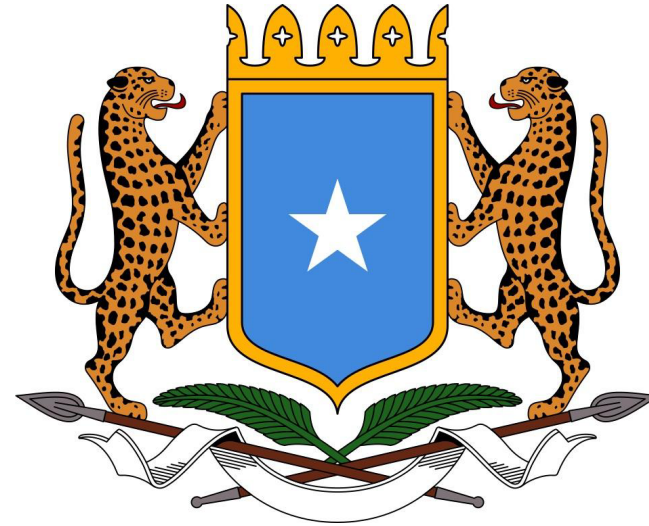




FEDERAL GOVERNMENT OF SOMALIA

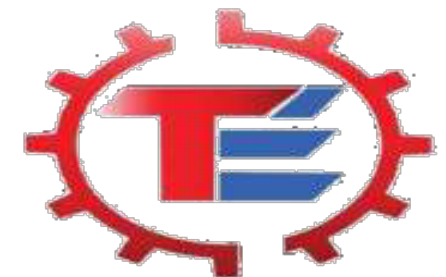
**MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)**

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JOHWAR DISTRICT**

**HIRSHABELE STATE SOMALIA
DESIGN DRAWINGS**



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MINISTRY OF FINANCE - PROJECT IMPLEMENTATION UNIT (PIU)

PROJECT

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JOHWAR DISTRICT**

HIRSHABELE STATE SOMALIA

JOHWAR, ,SOMALIA

DRAWING SCHEDULES

Layout ID	Layout Name	Drawing		Drawing Scale
		ID	Name	
AR.001				
JOHWAR	PROJECT TITTLE	01	PROJECT TITTLE	
	PROJECT SUMMARY	02	PROJECT SUMMARY	
	SITE MAP	03	SITE MAP	1:500
	SITE LAYOUT	04	SITE LAYOUT	1:500
	TOPO SURVEY	05	TOPO SURVEY	1:500
	SPOT ELEVATION	06	SPOT ELEVATION	1:500
	TOPO ELEVATION	07	TOPO ELEVATION	1:500
	SCHEMATIC PLAN	08	SCHEMATIC PLAN	1:400
	HARDSCAPE PLAN	09	HARDSCAPE PLAN	1:400
	GRADING PLAN	10	GRADING PLAN	1:400

AR.002				
	FLOOR PLAN	01	GROUND FLOOR PLAN	1:100

AR.003				
	FLOOR PLAN	01	FIRST FLOOR PLAN	1:100

AR.004				
	ROOF PLAN	01	ROOF TOP PLAN	1:100

AR.005				
	SECTIONS	01	SECTION A	1:100
	SECTIONS	01	SECTION B	1:100

AR.006				
	ELEVATIONS	01	ELEVATION 01	1:100
	ELEVATIONS	02	ELEVATION 02	1:100
	ELEVATIONS	03	ELEVATION 03	1:100
	ELEVATIONS	04	ELEVATION 04	1:100

AR.007				
	PERSPECTIVE	01		
	PERSPECTIVE	02	ELEVATION E-01	
	PERSPECTIVE	03		
	PERSPECTIVE	04	ELEVATION E-02	
	PERSPECTIVE	05		
	PERSPECTIVE	06		

AR.008				
	ELECTRICAL COVER PAGE	01	ELECTRICAL COVER PAGE	
	DRAWING LIST & LEGEND	02	DRAWING LIST & LEGEND	
	INSTALLATION NOTES	03	INSTALLATION NOTES	

AR.009				
	LIGHTING	01	GF LIGHTING LAYOUT	1:100
	POWER AND DATA	02	GF POWER AND DATA LAYOUT	1:100
	SECURITY	03	GF SECURITY LAYOUT	1:100
	AIR CONDITIONING	04	GF AIR CONDITIONING LAYOUT	1:100

Layout ID	Layout Name	Drawing		Drawing Scale
		ID	Name	

AR.010				
	LIGHTING	01	FF LIGHTING LAYOUT	1:100
	POWER AND DATA	02	FF POWER AND DATA LAYOUT	1:100
	SECURITY	03	FF SECURITY LAYOUT	1:100
	AIR CONDITIONING	04	FF AIR CONDITIONING LAYOUT	1:100

AR.011				
	SINGLE LINE DIAGRAM	01	DB GF & DB FF	

AR.012				
	CONSUMER UNITS	01	GF & FF CONSUMER UNITS	

AR.013				
	ELECTRICAL DETAILS	01	ELECTRICAL DETAILS	1:75 1:50 1:25

AR.014				
	PLUMBING COVER PAGE	01	PLUMBING COVER PAGE	
	PLUMBING	02	GROUND FLOOR PLUMBING	1:100
	PLUMBING	03	FIRST FLOOR PLUMBING	1:100



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GENERAL NOTES

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REVISIONS

NO	Description	Date

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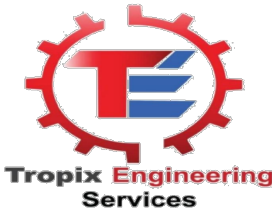
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MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)

DONOR



PROJECT NAME:

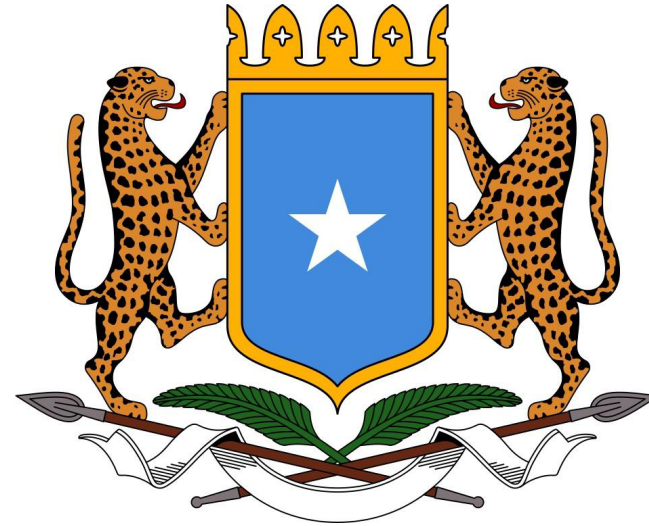
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: Drawing Schedules

Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 11/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	11 / 12 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	



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**MINISTRY OF FINANCE
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**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
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**HIRSHABELE STATE SOMALIA
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MINISTRY OF FINANCE - PROJECT IMPLEMENTATION UNIT (PIU)

PROJECT

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
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HIRSHABELE STATE SOMALIA



FEDERAL GOVERNMENT OF SOMALIA

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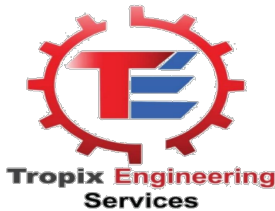
NO	Description	Date

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DONOR



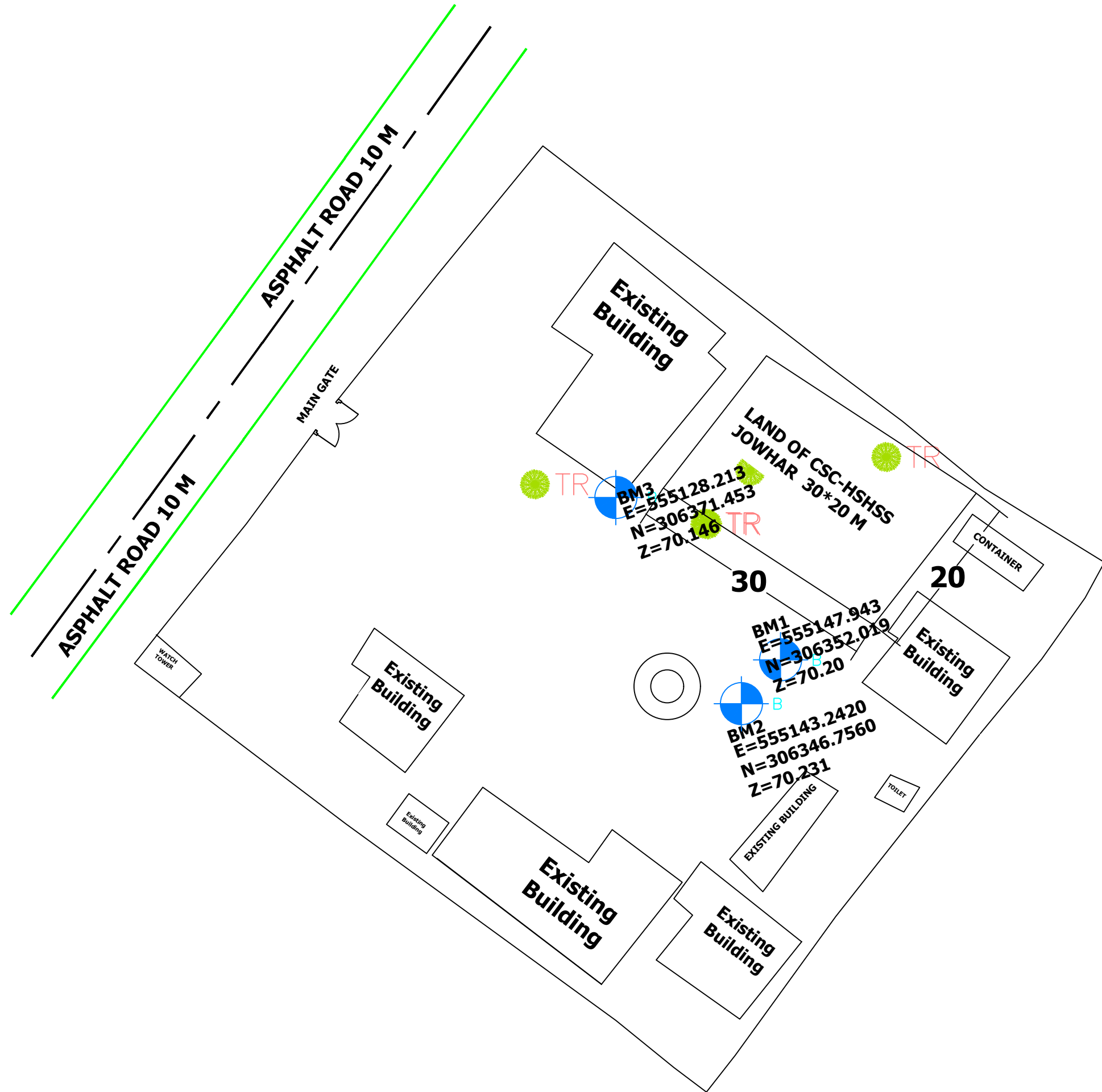
PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: TOPOGRAPHICAL SURVEY

Drawn by:	ABDIRAZAK MOHAMMED	SIGN	DATE: 10 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	10 / 12 / 2025	Scale:	
Project no.	Drawing no.	Sheet no.	



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REVISIONS

NO	Description	Date

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PROJECT NAME:

SOMALIA ENHANCING RECOURSE PROJECT (SERP)
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DESIGN REVIEW DRAWINGS

DRAWING TITLE: TOPOGRAPHICAL SURVEY

Drawn by:	ABDIRAZAK MOHAMMED	SIGN	DATE: 10 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
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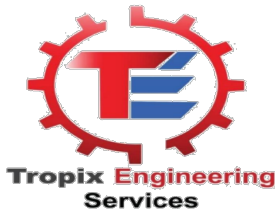
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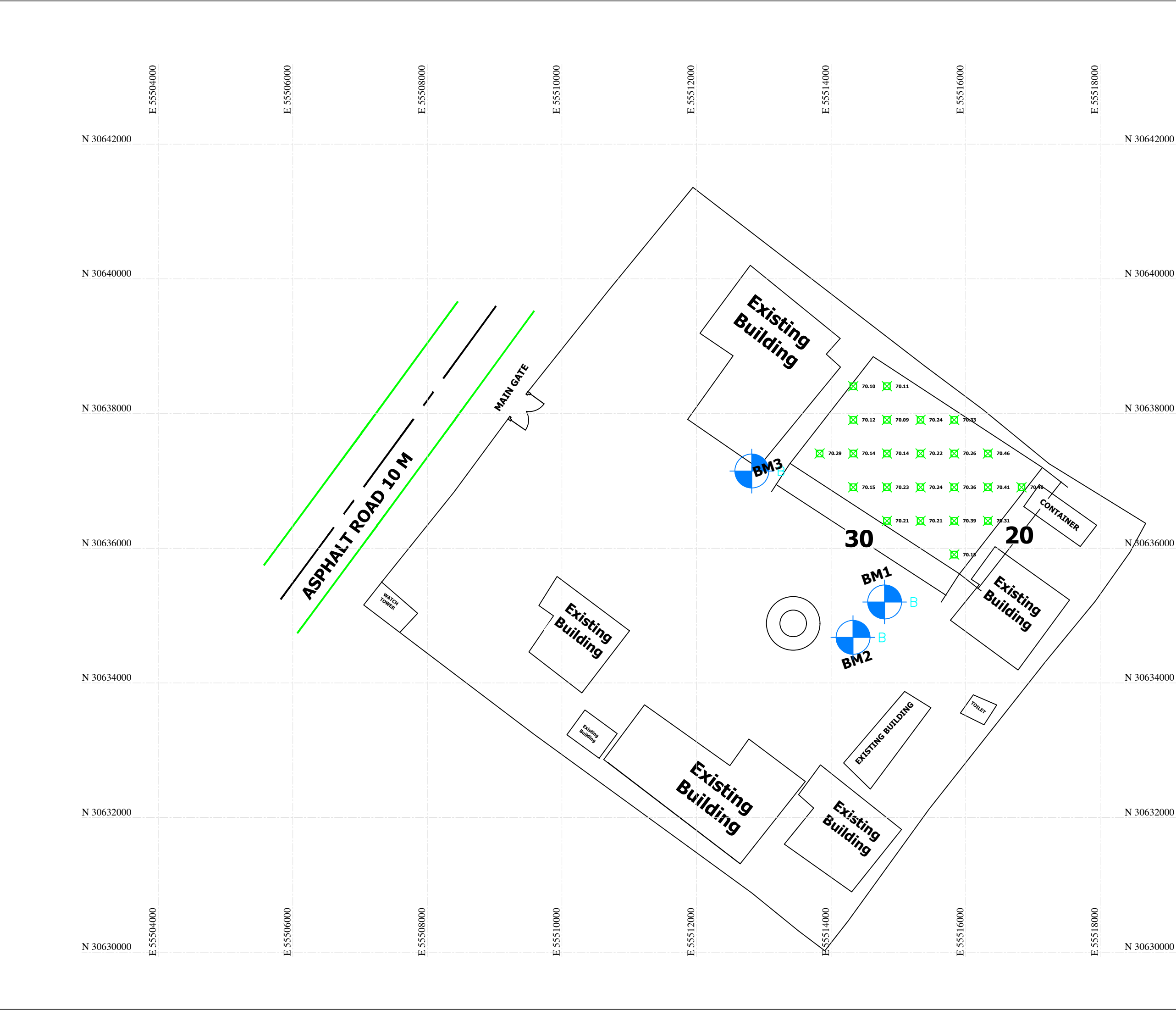
PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: TOPOGRAPHICAL SURVEY

Drawn by:	ABDIRAZAK MOHAMMED	SIGN	DATE: 10 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	10 / 12 / 2025	Scale:	
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REVISIONS

NO	Description	Date

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PROJECT NAME:

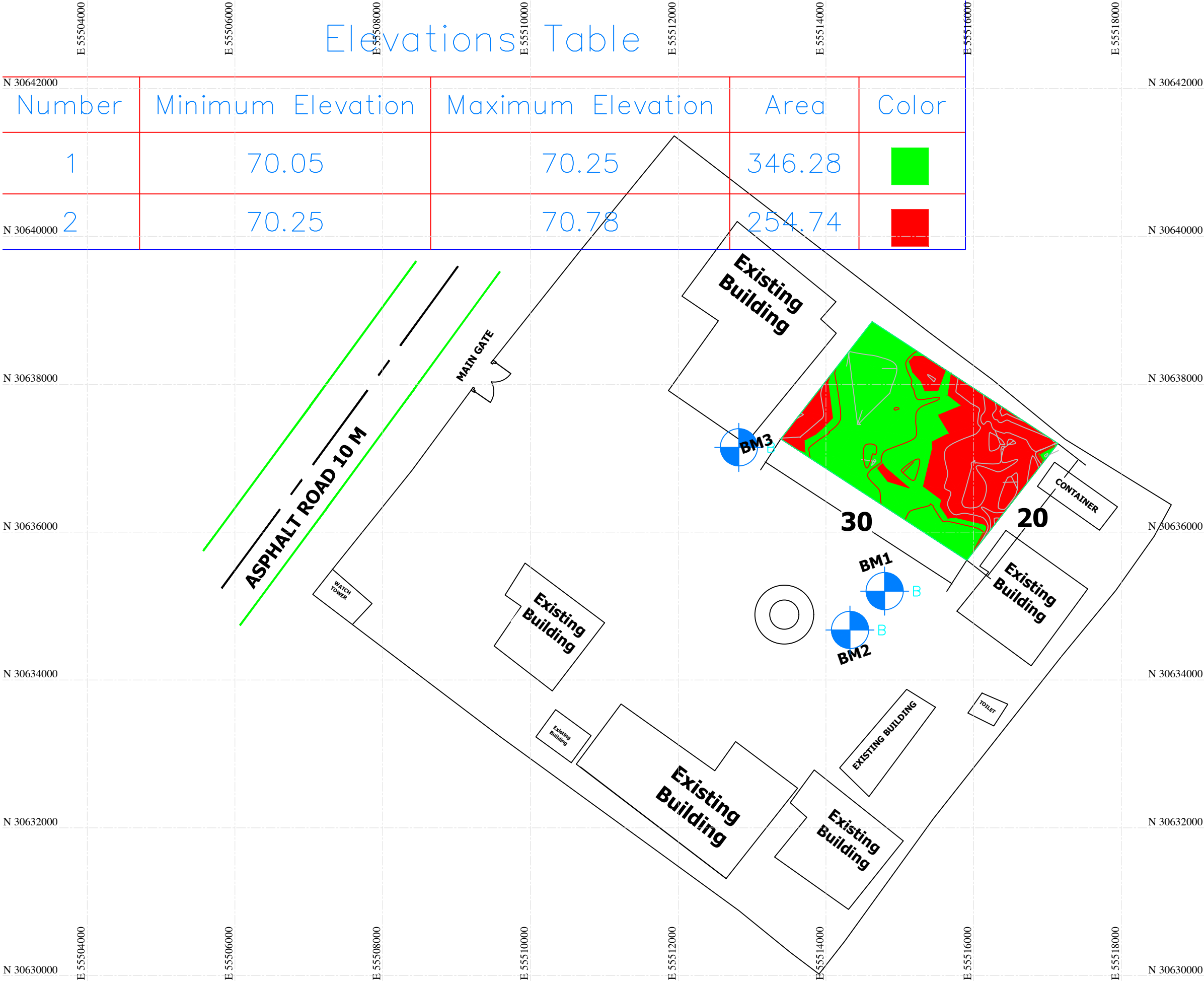
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
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AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: TOPOGRAPHICAL SURVEY

Drawn by:	ABDIRAZAK MOHAMMED	SIGN	DATE: 10 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
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REVISIONS

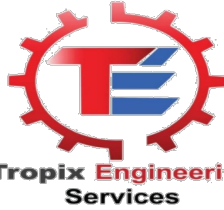
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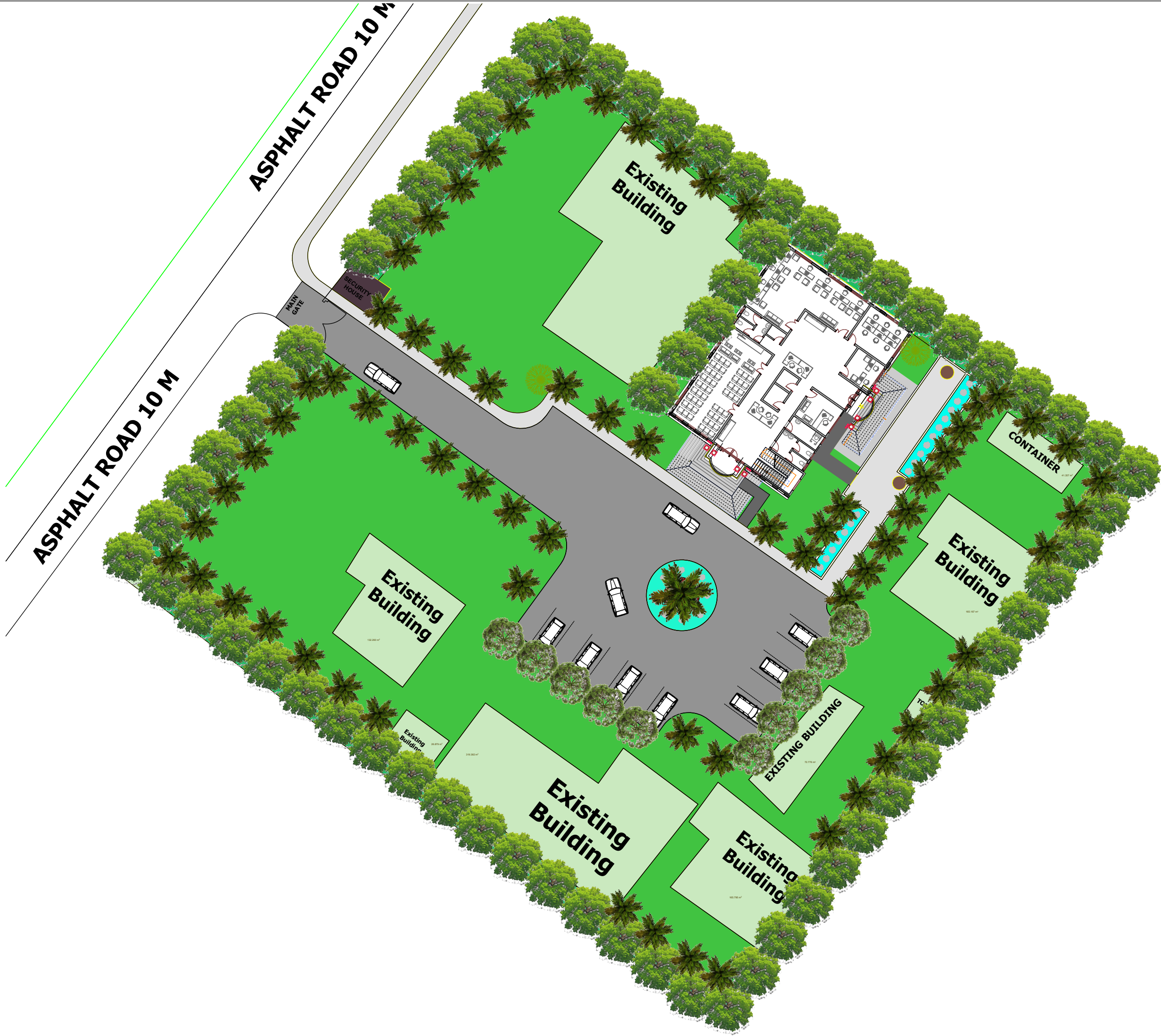
PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: TOPOGRAPHICAL SURVEY

Drawn by:	ABDIRAZAK MOHAMMED	SIGN	DATE: 10 / 12 / 2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / / 2025
Issue date:	10 / 12 / 2025	Scale:	
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PROJECT NAME:

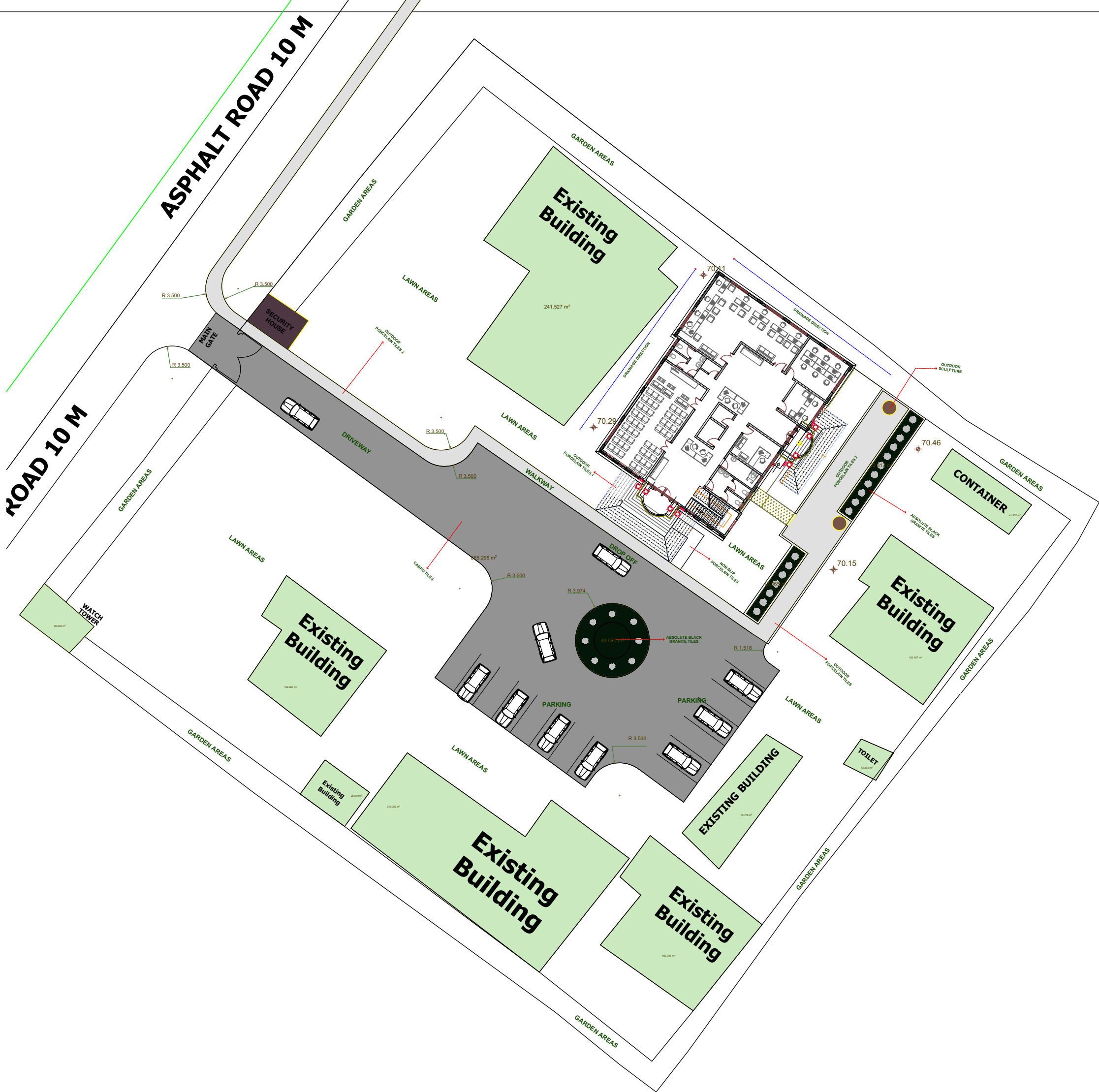
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: SCHEMATIC PLAN

Drawn by:	ABDIRAZAK MOHAMMED	SIGN	DATE: 10 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
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PROJECT NAME:

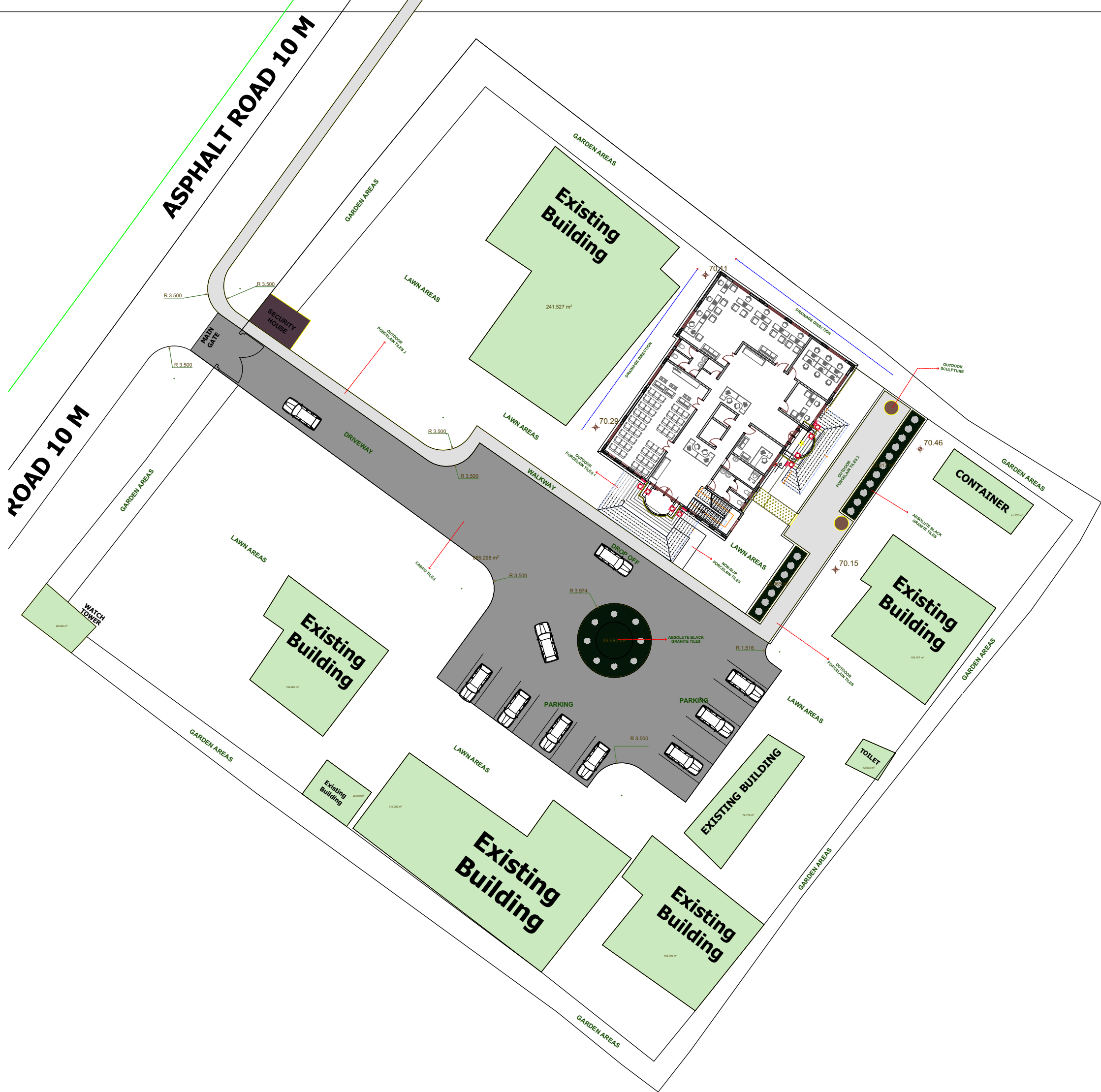
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: HARDSCAPE PLAN

Drawn by:	ABDIRAZAK MOHAMMED	SIGN	DATE: 10 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / / 2025
Issue date:	10 / 12 / 2025	Scale:	
Project no.	Drawing no.	Sheet no.	



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REVISIONS

NO	Description	Date

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PROJECT NAME:

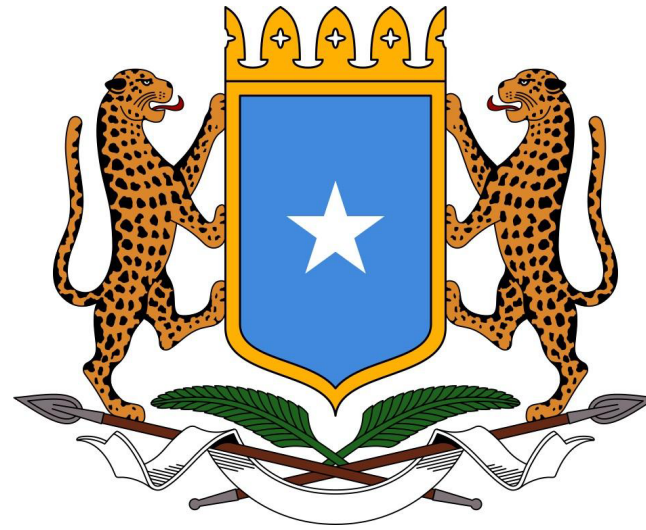
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: GRADING PLAN

Drawn by:	ABDIRAZAK MOHAMMED	SIGN	DATE: 10 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	10 / 12 / 2025	Scale:	
Project no.	Drawing no.	Sheet no.	



FEDERAL GOVERNMENT OF SOMALIA

**MINISTRY OF FINANCE
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**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JOHWAR**

SOMALIA

DESIGN DRAWINGS



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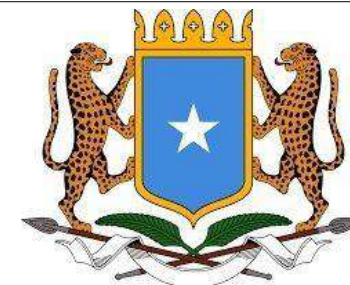
FEDERAL GOVERNMENT OF SOMALIA

MINISTRY OF FINANCE - PROJECT IMPLEMENTATION UNIT (PIU)

PROJECT

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JOHWAR**

SOMALIA



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REVISIONS

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PROJECT NAME:

SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: Ground Floor Plan

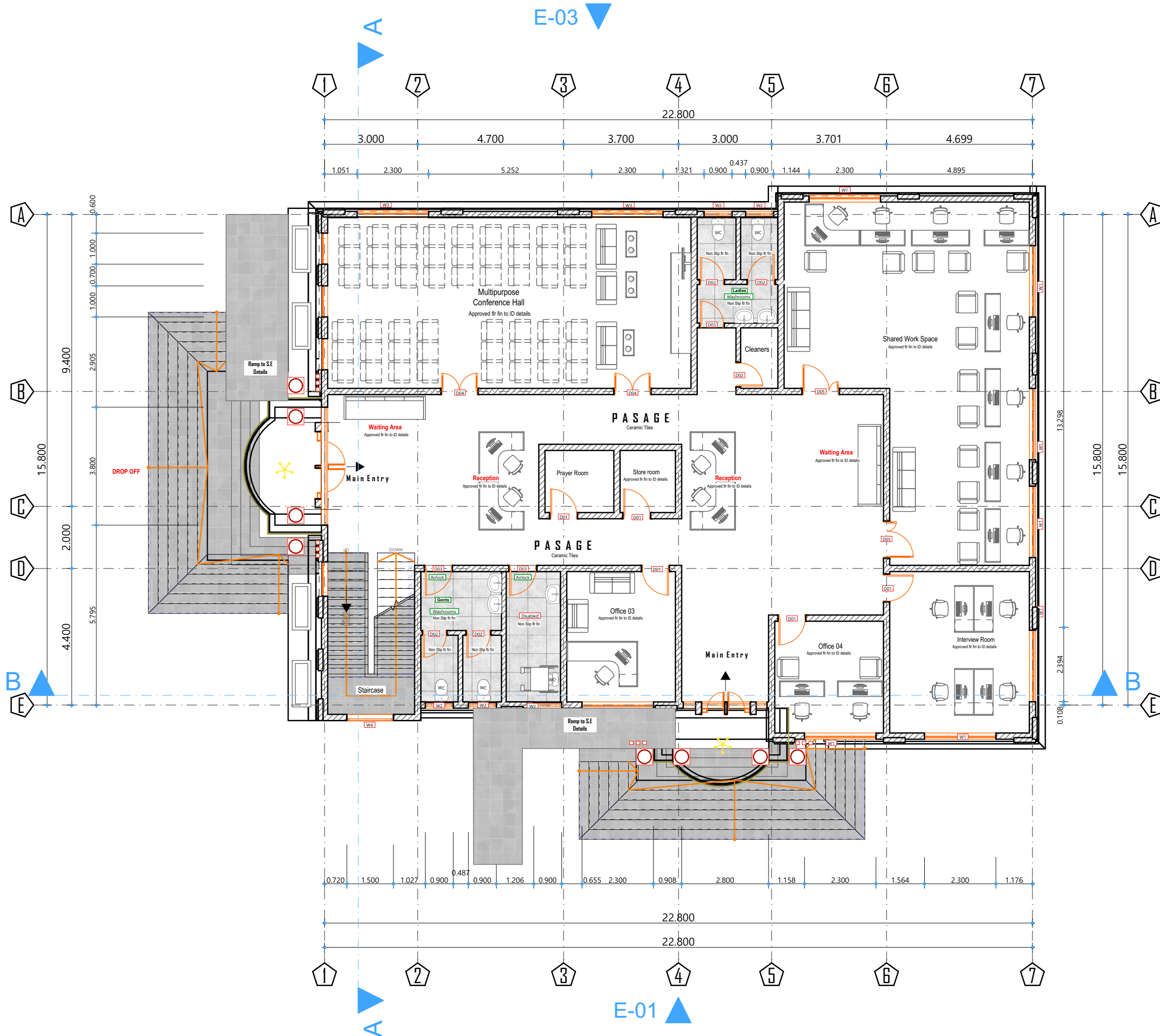
Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 30/11/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
Approved by:	Eng. Mohamed Saahid	SIGN	DATE: / / 2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	

E-03

E-01

E-04

E-02





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REVISIONS

NO	Description	Date

CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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PROJECT NAME:

SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: FLOOR PLAN

Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 30/11/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	

E-03



E-02

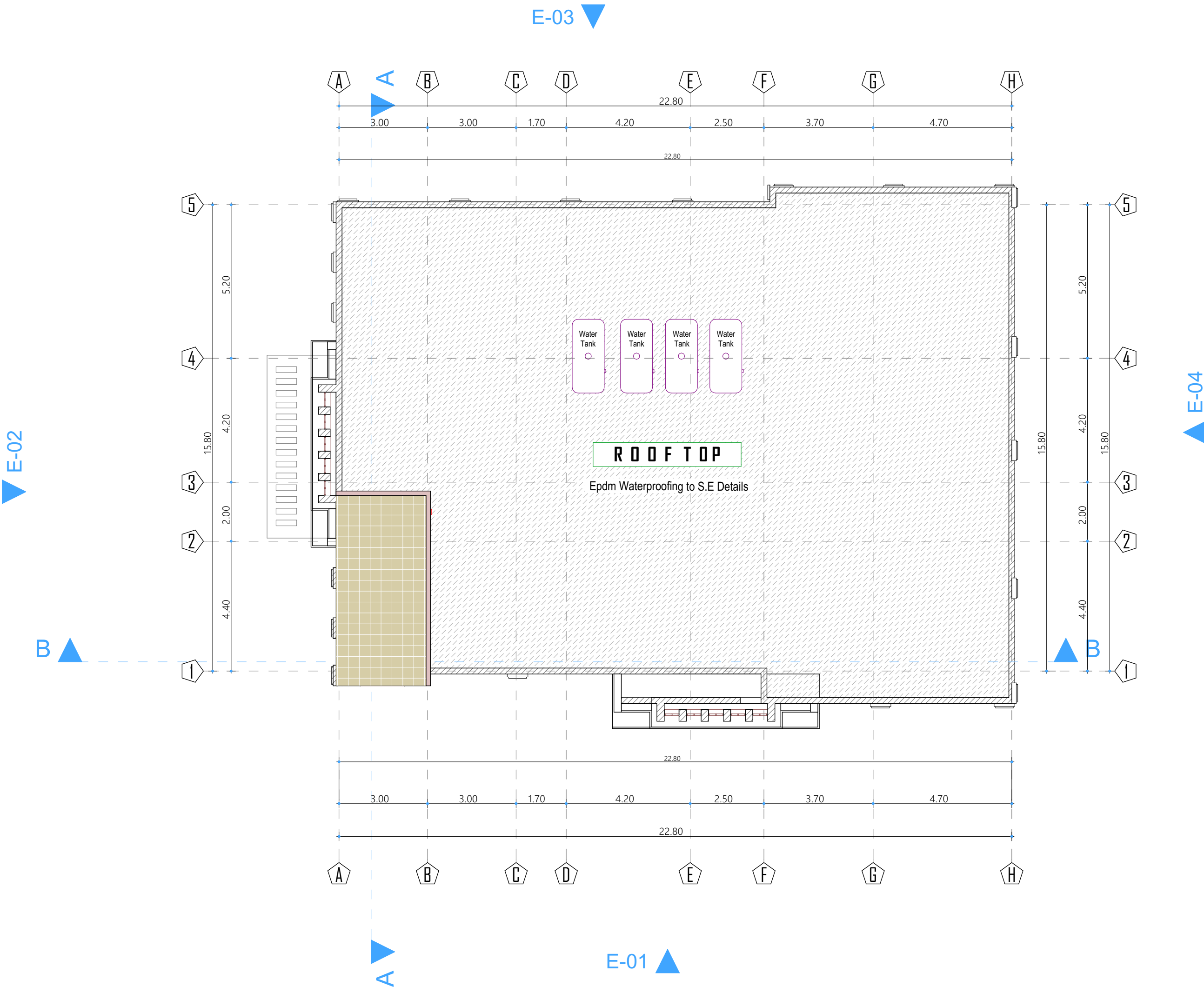
B

E-04

B

E-01

A



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REVISIONS

NO	Description	Date

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PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



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DRAWING TITLE: FLOOR PLAN

Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 30/11/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
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FEDERAL GOVERNMENT OF SOMALIA

GENERAL NOTES

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REVISIONS

NO	Description	Date

CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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DONOR



PROJECT NAME:

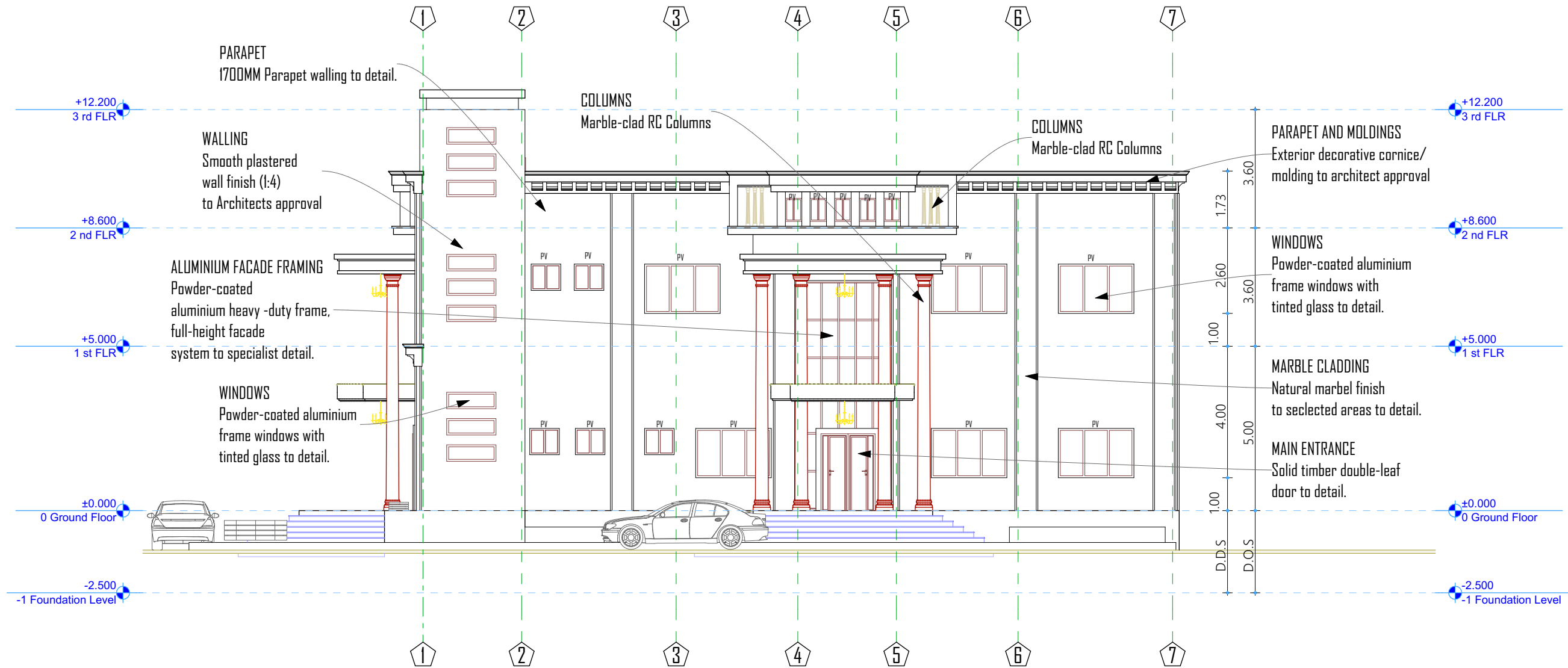
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: Elevation

Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 30/11/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
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E-01

Elevation (2)

1:71.37



FEDERAL GOVERNMENT OF SOMALIA

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DONOR



PROJECT NAME:

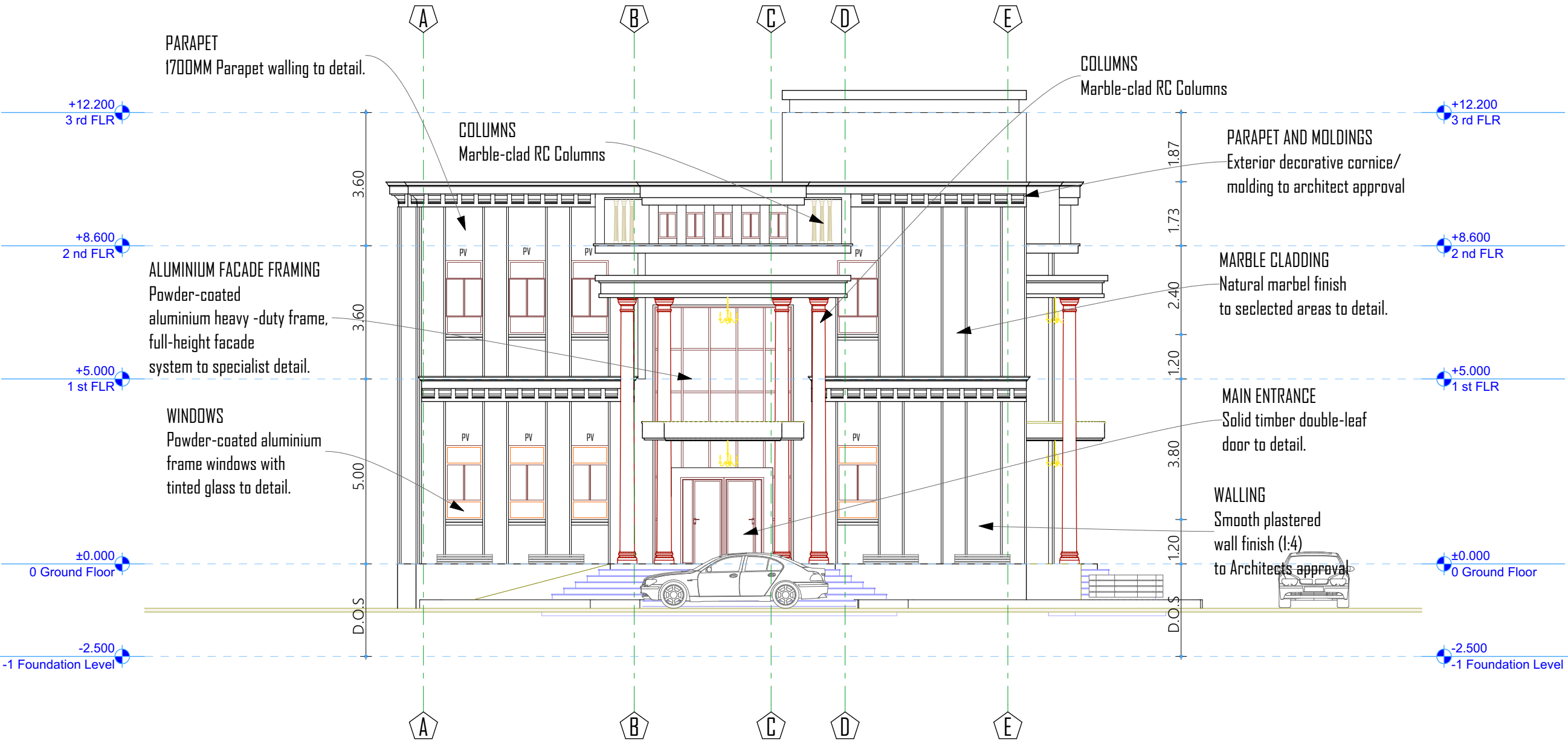
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
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DESIGN REVIEW DRAWINGS

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E-02

Elevation

1:63.65



FEDERAL GOVERNMENT OF SOMALIA

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REVISIONS

NO	Description	Date

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DONOR



PROJECT NAME:

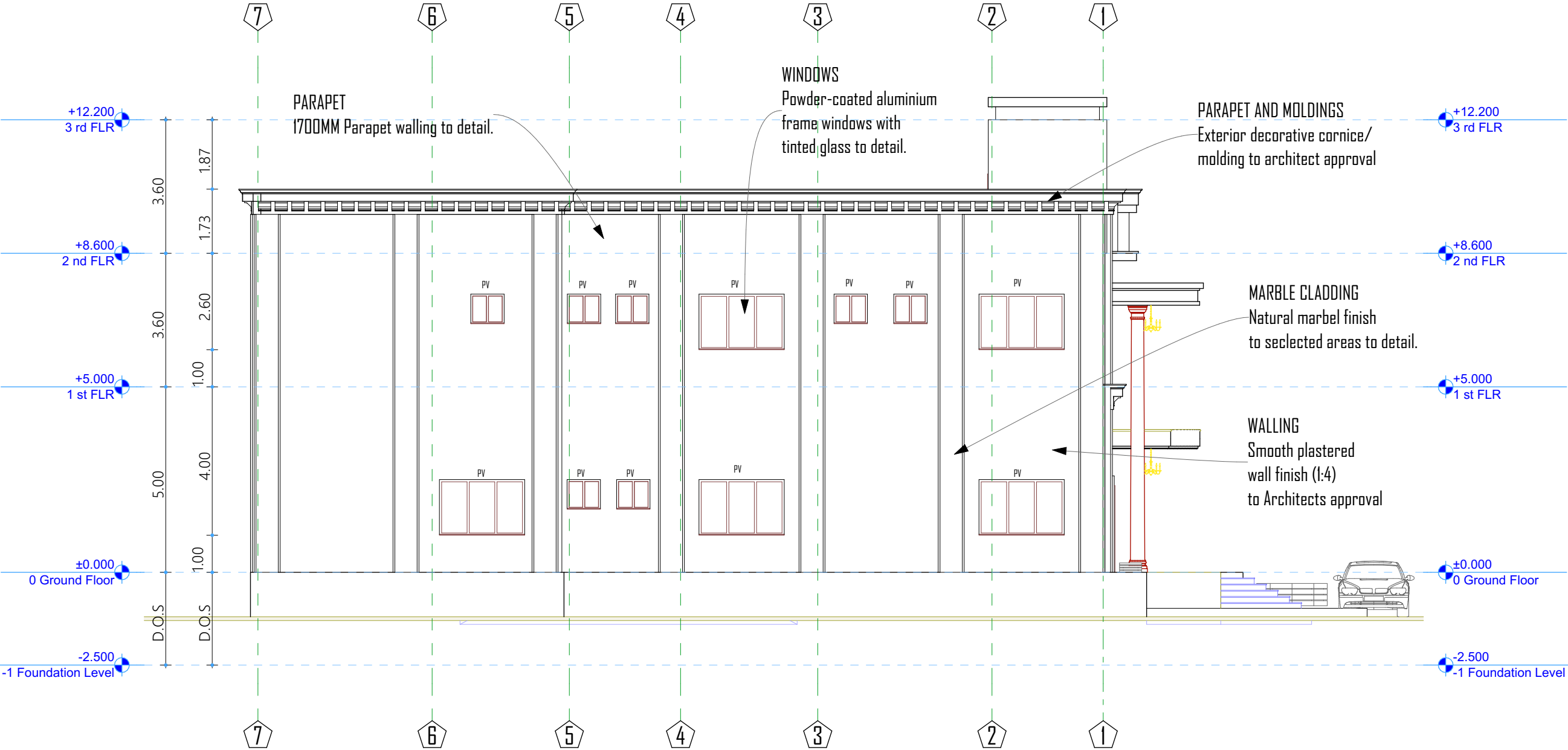
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
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DESIGN REVIEW DRAWINGS

DRAWING TITLE: Elevation

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Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	



E-03

Elevation

1:63.51



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REVISIONS

NO	Description	Date

CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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DONOR



PROJECT NAME:

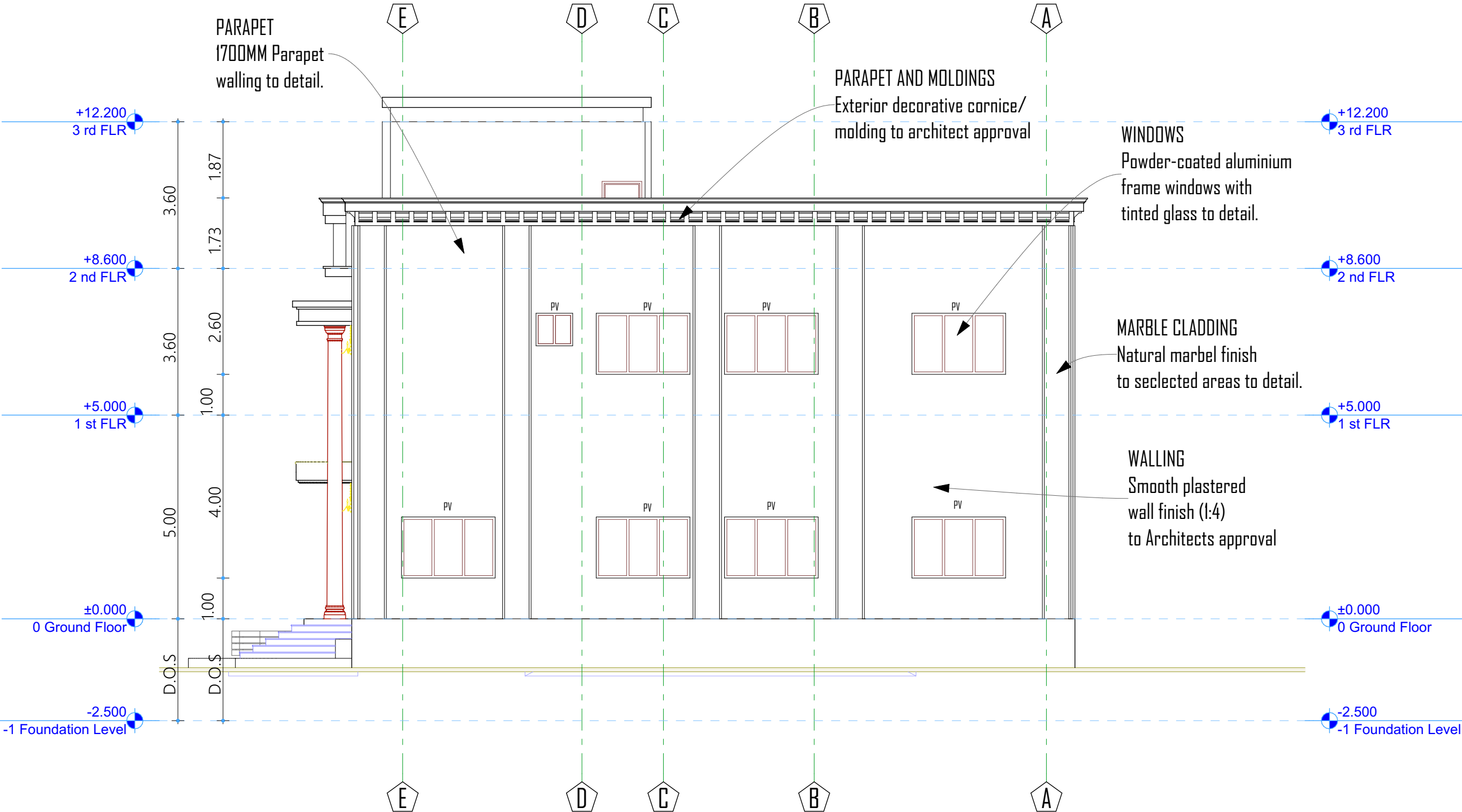
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DESIGN REVIEW DRAWINGS

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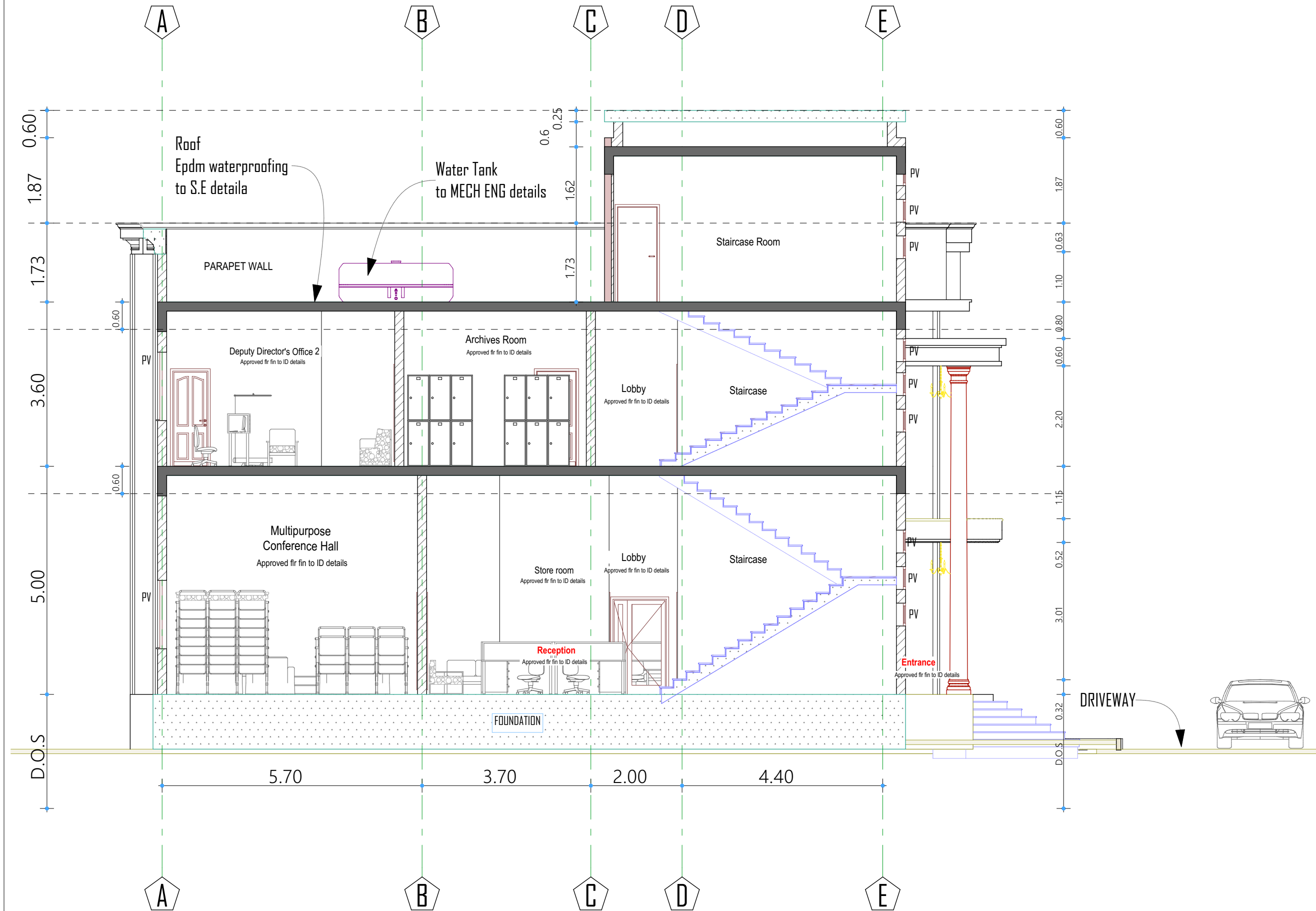
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
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AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: Section

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Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
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Project no.	Drawing no.	Sheet no.	



A

Building Section

1:42.72



FEDERAL GOVERNMENT OF SOMALIA

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NO	Description	Date

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PROJECT COORDINATION UNIT (PCU)

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PROJECT NAME:

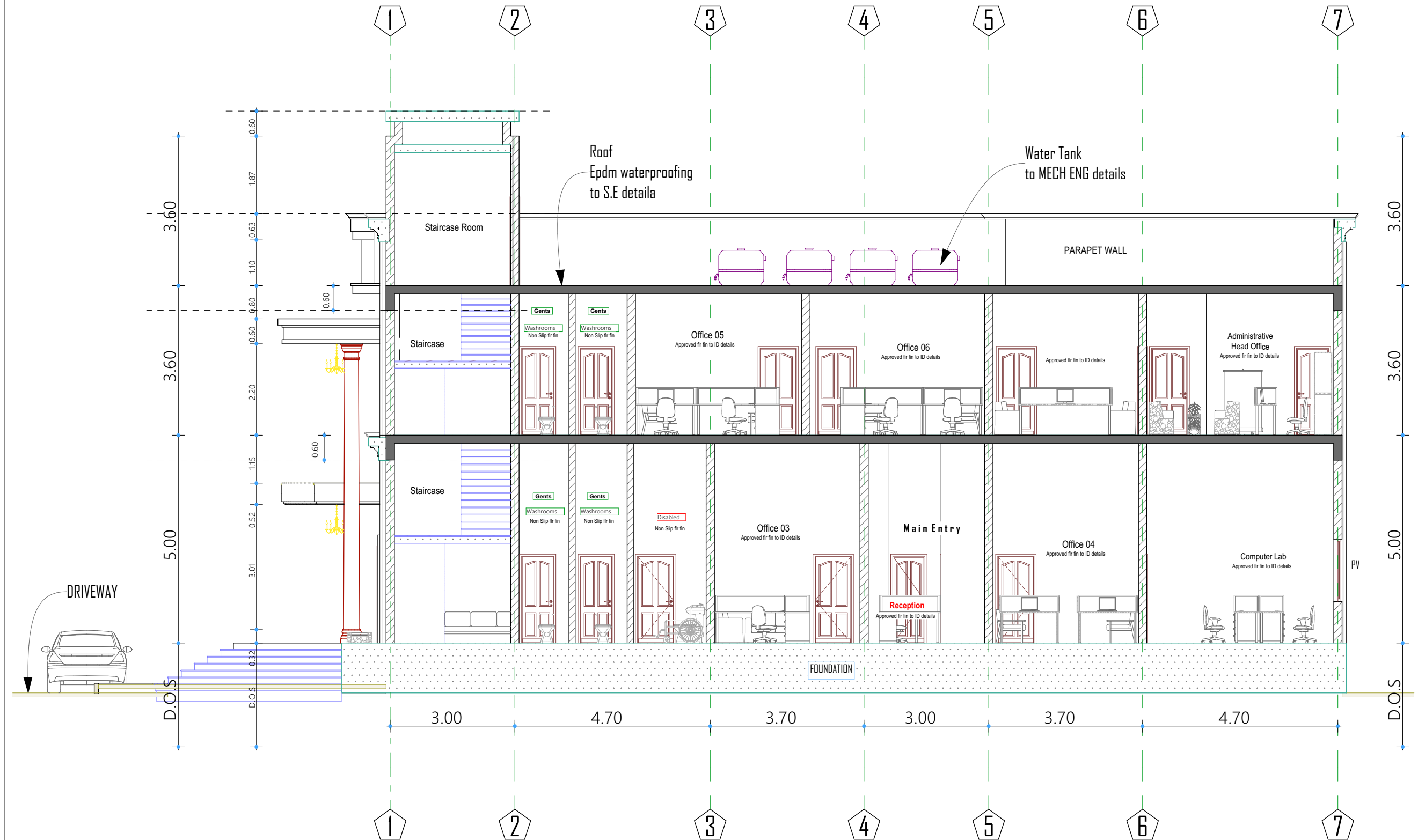
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
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DESIGN REVIEW DRAWINGS

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B

Building Section

1:50.32



FEDERAL GOVERNMENT OF SOMALIA

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REVISIONS

NO	Description	Date

CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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DONOR



PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: 3D View

Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 30/11/2025
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PROJECT NAME:

SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



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SOMALIA ENHANCING RECOURSE PROJECT (SERP)
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FEDERAL GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)

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PROJECT NAME:

SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



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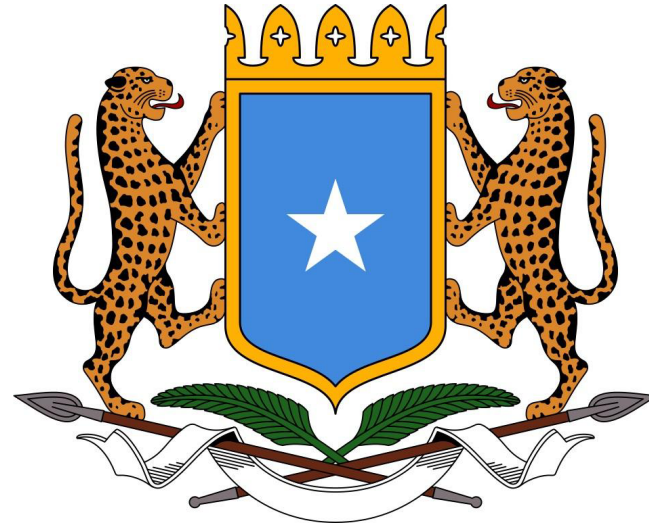
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FEDERAL GOVERNMENT OF SOMALIA

**MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)**

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JOHWAR**

SOMALIA

ELECTRIC DESIGN DRAWINGS



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ELECTRICAL DESIGN DRAWINGS

CLIENT

FEDERAL GOVERNMENT OF SOMALIA

MINISTRY OF FINANCE - PROJECT IMPLEMENTATION UNIT (PIU)

PROJECT

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JOHWAR**

SOMALIA

ELECTRICAL DRAWINGS LIST		
	DRAWING NUMBER	DRAWING TITLE
1	PS/CSC/GSS/DHSMEB/ELE/1	DRAWING LIST,SYMBOLS & ABBREVIATION
2	PS/CSC/GSS/DHSMEB/ELE/2	ELECTRICAL INSTALLATION NOTES
3	PS/CSC/GSS/DHSMEB/ELE/3	GROUND FLOOR - LIGHTING LAYOUT
4	PS/CSC/GSS/DHSMEB/ELE/4	GROUND FLOOR - POWER & ELV LAYOUT
5	PS/CSC/GSS/DHSMEB/ELE/5	GROUND FLOOR - SECURITY LAYOUT
6	PS/CSC/GSS/DHSMEB/ELE/6	GROUND FLOOR - AIR CON LAYOUT
7	PS/CSC/GSS/DHSMEB/ELE/7	FIRST FLOOR - LIGHTING LAYOUT
8	PS/CSC/GSS/DHSMEB/ELE/8	FIRST FLOOR - POWER & ELV LAYOUT
9	PS/CSC/GSS/DHSMEB/ELE/9	FIRST FLOOR - SECURITY LAYOUT
10	PS/CSC/GSS/DHSMEB/ELE/10	FIRST FLOOR - AIR CON LAYOUT
11	PS/CSC/GSS/DHSMEB/ELE/11	SINGLE LINE DIAGRAM - CU-GF, CU-1F
12	PS/CSC/GSS/DHSMEB/ELE/12	INSTALLATION DETAILS

LIGHTING ACCESSORIES

SYMBOL	DESCRIPTION
	10A 1GANG 1WAY SWITCH
	10A 1GANG 2WAY SWITCH
	10A 2GANG 1 WAY SWITCH
	10A 2GANG 2WAY SWITCH
	10A 3GANG 1WAY SWITCH

DATA & SECURITY LEGEND

SYMBOL	DESCRIPTION
	DATA OUTLET
	TELEVISION OUTLET
	WIFI POINT
	TELECOMMS CABINET
	INTERIOR VIDEO INTERCOM
	EXTERIOR VIDEO INTERCOM
	BULLET TYPE CCTV CAMERA
	DOME TYPE CCTV CAMERA
	PTZ TYPE CCTV CAMERA
	WINDOW VIBRATION SENSOR
	SECURITY PANEL
	CARD & BIOMETRIC READER
	EMERGENCY BREAK GLASS
	DOOR EXIT BUTTON
	MAGNETIC LOCK

RETICULATION LEGEND

SYMBOL	DESCRIPTION
	600x600MM POWER MANHOLE
	600x600MM DATA MANHOLE
	Ø100MM POWER DUCT UNLESS OTHERWISE STATED
	Ø100MM DATA DUCT UNLESS OTHERWISE STATED

LIGHT FITTING LEGEND

SYMBOL	DESCRIPTION
	1200MM LED TUBE LIGHT
	WEATHER PROOF 1200MM LED TUBE LIGHT
	12W LED CEILING LIGHT
	LED BATHROOM FITTING
	600*600 LED PANEL LIGHT
	600*600 LED PANEL LIGHT C/W EMERGENCY KIT
	LED SURFACE ROUND FITTING
	LED PENDANT FITTING
	BEDSIDE READING LIGHT FITTING
	MIRROR LIGHT
	LED DECORATIVE PENDANT FITTING
	DECORATIVE LED SCONCE LIGHTS - EXTERNAL
	LED PANEL LIGHT - STAIRCASE AREA
	LED STRIP LIGHT
	DECORATIVE PENDANT / CHANDELIER
	LED PORCH LIGHT
	LED DOWNLIGHTER
	LED DESK LAMP
	LED FLOOR LAMP
	LED 50W FLOOD LIGHT

POWER LEGEND

SYMBOL	DESCRIPTION
	13A TWIN SWITCHED SOCKET OUTLET
	13A TWIN SWITCHED SOCKET OUTLET @ HL
	WEATHER PROOF 13A TWIN SWITCHED SOCKET
	20A DP SWITCH FOR WASHING MACHINE
	20A DP SWITCH FOR INDOOR AIRCONDITION
	20A DP SWITCH FOR BACKUP SOLAR HEATER
	20A DP SWITCH FOR WATER PUMP
	20A DP SWITCH FOR HOOD
	20A DP SWITCH FOR FIRE PLACE
	CONSUMER UNIT
	SHAVER UNIT
	INSTANT SHOWER (PROVISIONAL)
	UNSWITCHED SPUR UNIT
	METALLIC POWER/DATA PEDESTAL OUTLET (4NO. TWIN SWITCHED SOCKET OUTLET 4NO. SINGLE DATA OUTLETS)

LIGHTNING PROTECTION LEGEND

SYMBOL	DESCRIPTION
	MULTIPLE AIR TERMINAL POINT WITH AIR TERMINAL BASE
	COMPENSATOR OF EARTH POTENTIAL TERMINAL BLOCK
	EARTH TERMINATION / INSPECTION PIT
	EARTH MAT

ABBREVIATIONS

ABBREV.	DESCRIPTION
HG	HEAVY GAUGE
PVC	POLYVINYL CHLORIDE
BT	BOTTOM ENTRY
TT	TOP ENTRY
CIR	CIRCUIT
TPN	TRIPLE POLE AND NEUTRAL
SPN	SINGLE POLE AND NEUTRAL
CU	CONSUMER UNIT
SQ MM	SQUARE MILLIMETRE
SWA	STEEL WIRE ARMoured
AFFL	AFTER FINISHED FLOOR LEVEL / ABOVE FINISHED FLOOR LEVEL
MCB	MINIATURE CIRCUIT BREAKER
MCCB	MOULDED CASE CIRCUIT BREAKER
CP	CONTROL PANEL
A	AMPERE
KVA	KILOVOLT AMPERE
V	VOLT
UPS	UNINTERRUPTED POWER SUPPLY
HD	HEAT DETECTOR
SD	SMOKE DETECTOR
SP	SPEAKER
TS	TIME SWITCH
AB	ADAPTABLE BOX
JB	JUNCTION BOX
HM	HEAT MOTION DETECTOR
BG	BREAK GLASS
H / L	HIGH LEVEL
CCU	COOKER CONTROL UNIT
NTS	NOT TO SCALE
ELV	EXTRA LOW VOLTAGE
HG	HEAVY GAUGE
GI	GALVANISED IRON
AWTL	ABOVE WORKTOP LEVEL
DB	DISTRIBUTION BOARD
LV	LOW VOLTAGE
MM	MILLIMETRE
CD	CONCEPT DESIGN
DD	DETAILED DESIGN
WD	WORKING DRAWING
ASD	AS BUILT DRAWINGS



FEDERAL GOVERNMENT OF SOMALIA

GENERAL NOTES

1. ALL DIMENSIONS ARE IN METERS, UNLESS OTHERWISE STATED.
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3. WRITTEN DIMENSIOS OVERRIDES SCALED DIMENSIOS, THUS ALL DIMENSIONS ARE TO BE READ AND NOT AT ANY TIME SCALED FROM THE DRAWING.
4. ANY DISCREPANCY TO BE REPORTED TO THE TROPIX ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECOARDING.

REVISIONS

NO	Description	Date

CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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DONOR



PROJECT NAME:

SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: DRAWING LIST AND
LEELEGEND OF SYMBOLS

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	

1.0 GENERAL

1.1 THE DESIGN DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATIONS AND ARCHITECTURAL, STRUCTURAL, CIVIL & MECHANICAL DRAWINGS AND SPECIFICATIONS.

1.2 THESE NOTES ARE GENERALLY APPLICABLE TO THE OVERALL SYSTEMS INSTALLATION. ANY ADDITIONAL NOTES ON INDIVIDUAL DRAWINGS WHICH ARE SUPPLEMENTARY TO THESE NOTES SHALL BE READ WITH THE INSTRUCTIONS STATED HEREIN.

1.3 THE FINAL POSITION OF ALL EQUIPMENT, PANELS, LUMINAIRES, DETECTORS, SWITCHES, OUTLETS AND OTHER ACCESSORIES SHALL BE COORDINATED WITH THE ARCHITECTURAL, MECHANICAL AND INTERIOR DESIGN DETAILS AND WILL BE APPROVED AT SITE BY THE ENGINEER.

1.4 UNLESS OTHERWISE SPECIFIED ALL EQUIPMENT AND MATERIALS TO BE USED SHALL BE SUITABLE AND RATED FOR THE SITE AMBIENT CONDITIONS.

1.5 ALL ELECTRICAL WORKS SHALL COMPLY WITH THE RELEVANT MINISTRY OF PUBLIC WORKS REGULATIONS, LATEST EDITION OF IEE WIRING REGULATIONS, INTERNATIONAL ELECTRO-TECHNICAL COMMISSION (IEC) STANDARDS AND ISO RECOMMENDATIONS.

1.6 THE INSTALLATION SHALL COMPLY IN ALL RESPECTS TO THE REQUIREMENTS OF THE MANUFACTURERS AND THE CODES REFERRED IN THE SPECIFICATIONS.

1.7 ANY EQUIPMENT DIMENSIONS AND ELECTRICAL LOAD STATED ON THE DRAWINGS SHALL BE COORDINATED/CONFIRMED WITH THE ACTUAL DIMENSIONS AND ACTUAL ELECTRICAL LOAD OF EQUIPMENT FROM RESPECTIVE MANUFACTURER(S).

1.8 ALL MATERIALS AND EQUIPMENT MUST BE OF THE BEST QUALITY AND ACCORDING TO THE LATEST INTERNATIONAL STANDARDS. THE CONTRACTOR SHALL SUBMIT SAMPLES AND CATALOGUES OF ALL MATERIALS AND OBTAIN ENGINEER'S APPROVAL BEFORE THE COMMENCEMENT OF ANY WORK.

1.9 IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO LIASE WITH THE LOCAL ELECTRICITY SUPPLY AUTHORITY FOR THE ELECTRICITY SUPPLY CONNECTION TO THE FACILITY AND MAKE PROVISIONS IN INSTALLATION TO SATISFY THEIR REQUIREMENTS. THE SERVICES PROVIDED SHALL CONFORM IN ALL RESPECTS WITH THE LOCAL CODES AND REGULATIONS.

1.10 IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO LIASE WITH LOCAL TELEPHONE AUTHORITY FOR THE REQUIRED TELEPHONE LINES TO THE FACILITY AND MAKE PROVISIONS IN INSTALLATION TO SATISFY THEIR REQUIREMENTS. THE SERVICES PROVIDED SHALL CONFORM IN ALL RESPECTS WITH THEIR STANDARDS/REGULATIONS.

1.11 THE LIGHTING, POWER AND LOW CURRENT SYSTEMS SHALL BE INSTALLED SEPARATELY FROM EACH OTHER. i.e. CONDUITS, RACEWAYS, WIRES, BOXES, ETC.

1.12 CABLE SIZES, MCB's,MCCBs AND ISOLATORS SHOWN ON THE DRAWINGS ARE BASED ON DESIGNED LOADS. THE CONTRACTOR SHALL PROVIDE THE SIZE OF CABLE, MCB, MCCB AND ISOLATOR BASED ON ACTUAL LOADS OF THE EQUIPMENT APPROVED BY THE ENGINEER

1.13 FOR SPECIAL SYSTEMS, THE CONTRACTOR IS TO SUBMIT SHOP DRAWINGS PREPARED BY SPECIALISTS EXPERIENCED IN THE DESIGN OF THE RELEVANT SYSTEMS AND AS PER THE MANUFACTURERS REQUIREMENTS.

2.0 CABLES

2.1 ALL WIRES AND CABLES SHALL BE STRANDED COPPER CONDUCTORS, PVC INSULATED COMPLYING WITH BS EN 50525:2011 OR XLPE INSULATED AS PER IEC 60502 AS SHOWN ON DRAWINGS OR SCHEDULES, EXCEPT FOR INFLAMMABLE / EXPLOSIVE AND OTHER EXCEPTIONAL SITUATIONS.

2.2 COLOUR CODE OF ELECTRICAL WIRES AND CABLES SHALL BE RED, YELLOW, BLUE, BLACK AND GREEN/YELLOW FOR L1, L2, L3, NEUTRAL AND EARTH RESPECTIVELY IN A THREE PHASE CONFIGURATION.

2.3 THE CONDUCTOR SIZES FOR ALL CABLES SHALL BE IN ACCORDANCE WITH THE PANEL BOARD/CABLE SCHEDULES AND SINGLE LINE DIAGRAMS.

2.4 THE MINIMUM SIZE OF ALL CIRCUIT CONDUCTORS SHALL BE COORDINATED WITH THE STARTING AND OPERATING CHARACTERISTICS OF THE EQUIPMENT THEY SERVE.

2.5 UNLESS OTHERWISE INDICATED, MINIMUM WIRE SIZE SHALL BE 1.5MM² FOR LIGHTING AND 2.5MM² FOR POWER.

2.6 LIGHTING AND SMALL POWER INSTALLATIONS SHALL BE CARRIED OUT USING SINGLE CORE PVC INSULATED WIRES IN RIGID PVC CONDUITS EMBEDDED IN CONCRETE.

2.7 ALL MULTICORE CABLES INSIDE THE BUILDING SHALL BE INSTALLED ON CABLE TRAYS OR CABLE LADDERS. RAISED SUN SHADES (COVERS) SHALL BE PROVIDED FOR ALL ROOF MOUNTED CABLE TRAYS/LADDERS.

2.8 THE WIRES/CABLES FOR LV CIRCUITS INSIDE BUILDINGS SHALL BE INSTALLED AT A MINIMUM DISTANCE OF 300MM FROM HOT WATER LINES AND 150MM FROM OTHER SERVICE PIPES.

2.9 WHERE EXTERNAL CABLES ARE DIRECT BURIED IN THE GROUND, THESE SHALL RUN THROUGH UNDERGROUND CONCRETE ENCASED UPVC DUCTS WHEN PASSING UNDER ROADS AND BUILDINGS.

3.0 CONDUITS, CABLE TRAYS AND TRUNKING

3.1 THE MINIMUM SIZE OF CONDUIT USED FOR ANY SYSTEM WIRING SHALL BE 20MM INTERNAL DIAMETER.

3.2 PVC CONDUITS SHALL BE HEAVY GAUGE, POLISHED AND SMOOTH INSIDE AND OUTSIDE, FLAME-RETARDANT AND SUITABLE FOR USE AT AMBIENT TEMPERATURE OF 50°C.

3.3 RIGID STEEL CONDUITS (RSC) SHALL BE HEAVY GAUGE, HOT DIP GALVANIZED TO CLASS 4 PROTECTION BOTH INSIDE AND OUTSIDE.

3.4 ALL PVC BOXES SHALL BE RIGID, FLAME-RETARDANT, SMOOTH AND ACCORDING TO LATEST STANDARDS/SPECIFICATIONS.

3.5 ALL STEEL BOXES SHALL BE HEAVY GAUGE, HOT DIP GALVANIZED ACCORDING TO LATEST STANDARDS/SPECIFICATIONS.

3.6 BRASS BUSHINGS AND RINGS SHALL BE USED TO SECURE STEEL CONDUITS WITH STEEL BOXES.

3.7 ALL STEEL COUPLERS SHALL BE PAINTED SUITABLY, IMMEDIATELY AFTER INSTALLATION.

3.8 NO CONDUIT RUN SHALL BE LONGER THAN 15M (STRAIGHT) OR WITH MORE THAN TWO 90° BENDS, OTHERWISE IT MUST BE PASSED THROUGH PULL OR DRAW BOX SUFFICIENT TO PERMIT EASY PULLING OF WIRES.

3.9 THE TOTAL FILL OF THE WIRES DRAWN IN CONDUIT SHALL BE AS PER IEE REGULATIONS AND NORMALLY NOT TO EXCEED 40% OF THE INTERNAL CROSS-SECTIONAL AREA OF THE CONDUIT.

3.10 ALL CONDUITS AND RECEWAYS PASSING THROUGH THE BUILDING EXPANSION JOINTS SHALL BE PROVIDED WITH EXPANSION JOINT COUPLING AND EXECUTED AS PER STANDARD DETAILS, APPROVED BY THE ENGINEER ON SITE.

3.11 ALL BENDS IN DUCTS, CONDUITS AND OTHER RACEWAYS SHALL BE SUITABLE TO ALLOW MINIMUM CABLE BENDING RADIUS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

3.12 ALL ENDS OF BURIED DUCTS AND CONDUITS SHALL HAVE BELL MOUTH PIPE ENDS AND SHALL BE SEALED BY A PROPRIETARY PIPE SEALING PRODUCT.

3.13 CABLE LADDERS AND CABLE TRAYS SHALL BE INSTALLED WHERE NECESSARY AND ARE NOT LIMITED TO WHAT IS SHOWN ON THE DRAWINGS. WIDTH, LENGTH, NUMBERS AND ROUTES OF CABLE TRAYS, LADDERS, PIPES AND OTHER CABLE RACEWAYS SHALL BE SHOWN ON SHOP DRAWINGS AS PER STANDARDS FOR APPROVAL.

3.14 WHERE OPENINGS ARE PROVIDED IN STRUCTURE TO CROSS CABLE TRAYS, PIPES, ETC., THE OPENING SHALL BE SEALED BY FIRE STOP MATERIAL SUITABLY RATED, AFTER INSTALLATION OF CABLES.

3.15 CONDUITS SHALL BE LAID WITH A SLOPE OF 1:100 SO THAT NO MOISTURE MAIN CONDENSE THEREIN.

4.0 WIRING DEVICES

4.1 THE LOCATION OF ALL SWITCHES, OUTLETS AND OTHER WIRING DEVICES SHALL BE COORDINATED WITH THE FURNITURE LAYOUTS/ID DRAWINGS ON SITE.

4.2 MOUNTING HEIGHTS FOR SWITCHES, SOCKETS, ETC., FROM THE CENTRE OF THE DEVICE TO ABOVE FINISHED FLOOR LEVEL SHALL BE AS FOLLOWS, UNLESS OTHERWISE SPECIFIED OR DIRECTED BY THE ENGINEER:

- SWITCHES 1250MM AFFL
- SOCKETS (STANDARD) 450MM AFFL
- SOCKETS (HIGH LEVEL TV) 1250MM AFFL OR AS INDICATED
- SOCKETS (KITCHENETTE) 300MM AFFL
- SOCKETS (KITCHENETTE) 250MM ABOVE WORK TOP
- ISOLATORS/DISCONNECT SWITCHES 1600MM AFFL
- DISTRIBUTION BOARDS (TOP OF DB) 1850MM AFFL
- FIRE ALARM PANEL (MID OF PANEL) 1600MM AFFL

4.3 THE ELECTRICAL CONTRACTOR SHALL INDICATE THE EXACT LOCATION, HEIGHTS OF ALL OUTLETS ON HIS WORK SHOP DRAWINGS AFTER COORDINATING WITH THE EQUIPMENT SPECIALIST CONTRACTOR'S DETAIL DRAWINGS.

4.4 ALL SOCKET OUTLETS LOCATED ABOVE WORKTOPS SHALL BE MOUNTED 1200MM ABOVE FINISHED FLOOR LEVEL OR 300MM ABOVE WORK TOP AS APPROVED ON SITE.

4.5 WHERE OUTLET IS PROVIDED FOR CONNECTION TO A FIXED APPLIANCE BY MEANS OF A FLEXIBLE CABLE, THE RESPECTIVE OUTLET SHALL BE POSITIONED AS CLOSE AS PRACTICABLE TO THE CABLE ENTRY OF THE FIXED APPLIANCE.

4.6 ALL ELECTRICAL OPERATED PLANT AND EQUIPMENT SHALL BE PROVIDED WITH MEANS OF LOCAL ISOLATION INSTALLED AS CLOSE AS POSSIBLE TO THE EQUIPMENT BEING SERVED.

4.7 FOR EXACT LOCATION OF ISOLATORS AND DISCONNECT SWITCHES FOR PUMPS, AHUS, MCCS AND OTHER MECHANICAL/HVAC EQUIPMENT, THE CONTRACTOR SHALL COORDINATE WITH MECHANICAL WORKS.

4.8 ISOLATORS FOR HVAC EQUIPMENT SHALL BE HEAVY DUTY 'ON-LOAD' TYPE AND SUITABLY RATED, TAKING INTO CONSIDERATION NORMAL AND STARTING CURRENTS OF THE EQUIPMENT AND THE AMBIENT TEMPERATURE OF THE OPERATING AREA.

4.9 ALL ISOLATORS/EQUIPMENT INSTALLED IN WET AND/OR POSSIBLE WET LOCATIONS SUCH AS TOILETS, PUMP ROOMS, ROOF, EXTERNAL/EXPOSED AREAS, ETC. SHALL BE WEATHERPROOF TYPE TO APPROPRIATE IP RATING (MINIMUM IP-54).

5.0 SWITCHGEAR / DISTRIBUTION BOARDS

5.1 ALL LIGHTING AND POWER DISTRIBUTION BOARDS (DB) SHALL BE FLUSH MOUNTED TYPE IN ALL PUBLIC AND CIRCULATION AREAS AND SURFACE MOUNTED IN ELECTRICAL/MECHANICAL AND PLANT ROOMS, UNLESS OTHERWISE INDICATED. THESE SHALL BE PROVIDED WITH LOCKABLE DOORS.

5.2 THE TOTAL LOAD ON THE THREE PHASES SHALL BE BALANCED AS EVENLY AS PROVIDED ON ALL SWITCHGEAR AND DISTRIBUTION BOARDS.

5.3 MINIATURE CIRCUIT BREAKERS (MCB) WITH APPROPRIATE SHORT CIRCUIT CURRENT RATING SHALL BE PROVIDED FOR LIGHTING, SWITCHED SOCKET OUTLETS, ELECTRIC WATER HEATERS/COOLERS, REFRIGERATORS, COOKERS, DOMESTIC WATER PUMPS AND SIMILAR EQUIPMENT.

5.4 THE OVERALL POWER FACTOR OF EVERY ELECTRICAL SUBSTATION SHALL BE MAINTAINED WITHIN THE RANGE OF 0.9 LAGGING AND UNITY. PROVIDE AUTOMATIC P.F. IMPROVEMENT PLANT.

5.5 THE CONTRACTOR HAS TO CHECK THE PHYSICAL DIMENSION OF THE PANELS WITH THE SPACE AVAILABILITY PRIOR TO PLACING THE ORDER. DRAWINGS FOR PANELS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

6.0 LIGHTING

6.1 ALL LIGHTING FIXTURES SHALL BE LED.

6.2 ALL WIRING FOR LIGHTING INSTALLATIONS SHALL FOLLOW "LOOP-IN" SYSTEM.

6.3 ALL SELF CONTAINED TYPE EMERGENCY/EXIT LIGHTING FIXTURES SHALL BE PROVIDED WITH CHARGER/INVERTER MODULE AND BATTERY BACK-UP FOR A MINIMUM OF 3 HOURS CONTINUOUS OPERATION AND TO BE COMPATIBLE WITH EMERGENCY LIGHTING SYSTEM.

6.4 ALL LIGHTING FIXTURES SHALL BE PROVIDED WITH POWER SUPPLY.

7.0 EARTHING AND GROUNDING

7.1 PROVIDE COMPLETELY INDEPENDENT AND CLEAN EARTHING SYSTEM FOR LOW CURRENT/COMMUNICATION SYSTEMS, WHEN REQUIRED AS PER MANUFACTURER'S RECOMMENDATIONS OR LOCAL AUTHORITY REGULATIONS.

7.2 A SEPARATE GROUNDING CONDUCTOR SHALL BE RUN WITH EACH CIRCUIT. ALL LIGHTING FIXTURES, RECEPTACLES, SWITCHES, METALLIC JUNCTION BOXES AND FITTINGS SHALL BE EFFECTIVELY AND PROPERLY EARTHED.

7.3 EARTH CONTINUITY CONDUCTORS AND BONDING CONDUCTORS SHALL BE SINGLE CORE, PVC INSULATED.

7.4 EARTHING CONDUCTOR OF THE RESPECTIVE CIRCUIT SHALL RUN IN THE SAME TRENCH/PIPE/TRUNKING OR ON SAME CABLE TRAY / LADDER AS THE ASSOCIATED CABLE.

7.5 EXTRANEOUS METALWORK AS METALLIC PIPES, DUCTING, CABLE TRAYS, METALWORK IN TOILETS, ETC. SHALL BE BONDED TO EARTHING SYSTEM BY PVC INSULATED CABLE IN ACCORDANCE WITH APPLICABLE STANDARDS.

8.0 GENERATORS/MOTORS/MECHANICAL

8.1 THE CONTROLS OF STANDBY GENERATOR FEEDING FIRE PUMPS SHALL BE SO ARRANGED THAT THE GENERATOR SHALL CONTINUE RUNNING WHEN FM200 OR CO2 GAS (FOR FIRE SUPPRESSION) IS RELEASED, UNLESS THE GENERATOR IS MANUALLY SHUTDOWN. A MANUAL SHUTDOWN SWITCH SHALL BE PROVIDED NEAR THE DOOR FOR SUCH GENERATOR.

8.2 ALL ROTATING MACHINERY OPERATED THROUGH STARTER SHALL HAVE A NO VOLTAGE RELEASE INCORPORATED WITHIN ITS STARTER PANEL.

8.3 ALL HVAC UNITS/PLANT/EQUIPMENT SUCH AS FCU'S, AHU'S, CONDENSING UNITS, CHILLERS, ETC. SHALL BE CONNECTED VIA SUITABLE ISOLATORS AND CONNECTION BOXES INSTALLED CLOSE TO THEM. PROVIDE UNDER VOLTAGE RELAYS AND AUTO RESET TIMER WITH ADJUSTABLE TIME SETTING BETWEEN 5 AND 10 MINUTES, FOR EACH UNIT.

9.0 ELV SYSTEMS

9.1 ACTIVATION OF THE FIRE ALARM SYSTEM SHALL START AND SHUTDOWN HVAC PLANT, AS PER HVAC SPECIFICATIONS AND DRAWINGS. PROPER COORDINATION BETWEEN THE TWO SYSTEMS SHALL BE CARRIED OUT DURING EXECUTION.

9.2 ALL LOW CURRENT SYSTEMS WIRING AND CABLES SHALL BE AS PER THE SPECIFICATIONS AND MANUFACTURER'S/SUPPLIER'S RECOMMENDATIONS.

9.3 ALL CABLING/WIRING SERVING THE LIFE SAFETY SYSTEMS SUCH AS FIRE ALARM, SMOKE MANAGEMENT, FIRE PUMPS, ETC., SHALL BE THREE HOURS FIRE RATED AS PER NFPA.

9.4 SEPARATE CONDUIT SHALL BE RUN FOR EACH LOW CURRENT SYSTEM. MINIMUM SIZE OF CONDUIT SHALL BE 20mm DIA.

9.5 ALL LOW CURRENT CABLES SHALL BE LAID AT A DISTANCE OF NOT LESS THAN 300MM FROM LOW VOLTAGE POWER CABLES AND 600MM FROM MEDIUM VOLTAGE POWER CABLES.

9.6 ALL FIRE ALARM SYSTEM INSTALLATIONS INCLUDING WIRING AND DEVICES SHALL BE IN ACCORDANCE WITH NFPA 72 AND LOCAL CIVIL DEFENSE REQUIREMENTS.

9.7 ALL TELEPHONE AND DATA SYSTEM INSTALLATIONS INCLUDING WIRING AND DEVICES SHALL BE IN ACCORDANCE WITH EIA/TIA REGULATIONS AND LOCAL AUTHORITY REQUIREMENTS.

10.0 LIGHTNING PROTECTION SYSTEM

10.1 ALL LIGHTNING PROTECTION SYSTEMS TO CONFORM TO THE LATEST EDITIONS OF BS EN 62305 AND BS EN 50164.

10.2 ALL GROUNDING (EARTHING) SYSTEMS TO CONFORM TO THE LATEST EDITION OF BS 7430.

10.3 ALL ARRESTORS, CONDUCTORS AND EARTH RODS / EARTH MATS TO BE OF PURE COPPER



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REVISIONS

NO	Description	Date

CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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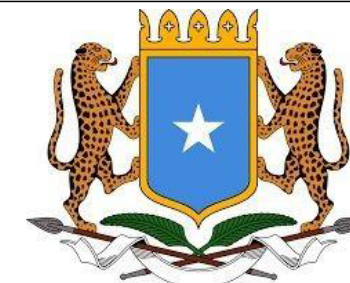
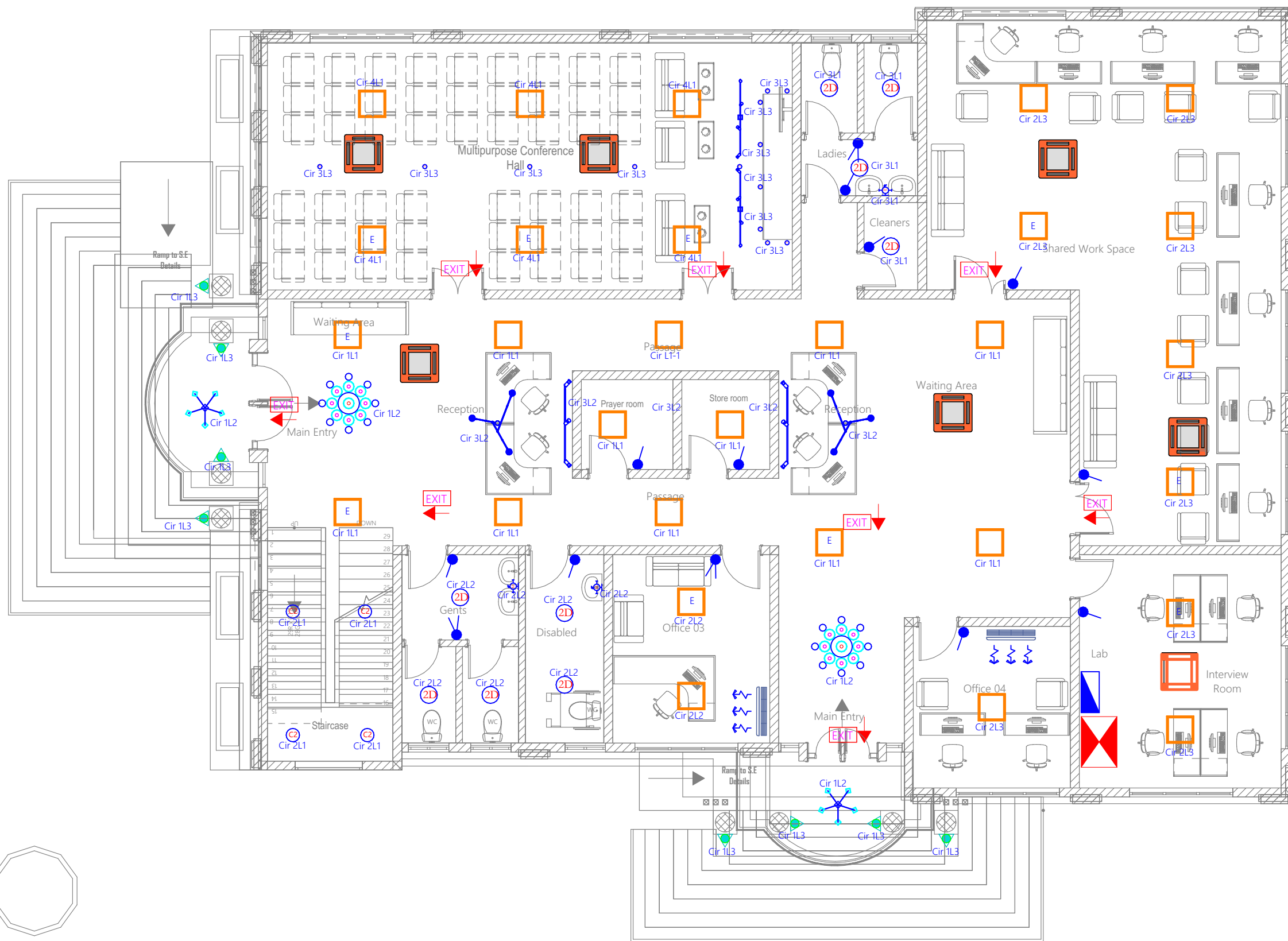
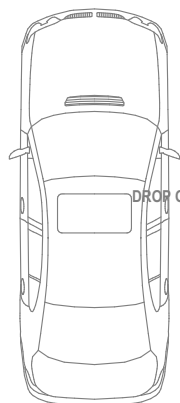
DONOR

PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: ELECTRIC NOTES			
Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / / 2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
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THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: LIGHTING LAYOUT GROUND FLOOR

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / / 2025
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REVISIONS

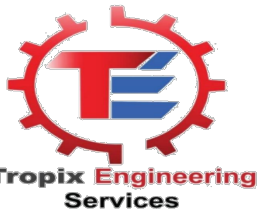
NO	Description	Date

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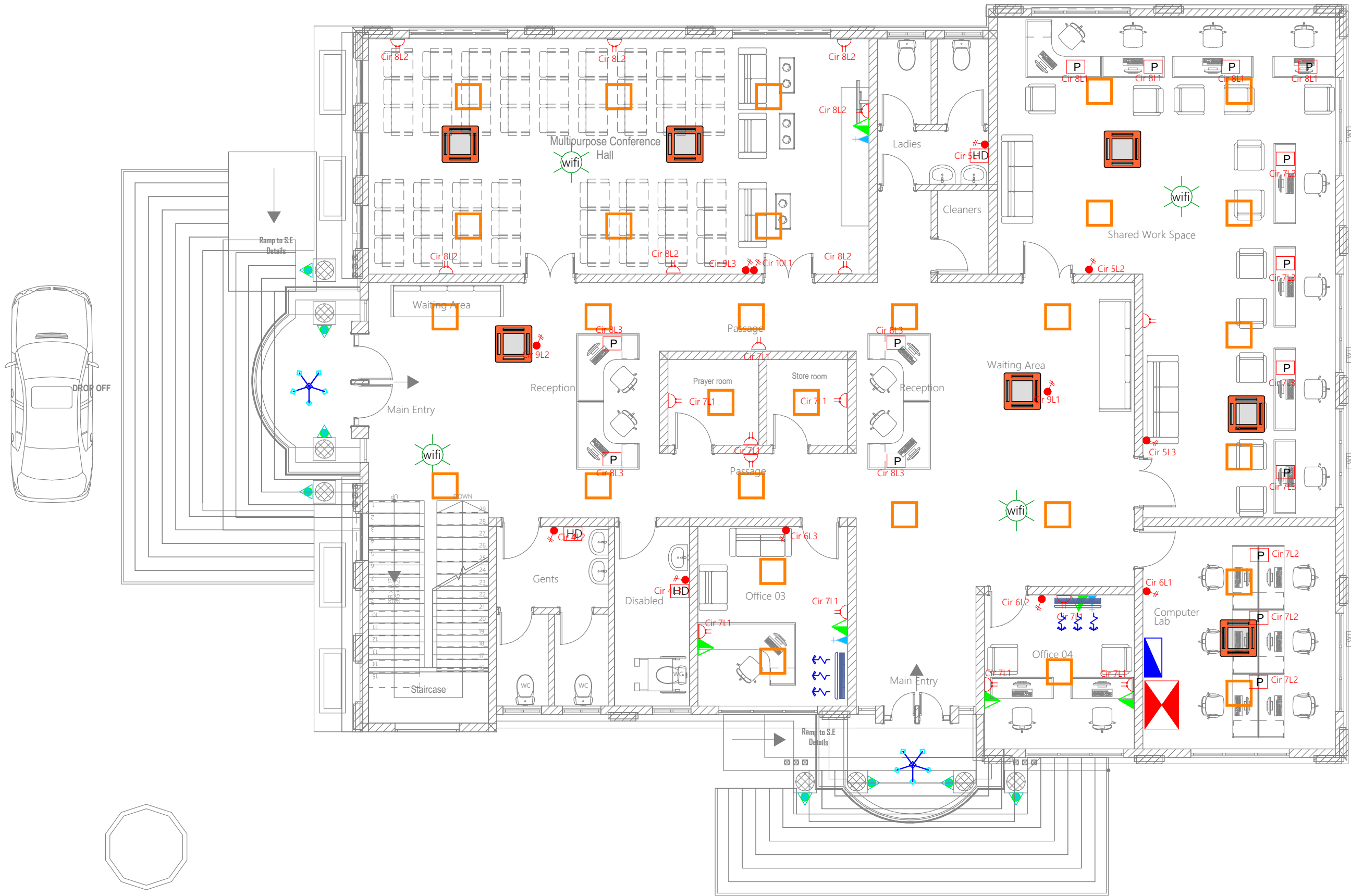
PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA

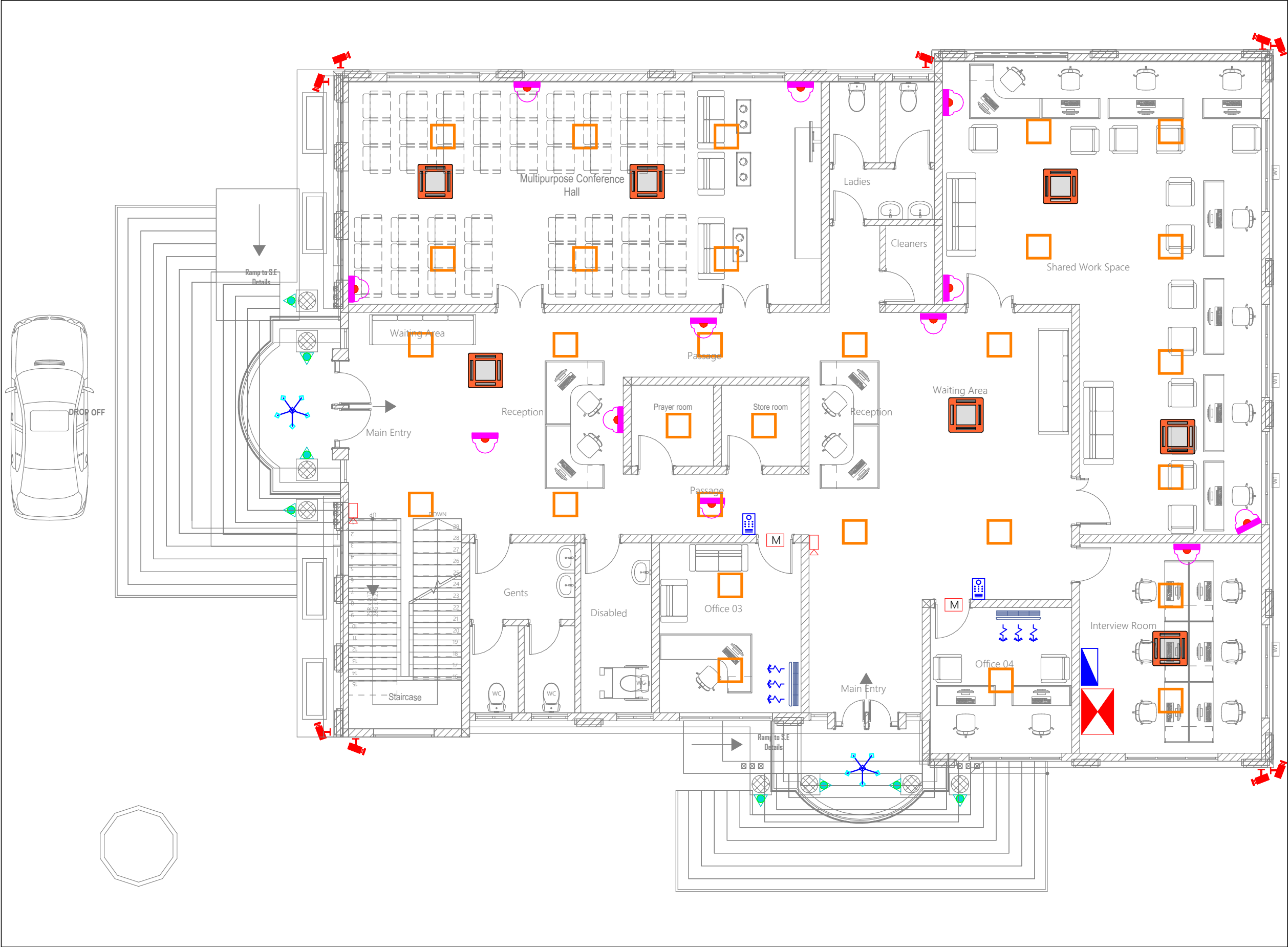


DESIGN REVIEW DRAWINGS

DRAWING TITLE: POWER AND DATA LAYOUT
GROUND FLOOR

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
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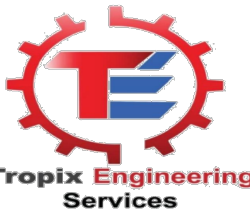
NO	Description	Date

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PROJECT COORDINATION UNIT (PCU)

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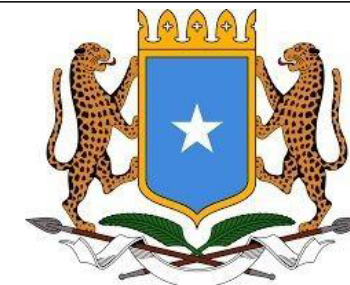
PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: SECURITY LAYOUT GROUND FLOOR

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
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REVISIONS

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CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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PROJECT NAME:

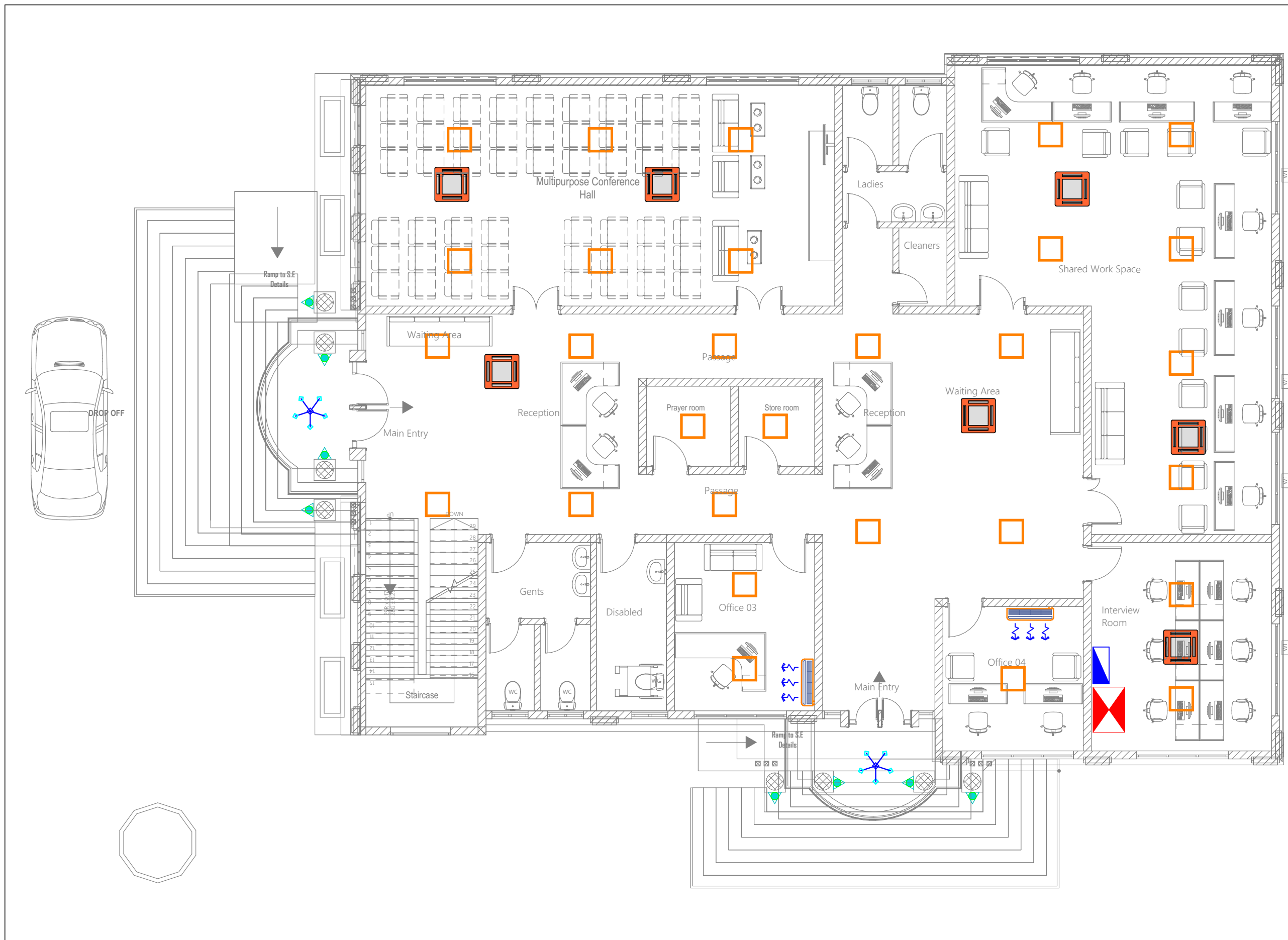
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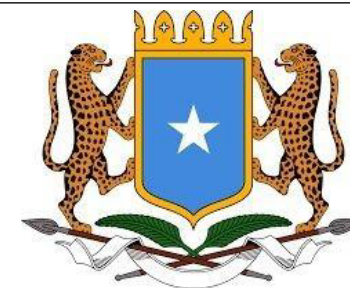


DESIGN REVIEW DRAWINGS

DRAWING TITLE: AIR CONDITIONING LAYOUT
GROUND FLOOR

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
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3. WRITTEN DIMENSIOIS OVERRIDES SCALED DIMENSIOS, THUS ALL DIMENSIONS ARE TO BE READ AND NOT AT ANY TIME SCALED FROM THE DRAWING.
4. ANY DISCREPANCY TO BE REPORTED TO THE TROPIX ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECOORDING.

REVISIONS

NO	Description	Date

CLIENT

FEDERAL GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)

DONOR



PROJECT NAME:

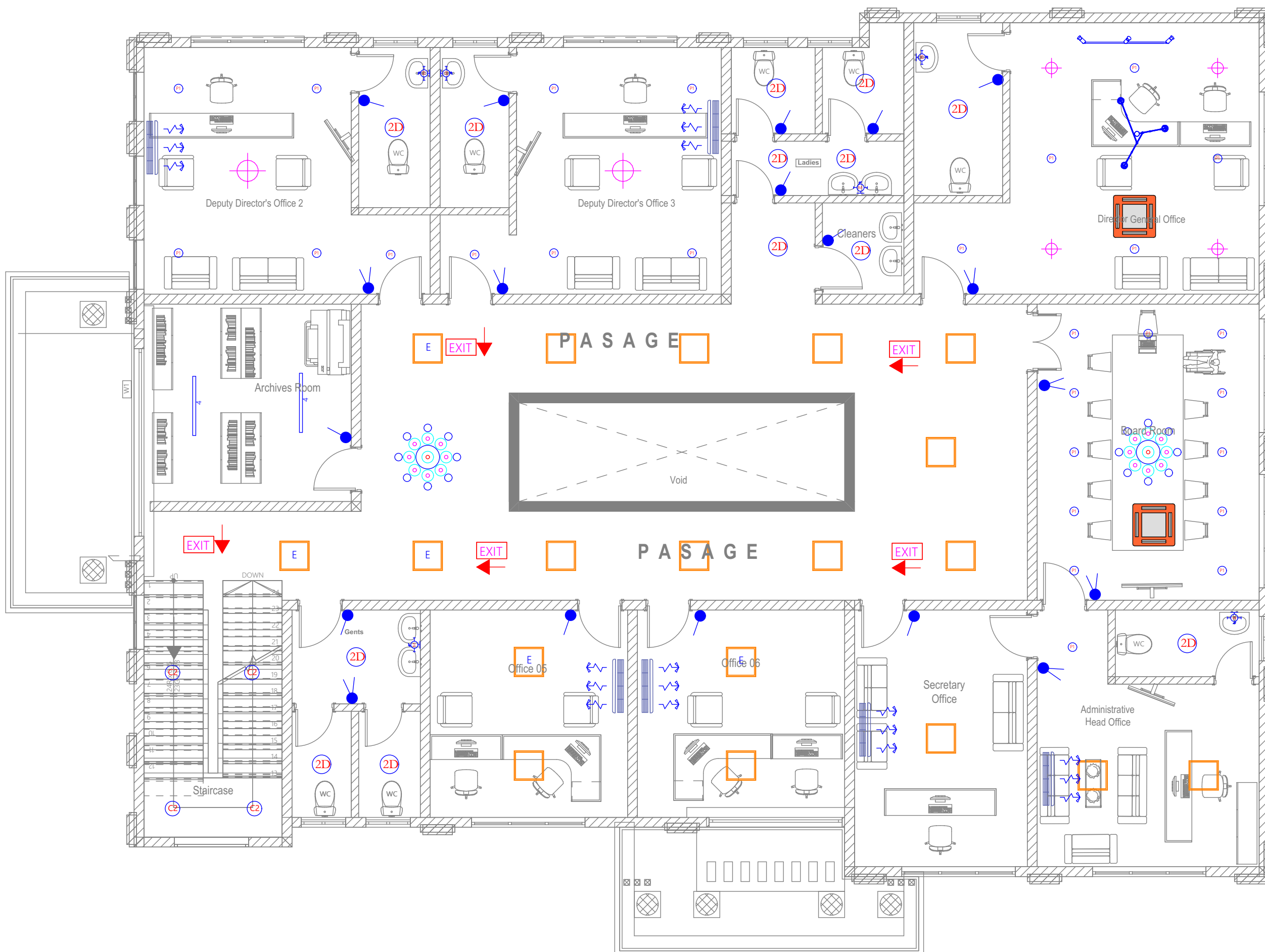
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: LIGHTING LAYOUT FIRST FLOOR

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringsservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	





FEDERAL GOVERNMENT OF SOMALIA

GENERAL NOTES

1. ALL DIMENSIONS ARE IN METERS, UNLESS OTHERWISE STATED.
2. ALL DIMENSIONS TO BE CHECKED AND CONFIRMED ON SITE BEFORE COMMENCEMENT OF ANY WORK.
3. WRITTEN DIMENSIO S OVERRIDES SCALED DIMENSIO S, THUS ALL DIMENSIONS ARE TO BE READ AND NOT AT ANY TIME SCALED FROM THE DRAWING.
4. ANY DISCREPANCY TO BE REPORTED TO THE TROPIX ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECOORDING.

REVISIONS

NO	Description	Date

CLIENT

FEDERAL GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)

DONOR



PROJECT NAME:

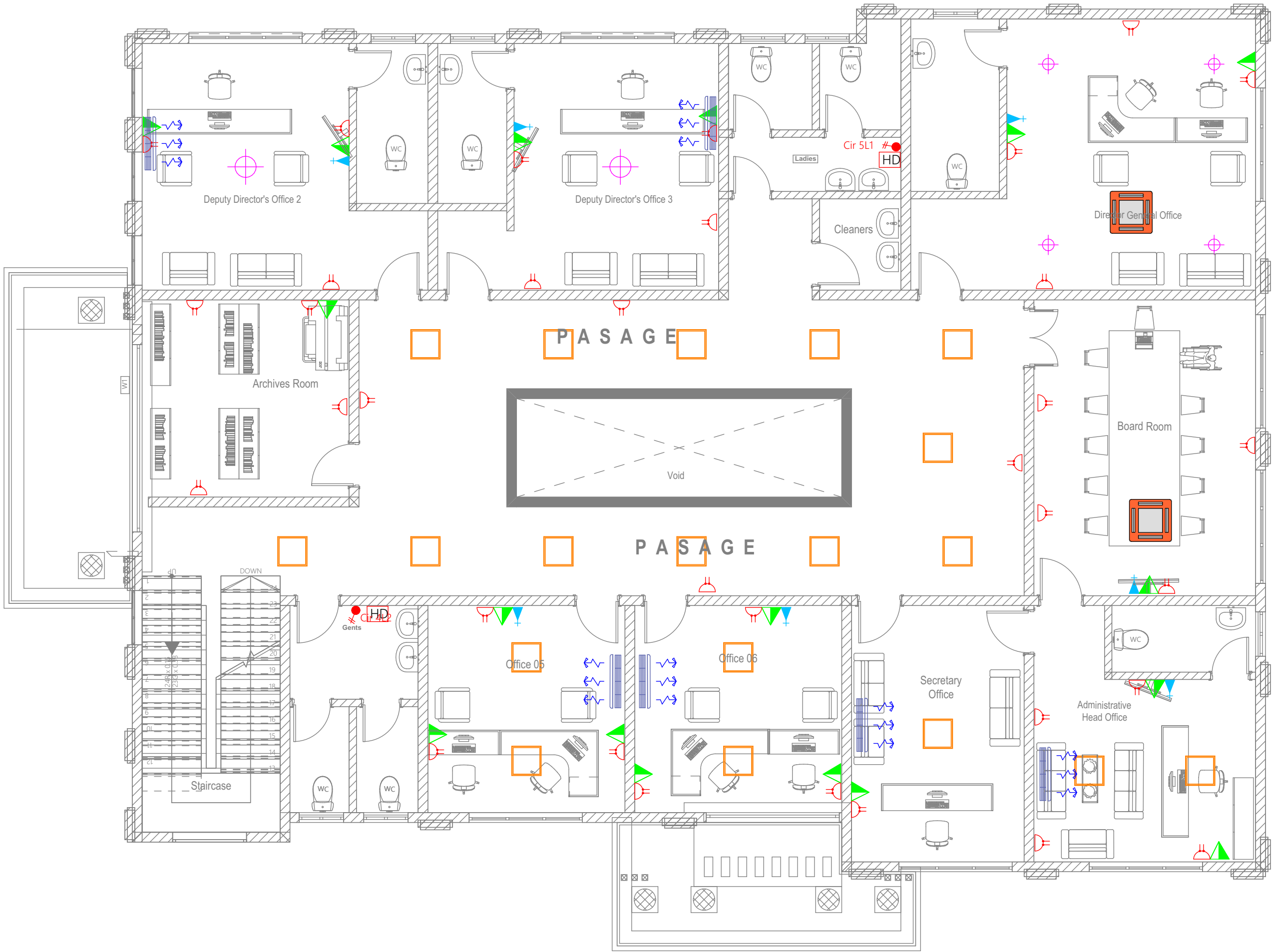
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: POWER AND DATA LAYOUT
FIRST FLOOR

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	





FEDERAL GOVERNMENT OF SOMALIA

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4. ANY DISCREPANCY TO BE REPORTED TO THE TROPIX ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECORADING.

REVISIONS

NO	Description	Date

CLIENT
FEDERAL GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)

DONOR



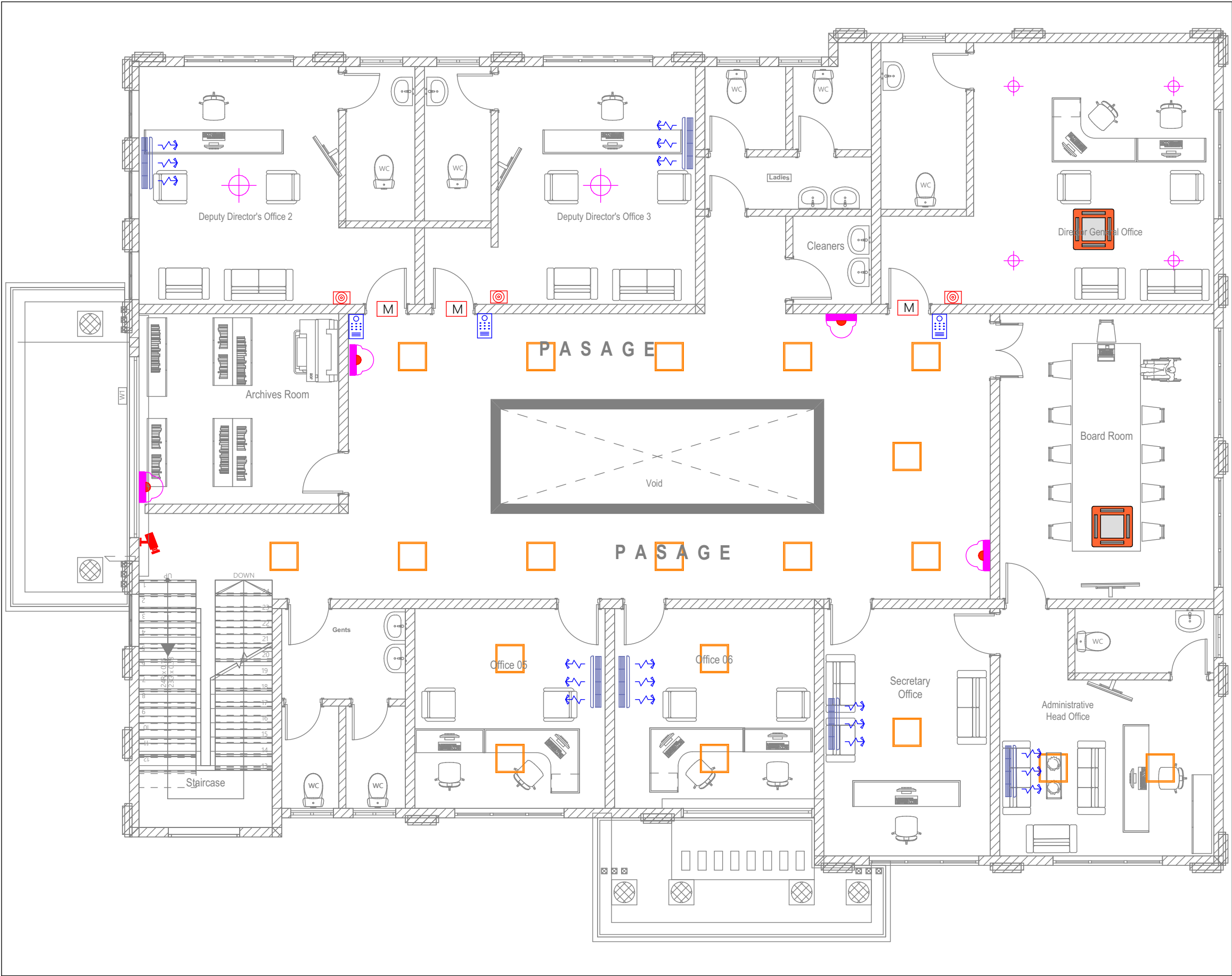
PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: SECURITY LAYOUT
FIRST FLOOR

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	





FEDERAL GOVERNMENT OF SOMALIA

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4. ANY DISCREPANCY TO BE REPORTED TO THE TROPICX ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECORDDING.

REVISIONS

NO	Description	Date

CLIENT
FEDERAL GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)

DONOR



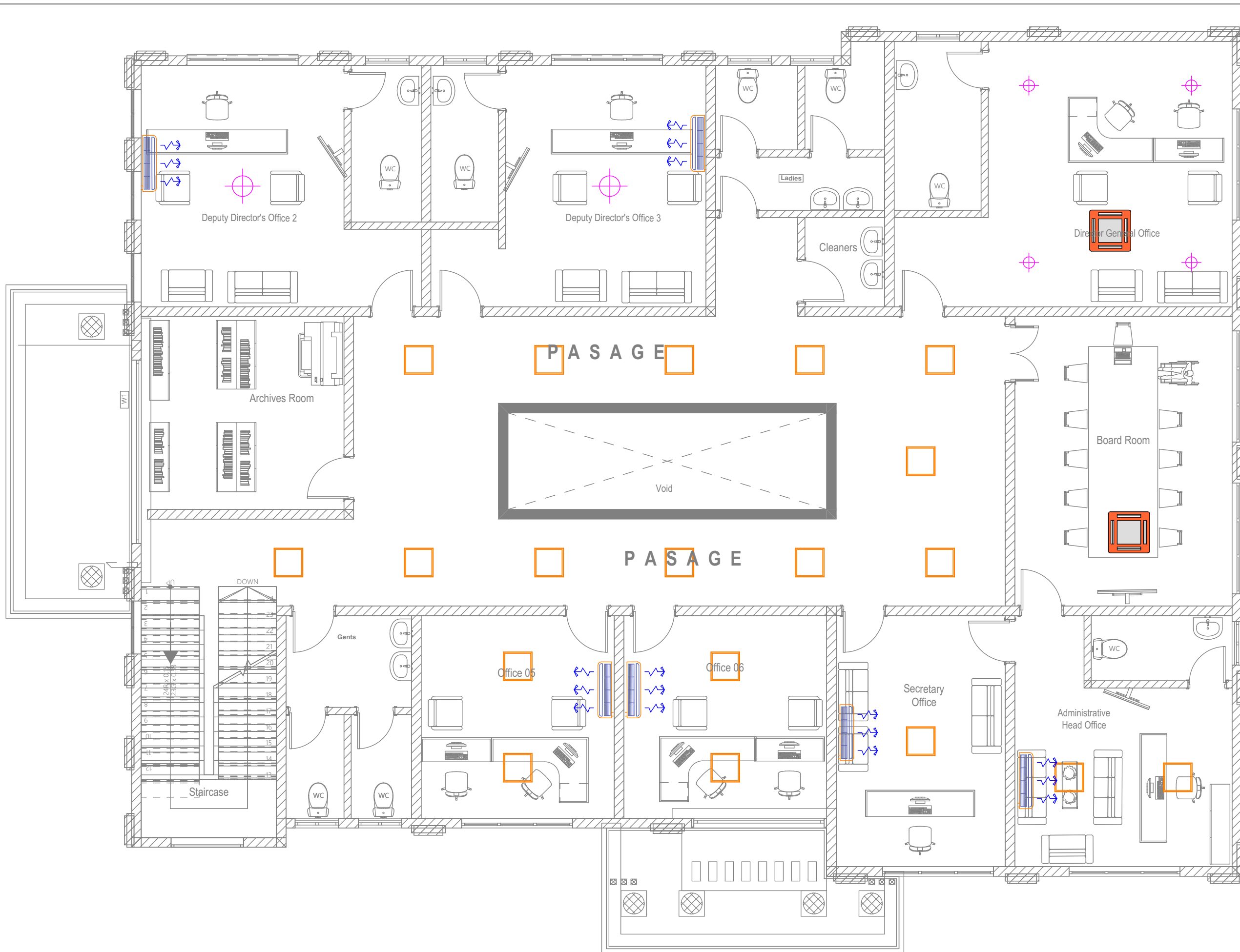
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SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA

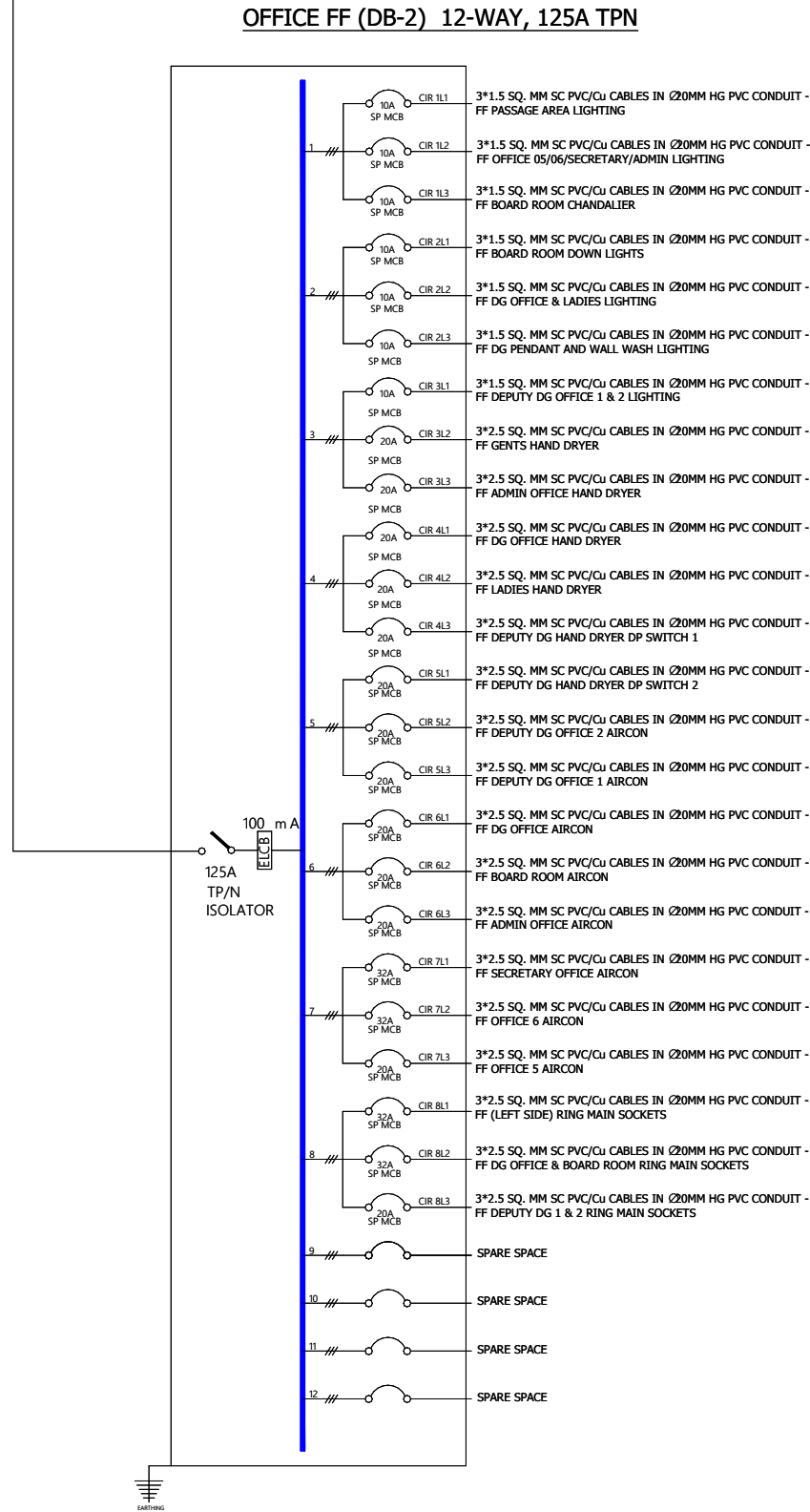
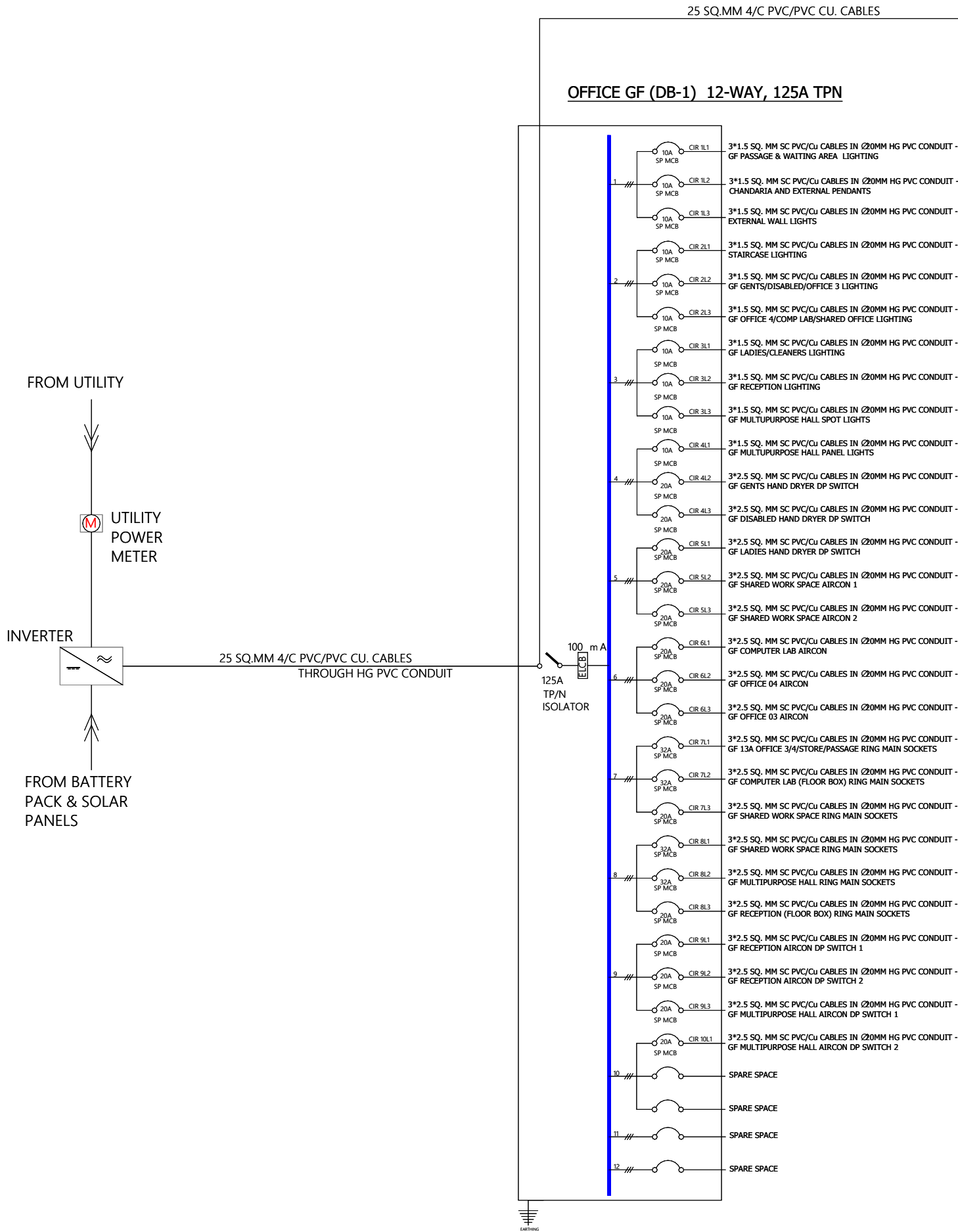


DESIGN REVIEW DRAWINGS

DRAWING TITLE: AIR CONDITIONING LAYOUT
FIRST FLOOR

Drawn by:	DAO	SIGN	DATE: 10/12/2025
Email	tropixengineeringervices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / / 2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	





FEDERAL GOVERNMENT OF SOMALIA

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4. ANY DISCREPANCY TO BE REPORTED TO THE TROPIX ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECOARDING.

REVISIONS

NO	Description	Date

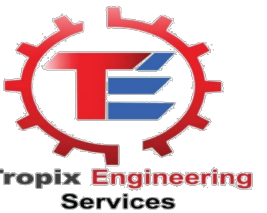
CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
--------	---

DONOR



PROJECT NAME:

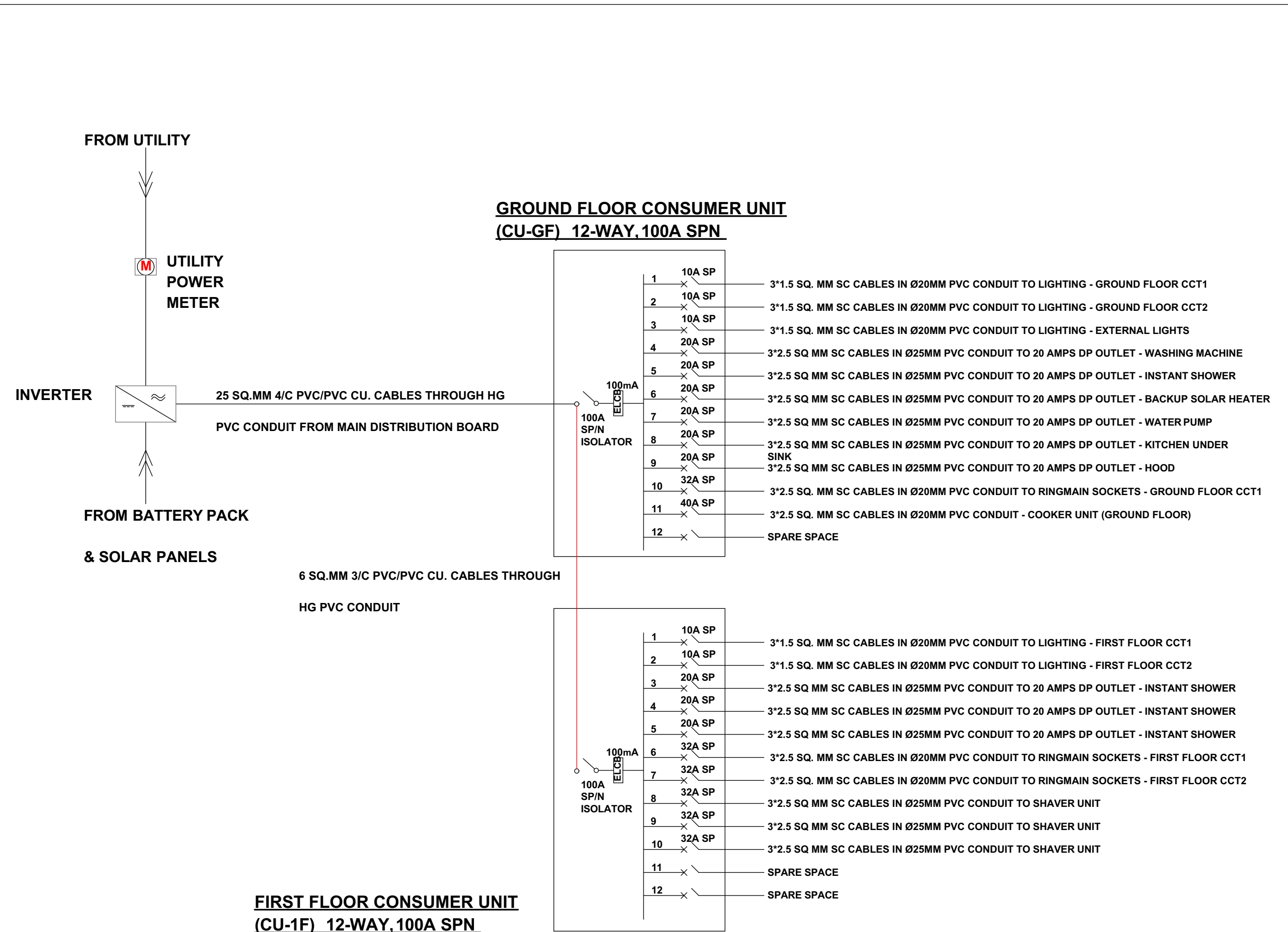
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: Single Line Diagram DB GF & DB FF

Drawn by:	DAO	SIGN	DATE: 11 /12/2025
Email	tropixengineeringervices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	11 / 12 / 2025	Scale:	
Project no.	Drawing no.	Sheet no.	



FEDERAL GOVERNMENT OF SOMALIA

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REVISIONS

NO	Description	Date

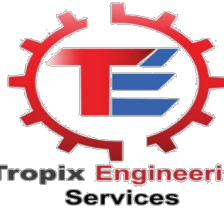
CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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DONOR



PROJECT NAME:

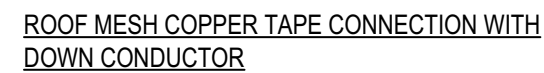
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: GF & FF Consumer Unit

Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 11 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
Approved by:	Eng.Mohamed Saahid	SIGN	DATE: / / 2025
Issue date:	11 / 12 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	

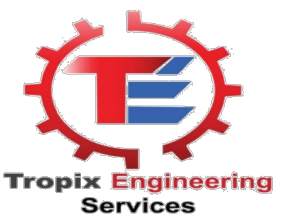


1. ALL DIMENSIONS ARE IN METERS, UNLESS OTHERWISE STATED.
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4. ANY DISCREPANCY TO BE REPORTED TO THE TROPIX ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECORDDING.

NO	Description	Date

CLIENT	FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)
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SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DRAWING TITLE: Electrical Details

Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 11 /12/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / / 2025
Approved by:	Eng. Mohamed Saahid	SIGN	DATE: / / 2025
Issue date:	11 /12 /2025	Scale: 1:100 / 1:75 / 1:50 / 1:25	
Project no.		Drawing no.	Sheet no.

PLUMBING DESIGN DRAWINGS

CLIENT

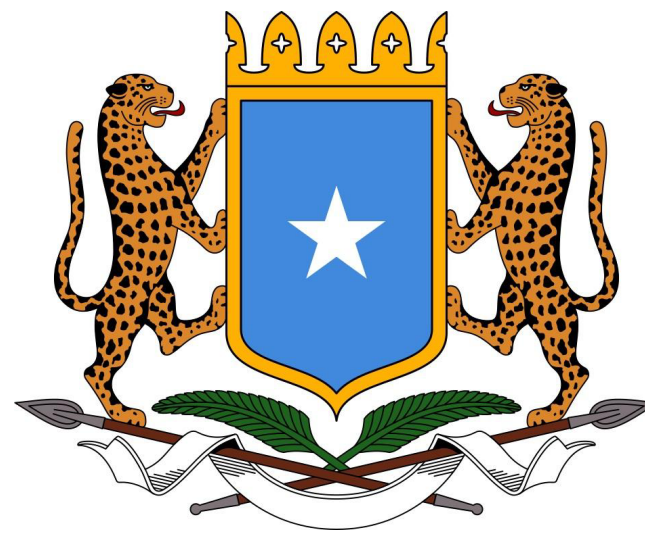
FEDERAL GOVERNMENT OF SOMALIA

MINISTRY OF FINANCE - PROJECT IMPLEMENTATION UNIT (PIU)

PROJECT

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JOHWAR**

SOMALIA



FEDERAL GOVERNMENT OF SOMALIA

**MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)**

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JOHWAR**

SOMALIA

PLUMBING DESIGN DRAWINGS



THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP



FEDERAL GOVERNMENT OF SOMALIA

GENERAL NOTES

1. ALL DIMENSIONS ARE IN METERS, UNLESS OTHERWISE STATED.
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4. ANY DISCREPANCY TO BE REPORTED TO THE TROPIX ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECOARDING.

REVISIONS

NO	Description	Date

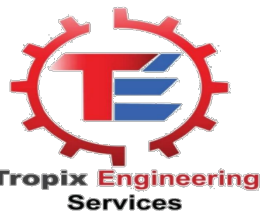
CLIENT
FEDERAL GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)

DONOR



PROJECT NAME:

SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST SATE SOMALIA



DESIGN REVIEW DRAWINGS

DRAWING TITLE: Ground Floor Plumbing

Drawn by:	Gerald Nyanjua Amolo	SIGN	DATE: 30/11/2025
Email	tropixengineeringservices@gmail.com		
Checked by:	Eng. Mohamed Abdullahi Sharif	SIGN	DATE: / /2025
Approved by:	Eng. Mohamed Saahid	SIGN	DATE: / /2025
Issue date:	30 / 11 / 2025	Scale:	1:100 / 1:50
Project no.	Drawing no.	Sheet no.	

E-03



A



1

2

3

4

5

6

7

A

A

B

B

C

C

D

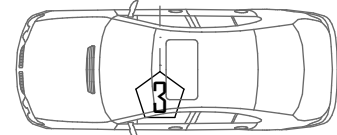
D

B

B

E

E



E-01



E-04



E-02





FEDERAL GOVERNMENT OF SOMALIA
GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE STATED.
2. ALL DIMENSIONS TO BE CHECKED AND CONFIRMED ON SITE BEFORE COMMENCEMENT OF ANY WORK.
3. WRITTEN DIMENSIONS OVERRIDES SCALED DIMENSIONS, THUS ALL DIMENSIONS ARE TO BE READ AND NOT AT ANY TIME SCALED FROM THE DRAWING.
4. ANY DISCREPANCY TO BE REPORTED TO THE TROPIC ENGINEERING SERVICES SITE ENGINEER / PROJECT MANAGER BEFORE RECORDED

REVISIONS

No	Description	Date

CLIENT
FEDERAL GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)



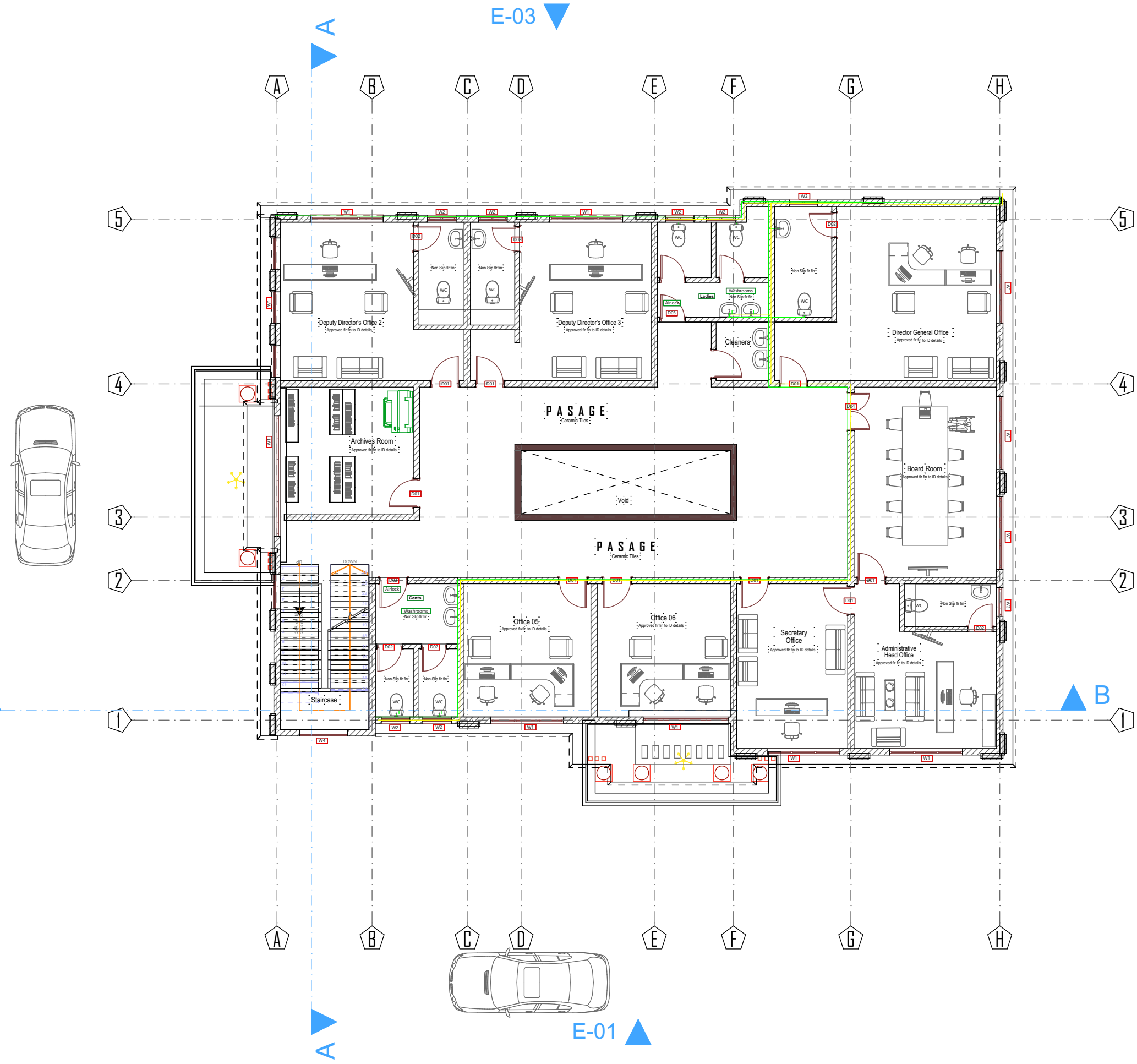
PROJECT NAME:
SOMALIA ENHANCING RECOURSE PROJECT (SERP)
PROPOSED CONSTRUCTION OF CIVIL SERVICE
AT SOUTH WEST STATE SOMALIA.



DESIGN REVIEW DRAWINGS

DRAWING TITLE: FIRST FLOOR PLUMBING
CIVIL SERVICE COMMISSION OFFICE:

Drawn by:	Gerald Nyanjua	SIGN	DATE
Checked by:	Mohamed Sharif		09/12/2025
Approved by:	Mohamed Saahid		
Issue date:	Dec 2025	P.M Sign:	
Project no.	Drawing no.: 01	Sheet no.:	AR.002



GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH-YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.
- 7.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM.
11. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
12. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
15. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
16. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 250KPa AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
17. LOCATIONS OF LABS:-
 - A. BENT OR JOINT BEAMS.
 - B. BEAMS AND SLABS.
 - C. BEAMS AND SLABS.
 - D. BEAMS AND SLABS.
 - E. BEAMS AND SLABS.
 - F. BEAMS AND SLABS.
 - G. BEAMS AND SLABS.
 - H. BEAMS AND SLABS.
 - I. BEAMS AND SLABS.
 - J. BEAMS AND SLABS.
 - K. BEAMS AND SLABS.
 - L. BEAMS AND SLABS.
 - M. BEAMS AND SLABS.
 - N. BEAMS AND SLABS.
 - O. BEAMS AND SLABS.
 - P. BEAMS AND SLABS.
 - Q. BEAMS AND SLABS.
 - R. BEAMS AND SLABS.
 - S. BEAMS AND SLABS.
 - T. BEAMS AND SLABS.
 - U. BEAMS AND SLABS.
 - V. BEAMS AND SLABS.
 - W. BEAMS AND SLABS.
 - X. BEAMS AND SLABS.
 - Y. BEAMS AND SLABS.
 - Z. BEAMS AND SLABS.
18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER	
COLUMN-30mm	
BEAMS-30mm	
slabs-20mm	
staircase-20mm	
footing -50mm	

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

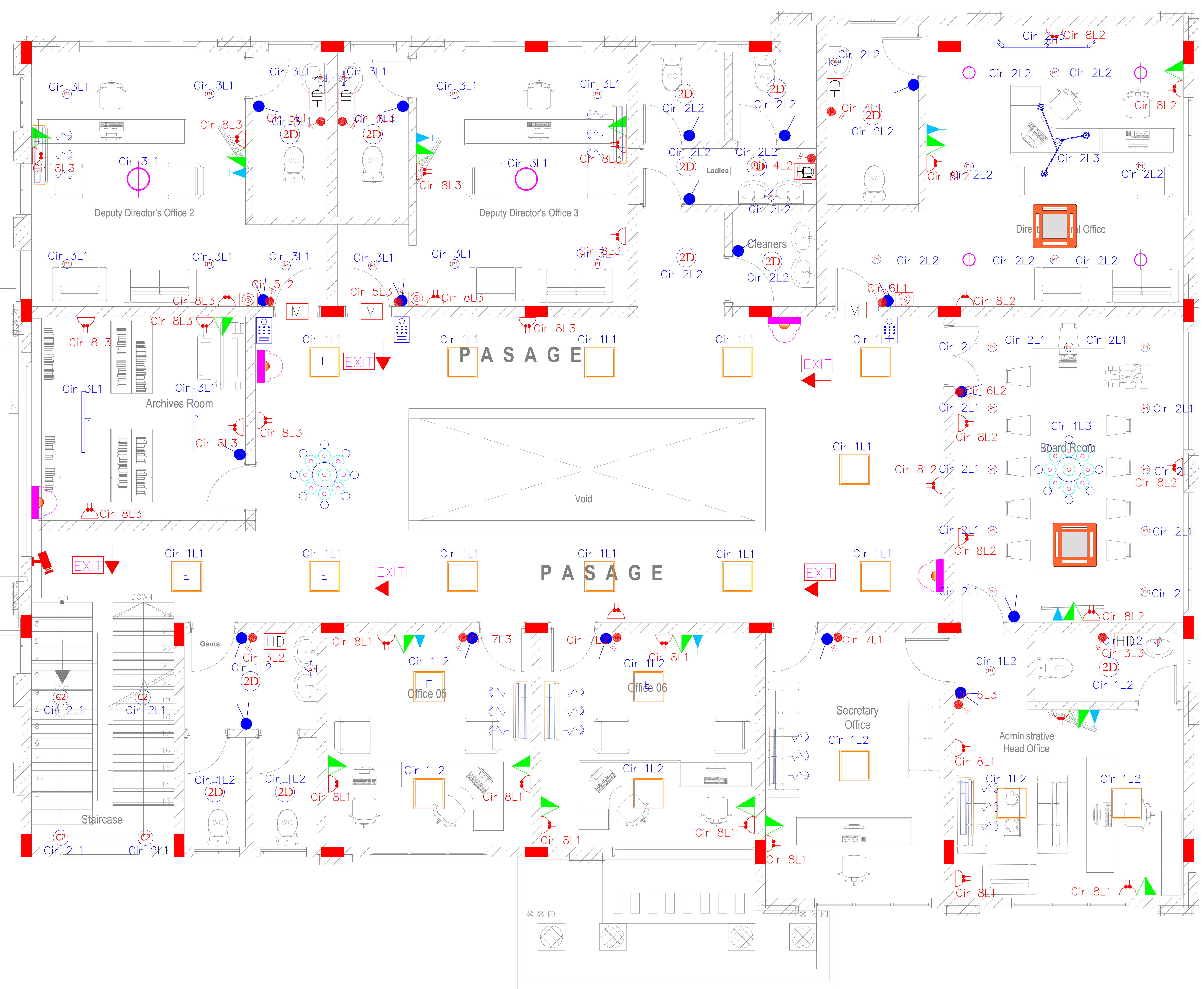
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
DATE: 12-2025	

JOB NO:	DWG NO: ST-1	SCALE: 1:100	SERIAL NO: 4D-P05 2025
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LAYOUT OF GROUND FLOOR

STRUCTURAL DESIGN DRAWINGS

CLIENT

FEDERAL GOVERNMENT OF SOMALIA

MINISTRY OF FINANCE - PROJECT IMPLEMENTATION UNIT (PIU)

PROJECT

**SOMALIA ENHANCING RECOURSE PROJECT (SERP) PROPOSED CONSTRUCTION OF
CIVIL SERVICE AT JUBBALAND, BAIDOA, JOHWAR, GALMUDUG**

SOMALIA

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
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3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 50 DEGREES CENTIGRADE.
11. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
12. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 400 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
15. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
16. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING. GRADE SLAB AND GRADE BEAMS).
17. LOCATIONS OF LAPS:-
 - a. SLAB ON BEAM
 - b. BEAM ON COLUMN
 - c. COLUMN ON BEAM
18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	12.20.2025

R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

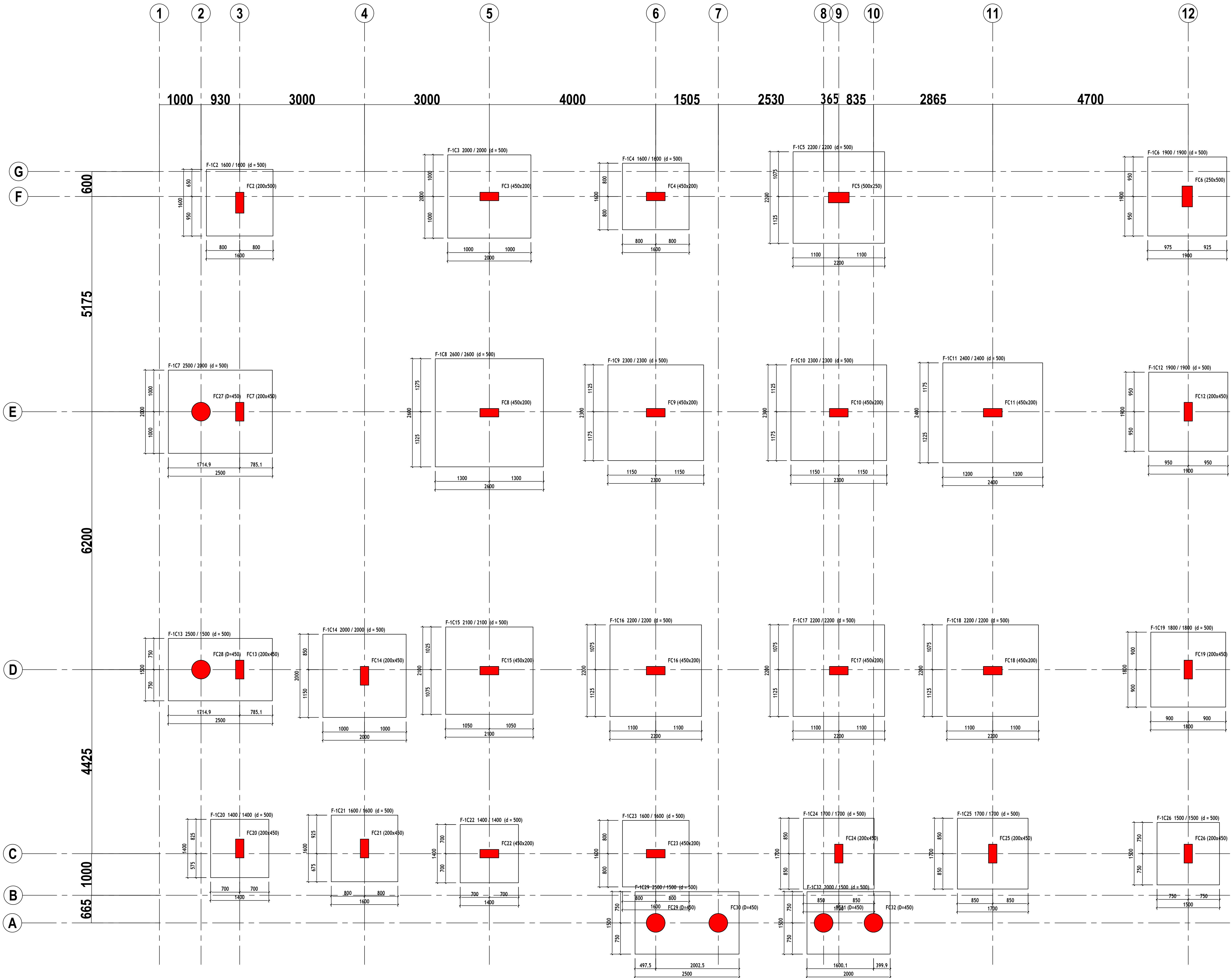
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
	DATE: 12-2025

JOB NO:	DWG NO: ST-1	SCALE: 1:100	SERIAL NO: 4D-P05 2025
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LAYOUT OF FOOTING PLAN



LAYOUT OF FOUNDATION BEAM PLAN 400*300

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube):	
- FOUNDATION	C25
- SLAB	C25
- STAIR	C25
- BEAM	C25
- COLUMN	C25
- BEAM-COLUMN JOINT	C25
- SLAB-COLUMN JOINT	C25
- FOUNDATION BEAM	C20
- SHEAR WALL	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5MT FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE FOR GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
- LOCATIONS OF LAPS:
A. SLAB: TOP AND BOTTOM
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN LIMIT STATE METHOD OF DESIGN AS PER BS EN 1992-1-1:2004.
IF ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

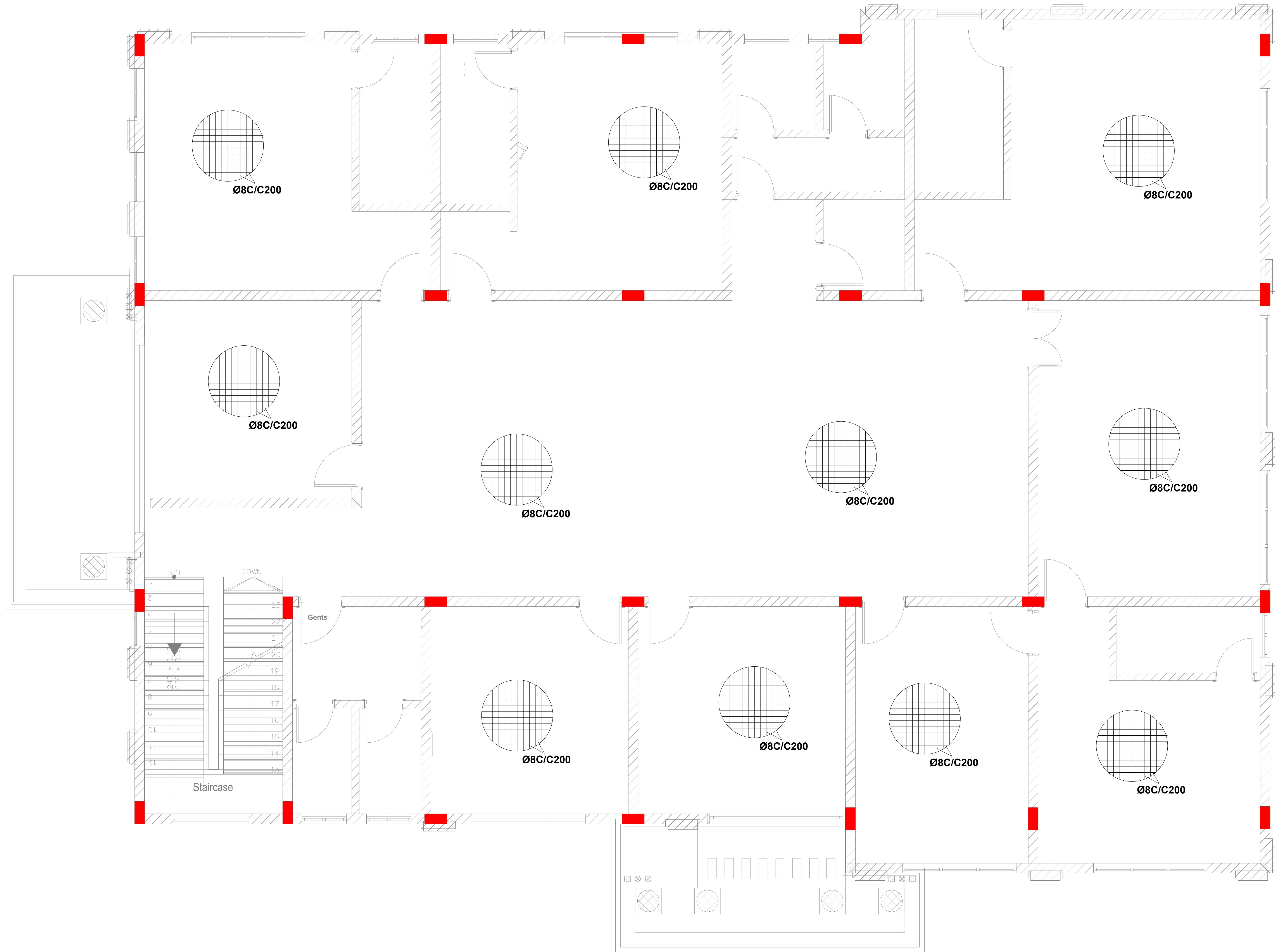
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
DATE: 12-2025	

JOB NO:	DWG NO: ST-1	SCALE: 1:100	SERIAL NO: 4D-P05 2025
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MESH SLAB 100MM T8-200C/C B1,B2

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C and T12@100C/C DISTRIBUTION BARS and MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
 - FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
 - REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
 - SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
 - READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
 - READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
 - RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
 - COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
 - IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
 - FOUNDATIONS ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL.(CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
 - LOCATIONS OF LAPS:
- A SHEET FOR SHEET BARS:
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER BS EN 2004.- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER	
COLUMN-30mm	
BEAMS-30mm	
slabs-20mm	
staircase-20mm	
footing -50mm	

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

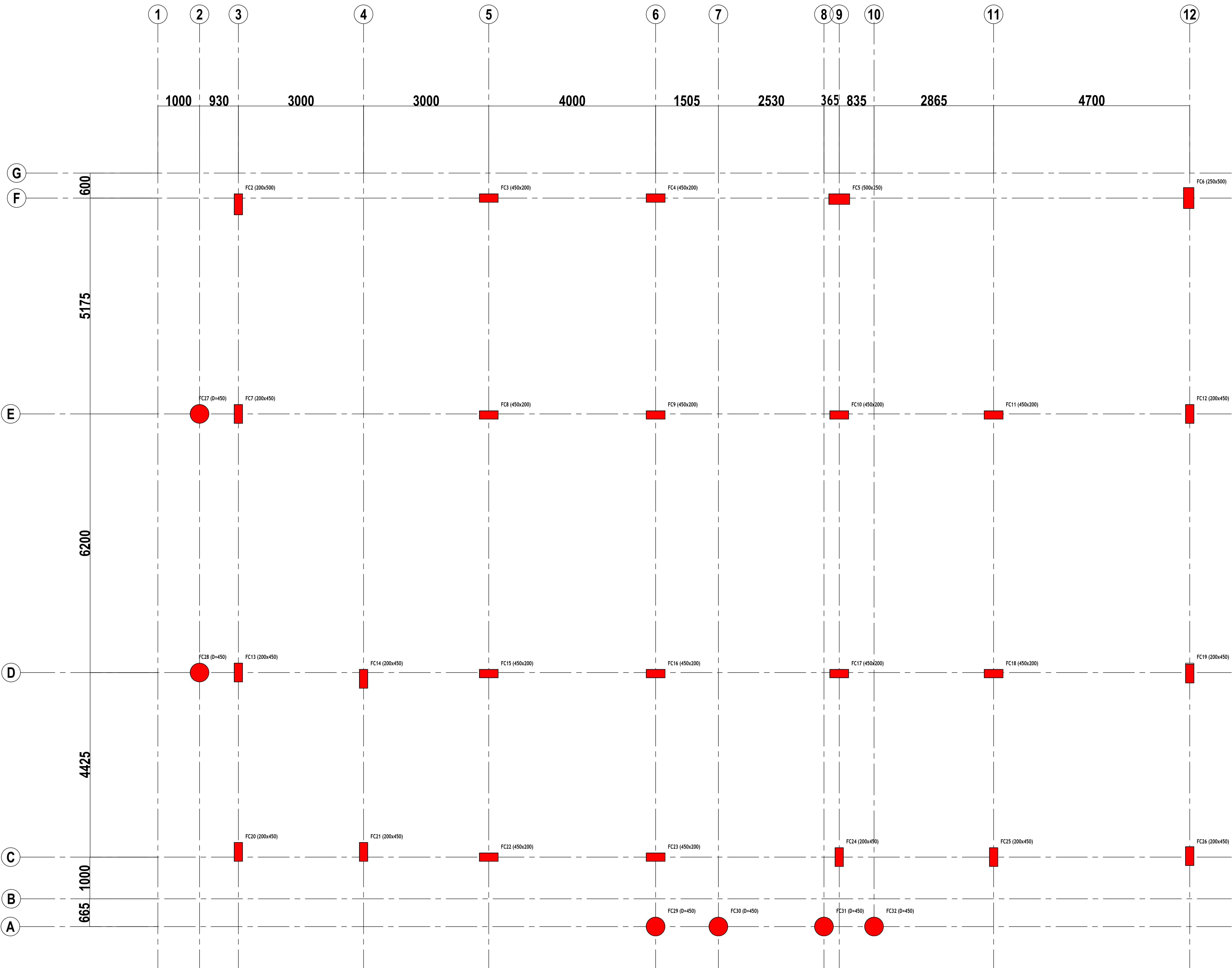
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
DATE: 12-2025	

JOB NO:	DWG NO:	SCALE: 1:100	SERIAL NO:
	ST-1		4D-P05 2025



LAYOUT OF COLUMNS PLAN

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING, SHORING, AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II, WITH A MINIMUM YIELD STRESS OF 460N/MM² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

CONCRETE :- (fck cube) :	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:**
 - A. RAFT AND FOOTING: TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS. BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
 - B. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN. BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
 - C. METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER IS 8004.
- IF ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER	
COLUMN-30mm	
BEAMS-30mm	
slabs-20mm	
staircase-20mm	
footing -50mm	

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



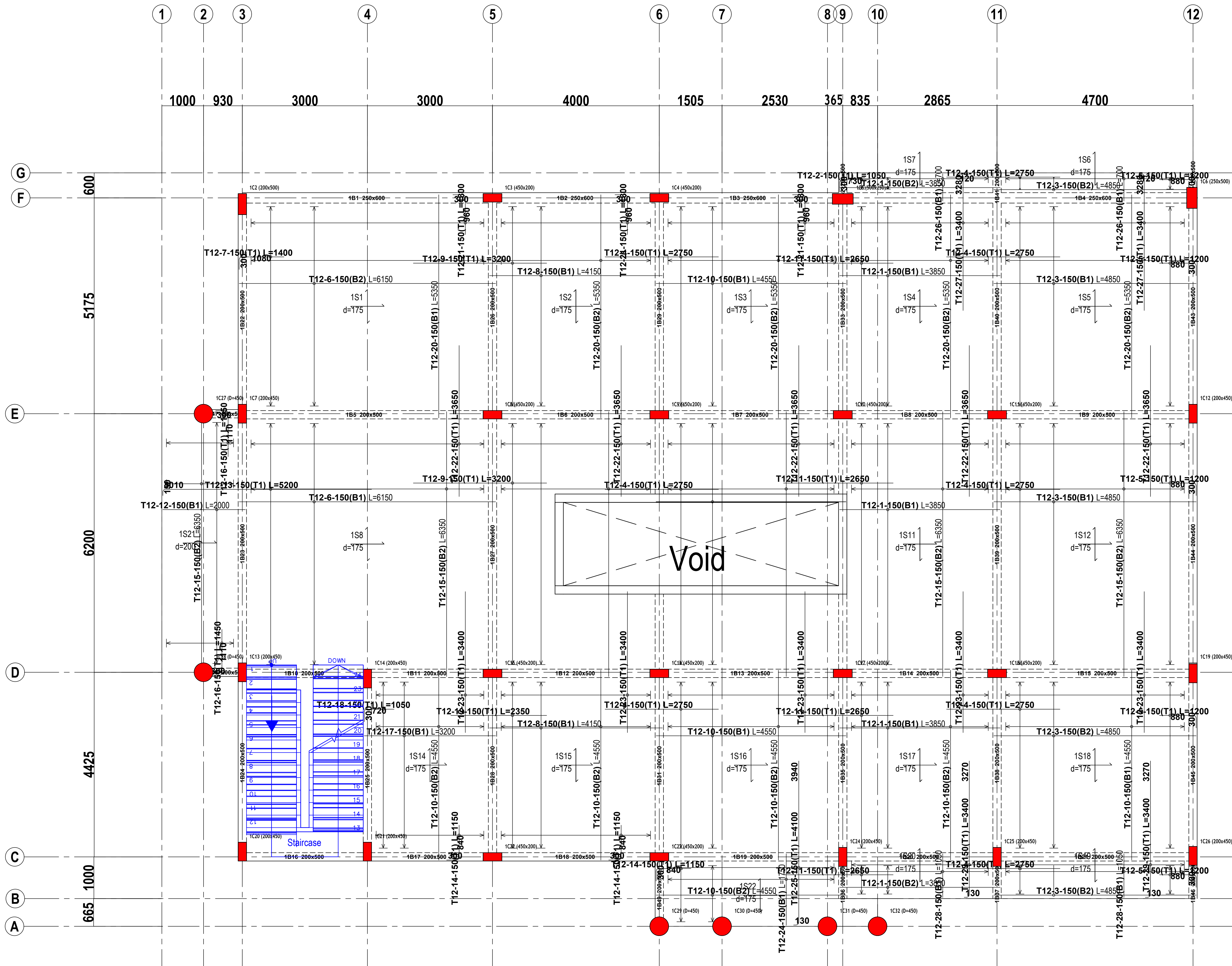
CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
DATE: 12-2025	
JOB NO:	DWG NO: ST-1
SCALE: 1:100	SERIAL NO: 4D-P05 2025



LAYOUT OF FIRST FLOOR PLAN

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.
- | CONCRETE :- (fck cube) :- | |
|---------------------------|-----|
| - FOUNDATION..... | C25 |
| - SLAB..... | C25 |
| - STAIR..... | C25 |
| - BEAM..... | C25 |
| - COLUMN..... | C25 |
| - BEAM-COLUMN JOINT..... | C25 |
| - SLAB-COLUMN JOINT..... | C25 |
| - FOUNDATION BEAM..... | C20 |
| - SHEAR WALL..... | N/A |
- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 6.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5Mtr FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:
- NOTES ON REINFORCEMENT:
 - TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
 - BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DRAWING.
 - BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN.
 - BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
 - METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER BS EN 2004.
 - ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
 - STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
 - THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER	
COLUMN-30mm	
BEAMS-30mm	
slabs-20mm	
staircase-20mm	
footing -50mm	

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
	DATE: 12-2025

JOB NO:	DWG NO: ST-1	SCALE: 1:100	SERIAL NO: 4D-P05 2025
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GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150(C) AND T12@150(C) DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
- MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube) :-

- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0m IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATIONS ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5m FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:-
A. SLAB OR RAFT BEAMS:
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER IS 800:2004.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO. REVISED DATE

R1 12.20.2025

R2

R3

R4



Tropix Engineering Services

CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION: CITY: PLOT AREA
HIRSHABELE JAWHAR ...M²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY: ENG HAMSE H HATLIA

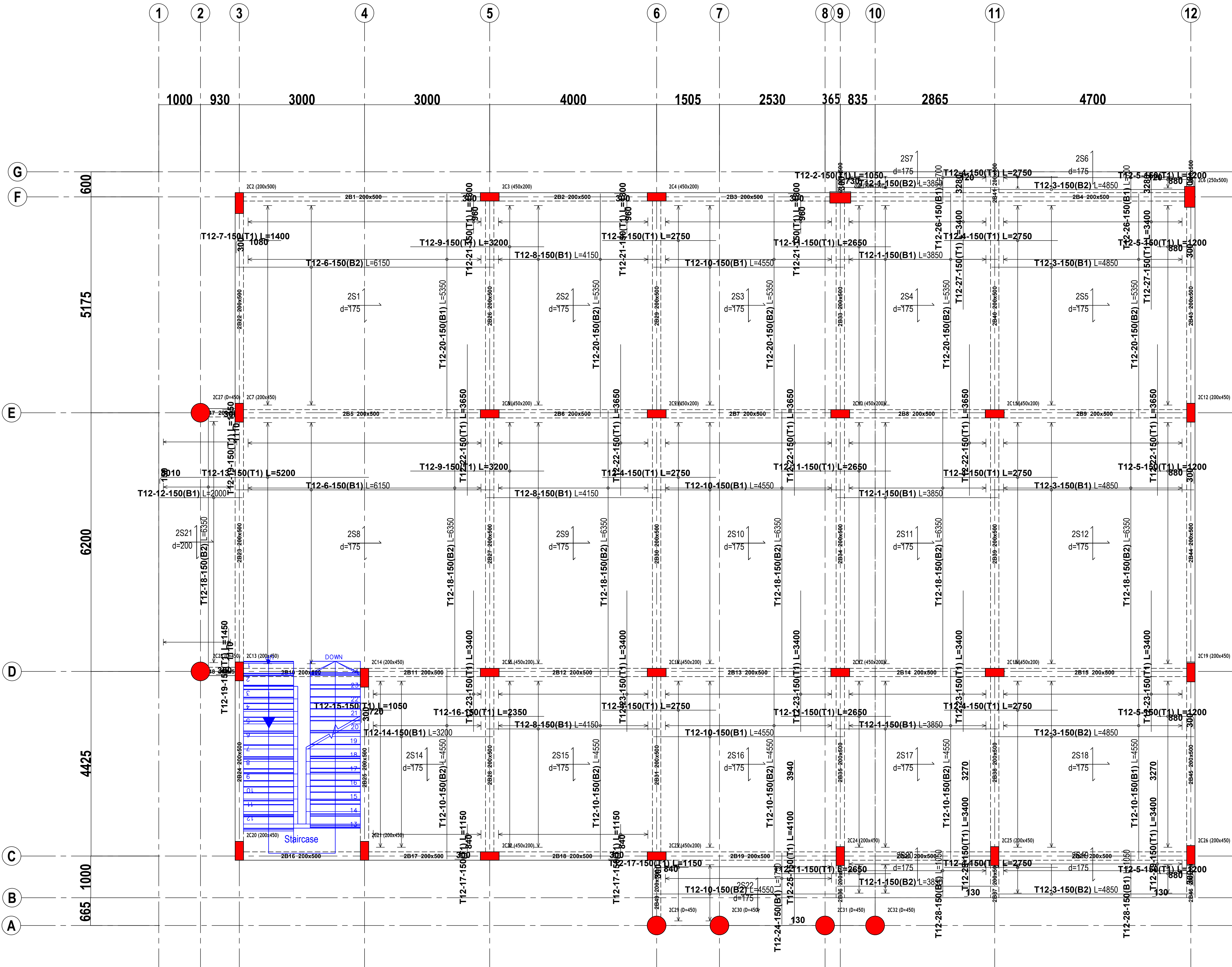
CHECK BY: ENG SEAD GULEED

APPROVED BY: ENG MOHAMED SAAHID

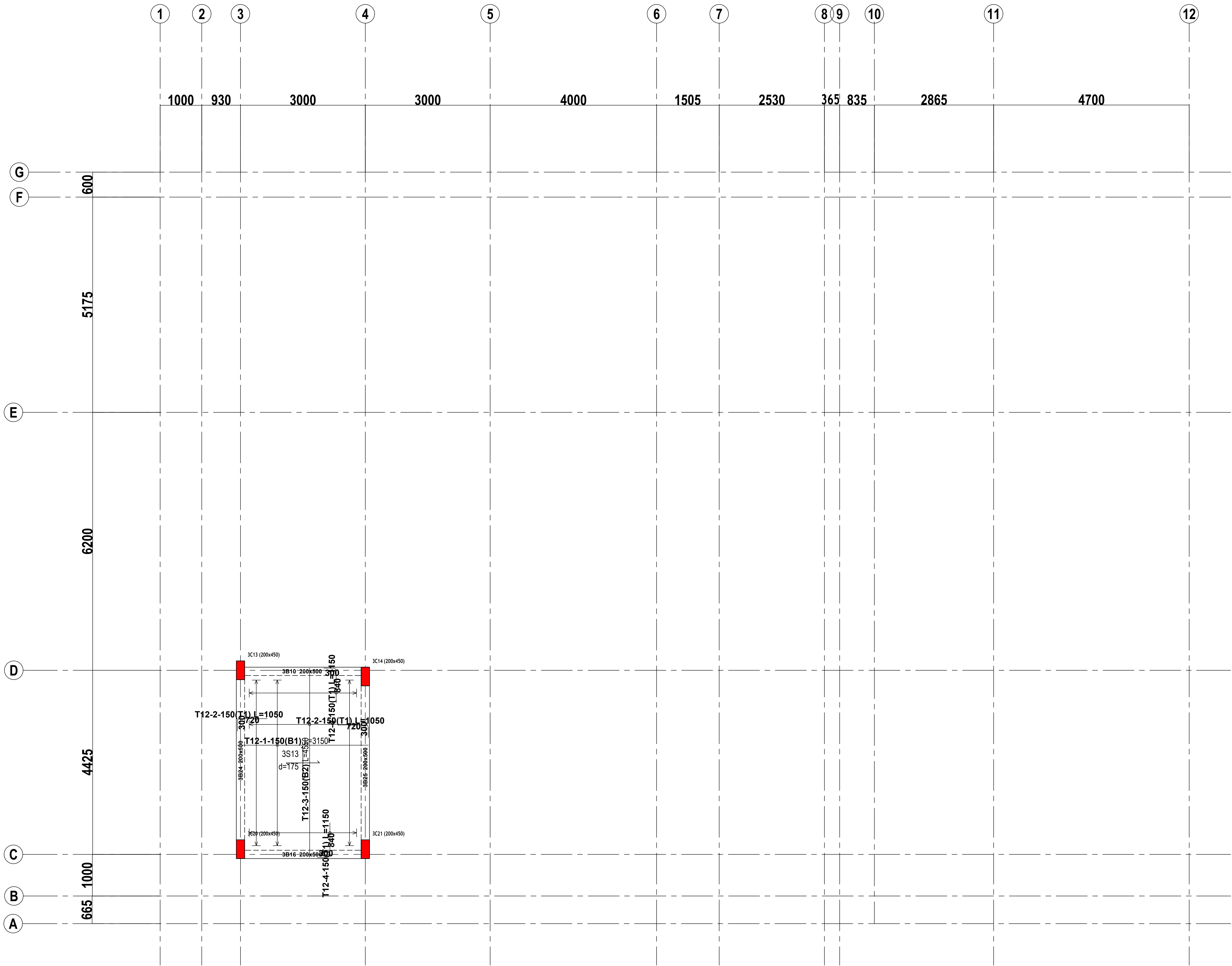
DATE: 12-2025

JOB NO: DWG NO: SCALE: 1:100 SERIAL NO:

ST-1 4D-P05 2025



LAYOUT OF SECOND FLOOR PLAN



LAYOUT OF STAIR COVER PLAN

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.

2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.

3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.

4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.

5. USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS

6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 480N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)

7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube):

- FOUNDATION.....C25

- SLAB.....C25

- STAIR.....C25

- BEAM.....C25

- COLUMN.....C25

- BEAM-COLUMN JOINT.....C25

- SLAB-COLUMN JOINT.....C25

-FOUNDATION BEAM.....C20

- SHEAR WALL.....N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.

FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.

9. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.

10. SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.

11. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.

12. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.

13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.

14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.

15. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.

16. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).

17. LOCATIONS OF LAPS:

ADJUST CORRECT LAPS:

TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS

BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.

8. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MID SPAN

BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.

METHOD OF DESIGN - LIMIT STATE METHOD OF DESIGN AS PER EN 1992

18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.

19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.

20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER

COLUMN-30mm

BEAMS-30mm

slabs-20mm

staircase-20mm

footing-50mm

REVISION NO.

REVISED DATE

R1

12.20.2025

R2

R3

R4

TE

Tropix Engineering Services

CLIENT NAME: FEDERAL GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT (PCU)

LOCATION:

CITY:

PLOT AREA

HIRSHABELE

JAWHAR

...M²

PROJECT:

G+1 RESIDENTIAL BUILDING

DRAWING TITLE:

FOOTING LAYOUT

DRAWING BY

ENG HAMSE H HATLIA

CHECK BY

ENG SEAD GULEED

APPROVED BY

ENG MOHAMED SAAHID

DATE: 12-2025

JOB NO:

DWG NO:

SCALE:1:100

SERIAL NO:

ST-1

4D-P05 2025

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING, SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE 12@150C/C AND 12@180C/C DISTRIBUTION BARS AND MAIN BARS OF SLAB.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube) :-	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:-
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT THE SPAN UNLESS OTHERWISE SHOWN ON DRWG.
BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN - LIMIT STATE METHOD OF DESIGN AS PER BS EN 2004.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.

REVISED DATE

R1

12.20.2025

R2

R3

R4



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION:

CITY:

PLOT AREA

HIRSHABELE

JAWHAR

...M²

PROJECT:

G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY

ENG HAMSE H HATLIA

CHECK BY

ENG SEAD GULEED

APPROVED BY

ENG MOHAMED SAAHID

DATE: 12-2025

JOB NO:

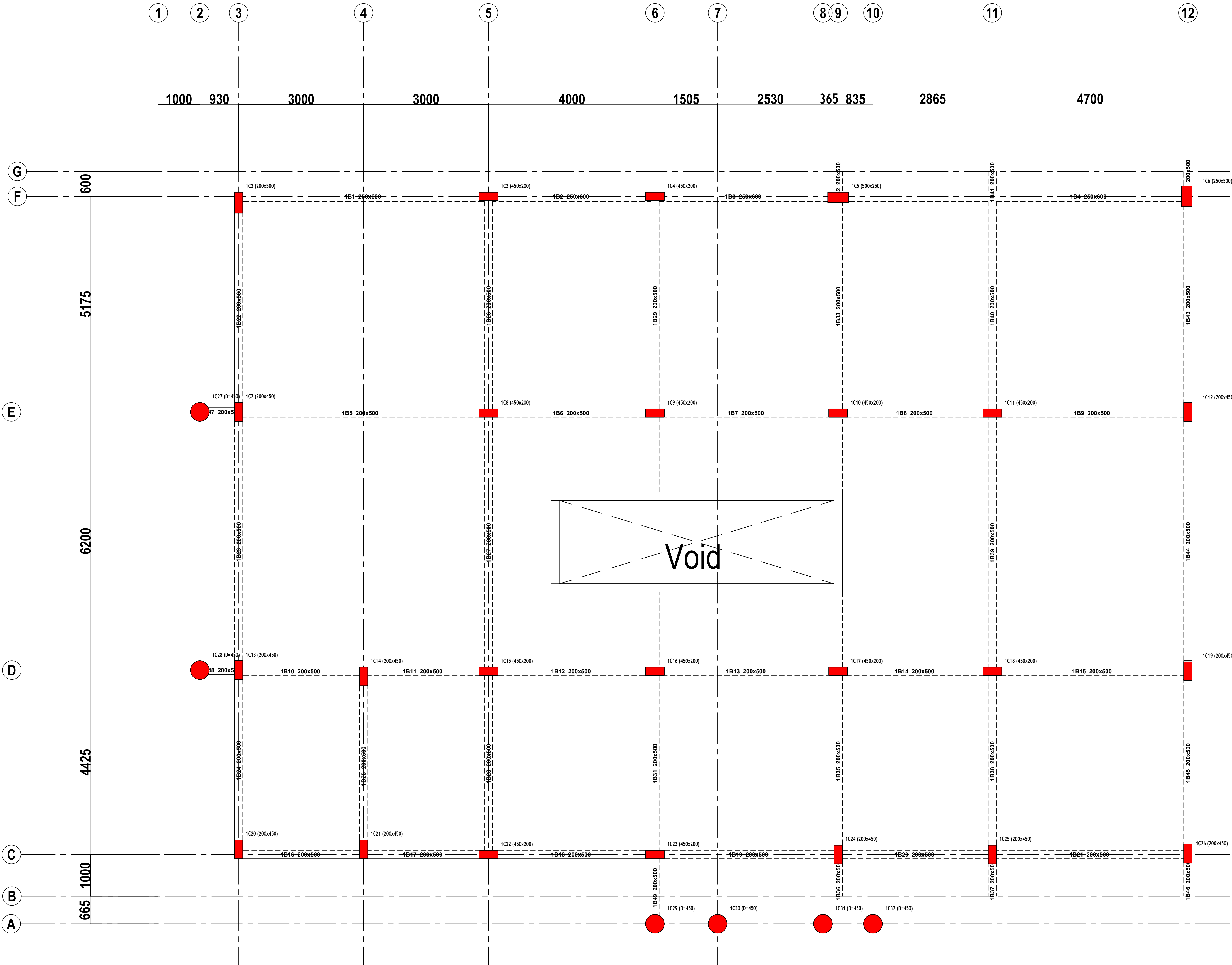
DWG NO:

ST-1

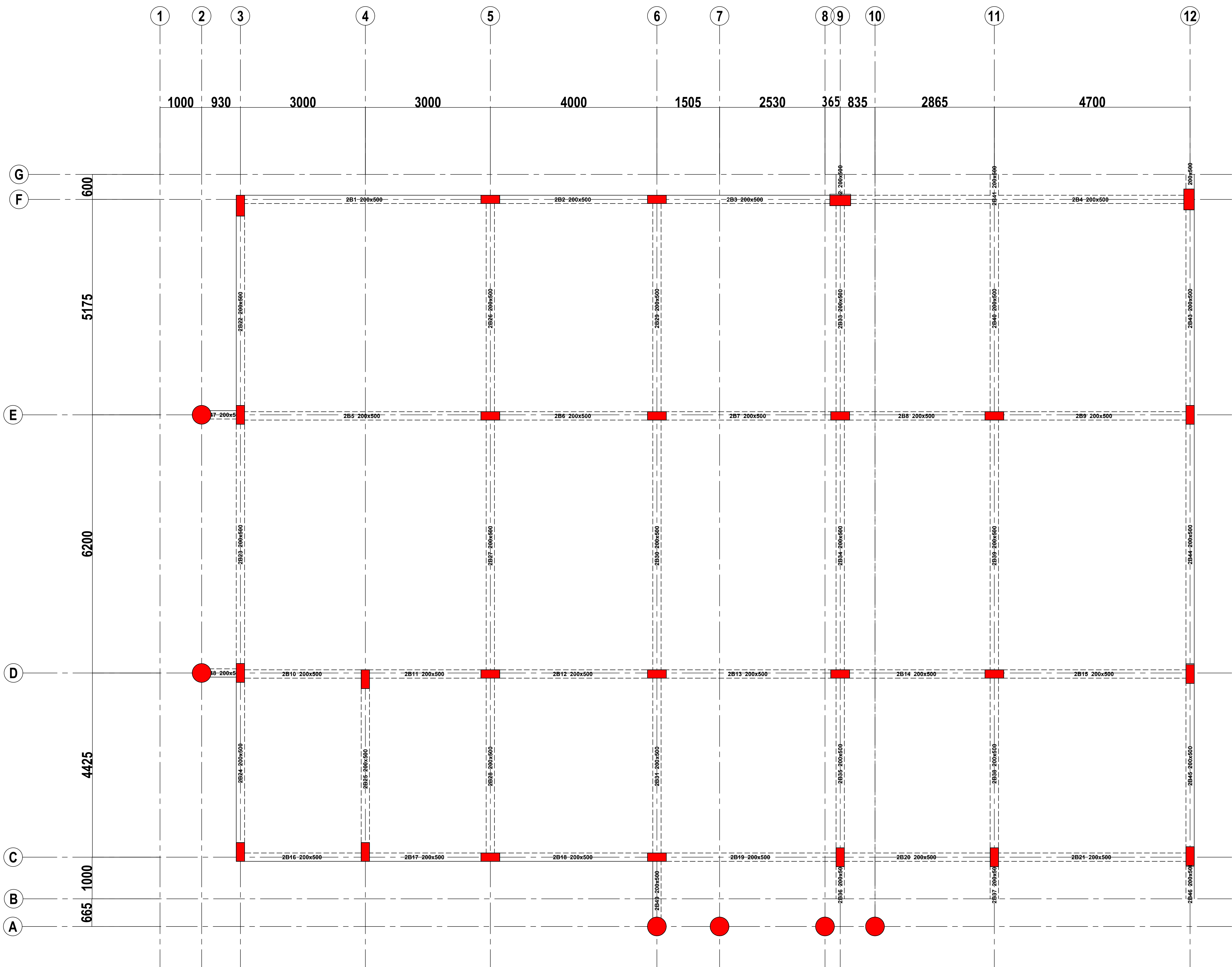
SCALE:1:100

SERIAL NO:

4D-P05 2025



LAYOUT OF FIRST FLOOR BEAM PLAN



GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWINGS WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 260N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
- MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

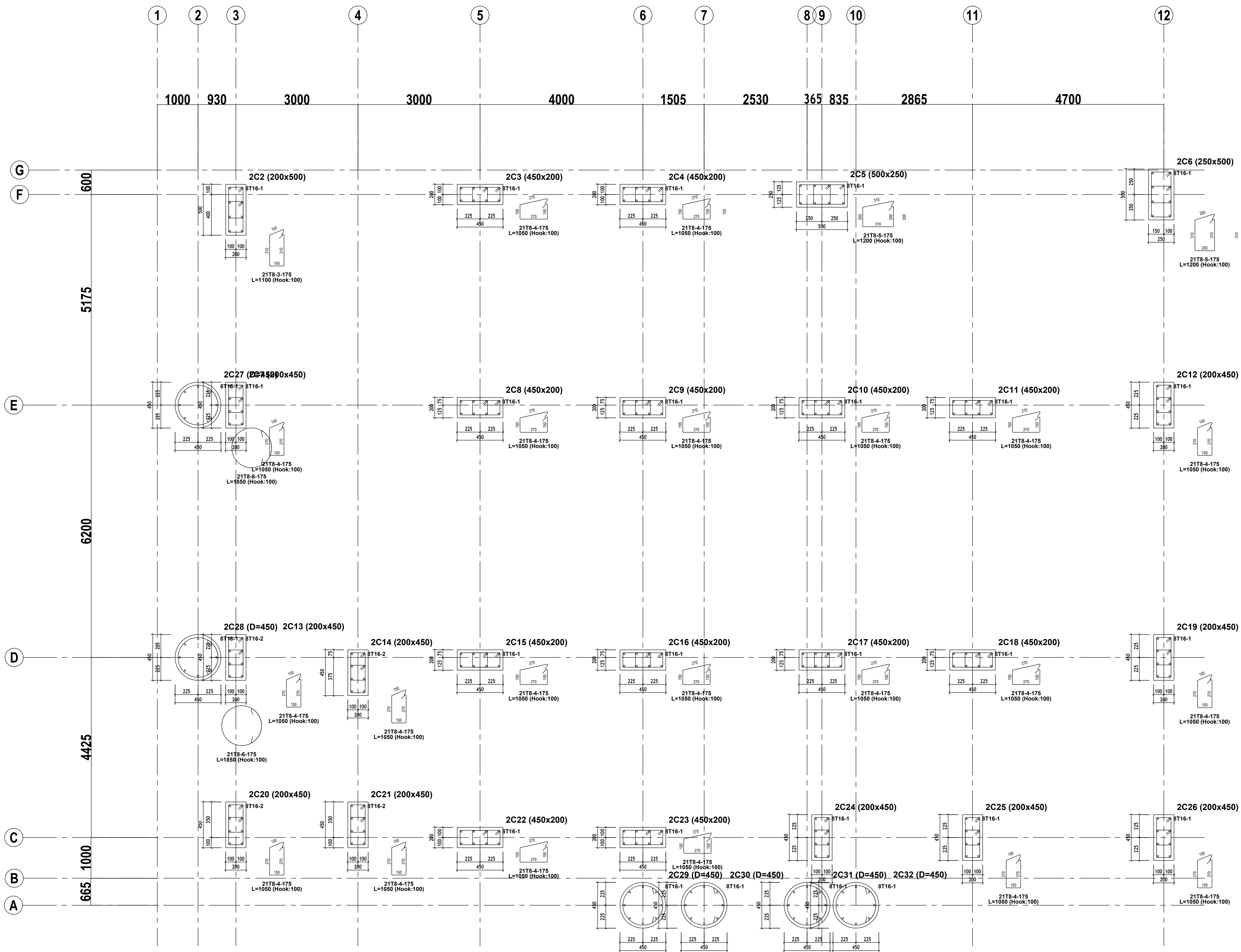
- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 2000KPa AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL.(CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:-**
A. RAFT OR RAFT BEAMS:
TOP BARS SHALL BE APPLIED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS OVER SLAB:- TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN - LIFT SLAB METHOD OF DESIGN AS PER IS 456:2000.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

REVISION NO.		REVISED DATE
R1		12.20.2025
R2		
R3		
R4		

 Tropix Engineering Services		
CLIENT NAME: FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)		
LOCATION: HIRSHABELE	CITY: JAWHAR	PLOT AREA ...M ²
PROJECT: G+1 RESIDENTIAL BUILDING		
DRAWING TITLE: FOOTING LAYOUT		
DRAWING BY	ENG HAMSE H HATLIA	
CHECK BY	ENG SEAD GULEED	
APPROVED BY	ENG MOHAMED SAAHID	
DATE: 12-2025		
JOB NO:	DWG NO: ST-1	SCALE: 1:100 SERIAL NO: 4D-P05 2025



JOB NO:	DWG NO: ST-1	SCALE:1:100	SERIAL NO 4D-P05 2025
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DETAIL OF COLUMNS SECOND FLOOR

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (f _{ck} cube) :-	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
11. SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
12. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
13. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
14. BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
15. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
16. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 400 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
17. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
18. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
19. LOCATIONS OF LAPS:-
20. TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
21. BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
22. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN.
23. BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
24. METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER BS 8110:2004.
25. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
26. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
27. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

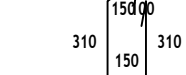
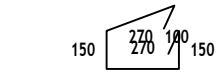
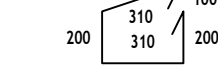
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

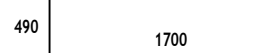
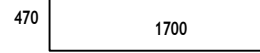
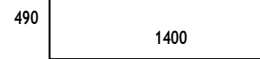
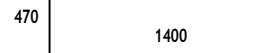
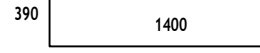
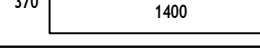
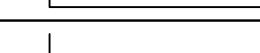
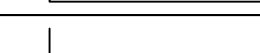
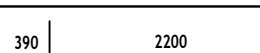
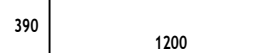
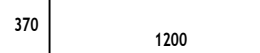
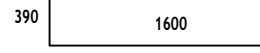
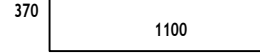
PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA		
CHECK BY	ENG SEAD GULEED		
APPROVED BY	ENG MOHAMED SAAHID		
DATE: 12-2025			
JOB NO:	DWG NO: ST-1	SCALE:1:100	SERIAL NO: 4D-P05 2025

FORM PLANS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T12	0.889		8,210.9	7,298.5	
			T.WEIGHT (Kg)	7,298.5	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	12	110	3850	423.50	
2	12	3	1050	3.15	
3	12	110	4850	533.50	
4	12	211	2750	580.25	
5	12	110	1200	132.00	
6	12	73	6150	448.95	
7	12	33	1400	46.20	
8	12	101	4150	419.15	
9	12	73	3200	233.60	
10	12	236	4550	1073.80	
11	12	107	2650	283.55	
12	12	40	2000	80.00	
13	12	40	5200	208.00	
14	12	54	1150	62.10	
15	12	157	6350	996.95	
16	12	24	1450	34.80	
17	12	28	3200	89.60	
18	12	28	1050	29.40	
19	12	28	2350	65.80	
20	12	145	5350	775.75	
21	12	92	1300	119.60	
22	12	145	3650	529.25	
23	12	125	3400	425.00	
24	12	28	1750	49.00	
25	12	28	4100	114.80	
26	12	53	700	37.10	
27	12	53	3400	180.20	
28	12	53	1050	55.65	
29	12	53	3400	180.20	

COLUMN APPLICATIONS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T8	0.395		4500	1777.5	
T16	1.580		2777	4387.66	
T.WEIGHT (Kg)				6165.16	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	16	248	5600	1388.80	
2	8	70	1100	77.00	
3	8	1540	1050	1617.00	
4	8	140	1200	168.00	
5	8	210	1850	388.50	

PAD FOOTINGS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T16	1.580		1,401.1	2,214.2	
			T.WEIGHT (Kg)	2,214.2	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	16	13	2668	34.68	
2	16	13	2636	34.27	
3	16	12	2468	29.62	
4	16	12	2436	29.23	
5	16	11	2368	26.05	
6	16	11	2336	25.70	
7	16	44	2168	95.39	
8	16	74	2136	158.06	
9	16	22	2668	58.70	
10	16	31	2068	64.11	
11	16	65	2036	132.34	
12	16	22	2968	65.30	
13	16	40	1968	78.72	
14	16	90	1936	174.24	
15	16	40	2368	94.72	
16	16	81	1868	151.31	
17	16	81	1836	148.72	

BEAM ELEVATIONS QUANTITY TAKE OFF - STOREYS - 1					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T8	0.395		692.8	273.7	
T16	1.580		999.9	1,580.1	
			T.WEIGHT (Kg)	1,853.8	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	16	3	10250	30.75	
2	16	3	2050	6.15	
3	16	3	11900	35.70	
4	16	3	3450	10.35	
5	16	3	5250	15.75	
6	16	11	3750	41.25	
7	16	7	10050	70.35	
8	8	102	1700	173.40	
9	16	4	7400	29.60	
10	16	3	10250	30.75	
11	16	9	11900	107.10	
12	8	371	1400	519.40	
13	16	3	9100	27.30	
14	16	3	9000	27.00	
15	16	3	4800	14.40	
16	16	3	6200	18.60	
17	16	3	4300	12.90	
18	16	3	10700	32.10	
19	16	4	3150	12.60	
20	16	3	2100	6.30	
21	16	6	7100	42.60	
22	16	3	2200	6.60	
23	16	3	10800	32.40	
24	16	3	6650	19.95	
25	16	3	5050	15.15	
26	16	3	4950	14.85	
27	16	3	11000	33.00	
28	16	9	1850	16.65	
29	16	3	10350	31.05	
30	16	13	1950	25.35	
31	16	3	7350	22.05	
32	16	4	6700	26.80	
33	16	6	750	4.50	
34	16	6	10700	64.20	
35	16	3	7450	22.35	
36	16	4	6050	24.20	
37	16	3	450	1.35	
38	16	3	2050	6.15	
39	16	5	6300	31.50	
40	16	5	6050	30.25	

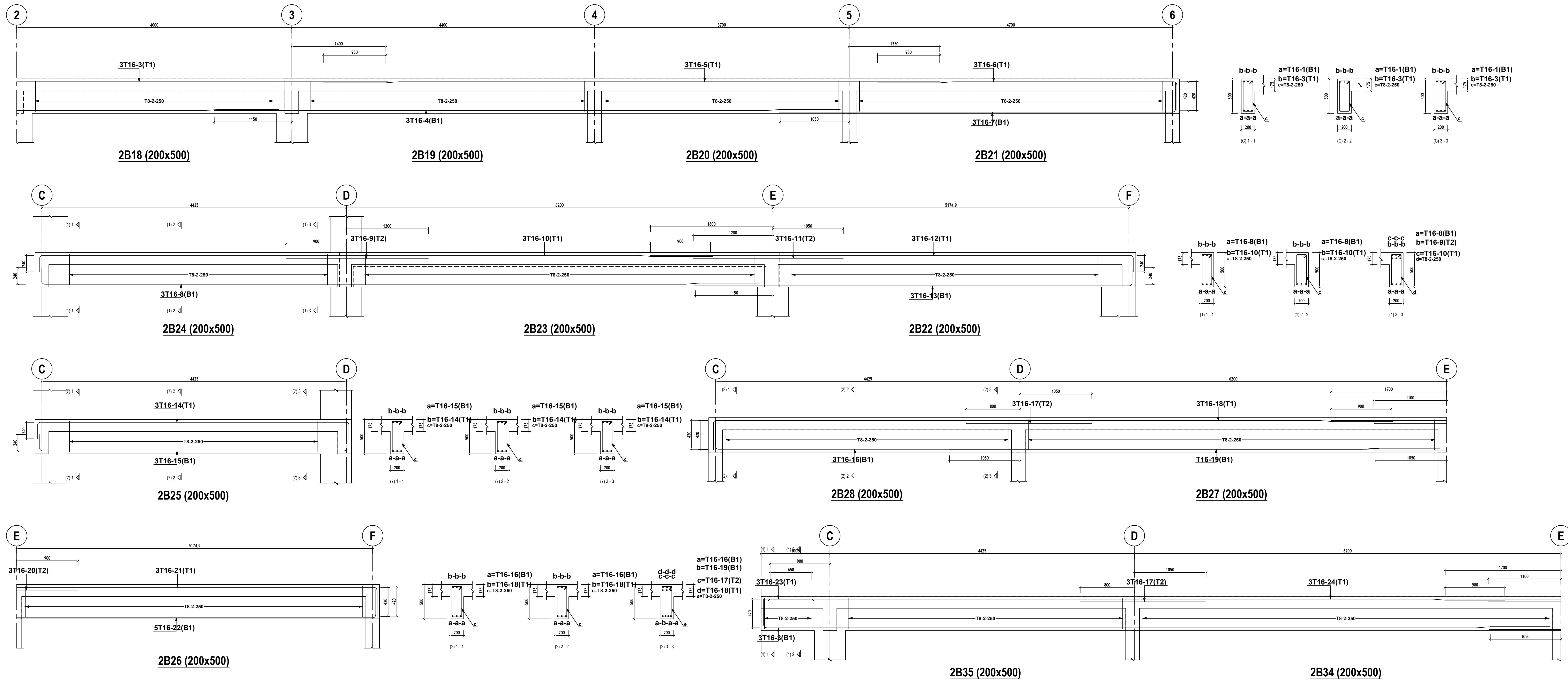
STEEL BAR QUANTITY OF SLAB,BEAM,COLUMNS AND FOOTING IN KG

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
- MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:-**
 - 1. COLUMN: TOP AND BOTTOM.
 - 2. BEAM: TOP AND BOTTOM.
 - 3. SLAB: TOP AND BOTTOM.
 - 4. RETAINING WALL: TOP AND BOTTOM.
 - 5. FOUNDATION: TOP AND BOTTOM.
 - 6. SHEAR WALL: TOP AND BOTTOM.
 - 7. STAIR: TOP AND BOTTOM.
 - 8. BEAM AND COLUMN: TOP AND BOTTOM.
 - 9. FOUNDATION: TOP AND BOTTOM.
 - 10. RETAINING WALL: TOP AND BOTTOM.
 - 11. SHEAR WALL: TOP AND BOTTOM.
 - 12. STAIR: TOP AND BOTTOM.
 - 13. BEAM AND COLUMN: TOP AND BOTTOM.
 - 14. FOUNDATION: TOP AND BOTTOM.
 - 15. RETAINING WALL: TOP AND BOTTOM.
 - 16. SHEAR WALL: TOP AND BOTTOM.
 - 17. STAIR: TOP AND BOTTOM.
 - 18. BEAM AND COLUMN: TOP AND BOTTOM.
 - 19. FOUNDATION: TOP AND BOTTOM.
 - 20. RETAINING WALL: TOP AND BOTTOM.
 - 21. SHEAR WALL: TOP AND BOTTOM.
 - 22. STAIR: TOP AND BOTTOM.
 - 23. BEAM AND COLUMN: TOP AND BOTTOM.
 - 24. FOUNDATION: TOP AND BOTTOM.
 - 25. RETAINING WALL: TOP AND BOTTOM.
 - 26. SHEAR WALL: TOP AND BOTTOM.
 - 27. STAIR: TOP AND BOTTOM.
 - 28. BEAM AND COLUMN: TOP AND BOTTOM.
 - 29. FOUNDATION: TOP AND BOTTOM.
 - 30. RETAINING WALL: TOP AND BOTTOM.
 - 31. SHEAR WALL: TOP AND BOTTOM.
 - 32. STAIR: TOP AND BOTTOM.
 - 33. BEAM AND COLUMN: TOP AND BOTTOM.
 - 34. FOUNDATION: TOP AND BOTTOM.
 - 35. RETAINING WALL: TOP AND BOTTOM.
 - 36. SHEAR WALL: TOP AND BOTTOM.
 - 37. STAIR: TOP AND BOTTOM.
 - 38. BEAM AND COLUMN: TOP AND BOTTOM.
 - 39. FOUNDATION: TOP AND BOTTOM.
 - 40. RETAINING WALL: TOP AND BOTTOM.
 - 41. SHEAR WALL: TOP AND BOTTOM.
 - 42. STAIR: TOP AND BOTTOM.
 - 43. BEAM AND COLUMN: TOP AND BOTTOM.
 - 44. FOUNDATION: TOP AND BOTTOM.
 - 45. RETAINING WALL: TOP AND BOTTOM.
 - 46. SHEAR WALL: TOP AND BOTTOM.
 - 47. STAIR: TOP AND BOTTOM.
 - 48. BEAM AND COLUMN: TOP AND BOTTOM.
 - 49. FOUNDATION: TOP AND BOTTOM.
 - 50. RETAINING WALL: TOP AND BOTTOM.
 - 51. SHEAR WALL: TOP AND BOTTOM.
 - 52. STAIR: TOP AND BOTTOM.
 - 53. BEAM AND COLUMN: TOP AND BOTTOM.
 - 54. FOUNDATION: TOP AND BOTTOM.
 - 55. RETAINING WALL: TOP AND BOTTOM.
 - 56. SHEAR WALL: TOP AND BOTTOM.
 - 57. STAIR: TOP AND BOTTOM.
 - 58. BEAM AND COLUMN: TOP AND BOTTOM.
 - 59. FOUNDATION: TOP AND BOTTOM.
 - 60. RETAINING WALL: TOP AND BOTTOM.
 - 61. SHEAR WALL: TOP AND BOTTOM.
 - 62. STAIR: TOP AND BOTTOM.
 - 63. BEAM AND COLUMN: TOP AND BOTTOM.
 - 64. FOUNDATION: TOP AND BOTTOM.
 - 65. RETAINING WALL: TOP AND BOTTOM.
 - 66. SHEAR WALL: TOP AND BOTTOM.
 - 67. STAIR: TOP AND BOTTOM.
 - 68. BEAM AND COLUMN: TOP AND BOTTOM.
 - 69. FOUNDATION: TOP AND BOTTOM.
 - 70. RETAINING WALL: TOP AND BOTTOM.
 - 71. SHEAR WALL: TOP AND BOTTOM.
 - 72. STAIR: TOP AND BOTTOM.
 - 73. BEAM AND COLUMN: TOP AND BOTTOM.
 - 74. FOUNDATION: TOP AND BOTTOM.
 - 75. RETAINING WALL: TOP AND BOTTOM.
 - 76. SHEAR WALL: TOP AND BOTTOM.
 - 77. STAIR: TOP AND BOTTOM.
 - 78. BEAM AND COLUMN: TOP AND BOTTOM.
 - 79. FOUNDATION: TOP AND BOTTOM.
 - 80. RETAINING WALL: TOP AND BOTTOM.
 - 81. SHEAR WALL: TOP AND BOTTOM.
 - 82. STAIR: TOP AND BOTTOM.
 - 83. BEAM AND COLUMN: TOP AND BOTTOM.
 - 84. FOUNDATION: TOP AND BOTTOM.
 - 85. RETAINING WALL: TOP AND BOTTOM.
 - 86. SHEAR WALL: TOP AND BOTTOM.
 - 87. STAIR: TOP AND BOTTOM.
 - 88. BEAM AND COLUMN: TOP AND BOTTOM.
 - 89. FOUNDATION: TOP AND BOTTOM.
 - 90. RETAINING WALL: TOP AND BOTTOM.
 - 91. SHEAR WALL: TOP AND BOTTOM.
 - 92. STAIR: TOP AND BOTTOM.
 - 93. BEAM AND COLUMN: TOP AND BOTTOM.
 - 94. FOUNDATION: TOP AND BOTTOM.
 - 95. RETAINING WALL: TOP AND BOTTOM.
 - 96. SHEAR WALL: TOP AND BOTTOM.
 - 97. STAIR: TOP AND BOTTOM.
 - 98. BEAM AND COLUMN: TOP AND BOTTOM.
 - 99. FOUNDATION: TOP AND BOTTOM.
 - 100. RETAINING WALL: TOP AND BOTTOM.
 - 101. SHEAR WALL: TOP AND BOTTOM.
 - 102. STAIR: TOP AND BOTTOM.
 - 103. BEAM AND COLUMN: TOP AND BOTTOM.
 - 104. FOUNDATION: TOP AND BOTTOM.
 - 105. RETAINING WALL: TOP AND BOTTOM.
 - 106. SHEAR WALL: TOP AND BOTTOM.
 - 107. STAIR: TOP AND BOTTOM.
 - 108. BEAM AND COLUMN: TOP AND BOTTOM.
 - 109. FOUNDATION: TOP AND BOTTOM.
 - 110. RETAINING WALL: TOP AND BOTTOM.
 - 111. SHEAR WALL: TOP AND BOTTOM.
 - 112. STAIR: TOP AND BOTTOM.
 - 113. BEAM AND COLUMN: TOP AND BOTTOM.
 - 114. FOUNDATION: TOP AND BOTTOM.
 - 115. RETAINING WALL: TOP AND BOTTOM.
 - 116. SHEAR WALL: TOP AND BOTTOM.
 - 117. STAIR: TOP AND BOTTOM.
 - 118. BEAM AND COLUMN: TOP AND BOTTOM.
 - 119. FOUNDATION: TOP AND BOTTOM.
 - 120. RETAINING WALL: TOP AND BOTTOM.
 - 121. SHEAR WALL: TOP AND BOTTOM.
 - 122. STAIR: TOP AND BOTTOM.
 - 123. BEAM AND COLUMN: TOP AND BOTTOM.
 - 124. FOUNDATION: TOP AND BOTTOM.
 - 125. RETAINING WALL: TOP AND BOTTOM.
 - 126. SHEAR WALL: TOP AND BOTTOM.
 - 127. STAIR: TOP AND BOTTOM.
 - 128. BEAM AND COLUMN: TOP AND BOTTOM.
 - 129. FOUNDATION: TOP AND BOTTOM.
 - 130. RETAINING WALL: TOP AND BOTTOM.
 - 131. SHEAR WALL: TOP AND BOTTOM.
 - 132. STAIR: TOP AND BOTTOM.
 - 133. BEAM AND COLUMN: TOP AND BOTTOM.
 - 134. FOUNDATION: TOP AND BOTTOM.
 - 135. RETAINING WALL: TOP AND BOTTOM.
 - 136. SHEAR WALL: TOP AND BOTTOM.
 - 137. STAIR: TOP AND BOTTOM.
 - 138. BEAM AND COLUMN: TOP AND BOTTOM.
 - 139. FOUNDATION: TOP AND BOTTOM.
 - 140. RETAINING WALL: TOP AND BOTTOM.
 - 141. SHEAR WALL: TOP AND BOTTOM.
 - 142. STAIR: TOP AND BOTTOM.
 - 143. BEAM AND COLUMN: TOP AND BOTTOM.
 - 144. FOUNDATION: TOP AND BOTTOM.
 - 145. RETAINING WALL: TOP AND BOTTOM.
 - 146. SHEAR WALL: TOP AND BOTTOM.
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 - 160. RETAINING WALL: TOP AND BOTTOM.
 - 161. SHEAR WALL: TOP AND BOTTOM.
 - 162. STAIR: TOP AND BOTTOM.
 - 163. BEAM AND COLUMN: TOP AND BOTTOM.
 - 164. FOUNDATION: TOP AND BOTTOM.
 - 165. RETAINING WALL: TOP AND BOTTOM.
 - 166. SHEAR WALL: TOP AND BOTTOM.
 - 167. STAIR: TOP AND BOTTOM.
 - 168. BEAM AND COLUMN: TOP AND BOTTOM.
 - 169. FOUNDATION: TOP AND BOTTOM.
 - 170. RETAINING WALL: TOP AND BOTTOM.
 - 171. SHEAR WALL: TOP AND BOTTOM.
 - 172. STAIR: TOP AND BOTTOM.
 - 173. BEAM AND COLUMN: TOP AND BOTTOM.
 - 174. FOUNDATION: TOP AND BOTTOM.
 - 175. RETAINING WALL: TOP AND BOTTOM.
 - 176. SHEAR WALL: TOP AND BOTTOM.
 - 177. STAIR: TOP AND BOTTOM.
 - 178. BEAM AND COLUMN: TOP AND BOTTOM.
 - 179. FOUNDATION: TOP AND BOTTOM.
 - 180. RETAINING WALL: TOP AND BOTTOM.
 - 181. SHEAR WALL: TOP AND BOTTOM.
 - 182. STAIR: TOP AND BOTTOM.
 - 183. BEAM AND COLUMN: TOP AND BOTTOM.
 - 184. FOUNDATION: TOP AND BOTTOM.
 - 185. RETAINING WALL: TOP AND BOTTOM.
 - 186. SHEAR WALL: TOP AND BOTTOM.
 - 187. STAIR: TOP AND BOTTOM.
 - 188. BEAM AND COLUMN: TOP AND BOTTOM.
 - 189. FOUNDATION: TOP AND BOTTOM.
 - 190. RETAINING WALL: TOP AND BOTTOM.
 - 191. SHEAR WALL: TOP AND BOTTOM.
 - 192. STAIR: TOP AND BOTTOM.
 - 193. BEAM AND COLUMN: TOP AND BOTTOM.
 - 194. FOUNDATION: TOP AND BOTTOM.
 - 195. RETAINING WALL: TOP AND BOTTOM.
 - 196. SHEAR WALL: TOP AND BOTTOM.
 - 197. STAIR: TOP AND BOTTOM.
 - 19



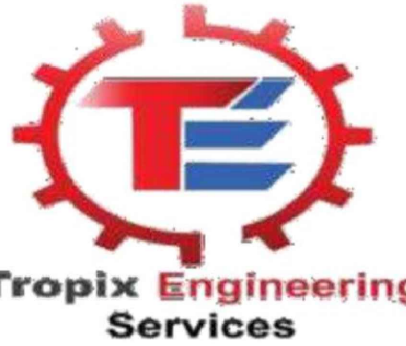
DETAIL OF BEAMS

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
 - FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING, SHORING AND FORMWORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
 - FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
 - USE F20B150C AND F20B150C/D DISTRIBUTION BARS AND MAIN BARS OF SLABS.
 - REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II, WITH A MINIMUM YIELD STRESS OF 460 N/mm². (FOR MORE DETAILS REFER SPECIFICATION.)
 - MAXIMUM DOWN BEND TOLERANCE ON AREA OF CROSS SECTION SHALL BE (1) 1%.
- CONCRETE :- (fck cube)**
- | | |
|---------------------|-----|
| - FOUNDATION | C25 |
| - SLAB | C25 |
| - BEAM | C25 |
| - COLUMN | C25 |
| - SLAB-COLUMN JOINT | C25 |
| - FOUNDATION BEAM | C20 |
| - SHEAR WALL | N/A |
- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
 - FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
 - REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
 - SLUMP AT SITE SHALL BE 100mm MIN AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
 - READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
 - READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 1 HOUR WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
 - RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 30m IN LENGTH. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
 - COLUMN, BEAMS AND WALLS INCLUDING FORMWORK SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION LAYERS OF 600mm. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
 - IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
 - FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200kPa AT A DEPTH OF 1.5m FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE FOR GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
- 17. LOCATIONS OF LAPS:**
- 17.1. FOUNDATION: 100% LAP. 17.2. COLUMN: 50% LAP. 17.3. BEAM: 50% LAP. 17.4. SLAB: 50% LAP. 17.5. WALL: 50% LAP. 17.6. JOINT: 50% LAP. 17.7. CORNER: 50% LAP. 17.8. END: 50% LAP. 17.9. MID: 50% LAP. 17.10. TOP: 50% LAP. 17.11. BOTTOM: 50% LAP. 17.12. SIDE: 50% LAP. 17.13. FRONT: 50% LAP. 17.14. BACK: 50% LAP. 17.15. LEFT: 50% LAP. 17.16. RIGHT: 50% LAP. 17.17. OTHER: 50% LAP.

COVER	
COLUMN-30mm	
BEAMS-30mm	
SLAB-20mm	
STAIRCASE-20mm	
FOOTING-50mm	

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



Tropix Engineering Services

CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

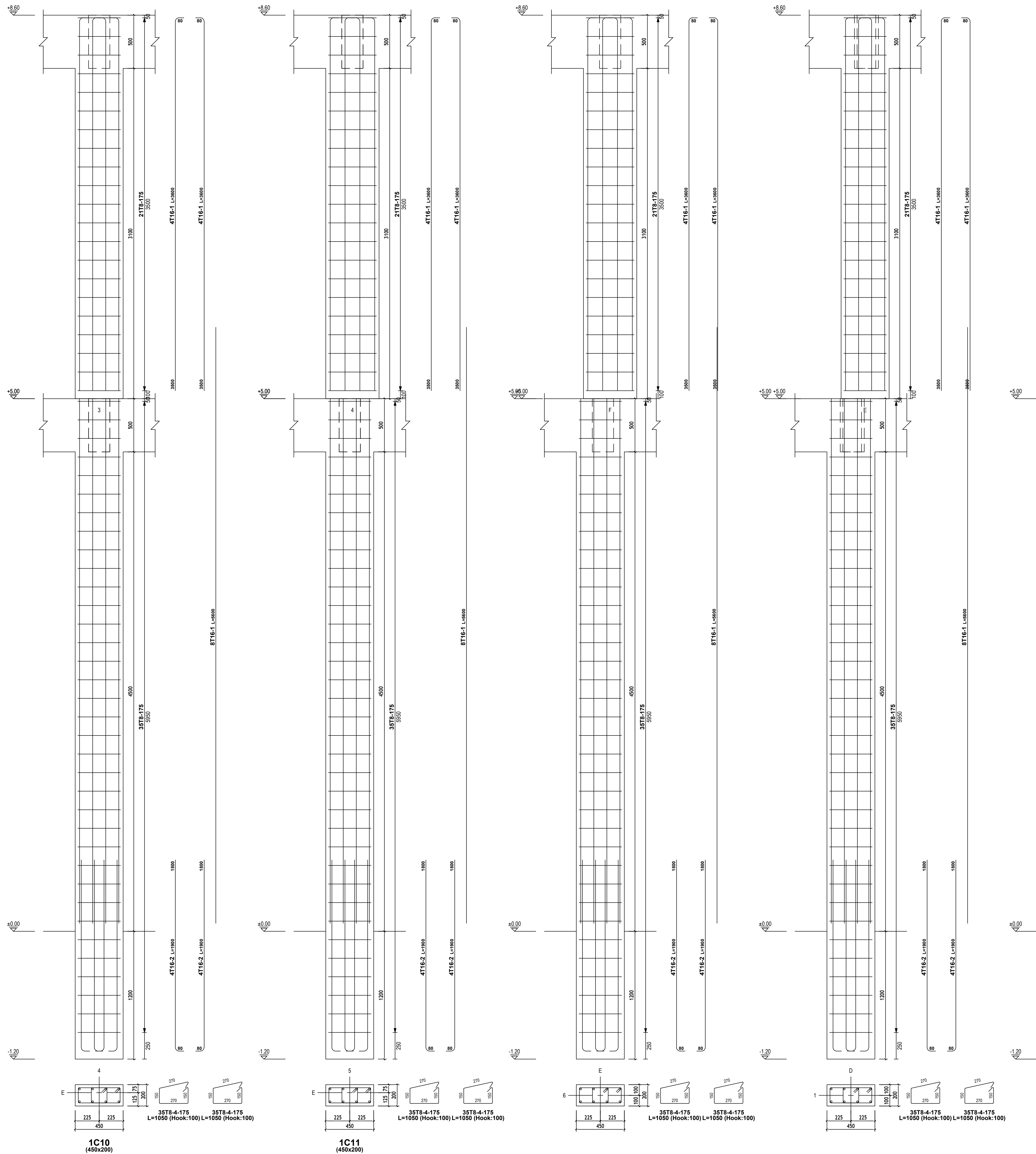
LOCATION:	CITY:	PLOT AREA
HIRSHABE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
	DATE: 12-20-2025

JOB NO:	DWG NO:	SCALE: 1:100	SERIAL NO:
	ST-1		4D-P05 2025

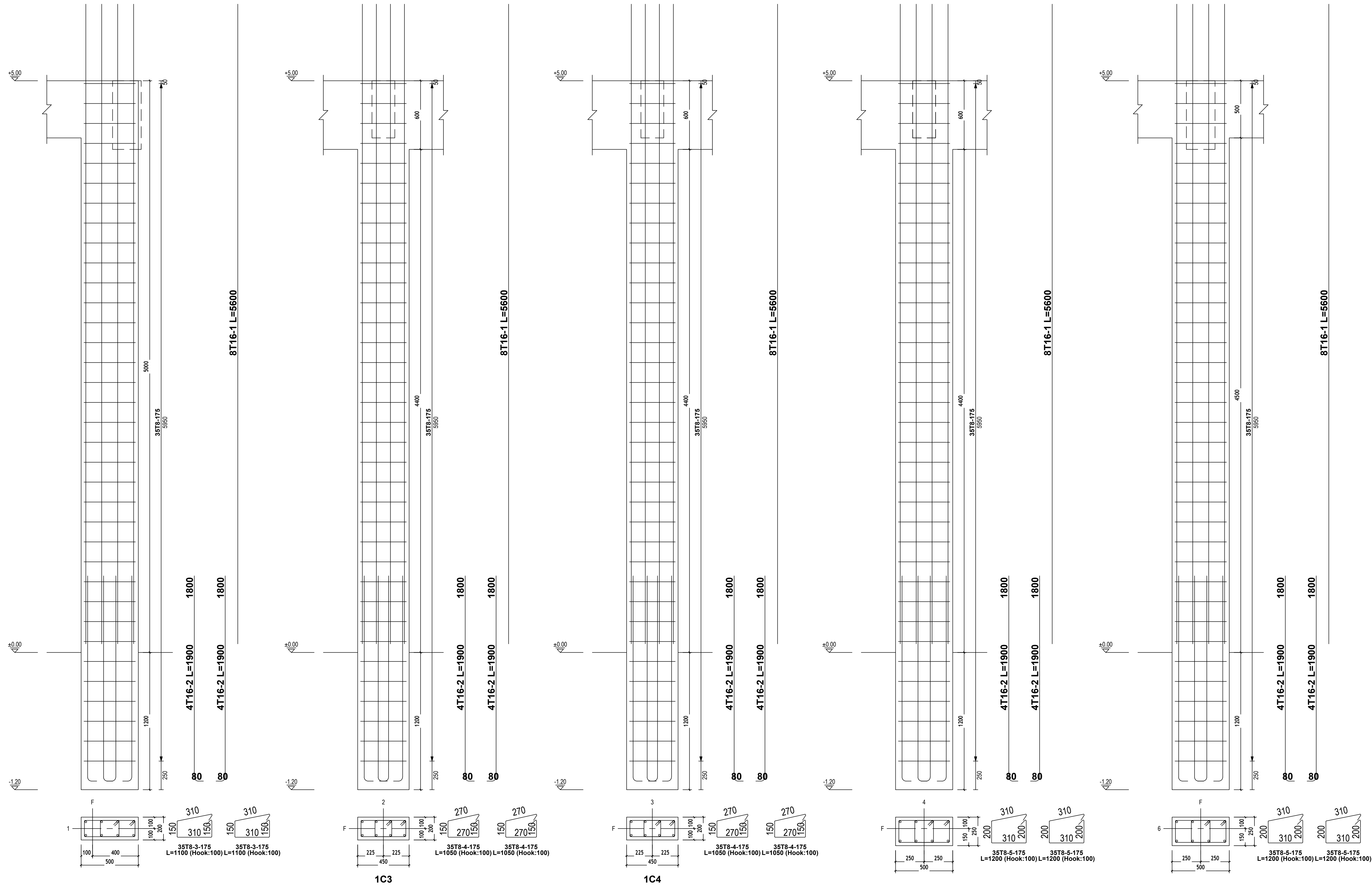


COLUMN ELEVATION OF FIRST FLOOR AND SECOND FLOOR

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150/C AND T12@150/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.
- | CONCRETE :- (fck cube) :- | |
|----------------------------|-----|
| - FOUNDATION..... | C25 |
| - SLAB..... | C25 |
| - STAIR..... | C25 |
| - BEAM..... | C25 |
| - COLUMN..... | C25 |
| - BEAM-COLUMN JOINT..... | C25 |
| - SLAB-COLUMN JOINT..... | C25 |
| -FOUNDATION BEAM..... | C20 |
| - SHEAR WALL..... | N/A |
- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:-**
A. RAFT OR RAFT BEAMS:
TOP BARS SHALL BE LAPPED AT COLUMN / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER IS 800:2004
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER COLUMN-30mm BEAMS-30mm slabs-20mm staircase-20mm footing -50mm		
REVISION NO.		REVISED DATE
R1		12.20.2025
R2		
R3		
R4		
 Tropix Engineering Services		
CLIENT NAME: FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)		
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²
PROJECT: G+1 RESIDENTIAL BUILDING		
DRAWING TITLE: FOOTING LAYOUT		
DRAWING BY		ENG HAMSE H HATLIA
CHECK BY		ENG SEAD GULEED
APPROVED BY		ENG MOHAMED SAAHID
DATE: 12-2025		
JOB NO:	DWG NO:	SCALE: 1:100
	ST-1	SERIAL NO: 4D-P05 2025



ELEVATION OF COLUMNS

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 480N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
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TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWD.
BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MID SPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN - LIMIT STATE METHOD OF DESIGN AS PER BS EN 2004.
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COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
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R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
	DATE: 12-2025

JOB NO:	DWG NO: ST-1	SCALE: 1:100	SERIAL NO: 4D-P05 2025
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- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

CONCRETE :- (fck cube) :-	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

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- LOCATIONS OF LAPS:-
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TOP BARS SHALL BE LAPPED AT COLUMN ENDS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS:-
TOP BARS SHALL BE LAPPED AT MID SPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN LAY OUT SITE METHOD OF DESIGN LAY OUT PER IS 2004
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
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COVER	
COLUMN-30mm	
BEAMS-30mm	
slabs-20mm	
staircase-20mm	
footing -50mm	

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

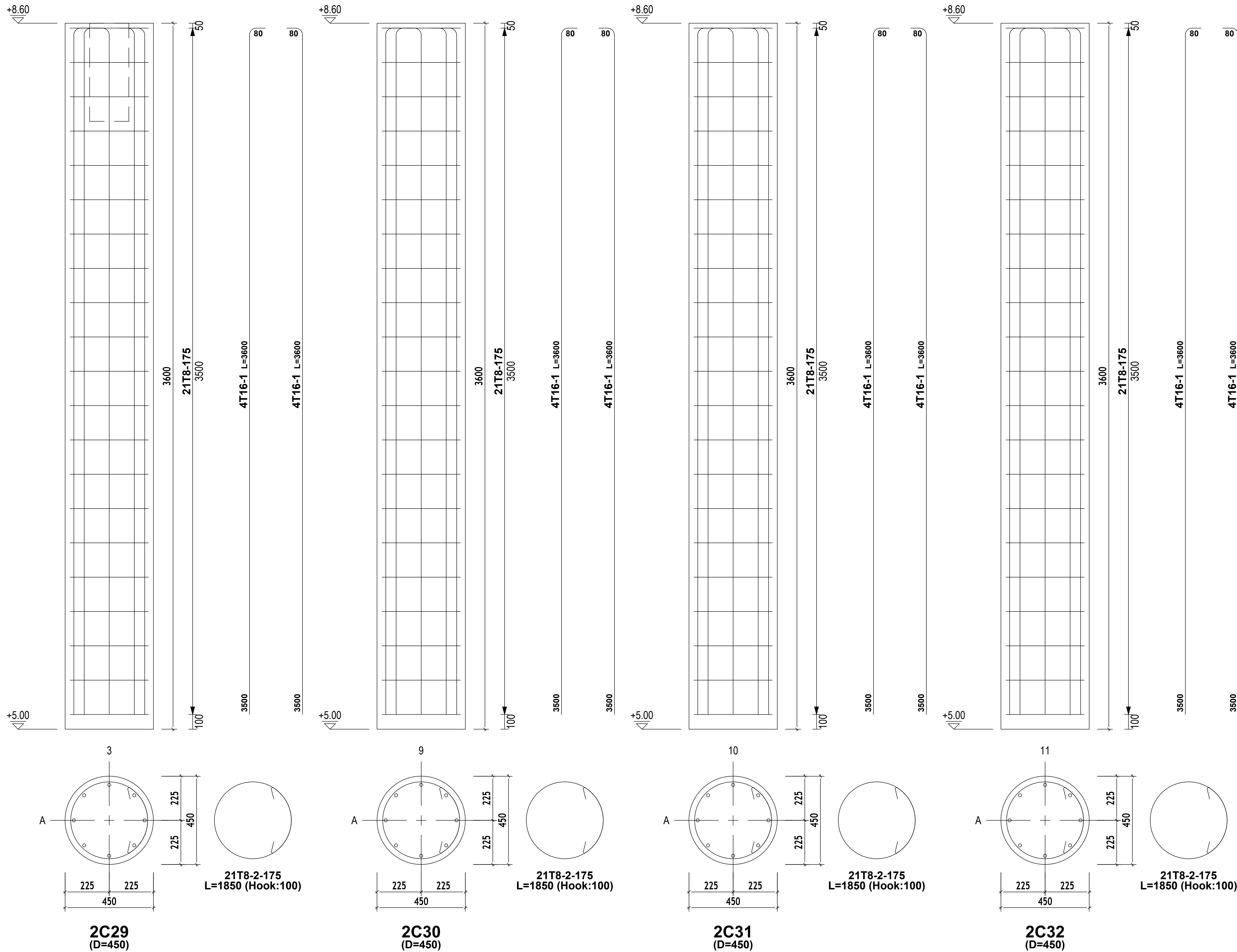
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
	DATE: 12-2025

JOB NO:	DWG NO: ST-1	SCALE:1:100	SERIAL NO: 4D-P05 2025
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CIRCULAR COLUMNS

Concrete Beam Rebar Schedule:[0] [1] [2] [3]																
Mark	Beam				Hanger	Top Reinforcements			Bottom Reinforcements			Links			Side Bars	Remarks
	Width (mm)	Depth (mm)	Span (mm)	Type		Left	Center	Right	Left	Center	Right	Left	Center	Right		
1B1	250	600	6000	E1			3T16	3T16n3T16		3T16			T8-250	T8-250	T8-225	
1B2	250	600	4000	INT		3T16n3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B3	250	600	4400	INT		3T16	3T16	1T16		3T16			T8-250	T8-250	T8-250	
1B4	250	600	8400	E2		1T16	4T16			7T16			T8-125	T8-250	T8-150	
1B16	200	500	3000	E1			3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B17	200	500	3010	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B18	200	500	4000	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B19	200	500	4400	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B20	200	500	3700	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B21	200	500	4700	E2		3T16	3T16			3T16			T8-250	T8-250	T8-250	
1B24	200	500	4430	E1			3T16	4T16n3T16		3T16			T8-250	T8-250	T8-250	
1B23	200	500	6200	INT		4T16n3T16	3T16	3T16n3T16		4T16			T8-175	T8-250	T8-200	
1B22	200	500	5180	E2		3T16n3T16	3T16			3T16			T8-250	T8-250	T8-250	
1B25	200	500	4430	SS			3T16			3T16			T8-250	T8-250	T8-250	
1B28	200	500	4430	E1			3T16	3T16n3T16		3T16			T8-250	T8-250	T8-250	
1B27	200	500	6200	INT		3T16n3T16	3T16	3T16n4T16		5T16			T8-175	T8-250	T8-150	
1B26	200	500	5180	E2		3T16n4T16	3T16			4T16			T8-200	T8-250	T8-250	
1B36	200	500	1000	CA			3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B35	200	500	4430	INT		3T16	3T16	3T16n3T16		3T16			T8-250	T8-250	T8-250	
1B34	200	500	6200	INT		3T16n3T16	3T16	3T16n4T16		5T16			T8-175	T8-250	T8-175	
1B33	200	500	5180	INT		3T16n4T16	3T16	3T16		4T16			T8-200	T8-250	T8-250	
1B32	200	500	610	CA		3T16	3T16			3T16			T8-250	T8-250	T8-250	
1B37	200	500	1000	CA			3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B38	200	500	4430	INT		3T16	3T16	3T16n3T16		3T16			T8-250	T8-250	T8-250	
1B39	200	500	6200	INT		3T16n3T16	3T16	5T16n5T16		4T16			T8-175	T8-250	T8-150	
1B40	200	500	5180	INT		5T16n5T16	5T16	3T16		5T16			T8-150	T8-250	T8-250	
1B41	200	500	610	CA		3T16	3T16			3T16			T8-250	T8-250	T8-250	
1B46	200	500	1000	CA			3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B45	200	500	4430	INT		3T16	3T16	3T16n3T16		3T16			T8-250	T8-250	T8-250	
1B44	200	500	6200	INT		3T16n3T16	3T16	3T16n3T16		3T16			T8-250	T8-250	T8-250	
1B43	200	500	5180	INT		3T16n3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B42	200	500	610	CA		3T16	3T16			3T16			T8-250	T8-250	T8-250	
1B47	200	500	930	E1			3T16	5T16		3T16			T8-250	T8-250	T8-250	
1B5	200	500	6000	INT		5T16	3T16	3T16n4T16		5T16			T8-225	T8-250	T8-150	
1B6	200	500	4000	INT		3T16n4T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B7	200	500	4400	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B8	200	500	3700	INT		3T16	3T16	3T16n3T16		3T16			T8-250	T8-250	T8-250	
1B9	200	500	4700	E2		3T16n3T16	3T16			3T16			T8-250	T8-250	T8-250	
1B48	200	500	930	E1			3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B10	200	500	3000	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B11	200	500	3010	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B12	200	500	4000	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B13	200	500	4400	INT		3T16	3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B14	200	500	3700	INT		3T16	3T16	3T16n3T16		3T16			T8-250	T8-250	T8-250	
1B15	200	500	4700	E2		3T16n3T16	3T16			3T16			T8-250	T8-250	T8-250	
1B49	200	500	1670	E1			3T16	3T16		3T16			T8-250	T8-250	T8-250	
1B31	200	500	4430	INT		3T16	3T16	3T16n3T16		3T16			T8-250	T8-250	T8-250	
1B30	200	500	6200	INT		3T16n3T16	3T16	3T16n4T16		5T16			T8-175	T8-250	T8-175	
1B29	200	500	5180	E2		3T16n4T16	3T16			4T16			T8-200	T8-250	T8-250	

BBS OF BEAMS OF FIRST FLOOR

GENERAL NOTE

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CONCRETE :- (fck cube):-

- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
-FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
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- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM.
- CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
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COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.

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R2

R3

R4



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION:

CITY:

PLOT AREA

HIRSHABELE

JAWHAR

...M²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY

ENG HAMSE H HATLIA

CHECK BY

ENG SEAD GULEED

APPROVED BY

ENG MOHAMED SAAHID

DATE: 12-2025

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4D-P05 2025

GENERAL NOTE

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3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING, SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II, WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
- MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

7.

CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
-FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
9. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
10. SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
11. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
12. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
15. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
16. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL.(CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
17. LOCATIONS OF LAPS:-
- A. BASE COLUMNS: BEAMS:
- TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
- BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
- B. BEAMS AND SLAB: TOP BARS SHALL BE LAPPED AT MIDSPAN.
- BOTTOM SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
- METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER BS EN 2004.
18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
DATE: 12-2025	

JOB NO:	DWG NO:	SCALE: 1:100	SERIAL NO:
	ST-1		4D-P05 2025

2B1	200	500	6000	E1			3T16	3T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B2	200	500	4000	INT		3T16ln3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B3	200	500	4400	INT		3T16	3T16	3T16ln6T16		3T16		T8-250	T8-250	T8-250		
2B4	200	500	8400	E2		3T16ln6T16	3T16			6T16		T8-250	T8-250	T8-250		
2B16	200	500	3000	E1			3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B17	200	500	3010	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B18	200	500	4000	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B19	200	500	4400	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B20	200	500	3700	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B21	200	500	4700	E2		3T16	3T16			3T16		T8-250	T8-250	T8-250		
2B24	200	500	4430	E1			3T16	3T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B23	200	500	6200	INT		3T16ln3T16	3T16	3T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B22	200	500	5180	E2		3T16ln3T16	3T16			3T16		T8-250	T8-250	T8-250		
2B25	200	500	4430	SS			3T16			3T16		T8-250	T8-250	T8-250		
2B28	200	500	4430	E1			3T16	3T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B27	200	500	6200	INT		3T16ln3T16	3T16	3T16ln3T16		4T16		T8-250	T8-250	T8-250		
2B26	200	500	5180	E2		3T16ln3T16	3T16			5T16		T8-175	T8-250	T8-225		
2B36	200	500	1000	CA			3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B35	200	500	4430	INT		3T16	3T16	3T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B34	200	500	6200	INT		3T16ln3T16	3T16	3T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B33	200	500	5180	INT		3T16ln3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B32	200	500	610	CA		3T16	3T16			3T16		T8-250	T8-250	T8-250		
2B37	200	500	1000	CA			3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B38	200	500	4430	INT		3T16	3T16	4T16		3T16		T8-250	T8-250	T8-250		
2B39	200	500	6200	INT		4T16	3T16	4T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B40	200	500	5180	INT		4T16ln3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B41	200	500	610	CA		3T16	3T16			3T16		T8-250	T8-250	T8-250		
2B46	200	500	1000	CA			3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B45	200	500	4430	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B44	200	500	6200	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B43	200	500	5180	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B42	200	500	610	CA		3T16	3T16			3T16		T8-250	T8-250	T8-250		
2B47	200	500	930	E1			3T16	4T16		3T16		T8-250	T8-250	T8-250		
2B5	200	500	6000	INT		4T16	3T16	3T16ln3T16		5T16		T8-250	T8-250	T8-200		
2B6	200	500	4000	INT		3T16ln3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B7	200	500	4400	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B8	200	500	3700	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B9	200	500	4700	E2		3T16	3T16			3T16		T8-250	T8-250	T8-250		
2B48	200	500	930	E1			3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B10	200	500	3000	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B11	200	500	3010	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B12	200	500	4000	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B13	200	500	4400	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B14	200	500	3700	INT		3T16	3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B15	200	500	4700	E2		3T16	3T16			3T16		T8-250	T8-250	T8-250		
2B49	200	500	1670	E1			3T16	3T16		3T16		T8-250	T8-250	T8-250		
2B31	200	500	4430	INT		3T16	3T16	3T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B30	200	500	6200	INT		3T16ln3T16	3T16	3T16ln3T16		3T16		T8-250	T8-250	T8-250		
2B29	200	500	5180	E2		3T16ln3T16	3T16			4T16		T8-250	T8-250	T8-250		

BBS OF BEAMS OF SECOND FLOOR

FOOTING SCHEDULE (C20/25:Fy460)

FOOTING NUMBERS	COLUMN NUMBERS	FOOTING TYPE	FOOTING DIMENSION					FOOTING REINFORCEMENT	
			STEP	L	B	D1	D2	TOP AND BOTTOM	
								ALONG B	ALONG L
F1	2 PCS	Pad	-	1400	1400	500	-	T16@150 C/C	T16@150 C/C
F2	1 PCS	Pad	-	1500	1500	500	-	T16@150 C/C	T16@150 C/C
F3	4 PCS	Pad	-	1600	1600	500	-	T16@150 C/C	T16@150 C/C
F4	2 PCS	Pad	-	1700	1700	500	-	T16@150 C/C	T16@150 C/C
F5	1 PCS	Pad	-	1800	1800	500	-	T16@150 C/C	T16@150 C/C
F6	2 PCS	Pad	-	1900	1900	500	-	T16@150 C/C	T16@150 C/C
F7	2 PCS	Pad	-	2000	2000	500	-	T16@150 C/C	T16@150 C/C
F8	1 PCS	Pad	-	2100	2100	500	-	T16@150 C/C	T16@150 C/C
F9	4 PCS	Pad	-	2200	2200	500	-	T16@150 C/C	T16@150 C/C
F10	2 PCS	Pad	-	2300	2300	500	-	T16@150 C/C	T16@150 C/C
F11	1 PCS	Pad	-	2400	2400	500	-	T16@150 C/C	T16@150 C/C
F12	1 PCS	Pad	-	2600	2600	500	-	T16@150 C/C	T16@150 C/C
F13	1 PCS	combined	-	2500	2000	500	-	T16@150 C/C	T16@150 C/C
F14	2 PCS	combined	-	2500	1500	500	-	T16@150 C/C	T16@150 C/C
F15	1 PCS	combined	-	2000	1500	500	-	T16@150 C/C	T16@150 C/C

FOOTING SCHEDULE (C20/25:Fy460)

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING, SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWINGS WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (±) 3%.
8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
11. SLUMP AT SITE SHALL BE 100mm, MIN. AND 150mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
12. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
13. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
14. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
15. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
16. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
17. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPa AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL (CLINT) AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
18. LOCATIONS OF LAPS:-
19. (SEE SPECIFICATION) REINFORCING AT COLUMNS, WALLS, BEAMS, GRADE BEAMS SHALL BE LAPPED AT 40D AND 30D UNLESS OTHERWISE SPECIFIED ON DWD.
20. REINFORCING SHALL BE LAPPED AT 40D UNLESS OTHERWISE SPECIFIED ON DWD.
21. REINFORCING SHALL BE LAPPED AT 40D UNLESS OTHERWISE SPECIFIED ON DWD.
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99. REINFORCING SHALL BE LAPPED AT 40D UNLESS OTHERWISE SPECIFIED ON DWD.
100. REINFORCING SHALL BE LAPPED AT 40D UNLESS OTHERWISE SPECIFIED ON DWD.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.

REVISED DATE

R1

12.20.2025

R2

R3

R4



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION:

CITY:

PLOT AREA

HIRSHABELE

JAWHAR

...M²

PROJECT:

G+1 RESIDENTIAL BUILDING

DRAWING TITLE:

FOOTING LAYOUT

DRAWING BY

ENG HAMSE H HATLIA

CHECK BY

ENG SEAD GULEED

APPROVED BY

ENG MOHAMED SAAHID

DATE:

12-2025

JOB NO:

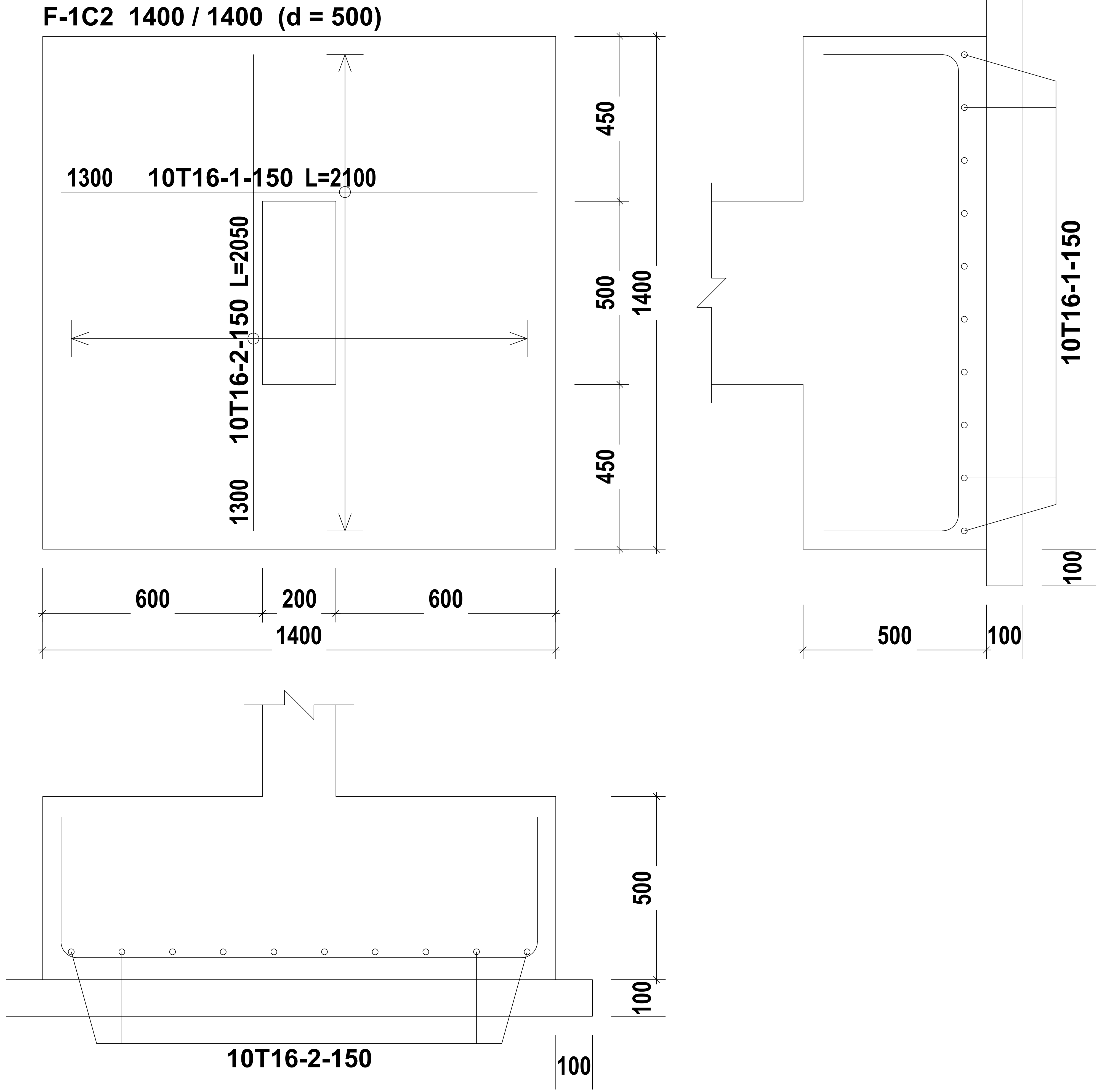
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SERIAL NO:

ST-1

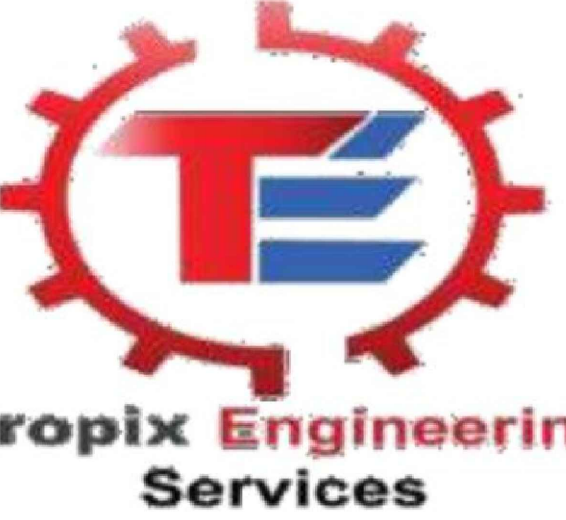
4D-P05 2025



DETAIL OF FOOTING

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING, SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE 12@150C/C and 12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF GROSS SECTION SHALL BE (-) 3%.
- | CONCRETE :- (fck cube) : | |
|--------------------------|-----|
| - FOUNDATION..... | C25 |
| - SLAB..... | C25 |
| - STAIR..... | C25 |
| - BEAM..... | C25 |
| - COLUMN..... | C25 |
| - BEAM-COLUMN JOINT..... | C25 |
| - SLAB-COLUMN JOINT..... | C25 |
| - FOUNDATION BEAM..... | C20 |
| - SHEAR WALL..... | N/A |
- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5Mtr FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:-**
A. SHEET OR PAGE NUMBER:
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER BS EN 2004.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER COLUMN-30mm BEAMS-30mm slabs-20mm staircase-20mm footing -50mm		
REVISION NO.		REVISED DATE
R1		12.20.2025
R2		
R3		
R4		
 Tropix Engineering Services		
CLIENT NAME: FEDERAL GOVERNMENT OF SOMALIA MINISTRY OF FINANCE PROJECT COORDINATION UNIT (PCU)		
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²
PROJECT: G+1 RESIDENTIAL BUILDING		
DRAWING TITLE: FOOTING LAYOUT		
DRAWING BY	ENG HAMSE H HATLIA	
CHECK BY	ENG SEAD GULEED	
APPROVED BY	ENG MOHAMED SAAHID	
DATE: 12-2025		
JOB NO:	DWG NO:	SCALE: 1:100
	ST-1	SERIAL NO: 4D-P05 2025

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. FOR ALL OTHER INFORMATION, THE ENGINEER'S DRAWINGS SHALL BE SET TO THE ENGINEERS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK TO BE NECESSARY FOR THE CONSTRUCTION OF THE STRUCTURE.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE 12@1500C AND 12@1500C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
6. CONCREGEMENT WITH CONCRETE SHALL BE 25MPA. (FOR MORE DETAILS REFER SPECIFICATION)
7. MINIMUM YIELD STRESS OF 480N/MPA. (FOR MORE DETAILS REFER SPECIFICATION)

MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube) :	
- FOUNDATION.....	C25
- SLAB	C25
- STAIR	C25
- BEAM	C25
- COLUMN	C25
- BEAM-COLUMN JOINT	C25
- SLAB-COLUMN JOINT	C25
-FOUNDATION BEAM.....	C20
- SHEAR WALL	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER AGGREGATE RATIO OF 0.45.

9. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.

10. SLUMP AT SITE SHALL BE 100mm, 150mm and 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 32°C AT THE TIME OF CASTING.

11. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.

12. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL NOT BE MORE THAN 10 HOURS.

13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTING SHALL BE 24 HOURS. SHALL NOT BE POURED FOR ALL DAYS.

14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE POURED IN CAST IN CONTINUOUS LAYERS IN LAYERS OF 400mm. EACH LAYER SHALL BE POURED AND COMPACTED AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.

15. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.

16. IF THERE IS AN ARE DISCREPANCY IN THE DRAWING, THE CONTRACTOR SHALL ADOPT THE 1:5M FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEO TECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).

17. LOCATIONS OF LAPS:-
A. RAFT OR RAFT BEAMS:-
TOP BEAMS SHALL BE LAPPED AT COLUMNS/ WALLS.
BOTTOM BEAMS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS:- TOP BEAMS SHALL BE LAPPED AT COLUMNS/ WALLS.
BOTTOM BEAMS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN LAPT SITE METHOD OF DESIGN.

18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER, WORKER, AND THE ENGINEER AT THE TIME OF CONSTRUCTION.

19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING SHUTTERING QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.

20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

	REVISION NO.	REVISED DATE
	R1	12.20.2025
	R2	
	R3	
	R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

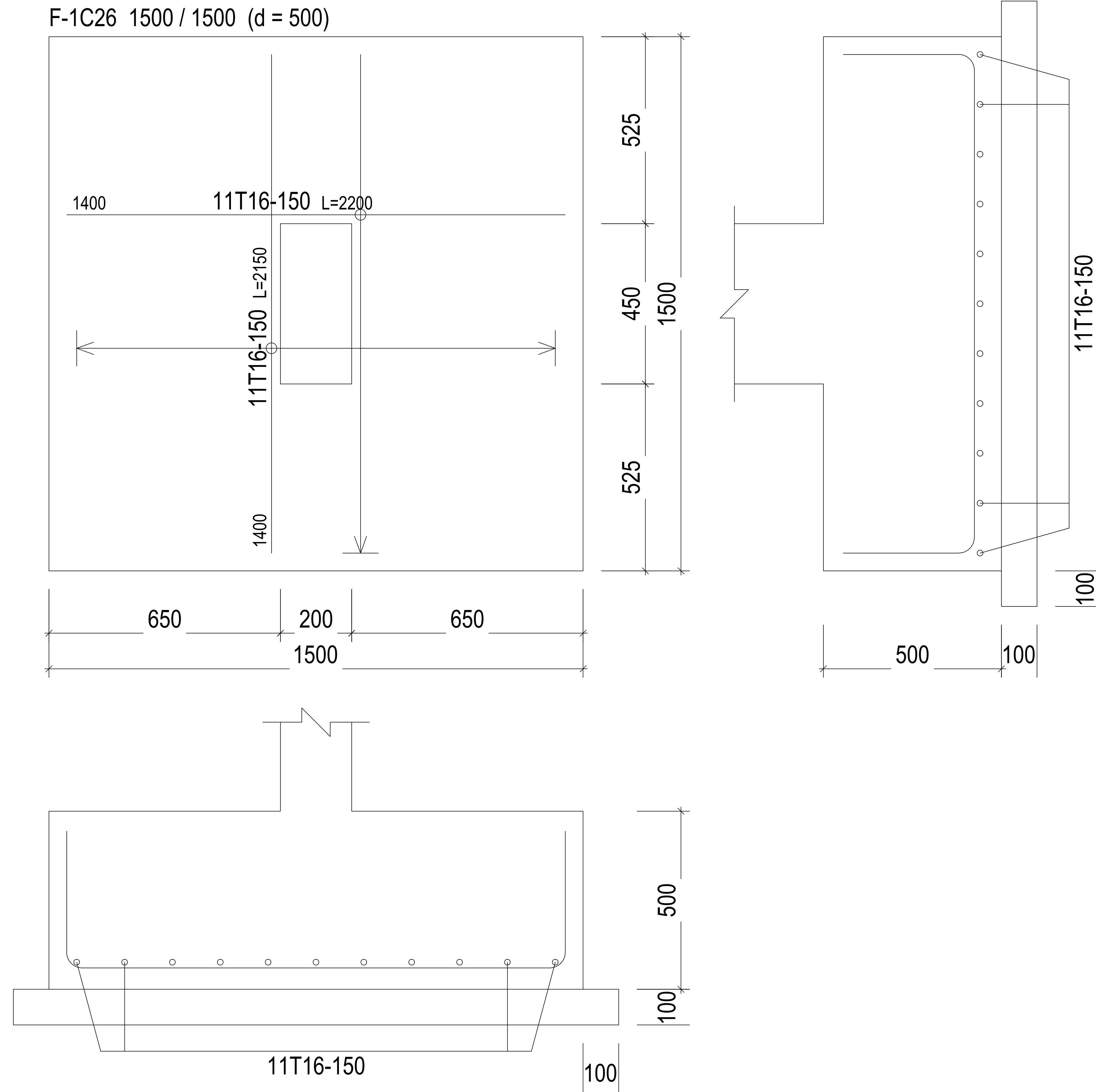
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

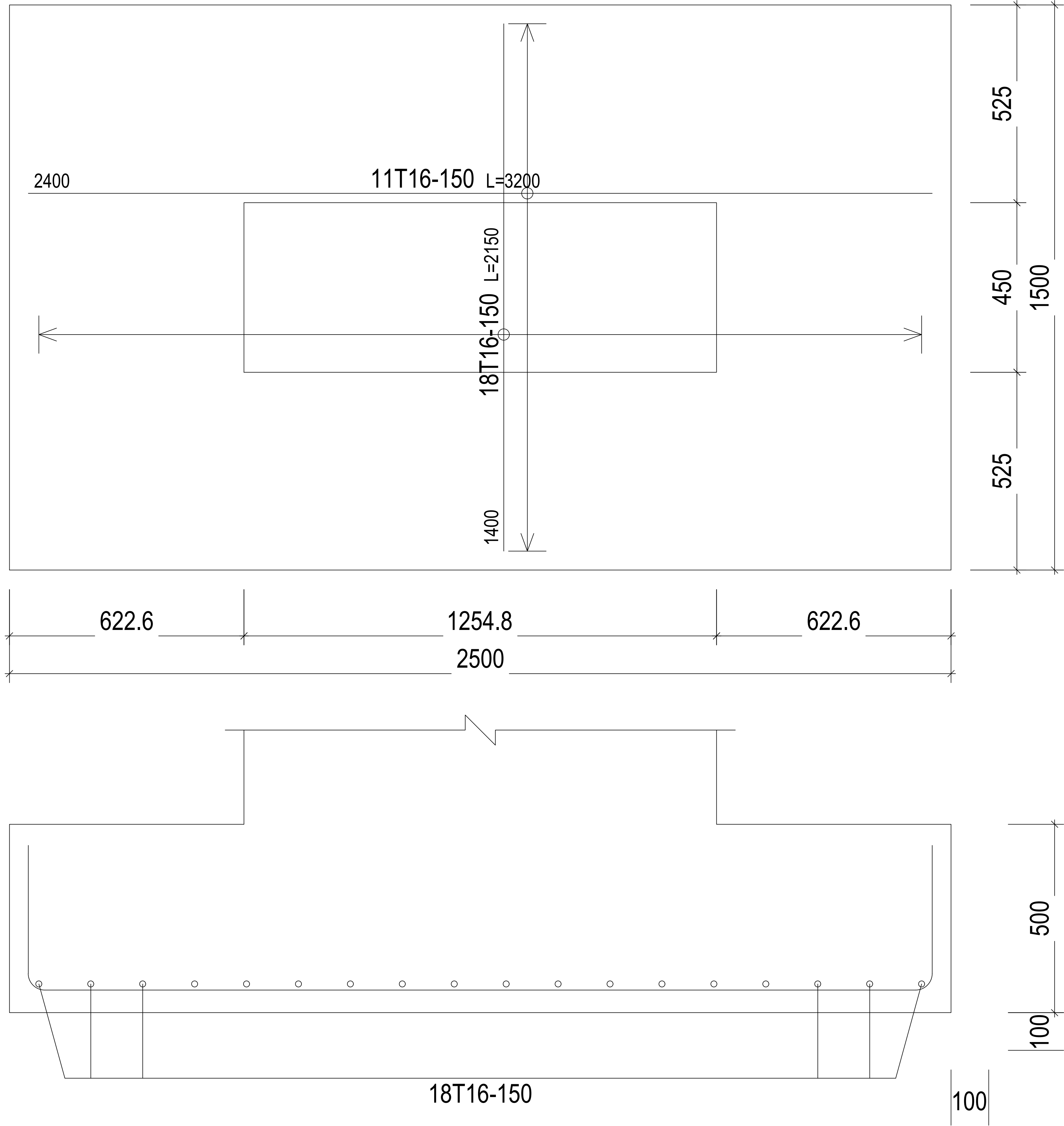
DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
	DATE: 12-2025

JOB NO:	DWG NO: ST-1	SCALE:1:100	SERIAL NO: 4D-P05 2025
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DETAIL OF FOOTING

F-1C13 2500 / 1500 (d = 500)



DETAIL OF FOOTING

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

CONCRETE :- (fck cube) :	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.50m FROM NATURAL GROUND LEVEL(CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:
A. RAFT OR SLAB BEAMS:
TOP BARS SHALL BE LAPPED AT COLUMN / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS:
TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN LAPS STATE METHOD OF DESIGN LAPS BY ENDS.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

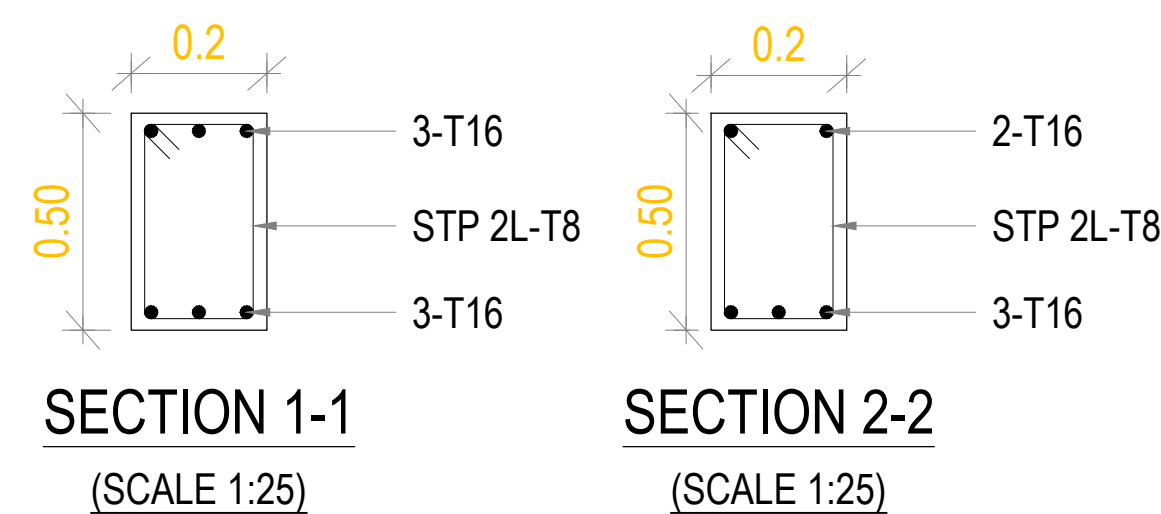
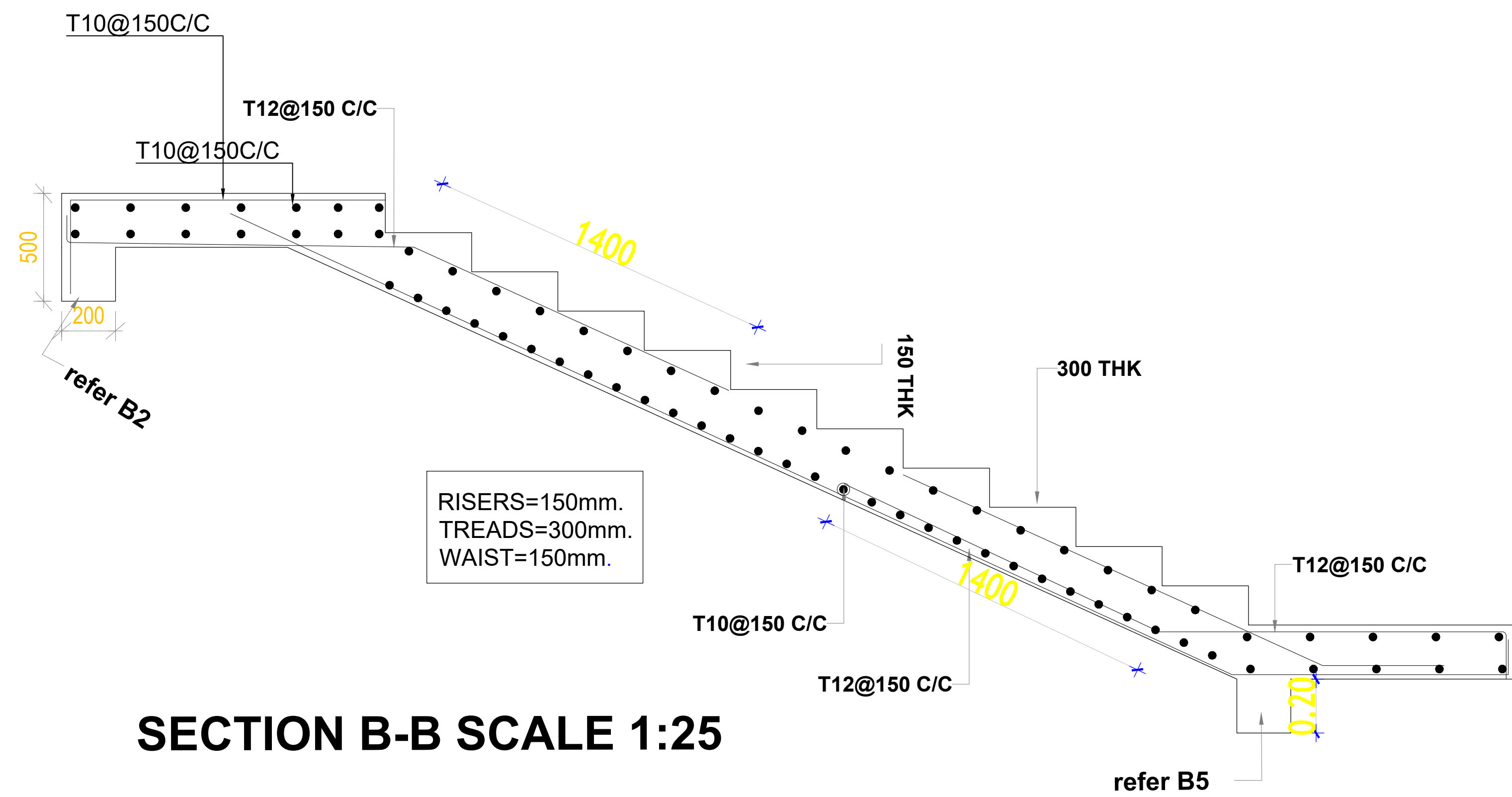
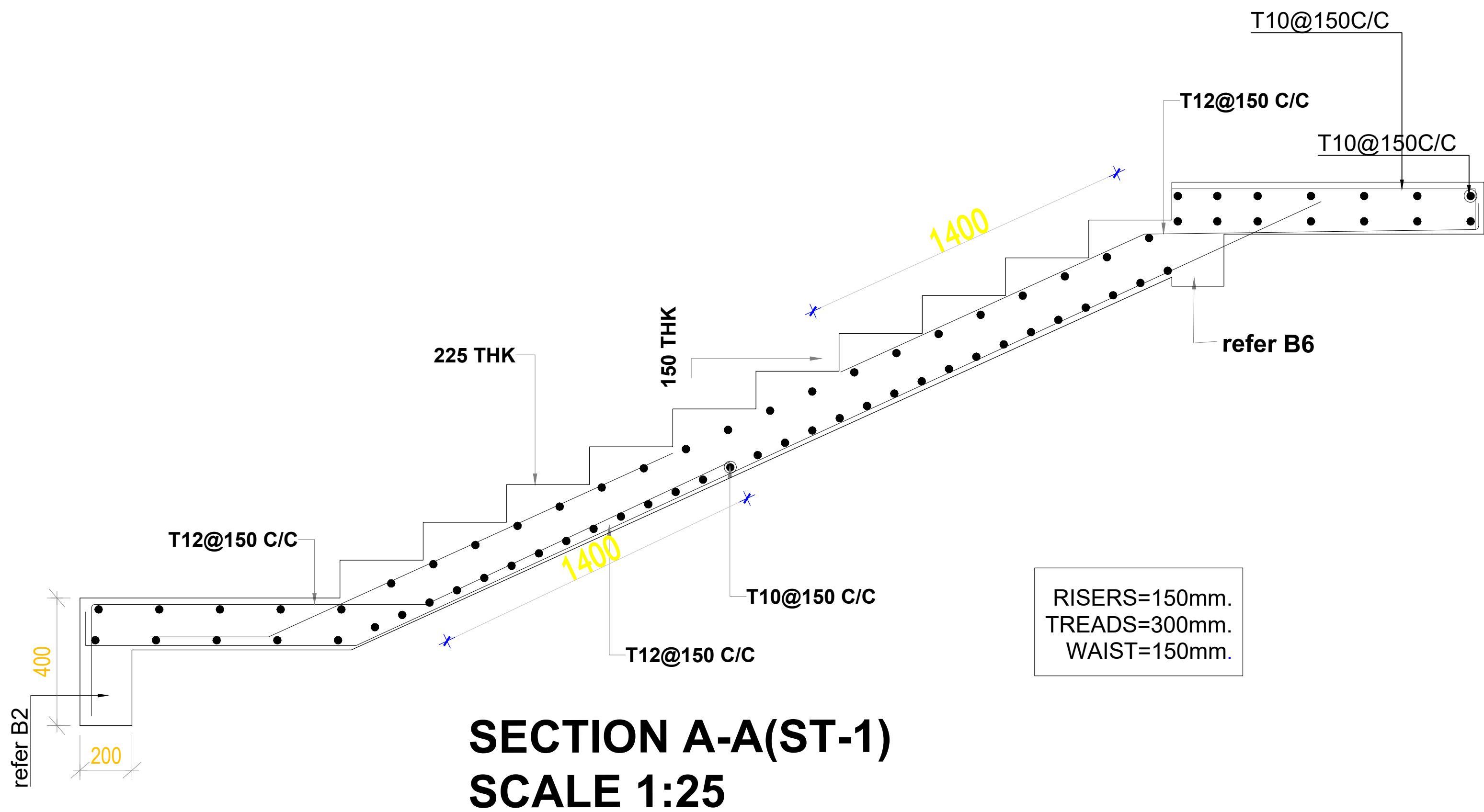
LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
DATE: 12-2025	

JOB NO:	DWG NO: ST-1	SCALE: 1:100	SERIAL NO: 4D-P05 2025
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DETAIL OF STAIRCASE

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWING THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING, SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
3. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
4. USE T10@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
5. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/MM². FOR MORE DETAILS REFER SPECIFICATION.
6. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
11. SLUMP AT SITE SHALL BE 100mm MIN AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
12. READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
13. READY MIXED OR SHUTT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 3 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
14. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTH. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
15. COLUMNS, BEAMS AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
16. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
17. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPa AT A DEPTH OF 1.0M FROM NATURAL GROUND LEVEL. ENGINEER AND/OR CONTRACTOR IS RESPONSIBLE FOR GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
18. LOCATIONS OF LAP:
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97. LOCATIONS OF LAP:
98. LOCATIONS OF LAP:
99. LOCATIONS OF LAP:
100. LOCATIONS OF LAP:

COVER	
COLUMN-30mm	
BEAMS-30mm	
slabs-20mm	
stairs-20mm	
footing-50mm	

REVISION NO.	REVISED DATE
R1	12.20.2025
R2	
R3	
R4	



CLIENT NAME: FEDERAL
GOVERNMENT OF SOMALIA
MINISTRY OF FINANCE
PROJECT COORDINATION UNIT
(PCU)

LOCATION:	CITY:	PLOT AREA
HIRSHABELE	JAWHAR	...M ²

PROJECT:
G+1 RESIDENTIAL BUILDING

DRAWING TITLE:
FOOTING LAYOUT

DRAWING BY	ENG HAMSE H HATLIA
CHECK BY	ENG SEAD GULEED
APPROVED BY	ENG MOHAMED SAAHID
DATE: 12-2025	

JOB NO:	DWG NO:	SCALE:	SERIAL NO:
	ST-1	1:100	4D-P05 2025