

Proposed 12 Classroom at
S.Hithadhoo Noorani School
(03 Storey)

SERVICES DRAWINGS
Client: Ministry of Education

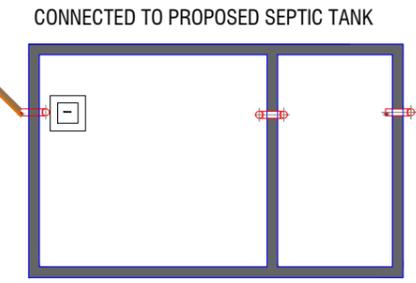
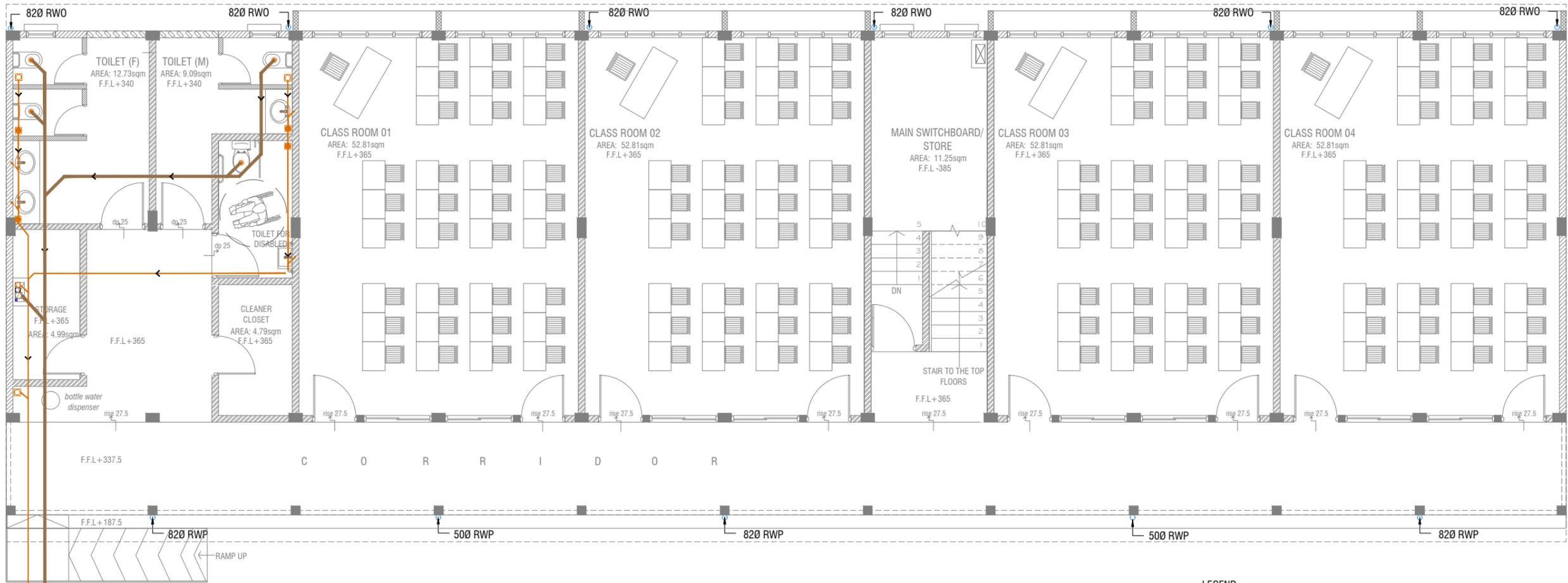


RIYAN PRIVATE LIMITED

t: +9603315049 f: +9603310776
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Amereemaguu, Male'

TABLE OF CONTENTS

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

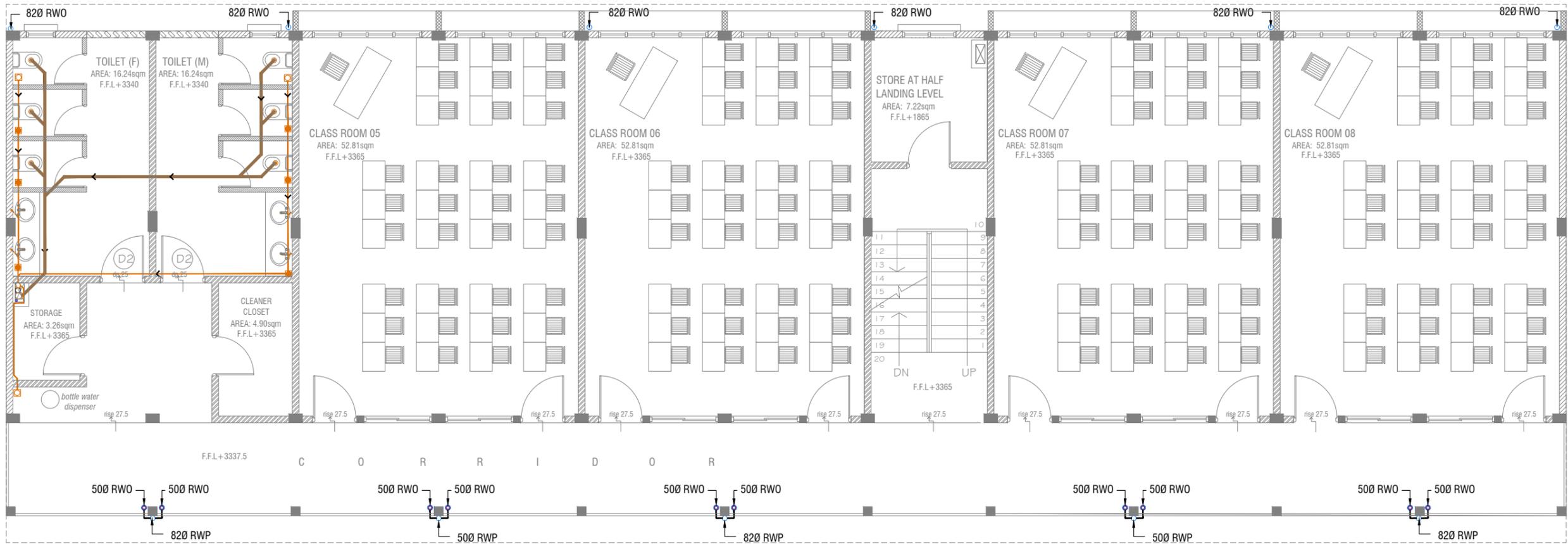
GROUND FLOOR DRAINAGE LAYOUT
 SCALE 1:100



Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
 Client: Ministry of Education

Project Number: RI/2020/006
 Date: March, 2021
 Architect: Mariyam Iqasha Shareef
 Engineer: Mohamed Muhtalib Waleed
 Drawn by: Mariyam Leevan Jaleel
 Services: Aishath Ahmed

Rev no	Date



FIRST - SECOND FLOOR 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

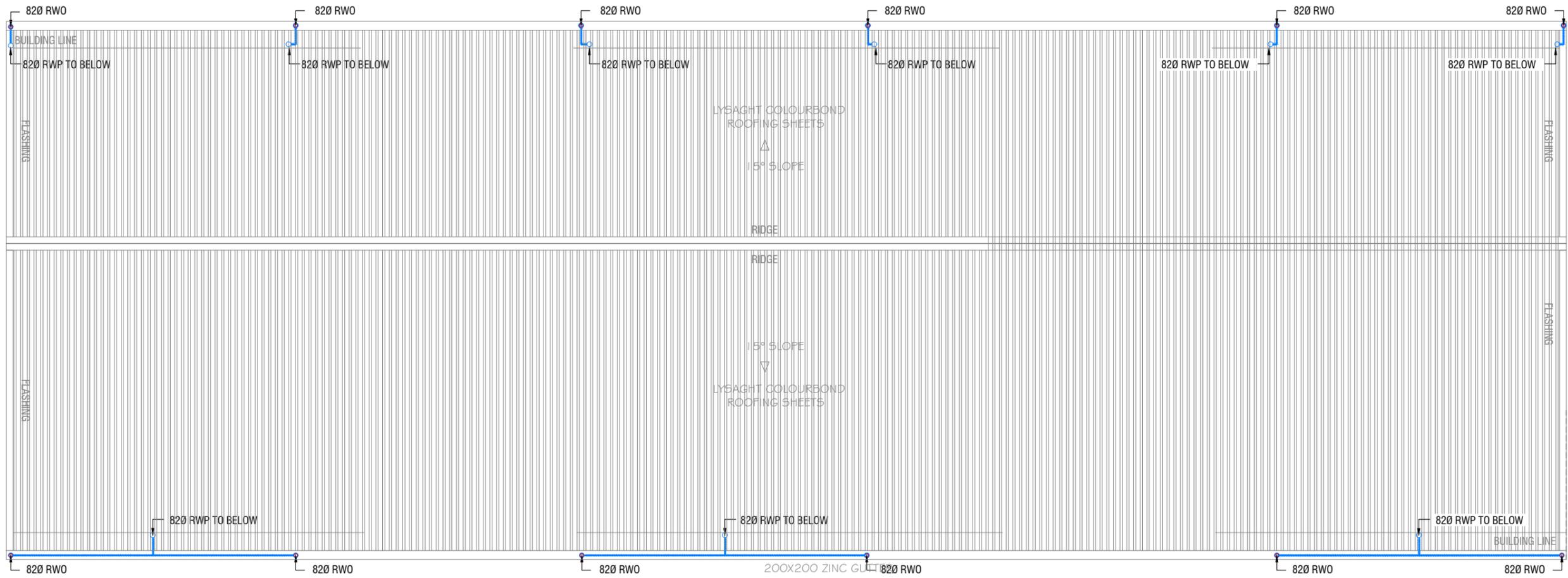
NOTE:
- ALL SOIL AND WASTE PIPES TO BE UNDER THE SLAB LEVEL.

Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
 Client: Ministry of Education

Project Number: RI/2020/006	Date	Rev no	Date
Date: March 2021			
Architect: Mariyam Iqasha Shareef			
Engineer: Mohamed Muthalib Waleed			
Drawn by: Mariyam Laveyan Jaleel			
Services: Aishath Ahmed			



RIYAN PRIVATE LIMIT
 t: +9603315049 f: +960331077
 e: info@riyan.com.mv
 w: www.riyan.com.mv
 3rd floor, H. Azum, Ameenemagui, I



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

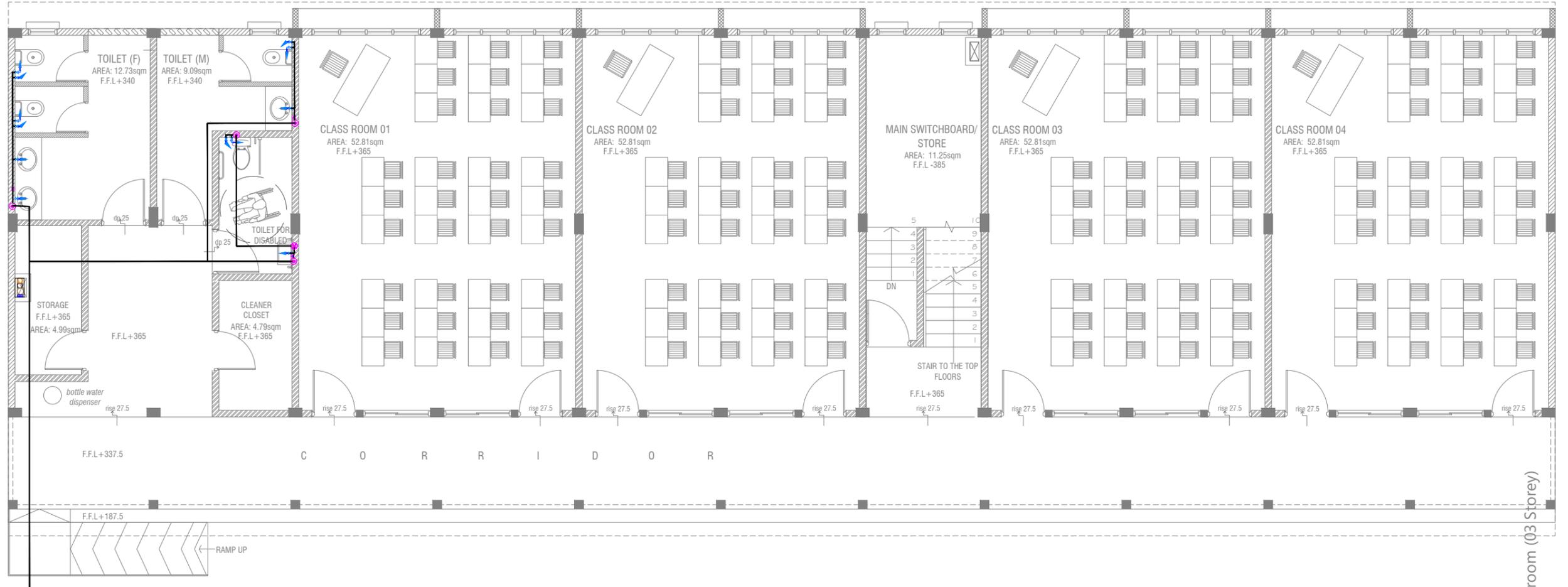
Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
 Client: Ministry of Education

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

Rev no	Date
1	2021/03/01
2	2021/03/01
3	2021/03/01
4	2021/03/01
5	2021/03/01

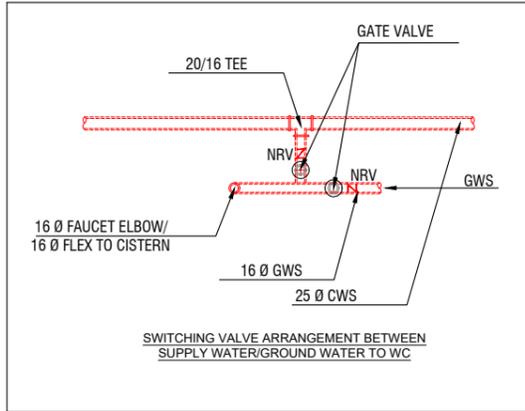
Architect : Mariyam Iqbal Shareef
 Engineer : Mohamed Mubtinalib Waleed
 Drawn by : Mariyam Laveen Jaleel
 Services : Aishath Ahmed

RIYAN PRIVATE LIMIT
 t: +9603315049 f: +960331077
 e: info@riyan.com.mv
 w: www.riyan.com.mv
 3rd floor, H. Azum, Ameenemagui, I



CONNECTED TO EXISTING WELL

GROUND FLOOR PLUMBING LAYOUT



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

Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
 Client: Ministry of Education

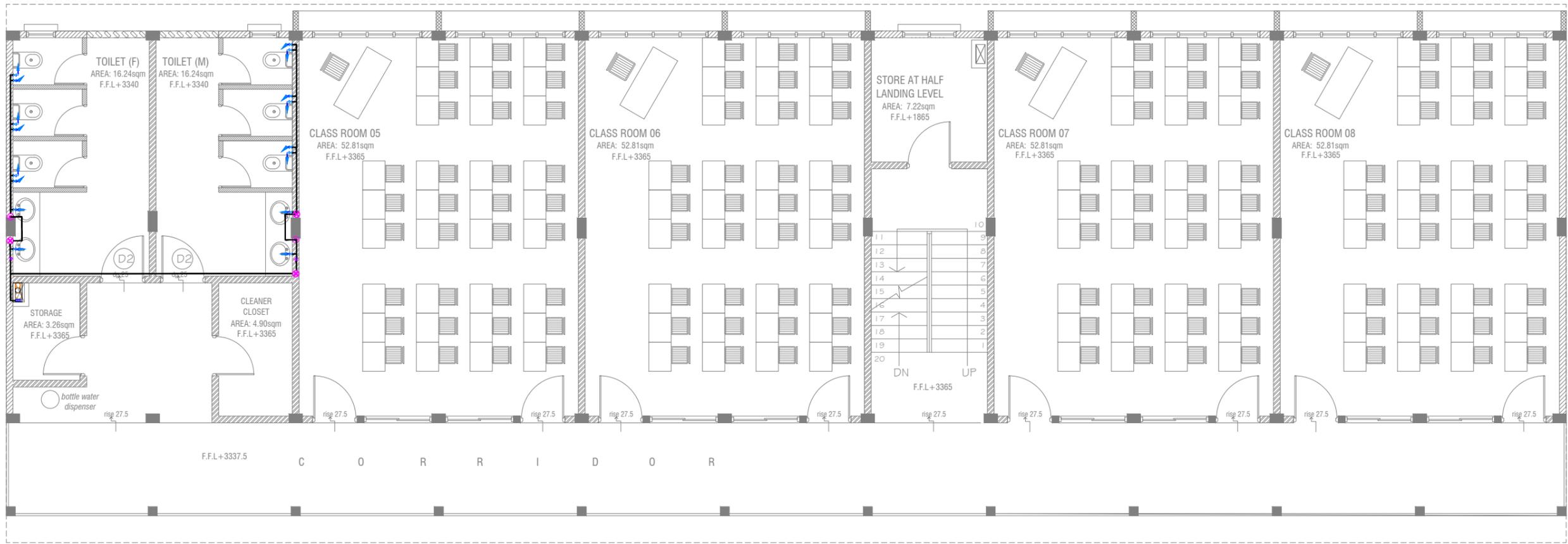
Rev no	Date

Project Number: RI/2020/006
 Date: March 2021
 Architect: Maryam Irshad Shareef
 Engineer: Mohamed Muthalib Waleed
 Drawn by: Maryam Leevan Jaleel
 Services: Aishath Ahmed



RIYAN PRIVATE LIMIT

t: +9603315049 f: +960331077
 e: info@riyan.com.mv
 w: www.riyan.com.mv
 3rd floor, H. Azum, Ameenemagui, I



FIRST - SECOND FLOOR PLUMBING LAYOUT



LEGEND

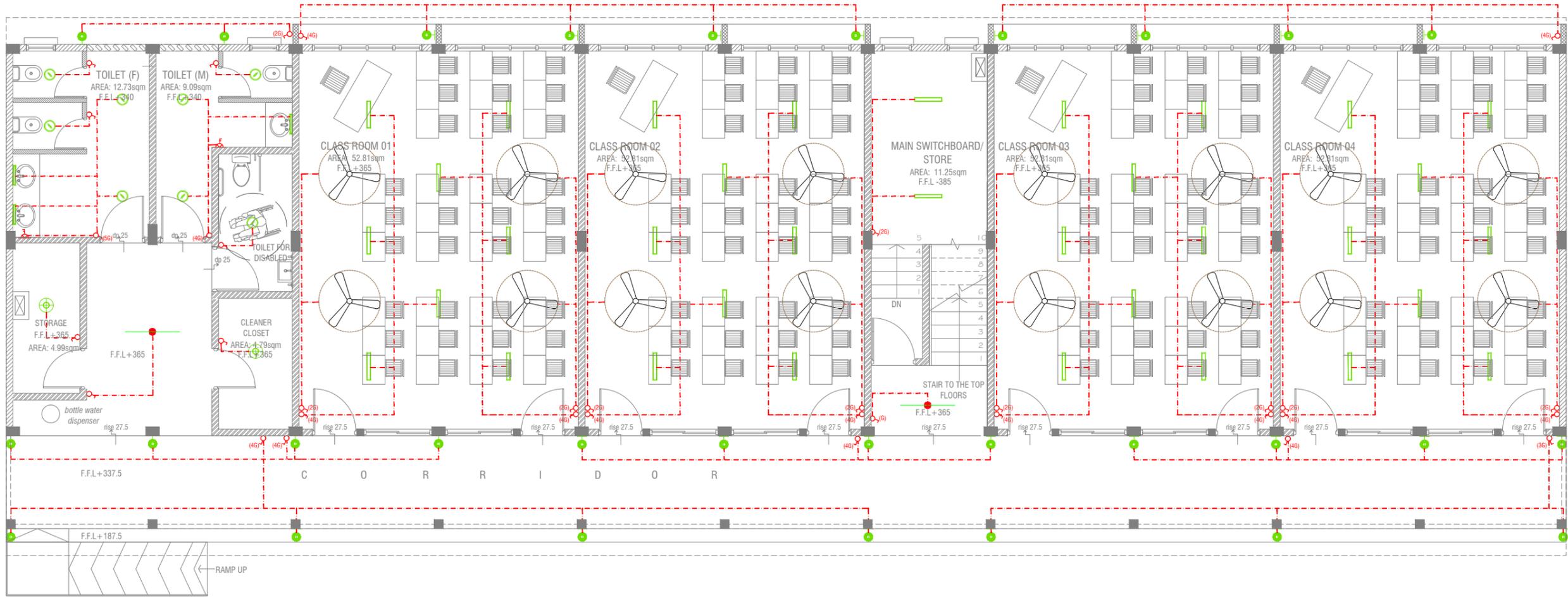
- 16 Ø COLD WATER SUPPLY TO CISTERN
- 16 Ø COLD WATER SUPPLY TO BIDET SHOWER
- 16 Ø COLD WATER SUPPLY TO BASIN FAUCET / SINK
- GV GATE VALVE
- 25 Ø COLD WATER SUPPLY PIPES RUN UNDERGROUND
- 25 Ø COLD WATER SUPPLY PIPES RUN IN WALL / UNDER FALSE CEILING
- RISE IN WALL
- DROP IN WALL
- CWS COLD WATER SUPPLY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

Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
 Client: Ministry of Education

Project Number: RI/2020/006	Date: March 2021
Architect: Mariyam Irasha Shareef	Engineer: Mohamed Muhtalib Waleed
Drawn by: Mariyam Leevan Jaleel	Services: Aishath Ahmed
Rev no	Date



RIYAN PRIVATE LIMIT
 t: +9603315049 f: +960331077
 e: info@riyan.com.mv
 w: www.riyan.com.mv
 3rd floor, H. Azum, Ameenemagui, I



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

Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
Client: Ministry of Education

Project Number: RI/2020/006
Date: March 2021
Architect: Maryam Trisha Shareef
Engineer: Mohamed Muthalib Waleed
Drawn by: Maryam Leevan Jaleel
Services: Aishath Ahmed

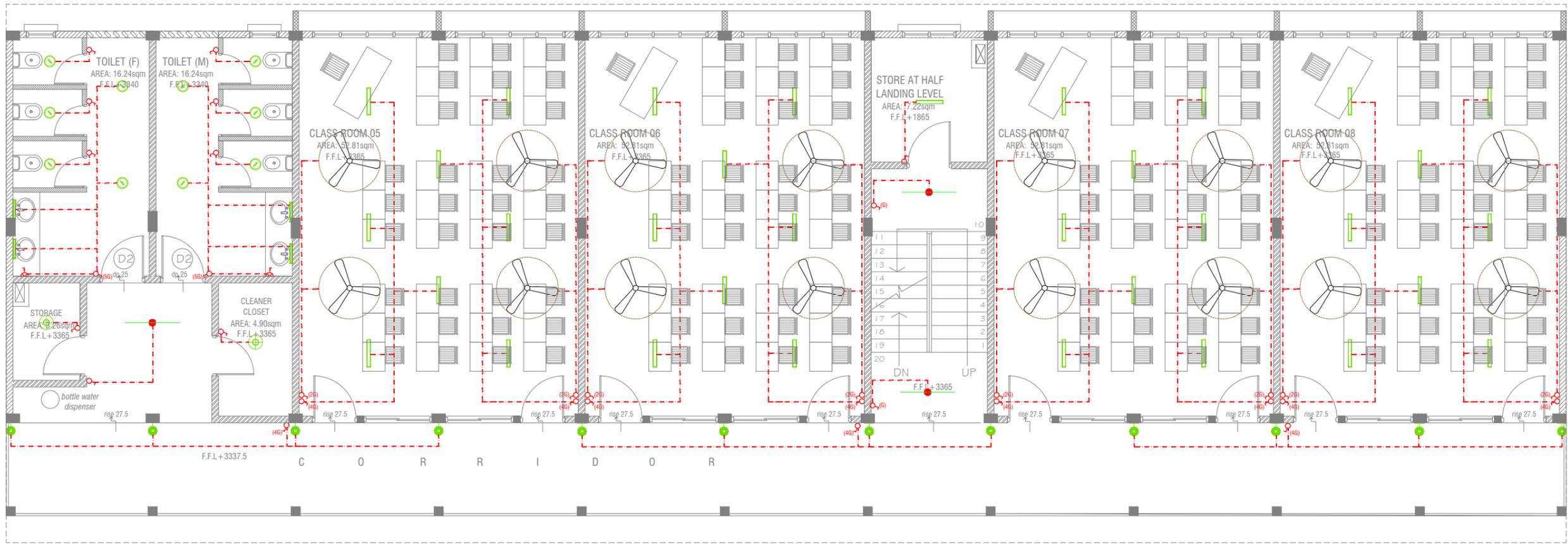
Rev no
Date



RIYAN PRIVATE LIMIT

t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ameenemagui, I

Title: Ground Floor Lighting Layout
Page: EL 01-02



FIRST - SECOND FLOOR LIGHTING LAYOUT

SCALE 1:100
 0 0.5 1 2 3 4 5

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

CEILING FAN (52" - 54")

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

Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
 Client: Ministry of Education

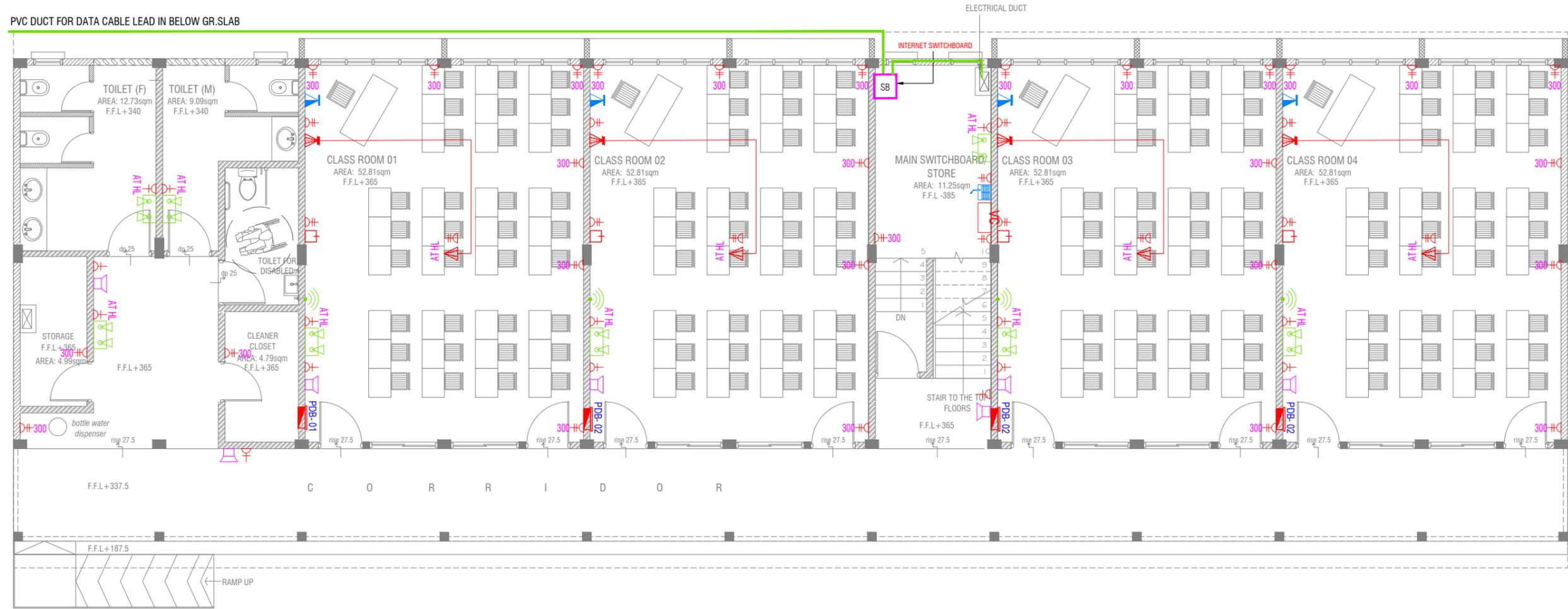
Rev no	Date

Project Number: RI/2020/006
 Date: March 2021
 Architect: Mariyam Trisha Shareef
 Engineer: Mohamed Muthalib Waleed
 Drawn by: Mariyam Leevan Jaleel
 Services: Aishath Ahmed



RIYAN PRIVATE LIMIT
 t: +9603315049 f: +960331077
 e: info@riyan.com.mv
 w: www.riyan.com.mv
 3rd floor, H. Azum, Ameenemagui, I

PVC DUCT FOR DATA CABLE LEAD IN BELOW GR.SLAB



GROUND FLOOR POWER LAYOUT

SCALE 1:100



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
- 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

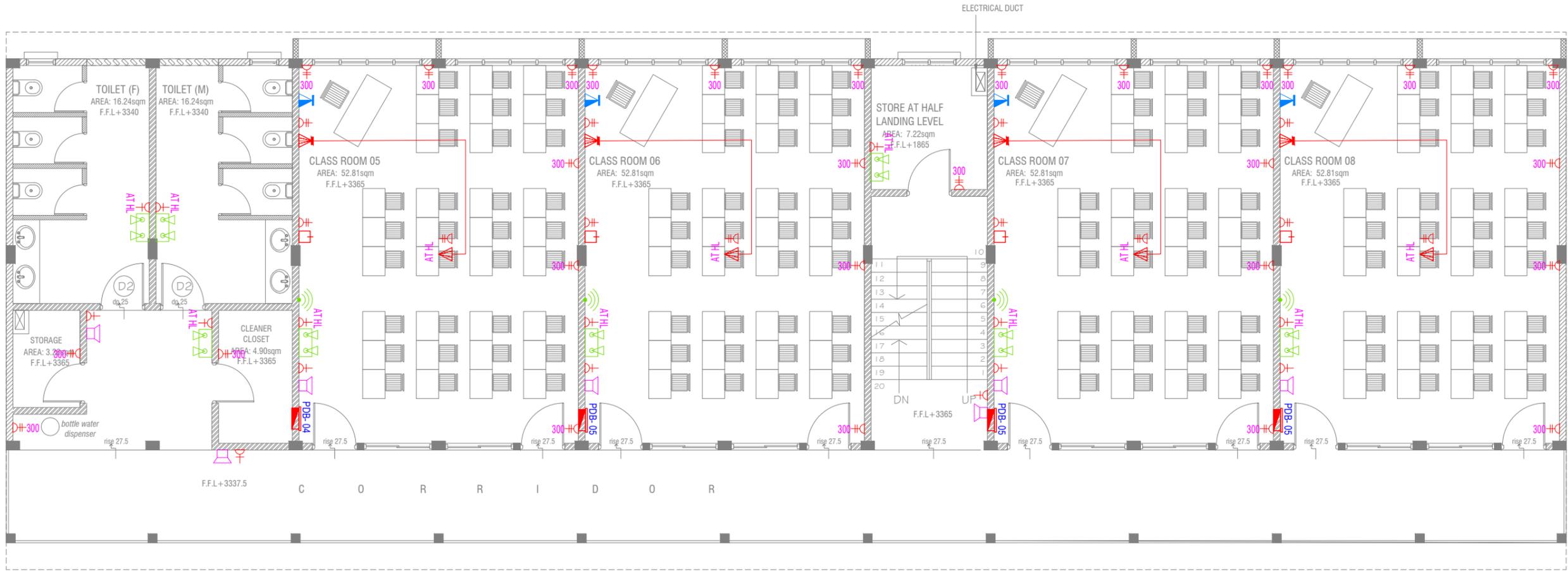
Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
Client: Ministry of Education

Project Number: RI/2020/006
Date: March 2021
Architect: Mariyam Irasha Shareef
Engineer: Mohammedi Muththalihs Waleed



RIYAN PRIVATI
t: +9603315049 f: -
e: info@riyan.c
w: www.riyan.c
3rd floor, H. Azum, Amee

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



FIRST - SECOND FLOOR POWER LAYOUT

SCALE 1:100



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
- 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

Sr.Hithadhoo Noorani School - 12 Classroom (03 Storey)
Client: Ministry of Education

Project Number: RI/2020/006	Date
Date: March 2021	
Architect: Mariyam Irsha Shareef	
Engineer: Mohamed Muthalib Waleed	
Drawn by: Mariyam Leevan Jaleel	
Services: Aishath Ahmed	
Rev no	Date



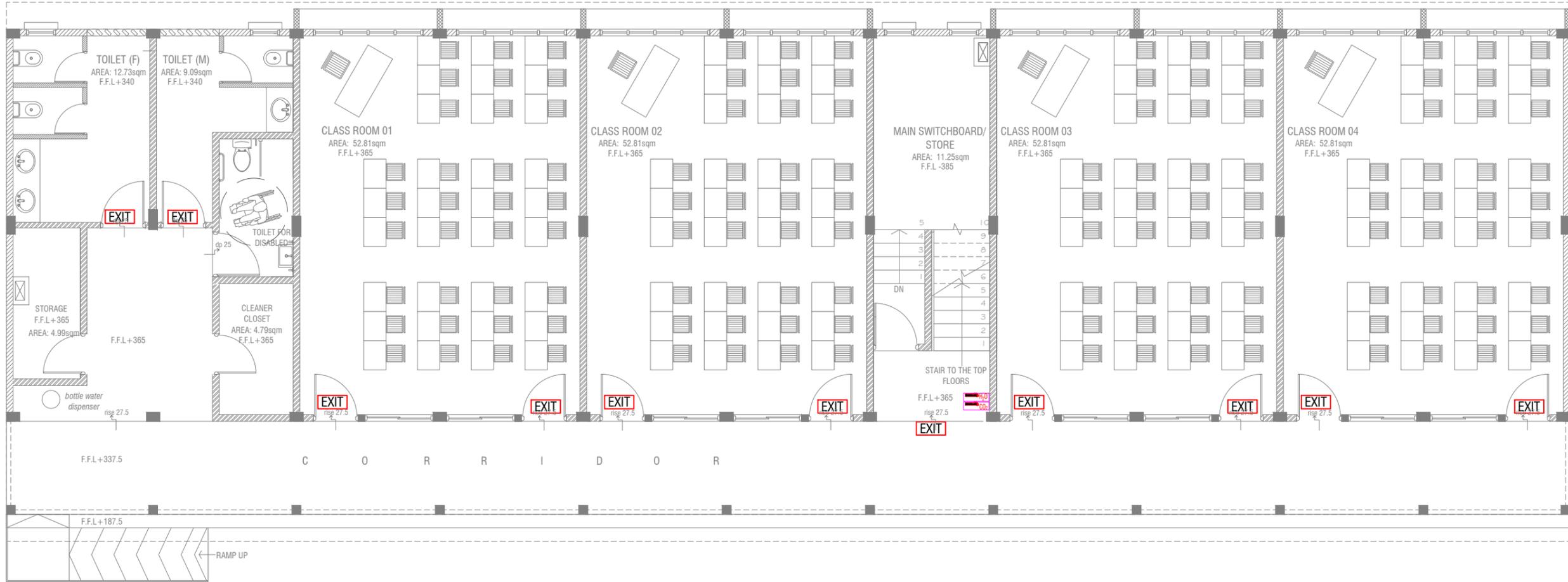
RIYAN PRIVATE LIMIT

t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv

3rd floor, H. Azum, Ameenemagu, I

Title: First - Second Floor Power Layout

Page: EP 02-02



GROUND FLOOR FDP LAYOUT

SCALE 1:100



LEGEND

-  EXIT SIGN
-  CO₂ EXTINGUISHER (LOAD: 2KG) IN POLYCARBONATE ENCLOSURE(TYP.)
-  H₂O 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

Sn. Hithadhoo Noorani School - 12 Classroom (03 Storey)
 Client: Ministry of Education

Rev no	Date
1	2020/03/06
2	2020/03/06
3	2020/03/06
4	2020/03/06
5	2020/03/06

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



RYAN PRIVATE LIMITED

t: +9603315049 f: +9603310776
 e: info@riyan.com.mv
 w: www.riyan.com.mv
 3rd floor, H. Azum, Ameenemagu, Male'

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



FIRST - SECOND FLOOR FDP LAYOUT

SCALE 1:100



LEGEND

-  EXIT SIGN
-  CO₂ EXTINGUISHER (LOAD: 2KG) IN POLYCARBONATE ENCLOSURE(TYP.)
-  H₂O 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

Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)

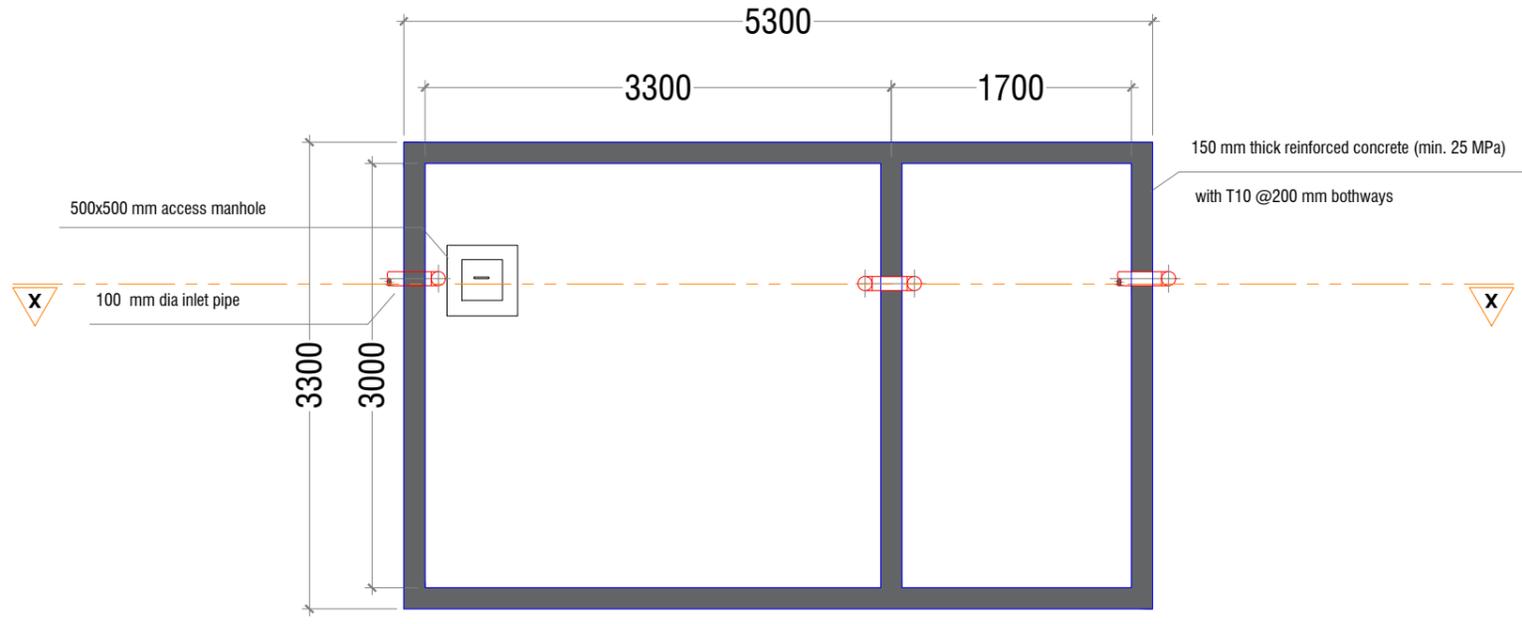
Client: Ministry of Education

Rev no	Date

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

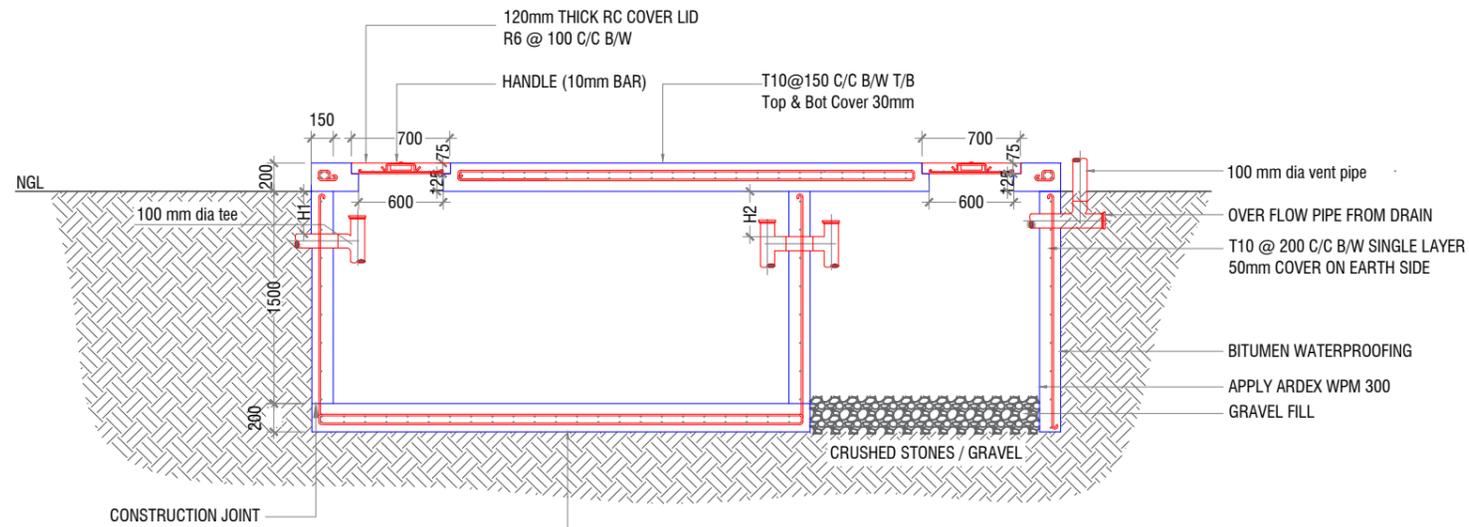


RYAN PRIVATE LIMITED
 t: +9603315049 f: +9603310776
 e: info@ryan.com.mv
 w: www.ryan.com.mv
 3rd floor, H. Azum, Ameeremaqaa, Malé



PLAN

SCALE 1:50



SECTION X-X

SCALE 1:50



T10@150 C/C B/W T/B
Bot Cover 50mm
Top Cover 30mm

SEPTIC TANK DETAIL

SCALE 1:50



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

Sn.Hithadhoo Noorani School - 12 Classroom (03 Storey)
Client: Ministry of Education

Rev no	Date
-	-
-	-
-	-
-	-
-	-

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



RIYAN PRIVATE LIMITED

t : +9603315049 f : +9603310776
e : info@riyan.com.mv
w : www.riyan.com.mv
3rd floor, H. Azum, Ameenemogaj, Male'

Title: Septic Tank Detail

Page: Detail 01-01