

Proposed 02 Classroom, Health Room & Science Lab at  
Th.Omadhoo School  
(02 Storey)

**SERVICES DRAWINGS**  
Client: Ministry of Education

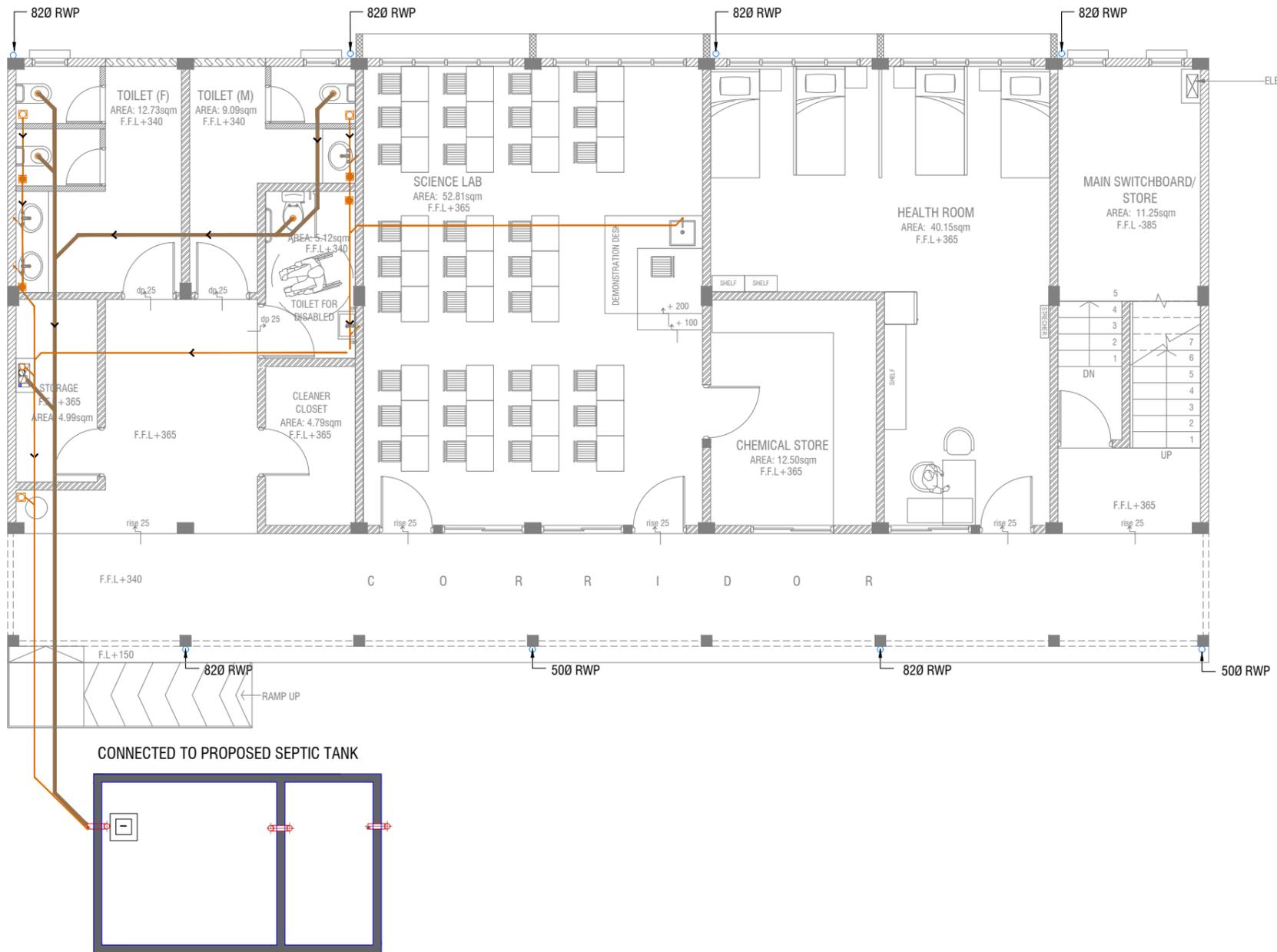


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3rd floor, H. Azum, Ameenemaguu, Male'

### TABLE OF CONTENTS

DRAWING No.	TITLE	REVISION No.	DATE	REMARKS
<b>S E R V I C E S</b>				
DR - 01 /03	GROUND FLOOR DRAINAGE LAYOUT	---	---	---
DR - 02 /03	FIRST FLOOR DRAINAGE LAYOUT	---	---	---
DR - 03 /03	ROOF DRAINAGE LAYOUT	---	---	---
PL - 01 / 02	GROUND FLOOR PLUMBING LAYOUT	---	---	---
PL - 02 / 02	FIRST FLOOR PLUMBING LAYOUT	---	---	---
EL - 01 / 02	GROUND FLOOR LIGHTING LAYOUT	---	---	---
EL - 02 / 02	FIRST FLOOR LIGHTING LAYOUT	---	---	---
EP - 01 / 02	GROUND FLOOR POWER LAYOUT	---	---	---
EP - 02 / 02	FIRST FLOOR POWER LAYOUT	---	---	---
FDP - 01 / 02	GROUND FLOOR FDP LAYOUT	---	---	---
FDP - 02 / 02	FIRST FLOOR FDP LAYOUT	---	---	---
ACV - 01 / 01	GROUND FLOOR ACV LAYOUT	---	---	---
DETAIL - 01 / 01	SEPTIC TANK DETAIL	---	---	---



- LEGEND**
- FG ■ FLOOR GULLY
  - FD □ FLOOR DRAIN
  - WM ⊙ 40 Ø STUB FOR WASHING MACHINE
  - SP — 110 Ø SOIL PIPE
  - SVP ○ 110 Ø SOIL VENT PIPE
  - WP — 82 Ø WASTE PIPE
  - WVP ○ 82 Ø WASTE VENT PIPE
  - WP — 40 Ø WASTE PIPE
  - RWP — 82/50 Ø RAINWATER PIPE
  - RWO ○ 82/50 Ø DRAIN OUTLET
  - CD — 25 Ø DRAIN PIPE
  - MHVP — 50 Ø MANHOLE VENT PIPE

**NOTE:**  
 - ALL RAINWATER PIPES TO BE AT GROUND LEVEL DISCHARGED THROUGH A PERFORATED COWL OR TO A SOAK PIT  
 - ALL SOIL AND WASTE PIPES TO BE AT GROUND LEVEL, UNDER THE SLAB.

**GROUND FLOOR DRAINAGE LAYOUT**  
 SCALE 1:100



Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
 Client: Ministry of Education

Project Number: RI/2020/006  
 Date: April 2021

Rev no	Date
1	
2	
3	
4	
5	
6	
7	

Architect: Mariyam Irasha Shareef  
 Engineer: Mohamed Muhtalib Waleed  
 Drawn by: Mariyam Leevan Jaleel  
 Services: Aishath Ahmed  
 Interior:



### FIRST FLOOR DRAINAGE LAYOUT



#### LEGEND

- FG FLOOR GULLY
- FD FLOOR DRAIN
- WM 40 Ø STUB FOR WASHING MACHINE
- SP 110 Ø SOIL PIPE
- SVP 110 Ø SOIL VENT PIPE
- WP 82 Ø WASTE PIPE
- WVP 82 Ø WASTE VENT PIPE
- WP 40 Ø WASTE PIPE
- RWP 82/50 Ø RAINWATER PIPE
- RWO 82/50 Ø DRAIN OUTLET
- CD 25 Ø DRAIN PIPE
- MHVP 50 Ø MANHOLE VENT PIPE

**NOTE:**  
- ALL SOIL AND WASTE PIPES TO BE UNDER THE SLAB LEVEL.

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
Client: Ministry of Education

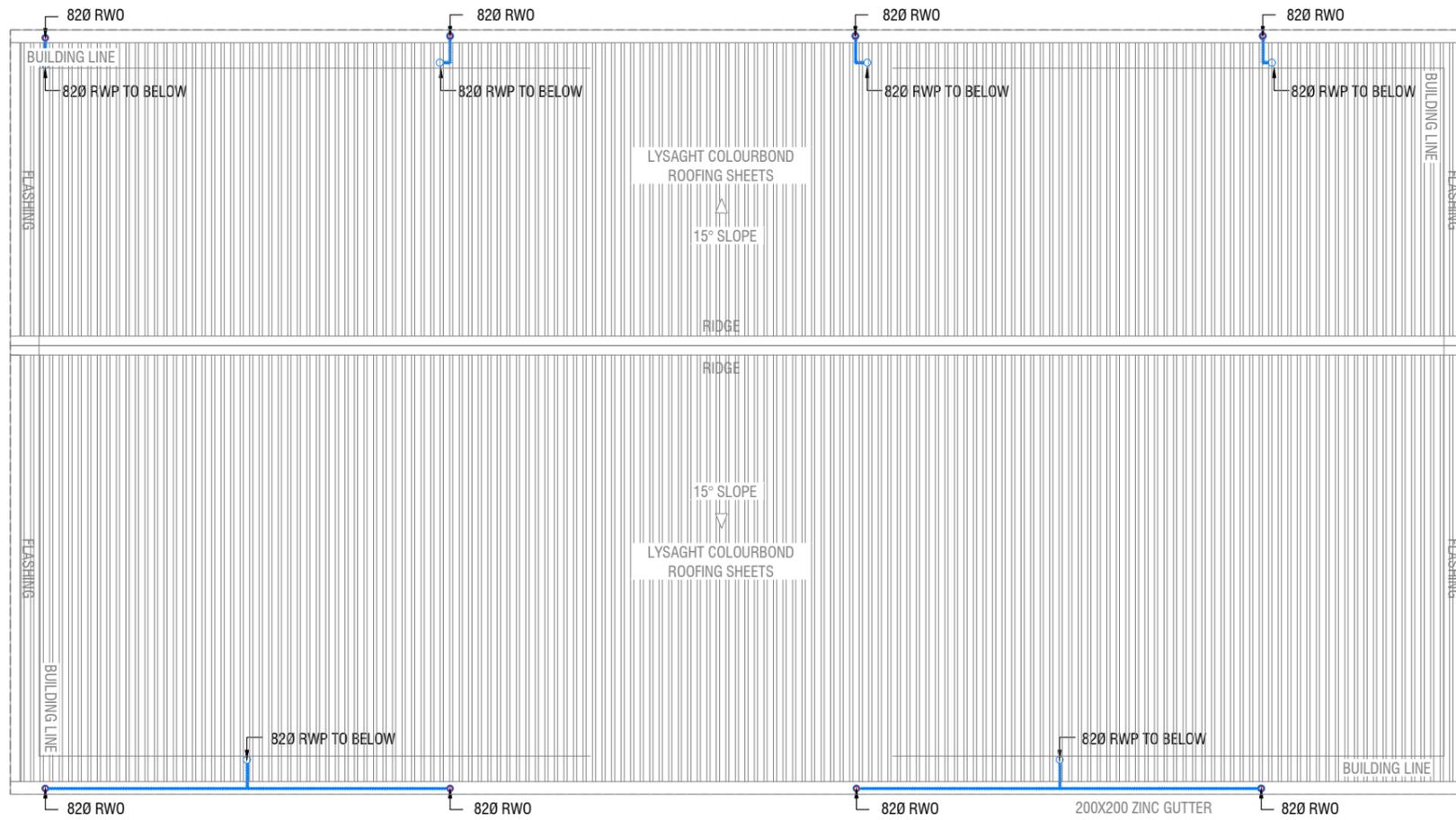
Project Number: RI/2020/006  
Date: April 2021

Rev no	Date
1	.....
2	.....
3	.....
4	.....
5	.....

Architect: Mariyam Irasha Shareef  
Engineer: Mohamed Muhtalib Waleed  
Drawn by: Mariyam Leevan Jaleel  
Services: Aishath Ahmed  
Interior: .....



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## ROOF DRAINAGE LAYOUT

SCALE 1:100



### LEGEND

- FG ■ FLOOR GULLY
- FD □ FLOOR DRAIN
- WM ⊙ 40 Ø STUB FOR WASHING MACHINE
- SP — 110 Ø SOIL PIPE
- SVP ○ 110 Ø SOIL VENT PIPE
- WP — 82 Ø WASTE PIPE
- WVP ○ 82 Ø WASTE VENT PIPE
- WP — 40 Ø WASTE PIPE
- RWP — 82/50 Ø RAINWATER PIPE
- RWO ○ 82/50 Ø DRAIN OUTLET
- CD — 25 Ø DRAIN PIPE
- MHVP — 50 Ø MANHOLE VENT PIPE

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
Client: Ministry of Education

Rev no	Date
1	04/04/2021
2	
3	
4	
5	

Project Number: RI/2020/006  
Date: April 2021  
Architect: Mariyam Irasha Shareef  
Engineer: Mohamed Muhtalib Waleed  
Drawn by: Mariyam Lavevan Jaleel  
Services: Aishath Ahmed  
Interior: -



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Title: Roof  
Drainage Layout

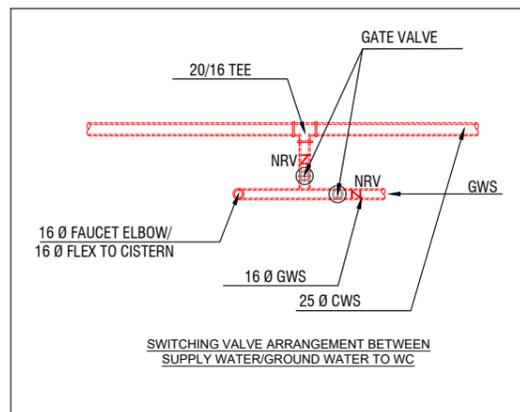
Page: DR 03-03



CONNECTED TO EXISTING GROUND WATER WELL

### GROUND FLOOR PLUMBING LAYOUT

SCALE 1:100



#### LEGEND

- 16 Ø COLD WATER SUPPLY TO CISTERN
- 16 Ø COLD WATER SUPPLY TO BIDET SHOWER
- 16 Ø COLD WATER SUPPLY TO BASIN FAUCET / SINK
- GV GATE VALVE
- 25 Ø COLD WATER SUPPLY PIPES RUN UNDERGROUND
- 25 Ø COLD WATER SUPPLY PIPES RUN IN WALL / UNDER FALSE CEILING
- RISE IN WALL
- DROP IN WALL
- CWS** COLD WATER SUPPLY
- HWS** HOT WATER SUPPLY
- GROUND WATER SUPPLY

#### NOTE:

- THE WELL SHALL BE RELOCATED ACCORDING TO THE SALINITY OF THE GROUND WATER.
- BASED ON WELL LOCATION PUMP CAPACITY TO BE DECIDED

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
Client: Ministry of Education

Rev no	Date
1	.....
2	.....
3	.....
4	.....
5	.....
6	.....
7	.....

Project Number: RI/2020/006  
Date: April 2021  
Architect: Mariyam Trasha Shareef  
Engineer: Mohamed Muhtalib Waleed  
Drawn by: Mariyam Leevan Jaleel  
Services: Aishath Ahmed  
Interior: .....



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Title: Ground Floor Plumbing Layout  
Page: PL 01-/02



**FIRST FLOOR PLUMBING LAYOUT**



**LEGEND**

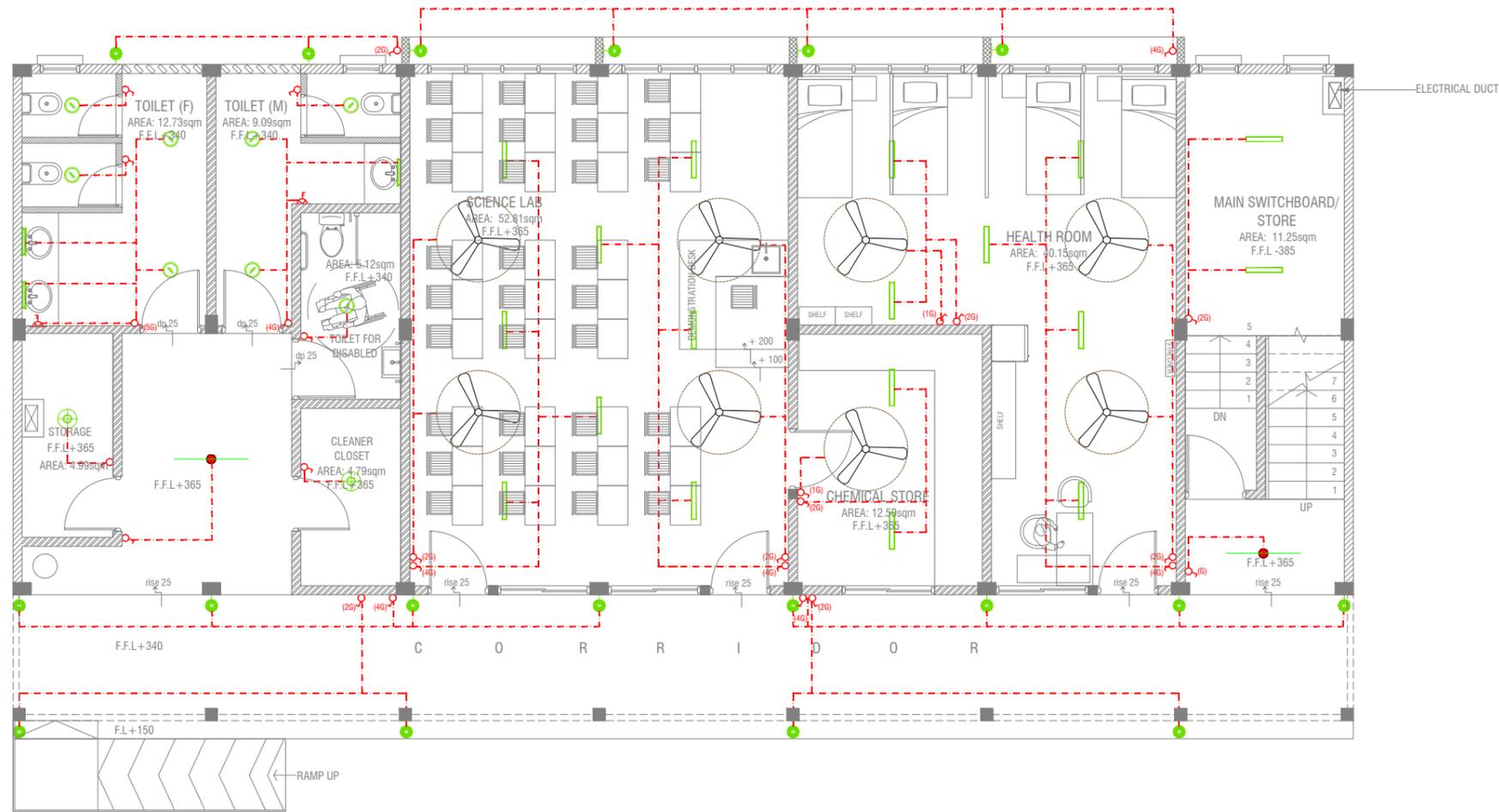
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- 16 Ø COLD WATER SUPPLY TO BIDET SHOWER
- 16 Ø COLD WATER SUPPLY TO BASIN FAUCET / SINK
- GV GATE VALVE
- 25 Ø COLD WATER SUPPLY PIPES RUN UNDERGROUND
- 25 Ø COLD WATER SUPPLY PIPES RUN IN WALL / UNDER FALSE CEILING
- RISE IN WALL
- DROP IN WALL
- CWS** COLD WATER SUPPLY
- HWS** HOT WATER SUPPLY
- GROUND WATER SUPPLY

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
 Client: Ministry of Education

Project Number: RI/2020/006  
 Date: April 2021  
 Architect: Mariyam Irasha Shareef  
 Engineer: Mohamed Muhtalib Waleed  
 Drawn by: Mariyam Lievevan Jaleel  
 Services: Aishath Ahmed  
 Interior:

Rev no	Date
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## GROUND FLOOR LIGHTING LAYOUT

SCALE 1:100



### LEGEND

- WPD 40W (IP 65) OUT DOOR WALL LIGHT
- ML MIRROR LIGHT (7W LED LIGHT)
- H2 LED RECESSED DOWN LIGHT 12W
- CL LED CEILING LIGHT 18W
- WP LED TUBE LIGHT WITH WEATHER PROOF OPAL CASING
- C2 LED CEILING DOWN LIGHT ( 18W)
- LIGHT SWITCH
- SWITCHING LINE
- EXHAUST

CL2 LED TUBE LIGHT WITH OPAL CASING



### NOTE:

- ALL WIRING TO BE OF STELCO APPROVED STANDARDS
- SWITCH CONTROL = 1200MM FROM FLOOR FIN. LEVEL
- ALL LIGHTING POINTS CONNECTED TO THEIR RESPECTIVE DB
- POLYCARBONATE ENCLOSURE TO ALL SWITCH AND SOCKET WHICH ARE LOCATED AT THE OUTDOORS

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
Client: Ministry of Education

Rev no	Date
1	.....
2	.....
3	.....
4	.....
5	.....

Project Number: RI/2020/006  
Date: April 2021  
Architect: Mariyam Irasha Shareef  
Engineer: Mohamed Muhtalib Walleed  
Drawn by: Mariyam Leevan Jaleel  
Services: Aishath Ahmed  
Interior: .....

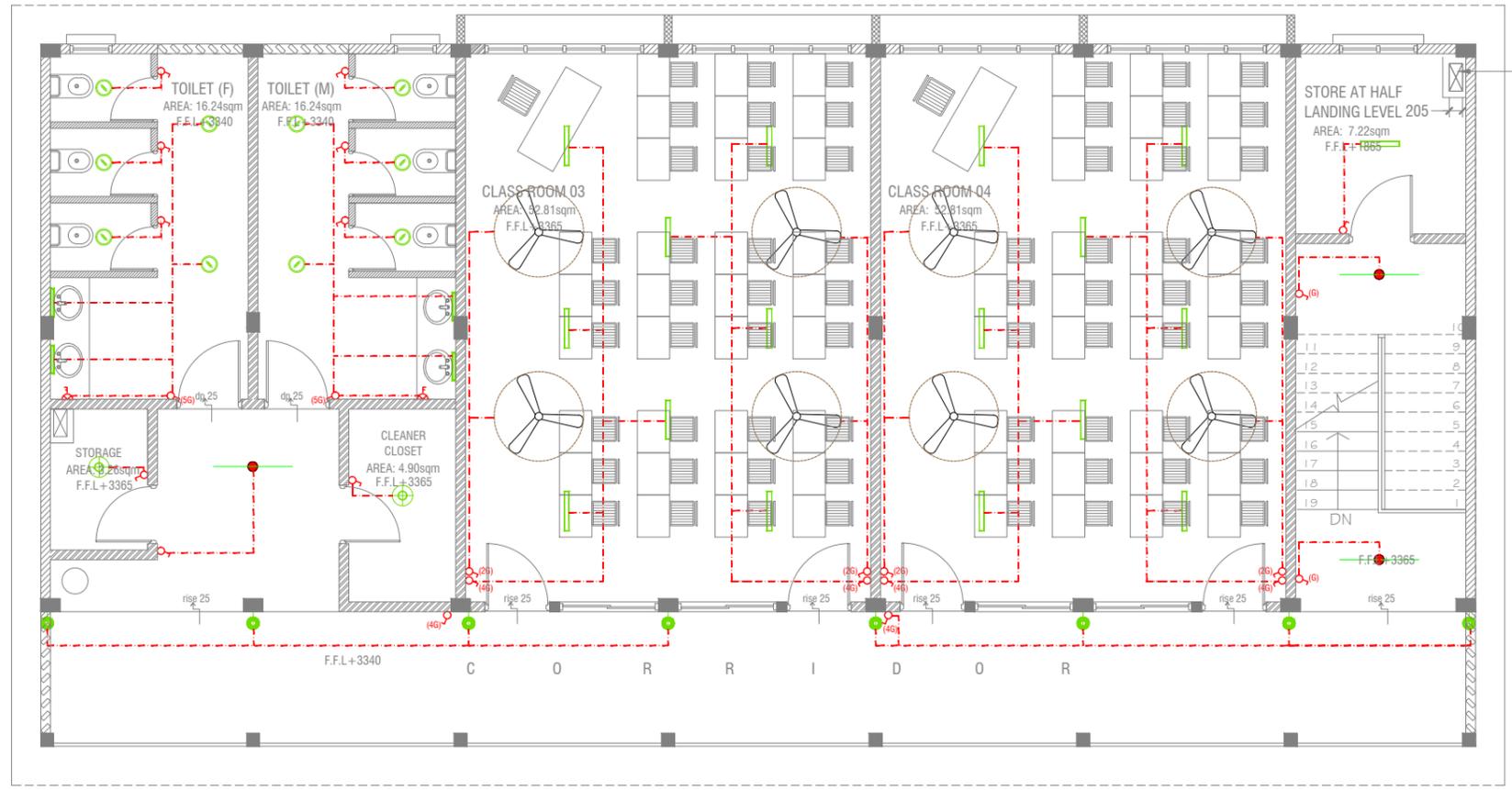


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Title: Ground Floor  
Lighting Layout

Page: EL 01-02



ELECTRICAL DUCT

### FIRST FLOOR LIGHTING LAYOUT



#### LEGEND

- WPD 40W (IP 65) OUT DOOR WALL LIGHT
- ML MIRROR LIGHT (7W LED LIGHT)
- H2 LED RECESSED DOWN LIGHT 12W
- CL LED CEILING LIGHT 18W
- WP LED TUBE LIGHT WITH WEATHER PROOF OPAL CASING
- C2 LED CEILING DOWN LIGHT (18W)
- LIGHT SWITCH
- SWITCHING LINE
- EXHAUST

CL2 LED TUBE LIGHT WITH OPAL CASING



**NOTE:**

- ALL WIRING TO BE OF STELCO APPROVED STANDARDS
- SWITCH CONTROL = 1200MM FROM FLOOR FIN. LEVEL
- ALL LIGHTING POINTS CONNECTED TO THEIR RESPECTIVE DB
- POLYCARBONATE ENCLOSURE TO ALL SWITCH AND SOCKET WHICH ARE LOCATED AT THE OUTDOORS

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
 Client: Ministry of Education

Project Number: RI/2020/006  
 Date: April 2021

Rev no	Date
1	
2	
3	
4	
5	

Architect: Mariyam Irasha Shareef  
 Engineer: Mohamed Muhtalib Waleed  
 Drawn by: Mariyam Lavevan Jaleel  
 Services: Aishath Ahmed  
 Interior: .

PVC DUCT FOR DATA CABLE LEAD IN BELOW GR.SLAB



**NOTE:**

1. ALL WIRING TO BE OF APPROVED STANDARDS
2. POWER/IT/COMPUTER SOCKETS = 300MM - 450MM FROM FLOOR FIN. LEVEL
3. SWITCH CONTROL / SOCKET = 1100MM - 1200MM FROM FLOOR FIN. LEVEL
4. KITCHEN SOCKETS / PANTRY SOCKETS = 1150MM - 1250MM FROM FLOOR FIN. LEVEL
5. AC = 2500MM - 2700MM FROM FLOOR FIN. LEVEL

**LEGEND**

- COMPUTER NETWORK OUTLET (RJ 45 CONNECTORS)
- TELEPHONE OUTLET (RJ11, CONNECTOR)
- 13A POWER OUTLET
- 13A TWIN SOCKET OUTLET
- HDMI,VGA & RAC AV SOCKET
- DISTRIBUTION BOX
- SPEAKERS
- HDMI,VGA & RAC AV TWIN SOCKET
- TWIN COMPUTER NETWORK OUTLET
- DATA POINT
- 15A SWITCHED/ SPUR UNIT @ H.L.
- TWO GANG / TV SOCKET

- PAGING MIC
- VOLUME CONTROLLER
- EMERGENCY LIGHT

ALL ELECTRICAL COMPONENT TO BE CONNECTED TO THEIR RESPECTIVE DB

SPEAKERS TO BE CONNECTED TO THE MAIN PA SYSTEM OF THE SCHOOL

TO CHECK IF THE EXISTING MAIN PANEL BOARD CAN CATER THE PROPOSED BUILDING, IF NOT, TO SUPPLY AND INSTALL PANEL BOARD WITH kWh METER. WIRING AND CONNECTION TO MAIN PANEL BOARD FROM MAIN ELECTRICAL NETWORK TO BE DECIDED ON SITE

**GROUND FLOOR POWER LAYOUT**

SCALE 1:100



Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
Client: Ministry of Education

Rev no	Date
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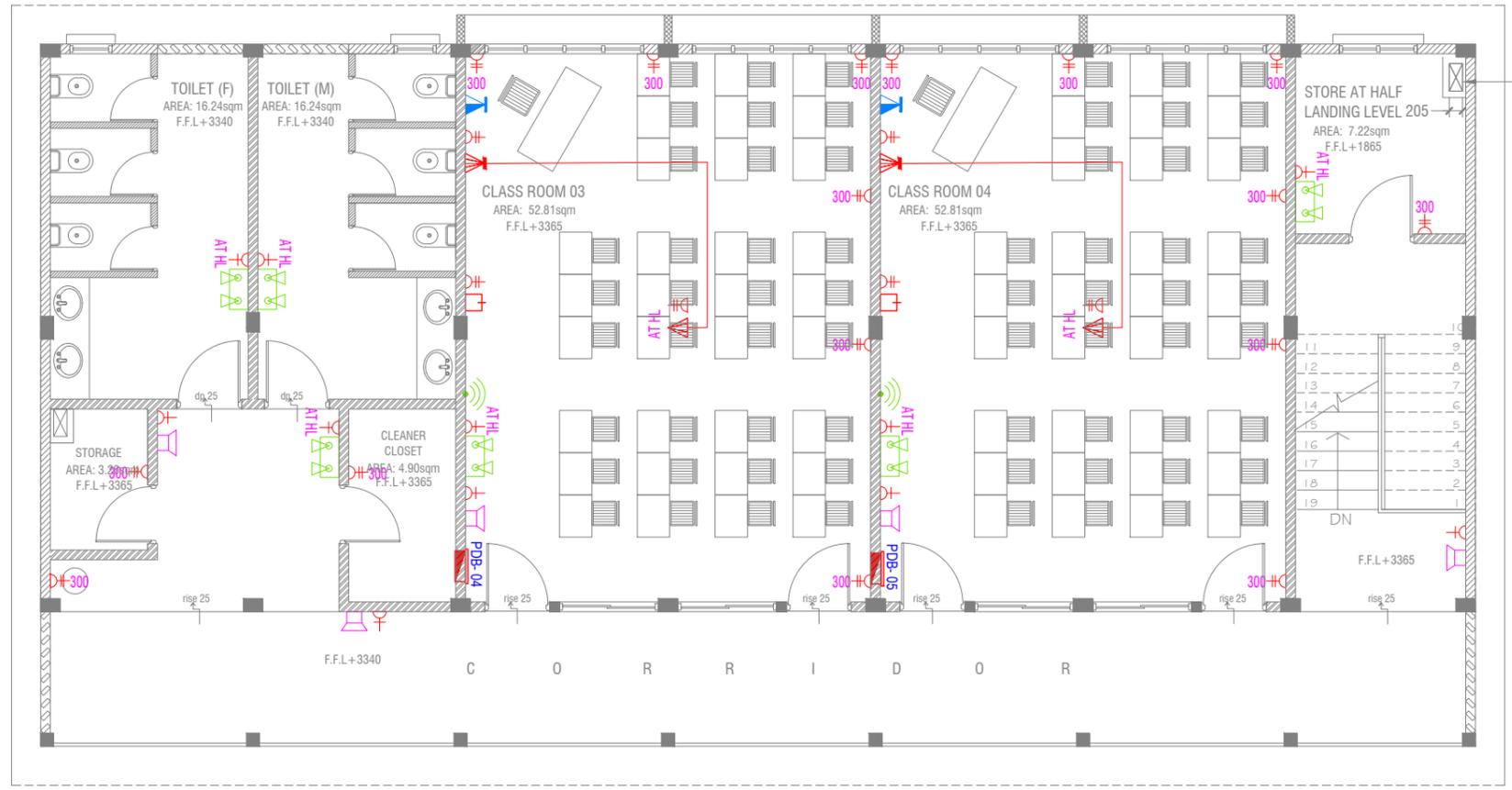
Project Number: RI/2020/006  
Date: April 2021  
Architect: Mariyam Irasha Shareef  
Engineer: Mohamed Muhtalib Waleed  
Drawn by: Mariyam Laveevan Jalleel  
Services: Aishath Ahmed  
Interior: -



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Title: Ground Floor Power Layout  
Page: EP 01-02



ELECTRICAL DUCT

### FIRST FLOOR POWER LAYOUT



**NOTE:**

1. ALL WIRING TO BE OF APPROVED STANDARDS
2. POWER/IT/COMPUTER SOCKETS = 300MM - 450MM FROM FLOOR FIN. LEVEL
3. SWITCH CONTROL / SOCKET = 1100MM - 1200MM FROM FLOOR FIN. LEVEL
4. KITCHEN SOCKETS / PANTRY SOCKETS = 1150MM - 1250MM FROM FLOOR FIN. LEVEL
5. AC = 2500MM - 2700MM FROM FLOOR FIN. LEVEL

**LEGEND**

- TELEPHONE OUTLET (RJ11, CONNECTOR)
- 13A POWER OUTLET
- 13A TWIN SOCKET OUTLET
- HDMI, VGA & RAC AV SOCKET
- DISTRIBUTION BOX
- SPEAKERS
- HDMI, VGA & RAC AV TWIN SOCKET
- TWIN COMPUTER NETWORK OUTLET
- DATA POINT

- PAGING MIC
- VOLUME CONTROLLER
- EMERGENCY LIGHT

ALL ELECTRICAL COMPONENT TO BE CONNECTED TO THEIR RESPECTIVE DB

SPEAKERS TO BE CONNECTED TO THE MAIN PA SYSTEM OF THE SCHOOL

TO CHECK IF THE EXISTING MAIN PANEL BOARD CAN CATER THE PROPOSED BUILDING. IF NOT, TO SUPPLY AND INSTALL PANEL BOARD WITH kWh METER. WIRING AND CONNECTION TO MAIN PANEL BOARD FROM MAIN ELECTRICAL NETWORK TO BE DECIDED ON SITE

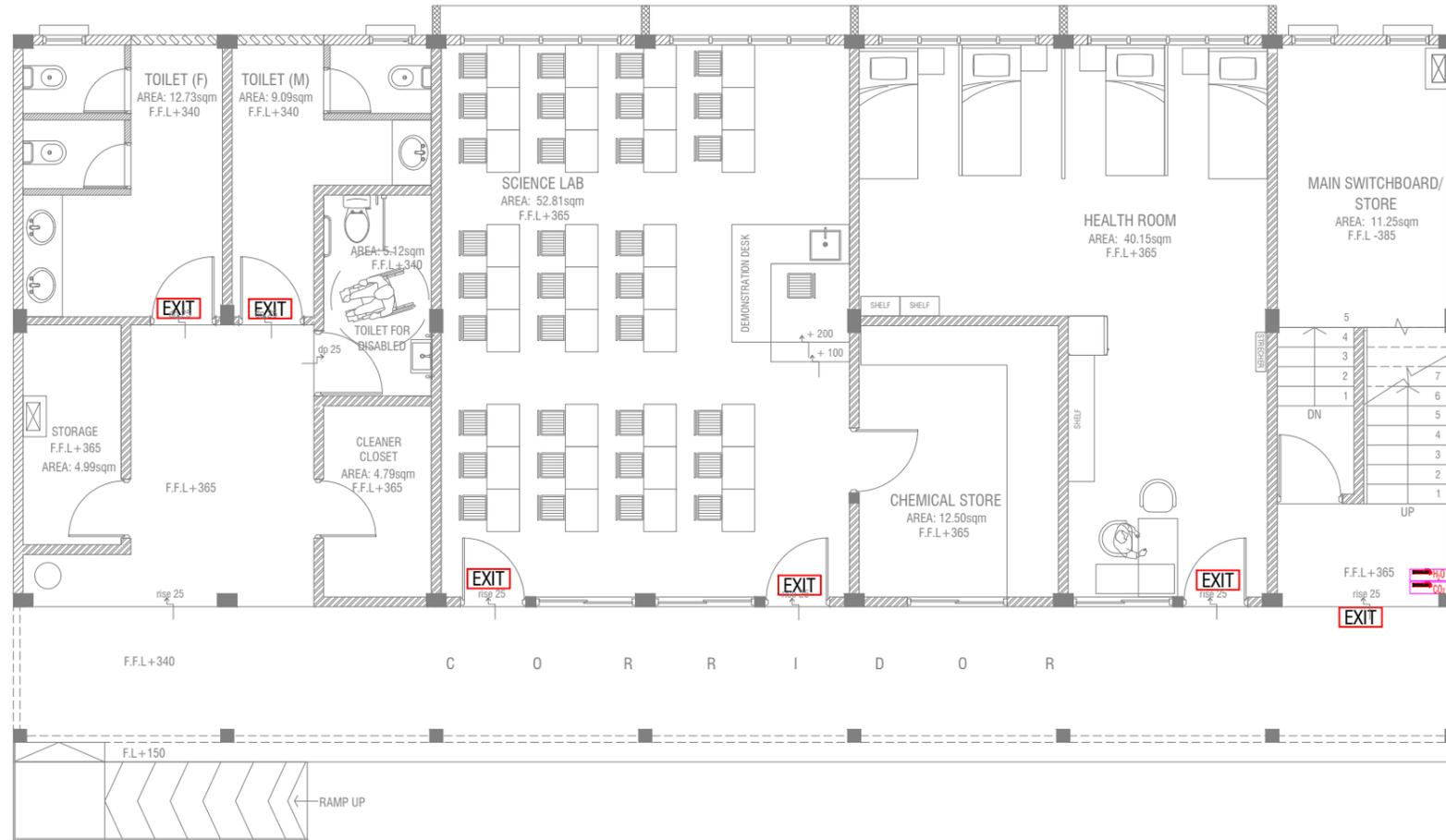
Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
 Client: Ministry of Education

Rev no	Date

Project Number: RI/2020/006  
 Date: April 2021  
 Architect: Mariyam Irasha Shareef  
 Engineer: Mohamed Muhtalib Waleed  
 Drawn by: Mariyam Leevan Jaleel  
 Interior: Aishath Ahmed



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**GROUND FLOOR FDP LAYOUT**

SCALE 1:100



**LEGEND**

-  EXIT SIGN
-  CO<sub>2</sub> EXTINGUISHER (LOAD: 2KG) IN POLYCARBONATE ENCLOSURE(TYP.)
-  H<sub>2</sub>O EXTINGUISHER (LOAD: 9L) IN POLYCARBONATE ENCLOSURE(TYP.)

ALL FIRE CABLES AND CONDUITS SHOULD BE FIRE RETARDANT LOW SMOKE (FRLS) TYPE.

ALL FIRE RATED DOOR SHOULD COME WITH PACKING (EXPANSION SEAL TRAP)

1. ALL PIPES SHOULD BE GALVANIZED, SCHEDULE 40.
2. ALL PIPE SHALL BE PAINTED IN RED AS PER REGULATION.
3. ALL SUPPORT/BRAKET SHALL BE HOT DIPPED GALVANIZED TO 100MM
4. ALL FIRE EXTINGUISHER INSIDE CABINETS. (CABINET SHOULD BE PROVIDED)

-IF THE INSTALLATION OF CEILING IS CARRIED OUT LOWER THAN BEAM BOTTOM ,SMOKE DETECTORS SHOULD BE PLACED AS INDICATED ON THE DRAWING.  
 -ALTERNATIVELY IF THE INSTALLATION OF CEILING IS CARRIED OUT EQUAL TO BEAM BOTTOM OR IF THE CEILING IS NOT INSTALLED , SMOKE DETECTORS ARE TO BE PLACED IN BETWEEN EACH BEAM

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
 Client: Ministry of Education

Rev no	Date
..	..
..	..
..	..

Project Number: R/2020/006

Date: April 2021

Architect: Maryam Irasha Shareef

Engineer: Mohamed Muthalib Waleed

Drawn by: Maryam Leeyan Jaleel

Services: Aishath Ahmed Interior : -

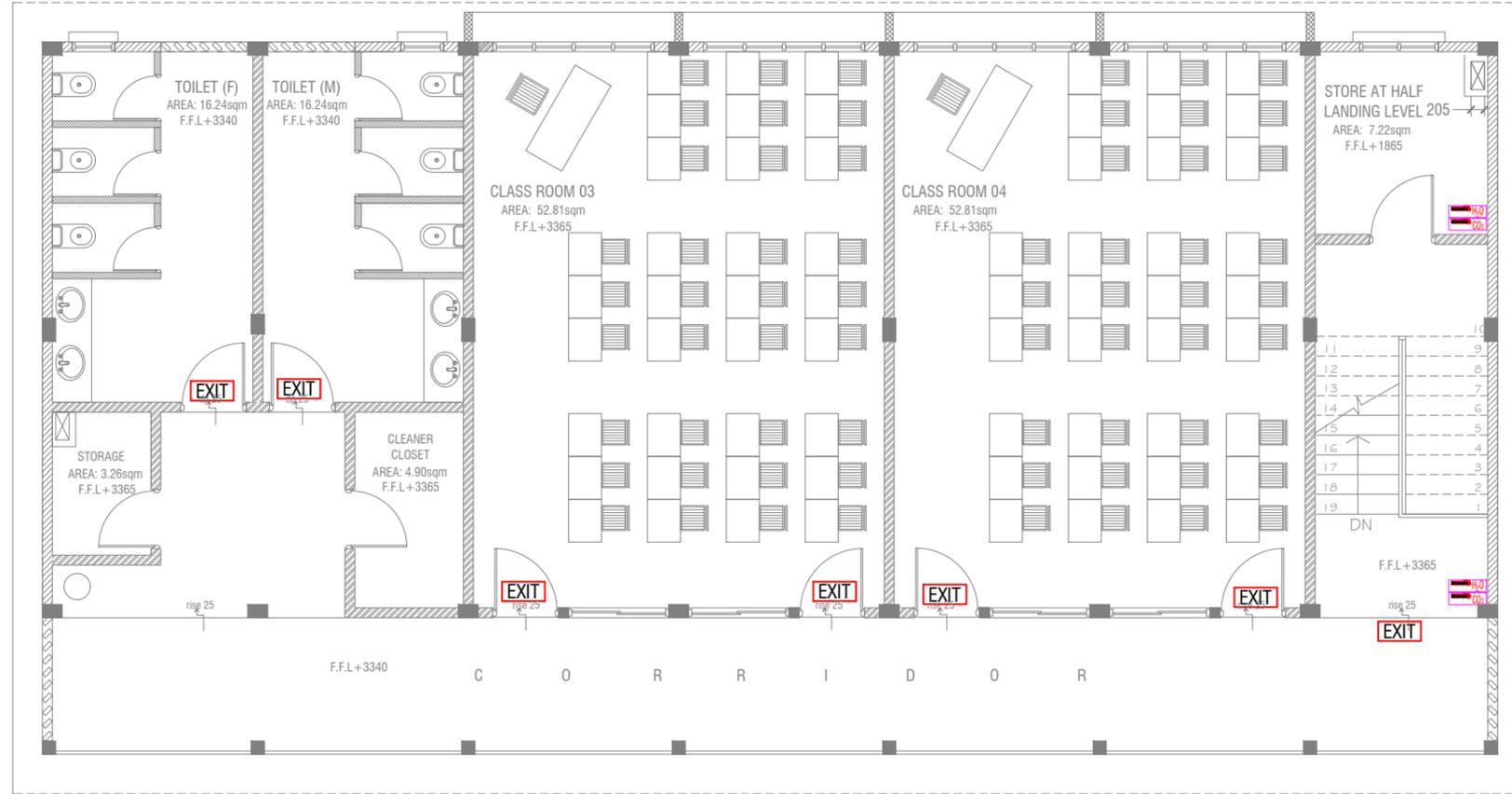


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Title: Ground Floor FDP Layout  
 Page: FDP 01-02

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**FIRST FLOOR FDP LAYOUT**

SCALE 1:100



**LEGEND**

-  EXIT SIGN
-  CO<sub>2</sub> EXTINGUISHER (LOAD: 2KG) IN POLYCARBONATE ENCLOSURE(TYP.)
-  H<sub>2</sub>O EXTINGUISHER (LOAD: 9L) IN POLYCARBONATE ENCLOSURE(TYP.)

ALL FIRE CABLES AND CONDUITS SHOULD BE FIRE RETARDANT LOW SMOKE (FRLS) TYPE.

ALL FIRE RATED DOOR SHOULD COME WITH PACKING (EXPANSION SEAL TRAP)

1. ALL PIPES SHOULD BE GALVANIZED, SCHEDULE 40.  
 2. ALL PIPE SHALL BE PAINTED IN RED AS PER REGULATION.  
 3. ALL SUPPORT/BACKET SHALL BE HOT DIPPED GALVANIZED TO 100MM  
 4. ALL FIRE EXTINGUISHER INSIDE CABINETS. (CABINET SHOULD BE PROVIDED)

-IF THE INSTALLATION OF CEILING IS CARRIED OUT LOWER THAN BEAM BOTTOM, SMOKE DETECTORS SHOULD BE PLACED AS INDICATED ON THE DRAWING.  
 -ALTERNATIVELY IF THE INSTALLATION OF CEILING IS CARRIED OUT EQUAL TO BEAM BOTTOM OR IF THE CEILING IS NOT INSTALLED, SMOKE DETECTORS ARE TO BE PLACED IN BETWEEN EACH BEAM

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
 Client: Ministry of Education

Rev no	Date

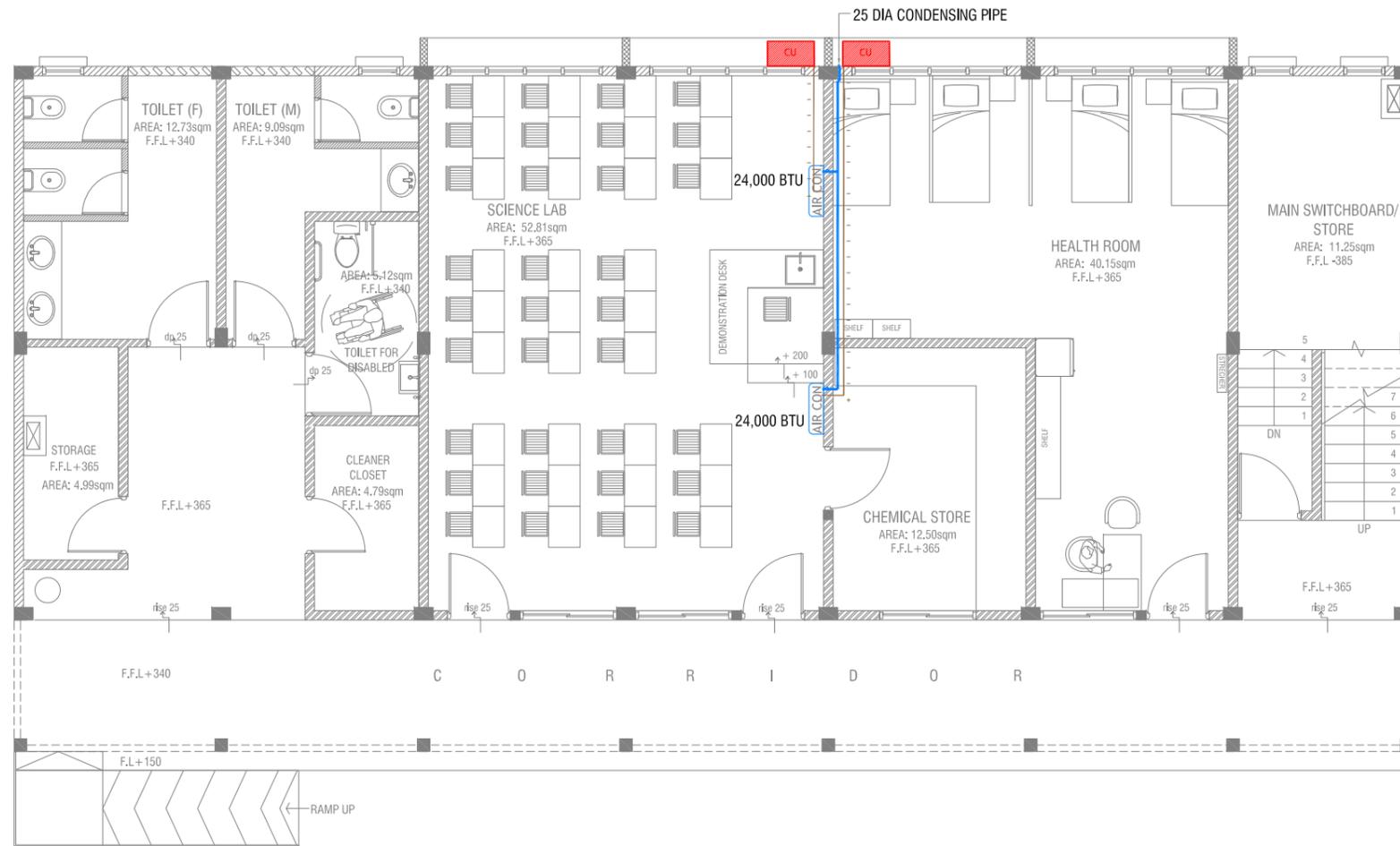
Project Number: RI/2020/006  
 Date: April 2021  
 Architect: Mariyam Irasha Shareef  
 Engineer: Mohamed Muththalib Waleed  
 Drawn by: Mariyam Leevan Jaleel  
 Services: Aishath Ahmed  
 Interior: -



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Title: First Floor  
 FDP Layout  
 Page: FDP 02-02

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## GROUND FLOOR ACV LAYOUT

SCALE 1:100



### LEGEND

-  REFRIGERANT PIPES
-  25 Ø CONDENSATE DRAIN PIPE
-  CONDENSING UNIT

### NOTE:

- ALL CONDENSING PIPES TO BE AT GROUND LEVEL  
DISCHARGED THROUGH A PERFORATED COWL OR TO A SOAK PIT

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
Client: Ministry of Education

Project Number: RI/2020/006

Date: April 2021

Architect: Mariyam Irasha Shareef

Engineer: Mohamed Muththalib, Waleed

Drawn by: Mariyam Leevan Jaleel

Services: Alshath Ahmed

Rev no

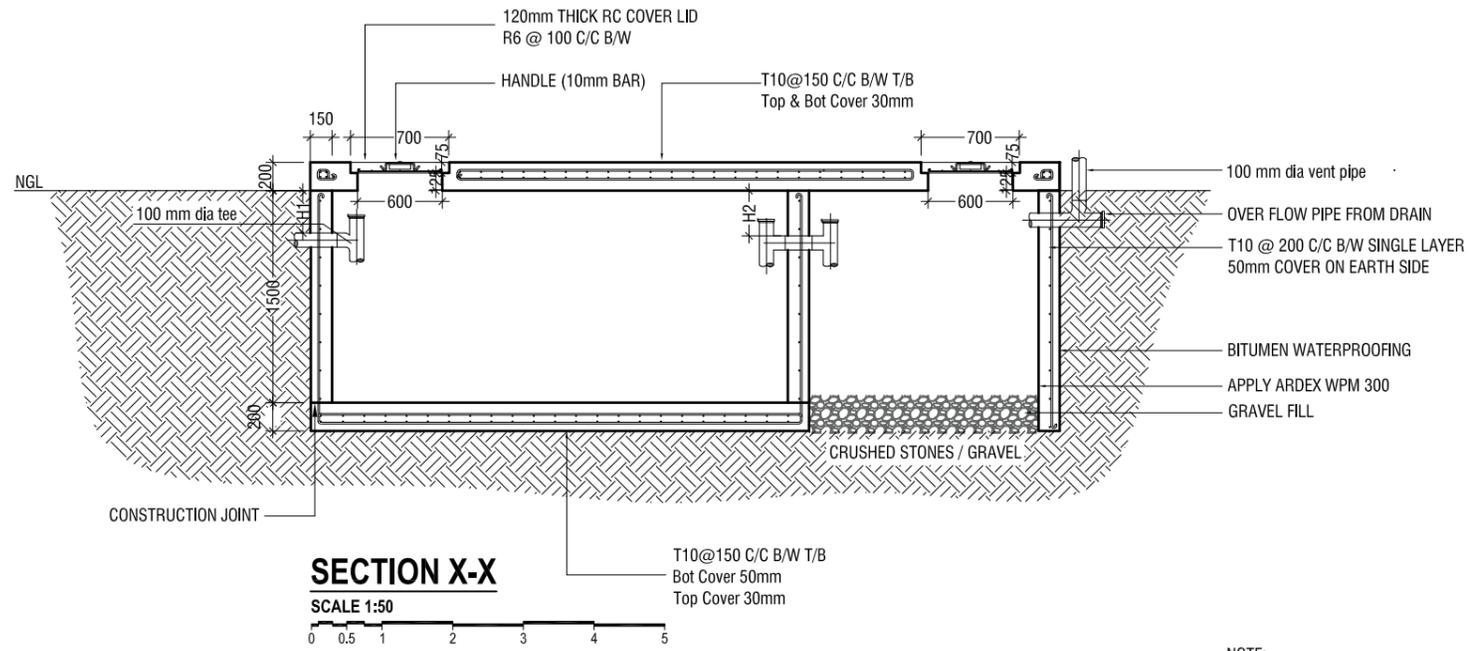
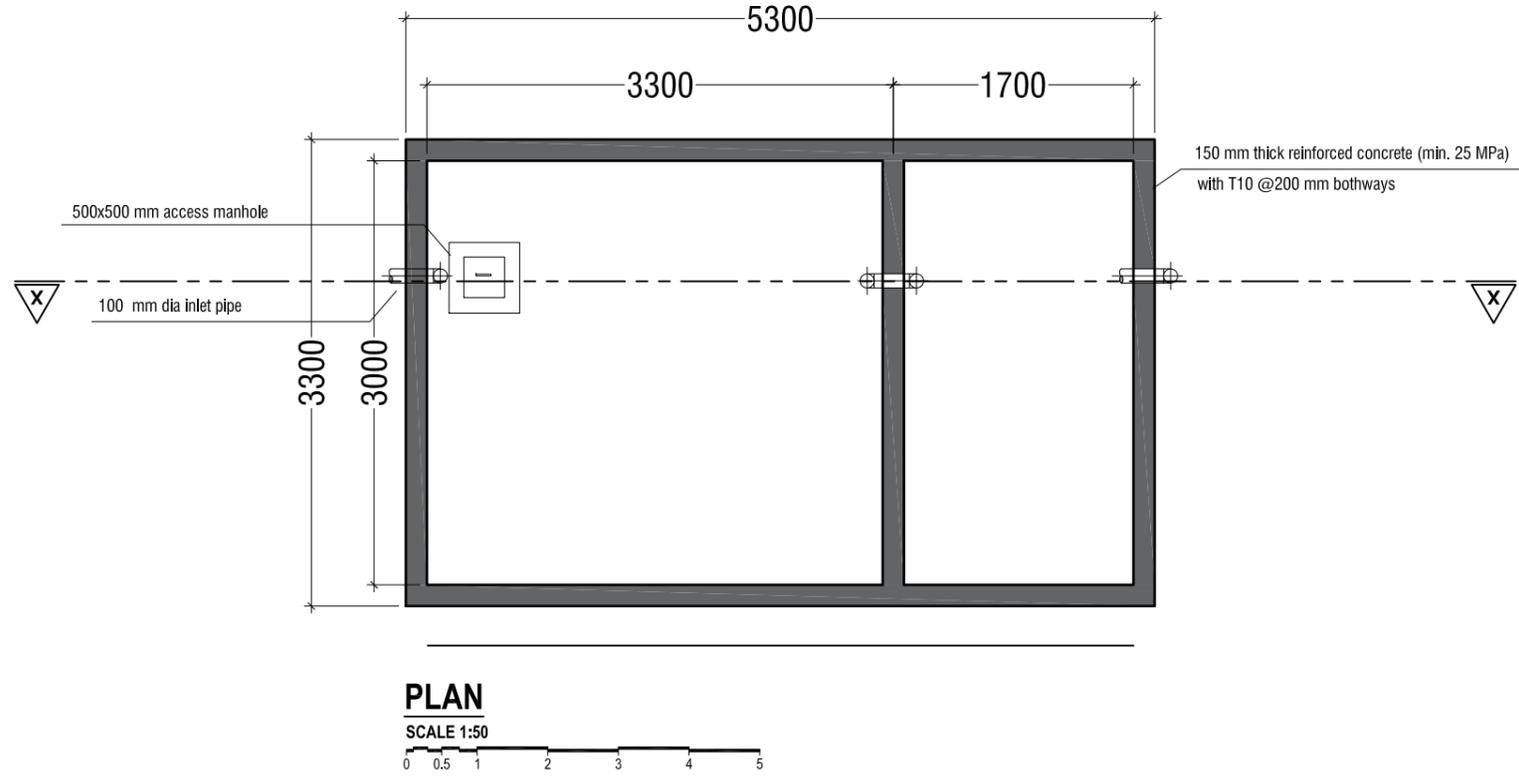
Date

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Title: Ground Floor  
ACV Layout

Page: ACV 01-01



**SEPTIC TANK DETAIL**

SCALE 1:50  
0 0.5 1 2 3 4 5

- NOTE:**
- H1 < H2
- TOP AND BOTTOM OF SEPTIC TANK SHOULD BE OF 200mm THICK
  - BITUMINOUS WATERPROOFING TO BE APPLIED BELOW GROUND SURFACE
  - REINFORCEMENT TO HAVE A COVER OF 50mm FROM EARTH

Th.Omadhoo School Health Room, Science Lab & 2 Classroom Block (2 story)  
Client: Ministry of Education

Rev no	Date

Project Number: RI/2020/006  
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Architect: Mariyam Irasha Shareef  
Engineer: Mohamed Muththallib Walleed  
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