALTH CENTER**

**OPD BUILDING  
Elevations**

Project number	2017 / 05 / 02	A / 05	Scale	1:100
Date	18 OCTOBER 2017			
Drawn by	DCNM			
Checked by	DCNM			



**ELEVATIONS**  
**SCALE: 1:100**

Building Section  
Policy and Planning Department  
Ministry of Health, Community Development,  
Gender, Elderly and Children  
University of Dodoma  
College of Humanities and Social Science | 11th  
Building,  
P. O. Box 743,  
40476 DODOMA

Approved

No.	Description	Date

Client:  
**MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT,  
GENDER, ELDERLY AND CHILDREN**  
Project:  
**PROPOSED RURAL HEALTH CENTER**

**OPD BUILDING Elevations**  
Project number 2017 / 05 / 02  
Date 18 OCTOBER 2017  
Drawn by DCNM  
Checked by DCNM  
Scale 1:100

A106

**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 20 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED REHABILITATION OF HEALTH CENTRES**

**CLIENT: PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT**

**MINISTRY OF HEALTH,  
COMMUNITY DEVELOPMENT,  
GENDER AND CHILDREN**

**DRAWING TITLE:  
OPD FOUNDATION LAYOUT**

**Designed by:** Eng. R.A.M

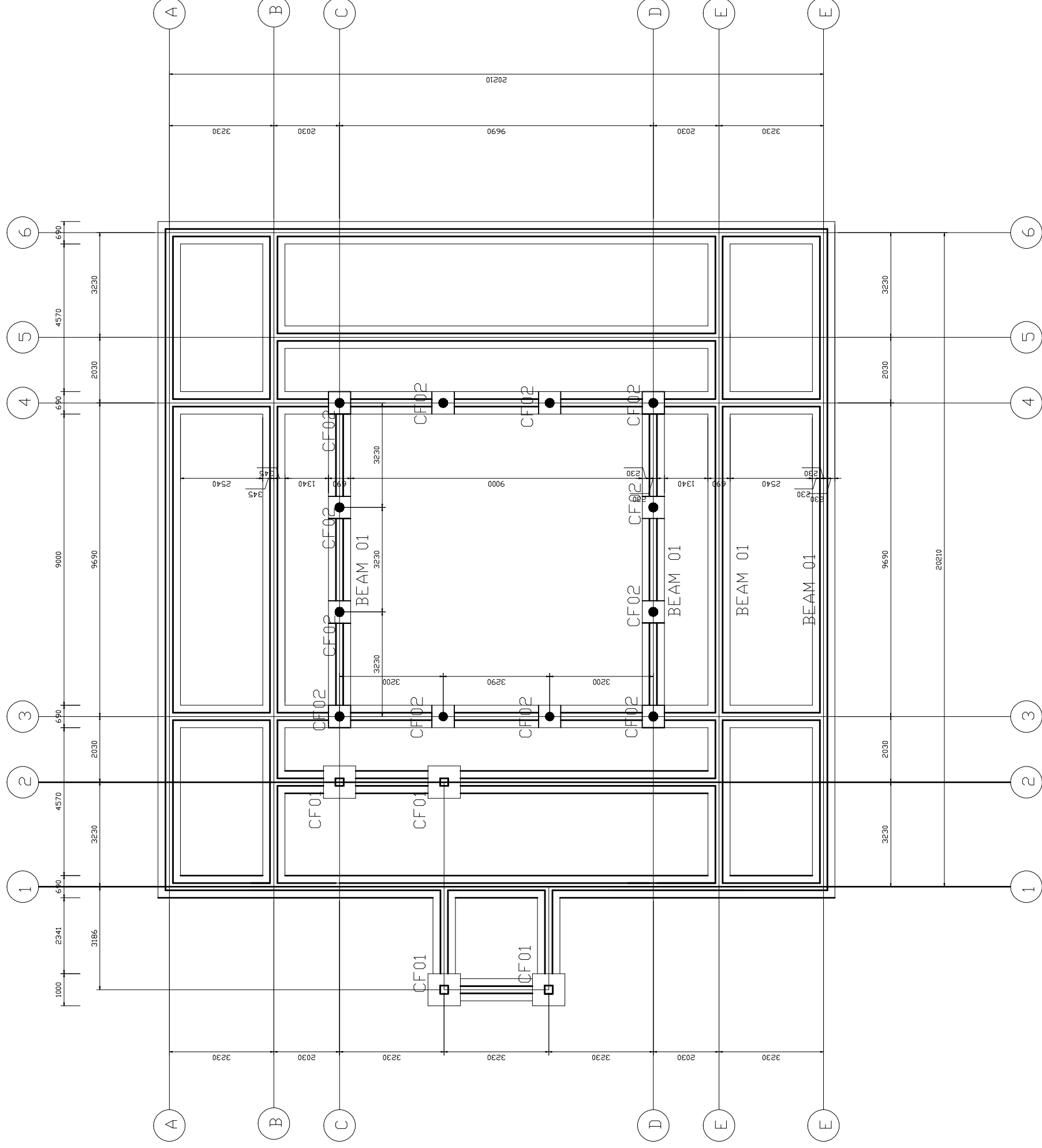
**Drawn by:** Eng. R.A.M

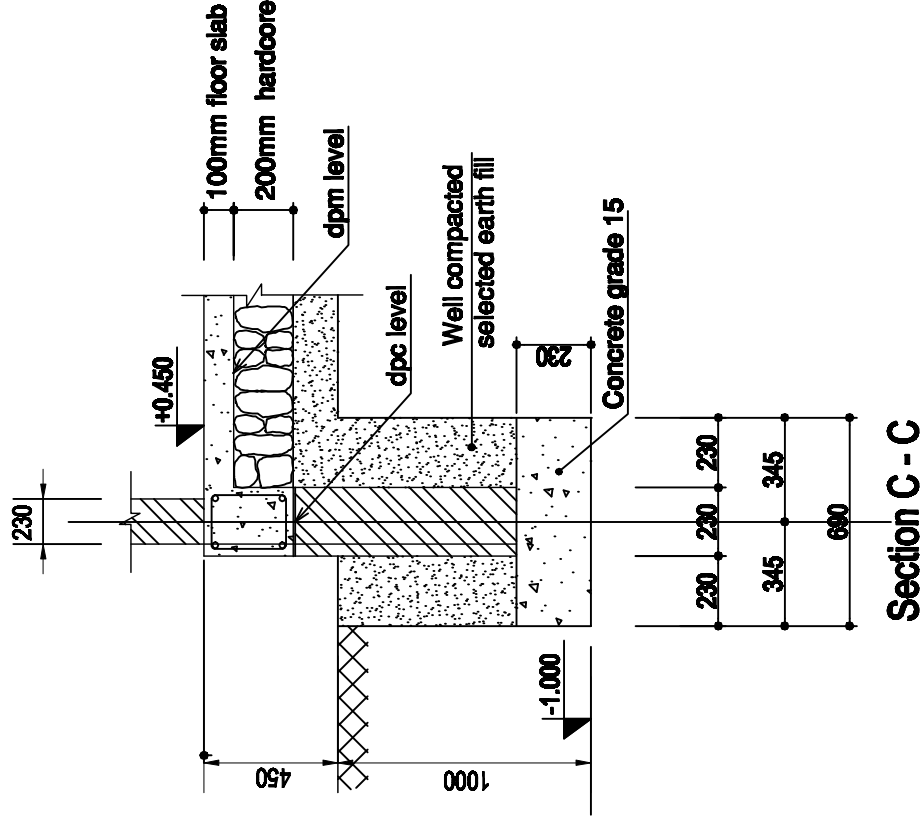
**Checked by:** Eng. A.NGATOMELA

**Approved by:**

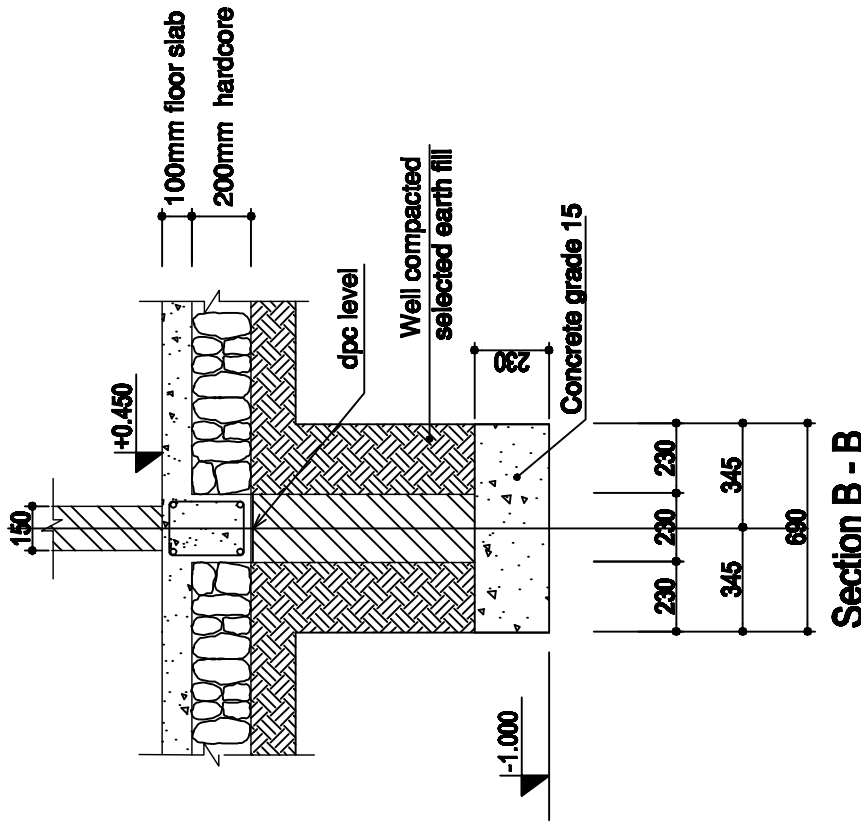
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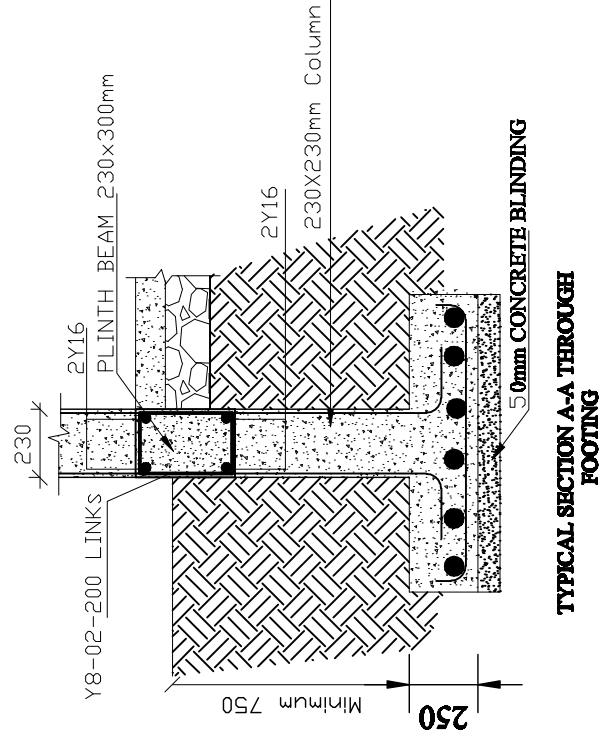




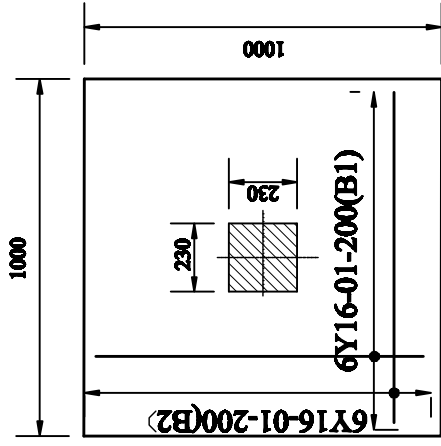
Section C - C



Section B - B



TYPICAL SECTION A-A THROUGH FOOTING



COLUMN FOOTING F1 -4Nos  
1000x1000x250mm

**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

PROJECT:

**PROPOSED REHABILITATION OF HEALTH CENTRES**

CLIENT:

**PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT**

**MINISTRY OF  
HEALTH, COMMUNITY  
DEVELOPMENT, GENDER,  
ELDERLY AND CHILDREN**

DRAWING TITLE:  
**OPD FOUNDATION DETAILS**

Designed by: **Eng. R.A.M**

Drawn by: **Eng. R.A.M**

Checked by: **ENG. A. NGATOMELA**

Approved by:

Date: **2018** Scale:

Drawing No. **OPD/STR,102** Sheet:

**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED REHABILITATION OF HEALTH CENTRES**

**CLIENT:**

**PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT**

**MINISTRY OF  
HEALTH, COMMUNITY  
DEVELOPMENT, GENDER,  
ELDERLY AND CHILDREN**

**DRAWING TITLE:**

**OPD PLINTH BEAM LAYOUT**

**Designed by:**

**Eng. R.A.M**

**Drawn by:**

**Eng. R.A.M**

**Checked by:**

**Eng. A. NGATOMELA**

**Approved by:**

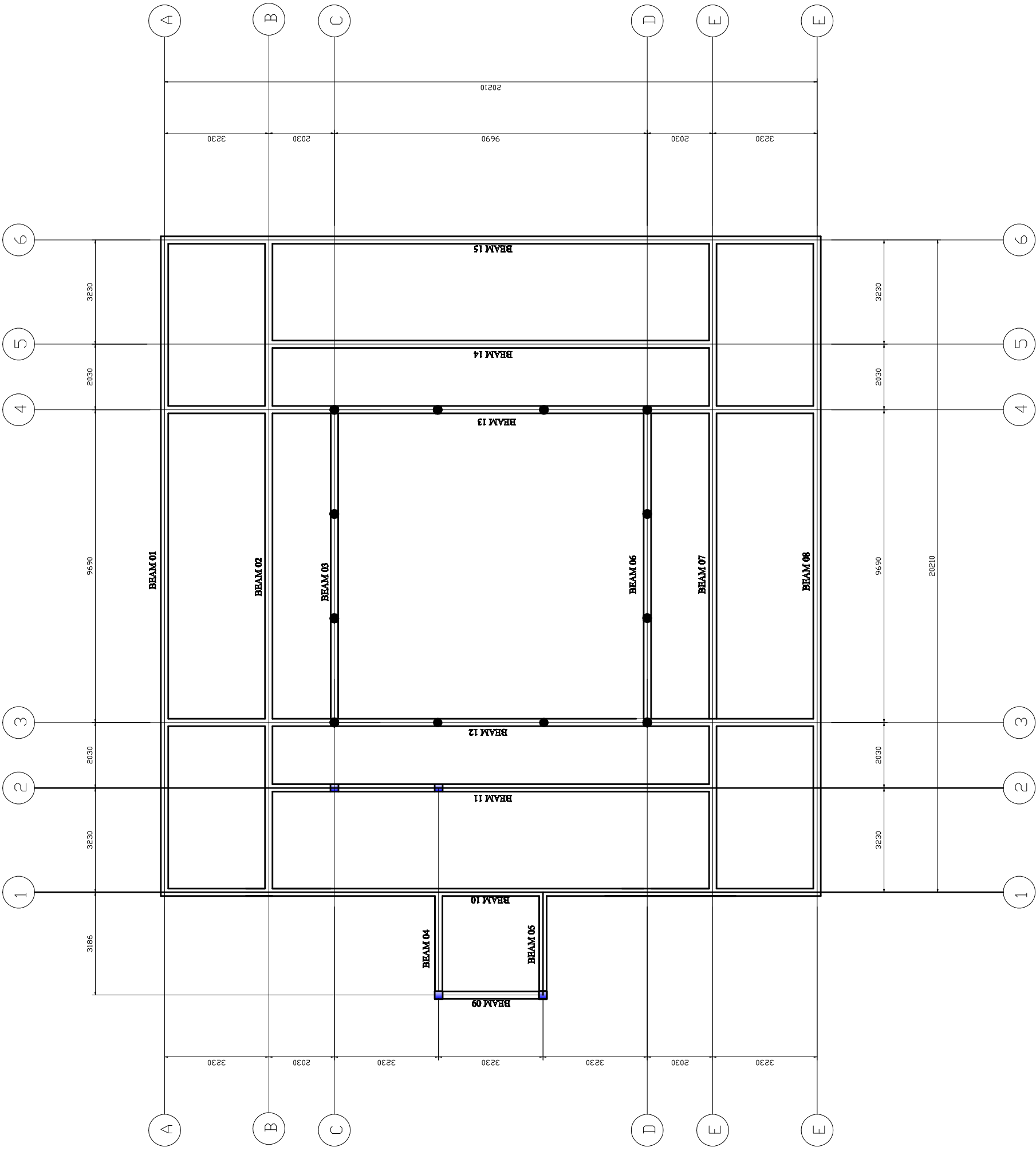
**Date: 2018**

**Scale:**

**Drawing No.**

**Sheet:**

**OPD/STR,103**





**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED REHABILITATION OF HEALTH CENTRES**

**CLIENT:**

**PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT**

**MINISTRY OF  
HEALTH, COMMUNITY  
DEVELOPMENT, GENDER,  
ELDERLY AND CHILDREN**

**DRAWING TITLE:**

**OPD BEAM DETAILS**

**Designed by:**

Eng. R.A.M

**Drawn by:**

Eng. R.A.M

**Checked by:**

Eng. A.NGATOMELA

**Approved by:**

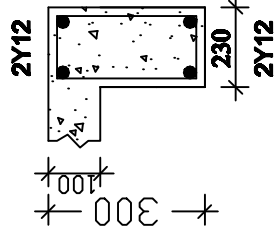
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**Scale:**

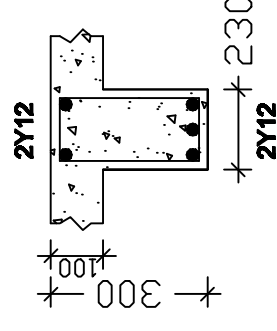
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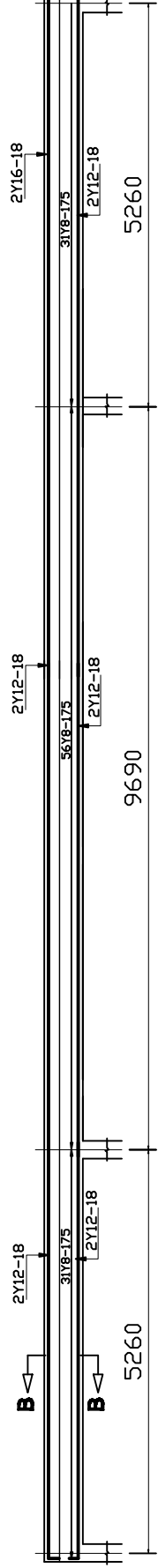
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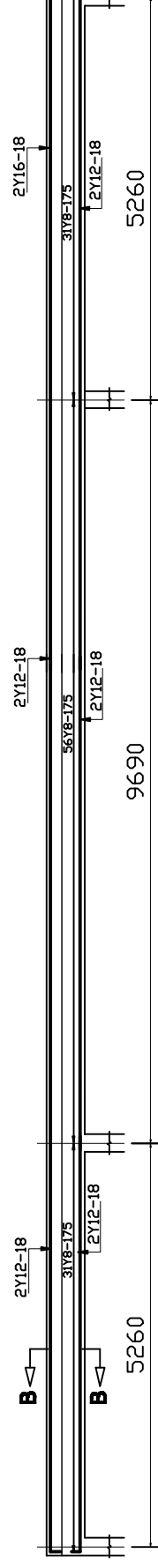
**SECTION B-B**



**SECTION A-A**



**BEAM 01 230x300mm USE FOR EXTERNAL WALLS**



**BEAM 02 230x300mm USE FOR INTERNAL WALLS**

**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED REHABILITATION OF HEALTH CENTRES**

**CLIENT:**

**PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT**

**MINISTRY OF  
HEALTH, COMMUNITY  
DEVELOPMENT, GENDER,  
ELDERLY AND CHILDREN**

**DRAWING TITLE:**

**OPD RINGBEAM LAYOUT**

**Designed by:**

Eng. R.A.M

**Drawn by:**

Eng. R.A.M

**Checked by:**

Eng. A.NGATOMELA

**Approved by:**

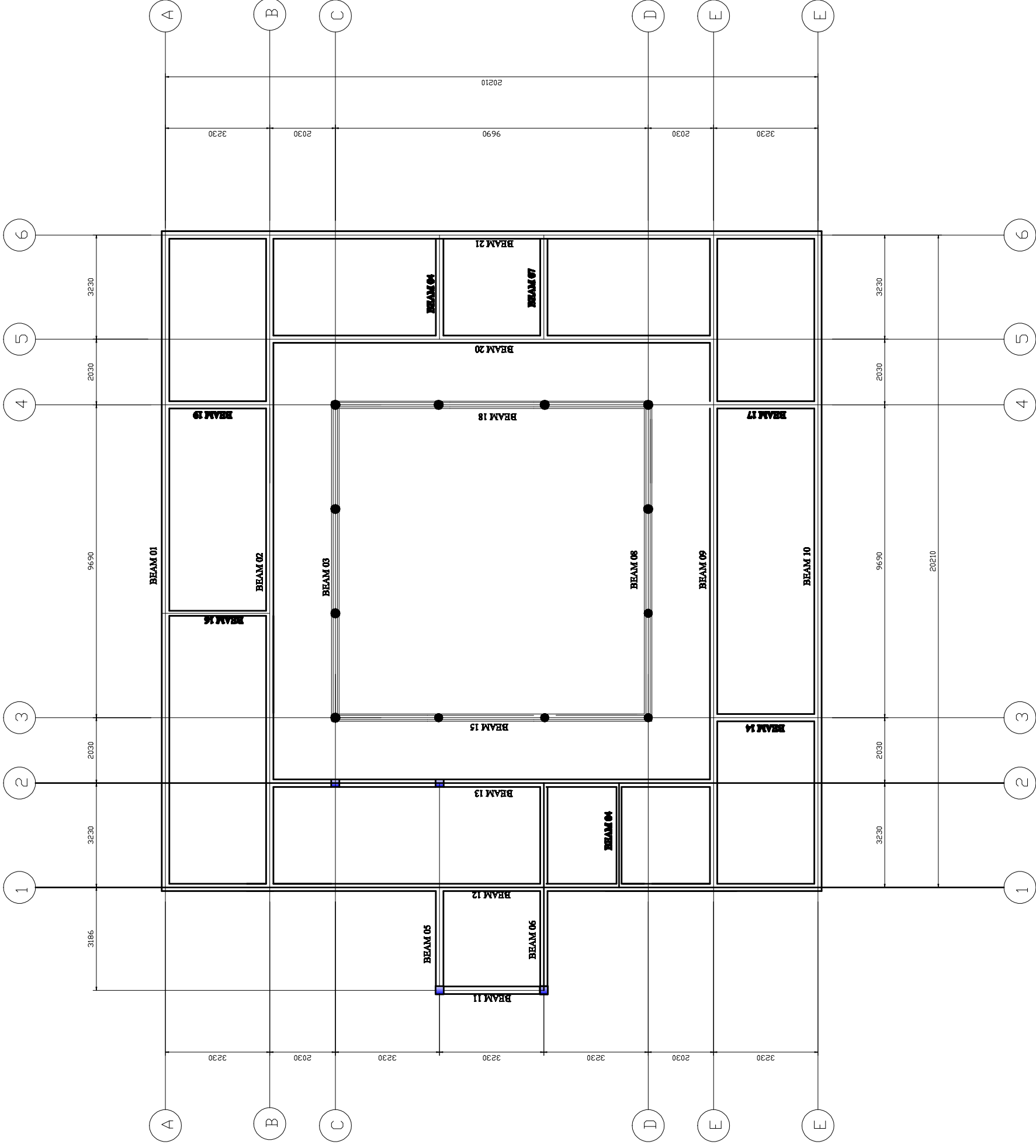
**Date:** 2018

**Scale:**

**Drawing No.**

**Sheet:**

**OPD/STR. 105**



**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED CONSTRUCTION OF DISPENSARIES**

**CLIENT:**

**PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT**

**MINISTRY OF  
HEALTH, COMMUNITY  
DEVELOPMENT, GENDER,  
ELDERLY AND CHILDREN**

**DRAWING TITLE:**

**OPD RING BEAM DETAILS**

**Designed by:** Eng. R.A.M

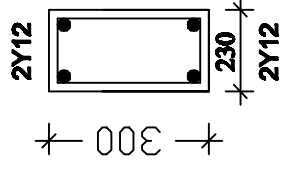
**Drawn by:** Eng. R.A.M

**Checked by:** Eng. A. NGATOMELA

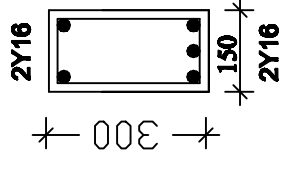
**Approved by:**

**Date:** 2018 **Scale:**

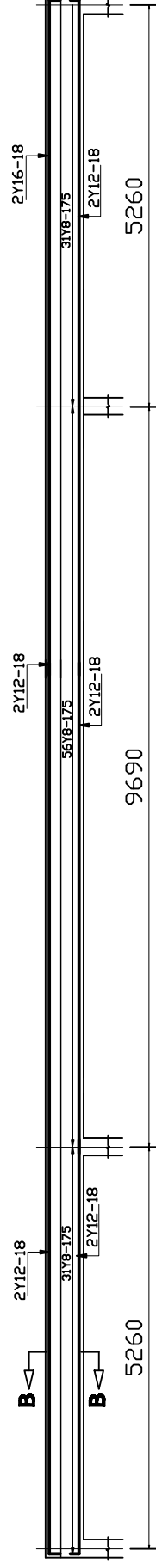
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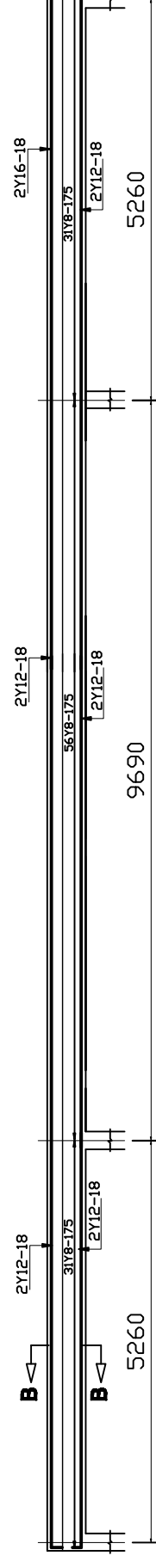
**SECTION B-B**



**SECTION A-A**



**BEAM\_01\_230x300mm USE FOR  
EXTERNAL WALLS**



**BEAM\_02\_230x150mm USE FOR  
INTERNAL WALLS**

**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED CONSTRUCTION OF DISPENSARIES**

**CLIENT:**  
PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT

**MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT, GENDER, ELDERLY AND CHILDREN**

**DRAWING TITLE:**  
**OPD COLUMNS DETAILS**

**Designed by:** Eng. R.A.M

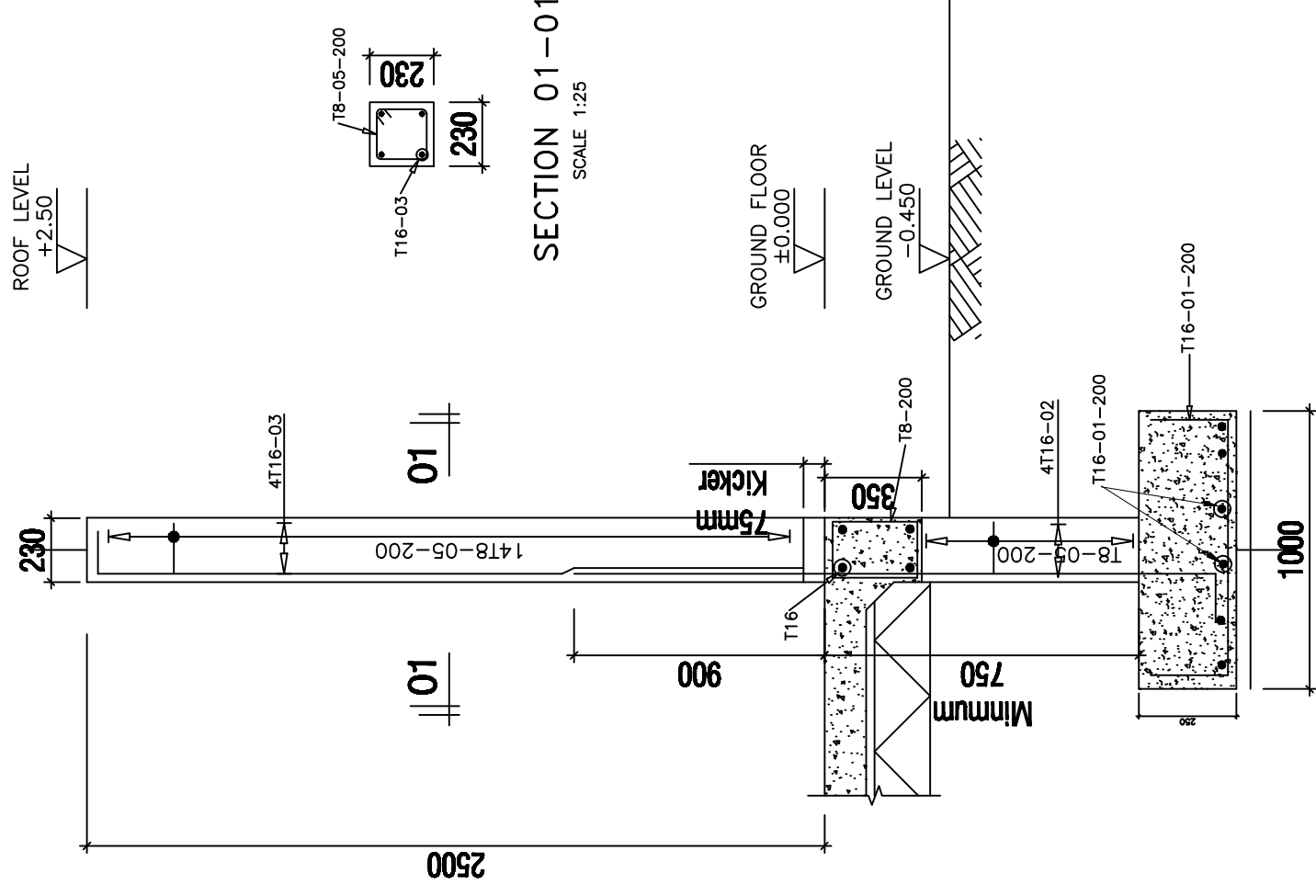
**Drawn by:** Eng. R.A.M

**Checked by:** Eng. A.NGATOMELA

**Approved by:**

**Date:** 2018  
**Scale:**

**Drawing No.** OPD/STR.106  
**Sheet:**



**COLUMN 4No**  
**(230x230mm)**  
SCALE 1:25

**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED REHABILITATION OF HEALTH CENTRES**

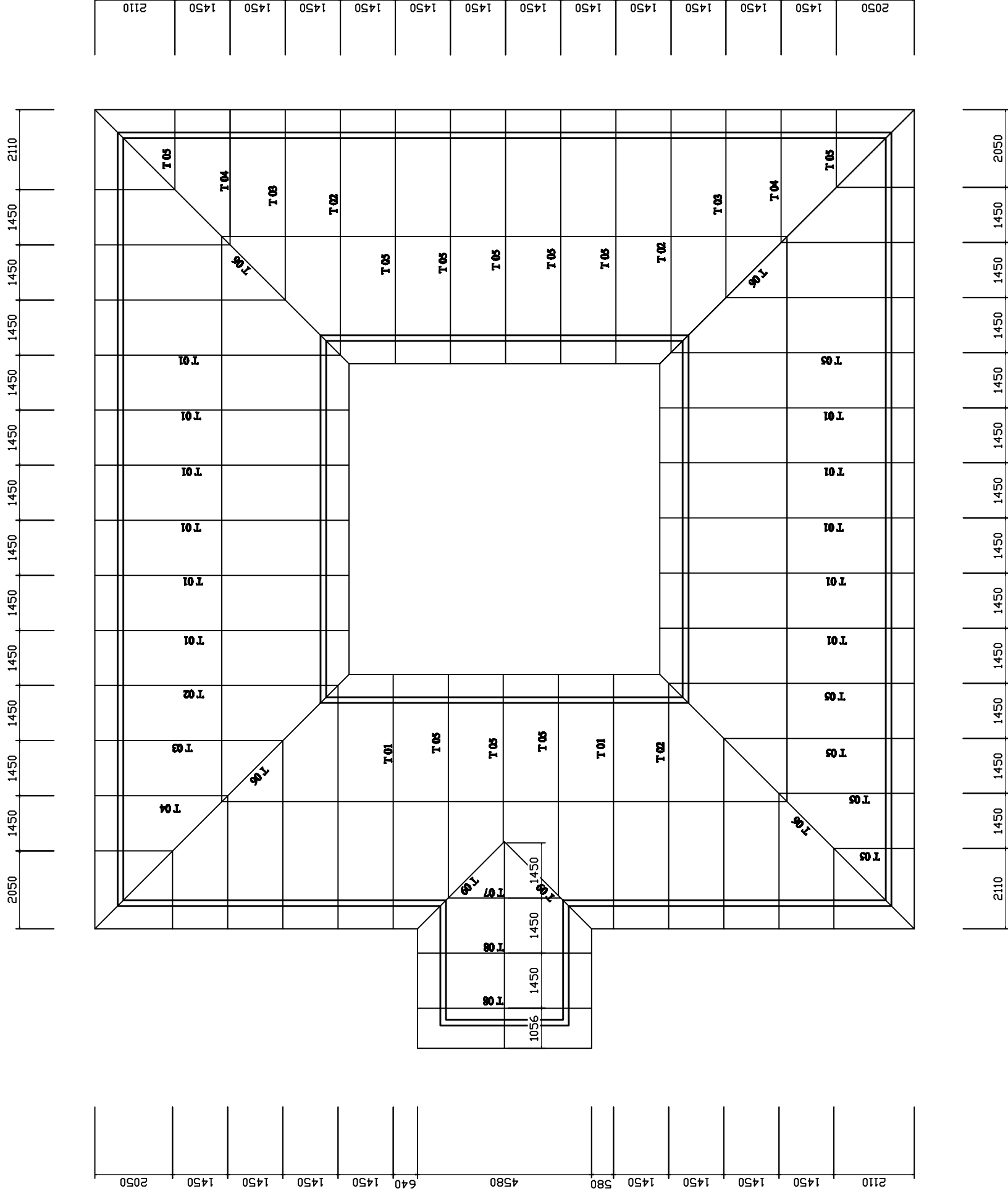
**CLIENT:**

PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT

MINISTRY OF  
HEALTH, COMMUNITY  
DEVELOPMENT, GENDER,  
ELDERLY AND CHILDREN

**DRAWING TITLE:  
OPD TRUSS LAYOUT**

Designed by:	Eng. R.A.M
Drawn by:	Eng. R.A.M
Checked by:	Eng. A.NGATOMELA
Approved by:	
Date:	2018
Scale:	
Drawing No.	Sheet
	<b>OPD/STR.107</b>



**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED REHABILITATION OF HEALTH CENTRES**

**CLIENT:**

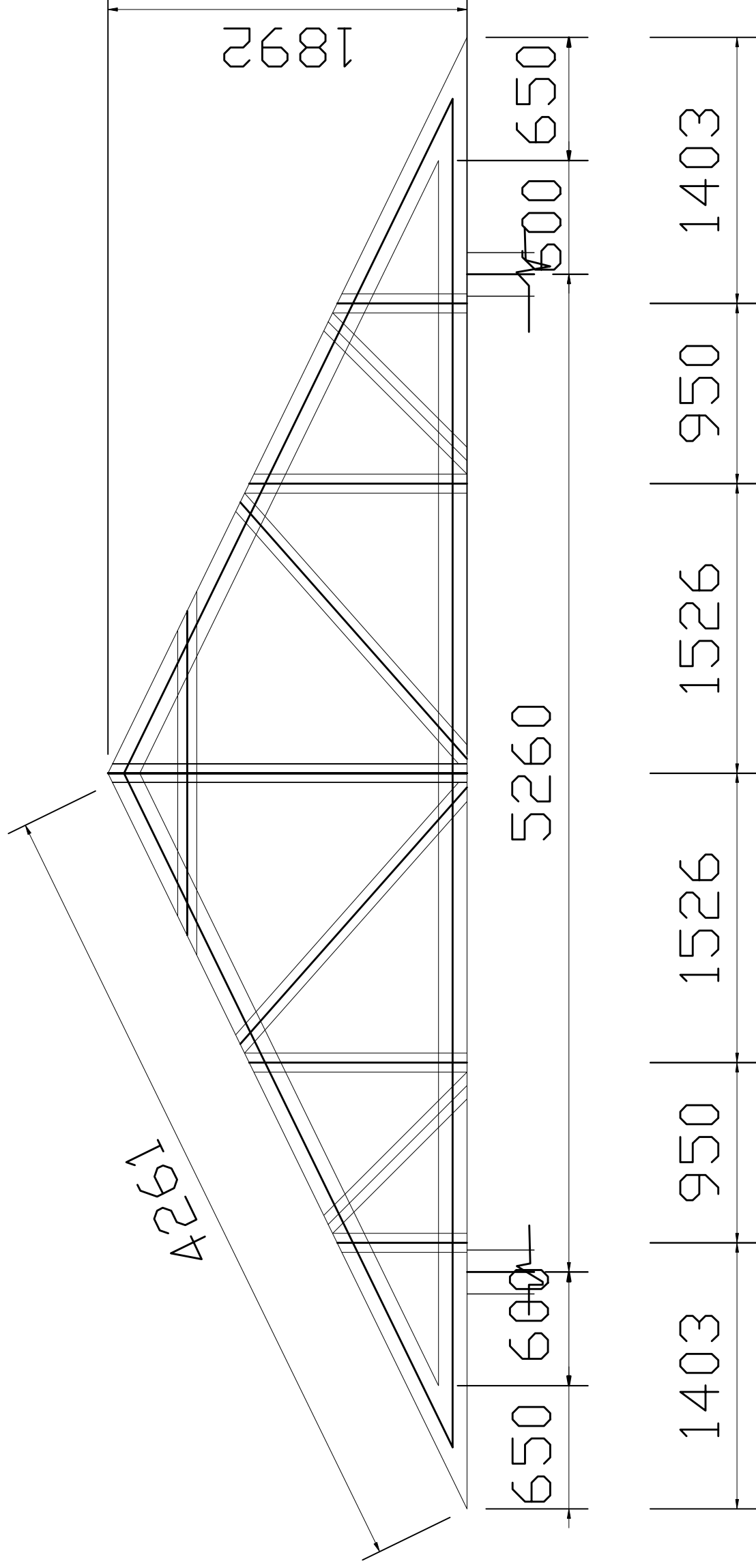
**PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT**

**MINISTRY OF  
HEALTH, COMMUNITY  
DEVELOPMENT, GENDER,  
ELDERLY AND CHILDREN**

**DRAWING TITLE:**

**OPD TRUSS DETAILS**

Designed by:	Eng. R.A.M
Drawn by:	Eng. R.A.M
Checked by:	Eng. A. NGATOMELA
Approved by:	
Date: 2018	Scale:
Drawing No. OPD/STR.108	Sheet:



TYPICAL TRUSS T01

**NOTE:**

1. All dimensions are in mm unless otherwise specified
2. All discrepancies shall be referred to the structural engineer
3. Reinforced concrete shall be of grade 25 with  $f_{cu}=25N/mm^2$  at 28 days of age
4. Main reinforcements shall be high tensile steel with  $f_y = 460N/mm^2$
5. Nominal cover to the reinforcements:
  - a) Foundation 50mm
  - b) Column 25mm
  - c) Beam 25mm
  - d) Slab 25mm

**PROJECT:**

**PROPOSED REHABILITATION OF HEALTH CENTRES**

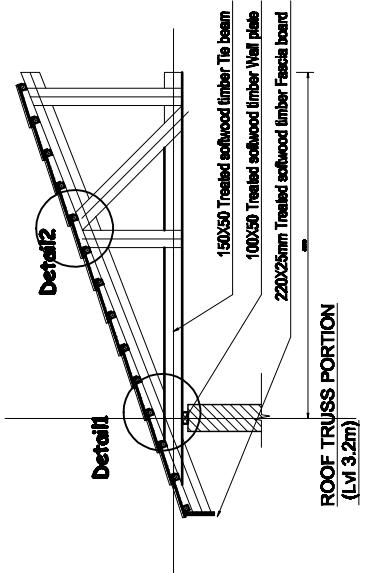
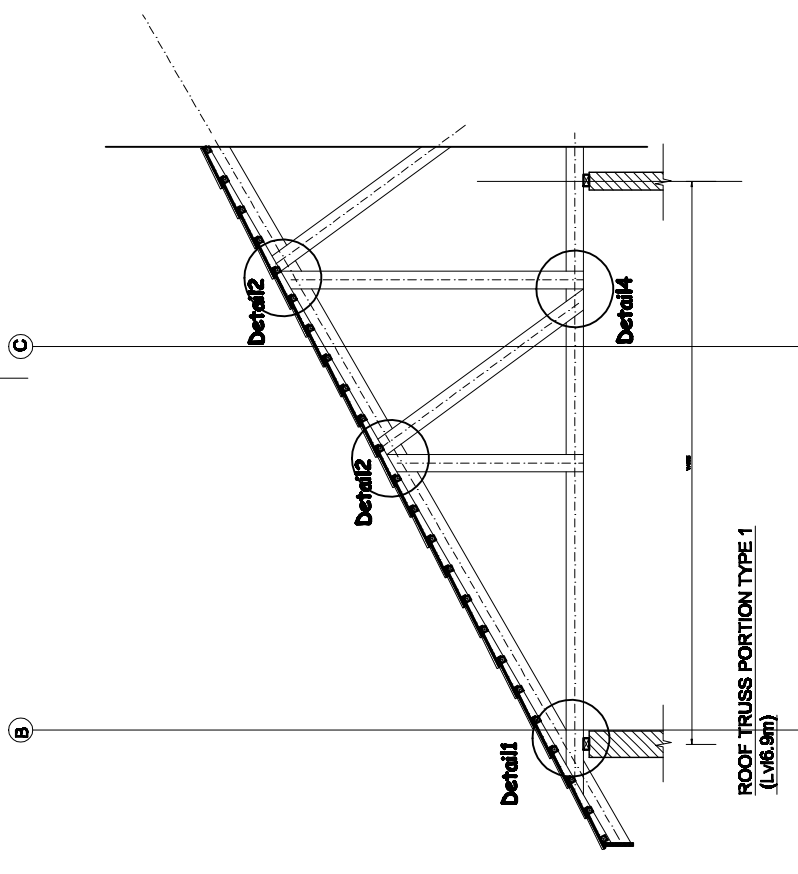
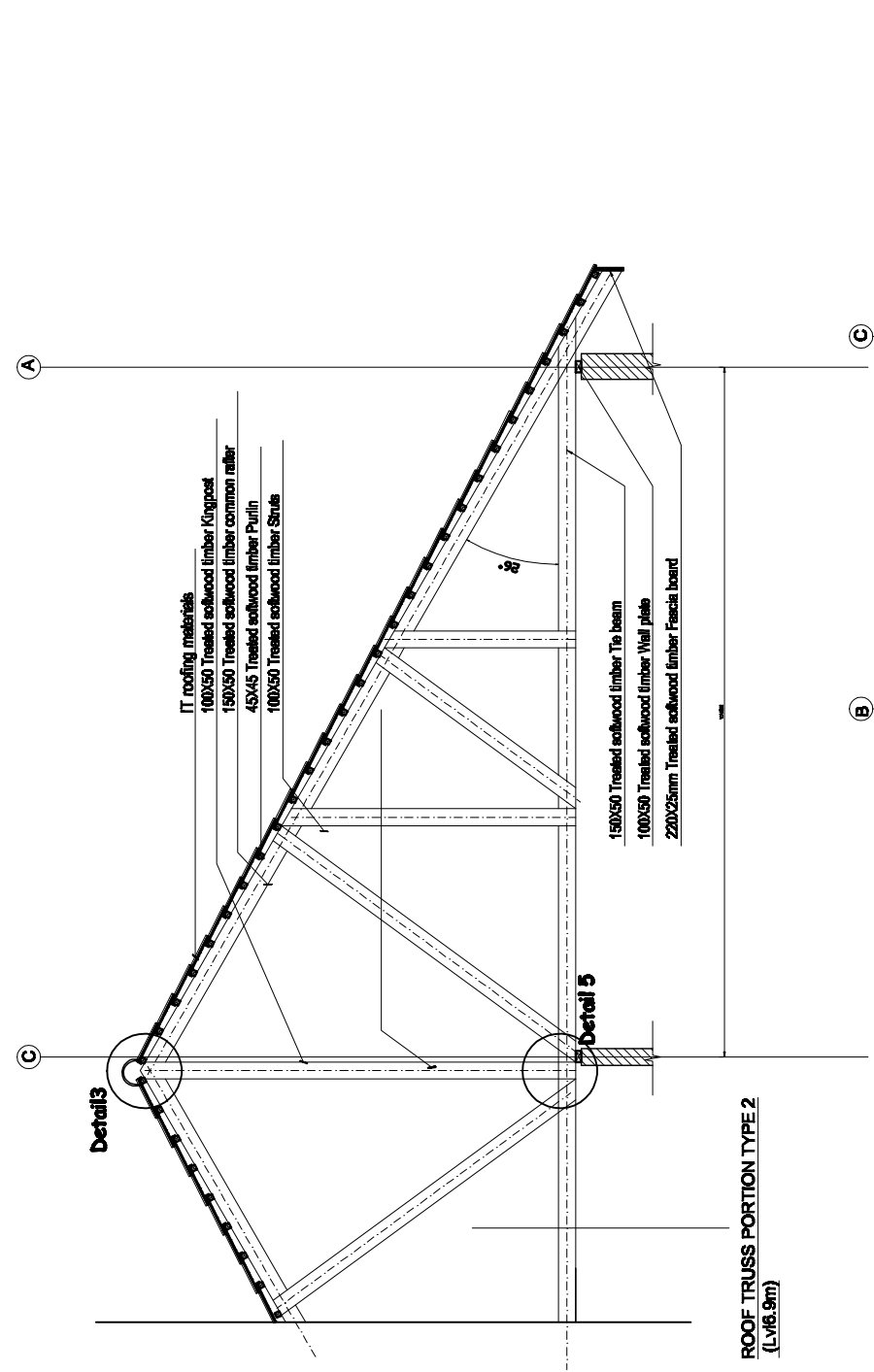
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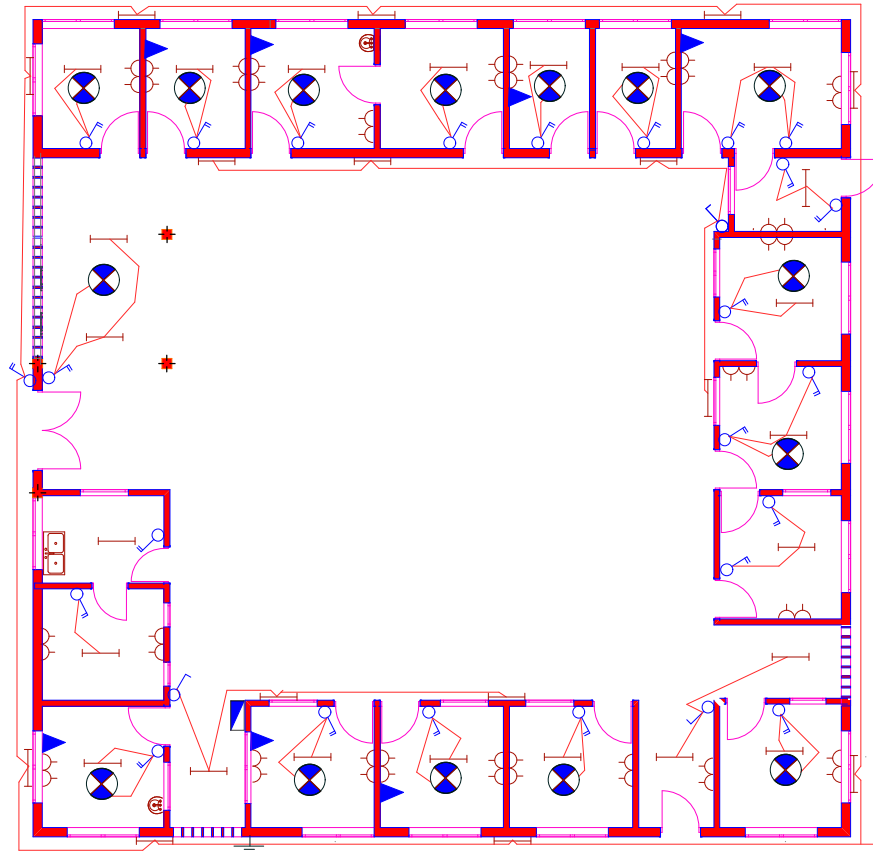
PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION  
LOCAL GOVERNMENT

MINISTRY OF  
HEALTH, COMMUNITY  
DEVELOPMENT, GENDER,  
ELDERLY AND CHILDREN

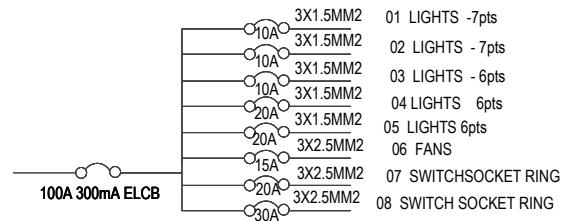
**DRAWING TITLE:  
OPD DETAILS AND CONNECTIONS**

Designed by:	Eng. R.A.M
Drawn by:	Eng. R.A.M
Checked by:	Eng. A. NGATOMELA
Approved by:	
Date:	2018
Drawing No.	Scale:
	Sheet:
	<b>OPD/STR.109</b>





8WAYS TPN DISTRIBUTION BOARD OPD



NOTES:

1. All work to be carried out in strict accordance with local authority requirements and Engineers Registration Board.
2. This drawing may not be scaled. Only figured dimensions and levels may be used.
3. All relevant details, levels, dimensions must be checked on site before commencement of work. Any discrepancies to be reported to the Electrical Engineer office immediately.

No.	Date	Description

Building Section,  
Policy and Planning Department,  
Ministry of Health, Community Development, Elderly and Children,  
University of Dodoma,  
College of Humanities and Social Science 11th Building,  
P.O.Box 743,  
Dodoma

PROJECT NAME

**OPD**

PROPOSED HEALTH CENTRES

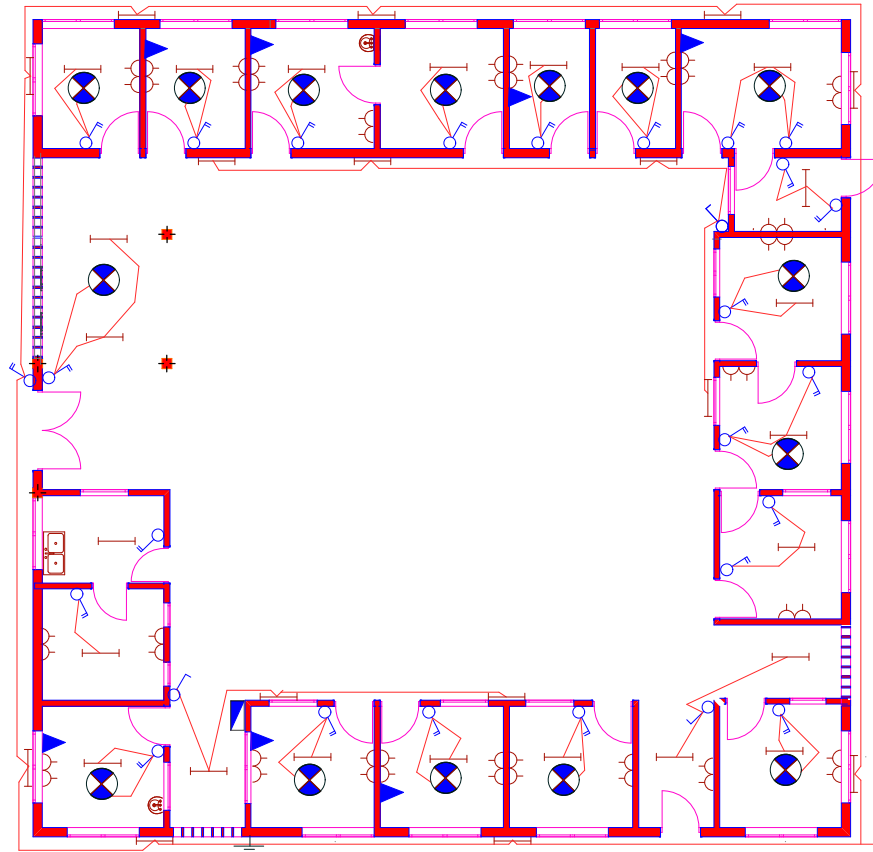
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**ELECTRICAL PLAN**

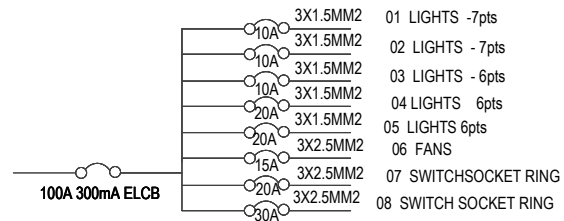
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1:100	APRIL 2018	CHENGULA
		DRAWN
		CHENGULA
		CHECKED
		CHENGULA

DRAWING NUMBER	REVISION





8WAYS TPN DISTRIBUTION BOARD OPD



NOTES:

1. All work to be carried out in strict accordance with local authority requirements and Engineers Registration Board.
2. This drawing may not be scaled. Only figured dimensions and levels may be used.
3. All relevant details, levels, dimensions must be checked on site before commencement of work. Any discrepancies to be reported to the Electrical Engineer office immediately.

No.	Date	Description

Building Section,  
Policy and Planning Department,  
Ministry of Health, Community Development, Elderly and Children,  
University of Dodoma,  
College of Humanities and Social Science 11th Building,  
P.O.Box 743,  
Dodoma

PROJECT NAME

**OPD**

PROPOSED HEALTH CENTRES

DRAWING DESCRIPTION

**ELECTRICAL PLAN**

SCALE	DATE	DESIGNED
1:100	APRIL 2018	CHENGULA
		DRAWN
		CHENGULA
		CHECKED
		CHENGULA

DRAWING NUMBER	REVISION