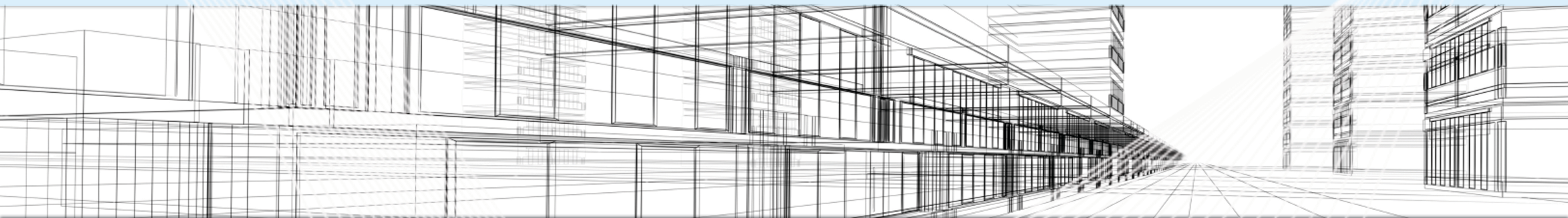
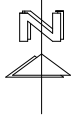


FINAL DETAILED DESIGN DRAWINGS



ONE STOP SHOP DESIGN

ARCHITECTURE, STRUCTURE, ELECTRICAL, VAC, FIREFIGHTING, WATER
SUPPLY & WATER DRAINAGE DESIGN DRAWINGS



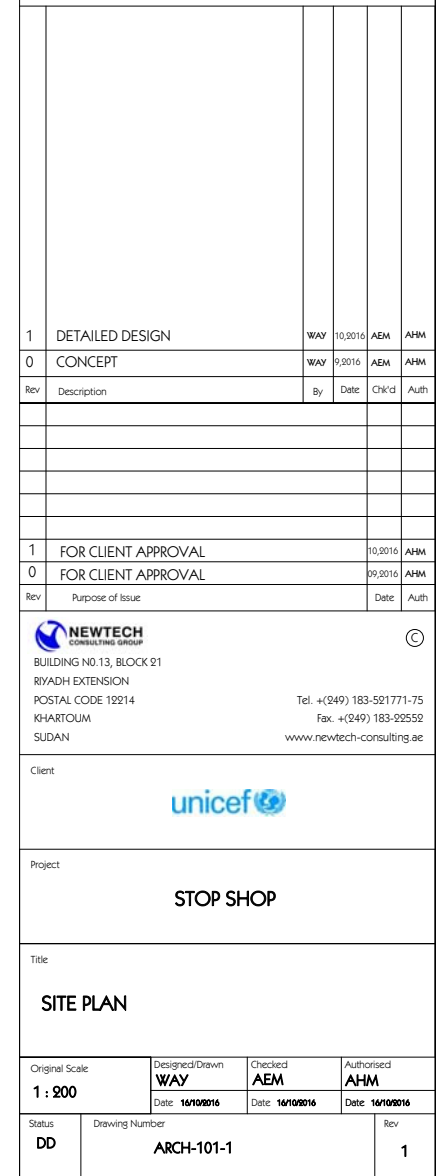
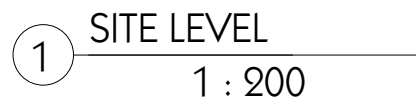
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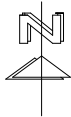
1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

LIST OF ARCHITECTURE DRAWINGS			
Sheet Number	Sheet Name	Sheet Issue Date	Current Revision
ARCH-100	LIST OF DRAWINGS	16/10/2016	1
ARCH-101	SITE PLAN	16/10/2016	1
ARCH-102	VIEWS	16/10/2016	1
ARCH-200	GROUND FLOOR PLAN	16/10/2016	1
ARCH-201	GROUND FLOOR DIMENTIONS PLAN	16/10/2016	1
ARCH-202	FIRST FLOOR DIMENTIONS PLAN	16/10/2016	1
ARCH-203	ENTERANCE	16/10/2016	1
ARCH-300	ELEVATIONS	16/10/2016	1
ARCH-301	ELEVATIONS	16/10/2016	1
ARCH-400	SECTIONS 1	16/10/2016	1
ARCH-401	SECTIONS 2	16/10/2016	1
ARCH-500	TOLITES DETAILS	16/10/2016	1
ARCH-501	BOUNDARY WALL DETAILS	16/10/2016	1
ARCH-600	STAIRCASE	16/10/2016	1
ARCH-601	STAIRCASE DETAILS	16/10/2016	1
ARCH-700	DOORS AND WINDOWS SCHEDULES	16/10/2016	1
ARCH-701	DOORS DETAILS	16/10/2016	1
ARCH-702	WINDOWES DETAILS	16/10/2016	1
ARCH-703	FINISHES SCHEDULE	16/10/2016	1

1	DETAILED DESIGN	WAY	10/2016	AEM	AHM
0	CONCEPT	WAY	9/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016		AHM
0	FOR CLIENT APPROVAL		09/2016		AHM
Rev	Purpose of Issue		Date		Auth
<div><div>NEWTECH CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 19214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-92552 www.newtech-consulting.ae</div></div> <div></div>					
Client <div>unicef</div>					
Project <div>STOP SHOP</div>					
Title <div>LIST OF DRAWINGS</div>					
Original Scale		Designed/Drawn WAY Date: 16/10/2016	Checked AEM Date: 16/10/2016	Authorised AHM Date: 16/10/2016	
Status DD	Drawing Number ARCH-100-1				Rev 1



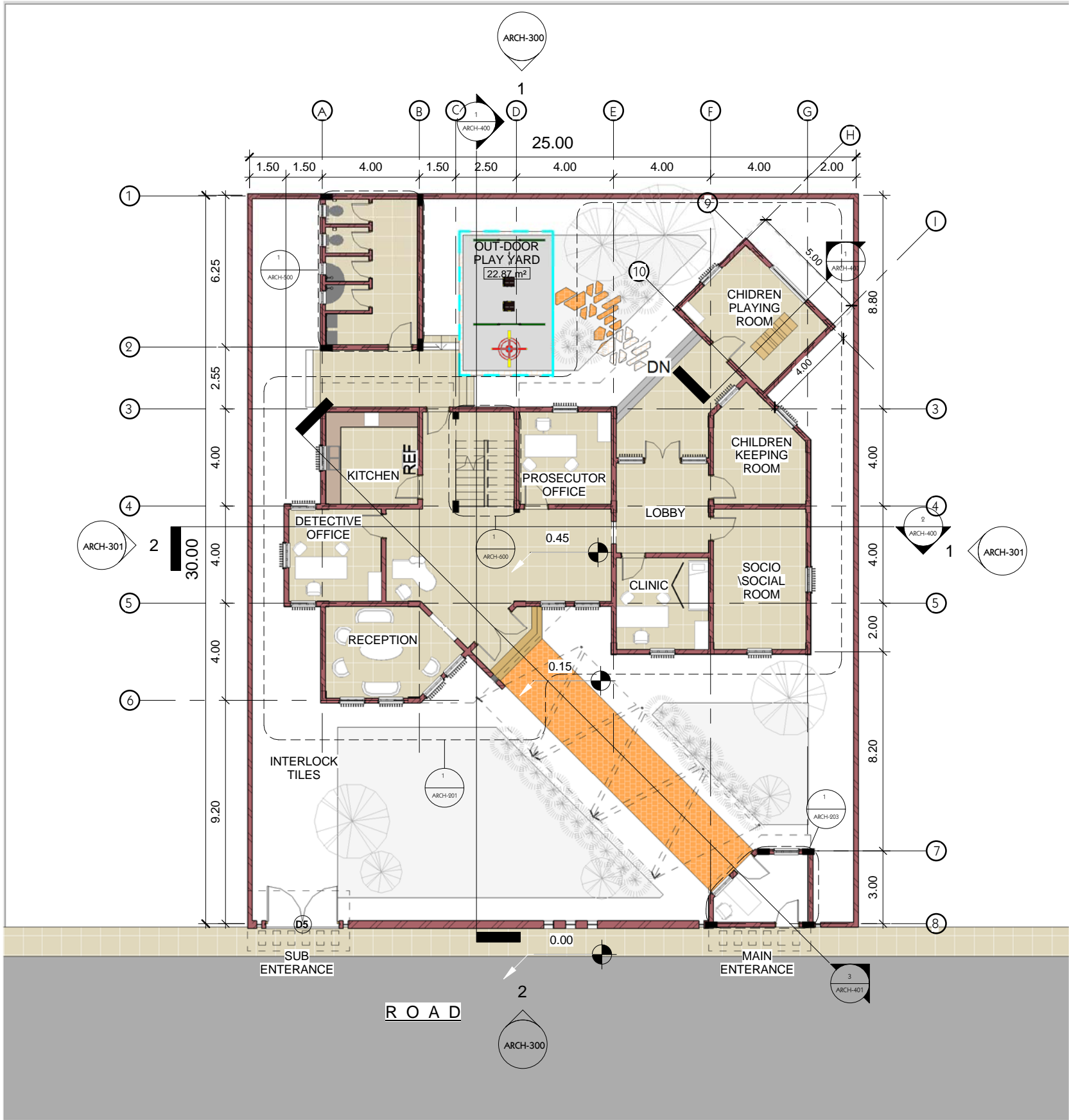


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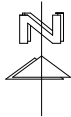
1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN	WAY	10/2016	AEM	AHM
0	CONCEPT	WAY	9/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016		AHM
0	FOR CLIENT APPROVAL		09/2016		AHM
Rev	Purpose of Issue		Date		Auth
<div><div>NEWTECH</div><div>CONSULTING GROUP</div></div> <div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 19214 KHARTOUM SUDAN</div> <div>Tel. +(249) 183-521771-75 Fax. +(249) 183-92552 www.newtech-consulting.ae</div>					
Client <div>unicef</div>					
Project <div>STOP SHOP</div>					
Title <div>VIEWS</div>					
Original Scale		Designed/Drawn WAY	Checked AEM	Authorised AHM	
		Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016	
Status DD	Drawing Number ARCH-102-1				Rev 1



1 GROUND FLOOR PLAN
1 : 200

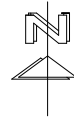


NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN	Author	10/2016	AEM	AHM
0	CONCEPT	Author	9/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016		AHM
0	FOR CLIENT APPROVAL		09/2016		AHM
Rev	Purpose of Issue		Date		Auth
<div><div>NEWTECH CONSULTING GROUP</div><div><div>BUILDING NO.13, BLOCK 21</div><div>RIYADH EXTENSION</div><div>POSTAL CODE 12914</div><div>KHARTOUM</div><div>SUDAN</div></div><div><div>Tel. +(249) 183-521771-75</div><div>Fax. +(249) 183-92552</div><div>www.newtech-consulting.ae</div></div></div> <div></div>					
Client					
<div></div>					
Project					
STOP SHOP					
Title					
GROUND FLOOR PLAN					
Original Scale	Designed/Drawn	Checked	Authorised		
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	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016		
Status	Drawing Number				Rev
DD	ARCH-200-1				1

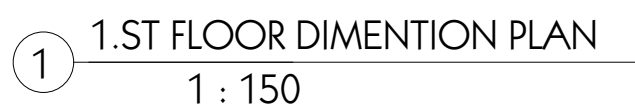


- NOTES:
- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN	Author	10/2016	AEM	AHM
0	CONCEPT	Author	09/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016	AHM	
0	FOR CLIENT APPROVAL		09/2016	AHM	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH CONSULTING GROUP</div><div></div></div> <div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 19214 KHARTOUM SUDAN</div> <div>Tel. +(249) 183-521771-75 Fax. +(249) 183-92552 www.newtech-consulting.ae</div> <div></div>					
Client					
					
Project					
STOP SHOP					
Title					
GROUND FLOOR DIMENTIONS PLAN					
Original Scale	Designed/Drawn	Checked	Authorised		
1 : 100	WAY	AEM	AHM		
	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016		
Status	Drawing Number				Rev
DD	ARCH-201-1				1

1 GROUND FLOOR DIMENTION PLAN

1 : 100

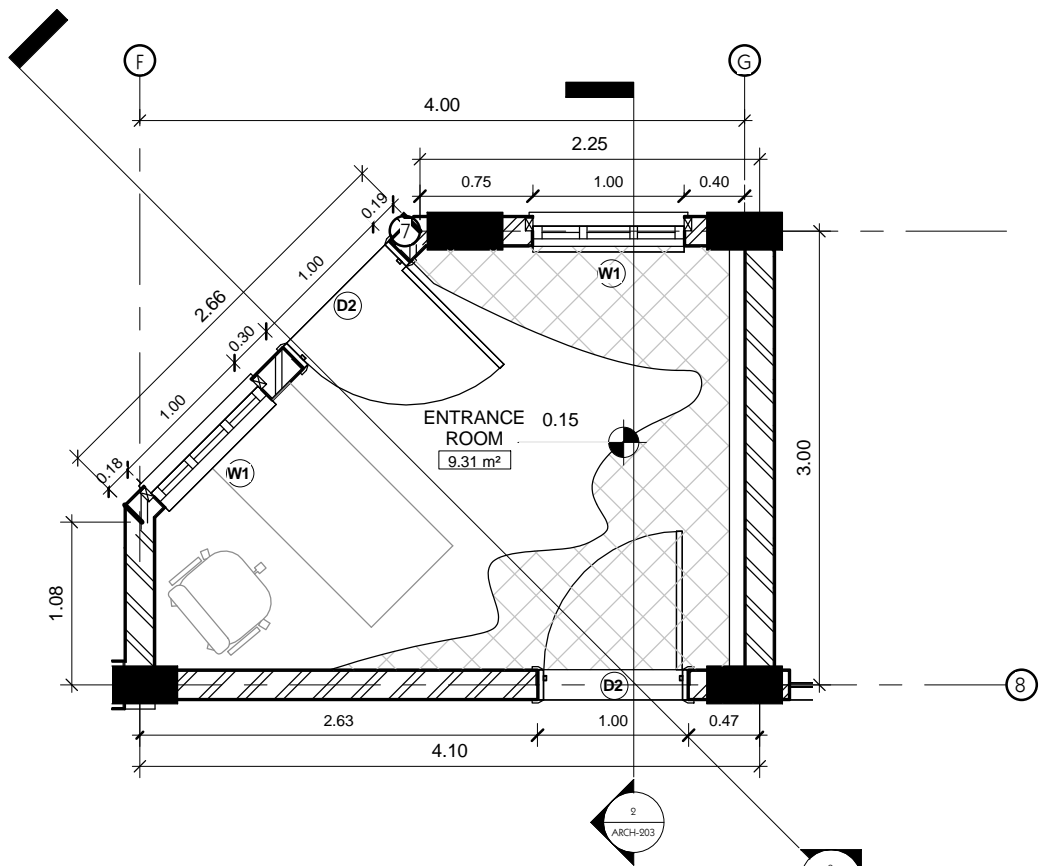


2. ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

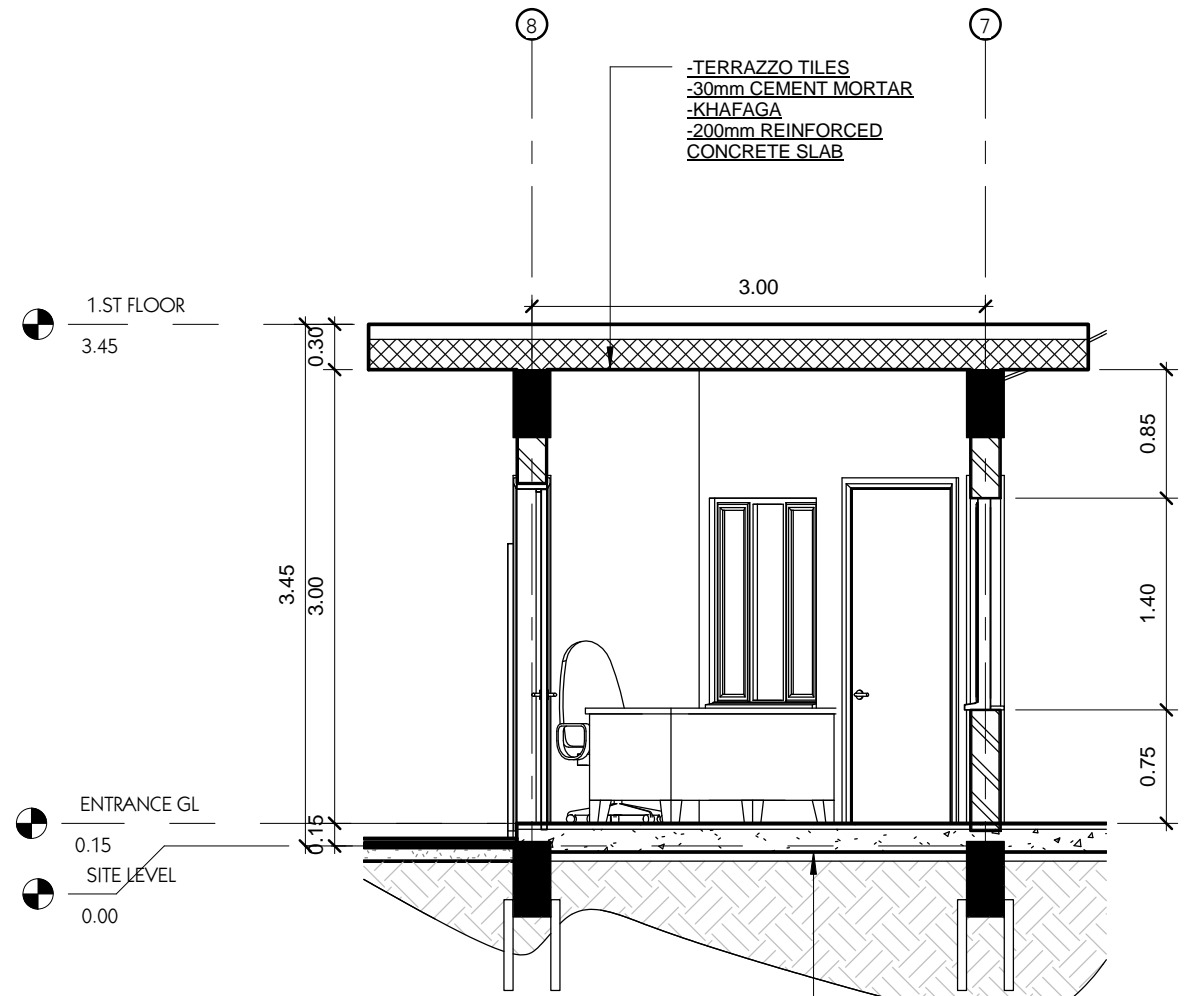
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CONSULTING GROUP

BUILDING NO.13, BLOCK 21
RIYADH EXTENSION
POSTAL CODE 12214
KHARTOUM
SUDAN

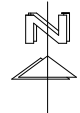
Tel. +(249) 183-521771-
Fax. +(249) 183-9251-
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1 ENTRANCE GROUND FLOOR PLAN
1 : 50



2 ENTRANCE SECTION
1 : 50



NOTES:

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2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN	Author	10/2016	AEM	AHM
0	CONCEPT	Author	9/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016		AHM
0	FOR CLIENT APPROVAL		09/2016		AHM
Rev	Purpose of Issue		Date		Auth
<div><div>NEWTECH</div><div>CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21</div><div>RIYADH EXTENSION</div><div>POSTAL CODE 19214</div><div>KHARTOUM</div><div>SUDAN</div><div>Tel. +(249) 183-521771-75</div><div>Fax. +(249) 183-92552</div><div>www.newtech-consulting.ae</div></div>					
Client					
<div>unicef</div>					
Project					
STOP SHOP					
Title					
ENTRANCE					
Original Scale	Designed/Drawn	Checked	Authorised		
1 : 50	WAY	AEM	AHM		
	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016		
Status	Drawing Number				Rev
DD	ARCH-203-1				1



NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

KEYNOTE LEGEND

Key Value	Keynote Text
E1	ACRYLIC POLYURETHANE PAINT (BEIGE COLOR)SMOOTH TEXTURE APPLIED ON 20 MM CEMENT / SAND PLASTER TO BE APPROVED BY ENGINEER.
E2	ACRYLIC POLYURETHANE PAINT (BROWN COLOR)SMOOTH TEXTURE APPLIED ON 20 MM CEMENT / SAND PLASTER TO BE APPROVED BY ENGINEER.



1	DETAILED DESIGN	Author	10/2016	AEM	AI
0	CONCEPT	Author	9/2016	AEM	AI
Rev	Description	By	Date	Ch'cd	AI
1	FOR CLIENT APPROVAL		10/2016	AI	
0	FOR CLIENT APPROVAL		09/2016	AI	
Rev	Purpose of Issue		Date		AI



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Fax. +(249) 183-925552
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Client	
--------	--



Project


STOP SHOP

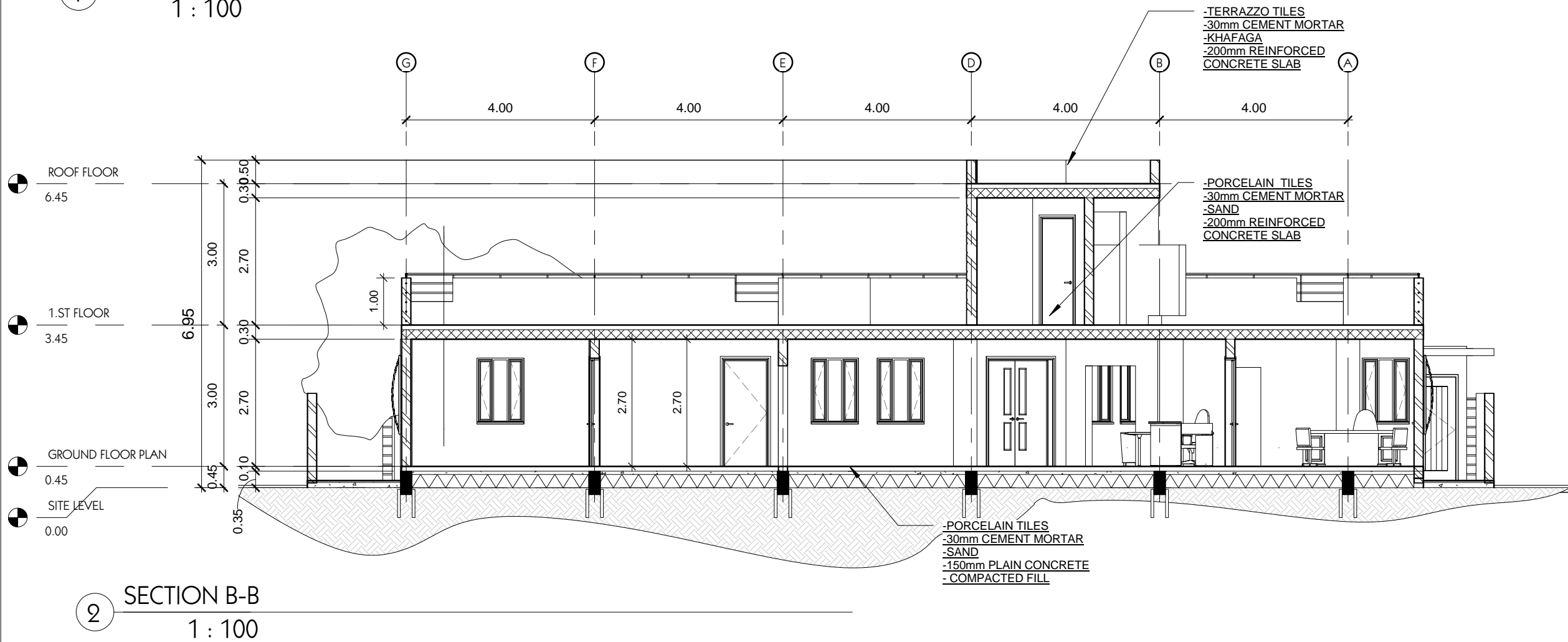
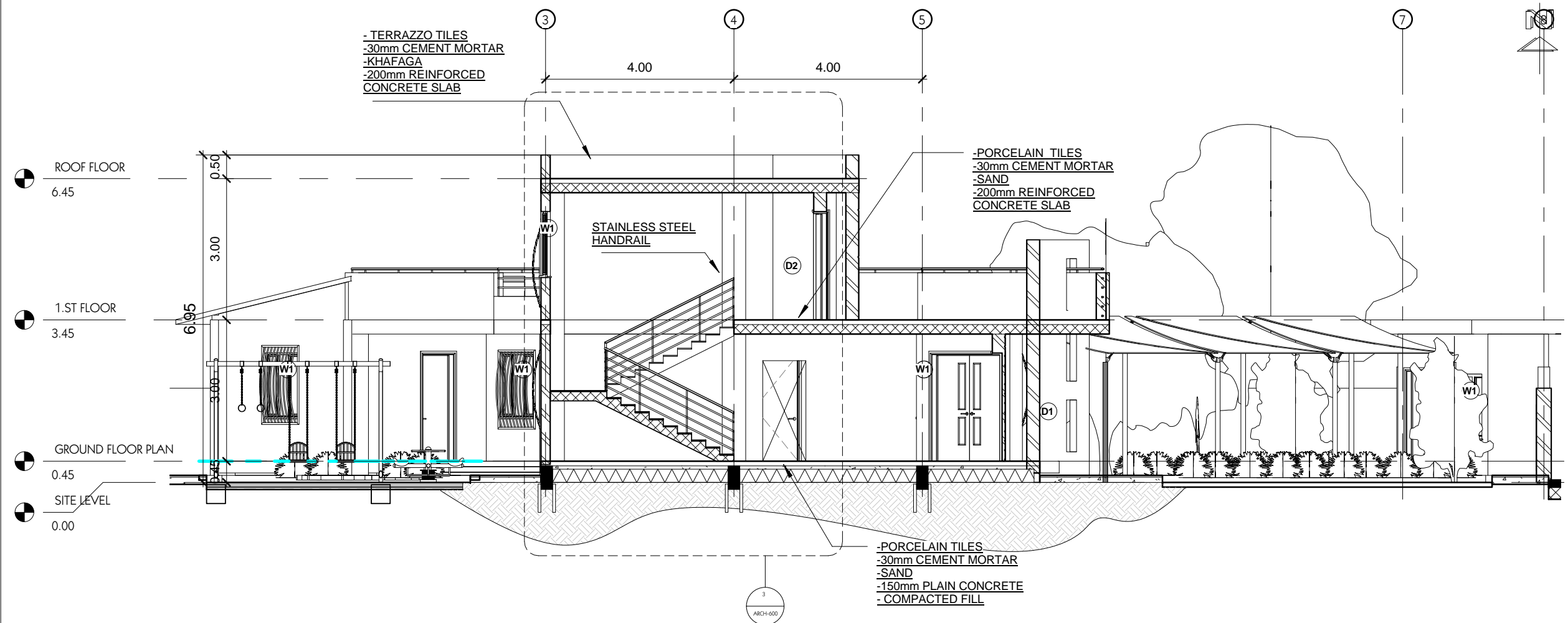
Title

ELEVATIONS

Original Scale 1 : 100	Designed/Drawn WAY	Checked AEM	Authorised AHM
	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016
Status DD	Drawing Number ARCH-300-1		Rev 1



Client			
			
Project			
STOP SHOP			
Title			
ELEVATIONS			
Original Scale	Designed/Drawn	Checked	Authorised
1 : 100	WAY	AEM	AHM
	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016
Status	Drawing Number		Rev
DD	ARCH-301-1		1



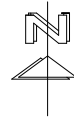
NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN	Author	10/2016	Checker	Approver
0	CONCEPT	Author	9/2016	Checker	Approver
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016		Approver
0	FOR CLIENT APPROVAL		09/2016		Approver
Rev	Purpose of Issue		Date		Auth
NEWTECH CONSULTING GROUP					
BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 19214 KHARTOUM SUDAN					
Tel. +(249) 183-521771-75 Fax. +(249) 183-92552 www.newtech-consulting.ae					

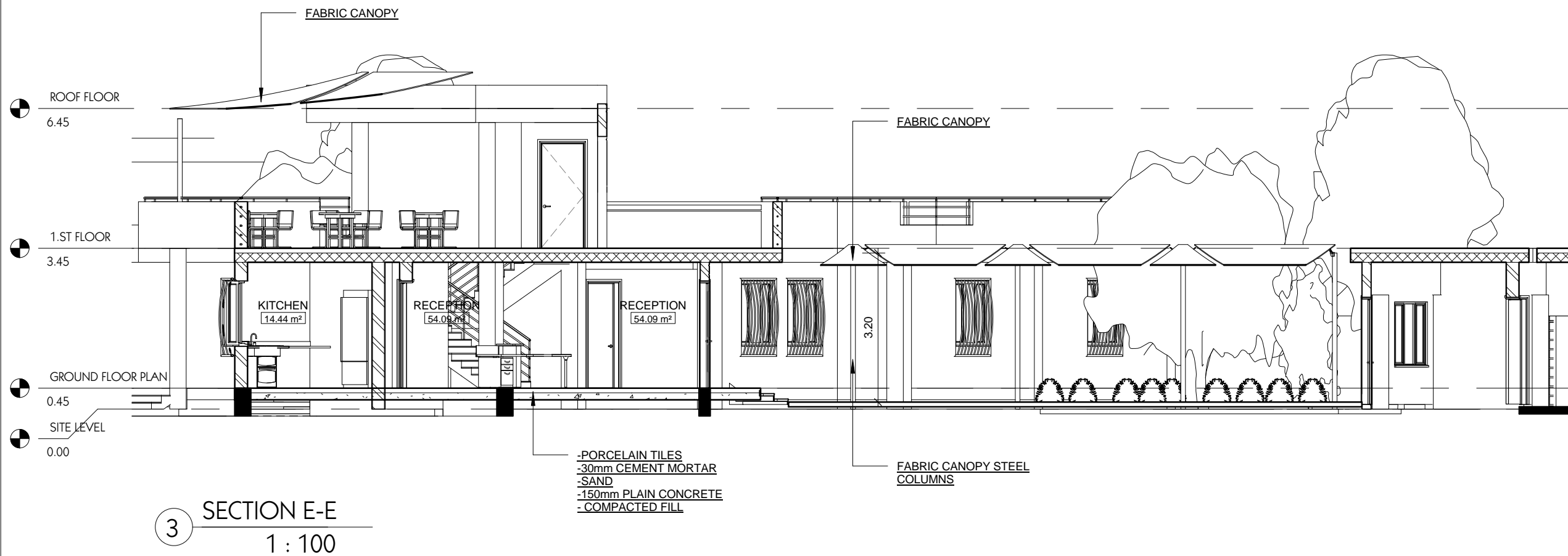
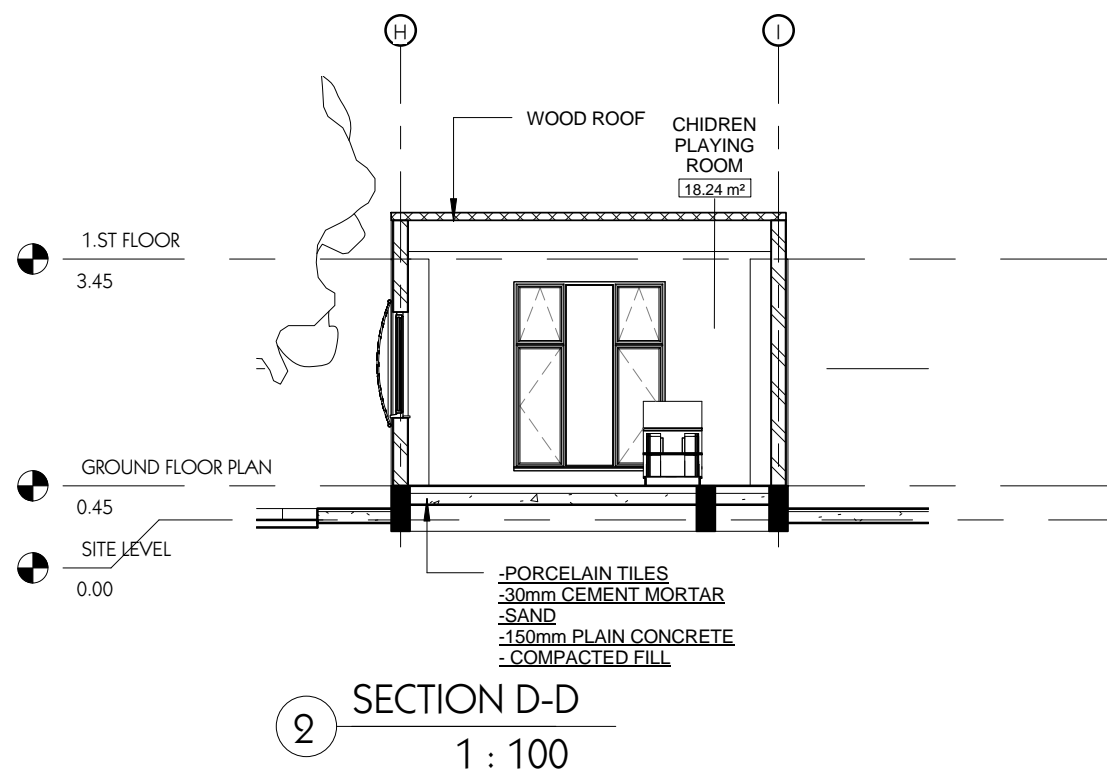
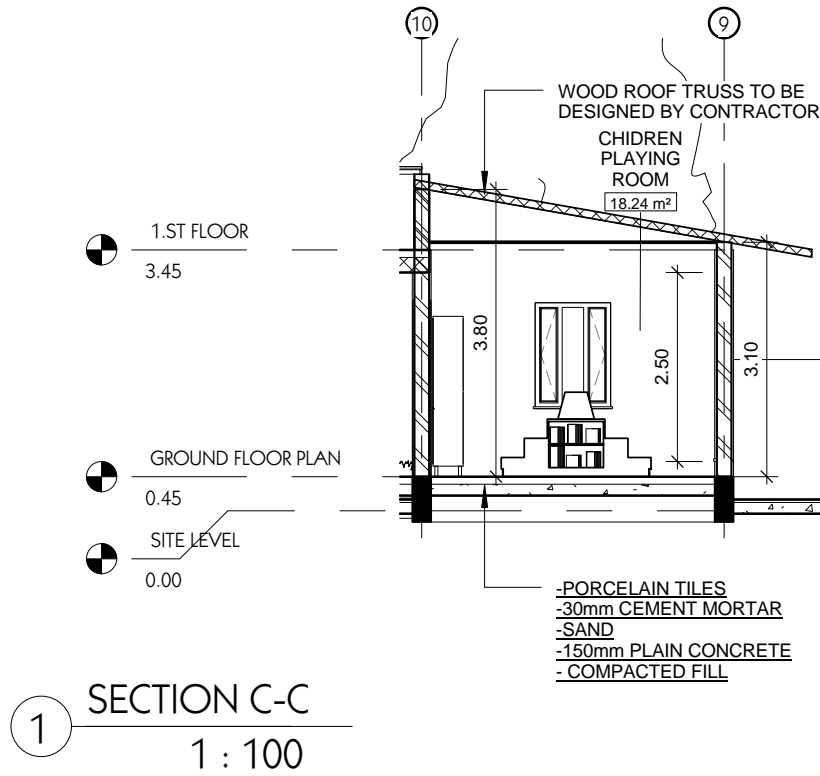
Client					
Project	STOP SHOP				
Title	SECTIONS 1				
Original Scale	Designed/Drawn	Checked	Authorised		
1 : 100	Designer	Checker	Approver		
Status	Drawing Number	Date	Date	Date	Rev
DD	ARCH-400-1	16/10/2016	16/10/2016	16/10/2016	1



NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.




1	DETAILED DESIGN	WAY	10/2016	AEA	AHA
0	CONCEPT	WAY	9/2016	AEA	AHA
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016		AHA
0	FOR CLIENT APPROVAL		09/2016		AHA
Rev	Purpose of Issue		Date		Auth

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POSTAL CODE 19214
KHARTOUM
SUDAN

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Client	unicef 		
Project	STOP SHOP		
Title	SECTIONS 2		
Original Scale	Designed/Drawn WAY Date: 16/10/2016	Checked AEA Date: 16/10/2016	Authorised AHA Date: 16/10/2016
Status DD	Drawing Number ARCH-401-1		Rev 1



NOTES:


1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2:ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

TOILET ACCESSORIES

ITEM	DESCRIPTION	NO
1	WATER CLOSET	2
2	HAND SHOWER	2
3	CORNER SHOWER	2
4	HANDHELD SHOWER	2
5	LAVATORY	2
6	MIRROR	1
7	TOILET PAPER HOLDER	2
8	BUILT-IN COUNTER TOP LIQUID SOAP DISPENSER	1

1	DETAILED DESIGN	Author	10/2016	AEM	AH
0	CONCEPT	Author	9/2016	AEM	AH
Rev	Description	By	Date	CHK'd	Aut
1	FOR CLIENT APPROVAL		10/2016	AEM	AH
0	FOR CLIENT APPROVAL		9/2016	AEM	AH
Rev	Purpose of Issue		Date		Aut

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POSTAL CODE 19214
KHARTOUM
SUDAN

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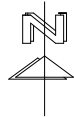
Client 

Project **STOP SHOP**

Title

TOLITES DETAILS

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Status DD	Drawing Number ARCH-500-1		Rev 1



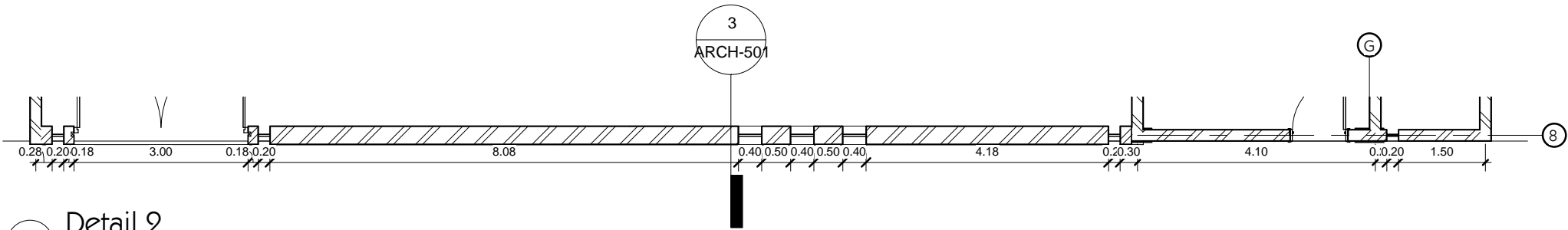
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1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

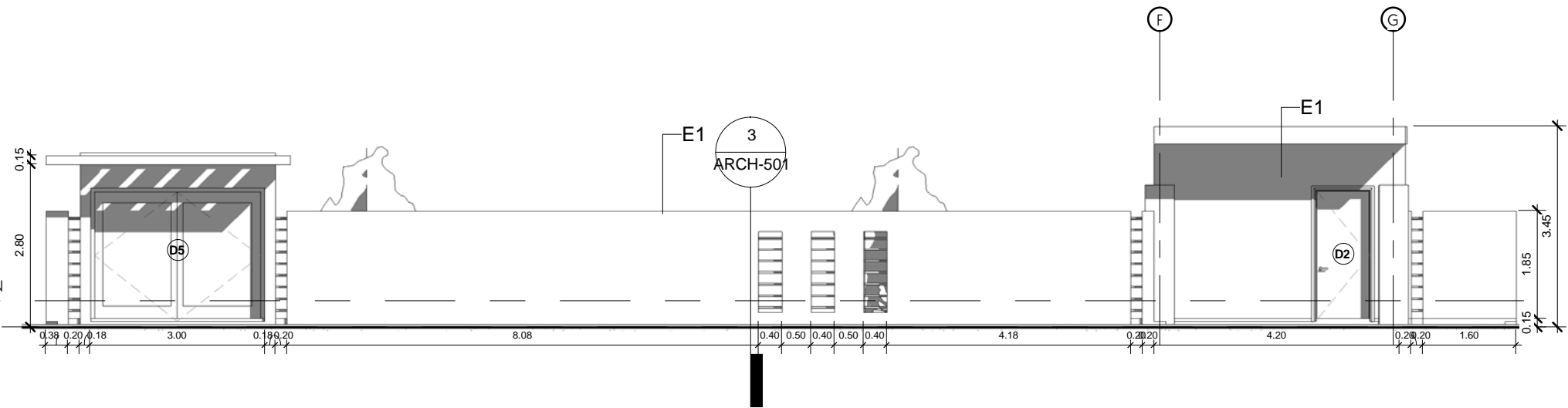
2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

KEYNOTE LEGEND

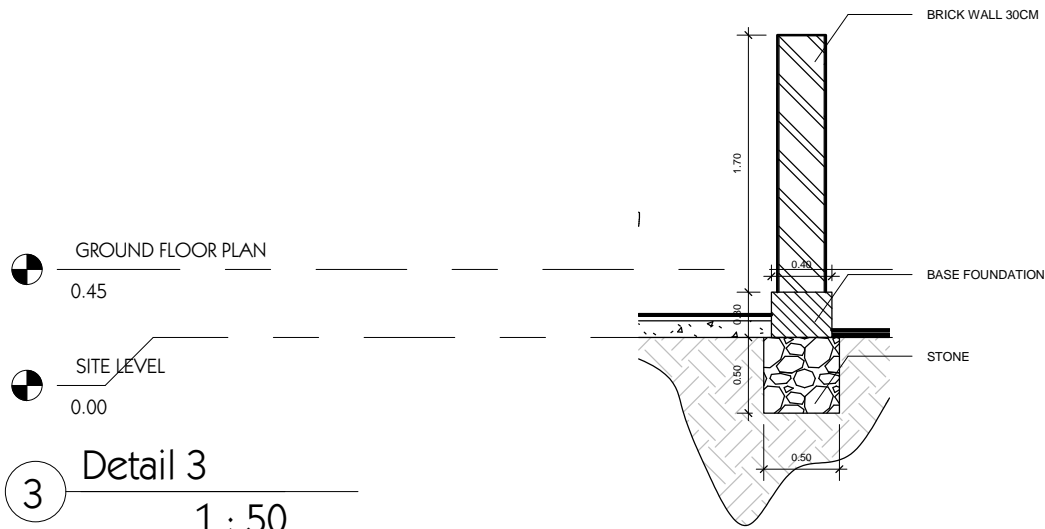
Key Value	Keynote Text
E1	ACRYLIC POLYURETHANE PAINT (BEIGE COLOR)SMOOTH TEXTURE APPLIED ON 20 MM CEMENT / SAND PLASTER TO BE APPROVED BY ENGINEER.
E2	ACRYLIC POLYURETHANE PAINT (BROWN COLOR)SMOOTH TEXTURE APPLIED ON 20 MM CEMENT / SAND PLASTER TO BE APPROVED BY ENGINEER.



1 Detail 2
1 : 100




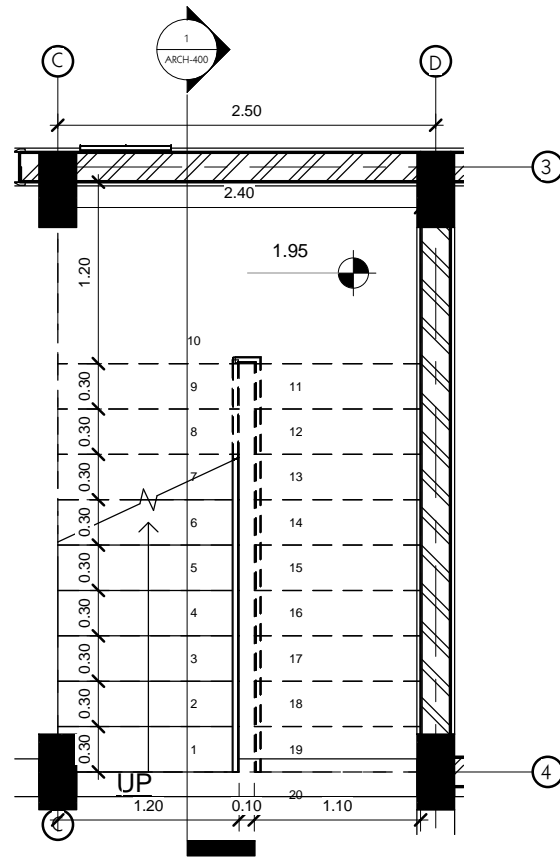
2 BOUNDARY ELEVATION
1 : 100



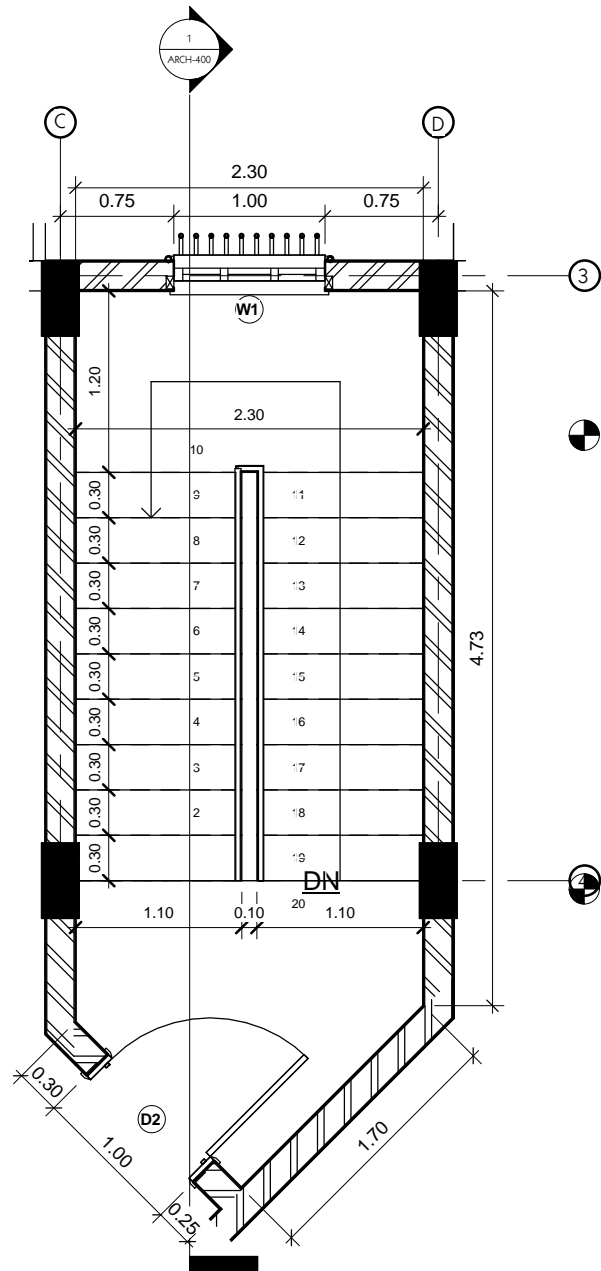
3 Detail 3
1 : 50

1	DETAILED DESIGN	Author	10/2016	AEM	AHM
0	CONCEPT	Author	09/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016		AHM
0	FOR CLIENT APPROVAL		09/2016		AHM
Rev	Purpose of Issue		Date		Auth
<div><div>NEWTECH</div><div>CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21</div><div>RIYADH EXTENSION</div><div>POSTAL CODE 19214</div><div>KHARTOUM</div><div>SUDAN</div></div> <div><div>Tel. +(249) 183-521771-75</div><div>Fax. +(249) 183-92552</div><div>www.newtech-consulting.ae</div></div>					

Client			
Project	STOP SHOP		
Title	BOUNDARY WALL DETAILS		
Original Scale	Designed/Drawn	Checked	Authorised
As indicated	WAY	AEM	AHM
	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016
Status	Drawing Number		Rev
DD	ARCH-501-1		1



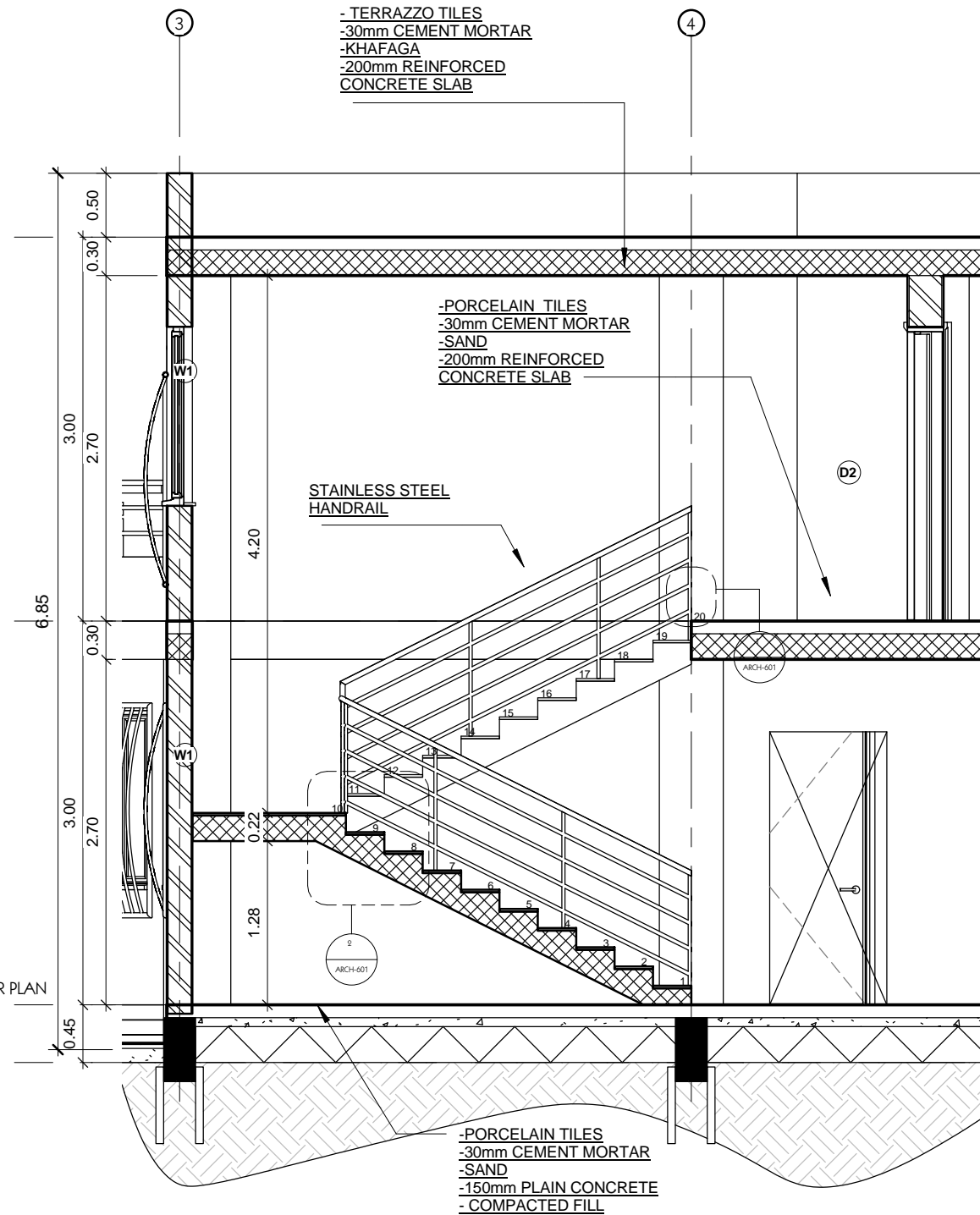
1 GROUND FLOOR STAIR CASE
1 : 50



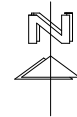
2 FIRST FLOOR STAIR CASE
1 : 50



GROUND FLOOR PLAN
0.45
SITE LEVEL
0.00



3 STAIRCASE SECTION
1 : 50



NOTES:

- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN	Author	10/2016	AEM	AHM
0	CONCEPT	Author	9/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016	AHM	
0	FOR CLIENT APPROVAL		09/2016	AHM	
Rev	Purpose of Issue		Date	Auth	
NEWTECH CONSULTING GROUP					
BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 19214 KHARTOUM SUDAN					
Tel. +(249) 183-521771-75 Fax. +(249) 183-92552 www.newtech-consulting.ae					

Client	unicef
Project	STOP SHOP
Title	STAIRCASE
Original Scale	1 : 50
Designed/Drawn	WAY
Checked	AEM
Authorised	AHM
Date	16/10/2016
Date	16/10/2016
Date	16/10/2016
Status	DD
Drawing Number	ARCH-600-1
Rev	1



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WINDOWS SCHEDULE					
Level	Type Mark	Count	Width	Height	Sill Height
SITE LEVEL	W1	2	1.00	1.40	0.90
GROUND FLOOR PLAN	W1	19	1.00	1.40	0.90
GROUND FLOOR PLAN	W2	4	0.50	0.50	1.80
GROUND FLOOR PLAN	W3	1	2.00	2.50	0.20
1.ST FLOOR	W1	1	1.00	1.40	0.90

NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN			WAY	10/2016	AEM	AHM		
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Rev	Description			By	Date	Chk'd	Auth		
1	FOR CLIENT APPROVAL					10/2016	AHM		
0	FOR CLIENT APPROVAL					09/2016	AHM		
Rev	Purpose of Issue					Date	Auth		
NEWTECH CONSULTING GROUP (C)									
BUILDING NO.13, BLOCK Z1 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN								Tel. +(249) 183-521771-75 Fax. +(249) 183-92552 www.newtech-consulting.ae	
Client									
Project									
STOP SHOP									
Title									
DOORS AND WINDOWS SCHEDULES									
Original Scale		Designed/Drawn WAY Date: 16/10/2016		Checked AEM Date: 16/10/2016		Authorised AHM Date: 16/10/2016			
Status DD	Drawing Number ARCH-700-1						Rev 1		



TYPE MARK	DOOR DETAILS	TYPE MARK	DOOR DETAILS
D1		D4	
D2		D5	
D3			DECORATIVE STEEL DOORS

NOTES:

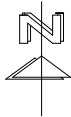
1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN	WAY	10/2016	AEM	AHM
0	CONCEPT	WAY	9/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016	AHM	
0	FOR CLIENT APPROVAL		09/2016	AHM	
Rev	Purpose of Issue		Date	Auth	
<div><div></div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 19214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-92552 www.newtech-consulting.ae</div></div>					
Client					
Project					
STOP SHOP					
Title					
DOORS DETAILS					
Original Scale	Designed/Drawn	Checked	Authorised		
1 : 50	WAY	AEM	AHM		
	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016		
Status	Drawing Number				Rev
DD	ARCH-701-1				1

DOORS LEGEND

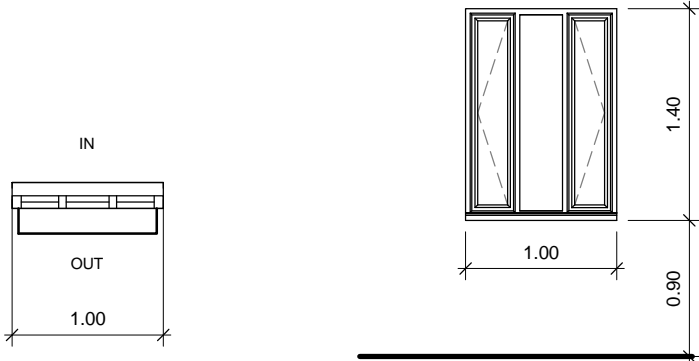
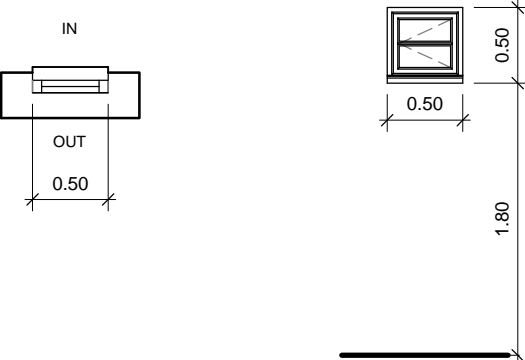
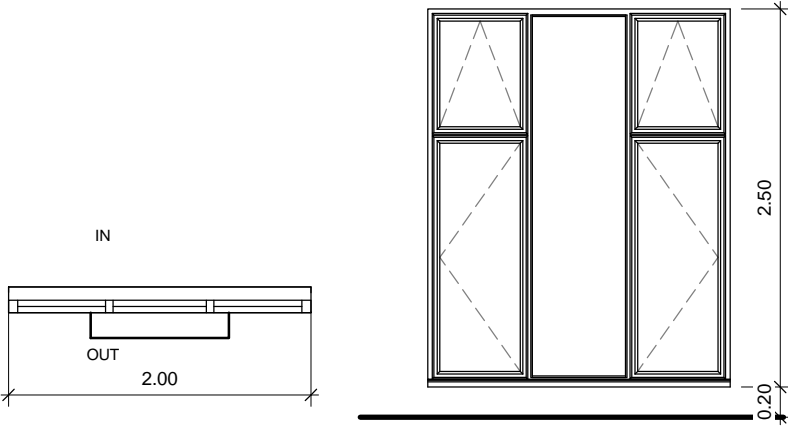
1 : 50



NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

TYPE MARK	WINDOWES DETAILS	TYPE MARK	WINDOWES DETAILS
W1	<div>DECORATIVE STEEL WINDOWS</div> <div></div>	W2	<div></div>
W3	<div></div>		<div>NOTES</div> <div><div>1. DO NOT SCALE THIS DRAWING, TAKE WRITTEN DIMENSIONS ONLY.</div><div>2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ASSOCIATED ARCHITECTS DRAWINGS, STRUCTURAL DRAWINGS, AND RELEVANT SPECIALIST DRAWINGS.</div><div>3. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY SITE WORKS OR MANUFACTURE.</div><div>4. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE ENGINEER ANY DISCRIPANCIES WHICH HE MAY FIND IN THIS DRAWING PRIOR TO WORK COMMENCEMENT.</div><div>5. OVERALL DIMENSIONS GIVEN FOR THE DOORS AND WINDOWS ARE STRUC. OPENINGS.</div><div>6. SAMPLES OF SHOP DRAWINGS TO BE SUBMITTED FOR APPROVAL BEFORE PLACEMENT OF ORDERS OR EXECUTION OF THE WORKS.</div></div>

 WINDOWES LEGEND

1 : 50

1	DETAILED DESIGN	WAY	10/2016	AEM	AHM
0	CONCEPT	WAY	9/2016	AEM	AHM
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016	AHM	
0	FOR CLIENT APPROVAL		09/2016	AHM	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 19214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-92552 www.newtech-consulting.ae</div></div> <div>Client</div> <div></div> <div>Project</div> <div>STOP SHOP</div> <div>Title</div> <div>WINDOWES DETAILS</div>					
Original Scale	Designed/Drawn	Checked	Authorised		
1 : 50	WAY	AEM	AHM		
Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016		
Status	Drawing Number				Rev
DD	ARCH-702-1				1

ITEM	WALL FINISHES DESCRIPTION
W1	EMULSION PAINT ON CEMENT/ SAND PLASTER.
W2	300X450mm GLAZED CERAMIC TILES ON CEMENT / SAND MORTAR BED TO MATCH FLOOR CERAMIC.

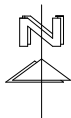
1 : 50

1 : 50

ITEM	CEILING FINISHES DESCRIPTION
C1	EMULSION PAINT MATT FINISH ON CEMENT/ SAND PLASTER

1 : 50

1 : 50



NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

1	DETAILED DESIGN	WAY	10/2016	AEM	AHA
0	CONCEPT	WAY	9/2016	AEM	AHA
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016	AHA	
0	FOR CLIENT APPROVAL		09/2016	AHA	
Rev	Purpose of Issue		Date	Auth	



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Client



Project

STOP SHOP

Title

FINISHES SCHEDULE

Original Scale	Designed/Drawn	Checked	Authorised
1 : 50	WAY	AEM	AHA
Status	Date: 16/10/2016	Date: 16/10/2016	Date: 16/10/2016
DD	Drawing Number	Rev	
	ARCH-703-1	1	

STRU-0000	LIST OF DRAWING	16/10/2016	1
STRU-1100	FOUNDATION PLAN AND DETAILS	16/10/2016	1
STRU-1200	COLUMNS PLAN AND DETAILS	16/10/2016	1
STRU-1300	GRADE BEAMS PLAN	16/10/2016	1
STRU-1301-1	GRADE BEAMS DETAILS (1)	16/10/2016	1
STRU-1301-2	GRADE BEAMS DETAILS (2)	16/10/2016	1
STRU-1302	GROUND FLOOR COVER SLAB BEAMS	16/10/2016	1
STRU-1303	GROUND FLOOR COVER SLAB BEAMS DETAILS	16/10/2016	1
STRU-1304	GROUND FLOOR COVER SLAB BOTTOM REINFORCEMENT	16/10/2016	1
STRU-1305	GROUND FLOOR COVER SLAB TOP REINFORCEMENT	16/10/2016	1
STRU-1306	ROOF FLOOR COVER SLAB BEAMS DETAILS	16/10/2016	1
STRU-1307	ROOF FLOOR COVER SLAB DETAILS	16/10/2016	1
STRU-1400	STAIRCASE DETAILS	16/10/2016	1

1	DETAILED DESIGN	DRW	10.2016	CHK	APR
0	CONCEPT	DRW	9.2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10.2016		APR
0	FOR CLIENT APPROVAL		09.2016		APR
Rev	Purpose of Issue		Date		Auth

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BUILDING NO.13, BLOCK 21			
RIYADH EXTENSION			
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KHARTOUM		Fax. +(249) 183-22552	
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Project



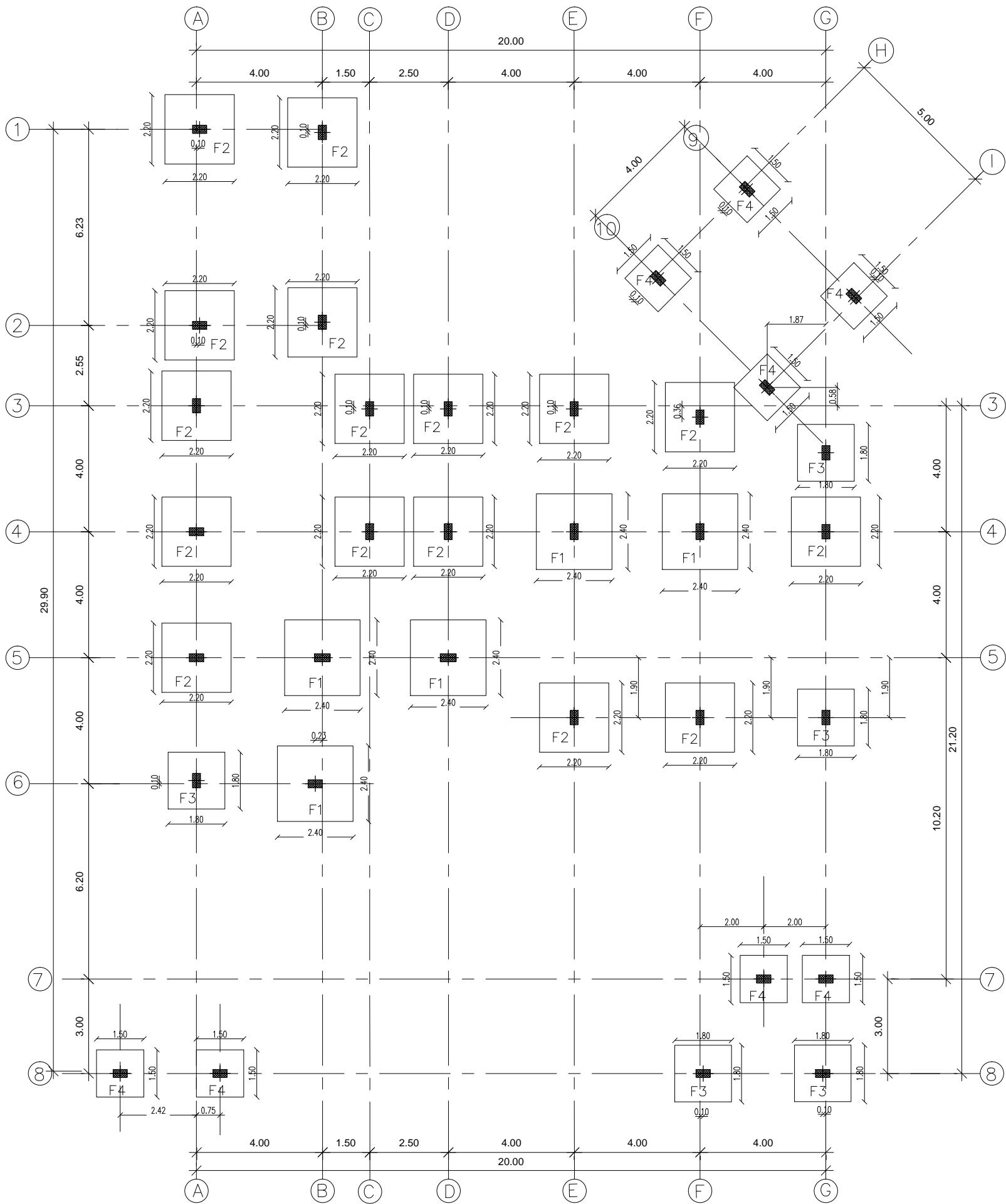
STOP SHOP

Title

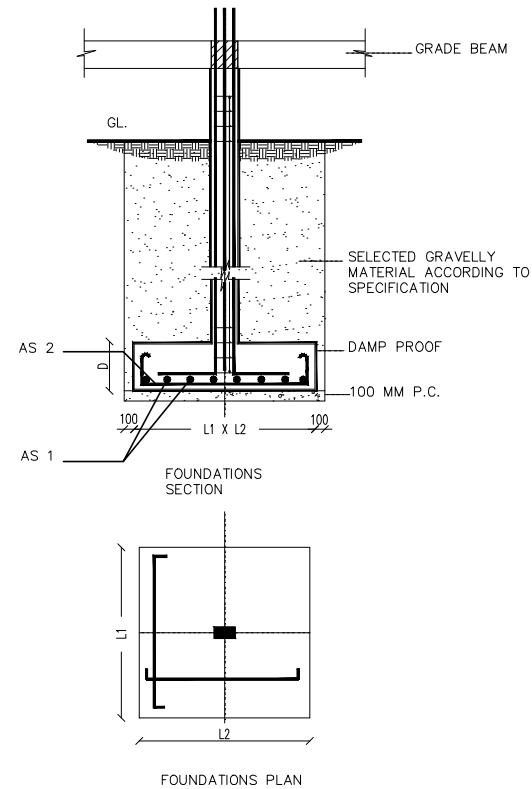
LIST OF DRAWING

Original Scale NOT TO SCALE	Designed/Drawn A/M	Checked SEM	Authorised AHA
	Date 16/10/2016	Date 16/10/2016	Date 16/10/2016

Status	Drawing Number	Rev
DD	STRU-0000	1

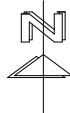


1 FOUNDATIONS PLAN
SCALE 1:150



2 FOUNDATIONS DETAILS
NOT TO SCALE

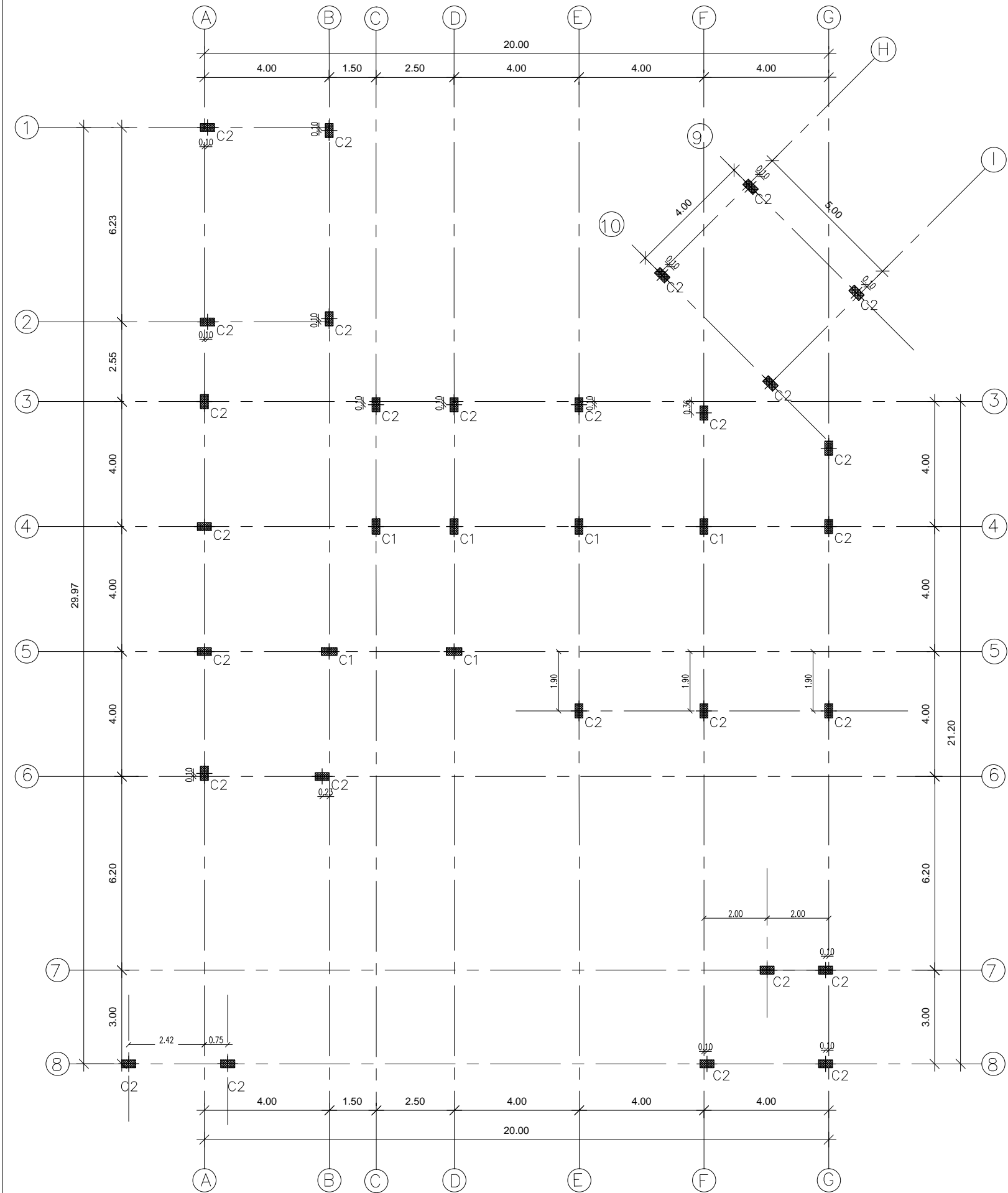
TYPE	L1(m) x L2(m)	D(mm)	REINFORCEMENT (AS1&AS2)
F1	2.40 x 2.40	600	T16@150mm C/C
F2	2.20 x 2.20	600	T16@150mm C/C
F3	1.80 x 1.80	500	T16@150mm C/C
F4	1.50 x 1.50	400	T16@150mm C/C



NOTES:

- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
3. ASSUMED SOIL CAPACITY $\geq 150 \text{ KN/M}^2$ IF LESS TO CHECK FOUNDATION.
4. $f_{cu} = 25 \text{ N/mm}^2$
5. $F_y = 410 \text{ N/mm}^2$
6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.

1	DETAILED DESIGN	DRW	10.2016	CHK	APR
0	CONCEPT	DRW	9.2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10.2016	APR	
0	FOR CLIENT APPROVAL		09.2016	APR	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH CONSULTING GROUP</div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div><div><div></div><div></div><div></div></div></div>					
Client <div><div></div><div></div></div>					
Project <div>STOP SHOP</div>					
Title <div>FOUNDATION PLAN AND DETAILS</div>					
Original Scale 1 : 150		Designed/Drawn AAM	Checked SEM	Authorised AHA	
		Date 16 /10/ 2016	Date 16 /10/2016	Date 16/10/2016	
Status	Drawing Number				Rev
DD	STRU-1100				1

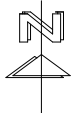


1 COLUMNS PLAN
SCALE 1:150

2 COLUMNS DETAILS
1:25

COLUMNS	UNDER G.F	G.F	1ST
C1			
C2			

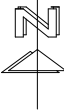
LINK R8 @ 150 mm C/C



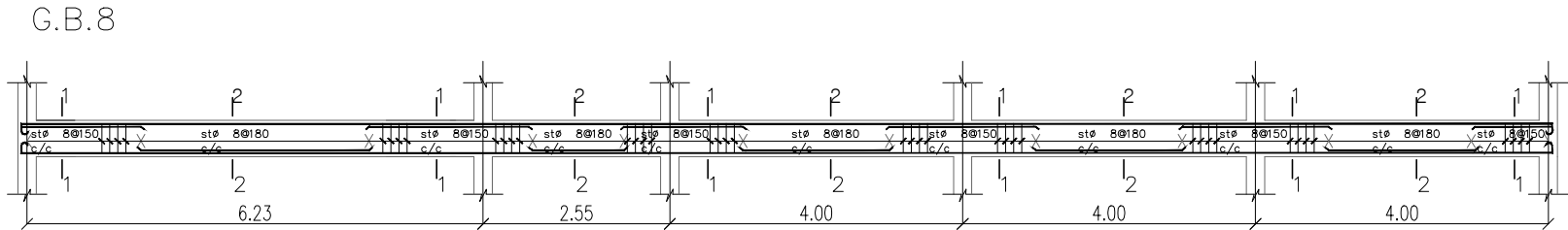
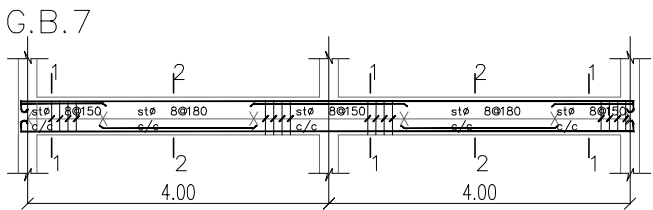
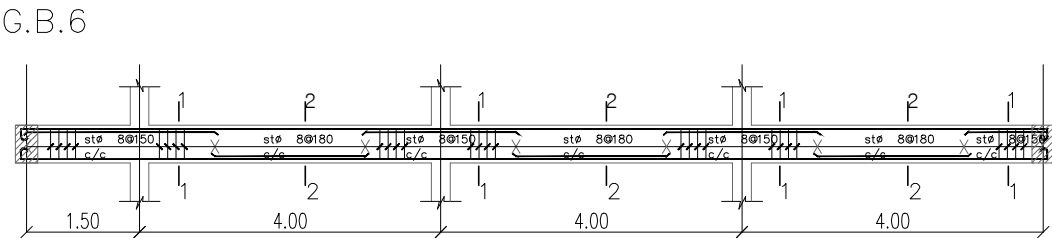
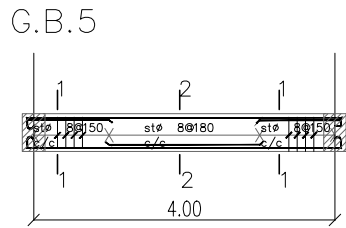
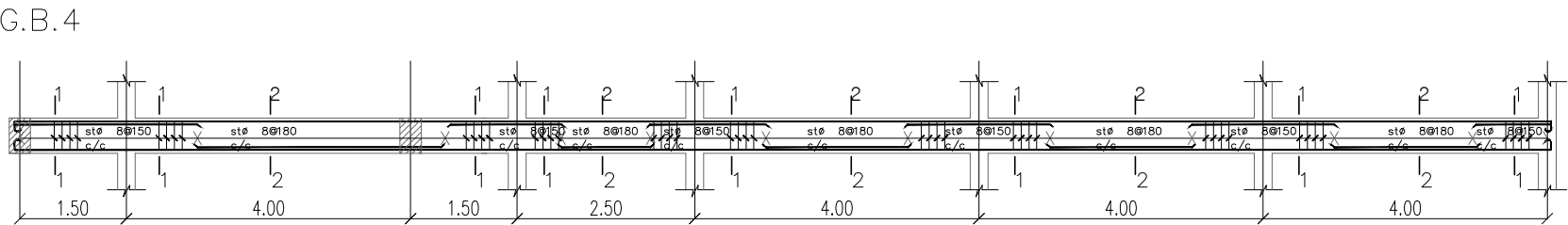
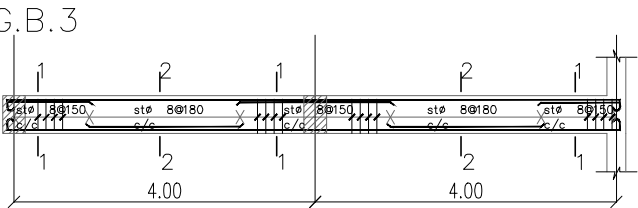
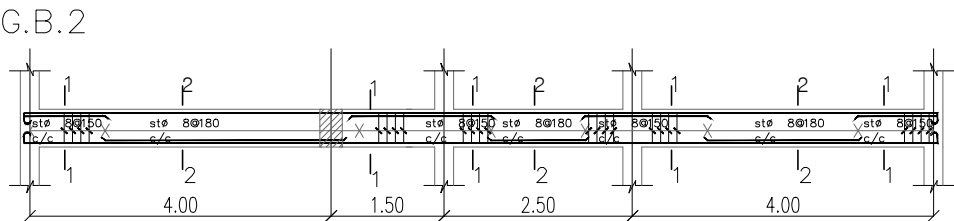
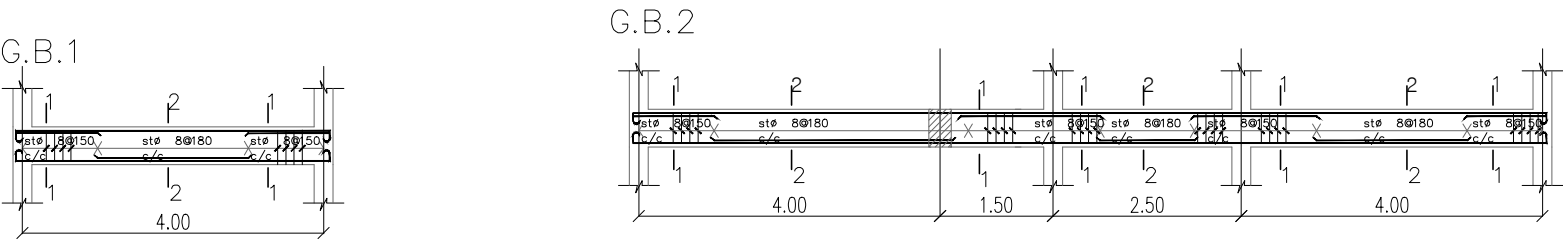
- NOTES:
- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
 - 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
 3. ASSUMED SOIL CAPACITY $\geq 150 \text{ KN/M}^2$ IF LESS TO CHECK FOUNDATION.
 4. $f_{cu} = 25 \text{ N/mm}^2$
 5. $F_y = 410 \text{ N/mm}^2$
 6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.

1	DETAILED DESIGN	DRW	10.2016	CHK	APR
0	CONCEPT	DRW	9.2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10.2016	APR	
0	FOR CLIENT APPROVAL		09.2016	APR	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div></div> <div><div>Client</div><div>unicef</div></div>					
Project STOP SHOP					
Title COLUMNS PLAN AND DETAILS					
Original Scale NOT TO SCALE	Designed/Drawn AAM Date 16/10/2016	Checked SEM Date 16/10/2016	Authorised AHA Date 16/10/2016		
Status DD	Drawing Number STRU-1200				Rev 1

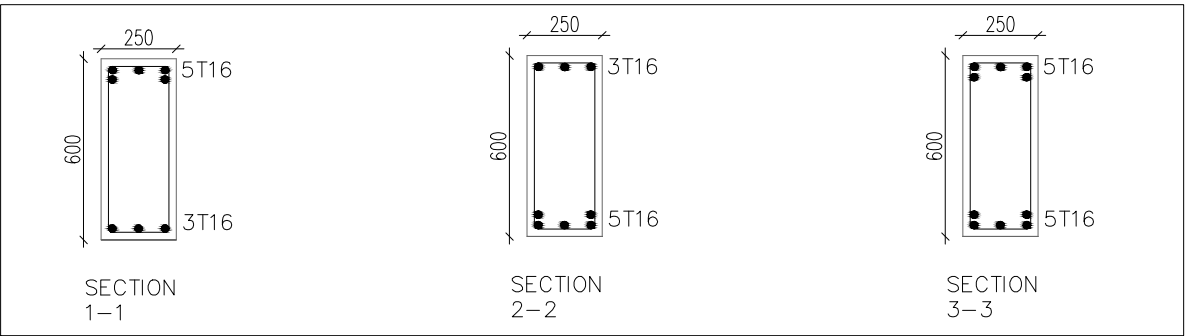
1 GRADE BEAMS PLAN
SCALE 1:150



- NOTES:
- 1·ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- 2·ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
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4. $f_{cu} = 25 \text{ N/mm}^2$
5. $F_y = 410 \text{ N/mm}^2$
6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.



1 GRADE BEAMS DETAILS (1)
SCALE 1:100



2 GRADE BEAMS SECTIONS
SCALE 1:25

1	DETAILED DESIGN	DRW	10.2016	CHK	APR
0	CONCEPT	DRW	9.2016	CHK	APR
Rev	Description	By	Date	Chkd	Auth
1	FOR CLIENT APPROVAL		10.2016		APR
0	FOR CLIENT APPROVAL		9.2016		APR
Rev	Purpose of Issue		Date	Auth	

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Client
unicef

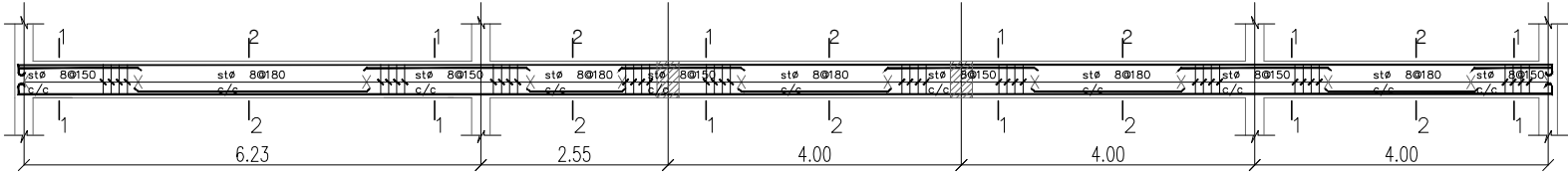
Project
STOP SHOP

Title
GRADE BEAMS DETAILS (1)

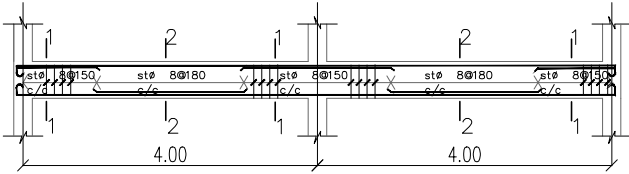
Original Scale	Designed/Drawn	Checked	Authorised
NOT TO SCALE	AAM	SEM	AHA
	Date 16 /10/ 2016	Date 16 /10/2016	Date 16/10/2016

Status	Drawing Number	Rev
DD	STRU-1301-1	1

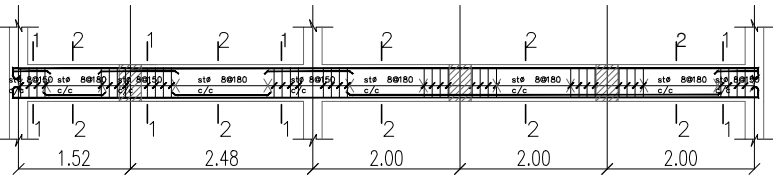
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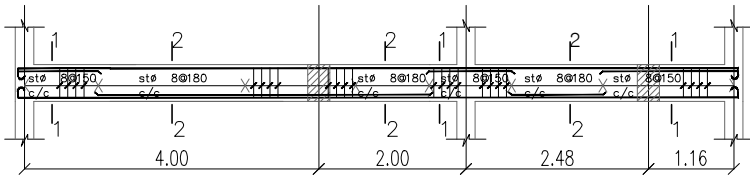
G.B.10



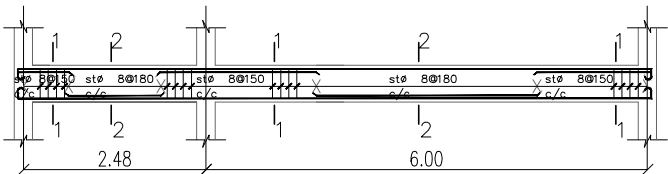
G.B.11



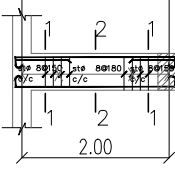
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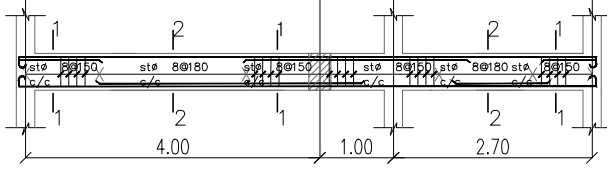
G.B.13



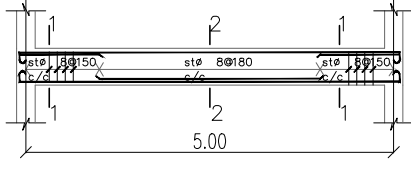
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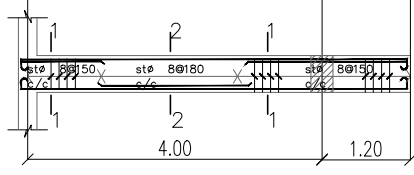
G.B.15



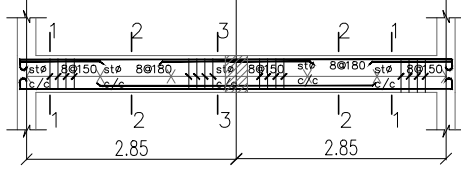
G.B.16



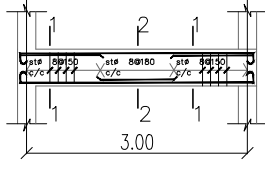
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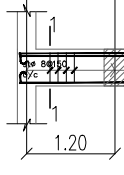
G.B.18



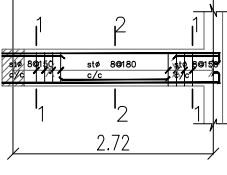
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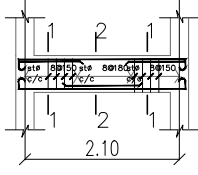
G.B.20



G.B.21

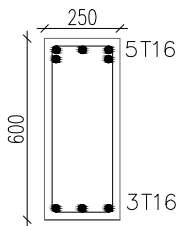


G.B.22

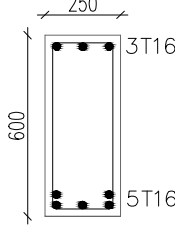


GRADE BEAMS DETAILS (2)

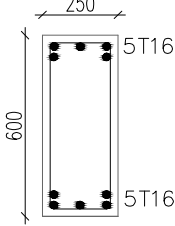
SCALE 1:100



SECTION 1-1



SECTION 2-2



SECTION 3-3

GRADE BEAMS SECTIONS

SCALE 1:25

NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.


3. ASSUMED SOIL CAPACITY $\geq 150 \text{ KN/M}^2$ IF LESS TO CHECK FOUNDATION.

4. $f_{cu} = 25 \text{ N/mm}^2$

5. $F_y = 410 \text{ N/mm}^2$

6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.

1	DETAILED DESIGN	DRW	10/2016	CHK	APR
0	CONCEPT	DRW	9/2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016	CHK	APR
0	FOR CLIENT APPROVAL		09/2016	CHK	APR
Rev	Purpose of Issue		Date	Chk'd	Auth



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Fax. +(249) 183-22552

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Client



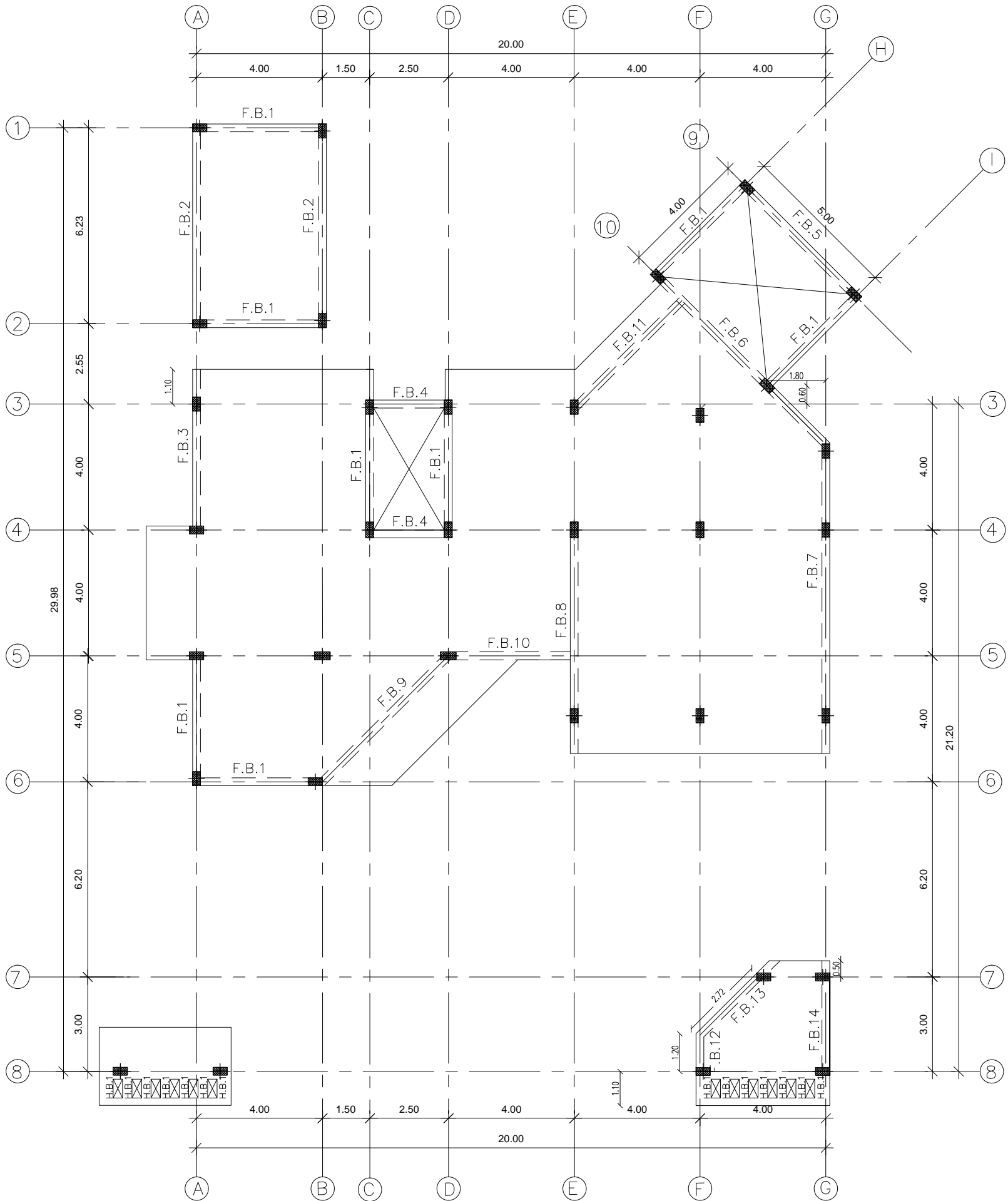
Project

STOP SHOP

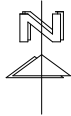
Title

GRADE BEAMS DETAILS (2)

Original Scale	Designed/Drawn	Checked	Authorised
NOT TO SCALE	AAM	SEM	AHA
	Date 16 /10/ 2016	Date 16 /10/2016	16/10/2016
Status	Drawing Number		Rev
DD	STRU-1301-2		1



1 GROUND COVER SLAB BEAMS PLAN
SCALE 1:150



- NOTES:
- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
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4. $f_{cu} = 25 \text{ N/mm}^2$
5. $F_y = 410 \text{ N/mm}^2$
6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.

1	DETAILED DESIGN	DRW	10/2016	CHK	APR
0	CONCEPT	DRW	9/2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10/2016	CHK	APR
0	FOR CLIENT APPROVAL		09/2016	CHK	APR
Rev	Purpose of Issue	Date		Chk'd	Auth



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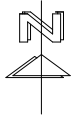
Project

STOP SHOP

Title

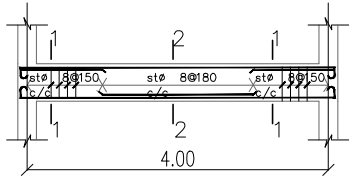
GROUND FLOOR COVER SLAB BEAMS

Original Scale	Designed/Drawn AAM	Checked SEM	Authorised AHS
1 : 150	Date 16 /10/ 2016	Date 16 /10/2016	Date 16/10/2016
Status	Drawing Number	Rev	
DD	STRU-1302	1	

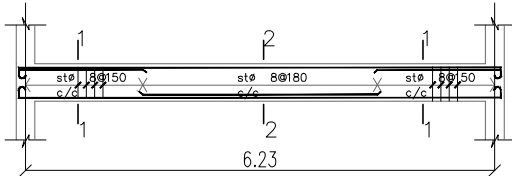


- NOTES:
- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
3. ASSUMED SOIL CAPACITY $\geq 150 \text{ KN/M}^2$ IF LESS TO CHECK FOUNDATION.
4. $f_{cu} = 25 \text{ N/mm}^2$
5. $F_y = 410 \text{ N/mm}^2$
6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.

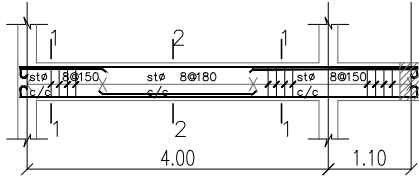
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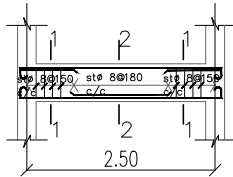
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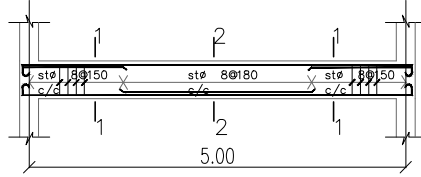
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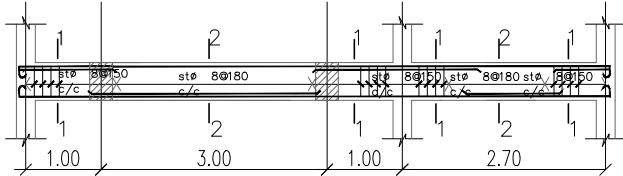
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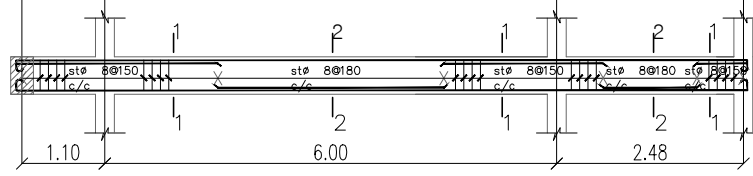
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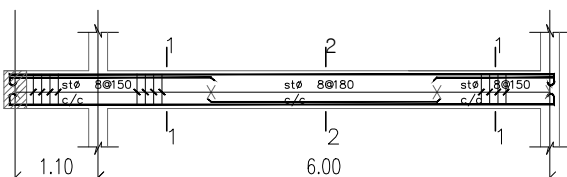
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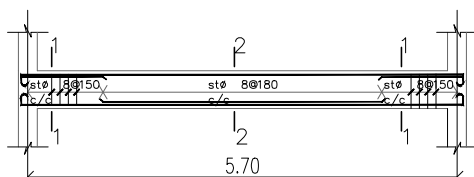
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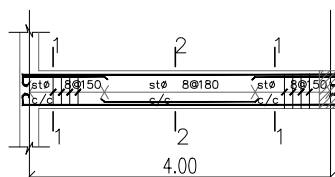
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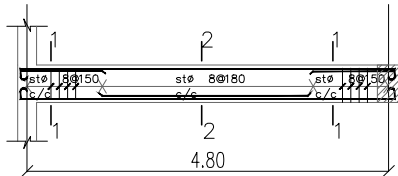
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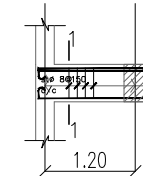
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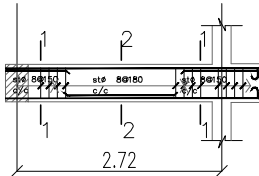
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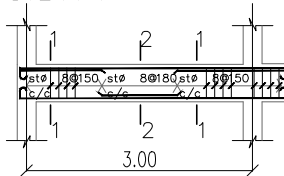
G.B.12



G.B.13

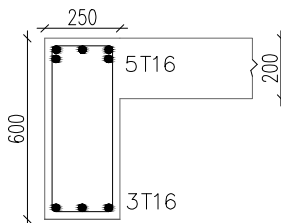


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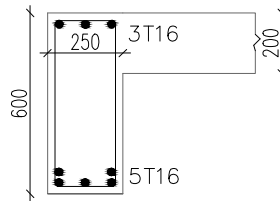


1 GROUND COVER SLAB BEAMS DETAILS
SCALE 1:100

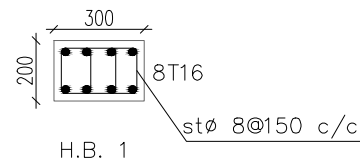
2 GROUND COVER SLAB BEAMS SECTIONS
SCALE 1:25



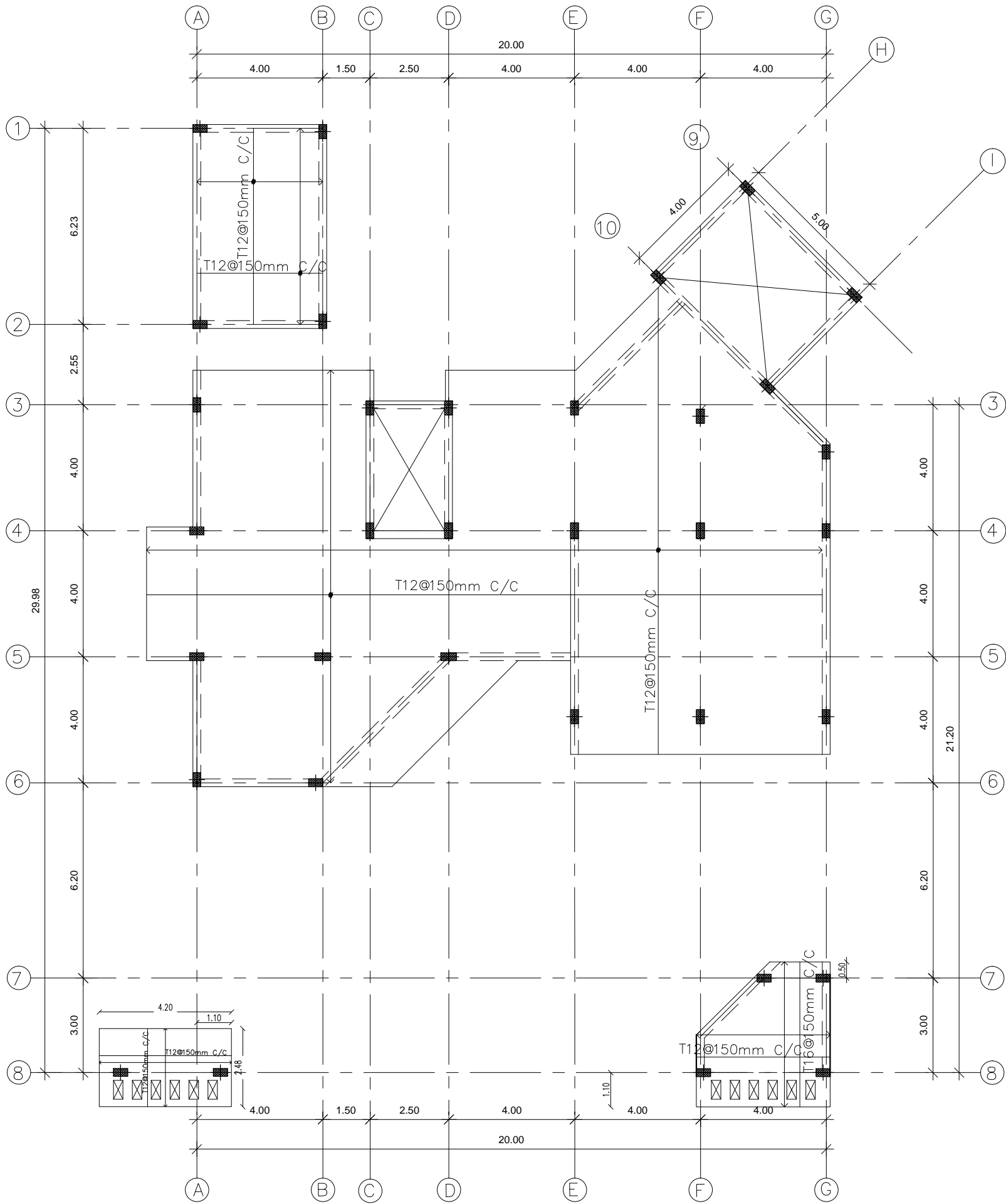
SECTION
1-1



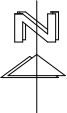
SECTION
2-2



1	DETAILED DESIGN	DRW	0.2016	CHK	APR
0	CONCEPT	DRW	0.2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10.2016	APR	
0	FOR CLIENT APPROVAL		09.2016	APR	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div></div>					
Client					
Project					
Title					
Original Scale					
Designed/Drawn					
Checked					
Authorised					
Status					
Drawing Number					
Rev					

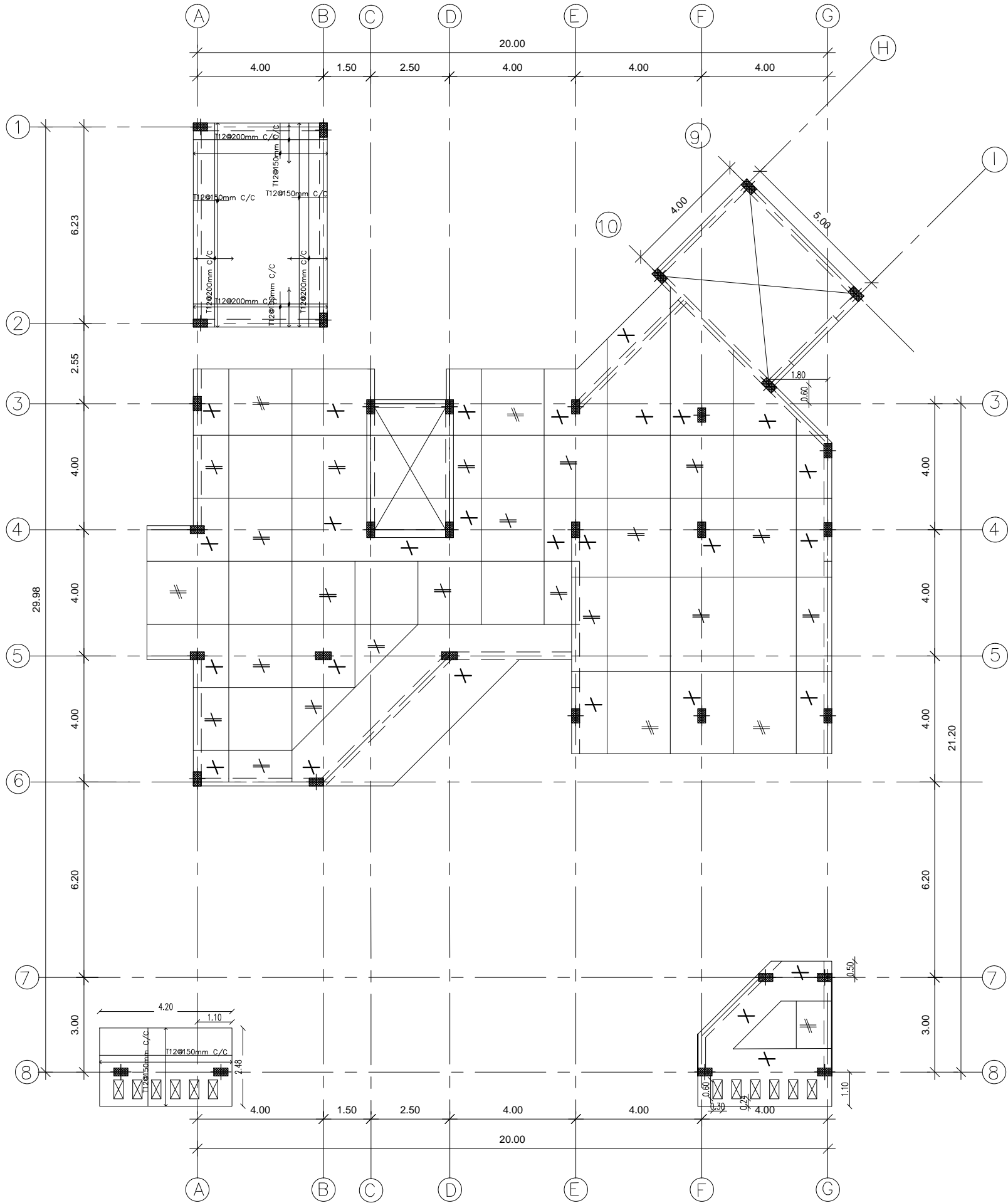


1 GROUND FLOOR COVER SLAB BOTTOM REINFORCEMENT
SCALE 1:150

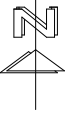


- NOTES:
- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
 - 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
 3. ASSUMED SOIL CAPACITY $\geq 150 \text{ KN/M}^2$ IF LESS TO CHECK FOUNDATION.
 4. $f_{cu} = 25 \text{ N/mm}^2$
 5. $F_y = 410 \text{ N/mm}^2$
 6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.
 7. SLAB THICKNESS= 200mm

1	DETAILED DESIGN	DRW	0.2016	CHK	APR
0	CONCEPT	DRW	0.2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10.2016	APR	
0	FOR CLIENT APPROVAL		09.2016	APR	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div></div>					
Client <div>unicef</div>					
Project <div>STOP SHOP</div>					
Title <div>GROUND FLOOR COVER SLAB BOTTOM REINFORCEMENT</div>					
Original Scale	Designed/Drawn	Checked	Authorised		
1 : 150	AAM	SEM	AHA		
	Date 16 /10/ 2016	Date 16 /10/2016	Date 16/10/2016		
Status	Drawing Number	Rev			
DD	STRU-1304	1			



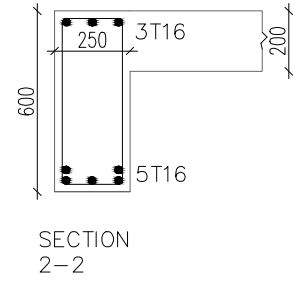
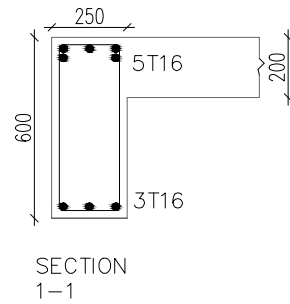
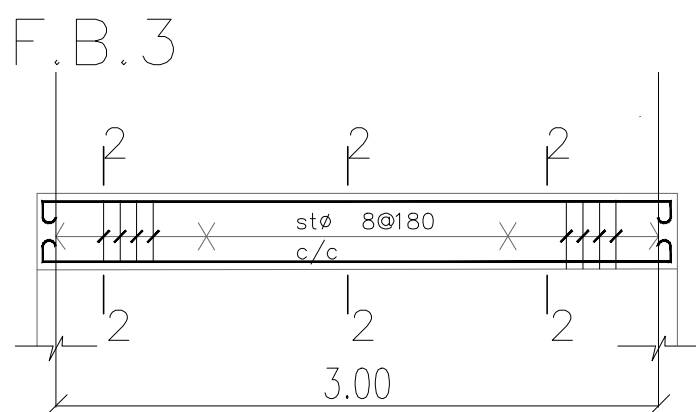
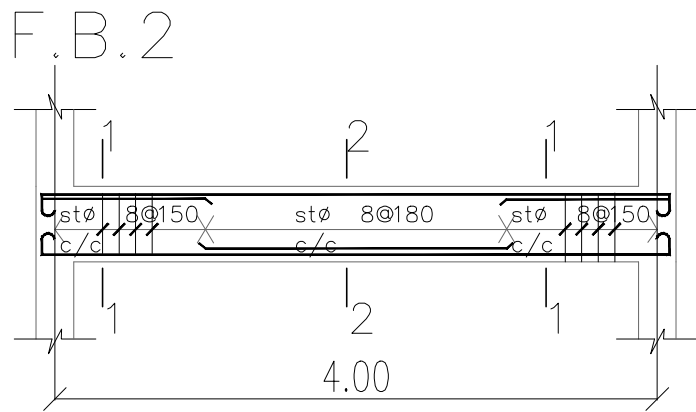
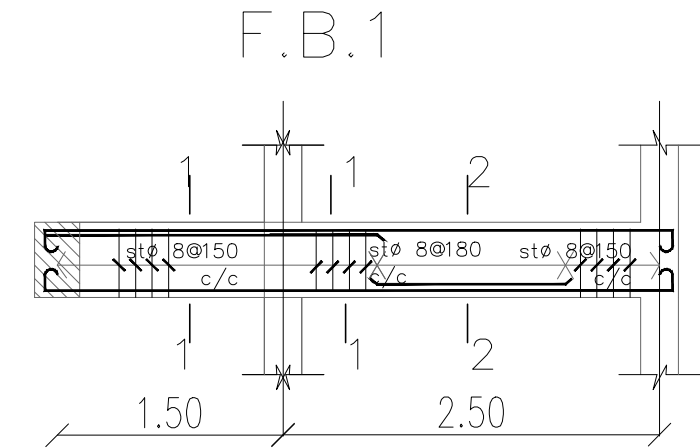
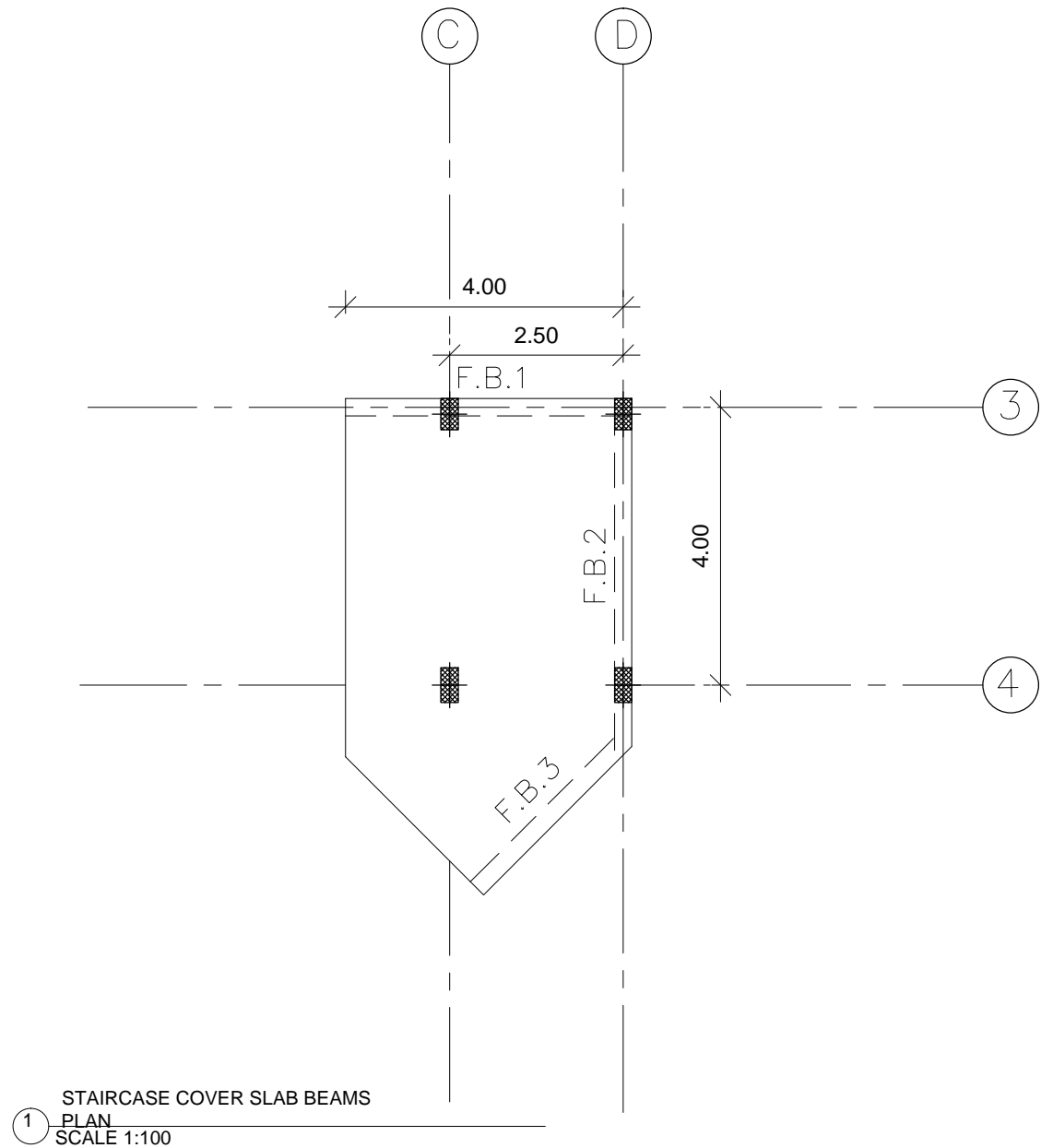
1 GROUND FLOOR COVER SLAB TOP REINFORCEMENT
SCALE 1:150



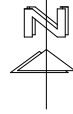
- NOTES:
- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
 - 2-ALL LEVELS ARE RELATED TO DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
 3. ASSUMED SOIL CAPACITY $\geq 150 \text{ KN/M}^2$ IF LESS TO CHECK FOUNDATION.
 4. $f_{cu} = 25 \text{ N/mm}^2$
 5. $F_y = 410 \text{ N/mm}^2$
 6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.

- T 16 @ 100 B.W
- T 16 @ 200 & T12 @ 150
- T 16 @ 100 & T16 @ 200

1	DETAILED DESIGN	DRW	10.2016	CHK	APR
0	CONCEPT	DRW	9.2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
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0	FOR CLIENT APPROVAL		09.2016		APR
Rev	Purpose of Issue		Date		Auth
<div><div>NEWTECH</div><div>CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21</div><div>RIYADH EXTENSION</div><div>POSTAL CODE 12214</div><div>KHARTOUM</div><div>SUDAN</div><div>Tel. +(249) 183-521771-75</div><div>Fax. +(249) 183-22552</div><div>www.newtech-consulting.ae</div></div> <div>Client</div> <div>unicef</div>					
Project					
STOP SHOP					
Title					
GROUND FLOOR COVER SLAB TOP REINFORCEMENT					
Original Scale		Designed/Drawn		Checked	
1 : 150		AAM		SEM	
Date 16 /10/ 2016		Date 16 /10/2016		Date 16/10/2016	
Status	Drawing Number	Rev			
DD	STRU-1305				1



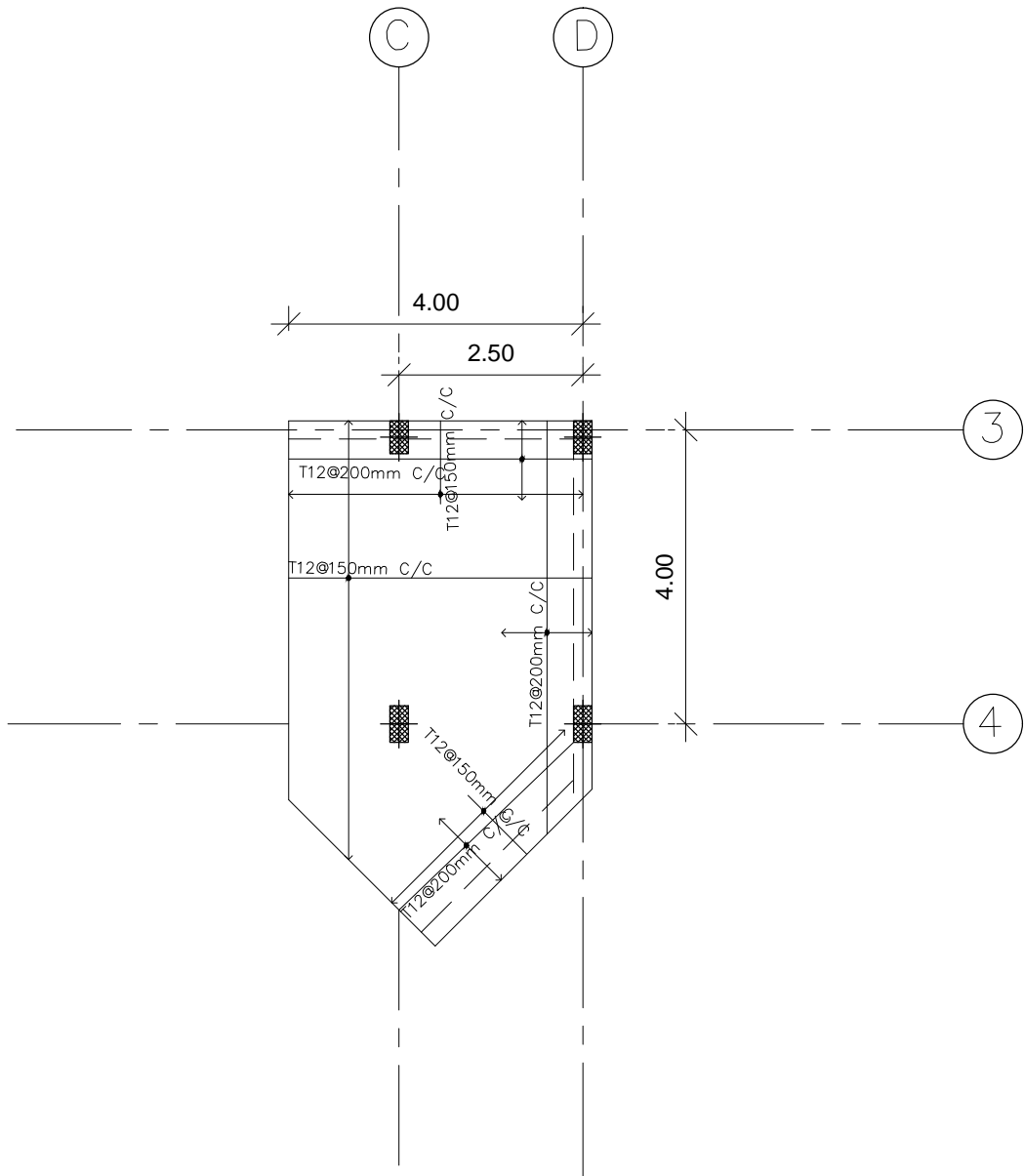
BEAMS SECTIONS
SCALE 1:25



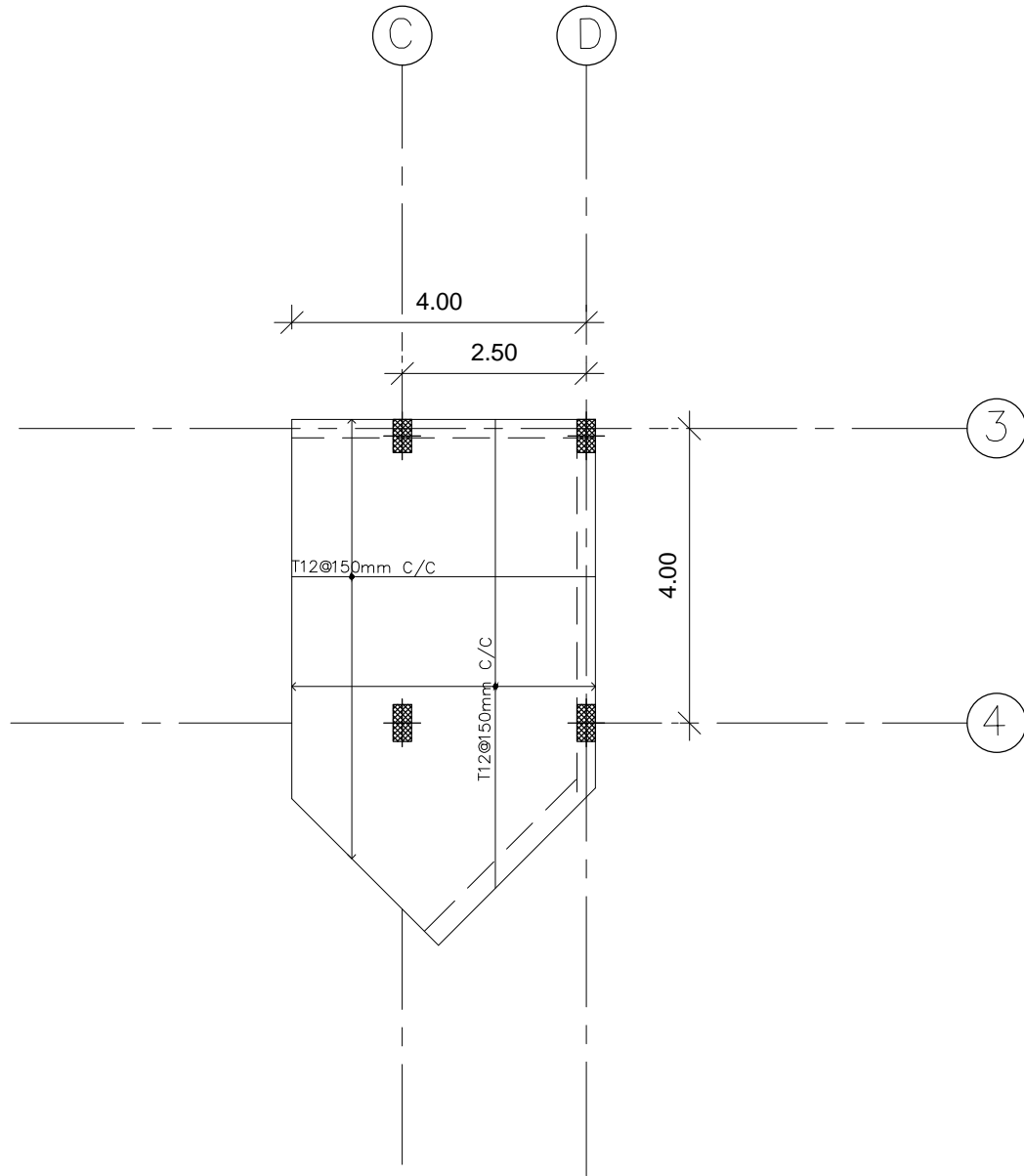
NOTES:

- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
3. ASSUMED SOIL CAPACITY $\geq 150 \text{ KN/M}^2$ IF LESS TO CHECK FOUNDATION.
4. $f_{cu} = 25 \text{ N/mm}^2$
5. $F_y = 410 \text{ N/mm}^2$
6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.
7. THICKNESS OF SLAB= 200mm.
8. WALLS BELOW SLAB TO BE CONSTRUCTED BEFORE CASTING SLAB.

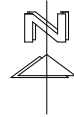
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Rev	Description	By	Date	Chk'd	Auth
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0	FOR CLIENT APPROVAL		09.2016	APR	
Rev	Purpose of Issue		Date	Auth	
NEWTECH CONSULTING GROUP BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae					
Client unicef					
Project STOP SHOP					
Title ROOF FLOOR COVER SLAB AND BEAMS DETAILS					
Original Scale NOT TO SCALE	Designed/Drawn AAM Date 16 /10/ 2016	Checked SEM Date 16 /10/2016	Authorised AH4 Date 16/10/2016		
Status DD	Drawing Number STRU-1306			Rev 1	



1 STAIRCASE COVER SLAB - TOP REINFORCEMENT
SCALE 1:100



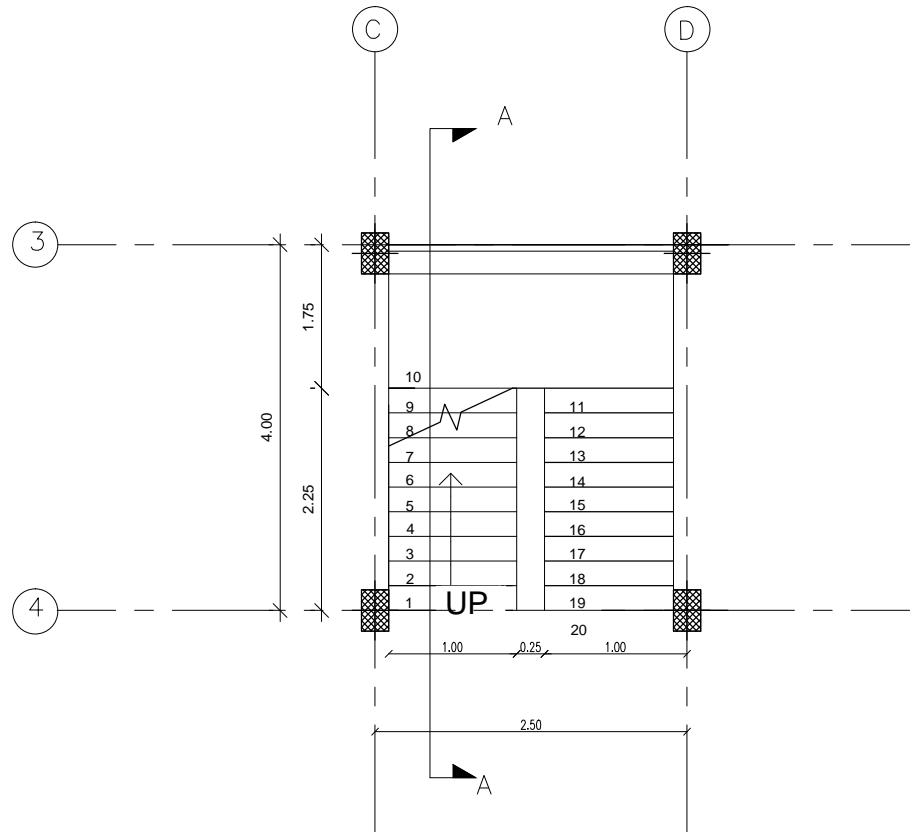
2 STAIRCASE COVER SLAB - BOTTOM REINFORCEMENT
SCALE 1:100



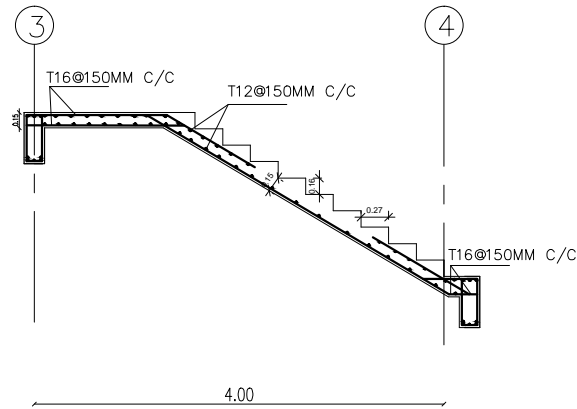
NOTES:

- 1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- 2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.
3. ASSUMED SOIL CAPACITY $\geq 150 \text{ KN/M}^2$ IF LESS TO CHECK FOUNDATION.
4. $f_{cu} = 25 \text{ N/mm}^2$
5. $F_y = 410 \text{ N/mm}^2$
6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.

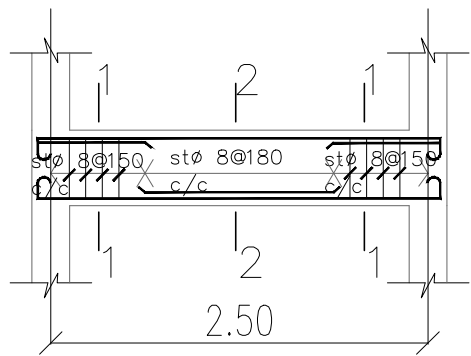
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Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10.2016	APR	
0	FOR CLIENT APPROVAL		09.2016	APR	
Rev	Purpose of Issue		Date	Auth	
<div><div></div><div>NEWTECH CONSULTING GROUP</div></div> <div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div> <div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div>					
Client <div></div>					
Project <div>STOP SHOP</div>					
Title <div>ROOF FLOOR COVER SLAB DETAILS</div>					
Original Scale	Designed/Drawn	Checked	Authorised		
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	Date 16 /10/ 2016	Date 16 /10/2016	Date 16/10/2016		
Status	Drawing Number				Rev
DD	STRU-1307				1



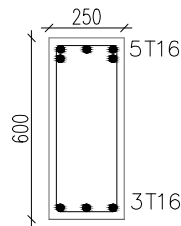
1 STAIRCASES PLAN
NOT TO SCALE



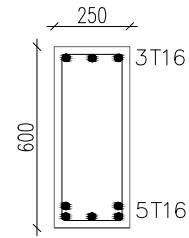
2 SECTION A-A
NOT TO SCALE



3 BEAM DETAILS
SCALE 1:50

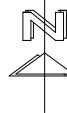


SECTION 1-1



SECTION 2-2

4 BEAM DETAILS
SCALE 1:25



NOTES:

1-ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2-ALL LEVELS ARE RELATED TO PROJECT DATUM WHICH MUST BE DETERMINED ON SITE BY ENGINEER.

3. ASSUMED SOIL CAPACITY \geq 150 KN/M2 IF LESS TO CHECK FOUNDATION.

4. $f_{cu} = 25\text{N/mm}^2$

5. $F_y = 410\text{N/mm}^2$

6. CENTERS ARE FOR ARCHITECTURAL WALLS. ECCENTRICITY FROM COLUMN WHERE SHOWN ON PLAN.

1	DETAILED DESIGN	DRW	10.2016	CHK	APR
0	CONCEPT	DRW	9.2016	CHK	APR
Rev	Description	By	Date	Chk'd	Auth
1	FOR CLIENT APPROVAL		10.2016	APR	
0	FOR CLIENT APPROVAL		09.2016	APR	
Rev	Purpose of Issue		Date	Auth	

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POSTAL CODE 12214
KHARTOUM
SUDAN
Tel. +(249) 183-521771-75
Fax. +(249) 183-22552
www.newtech-consulting.ae

Client
unicef

Project
STOP SHOP

Title
STAIRCASE DETAILS

Original Scale	Designed/Drawn	Checked	Authorised
NOT TO SCALE	AAM	SEM	AHA
Date 16 /10/ 2016	Date 16 /10/ 2016	Date 16 /10/ 2016	Date 16 /10/ 2016
Status	Drawing Number		Rev
DD	STRU-1400		1

LIST OF ELECTRICAL DRAWINGS			
Sheet Number	Sheet Name	Sheet Issue Date	Current Revision
SS-ELECTRICAL-100	ELECTRICAL LIST OF DRAWING	1/15/2017	0
SS-ELECTRICAL-100A	ELECTRICAL GENERAL NOTS	1/15/2017	0
SS-ELECTRICAL-101	GROUND FLOOR LIGHTING LAYOUT	1/15/2017	0
SS-ELECTRICAL-102	ROOF FLOOR LIGHTING LAYOUT	1/15/2017	0
SS-ELECTRICAL-103	GROUND FLOOR POWER LAYOUT	1/15/2017	0
SS-ELECTRICAL-104	ROOF FLOOR POWER LAYOUT	1/15/2017	0
SS-ELECTRICAL-105	DB-S (LIGHTING & POWER)	1/15/2017	0
SS-ELECTRICAL-106	DB-AC (AC UNIT & WATER HEATER)	1/16/2017	0
SS-ELECTRICAL-107	GROUND FLOOR FIRE ALARM LAYOUT	1/15/2017	0
SS-ELECTRICAL-108	GROUND FLOOR DATA NETWORK & TV POINT LAYOUT	1/15/2017	0
SS-ELECTRICAL-109	GROUNG FLOOR CCTV LAYOUT	1/15/2017	0
SS-ELECTRICAL-110	ELECTRICAL DETAILS	1/15/2017	0
SS-ELECTRICAL-111	FIRE ALARM DETAILS	1/15/2017	0

NOTES:

0	DETAILED DESIGN	AZA	1/2017	AME	AHM
Rev	Description	By	Date	CHK'd	Auth
0	FOR CLIENT APPROVAL		1/2017	AHM	
Rev	Purpose of Issue		Date	Auth	
 NEWTECH <small>CONSULTING GROUP</small> BUILDING NO.13, BLOCK 21 RYADHI EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN Tel : +9249 183 521771-75 Fax : +9249 183 52552 www.newtech-consulting.ae					
Client					
					
Project					
Stop Shop					
Title					
ELECTRICAL LIST OF DRAWINGS					
Original Scale	Designed/Drawn	Checked	Authorized		
NTS	AZA	AME	AHM		
	Date: 09/01/17	Date: 09/01/17	Date: 09/01/17		
Status	Drawing Number	Rev			
Detailed Design	SS-ELECTRICAL-100	0			

NOTES:

1. COMMON POWER AND ELECTRICAL NOTES:

- a. All power and electrical works are all-inclusive of all materials, transportation, storage, handling, workmanship, inspection, testing (periodic), final testing commissioning and all other items to enable "fitness for purpose" criteria to be achieved and to enable safe use and operation of the facility.
- b. These drawings shall be used for the power and electrical discipline purposes only.
- c. All material used for electrical works shall conform to relevant IEC specification and wiring shall be carried out as per latest edition of IEE wiring regulation.
- d. The power and electrical system selection, installations and testing etc shall be as per latest BS and/or IEC codes.
- e. All dimensions are in meters (m) unless otherwise specified.
- f. All levels are related to the Project Datum which must be determined and verified onsite by the Contractor and approved by the supervising Engineer.
- g. In-door fixture levels are measured from concrete floor (slab) level. Note that the finish tile level is approx +/-100mm above concrete floor (slab) level.
- h. Do not scale from the General Plan drawings. Use the scaled Part Plans instead. The designed distances and measurements could change onsite as per the specific site conditions.
- i. All power and electrical drawings shall be read in conjunction with general notes, specifications and miscellaneous details.
- j. These drawings shall be read in conjunction with all relevant drawings of the different trades / disciplines for co-ordination purposes.
- k. All equipment layout are provisional. Final layout shall be determined by the Contractor from the workshop drawing and after coordination with other trades.
- l. The Contractor shall submit for approval set of shop drawings showing openings and sleeves in concrete and walls before construction can begin.
- m. All pipe-work vertically penetrating reinforced or non-reinforced concrete structures and or going horizontally through walls to be approved by the Structural Engineer. If approved, these pipes shall pass through heavy duty/gauge uPVC sleeve encapsulated with fire-stopping material. The size and location of the sleeve is to be coordinated with the number, size and pressure of the passing piping systems.
- n. Where power and electrical elements are running through false ceilings, care must be taken to avoid clashing / conflict with other mechanical and instrumentation installations. The Contractor shall prepare sets of shop drawings for approval showing the power and electrical systems exactly in place.
- o. All power and electrical equipment should be approved prior to placing the Purchase Order, shipment and site installation.
- p. All pipes, conduits and fittings to be properly secured in walls and ceilings through clamps, hangers and supports.
- q. The contractor shall provide all fixing accessories required for complete installation of lighting fixtures, cable trays, bus-bars, switchgears, etc.
- r. Underground pipe lines with top of pipe less than 600mm deep from Finished Floor Level (FFL) shall be surrounded with 150mm thick C25 plain concrete. Warning tape demarcation is advised.
- s. The location of lighting fixtures in ceiling or in walls must be coordinated with all other disciplines (architectural, VAC and low current elements) to ensure that the ceilings and walls arrangements have aesthetic appeal. If in doubt, the Engineer advice should be thought.
- t. Where required, provide minimum 60x60 cm maintenance access panels (unless otherwise specified) in ceilings to all power and electrical elements (e.g. ceiling boxes, etc). The location of maintenance access panels to suit the selected equipment and to be coordinated with the ceiling plans.
- u. The Contractor shall engage the services of competent power and electrical vendor for the supply, installation, testing, etc services.
- v. All necessary testing and commissioning to be carried out to the requirement of the BS and IEC codes and to the satisfaction of the Engineer.
- w. Any discrepancies between the Contract Documents (Design, Specs and BOQs) are to be brought to the attention of the Engineer and resolved before commencement of any work.

2. Cable Management:

- a. The size of conduits, boxes, trays, trunking are not shown in drawings. The size of all shall be selected by the Contractor in accordance with the latest edition of IEE wiring regulations and shall be a function of the number and size of the respective conductors.
- b. All conduits embedded in concrete slab or inside walls shall be heavy gauge uPVC conduits and fittings.
- c. All conduits in exposed & wet areas shall be heavy gauge hot dip galvanized steel conduits fittings.
- d. Maximum of 40% of the conduit section shall be used for wires running inside to avoid over-loading the conduit.
- e. The minimum conduit size (external diameter) has to be 20mm "1.8mm.
- f. The Contractor is to install a pull box every 15m of conduit run and/or two 90° bends, without extra cost.

3. Wiring and Earthing:

- The color code for a 5-wire circuit shall be: red (phase 1), yellow (phase 2), blue (phase 3), black (neutral) and earthing shall be green with yellow stripes.
- For every circuit separate neutral and earth wire shall be drawn along with phase wire.
- All electrical equipment to be grounded.
- Earth continuity conductors shall be run with all circuit and feeders in accordance with specifications, regulations and standards.
- Ground result anywhere in the system shall not exceed 5 ohms.

4. Electrical Fixtures:

- Light switch shall be mounted on the wall 1400 mm above finished floor level and coordinated with interior design (level consistent with the room FCU thermostats).
- Power sockets shall be mounted at 500mm above finished floor level unless otherwise indicated.
- Outdoor electrical fitting shall weather-proof.
- Disconnect switches for outdoor VAC units will be installed beside the unit.

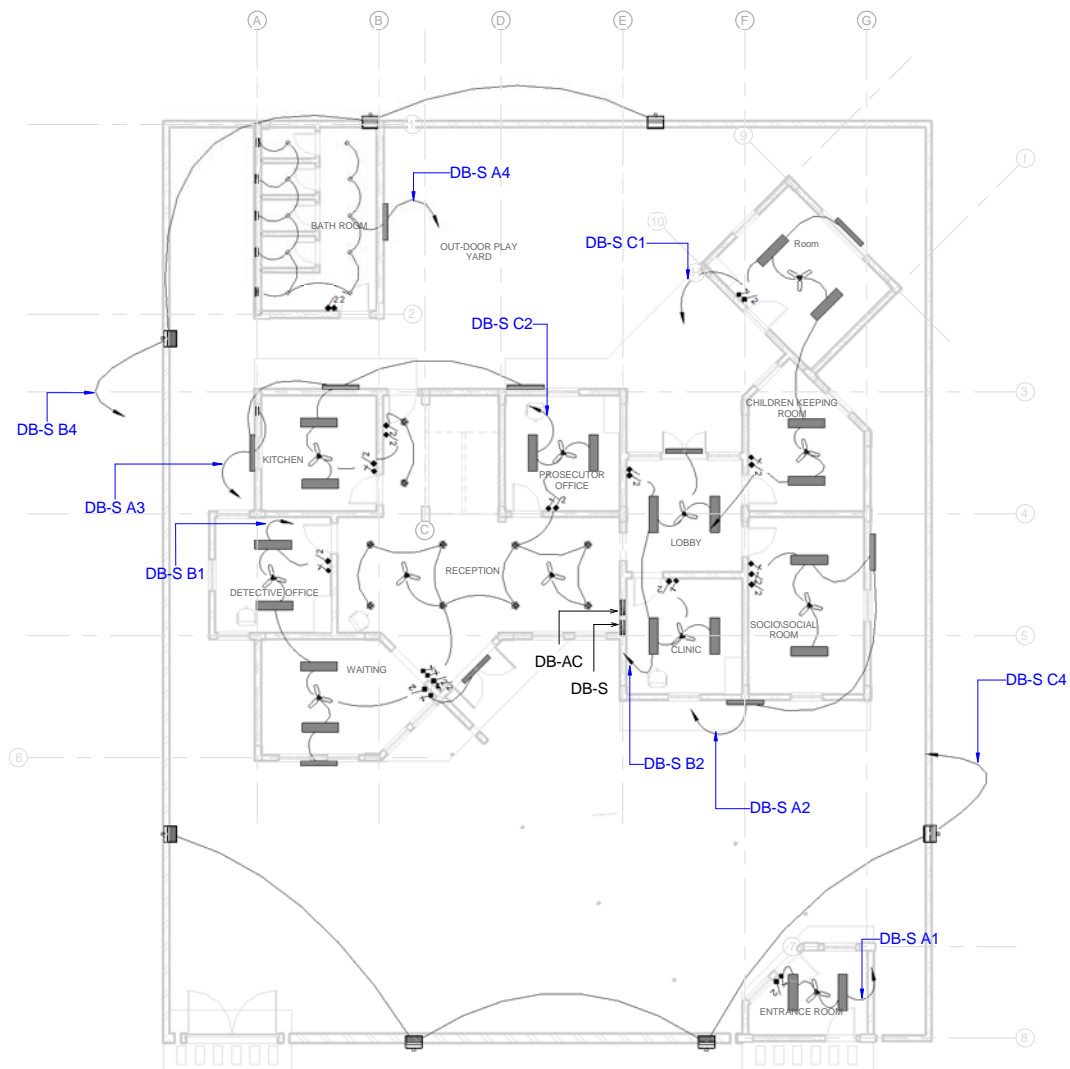
5. FIRE ALARM SYSTEM NOTES:

- Fire alarm system shall be conventional type.
- The fire alarm system shall be supplied and installed in accordance with the NFPA 72 and local authority requirements.
- Minimum size conduit for fire alarm installations shall be 25mm²
- All outdoor fire alarm devices shall be with minimum rating of IP-65.
- Fire alarm device/cabling to be 2c 1x.5mm² fire resistance with red LSF sheath.
- Exit stickers must be provided in fire escape doors even if exit luminaries are not installed above the door.

ELECTRICAL GENERAL NOTES

1 : 150

[illegible]















GROUND FLOOR LIGHTING LAYOUT

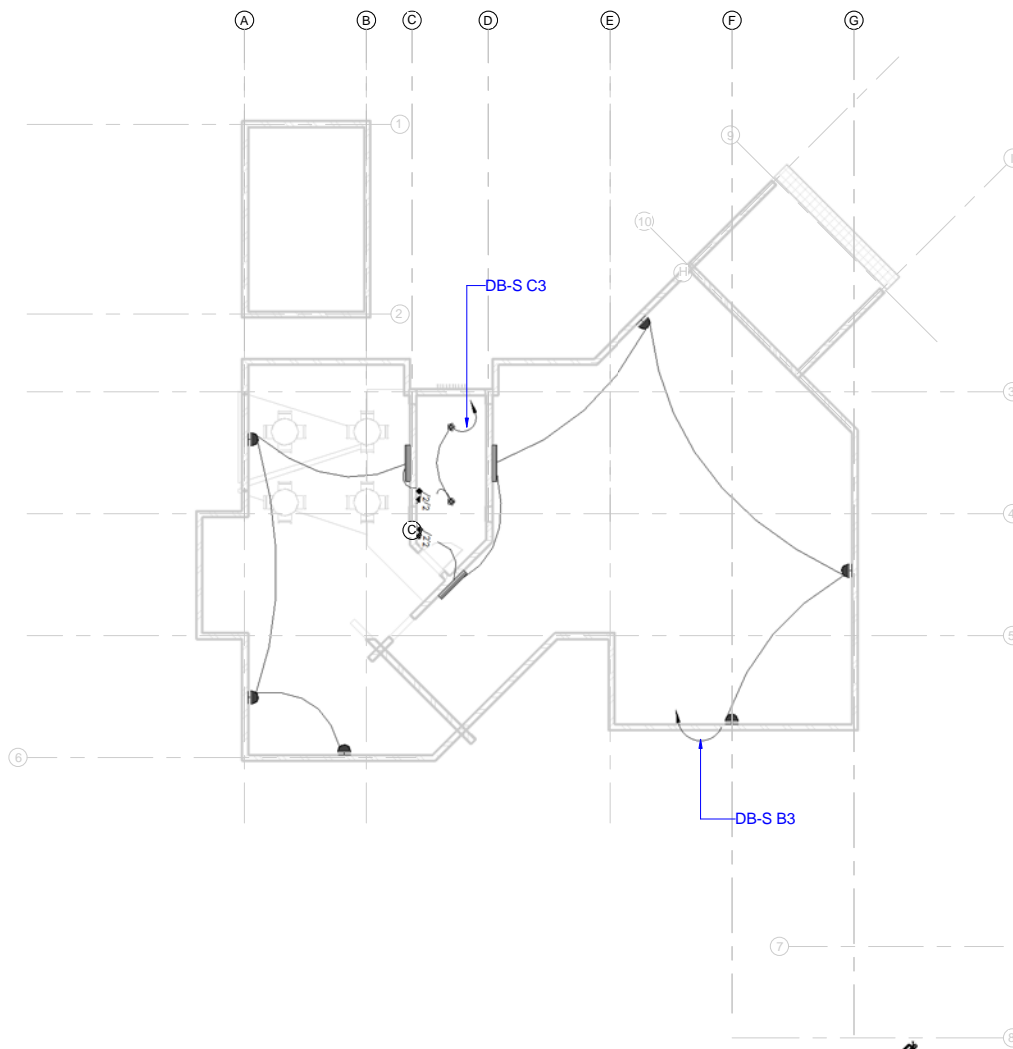
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NOTES:



LEGEND	
SYMBOL	DESCRIPTION
	SURFACE SCORE LIGHT 2 X 18W
	SURFACE PLAIN LIGHTING 2 X 36 W IP65
	SURFACE PLAIN LIGHTING 36 W
	SURFACE DOWNLIGHT CAN 30 W IP 42
	WALL PACK LIGHT 50 W IP 65
	ONE WAY ONE GANG SWITCH
	ONE WAY TWO GANG SWITCH
	ONE WAY THREE GANG SWITCH
	DIMMER SWITCH FOR FAN
	CEILING FAN 100W
	250W FLOOD LIGHT WALL MOUNTED IP 65
	DISTRIBUTION BOARD

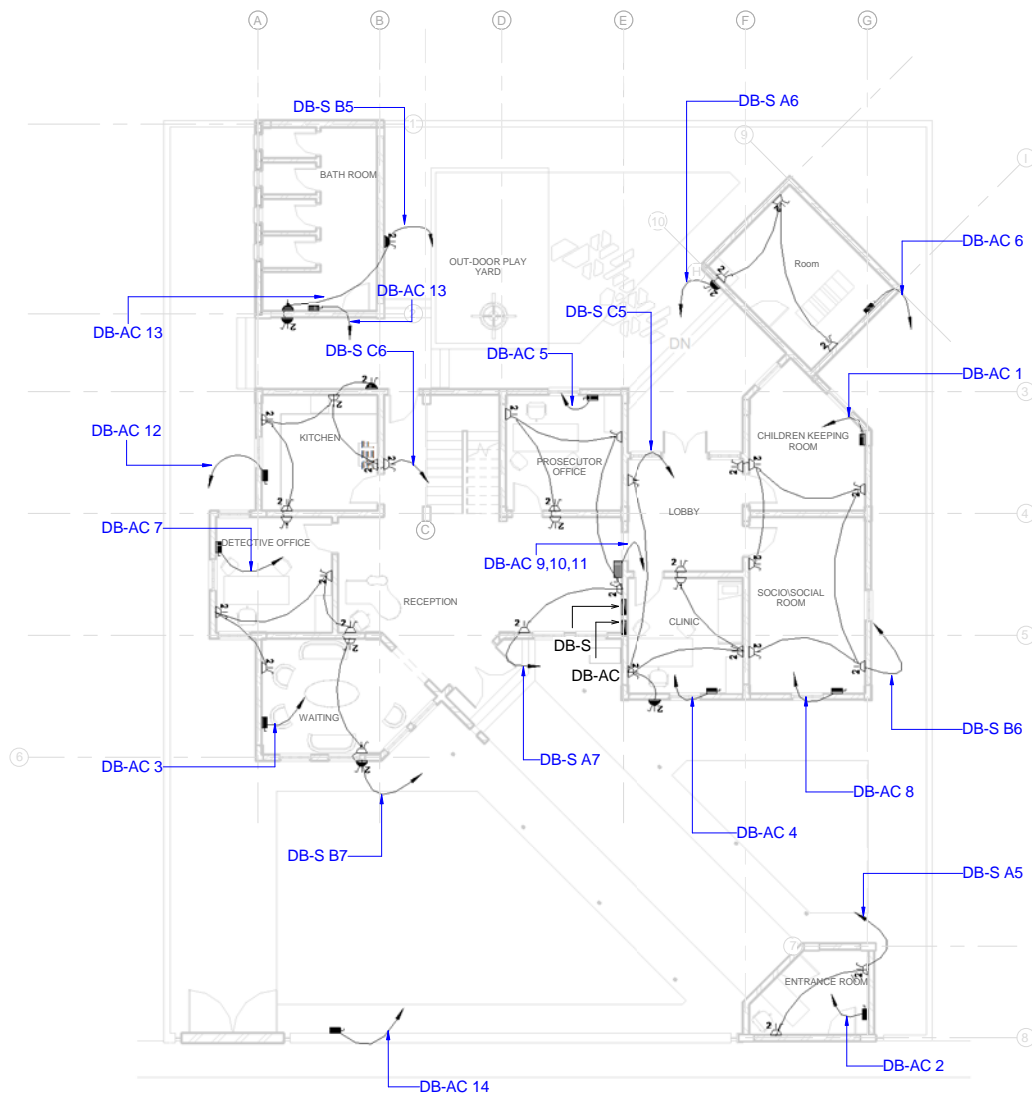
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NOTES:

LEGEND	
SYMBOL	DESCRIPTION
	SURFACE SCONE LIGHT 2 X 18W
	SURFACE PLAN LIGHTING 2 X 36 W IP65
	SURFACE PLAN LIGHTING 36 W
	SURFACE DOWNLIGHT CAN 30 W IP 42
	WALL PACK LIGHT 50 W IP 66
	ONE WAY ONE GANG SWITCH
	ONE WAY TWO GANG SWITCH
	ONE WAY THREE GANG SWITCH
	DIMMER SWITCH FOR FAN
	CEILING FAN 100W
	300W FLOOD LIGHT WALL MOUNTED IP 65
	DISTRIBUTION BOARD







0	DETAILED DESIGN	AZA	1/2017	AME	
0	CONCEPT	AZA	1/2017	AME	
Rev	Description	By	Date	CHKD	
0	FOR CLIENT APPROVAL			1/2017	
0	FOR CLIENT APPROVAL			1/2017	
Rev	Purpose of Issue			Date	
<div><div>NEWTECH Consulting Group</div><div>BUILDING NO.13, BLOCK 21 RYADHI EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel: +1(248) 183-521771 Fax: +1(248) 183-52255 www.newtech-consulting.com</div></div>					
Client					
<div></div>					
Project					
Stop Shop					
Title					
ROOF FLOOR LIGHTING LAYOUT					
Original Scale	Designed/Drawn	Checked	Authorised		
1 : 150	AZA Date: 01/01/17	AME Date: 01/01/17	AHM Date: 01/01/17		
Scale	Drawing Number				
Detailed Design	SS-ELECTRICAL-102				
					Rev





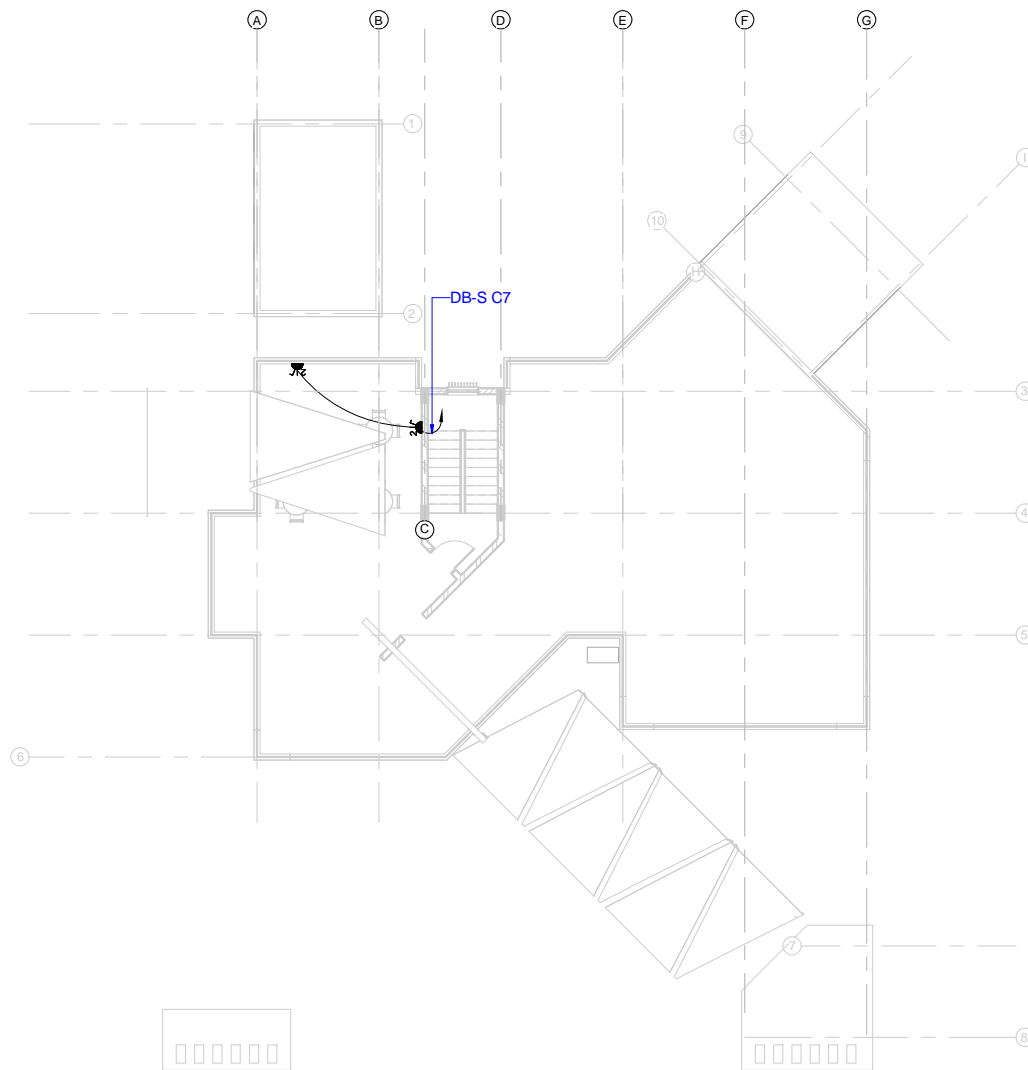
GROUND FLOOR
POWER LAYOUT
1 : 150



NOTES:

<u>LEGEND</u>	
<u>SYMBOL</u>	<u>DESCRIPTION</u>
	SINGLE SWITCH SOCKET 13A
	TWIN SWITCH SOCKET 13A
	TWIN SWITCH SOCKET 13A IP 65
	SHAVER SOCKET 10A
	DOUBLE POLE SWITCH WITH NEON INDICATOR 2
	DISTRIBUTION BOARD

0	DETAILED DESIGN	AZA	1/2017	AME	
0	CONCEPT	AZA	1-2017	AME	
Rev.	Description	By	Date	CHK	
0	FOR CLIENT APPROVAL				2/2017
0	FOR CLIENT APPROVAL				1/2017
Rev.	Purpose of Issue				Date
 NEWTECH BUILDING NO 13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN					
Tel. (+249) 183-521771 Fax. (+249) 183-2221 www.newtech-construction.com					
Client					
					
Project					
<div>Stop Shop</div>					
Title					
GROUND FLOOR POWER LAYOUT					
Original Scale	Designed/Drawn	Checked	Modified		
1 : 150	AZA	AME	AHM		
	Date: 01/01/17	Date: 01/01/17	Date: 01/01/17		
Status	Drawing Number				Rev
Detailed Design	SS-ELECTRICAL-103				



**ROOF FLOOR
POWER LAYOUT**
1 : 150



NOTES:

LEGEND	
SYMBOL	DESCRIPTION
	SINGLE SWITCH SOCKET 13A
	TWIN SWITCH SOCKET 13A
	TWIN SWITCH SOCKET 13A IP 65
	SHAVESOCKET 15A
	DOUBLE POLE SWITCH WITH NEON INDICATOR 20A
	DISTRIBUTION BOARD

0	DETAILED DESIGN	AZA	1/2017	AME	AHM
0	CONCEPT	AZA	1/2017	AME	AHM
Rev	Description	By	Date	CHKD	Auth
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0	FOR CLIENT APPROVAL		1/2017	AHM	
Rev	Purpose of Issue		Date	Auth	
 BUILDING NO.13, BLOCK 21 RYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN					
Client 					
Project Stop Shop					
Title ROOF FLOOR POWER LAYOUT					
Original Scale	Designed/Drawn	Checked	Authorised		
1 : 150	AZA	AME	AHM		
	Date: 09/09/17	Date: 09/09/17	Date: 09/09/17		
Revised	Design/Revise			Rev	
Detailed Design	SS-ELECTRICAL-104			0	



NOTES:

Branch Panel: DB-S

Location: Ground Floor
Supply From: SMDB
Mounting: Recessed
Enclosure: Type1

Volts: 240/415 wye
Phases: 3
Wires: 4

Incoming Cable Type CU/XLPE/SWA/PVC
Incoming Cable Size 16MM2
Mains Rating: 63 A
MCB Rating: 50 A

Notes:

CKT	Circuit Description	Trip	Wire Size	Wire Type	Poles	R	Y	B
A1	LIGHTING FOR ENTRANCE ROOM	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1	241 VA		
B1	LIGHTING FOR WAITING & DETECTIVE OFFICE	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1		625 VA	
C1	LIGHTING FOR ROOM	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1			554 VA
A2	LIGHTING FOR SOCIAL ROOM	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1	384 VA		
B2	LIGHTING FOR LOBBY & CLINIC	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1		554 VA	
C2	LIGHTING FOR RECEPTION & PROSECUTOR OFFICE	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1			1233 VA
A3	LIGHTING FOR KITCHEN	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1	656 VA		
B3	LIGHTING FOR ROOF 1	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1		294 VA	
C3	LIGHTING FOR ROOF 2	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1			422 VA
A4	LIGHTING FOR BATH ROOM	10 A	1-#2.5 mm, 1-#2.5mm, 1-#1.5 mm	CU/PVC	1	672 VA		
B4	LIGHTING FOR PLAY YARD	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1		1356 VA	
C4	LIGHTING FOR YARD	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1			1808 VA
A5	SOCKET OUTLET FOR ENTRANCE ROOM	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1	360 VA		
B5	SOCKET OUTLET FOR BATH & YARD	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1		540 VA	
C5	SOCKET OUT LET FOR LOBBY & CLINIC	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1			1080 VA
A6	SOCKET FOR ROOM	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1	720 VA		
B6	SOCKET OUT LET FOR CHILDREN KEEPING ROOM	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1		1080 VA	
C6	SOCKET OUTLET FOR KITCHEN	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1			1260 VA
A7	SOCKET OUTLET FOR PROSECUTOR OFFICE	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1	1080 VA		
B7	SOCKET OUTLET FOR WAITING & DETECTIVE OFFICE	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1		1260 VA	
C7	SOCKET OUTLET FOR ROOF	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1			360 VA
Total Load:						4113 VA	5709 VA	6716 VA
Total Amps:						17 A	25 A	29 A

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Other	0 VA	0.00%	0 VA	
Power	1200 VA	100.00%	1200 VA	Total Conn. Load: 16580 VA
Lighting	2376 VA	100.00%	2376 VA	Total Est. Demand: 16149 VA
Socket	7740 VA	91.15%	7055 VA	Total Conn. Current: 23 A
Lighting - Dwelling Unit	1800 VA	66.00%	1188 VA	Total Est. Demand Current: 22 A

Notes:

0	DETAILED DESIGN	AZA	10/17	AME	AHM
0	CONCEPT	AZA	1-2017	AME	AHM
Rev	Description	By	Date	CHKD	Auth

0	FOR CLIENT APPROVAL	1-2017	AHM
0	FOR CLIENT APPROVAL	1-2017	AHM
Rev	Purpose of Issue	Date	Auth

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Tel : +249 183 521771-75
Fax : +249 183 22552
www.newtech-consulting.ae

Client
unicef

Project
Stop Shop

Title
DB-S (LIGHTING & POWER)

Original Scale	Designed/Drawn AZA Date: 09/09/17	Checked AME Date: 09/09/17	Authorized AHM Date: 09/09/17
Scale	Design/Rev	Date	Rev
Detailed Design	SS-ELECTRICAL-105		0



Branch Panel: DB-AC

Location: Ground Floor
Supply From: SMDB
Mounting: Recessed
Enclosure: Type1

Volts: 240/415 wye
Phases: 3
Wires: 4

Incoming Cable Type CU/XLPE/SWA/PVC
Incoming Cable Size 25MM2
Mains Rating: 125 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	Trip	Wire Size	Wire Type	Poles	R	Y	B
1	AC FOR CHILDEN KEEPING ROOM	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1	3000 VA		
2	AC FOR ENTRANCE ROOM	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1		3000 VA	
3	AC FOR WAITING	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1			3400 VA
4	AC FOR CLINIC	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1	3000 VA		
5	AC FOR PROSECUTOR OFFICE	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1		3000 VA	
6	AC FOR ROOM	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1			3900 VA
7	AC FOR DETECTIVE OFFICE	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1	3000 VA		
8	AC FOR SOCIAL ROOM	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1		3400 VA	
9,10,11	AC FOR RECEPTION	20 A	3-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	3	1733 VA	1733 VA	1733 VA
12	WATER HEATER FOR KITCHEN	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1			2000 VA
13	WATER HEATER FOR BATH ROOM	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1	3700 VA		
14	WATER PUMPS	20 A	1-#4 mm, 1-#4 mm, 1-#2.5 mm	CU/PVC	1		2000 VA	
15								
16								
17								
18								
19								
20								
21								
						Total Load:	14433 VA	13133 VA
						Total Amps:	62 A	56 A
								46 A

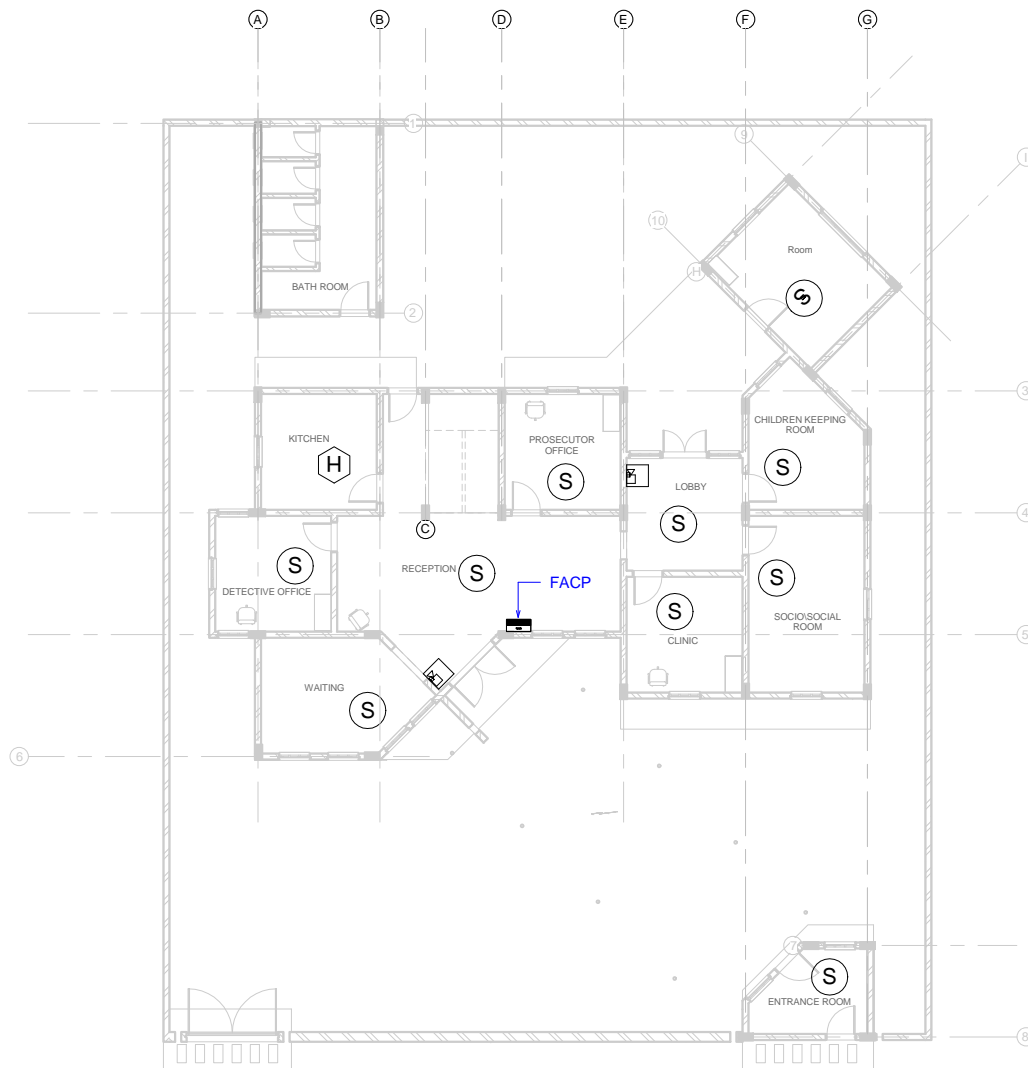
Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Motor	3700 VA	100.00%	3700 VA	Total Conn. Load: 38600 VA Total Est. Demand: 38600 VA Total Conn. Current: 54 A Total Est. Demand Current: 54 A
Power	2000 VA	100.00%	2000 VA	
HVAC	30900 VA	100.00%	30900 VA	
Cooling	2000 VA	100.00%	2000 VA	

Notes:

NOTES:

0	DETAILED DESIGN	AZA	12/17	AME	AHM		
0	CONCEPT	AZA	12/17	AME	AHM		
Rev	Description	By	Date	CHK'd	Auth		
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0	FOR CLIENT APPROVAL		12/17	AHM			
Rev	Purpose of Issue		Date	Auth			
<p>NEWTECH CONSULTING GROUP BUILDING NO.13, BLOCK 21 RYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN Tel : +9249 183-521771-75 Fax : +9249 183-22552 www.newtech-consulting.ae</p>							
Client							
Project							
Stop Shop							
Title							
DB-AC							
Original Scale	Designed/Drawn	Checked	Authorized				
	AZA	AME	AHM				
	Date: 09/07	Date: 09/07	Date: 09/07				
Status	Drawing Number						
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					Rev		
					0		



NOTES:

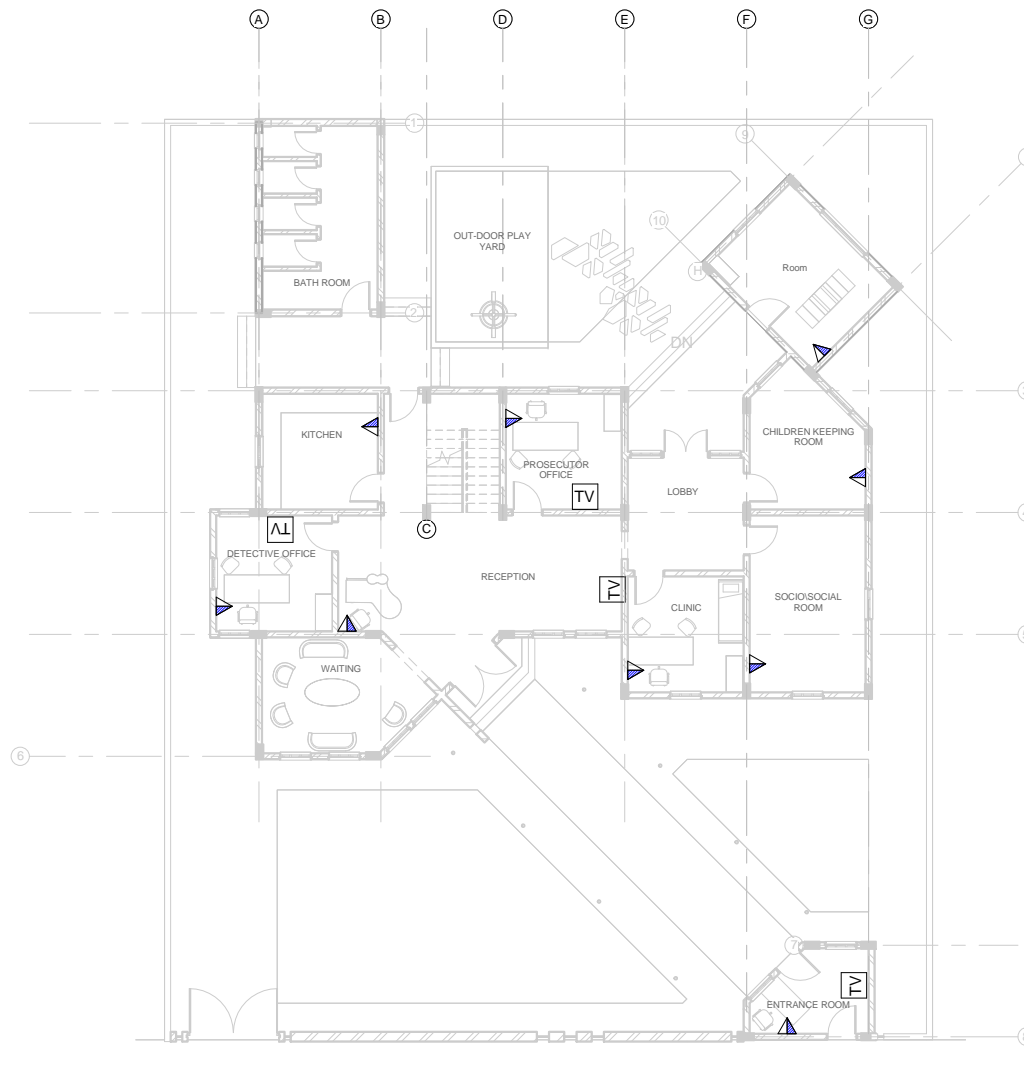
LEGEND	
SYMBOL	DESCRIPTION
(S)	SMOKE DETECTOR
(H)	HEAT DETECTOR
(M)	FIRE ALARM MANUAL CALL STATION
(S)	FIRE ALARM SOUNDER
(FACP)	FIRE ALARM CONTROL PANEL

0	DETAILED DESIGN	AZA	1/2017	AME	AHM
0	CONCEPT	AZA	1/2017	AME	AHM
Rev	Description	By	Date	CHK'd	Auth
0	FOR CLIENT APPROVAL		1/2017	AHM	
0	FOR CLIENT APPROVAL		1/2017	AHM	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21 RIVADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel : +249 183 521771-75 Fax : +249 183 22552 www.newtech-consulting.ae</div></div>					
Client					
<div></div>					
Project					
Stop Shop					
Title					
GROUND FLOOR FIRE ALARM LAYOUT					
Original Scale	Designed/Drawn	Checked	Authorized		
1 : 150	AZA	AME	AHM		
	Date: 09/09/17	Date: 09/09/17	Date: 09/09/17		
Revised	Drawing Number				
Detailed Design	SS-ELECTRICAL-107				
				Rev	0

GROUND FLOOR FIRE ALARM LAYOUT



1

1 : 150

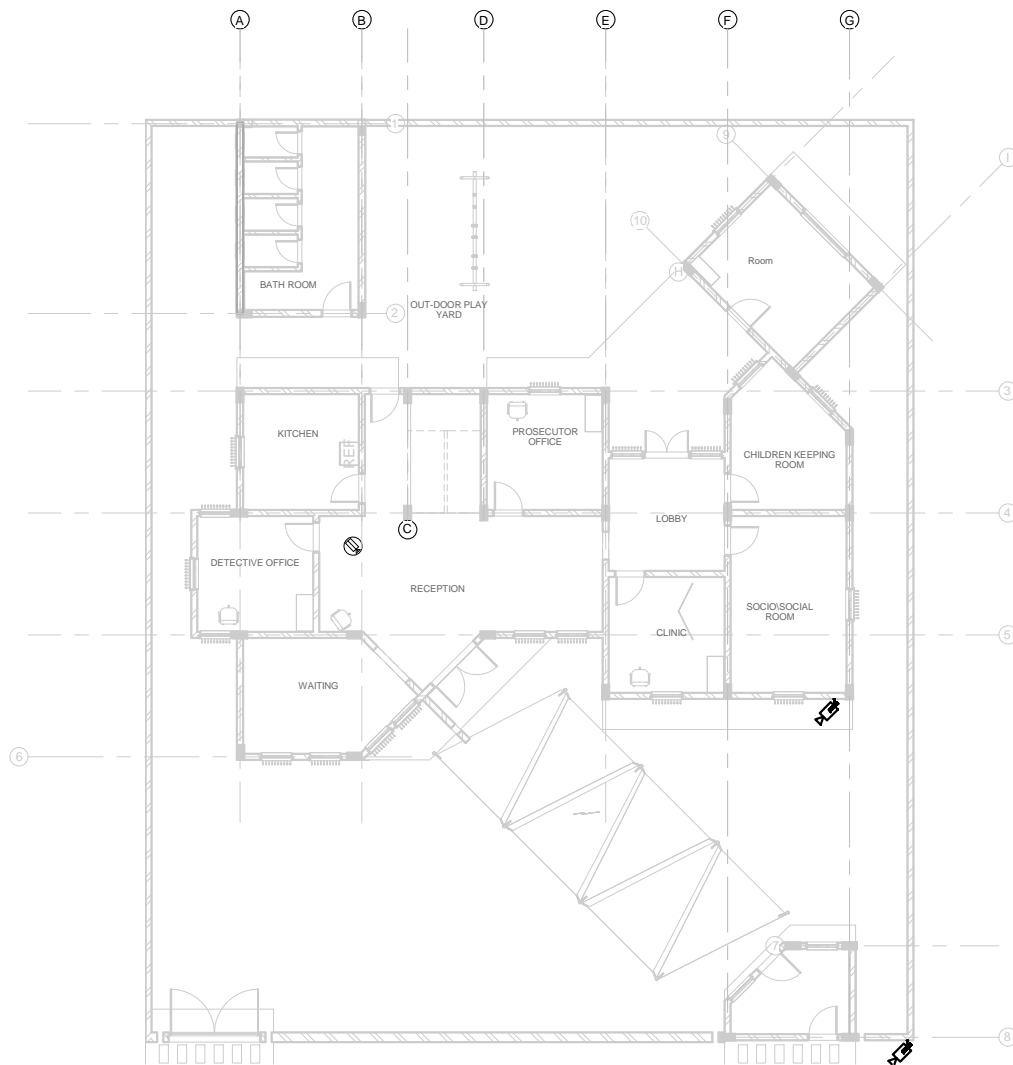


NOTES:

LEGEND	
SYMBOL	DESCRIPTION
	DUAL FACE PLATE (DATA + VOICE)
	TV POINT

0	DETAILED DESIGN	AZA	1/2017	AME	
0	CONCEPT	AZA	1/2017	AME	
Rev	Description	By	Date	CHK'd	
0	FOR CLIENT APPROVAL			1/2017	
0	FOR CLIENT APPROVAL			1/2017	
Rev	Purpose of Issue			Date	
<div> NEWTECH Consulting Group</div> <div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel : +9249 183-521771-75 Fax : +9249 183-22552 www.newtech-consulting.ae</div></div>					
Client					
<div></div>					
Project					
Stop Shop					
Title					
GROUND FLOOR DATA NETWORK & TV POINT LAYOUT					
Original Scale	Designed/Drawn	Checked	Authorized		
1 : 150	AZA	AME	AHM		
	Date: 8/1/2017	Date: 8/1/2017	Date: 8/1/2017		
Revised	Drawing Number				
Detailed Design	SS-ELECTRICAL-108				
					Rev
					0

GROUND FLOOR DATA NETWORK & TV POINT LAYOUT 1 : 150



**GROUND FLOOR
CCTV LAYOUT**
1 : 150



NOTES:

LEGEND	
SYMBOL	DESCRIPTION
	INDOOR DOME CAMERA
	OUTDOOR BULLET CAMERA

0	DETAILED DESIGN	AZA	1/2017	AME	AHM
0	CONCEPT	AZA	1/2017	AME	AHM
Rev	Description	By	Date	CHK'd	Auth

0	FOR CLIENT APPROVAL		1/2017	AHM	
0	FOR CLIENT APPROVAL		1/2017	AHM	
Rev	Purpose of Issue		Date	Auth	

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Fax : +9249 183-22552
www.newtech-consulting.ae

Client
unicef

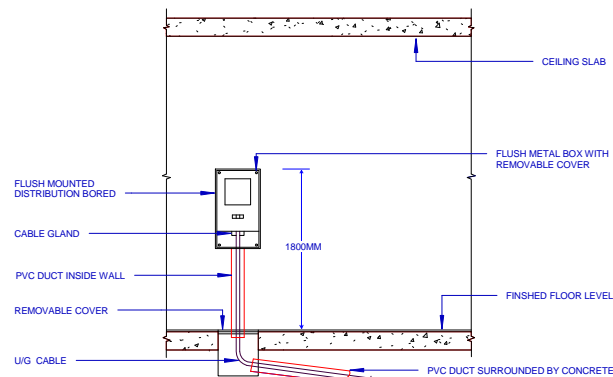
Project
Stop Shop

Title
GROUND FLOOR CCTV LAYOUT

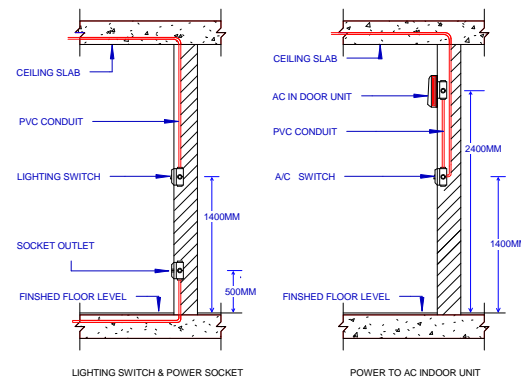
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Revised	Drawing Number	Date	Rev
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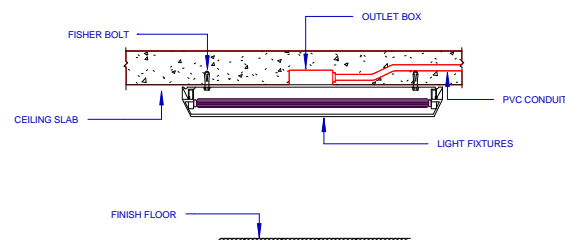
NOTES:



CONNECTION OF ARMOURED CABLE ON MOUNTED DISTRIBUTION BOARD



LIGHTING SWITCH & SOCKETS DETAILS





SURFACE MOUNTED LIGHTING FIXTURES MOUNTING DETAILS

ELECTRICAL DETAILS

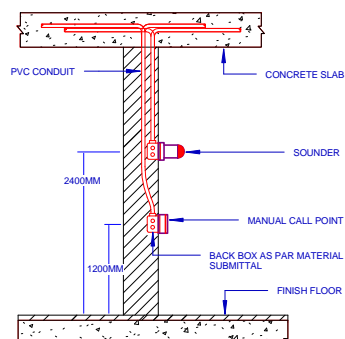
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1 : 50

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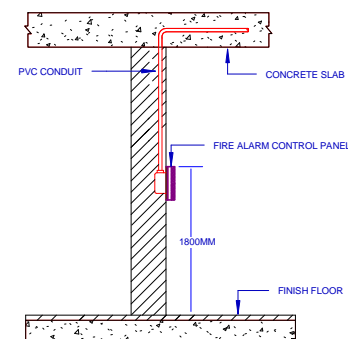
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Rev/	Description					By	Date	CHK'd	
0	FOR CLIENT APPROVAL						1/2017		
0	FOR CLIENT APPROVAL						1/2017		
Rev/	Purpose of Issue						Date		
<div> NEWTECH CONSULTING GROUP</div> <div><div>BUILDING NO.13, BLOCK 21</div><div>RIYADH EXTENSION</div><div>POSTAL CODE 12214</div><div>KHARTOUM</div><div>SUDAN</div></div> <div><div>Tel : +249 183-521771-75</div><div>Fax : +249 183-22552</div><div>www.newtech-consulting.ae</div></div>									
Client									
<div></div>									
Project									
Stop Shop									
Title									
ELECTRICAL DETAILS									
Original Scale		Designed/Drawn		Checked		Authorized			
1 : 50		AZA		AME		AHM			
		Date: 09/09/17		Date: 09/09/17		Date: 09/09/17			
Revision		Drawing Number							
Detailed Design		SS-ELECTRICAL-110							
		Rev							



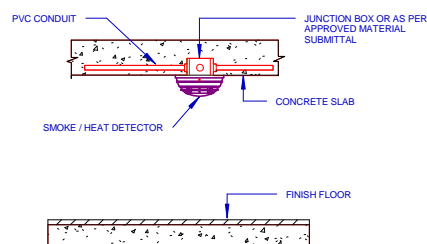
NOTES:
REFER TO GENERAL NOTES SHEET



TYPICAL MOUNTING OF MANUAL CALL POINT & SOUNDER



TYPICAL MOUNTING OF FIRE ALARM CONTROL PANEL



SURFACE MOUNTED SMOKE/HEAT DETECTOR

FIRE ALARM DETAILS

1
1 : 50

0	DETAILED DESIGN		AZA	1/2017	AME	AHM																				
Rev	Description		By	Date	CHK'd	Auth																				
0	FOR CLIENT APPROVAL			1/2017	AHM																					
Rev	Purpose of Issue			Date	Auth																					
<div><div><div>NEWTECH CONSULTING GROUP</div></div><div><div>BUILDING NO.13, BLOCK 21</div><div>RYADH EXTENSION</div><div>POSTAL CODE 12214</div><div>KHARTOUM</div><div>SUDAN</div></div><div><div>Client</div><div></div></div><div><div>Project</div><div>Stop Shop</div></div><div><div>Title</div><div>FIRE ALARM DETAILS</div></div><div><table><tr><td>Original Scale</td><td>Designed/Drawn</td><td>Checked</td><td>Authorized</td></tr><tr><td>1 : 50</td><td>AZA</td><td>AME</td><td>AHM</td></tr><tr><td></td><td>Date: 09/09/17</td><td>Date: 09/09/17</td><td>Date: 09/09/17</td></tr><tr><td>Scale</td><td>Drawing Number</td><td colspan="2">Rev</td></tr><tr><td>Detailed Design</td><td>SS-ELECTRICAL-111</td><td colspan="2">0</td></tr></table></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></d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Scale	Designed/Drawn	Checked	Authorized	1 : 50	AZA	AME	AHM		Date: 09/09/17	Date: 09/09/17	Date: 09/09/17	Scale	Drawing Number	Rev		Detailed Design	SS-ELECTRICAL-111	0	
Original Scale	Designed/Drawn	Checked	Authorized																							
1 : 50	AZA	AME	AHM																							
	Date: 09/09/17	Date: 09/09/17	Date: 09/09/17																							
Scale	Drawing Number	Rev																								
Detailed Design	SS-ELECTRICAL-111	0																								

LIST OF VAC DRAWINGS			
Sheet Number	Sheet Name	Sheet Issue Date	Current Revision
SS-VAC-200	LIST OF VAC DRAWINGS	18-01-17	0
SS-VAC-200-A	GENERAL NOTES FOR VAC	18-01-17	0
SS-VAC-201	GROUND FILOOR VAC LAYOUT	18-01-17	0

NOTES:

0 DETAILED DESIGN						MNR/2017	AHM/2017	AMH/2017
Rev.	Description	By	Date	Drawn	Checked	Authored	Reviewed	
0	FOR CLIENT APPROVAL						2017	AHM/2017
Rev.	Purpose of Issue						Date	Auth
<div><div></div><div>©</div></div> <p>BUILDING NO.13, BLOCK Z1 RYADAH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</p> <p>Tel. + (249) 813-62171-76 Fax. + (249) 813-22552 www.newtech-consulting.ae</p>								
Client								
								
Project								
Stop Shop								
Title								
LIST OF VAC DRAWINGS								
Original Scale		Design/Revision		Checked		Authorized		
NTS		MNR		AHM		AHM		
		Date 18/01/17		Date 18/01/17		Date 18/01/17		
Name Detailed Design	Drawing Number SS-VAC-200						Rev. 0	

1. COMMON VAC NOTES:

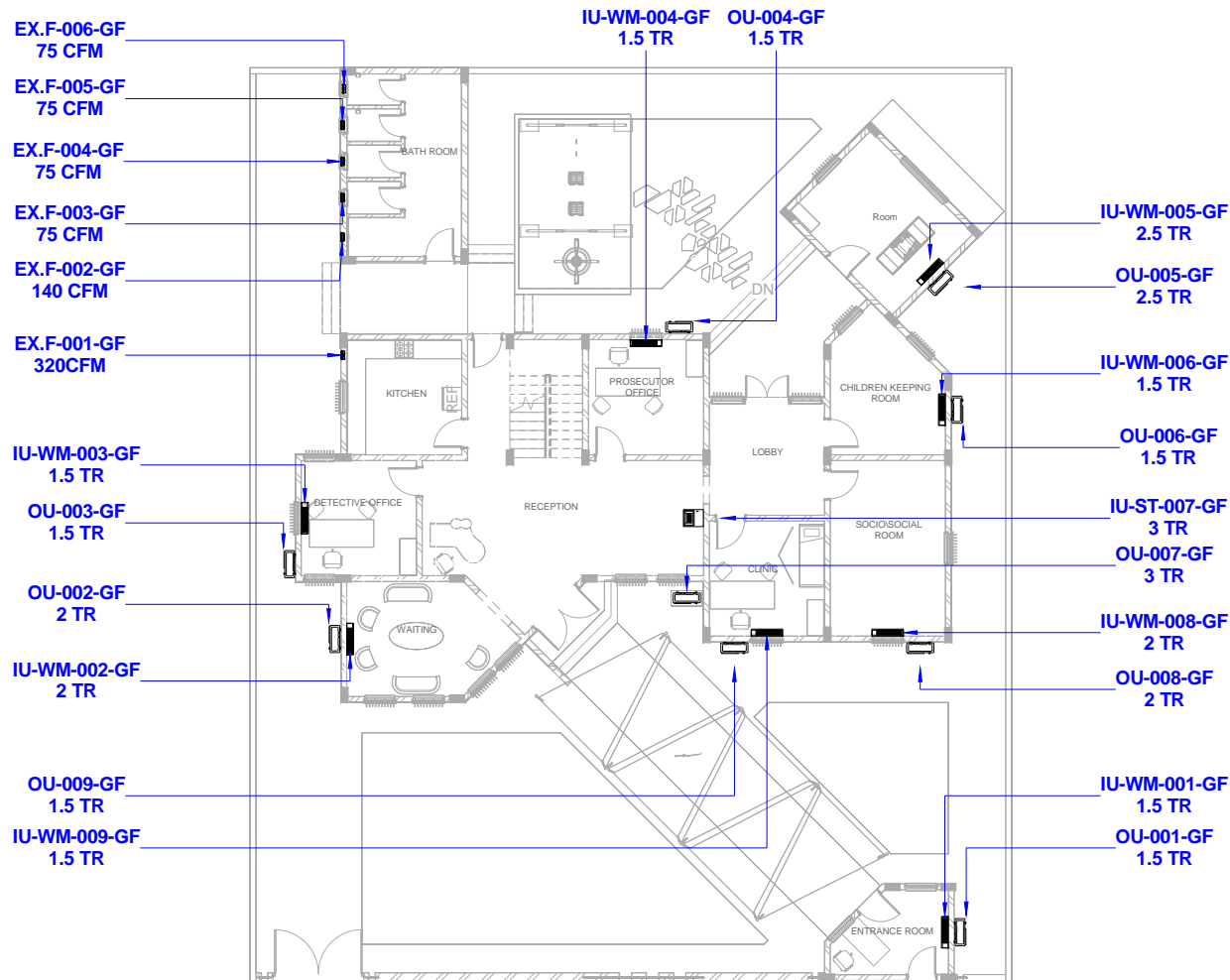
- All VAC works are all-inclusive of all materials, transportation, storage, handling, workmanship, inspection, testing (periodic), final testing commissioning and all other items to enable "fitness for purpose" criteria to be achieved and to enable safe use and operation of the facility.
- These drawings shall be used for the mechanical VAC discipline purposes only.
- The VAC system selection, installations and testing etc shall be as per latest ASHRAE codes.
- All levels are related to the Project Datum which must determined and verified onsite by the Contractor and approved by the supervising Engineer.
- In-door pipe levels are measured from concrete floor (slab) level. Note that the finish tile level is approx +/-100mm above concrete floor (slab) level.
- Do not scale from the General Plan drawings. Use the scaled Part Plans instead. The designed distances and measurements could change onsite as per the specific site conditions.
- All mechanical drawings shall be read in conjunction with general notes, specifications and miscellaneous details.
- These drawings shall be read in conjunction with all relevant drawings of the different trades / disciplines for co-ordination purposes.
- The Contractor shall submit for approval set of shop drawings showing openings and sleeves in concrete and walls before construction can begin.
- through heavy duty/gauge uPVC sleeve encapsulated with fire-stopping material. The size and location of the sleeve is to be coordinated with the number, size and pressure
- All VAC equipment should be approved prior to placing the Purchase Order, shipment and site installation.
- All pipes and fittings to be properly secured in walls and ceilings through clamps, hangers and supports.
- Underground pipe lines with top of pipe less than 600mm deep from Finished Floor Level (FFL) shall be surrounded with 150mm thick C25 plain concrete. Warning tape demarcation is advised.
- All AC condensate drain lines must be Polypropylene Random (PP-R) with minimum inner dia of 25mm / 1" (unless otherwise specified). All AC condensate drain installations to be inclusive of pipe work, fittings, supports, hangers and wall-brackets.
- Each AC condensate drain pipe or group of pipes are to connect to separate drain system or to dedicated storm / floor drain with slope of 1-2% max as provided on plumbing design.
- The location of VAC fixtures in ceiling (diffusers, grills, etc) or in walls must be coordinated with all other disciplines (architectural, power, lighting and low current elements) to ensure that the ceilings and walls arrangements have aesthetic appeal.
If in doubt, the Engineer advice should be thought.
- All wall-mounted exhaust fans outlet must complete with gooseneck with gravity shutter and demountable mesh screen to protect against insect access.
- The contractor shall engage the services of competent VAC vendor for supply, installation, testing, etc services.
- All necessary testing and commissioning to be carried out to the requirement of the ASHRAE codes and to the satisfaction of the Engineer.
- Any discrepancies between the Contract Documents (Design, Specs and BOQs) are to be brought to the attention of the Engineer and resolved before commencement of any work.

2. Split Unit AC Notes:

- All AC units re to be installed in accordance with the manufacture specifications/ instructions.
- The selection of the split units should achieve the design capacity with actual refrigerant pipe length.

NOTES:

0	DETAILED DESIGN	MNR	1,2017	AHM	AHM
Rev	Description	By	Date	CHK'd	Auth
0	FOR CLIENT APPROVAL		1,2017	AHM	
Rev	Purpose of Issue		Date	Auth	
 NEWTECH CONSULTING GROUP BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN Tel : + (249) 183-521771-75 Fax : + (249) 183-22552 www.newtech-consulting.ae					
Client					
					
Project					
Stop Shop					
Title					
GENERAL NOTES FOR VAC					
Original Scale	Designed/Drawn	Checked	Authorized		
NTS	MNR	AHM	AHM		
	Date: 18/01/17	Date: 18/01/17	Date: 18/01/17		
Status	Drawing Number	Rev			
Detailed Design	SS-VAC-200-A	0			



NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
OU	OUTDOOR UNIT
IU	INDOOR UNIT
WM	WALL MOUNTED TYPE
ST	FREE STAND TYPE
EX.F	WALL MOUNTED EXHAUST FAN

0	DETAILED DESIGN	MNR	1/2017	AHM	AHM
Rev	Description	By	Date	CHK'd	Auth

0	FOR CLIENT APPROVAL	1/2017	AHM	AHM
Rev	Purpose of Issue	Date	Auth	

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Client
unicef

Project
Stop Shop

Title
GROUND FLOOR VAC LAYOUT

Original Scale 1 : 150	Designed/Drawn MNR Date: 18/01/17	Checked AHM Date: 18/01/17	Authorized AHM Date: 18/01/17
Revised Detailed Design	Drawing Number SS-VAC-201	Rev 0	

**GROUND FLOOR PLAN
VAC LAYOUT**
1 : 150

LIST OF FIRE FIGHTING DRAWINGS			
Sheet Number	Sheet Name	Sheet Issue Date	Current Revision
SS-FIRE FIGHTING-300	LIST OF FIRE FIGHTING DRAWINGS	01/18/17	0
SS-FIRE FIGHTING-300-A	GENERAL NOTES FOR FIRE FIGHTING	01/18/17	0
SS-FIRE FIGHTING-301	GROUND FLOOR FIRE FIGHTING LAYOUT	01/18/17	0

NOTES:

[illegible]

1. COMMON FIRE-FIGHTING (FF) NOTES:

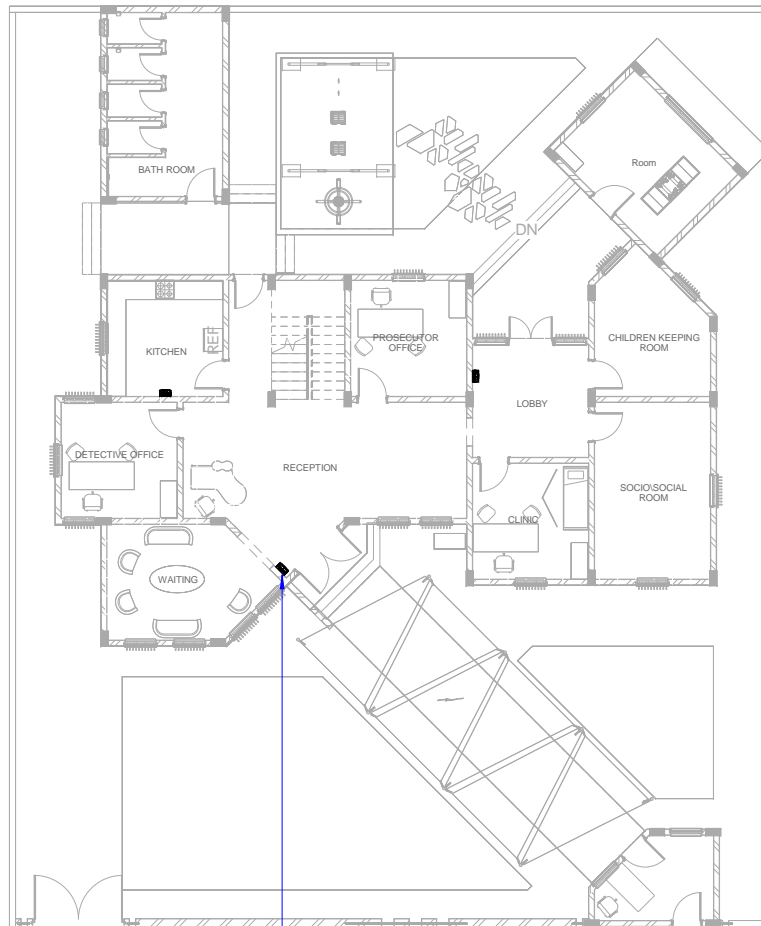
- All FF works are all-inclusive of all materials, transportation, storage, handling, workmanship, inspection, testing (periodic), final testing commissioning and all other items to enable "fitness for purpose" criteria to be achieved and to enable safe use and operation of the facility.
- These drawings shall be used for the mechanical FF discipline purposes only.
- The fire-fighting system (cabinets, pipes, fittings, pumps, etc) selection, installations and testing etc shall be as per latest NFPA codes.
- All dimensions are in meters (m) unless otherwise specified.
- All levels are related to the Project Datum which must determined and verified onsite by the Contractor and approved by the supervising Engineer.
- Do not scale from the General Plan drawings. Use the scaled Part Plans instead. The designed distances and measurements could change onsite as per the specific site conditions.
- All mechanical drawings shall be read in conjunction with general notes, specifications and miscellaneous details.
- These drawings shall be read in conjunction with all relevant drawings of the different trades / disciplines for co-ordination purposes.
- The Contractor shall submit for approval set of shop drawings showing openings and sleeves in concrete and walls before construction can begin.
- All FF equipment should be approved prior to placing the Purchase Order, shipment and site installation.
- The Contractor shall engage the services of competent and licensed fire-fighting vendor for the supply, installation, testing, etc services. Non-licensed entities will not be allowed to execute work.
- All necessary testing and commissioning to be carried out to the requirement of the NFPA codes and to the satisfaction of the Engineer.
- Any discrepancies between the Contract Documents (Design, Specs and BOQs) are to be brought to the attention of the Engineer and resolved before commencement of any work.

2. Fire Extinguishers:

- Fire extinguishers of designated types and capacities are to be provided and located as per drawings.

NOTES:

0	DETAILED DESIGN	MNR	1/2017	AHM	AHM
Rev	Description	By	Date	CHK'd	Auth
0	FOR CLIENT APPROVAL		1/2017	AHM	
Rev	Purpose of Issue		Date	Auth	
 BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN Tel : + (249) 183-521771-75 Fax : + (249) 183-22552 www.newtech-consulting.ae					
Client 					
Project Stop Shop					
Title GENERAL NOTES FOR FIRE FIGHTING					
Original Scale 1 : 75	Designed/Drawn MNR Date: 09/06/17	Checked AHM Date: 09/06/17	Authorized AHM Date: 09/06/17		
Issued Detailed Design	Drawing Number SS-FIRE FIGHTING-300-A	Rev 0			



Fire Extinguisher Cabinet with one 4.5 kg Dry Chemical Powder cylinder and one 4.5 kg Co2 cylinder
(Typical for all Cabinets)

GROUND FLOOR PLAN
FIRE FIGHTING LAYOUT
1 : 150



NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
	FIRE EXTINGUISHER CABINET

0	DETAILED DESIGN	MNR	1/2017	AHM	AHM
Rev	Description	By	Date	CHK'd	Auth

0	FOR CLIENT APPROVAL		1/2017	AHM	
Rev	Purpose of Issue		Date	Auth	

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Client
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Project
Stop Shop

Title
GROUND FLOOR FIRE FIGHTING LAYOUT

Original Scale	Designed/Drawn	Checked	Authorised
1 : 150	MNR Date: 09/06/17	AHM Date: 09/06/17	AHM Date: 09/06/17
Revised	Drawing Number	Date	Rev
Detailed Design	SS-FIRE FIGHTING-301		0

LIST OF DRAWINGS FOR WATER SUPPLY			
Sheet Number	Sheet Name	Sheet Issue Date	Current Revision
SS-PLUMBING-WS -400	LIST OF DRAWINGS WATER SUPPLY	1/22/2017	0
SS-PLUMBING-WS -401	GENERAL NOTES FOR WATER SUPPLY	1/22/2017	0
SS-PLUMBING-WS -402	STOP SHOP-GROUND FLOOR-WATER SUPPLY LAYOUT	1/22/2017	0
SS-PLUMBING-WS -403	STOP SHOP-GROUND FLOOR-BATHROOM PARTPLAN	1/22/2017	0
SS-PLUMBING-WS -404	STOP SHOP-GROUND FLOOR-BATHROOM WS SECTION	1/22/2017	0
SS-PLUMBING-WS -405	STOP SHOP-GROUND FLOOR-KITCHEN WS PART PLAN	1/22/2017	0
SS-PLUMBING-WS -406	STOP SHOP-GROUND FLOOR-KITCHEN WS SECTION	1/22/2017	0

NOTES:

0	DETAILED DESIGN	MGA	1.2017	AHM	AHM
Rev	Description	By	Date	CHK'd	Auth
0	FOR CLIENT APPROVAL		1.2017	AHM	
Rev	Purpose of Issue		Date	Auth	
<div><div></div><div><div>NEWTECH</div><div>CONSULTING GROUP</div></div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div><div>©</div></div>					
Client <div>unicef</div>					
Project <div>Stop Shop</div>					
Title <div>LIST OF DRAWINGS WATER SUPPLY</div>					
Original Scale	Designed/Drawn	Checked	Authorised		
NTS	MGA	AHM	AHM		
	Date 01/22/17	Date 01/22/17	Date 01/22/17		
Status	Drawing Number				Rev
Detailed Design	SS-PLUMBING-WS -400				0

- a. All plumbing works are all-inclusive of all materials, transportation, storage, handling, workmanship, inspection, testing (periodic), final testing commissioning and all other items to enable “fitness for purpose” criteria to be achieved and to enable safe and use and operation of the facility.
- b. These drawings shall be used for the water supply and sanitary drainage (mechanical plumbing discipline) purposes only.
- c. All dimensions are in meters (m) unless otherwise specified.
- d. All levels are related to the Project Datum which must be determined and verified onsite by the Contractor and approved by the supervising Engineer.
- e. In-door pipe levels are measured from concrete floor (slab) level. Note that the finish tile level is approx +/-100mm above concrete floor (slab) level.
- f. Do not scale from the General Plan drawings. Use the scaled Part Plans instead. The designed distances and measurements could change onsite as per the specific site conditions.
- g. These drawings shall be read in conjunction with all relevant drawings of the different trades / disciplines for co-ordination purposes.
- h. The Contractor shall submit for approval set of shop drawings showing openings and sleeves in concrete and walls before construction can begin.
- i. All pipe-work vertically penetrating reinforced or non-reinforced concrete structures and or going horizontally through walls to be approved by the Structural Engineer. If approved, these pipes shall pass through heavy duty/gauge uPVC sleeve encapsulated with fire-stopping material. The size and location of the sleeve is to be coordinated with the number, size and pressure of the passing piping systems.
- j. Where plumbing elements are running through false ceilings, care must be taken to avoid clashing / conflict with other mechanical and/or electrical installations. The Contractor shall prepare sets of shop drawings for approval showing the plumbing systems exactly in place.
- k. All plumbing equipment should be approved prior to placing the Purchase Order, shipment and site installation.
- l. All pipes and fittings to be properly secured in walls and ceilings through clamps, hangers and supports.
- m. The location of plumbing pipes in ceiling or in walls must be coordinated with all other disciplines (architectural, power, lighting and low current elements) to avoid clash and hazardous interfacing. If in doubt, the Engineer advice should be thought.
- n. Where required, provide minimum 60x60 cm maintenance access panels (unless otherwise specified) in ceilings to all plumbing elements (e.g. valves, etc) The location of maintenance access panels to suit the selected equipment and to be coordinated with the ceiling plans.
- o. Underground pipe lines with top of pipe less than 600mm deep from Finished Floor Level (FFL) shall be surrounded with 150mm thick C25 plain concrete. Warning tape demarcation is advised.
- p. The Contractor shall engage the services of competent plumbing entity for supply, installation, testing, etc services.
- q. All necessary testing and commissioning to be carried out to the requirement of the International Plumbing Code (IPC) and to the satisfaction of the Engineer.
- r. Any discrepancies between the Contract Documents (Design, Specs and BOQs) are to be brought to the attention of the Engineer and resolved before commencement of any work.

- a. Water supply pipes and fittings shall be Polypropylene Random (PP-R) with outer diameter and pressure rating as specified.
- b. All handwash basins are double tap type.
- c. Minimum hot & cold water pipe sizes are dia 20mm except where noted otherwise as designed sizes.
- d. Each bathroom, toilet and kitchen shall have one isolating valve (of appropriate size) inside the space unless noted otherwise. A secondary isolating valve could be fitted externally to shut down the facility in emergencies.
- e. Each electric water heater shall be provided with PP-R at its cold & hot water supply connection unless noted otherwise. Pex pipe connection must be in aluminum-sheathing and suitable to withstand heated water application.

GENERAL NOTES FOR WATER SUPPLY

1

1 : 75

[illegible]

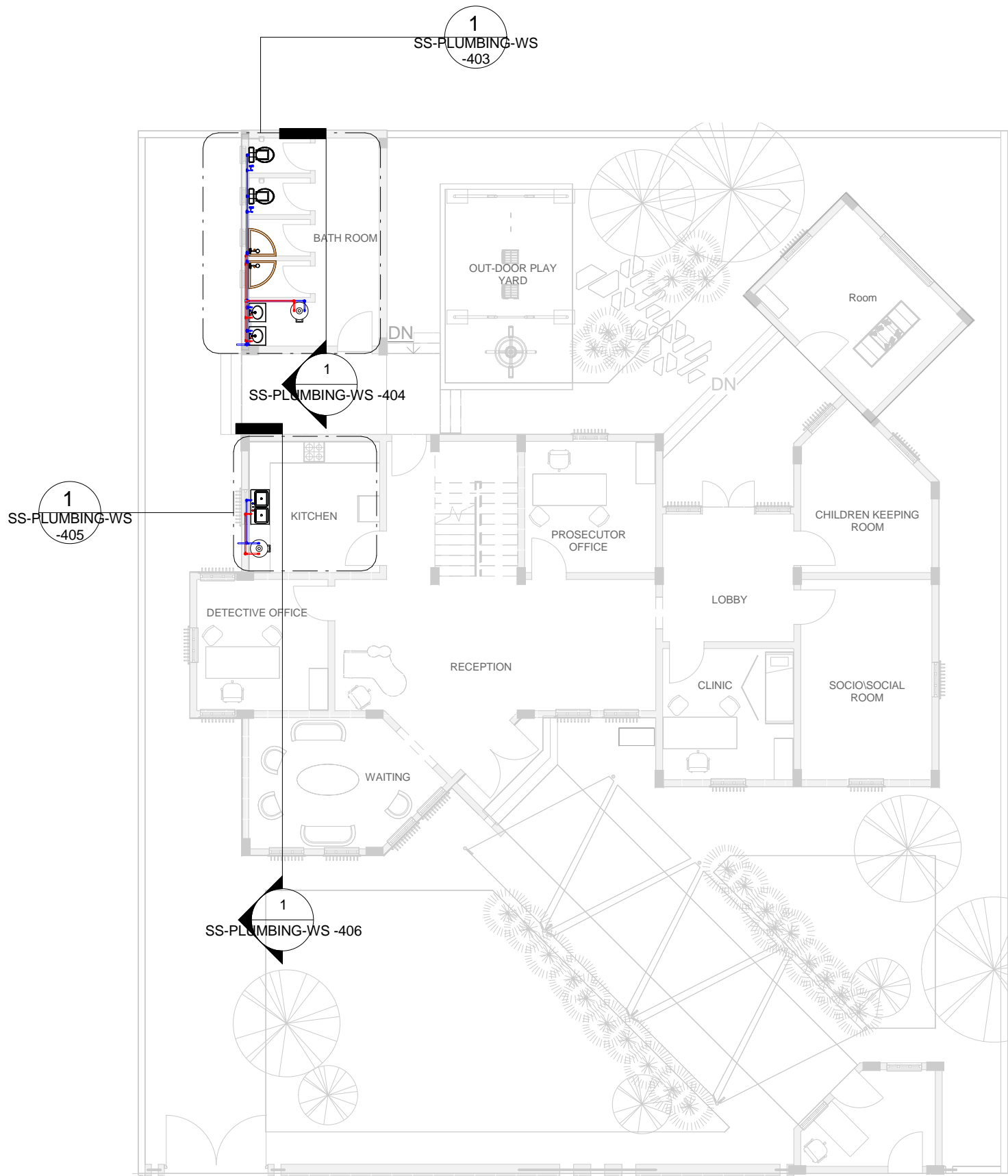
Client 

Project	Stop Shop
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Title

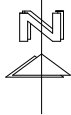
**GENERAL NOTES FOR WATER
SUPPLY**

Original Scale NTS		Designed/Drawn MGA	Checked AHM	Authorised AHM
		Date 01/22/17	Date 01/22/17	Date 01/22/17
Status Detailed Design	Drawing Number SS-PLUMBING-WS -401			Rev 0



STOP SHOP - GROUND FLOOR - WATER SUPPLY LAYOUT

1 : 150

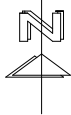
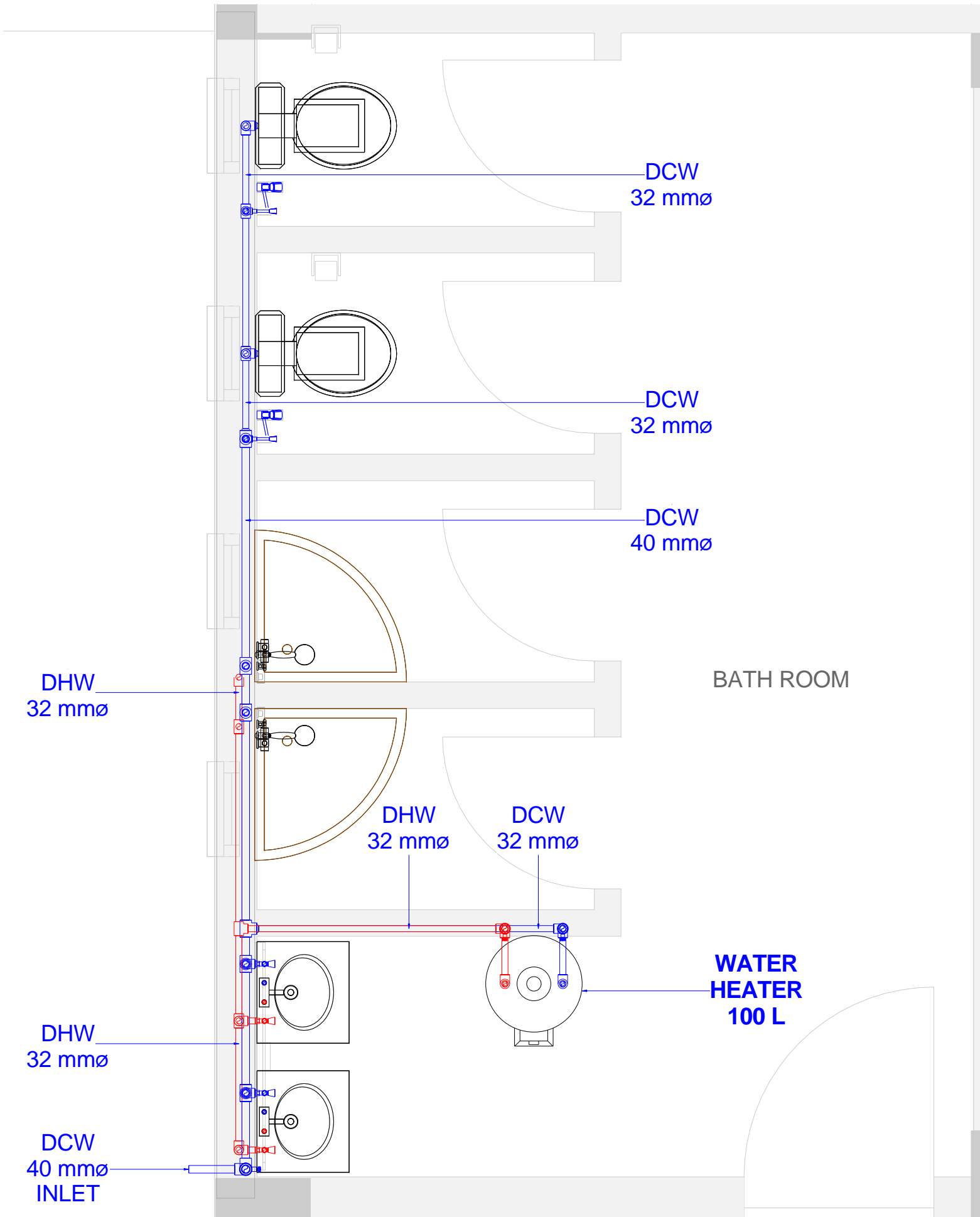


NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
<div></div>	DOMESTIC COLD WATER PIPE (DCW)
<div></div>	DOMESTIC HOT WATER PIPE (DHW)

0	DETAILED DESIGN	MGA	1.2017	AHM	AHM
Rev	Description	By	Date	Chk'd	Auth
0	FOR CLIENT APPROVAL		1.2017	AHM	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH</div><div>CONSULTING GROUP</div></div> <div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div> <div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div> <div>©</div>					

Client					
Project		Stop Shop			
Title		STOP SHOP GROUND FLOOR WATER SUPPLY LAYOUT			
Original Scale		Designed/Drawn	Checked	Authorised	
1 : 150		MGA	AHM	AHM	
Date 01/22/17		Date 01/22/17	Date 01/22/17	Date 01/22/17	
Status	Drawing Number	Rev			
Detailed Design	SS-PLUMBING-WS -402	0			

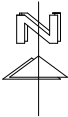
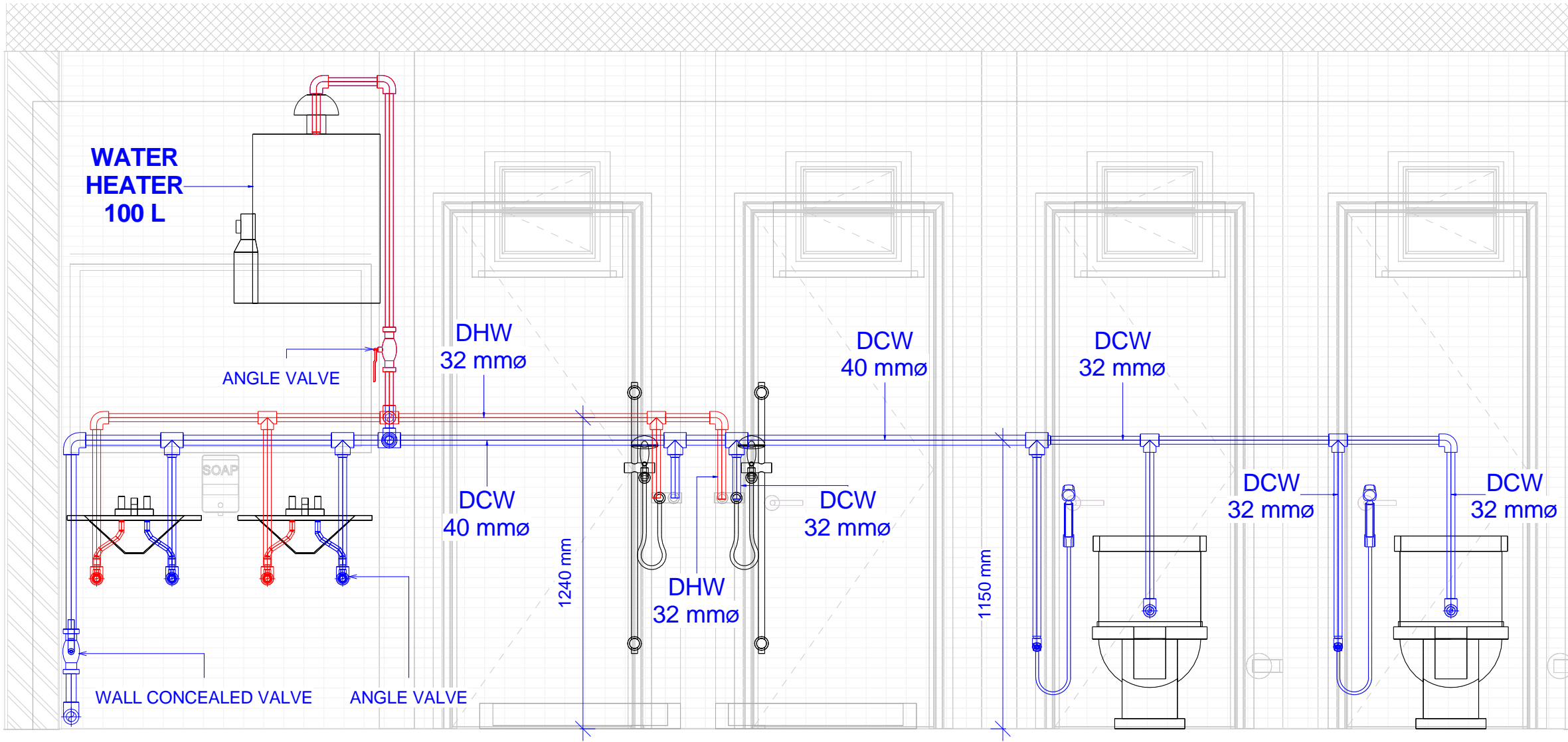


NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
■	DOMESTIC COLD WATER PIPE (DCW)
■	DOMESTIC HOT WATER PIPE (DHW)

0	DETAILED DESIGN	MGA	1,2017	AHM	AHM
Rev	Description	By	Date	Chk'd	Auth
0	FOR CLIENT APPROVAL		1,2017	AHM	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH</div><div>CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21</div><div>RIYADH EXTENSION</div><div>POSTAL CODE 12214</div><div>KHARTOUM</div><div>SUDAN</div><div>Tel. +(249) 183-521771-75</div><div>Fax. +(249) 183-22552</div><div>www.newtech-consulting.ae</div></div>					

Client					
Project		Stop Shop			
Title		STOP SHOP GROUND FLOOR BATHROOM PART PLAN			
Original Scale	Designed/Drawn	Checked	Authorised		
As indicated	MGA	AHM	AHM		
Date 01/22/17	Date 01/22/17	Date 01/22/17	Date 01/22/17		
Status	Drawing Number	Rev			
Detailed Design	SS-PLUMBING-WS-403	0			

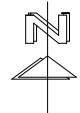
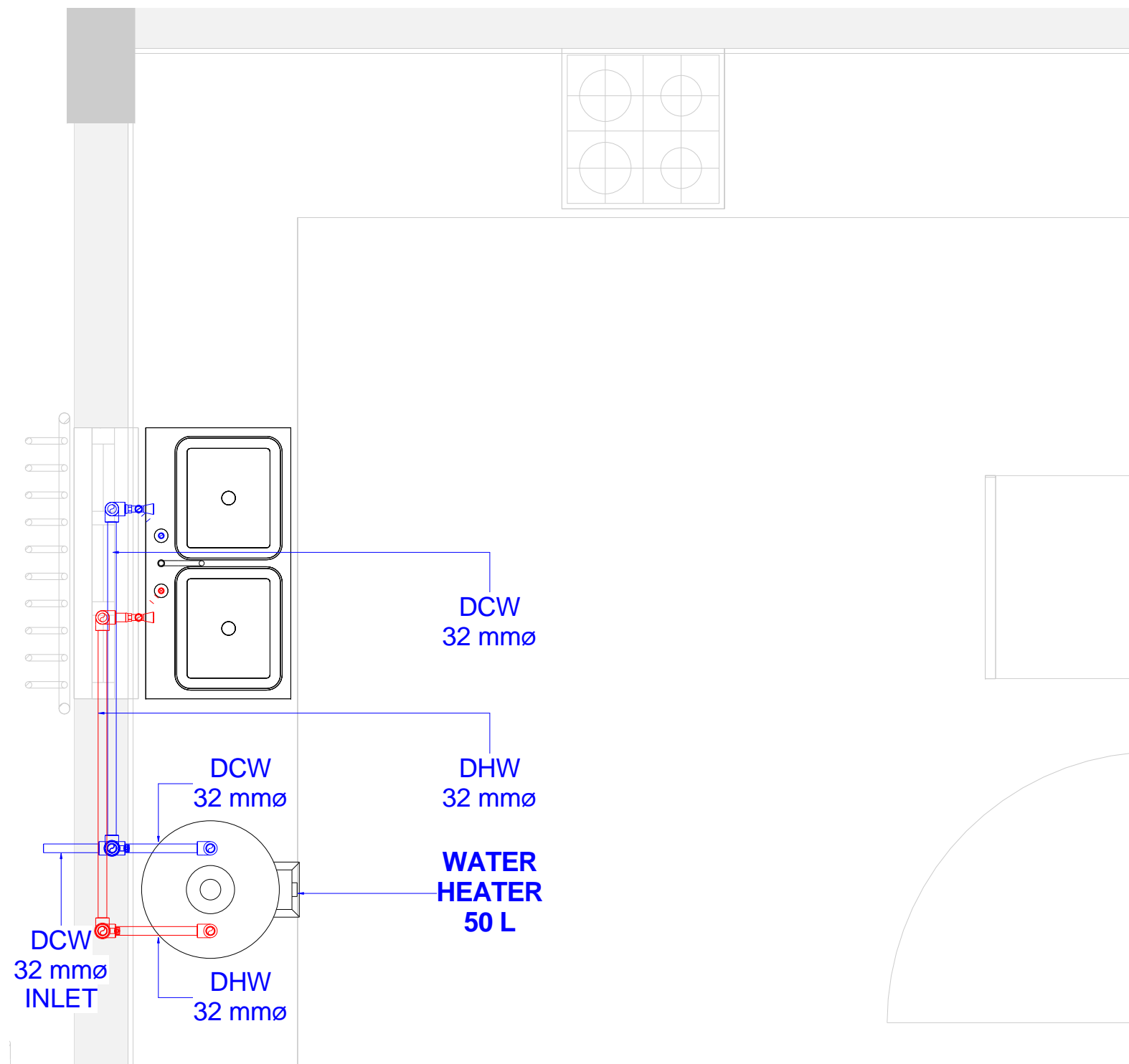


NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
■	DOMESTIC COLD WATER PIPE (DCW)
■	DOMESTIC HOT WATER PIPE (DHW)



0	DETAILED DESIGN	MGA	1.2017	AHM	AHM
Rev	Description	By	Date	Chk'd	Auth
0	FOR CLIENT APPROVAL		1.2017	AHM	
Rev	Purpose of Issue		Date	Auth	
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Client			
Project		Stop Shop	
Title		STOP SHOP GROUND FLOOR BATHROOM WS SECTION	
Original Scale	Designed/Drawn	Checked	Authorised
As indicated	MGA	AHM	AHM
Date 01/22/17	Date 01/22/17	Date 01/22/17	Date 01/22/17
Status	Drawing Number	Rev	
Detailed Design	SS-PLUMBING-WS-404	0	

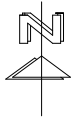
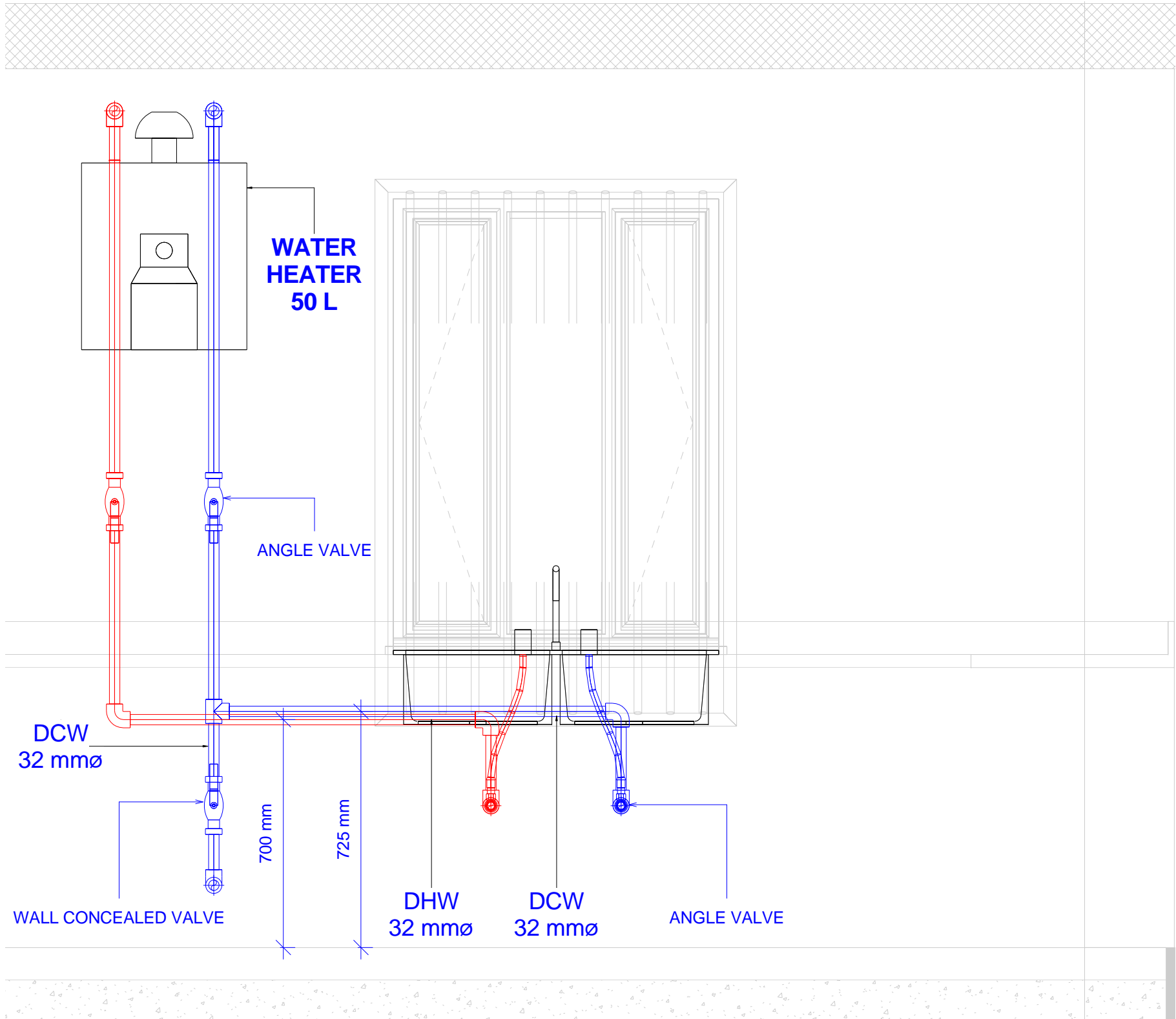


NOTES:

REFER TO GENERAL NOTES SHEET

<u>LEGEND</u>	
<u>SYMBOL</u>	<u>DESCRIPTION</u>
	DOMESTIC COLD WATER PIPE (DCW)
	DOMESTIC HOT WATER PIPE (DHW)

[illegible]



NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
■	DOMESTIC COLD WATER PIPE (DCW)
■	DOMESTIC HOT WATER PIPE (DHW)

0	DETAILED DESIGN	MGA	1.2017	AHM	AHM
Rev	Description	By	Date	Chk'd	Auth

0	FOR CLIENT APPROVAL		1.2017	AHM	
Rev	Purpose of Issue		Date	Auth	

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Fax. +(249) 183-22552
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Client
unicef

Project
Stop Shop

Title
**STOP SHOP
GROUND FLOOR
KITCHEN WS SECTION**

Original Scale	Designed/Drawn	Checked	Authorised
As indicated	MGA	AHM	AHM
Date 01/22/17	Date 01/22/17	Date 01/22/17	Date 01/22/17

Status	Drawing Number	Rev
Detailed Design	SS-PLUMBING-WS-406	0

LIST OF DRAWINGS FOR WATER DRAINAGE			
Sheet Number	Sheet Name	Sheet Issue Date	Current Revision
SS-PLUMBING-WD -500	LIST OF DRAWINGS FOR WATER DRAINAGE	1/22/2017	0
SS-PLUMBING-WD -501- A	GENERAL NOTES FOR WATER DRAINAGE	1/22/2017	0
SS-PLUMBING-WD -501- B	GENERAL NOTES FOR WATER DRAINAGE	1/23/2017	0
SS-PLUMBING-WD -502	STOP SHOP-GROUND FLOOR-WATER DRAINAGE LAYOUT	1/22/2017	0
SS-PLUMBING-WD -503	STOP SHOP-GROUND FLOOR-BATHROOM WD PART PLAN	1/22/2017	0
SS-PLUMBING-WD -504	STOP SHOP-GROUND FLOOR-3D VENT STACK BATHROOM - WD	1/23/2017	0
SS-PLUMBING-WD -505	STOP SHOP-GROUND FLOOR-KITCHEN WD PART PLAN	1/23/2017	0
SS-PLUMBING-WD -506	STOP SHOP-RAINWATER DRAINAGE LAYOUT	1/24/2017	0

LIST OF DRAWINGS FOR WATER DRAINAGE

1

1 : 150

NOTES:

0	DETAILED DESIGN	MGA	1.2017	AHM	AHM
Rev	Description	By	Date	CHK'd	Auth
0	FOR CLIENT APPROVAL		1.2017	AHM	
Rev	Purpose of Issue		Date	Auth	
<div><div>NEWTECH CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div></div> <div>©</div>					
Client <div>unicef</div>					
Project <div>Stop Shop</div>					
Title <div>LIST OF DRAWINGS FOR WATER DRAINAGE</div>					
Original Scale	Designed/Drawn	Checked	Authorised		
NTS	MGA	AHM	AHM		
Date 01/22/17	Date 01/22/17	Date 01/22/17	Date 01/22/17		
Status	Drawing Number				Rev
Detailed Design	SS-PLUMBING-WD -500				0

1. COMMON PLUMBING NOTES:

- a. All plumbing works are all-inclusive of all materials, transportation, storage, handling, workmanship, inspection, testing (periodic), final testing commissioning and all other items to enable “fitness for purpose” criteria to be achieved and to enable safe and use and operation of the facility.
- b. These drawings shall be used for the water supply and sanitary drainage (mechanical plumbing discipline) purposes only.
- c. All dimensions are in meters (m) unless otherwise specified.
- d. All levels are related to the Project Datum which must be determined and verified onsite by the Contractor and approved by the supervising Engineer.
- e. In-door pipe levels are measured from concrete floor (slab) level. Note that the finish tile level is approx +/-100mm above concrete floor (slab) level.
- f. Do not scale from the General Plan drawings. Use the scaled Part Plans instead. The designed distances and measurements could change onsite as per the specific site conditions.
- g. These drawings shall be read in conjunction with all relevant drawings of the different trades / disciplines for co-ordination purposes.
- h. The Contractor shall submit for approval set of shop drawings showing openings and sleeves in concrete and walls before construction can begin.
- i. All pipe-work vertically penetrating reinforced or non-reinforced concrete structures and or going horizontally through walls to be approved by the Structural Engineer. If approved, these pipes shall pass through heavy duty/gauge uPVC sleeve encapsulated with fire-stopping material. The size and location of the sleeve is to be coordinated with the number, size and pressure of the passing piping systems.
- j. Where plumbing elements are running though false ceilings, care must be taken to avoid clashing / conflict with other mechanical and/or electrical installations. The Contractor shall prepare sets of shop drawings for approval showing the plumbing systems exactly in place.
- k. All plumbing equipment should be approved prior to placing the Purchase Order, shipment and site installation.
- l. All pipes and fittings to be properly secured in walls and ceilings through clamps, hangers and supports.
- m. The location of plumbing pipes in ceiling or in walls must be coordinated with all other disciplines (architectural, power, lighting and low current elements) to avoid clash and hazardous interfacing. If in doubt, the Engineer advice should be thought.
- n. Where required, provide minimum 60x60 cm maintenance access panels (unless otherwise specified) in ceilings to all plumbing elements (e.g. valves, etc) The location of maintenance access panels to suit the selected equipment and to be coordinated with the ceiling plans.
- o. Underground pipe lines with top of pipe less than 600mm deep from Finished Floor Level (FFL) shall be surrounded with 150mm thick C25 plain concrete. Warning tape demarcation is advised.
- p. The Contractor shall engage the services of competent plumbing entity for supply, installation, testing, etc services.
- q. All necessary testing and commissioning to be carried out to the requirement of the International Plumbing Code (IPC) and to the satisfaction of the Engineer.
- r. Any discrepancies between the Contract Documents (Design, Specs and BOQs) are to be brought to the attention of the Engineer and resolved before commencement of any work.

NOTES:

0	DETAILED DESIGN	MGA	1.2017	AHM	AHM
Rev	Description	By	Date	Chk'd	Auth
0	FOR CLIENT APPROVAL		1.2017	AHM	
Rev	Purpose of Issue		Date		Auth
<div><div>NEWTECH CONSULTING GROUP</div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div></div> <div>©</div>					
Client <div></div>					
Project <div>Stop Shop</div>					
Title <div>GENERAL NOTES FOR WATER DRAINAGE</div>					
Original Scale <div>NTS</div>		Designed/Drawn <div>MGA</div>		Checked <div>AHM</div>	
Date 01/22/17		Date 01/22/17		Date 01/22/17	
Status <div>Detailed Design</div>		Drawing Number <div>SS-PLUMBING-WD -501- A</div>			Rev <div>0</div>

GENERAL NOTES FOR WATER DRAINAGE (A)

1 : 75

2. Water Drainage / Sanitary Notes:

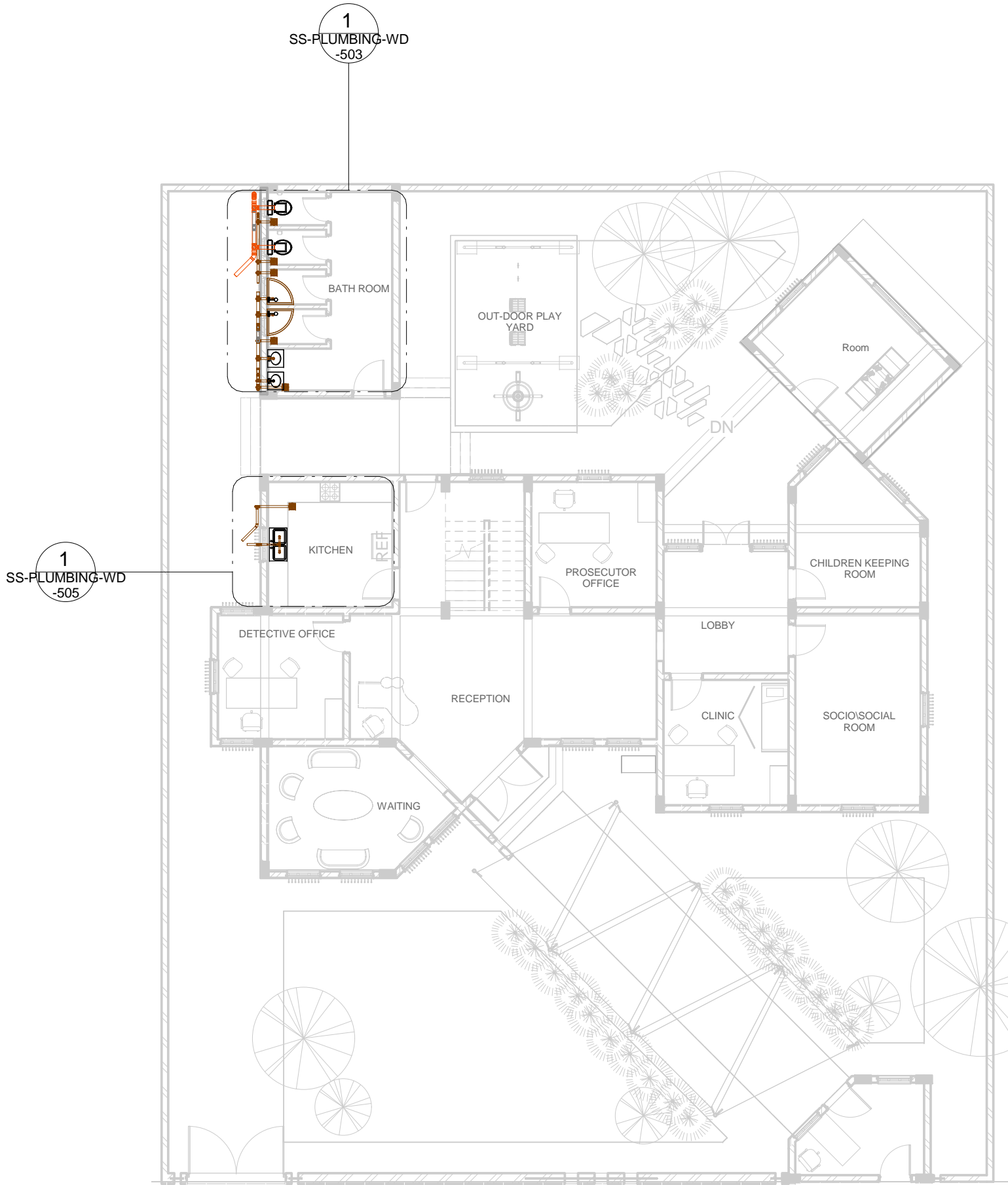
- a. Sanitary drainage pipes and fittings shall be UPVC with outer diameter and pressure rating as specified.
- b. All UPVC cement glue materials must withstand minimum 46°C (Degrees Celsius) temperature for application.
- c. The drainage pipe slopes are 1% in the direction of flow unless otherwise specified.
- d. All sanitary fixtures should be equipped with p-trap for odor control unless otherwise specified.
- e. Every trap that serves a lavatory, a sink or a laundry tray shall be provided with a cleanout plug of a minimum 3/4" size located at the lowest point of the trap and to be of the same material as the trap.
- f. All internal floor drains shall have minimum 64mm deep seal.
- g. All bends at base of stacks shall be long radius type.
- h. All external vents pipes must rise at least 1 meter above the parapet level. Vent pipes must be capped /closed with slotted or perforated covers.
- i. All inspection chambers/manholes should be built on bed of cement concrete 1:4:6. The thickness of the concrete shall be 150mm for manholes up to 1000mm deep and 200mm for depths above 1000 mm.
- j. Benching for incoming branches should be inclined towards main direction of flow with slope of 1-2% max.
- k. Acute angle connections are not allowed in junction manholes.
- l. The invert level of the external drainage system shall be determined by the Contractor taking into consideration the site and building levels as well as the drainage connection level to city network sewer (if any) or the designated sewer outfall.
- m. All AC condensate drain lines must be Polypropylene Random (PP-R) with minimum inner dia of 25mm / 1" (unless otherwise specified). All AC condensate drain installations to be inclusive of pipe work, fittings, supports, hangers and wall-brackets.
- n. Each AC condensate drain pipe or group of pipes are to connect to separate drain system or to dedicated storm / floor drain with slope of 1-2% max as provided on plumbing design.

3. Rainwater Piping Notes:

- a. Minimum uPVC pipes size for rainwater stacks is 110mm or 4" unless otherwise specified.
- b. Rainwater floor drains to be industrial size to improve discharge capacity.
- c. For rain water uPVC pipes, provide 45° (degree) bends at the bottom of stacks.

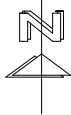
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0	DETAILED DESIGN						MGA	1.2017	AHM	AH
Rev	Description						By	Date	Chk'd	Au
0	FOR CLIENT APPROVAL							1.2017	AHM	AH
Rev	Purpose of Issue							Date		Au
<div> NEWTECH CONSULTING GROUP</div> <div>BUILDING NO.13, BLOCK Z1 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div> <div>Tel. +(249) 183-521771-75 Fax. +(249) 183-22552 www.newtech-consulting.ae</div>										
Client										
										
Project										
Stop Shop										
Title										
GENERAL NOTES FOR WATER DRAINAGE										
Original Scale		Designed/Drawn		Checked		Authorised				
NTS		MGA		AHM		AHM				
		Date 01/23/17		Date 01/23/17		Date 01/23/17				
Status	Drawing Number						Rev			
Detailed Design	SS-PLUMBING-WD -501- B						0			



STOP SHOP - GROUND FLOOR - WATER DRAINAGE LAYOUT

1 : 150



NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
	SOIL PIPE (SP)
	WASTE PIPE (WP)
	VENT PIPE (VP)

0	DETAILED DESIGN	MGA	1.2017	AHM	AHM
Rev	Description	By	Date	Chk'd	Auth
0	FOR CLIENT APPROVAL		1.2017	AHM	
Rev	Purpose of Issue		Date	Auth	

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Client

Project

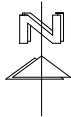
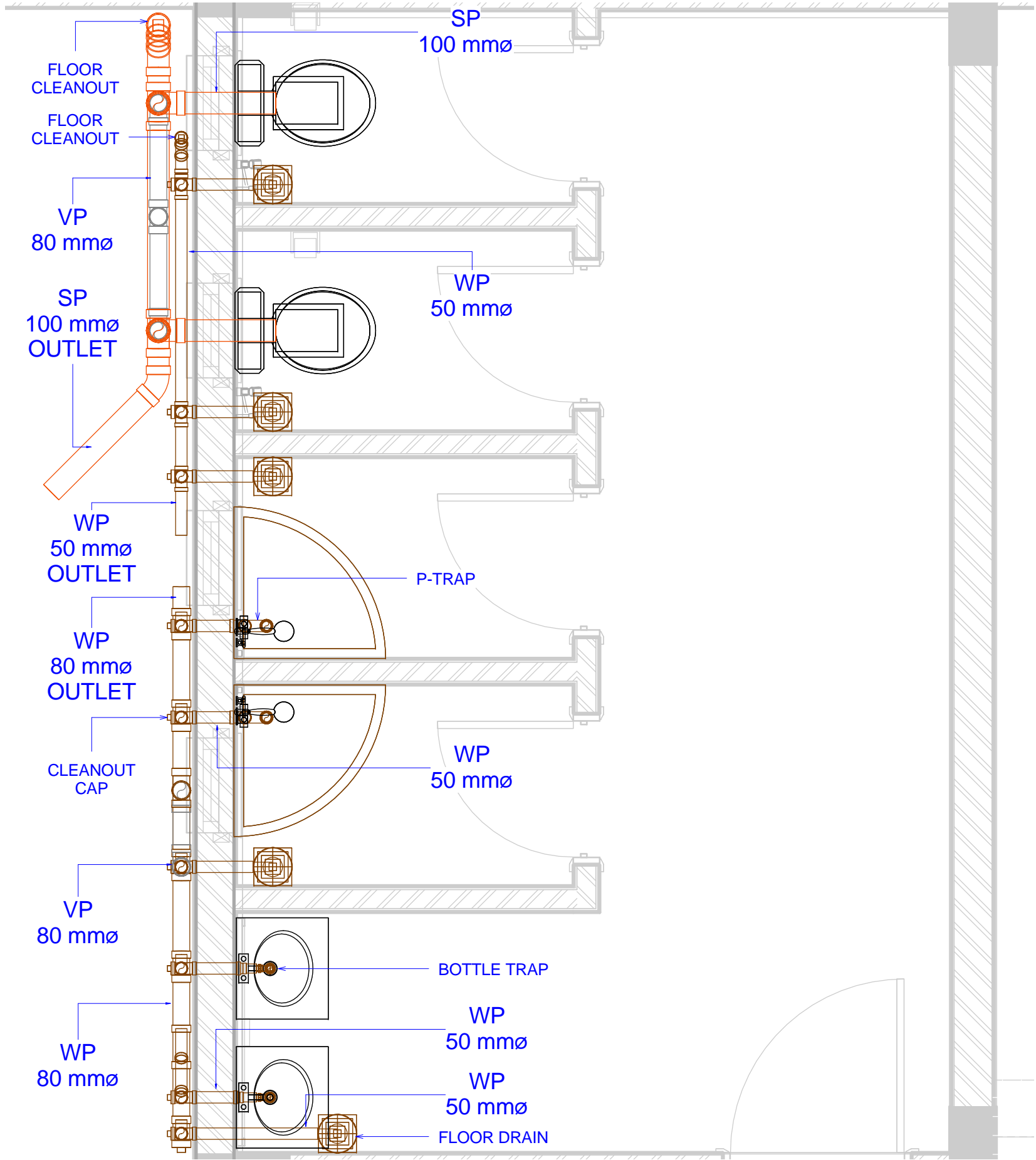
Stop Shop

Title

STOP SHOP
GROUND FLOOR
WATER DRAINAGE LAYOUT

Original Scale	Designed/Drawn	Checked	Authorised
1 : 150	MGA	AHM	AHM
Date 01/22/17	Date 01/22/17	Date 01/22/17	Date 01/22/17

Status	Drawing Number	Rev
Detailed Design	SS-PLUMBING-WD -502	0



NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
	SOIL PIPE (SP)
	WASTE PIPE (WP)
	VENT PIPE (VP)

0	DETAILED DESIGN	MGA	1,2017	AHM	AHM
Rev	Description	By	Date	Chk'd	Auth

0	FOR CLIENT APPROVAL		1,2017	AHM	
Rev	Purpose of Issue		Date	Auth	

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Client

Project
Stop Shop

Title
**STOP SHOP
GROUND FLOOR
BATHROOM WD PART PLAN**

Original Scale	Designed/Drawn	Checked	Authorised
As indicated	MGA	AHM	AHM
Date 01/22/17	Date 01/22/17	Date 01/22/17	Date 01/22/17

Status	Drawing Number	Rev
Detailed Design	SS-PLUMBING-WD -503	0




STOP SHOP - GROUND FLOOR - BATHROOM - WATER DRAINAGE PART PLAN

1
1 : 25

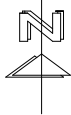
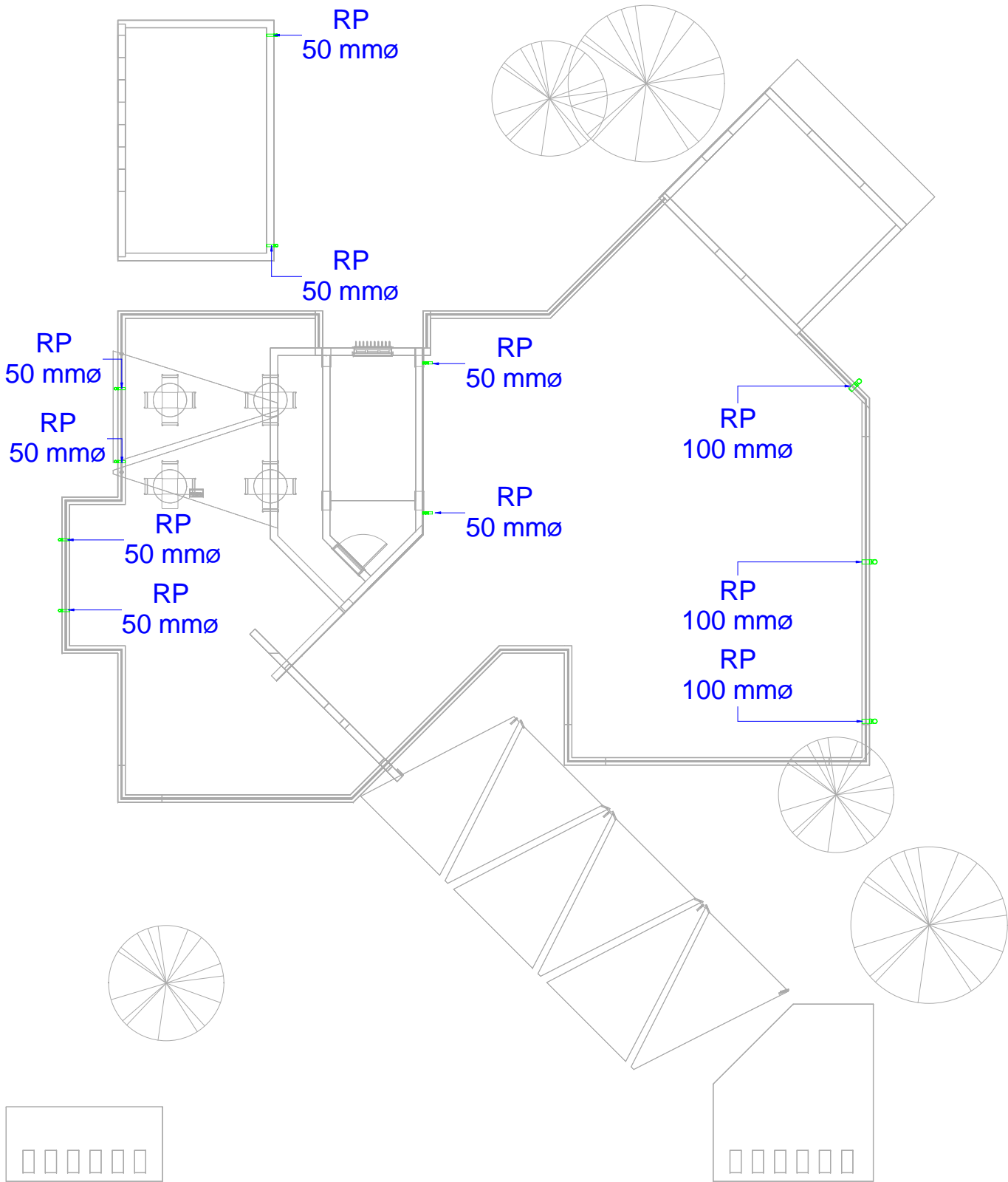


NOTES:

REFER TO GENERAL NOTES SHEET

<u>LEGEND</u>	
<u>SYMBOL</u>	<u>DESCRIPTION</u>
	SOIL PIPE (SP)
	WASTE PIPE (WP)
	VENT PIPE (VP)

[illegible]



NOTES:
REFER TO GENERAL NOTES SHEET

LEGEND	
SYMBOL	DESCRIPTION
	RAIN WATER PIPE (RP)

0	DETAILED DESIGN	MGA	1.2017	AHM	AHM
Rev	Description	By	Date	Chk'd	Auth
0	FOR CLIENT APPROVAL		1.2017	AHM	
Rev	Purpose of Issue		Date	Auth	

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Client



Project

Stop Shop

Title


STOP SHOP
RAINWATER DRAINAGE LAYOUT

Original Scale 1 : 150	Designed/Drawn MGA Date 01/24/17	Checked AHM Date 01/24/17	Authorised AHM Date 01/24/17
Status Detailed Design	Drawing Number SS-PLUMBING-WD -506		
			Rev 0

LIST OF DRAWINGS FOR EXTERNAL WATER SUPPLY			
Sheet Number	Sheet Name	Sheet Issue Date	Current Revision
SS-PLUMBING-EX.WS -600	LIST OF DRAWINGS FOR EXTERNAL WATER SUPPLY	1/25/2017	0
SS-PLUMBING-EX.WS -601- A	GENERAL NOTES FOR EXTERNAL WATER SUPPLY	1/25/2017	0
SS-PLUMBING-EX.WS -601- B	GENERAL NOTES FOR EXTERNAL WATER SUPPLY	1/29/2017	0
SS-PLUMBING-EX.WS -602	STOP SHOP-GROUND FLOOR- EXTERNAL WATER SUPPLY LAYOUT	1/25/2017	0

NOTES:

0	DETAILED DESIGN	MGA	2017	AHM	AHM
Rev	Description	By	Date	Check	Auth
0	FOR CLIENT APPROVAL		2017	AHM	
Rev	Purpose of Issue		Date	Auth	




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CONSULTING GROUP

BUILDING NO.13, BLOCK 21
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POSTAL CODE 12214
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Client



Project

Stop Shop

Title

LIST OF DRAWINGS FOR EXTERNAL WATER SUPPLY

Original Scale	Designed/Drawn	Checked	Authorised
NTS	MGA	AHM	AHM
Status	Detailed Design	Drawing Number	SS-PLUMBING-EX.WS -600
		Rev	0

Common Notes:

- All external mechanical works (namely water supply, sewer drainage, irrigation and fire-fighting) are all-inclusive of all materials, transportation, storage, handling, workmanship, inspection, testing (periodic), final testing commissioning and all other items to enable "fitness for purpose" criteria to be achieved and to enable safe and use and operation of the facility.
- These drawings shall be used for the water supply and sanitary drainage (mechanical plumbing discipline) purposes only.
- All distance dimensions are in meters (m) unless otherwise specified.
- All piping dimensions are in millimeters (mm).
- All levels are related to the Project Datum which must be determined and verified onsite by the Contractor and approved by the supervising Engineer.
- In-door pipe levels are measured from concrete floor (slab) level. Note that the finish tile level is approx. +/-100mm above concrete floor (slab) level.
- Do not scale from the General Plan drawings. Use the scaled Part Plans and /or Schedules instead. The designed distances and measurements could change onsite as per the specific site conditions.
- These drawings shall be read in conjunction with all relevant drawings of the different trades / disciplines for co-ordination purposes. All external services to be coordinated with each other vertically and horizontally with separating distances to be adhered to
- The Contractor shall submit for approval set of shop drawings showing openings and sleeves in concrete and walls before construction can begin.
- All pipe-work vertically penetrating reinforced or non-reinforced concrete structures and or going horizontally through walls to be approved by the Structural Engineer. If approved, these pipes shall pass through heavy duty/gauge uPVC sleeve encapsulated with fire-stopping material. The size and location of the sleeve is to be coordinated with the number, size pressure of the passing piping systems.
- If applicable, where plumbing elements are running through false ceilings, care must be taken to avoid clashing / conflict with other mechanical and/or electrical installations. The Contractor shall prepare . sets of shop drawings for approval showing the plumbing systems exactly in place.
- All plumbing equipment should be approved prior to placing the Purchase Order, shipment and site installation.
- All pipes and fittings to be properly secured in walls and ceilings through clamps, hangers and supports.
- If applicable, the location of plumbing pipes in ceiling or in walls must be coordinated with all other disciplines (architectural, power, lighting and low current elements) to avoid clash and hazardous interfacing. If in doubt, the Engineer advice should be thought.
- Where required, provide minimum 60x60 cm maintenance access panels (unless otherwise specified) in ceilings to all plumbing elements (e.g. valves, etc) The location of maintenance access panels to suit the selected equipment and to be coordinated with the ceiling plan
- Underground pipe lines with top of pipe less than 600mm deep from Finished Floor Level (FFL) shall be surrounded with 150mm thick C25 plain concrete. Warning tape demarcation is advised.
- The Contractor shall engage the services of competent plumbing / MEP entity for supply, installation, testing, etc services.
- All necessary testing and commissioning to be carried out to the requirement of the International Plumbing Code (IPC) and to the satisfaction of the Engineer.
- Any discrepancies between the Contract Documents (Design, Specs and BOQs) are to be brought to the attention of the Engineer and resolved before commencement of any work.
- The site geotechnical data to be checked before excavation, bedding and back-filling of pipe trenches and equipment foundations.

GENERAL NOTES FOR EXTERNAL WATER SUPPLY (A)

1 : 75

NOTES:

0	DETAILED DESIGN	MGA	2017	AH4	AH4
Rev	Description	By	Date	Chk'd	Auth
0	FOR CLIENT APPROVAL		2017	AH4	AH4
Rev	Purpose of Issue		Date		Auth
 BUILDING NO.13, BLOCK 21 RIVADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN Tel: +(249) 183-521771-75 Fax: +(249) 183-22552 www.newtech-consulting.ae					
Client 					
Project Stop Shop					
Title GENERAL NOTES FOR EXTERNAL WATER SUPPLY					
Original Scale NTS	Designed/Drawn MGA Date: #10/01/17	Checked AHM Date: #10/01/17	Authorized AHM Date: #10/01/17		
Status Detailed Design	Drawing Number SS-PLUMBING-EX-WS-601-A			Rev 0	

External Potable Water Supply Notes:

- a. The borehole water quality and discharge quantity (m^3/day) is to be confirmed through approved testing facility.
- b. The municipality / government water supply and/or the borehole outlet shall be connected to the external pipe network on the west side of the compound. Connection to municipality / government water supply network must be carried out by the authorised government body.
- c. External water supply pipes and fittings shall be Polypropylene random copolymer (PPR) with outer diameter and pressure rating as specified.
- d. All air release valves shall be equipped with isolating valve.
- e. The water supply tank should be GRP type shall be complete with RC base, fittings and accessories.
- f. The water supply pumps shall be complete with RC base, piping, fittings and accessories as indicated in the drawing.

NOTES:

0	DETAILED DESIGN	MGA	2017	AHM	AR				
Rev.	Description	By	Date	Chk'd	By				
0	FOR CLIENT APPROVAL		2017	AR					
Rev.	Purpose of Issue		Date	AR					
 NEWTECH CONSULTING BUILDING NO 13, BLOCK 21 ROYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN						Tel. + (249) 183-521771- Fax. + (249) 183-22555 www.newtech-consulting.com			
Client									
									
Project									
<h2>Stop Shop</h2>									
Title									
<h1>GENERAL NOTES FOR EXTERNAL WATER SUPPLY</h1>									
Original Scale		Designed/Drawn		Checked		Authorised			
NTS		MGA		AHM		AHM			
		Date: 20/02/17		Date: 20/02/17		Date: 20/02/17			
Status		Drawing Number						Rev	
Detailed Design		SS-PLUMBING-EX-Ws -601-B						0	



STOP SHOP - GROUND FLOOR - EXTERNAL WATER SUPPLY LAYOUT

1 : 150



NOTES:

REFER TO GENERAL NOTES SHEET

Title				
<p>STOP SHOP</p> <p>GROUND FLOOR</p> <p>EXTERNAL WATER SUPPLY LAYOUT</p>				
Original Scale	Designed Drawn	Checked	Authorised	
1 : 150	MGA	AHM	AHM	
	Date #10/29/17	Date #10/29/17	Date #10/29/17	
Status	Drawing Number			Rev
Detailed Design	SS-PLUMBING-EX.WS -602			0

LIST OF DRAWINGS FOR EXTERNAL WATER DRAINAGE			
Sheet Number	Sheet Name	Sheet Issue Date	Current Revision
SS-PLUMBING-EX.WD -700	LIST OF DRAWINGS FOR EXTERNAL WATER DAINAGE	1/25/2017	0
SS-PLUMBING-EX.WD -701 - A	GENERAL NOTES FOR EXTERNAL WATER DRAINAGE	1/25/2017	0
SS-PLUMBING-EX.WD -701 - B	GENERAL NOTES FOR EXTERNAL WATER DRAINAGE	1/29/2017	0
SS-PLUMBING-EX.WD -702	STOP SHOP-GROUND FLOOR- EXTERNAL W.DRAINAGE LAYOUT	1/25/2017	0
SS-PLUMBING-EX.WD -703 - A	MANHOLE & PIPE BEDDING DETAILS	1/29/2017	0
SS-PLUMBING-EX.WD -703 - B	MANHOLE & PIPE BEDDING DETAILS	1/29/2017	0

NOTES:

0	DETAILED DESIGN	ARM	1-2017	ARM
Rev	Description	By	Date	CHK'D
0	FOR CLIENT APPROVAL	ARM	1-2017	ARM
Rev	Purpose of Issue	Date		Auth
<div><div>NEWTECH</div><div>BUILDING NO.13, BLOCK 21 RIYADH EXTENSION POSTAL CODE 12214 KHARTOUM SUDAN</div><div>Tel: +(249) 183-521771-75 Fax: +(249) 183-22552 www.newtech-consulting.ae</div></div>				
Client				
<div>unicef</div>				
Project				
Stop Shop				
Title				
LIST OF DRAWINGS FOR EXTERNAL WATER DAINAGE				
Original Scale	Designed/Drawn	Checked	Authorised	
NTS	MGA	AHM	AHM	
	Date: 01/25/17	Date: 01/25/17	Date: 01/25/17	
Status	Drawing Number	Rev		
Detailed Design	SS-PLUMBING-EX.WD -700	0		

LIST OF DRAWINGS FOR EXTERNAL WATER DRAINAGE

1 : 150

Common Notes:

- a. All external mechanical works (namely water supply, sewer drainage, irrigation and fire-fighting) are all-inclusive of all materials, transportation, storage, handling, workmanship, inspection, testing (periodic), final testing commissioning and all other items to enable "fitness for purpose" criteria to be achieved and to enable safe and use and operation of the facility.
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- c. All distance dimensions are in meters (m) unless otherwise specified.
- d. All piping dimensions are in millimeters (mm).
- e. All levels are related to the Project Datum which must be determined and verified onsite by the Contractor and approved by the supervising Engineer.
- f. In-door pipe levels are measured from concrete floor (slab) level. Note that the finish tile level is approx. +/-100mm above concrete floor (slab) level.
- g. Do not scale from the General Plan drawings. Use the scaled Part Plans and /or Schedules instead. The designed distances and measurements could change onsite as per the specific site conditions.
- h. These drawings shall be read in conjunction with all relevant drawings of the different trades / disciplines for co-ordination purposes. All external services to be coordinated with each other vertically and horizontally with separating distances to be adhered to
- i. The Contractor shall submit for approval set of shop drawings showing openings and sleeves in concrete and walls before construction can begin.
- j. All pipe-work vertically penetrating reinforced or non-reinforced concrete structures and or going horizontally through walls to be approved by the Structural Engineer. If approved, these pipes shall pass through heavy duty/gauge uPVC sleeve encapsulated with fire-stopping material. The size and location of the sleeve is to be coordinated with the number, size pressure of the passing piping systems.
- k. If applicable, where plumbing elements are running through false ceilings, care must be taken to avoid clashing / conflict with other mechanical and/or electrical installations. The Contractor shall prepare . sets of shop drawings for approval showing the plumbing systems exactly in place.
- l. All plumbing equipment should be approved prior to placing the Purchase Order, shipment and site installation.
- m. All pipes and fittings to be properly secured in walls and ceilings through clamps, hangers and supports.
- n. If applicable, the location of plumbing pipes in ceiling or in walls must be coordinated with all other disciplines (architectural, power, lighting and low current elements) to avoid clash and hazardous interfacing. If in doubt, the Engineer advice should be thought.
- o. Where required, provide minimum 60x60 cm maintenance access panels (unless otherwise specified) in ceilings to all plumbing elements (e.g. valves, etc) The location of maintenance access panels to suit the selected equipment and to be coordinated with the ceiling plan
- p. Underground pipe lines with top of pipe less than 600mm deep from Finished Floor Level (FFL) shall be surrounded with 150mm thick C25 plain concrete. Warning tape demarcation is advised.
- q. The Contractor shall engage the services of competent plumbing / MEP entity for supply, installation, testing, etc services.
- r. All necessary testing and commissioning to be carried out to the requirement of the International Plumbing Code (IPC) and to the satisfaction of the Engineer.
- s. Any discrepancies between the Contract Documents (Design, Specs and BOQs) are to be brought to the attention of the Engineer and resolved before commencement of any work.
- t. The site geotechnical data to be checked before excavation, bedding and back-filling of pipe trenches and equipment foundations.

GENERAL NOTES FOR EXTERNAL WATER DRAINAGE (A)

1:75

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NOTES:

[illegible]

External Water Drainage / Sanitary Notes:

- a. Sanitary drainage pipes and fittings shall be uPVC with outer diameter and pressure rating as specified.
- b. In case of pipes with solvent welding joints, all uPVC cement glue materials must withstand minimum 46°C (degrees Celsius) temperature for application.
- c. In case of pipes with push-fit joints, all uPVC pipes must be conforming to manufacturing data with regards to soil application type.
- d. Where a temporary manhole is indicated in the drawing, this shall be isolated & plugged.
- e. The drainage pipe slopes are 2% in the direction of flow unless otherwise specified.
- f. All waste pipes connecting from toilets should have P-trap for odour control unless otherwise specified.
- g. All waste pipes connecting from kitchens should have grease trap unless otherwise specified.
- h. Unless otherwise indicated in structural drawings, all inspection chambers/manholes shall be RC circular type with the thickness of the concrete walls shall be 150mm for manholes up to 1000mm deep and 200 mm for depths above 1000 mm.
- i. All inspection chambers/manholes should be built on bed of plain concrete Grade C20. The soil under the plain concrete layer should be approved selected fill with 95% compaction.
- j. Benching for incoming branches should be inclined towards main direction of flow with slope of 1-2% max.
- k. Acute angle connections are not allowed in junction manholes.
- l. The invert and cover levels of the external drainage system shall be determined and checked by the Contractor taking into consideration the site and building levels as well as the drainage connection level to city network sewer (if any) or the designated sewer outfall.

NOTES:

0	DETAILED DESIGN	MGA-12077	AHM	AH					
Rev	Description	By	Date	Chk'd	As				
0	FOR CLIENT APPROVAL	12077	AH						
Rev	Purpose of Issue		Date	As					
									
BUILDING NO.13, BLOCK Z1 RYADEN EXTENSION, POSTAL CODE 12214 KHARTOUM SUDAN						Tel. +[249] 183-521771- Fax. +[249] 183-2255- www.newtech-consulting.africa			
Client									
									
Project									
Stop Shop									
Title									
GENERAL NOTES FOR ESTABLISHED WATER DRAINAGE									
Original Scale:		Designed/Drawn		Checked		Authorised			
NTS		MGA		AHM		AHM			
		Date: 01/09/17		Date: 01/09/17		Date: 01/09/17			
Station		Drawing Number							
Detailed Design		SS-PLUMBING-EX.WD -701 - B						Rev	
								0	

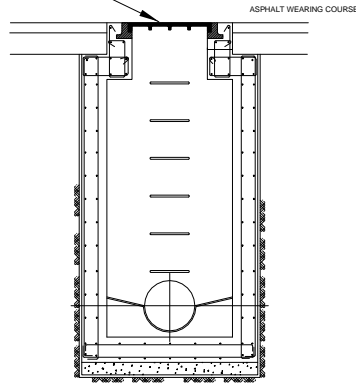
GENERAL NOTES FOR EXTERNAL WATER DRAINAGE (B)

1 : 75



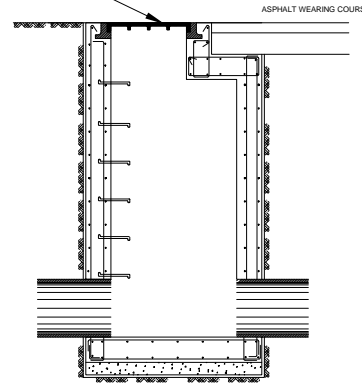
NOTES:
REFER TO GENERAL NOTES SHEET

HEAVY DUTY
MANHOLE
COVER

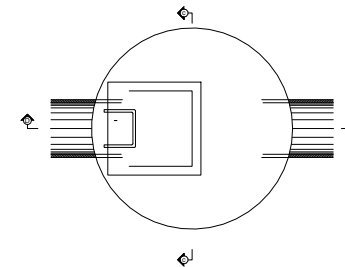


TYPICAL CIRCULAR MANHOLE
1000-Hx1500
SECTION C-C

HEAVY DUTY
MANHOLE
COVER



TYPICAL CIRCULAR MANHOLE
1000-Hx1500
SECTION D-D



TYPICAL CIRCULAR MANHOLE
1350-Hx3000
PLAN VIEW

0	DETAILED DESIGN	MGA	5/2017	AHM	AHM
Rev	Description	By	Date	CHKD	Auth
0	FOR CLIENT APPROVAL		5/2017	AHM	AHM
Rev	Purpose of Issue		Date		Auth

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Project
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Title
MANHOLE & PIPE BEDDING DETAILS

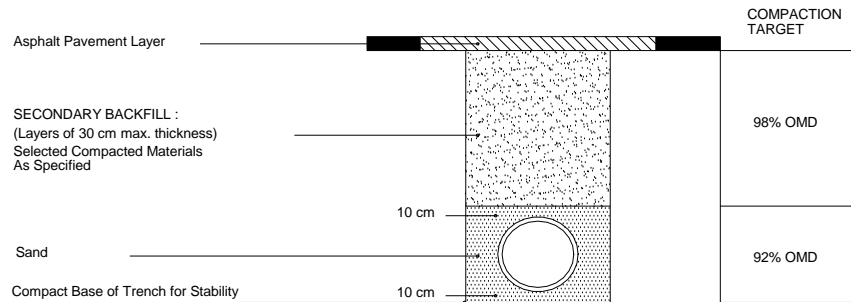
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1 : 20	MGA	AHM	AHM
	Date: 01/09/17	Date: 01/09/17	Date: 01/09/17
Status	Drawing Number		Rev
Detailed Design	SS-PLUMBING-EX-WD-703 - A		0

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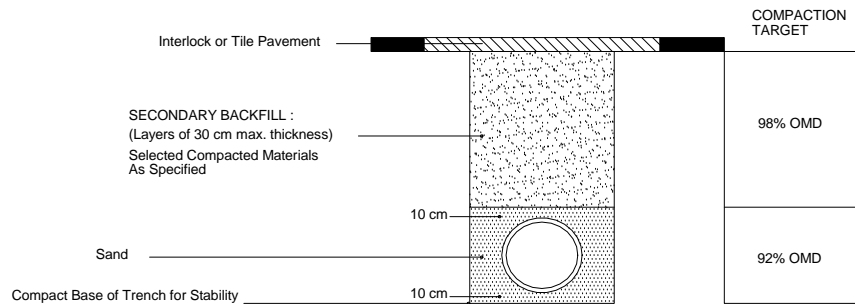
MANHOLE & PIPE BEDDING DETAILS (B)

1 : 15

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TRENCH UNDER ROAD VEHICULAR TRAFIC AREAS



TRENCH UNDER ROAD NON TRAFFIC AREAS



NOTES:
REFER TO GENERAL NOTES SHEET

0	DETAILED DESIGN	MGA	1-2017	AHM	AHM
Rev	Description	By	Date	CHK'd	Auth

0	FOR CLIENT APPROVAL		1-2017	AHM	
Rev	Purpose of Issue		Date		Auth

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MANHOLE & PIPE BEDDING DETAILS

Original Scale	Designed/Drawn	Checked	Authorised
1 : 15	MGA	AHM	AHM
Status	Detailed Design	Date: 01/09/17	Date: 01/09/17
Drawing Number	SS-PLUMBING-EX.WD-703-B	Rev	0