

ARCHITECTURAL & STRUCTURAL DRAWINGS OF

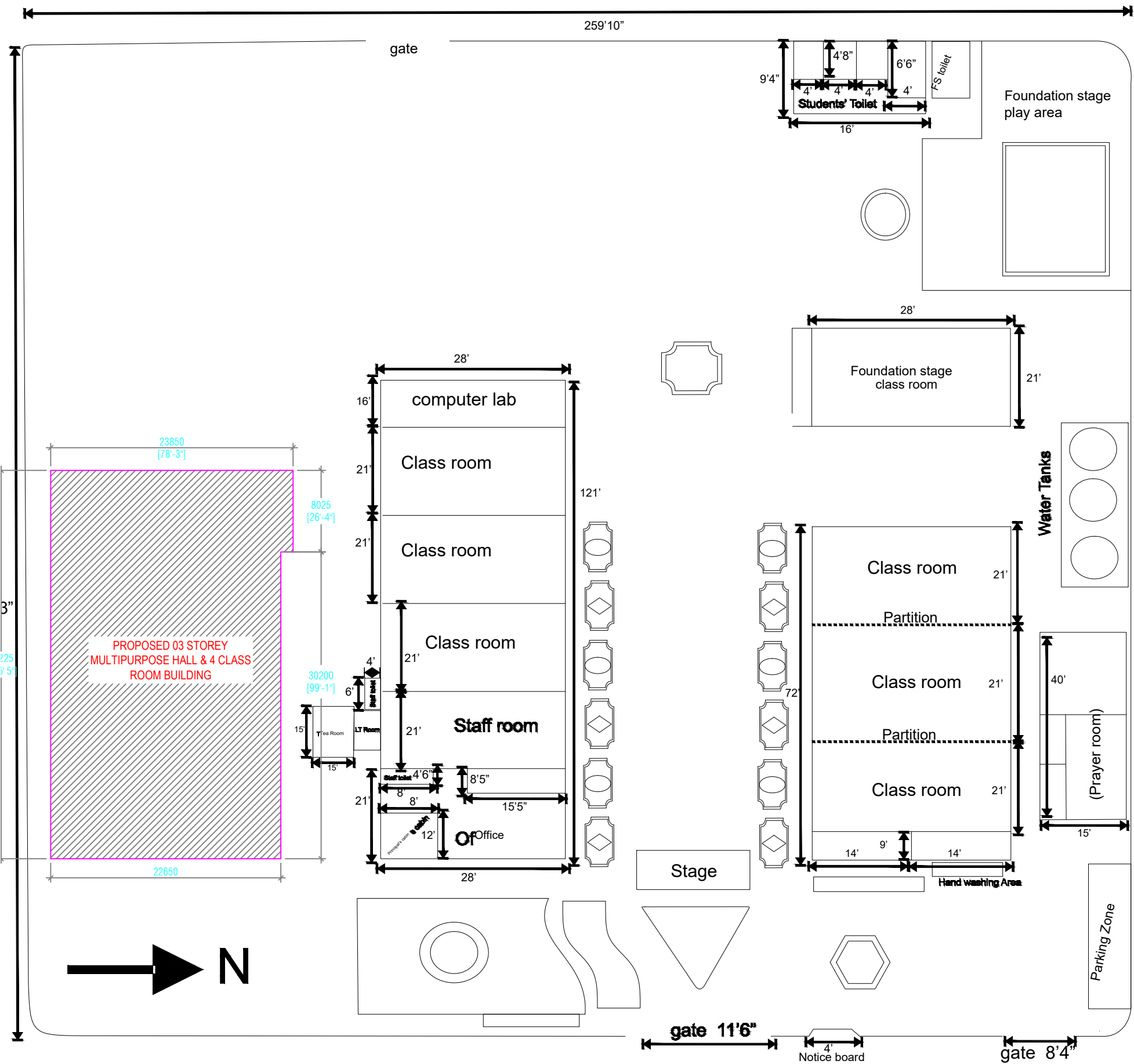
PROPOSED 03 STOREY BUILDING

MULTIPURPOSE HALL AND 4 CLASS ROOM BLOCK

SH. BILEFFAHEE SCHOOL

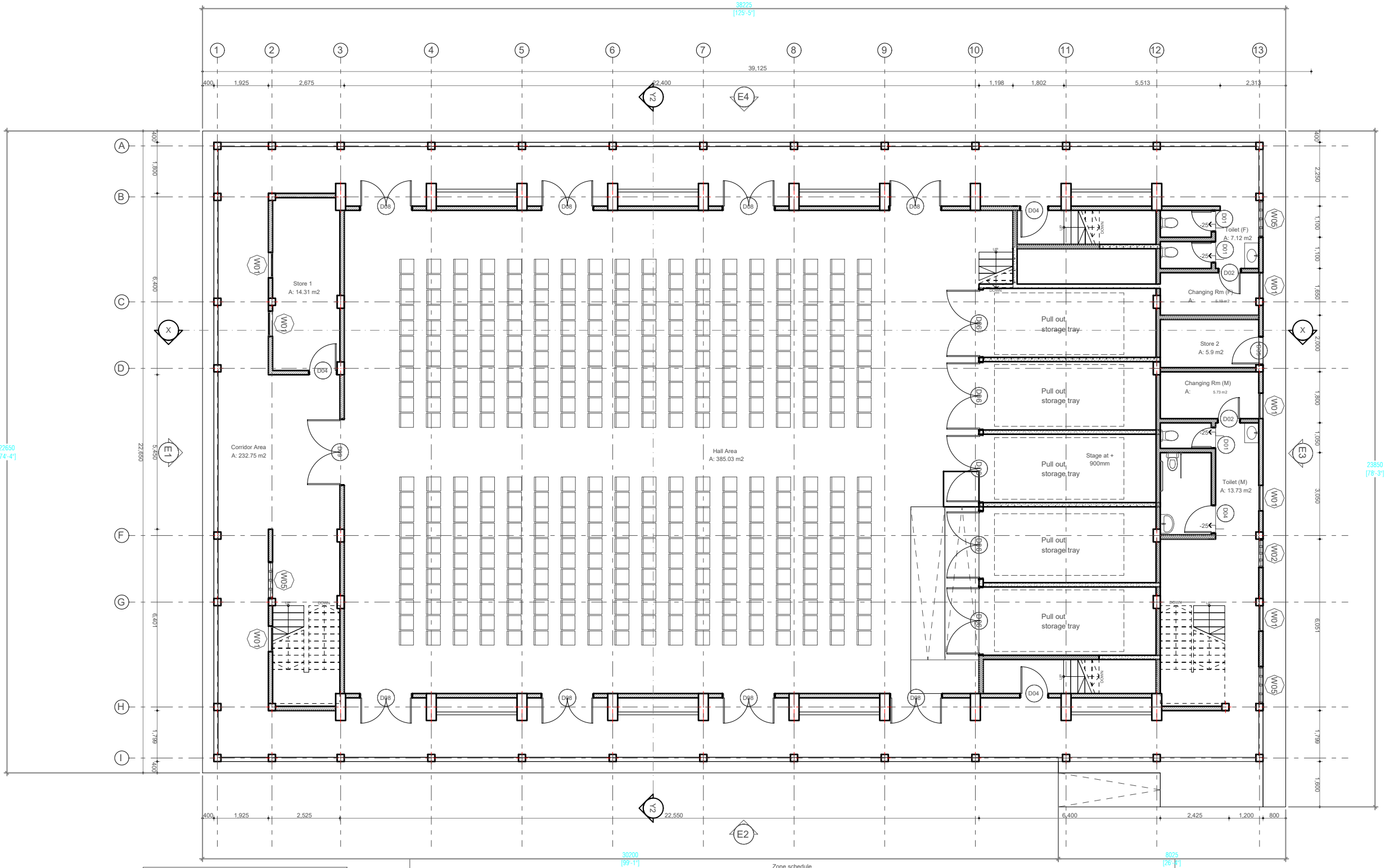
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SITE PLAN
SCALE 1:100

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 01 / 17		

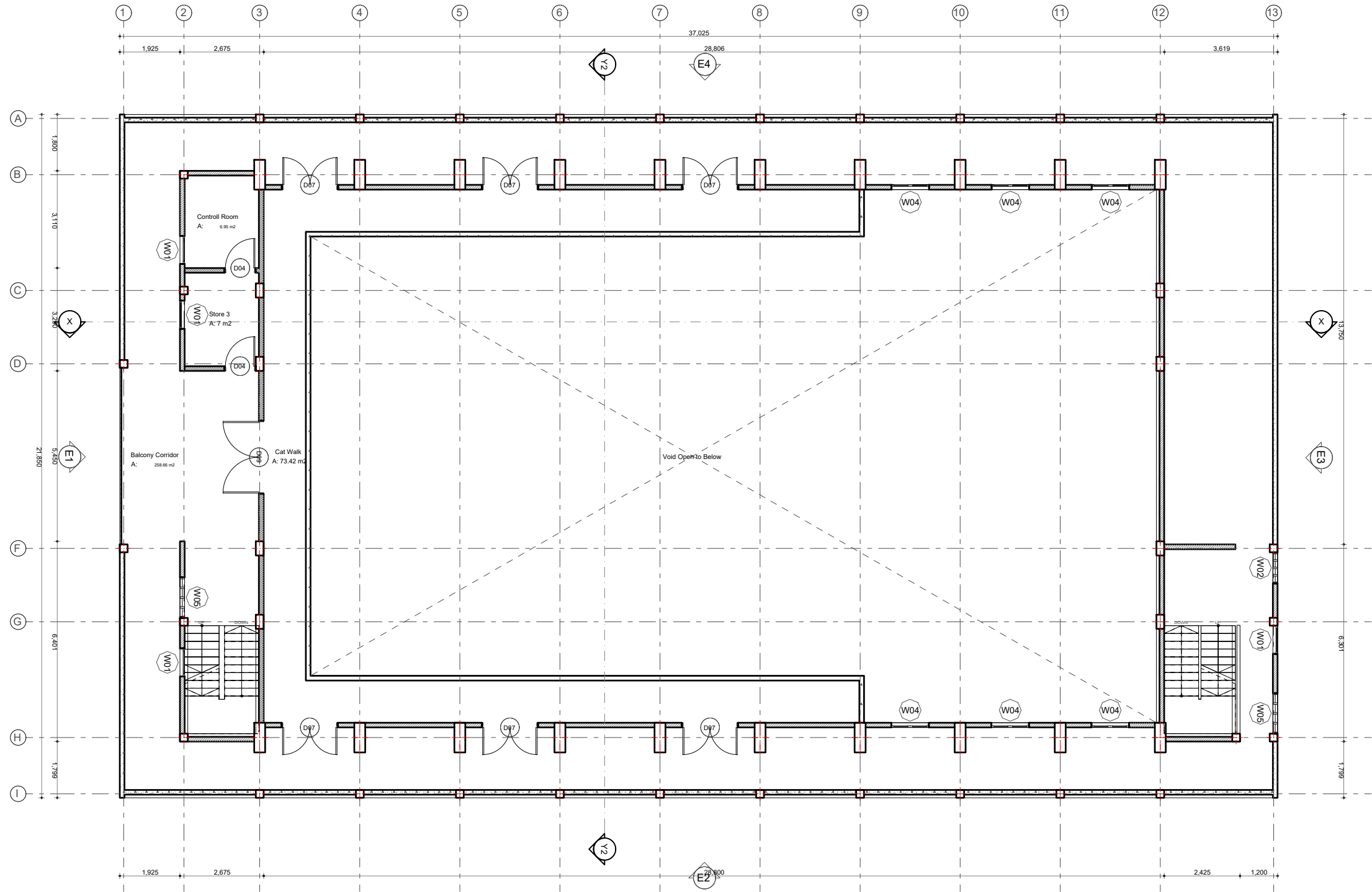


Wall Legend	
2D Plan Preview	Description
	100mm thick solid masonry block exterior wall with 25mm plaster on exterior and 16mm plaster on interior finished with smoothed putty and semi gloss white paint
	100mm thick solid masonry block interior wall with 16mm plaster on both sides finished with smoothed putty and semi gloss white paint
	1200mm high 100mm thick concrete balcony wall as per structural detail
	1200mm high 150mm thick concrete balcony wall as per structural detail
	350mm high 100mm thick exterior planter box solid block masonry wall with 25mm plaster on both sides finished with selected paint

Zone schedule						
Home Story	Zone Name	Area (sqm)	Floor Level	Floor Finishes	Ceiling Level	Wall Finishes
Ground Floor						
	Changing Rm (F)	2.40				
	Changing Rm (F)	5.19	+350	300 X 300mm Homogenous non-slip tiles over 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint
	Changing Rm (M)	2.38				16mm plaster, applied with ground smooth finished with selected paint
	Changing Rm (M)	5.73	+350	300 X 300mm Homogenous non-slip tiles over 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint
	Corridor Area	145.96				16mm plaster, applied with ground smooth finished with selected paint
	Corridor Area	232.75	+335	300 X 300mm Homogenous non-slip tiles over 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint
	Hall Area	239.66				16mm plaster, applied with ground smooth finished with selected paint
	Hall Area	385.03	+350	Self leveling cement floor screed with epoxy floor paint finish		16mm plaster, applied with ground smooth finished with selected paint
	Store 1	14.31	+350	600X600mm homogenous non-skid tiles on 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint
	Store 2	5.90	+350	600X600mm homogenous non-skid tiles on 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint
	Toilet	4.89				16mm plaster, applied with ground smooth finished with selected paint
	Toilet (F)	2.37				
	Toilet (F)	7.12	+350	300 X 300mm Homogenous non-slip tiles over 50mm screed	+3000	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint

Issue	Date	Description
AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A.02 / 17		

GROUND FLOOR PLAN
SCALE 1:150



Wall Legend	
2D Plan Preview	Description
	100mm thick solid masonry block exterior wall with 25mm plaster on exterior and 16mm plaster on interior finished with smoothed putty and semi gloss white paint
	100mm thick solid masonry block interior wall with 16mm plaster on both sides finished with smoothed putty and semi gloss white paint
	1200mm high 100mm thick concrete balcony wall as per structural detail
	1200mm high 150mm thick concrete balcony wall as per structural detail
	350mm high 100mm thick exterior planter box solid block masonry wall with 25mm plaster on both sides finished with selected paint

IES-03 Zone schedule copy 2							
Home Story	Zone Name	Area (sqm)	Floor Level	Floor Finishes	Ceiling Level	Ceiling Finishes	Wall Finishes
First Floor	Balcony Corridor	258.66	+3850	300 X 300mm Homogenous non-slip tiles over 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Cat Walk	73.42	+3850	300 X 300mm Homogenous non-slip tiles over 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Control Room	6.95	+3850	600X600mm homogenous non-skid tiles on 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Store 3	7.00	+3850	600X600mm homogenous non-skid tiles on 50mm screed		Exposed slab soffit to be finished with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint

FIRST FLOOR PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS:		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 03 / 17		

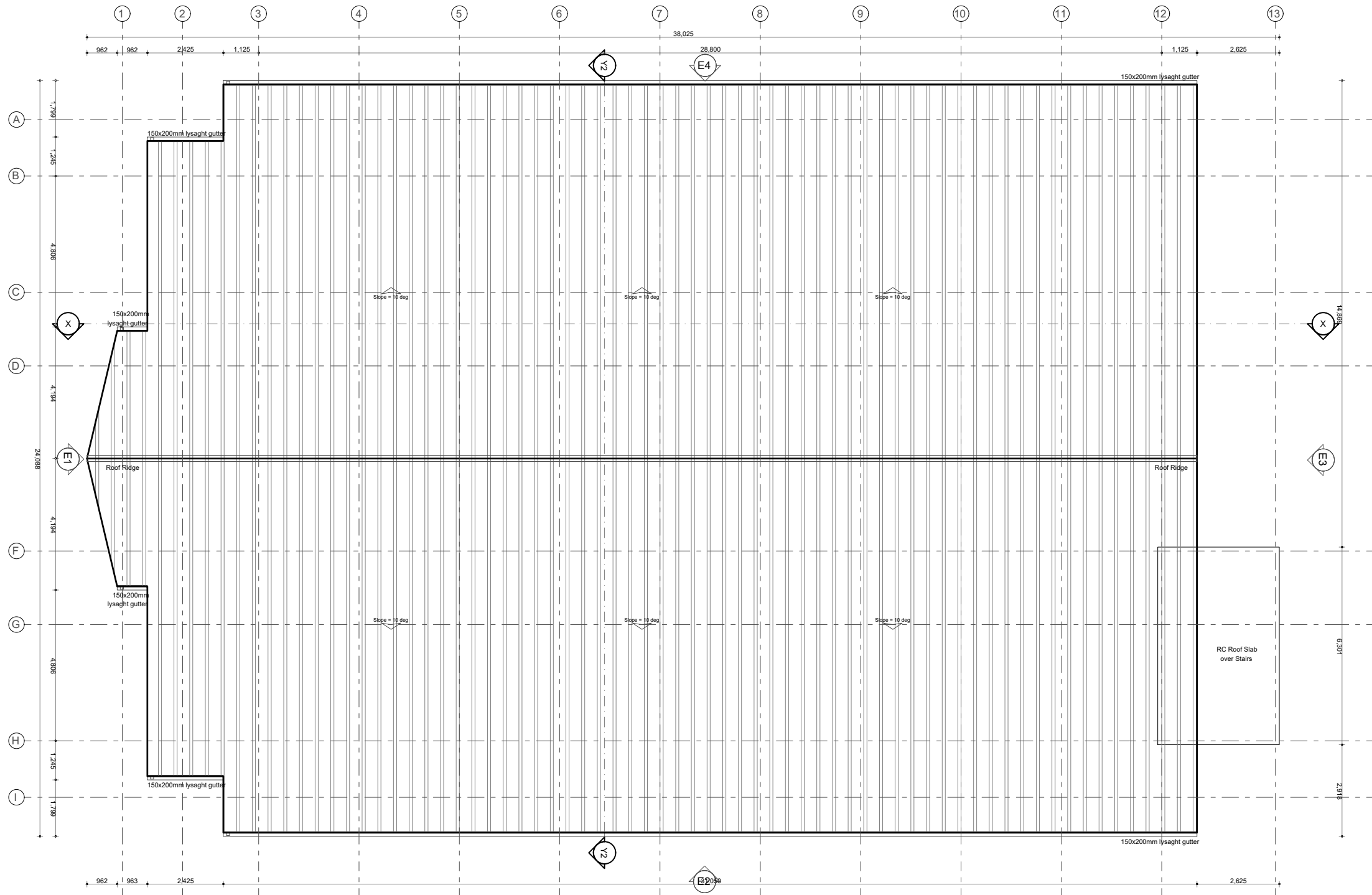


Second Floor
1:100

Wall Legend	
2D Plan Preview	Description
	100mm thick solid masonry block exterior wall with 25mm plaster on exterior and 16mm plaster on interior finished with smoothed putty and semi gloss white paint
	100mm thick solid masonry block interior wall with 16mm plaster on both sides finished with smoothed putty and semi gloss white paint
	1200mm high 100mm thick concrete balcony wall as per structural detail
	1200mm high 150mm thick concrete balcony wall as per structural detail
	350mm high 100mm thick exterior planter box solid block masonry wall with 25mm plaster on both sides finished with selected paint

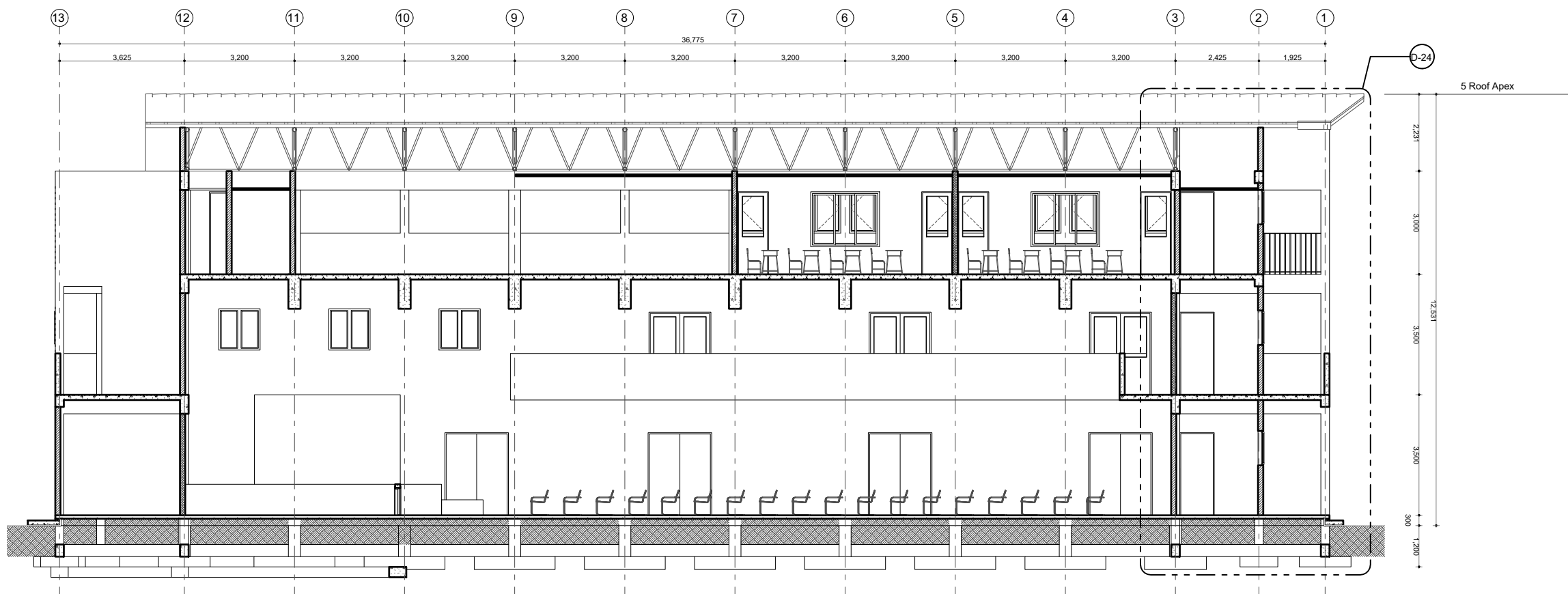
IES-03 Zone schedule copy 1							
Home Story	Zone Name	Area (sqm)	Floor Level	Floor Finishes	Ceiling Level	Ceiling Finishes	Wall Finishes
Second Floor							
	Balcony Corridor 2	410.31	+7335	300 X 300mm Homogenous non-slip tiles over 50mm screed		Exposed Roof as per Roof Design Detail	16mm plaster, applied with ground smooth finished with selected paint
	Class 01	53.13	+7350	600X600mm homogenous non-skid tiles on 50mm screed	+10.150	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Class 02	52.84	+7350	600X600mm homogenous non-skid tiles on 50mm screed	+10.150	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Class 04	54.07	+7350	600X600mm homogenous non-skid tiles on 50mm screed	+10.150	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Class 05	53.78	+7350	600X600mm homogenous non-skid tiles on 50mm screed	+10.150	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Janitor Store 1	4.49	+7350	300 X 300mm Homogenous non-slip tiles over 50mm screed	+9750	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Janitor Store 2	5.06	+7350	300 X 300mm Homogenous non-slip tiles over 50mm screed	+9750	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Store 4	13.82	+7350	600X600mm homogenous non-skid tiles on 50mm screed	+9750	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	16mm plaster, applied with ground smooth finished with selected paint
	Toilet (F)	7.99	+7350	300 X 300mm Homogenous non-slip tiles over 50mm screed	+9750	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	300mm X 300mm Homogenous wall tiles
	Toilet (M)	8.42	+7350	300 X 300mm Homogenous non-slip tiles over 50mm screed	+9750	Cementboard ceiling fixed to timber frames, with ground smooth finish in selected paint	300mm X 300mm Homogenous wall tiles

Issue	Date	Description
AMMENDMENTS		
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PROJECT SH BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 04 / 17		



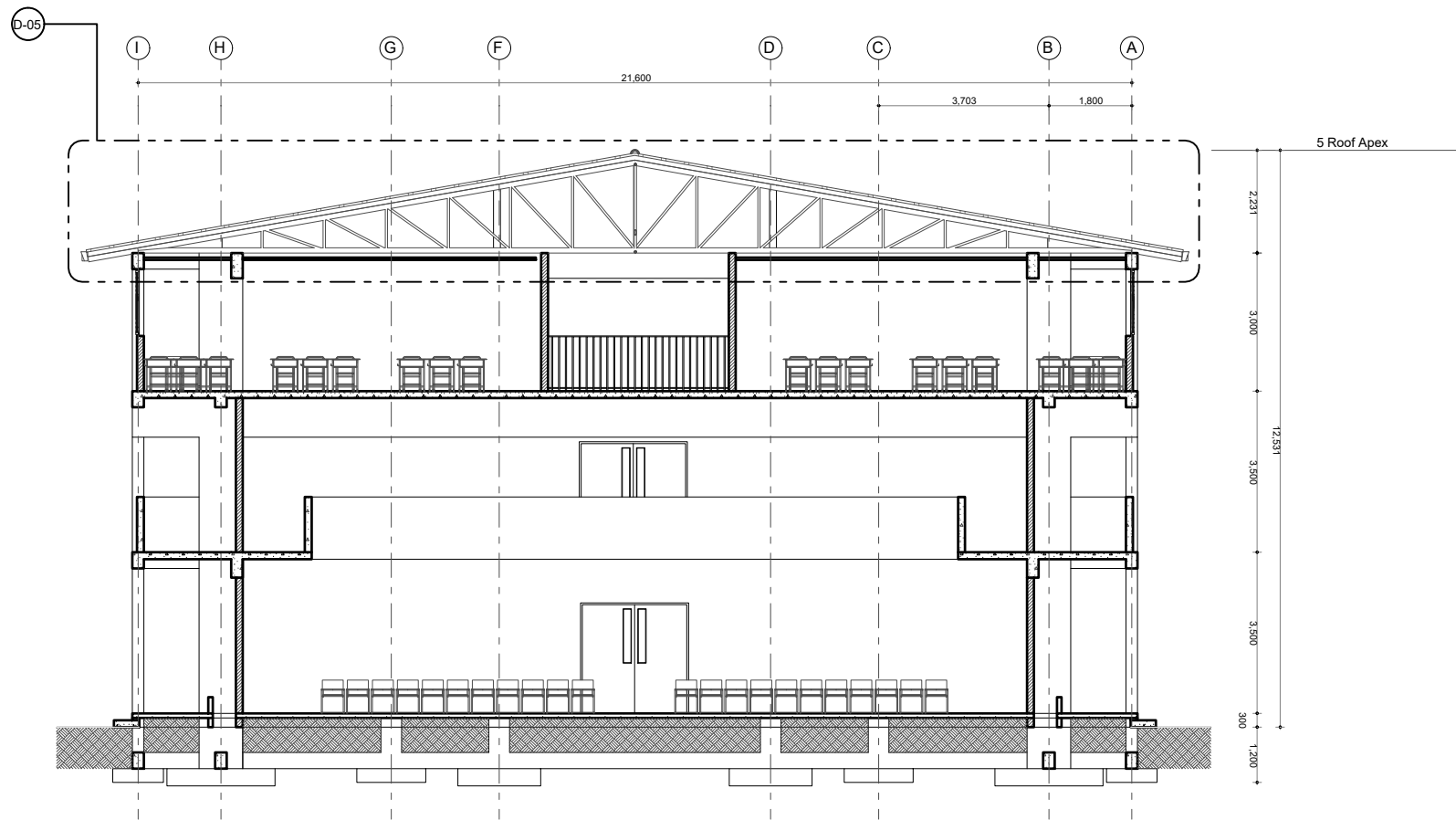
ROOF PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE', REPUBLIC OF MALDIVES		
PROJECT : SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO. : A 05 / 17		



SECTION XX
SCALE 1:100

Building Section X-X
1:100



SECTION YY
SCALE 1:150

Building Section Y-Y
1:100

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO - A.06/17		






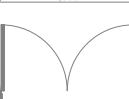



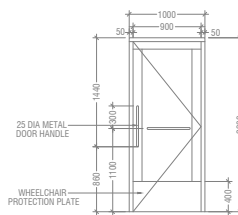

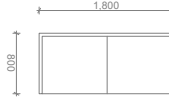


ELEVATION 3
SCALE 1:100



ELEVATION 4
SCALE 1:150

Issue	Date	Description
AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 08 / 17		

All Openings Schedule						
Element ID	D01	D02	D03	D04	D05	D06
Quantity	7	2	16	9	1	3
W x H Size	750×2,400	800×2,400	900×2,400	1,000×2,400	1,000×2,650	1,800×800
Sill height	0	100	0	0	0	0
Head height	2,400	2,500	2,400	2,400	2,650	800
2D Symbol						
View from Side Opposite to Opening Side						
Frame Surface	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)
Leaf Surface	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)
Sash Surface	---	---	---	---	---	---
Glass Surface	---	---	Clear Glass	---	---	---

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All door panel thicknesses are 35mm
All window panel thickness are 25mm
All frame edges shall be trimmed 3mm

All wooden components should be wood stained finish

All glazing should be of 6mm unless specified

External units must comply the following weather conditions:-
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/sqm

All external frames / wall joints must be sealed with silicon sealant and the wedges trimmed with 12X12mm hardwood beading fixed to frames by brass nails

All hardware should be provided for the performance of all functions of the units

Hinges shall conform to

- Door size more than 700X1800mm
WD: 125mm X2 sets
SD: 150mm X3 sets
- Door size less than 700X1800mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets

Door knobs shall be1000mm above FFL

ELEVATION E2

SCALE 1:100

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 09 / 17		

All Openings Schedule					
Element ID	D07	D07	D08	W01	W02
Quantity	6	8	2	15	3
W x H Size	1,800x2,400	1,800x2,400	2,350x2,400	900x1,000	1,000x2,600
Sill height	0	0	0	1,450	50
Head height	2,400	2,400	2,400	2,450	2,650
2D Symbol					
View from Side Opposite to Opening Side					
Frame Surface	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)
Leaf Surface	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	---	---
Sash Surface	---	---	---	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)
Glass Surface	Clear Glass	---	Clear Glass	Clear Glass	---

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All dor panel thicknesses are 35mm
All window muntin thickness are 25mm
All frame edges shall be trimmed 3mm

All wooden components should be wood stained finish

All glazing should be of 6mm unless specified

External units must comply the following weather conditions:-
Wind pressure: 200 kg/sgm
Water tightness: 25 kg/sgm

All external frames / wall joints must be sealed with silicon sealant and the wedges trimmed with 12X12mm hardwood beading fixed to frames by brass nails

All hardware should be provided for the performance of all functions of the units

Hinges shall conform to

- Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X3 sets
- Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets

Door knobs shall be 1000mm above FFL

ELEVATION E2

SCALE 1:100

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 10 / 17		

All Openings Schedule					
Element ID	D07	D07	D08	W01	W02
Quantity	6	8	2	15	3
W x H Size	1,800x2,400	1,800x2,400	2,350x2,400	900x1,000	1,000x2,600
Sill height	0	0	0	1,450	50
Head height	2,400	2,400	2,400	2,450	2,650
2D Symbol					
View from Side Opposite to Opening Side					
Frame Surface	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)
Leaf Surface	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	---	---
Sash Surface	---	---	---	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)
Glass Surface	Clear Glass	---	Clear Glass	Clear Glass	---

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All dor panel thicknesses are 35mm
All window panel thickness are 25mm
All frame edges shall be trimmed 3mm

All wooden components should be wood stained finish

All glazing should be of 6mm unless specified

External units must comply the following weather conditions:-
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/sqm

All external frames / wall joints must be sealed with silicon sealant and the wedges trimmed with 12X12mm hardwood beading fixed to frames by brass nails

All hardware should be provided for the performance of all functions of the units

Hinges shall conform to

1. Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X3 sets

2. Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets

Door knobs shall be 100mm above FFL

ELEVATION E2

SCALE 1:100

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
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ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 10 / 17		

All Openings Schedule					
Element ID	W03	W04	W05	W06	W07
Quantity	4	6	7	8	16
W x H Size	1,200x750	1,200x1,200	1,300x2,600	2,000x1,600	2,950x1,450
Sill height	1,700	1,300	50	800	1,200
Head height	2,450	2,500	2,650	2,400	2,650
2D Symbol					
View from Side Opposite to Opening Side					
Frame Surface	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)
Leaf Surface	---	---	---	---	---
Sash Surface	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)	Powder coated Aluminum (60 micron)
Glass Surface	---	Clear Glass	---	Clear Glass	Clear Glass

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All door panel thicknesses are 35mm
All window panel thickness are 25mm
All frame edges shall be trimmed 3mm

All wooden components should be wood stained finish

All glazing should be of 6mm unless specified

External units must comply the following weather conditions:-
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/eqm

All external frames / wall joints must be sealed with silicon sealant and the wedges trimmed with 12X12mm hardwood beading fixed to frames by brass nails

All hardware should be provided for the performance of all functions of the units

- Hinges shall conform to
- Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X2 sets
 - Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

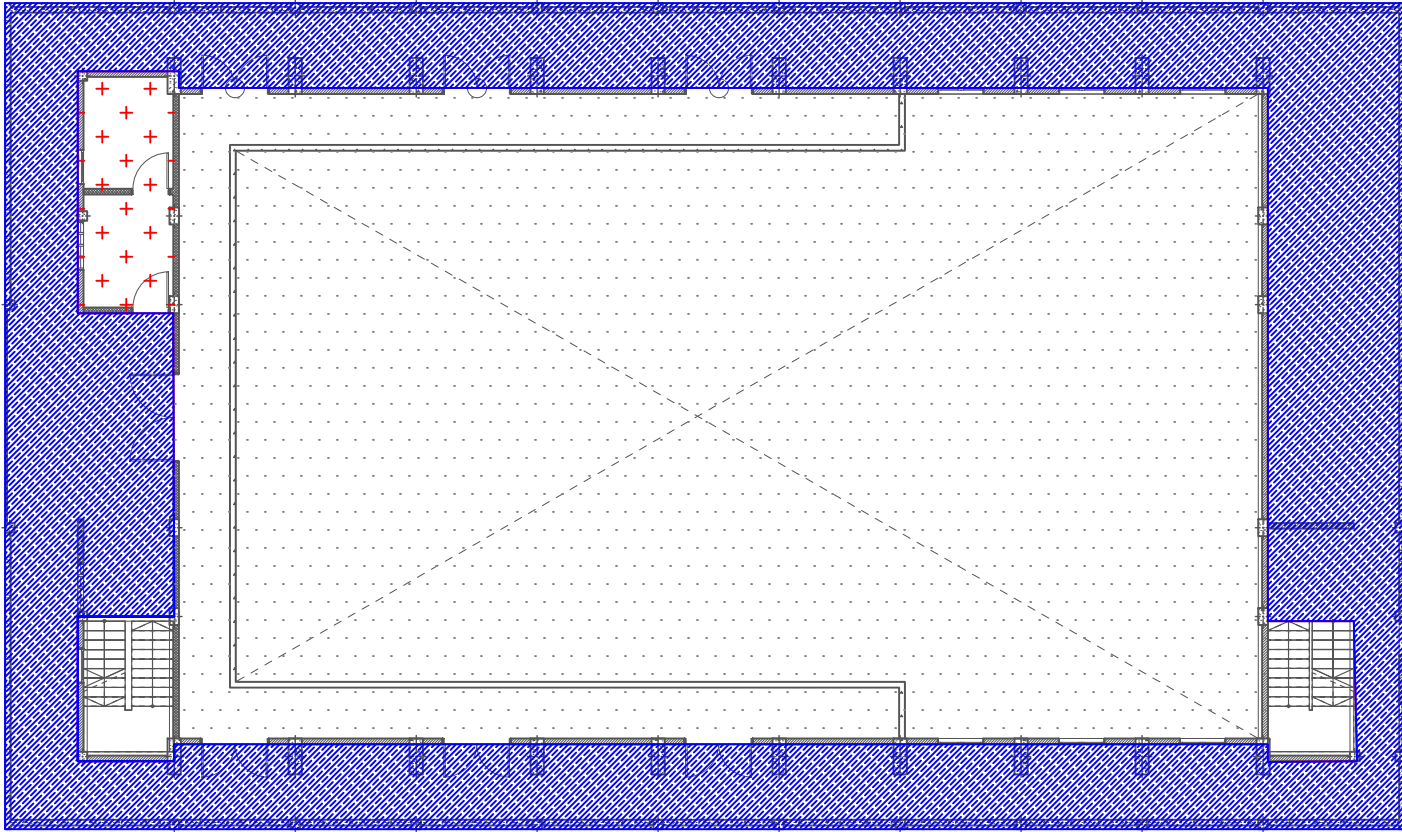
Locks shall be cylindrical with master key sets

Door knobs shall be 1000mm above FFL

ELEVATION E2

SCALE 1:100

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 11 / 17		



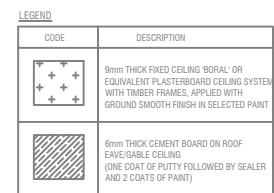
FIRST FLOOR - Reflective Ceiling Plan

SCALE 1:150

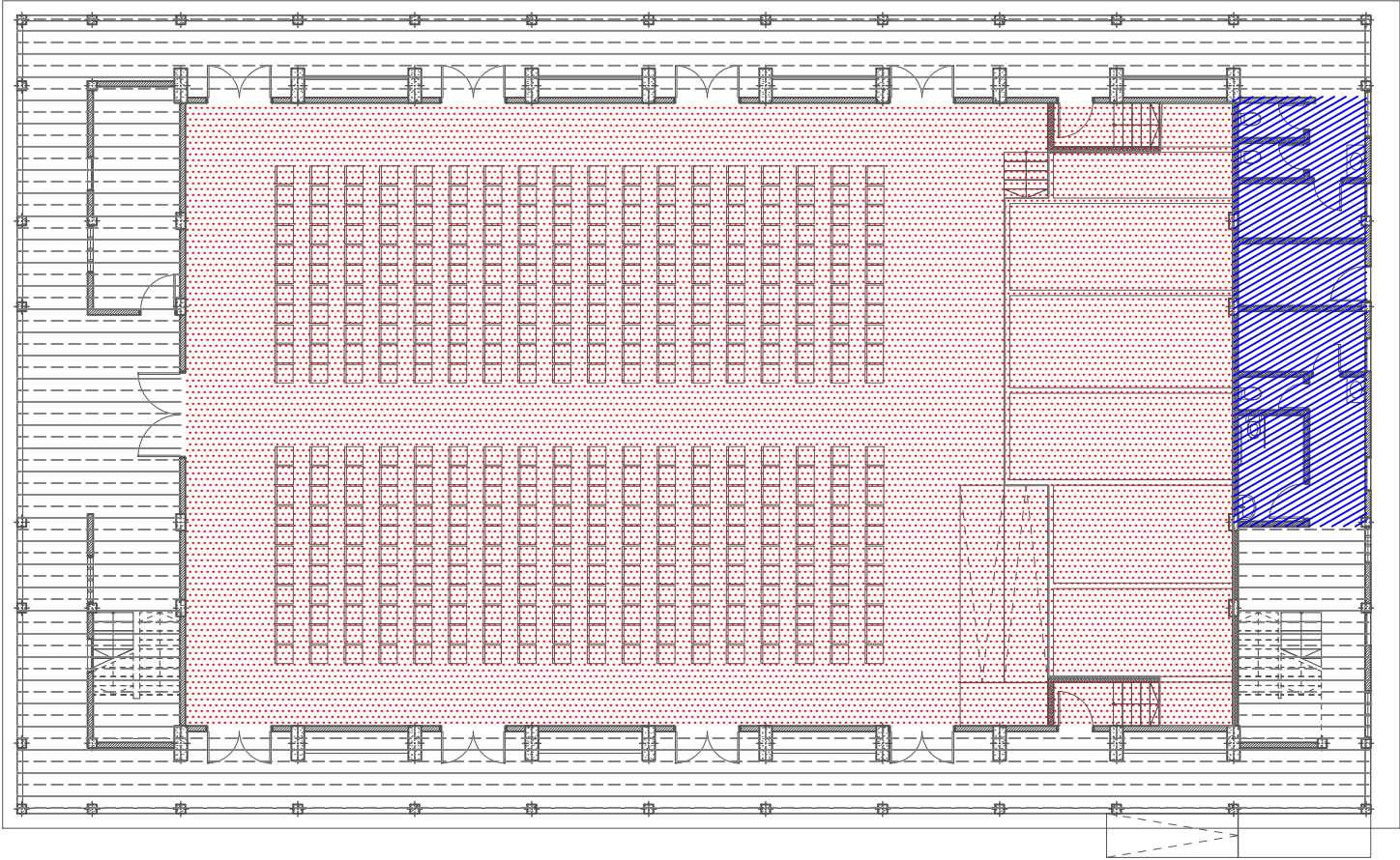
LEGEND



CODE	DESCRIPTION
	EXPOSED SLAB SOFFIT TO BE GROUND SMOOTH IN SELECT PAINT FINISH (ONE COAT OF PUTTY FOLLOWED BY SEALER AND 2 COATS OF PAINT)
	SUSPENDED ACOUSTIC CEILING SYSTEM WITH ALUMINUM FRAMING CEILING HEIGHT : + 7300mm
	8mm THICK CEMENT BOARD CEILING (ONE COAT OF PUTTY FOLLOWED BY SEALER AND 2 COATS OF PAINT)


Issue	Date	Description
AMENDMENTS:		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH BILEFAMKE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT: MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A.13 / 17		



Issue	Date	Description
AMENDMENTS		
<p>PHYSICAL FACILITIES DEVELOPMENT SECTION, MINISTRY OF EDUCATION, MALE REPUBLIC OF MALDIVES</p> <p>PROJECT SH.BILEFAANEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS</p> <p>PROJECT REFERENCE CLIENT: MINISTRY OF EDUCATION</p> <p>ARCHITECT :</p> <p>ENGINEER :</p> <p>DRAWN :</p> <p>CHECKED :</p> <p>SCALE : AS GIVEN</p> <p>DATE : 07.09.2021</p> <p>DWG NO. : A / 14 / 17</p>		

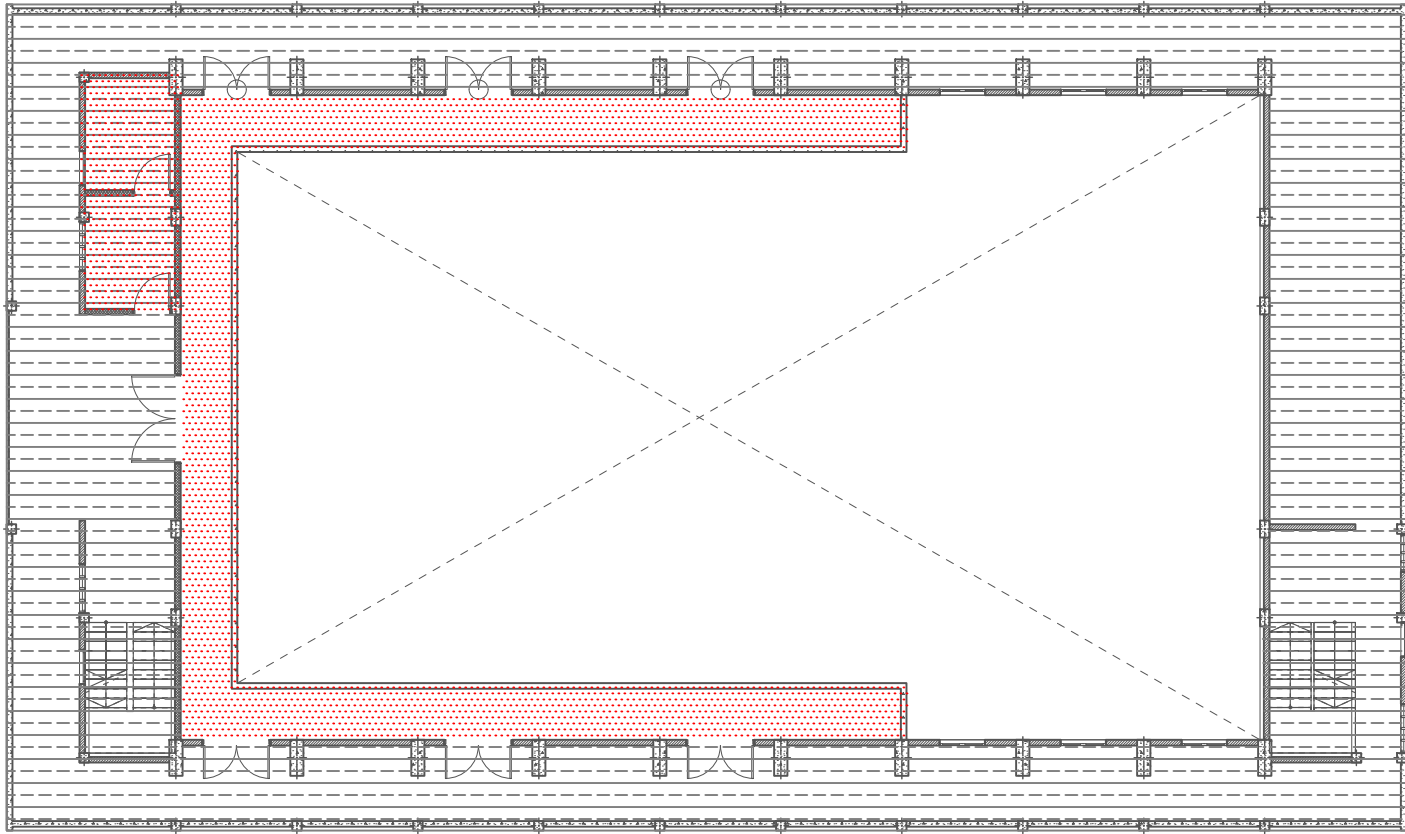


LEGEND	
CODE	DESCRIPTION
	300x300mm HOMOGENOUS NON-SLIP TILES OVER 25mm SCREEDING (TILET)
	600x800mm HOMOGENOUS NON-SLIP TILES OVER 25mm SCREEDING (EXTERIOR TILE)

LEGEND	
CODE	DESCRIPTION
	35mm NORMAL SCREEDING WITH 2.5mm SELF-LEVELING CEMENT WITH EPOXY FLOOR PAINT (2 COATS OF EPOXY)

NOTE:
BADMINTON COURT TO BE DRAWN ON WITH ELASTOMETRIC PAINT IN SELECTED PAINT FINISH
STAGE SHOULD HAVE A CARPET FINISH ON TOP OF THE 25x100mm HARDWOOD FLOORING

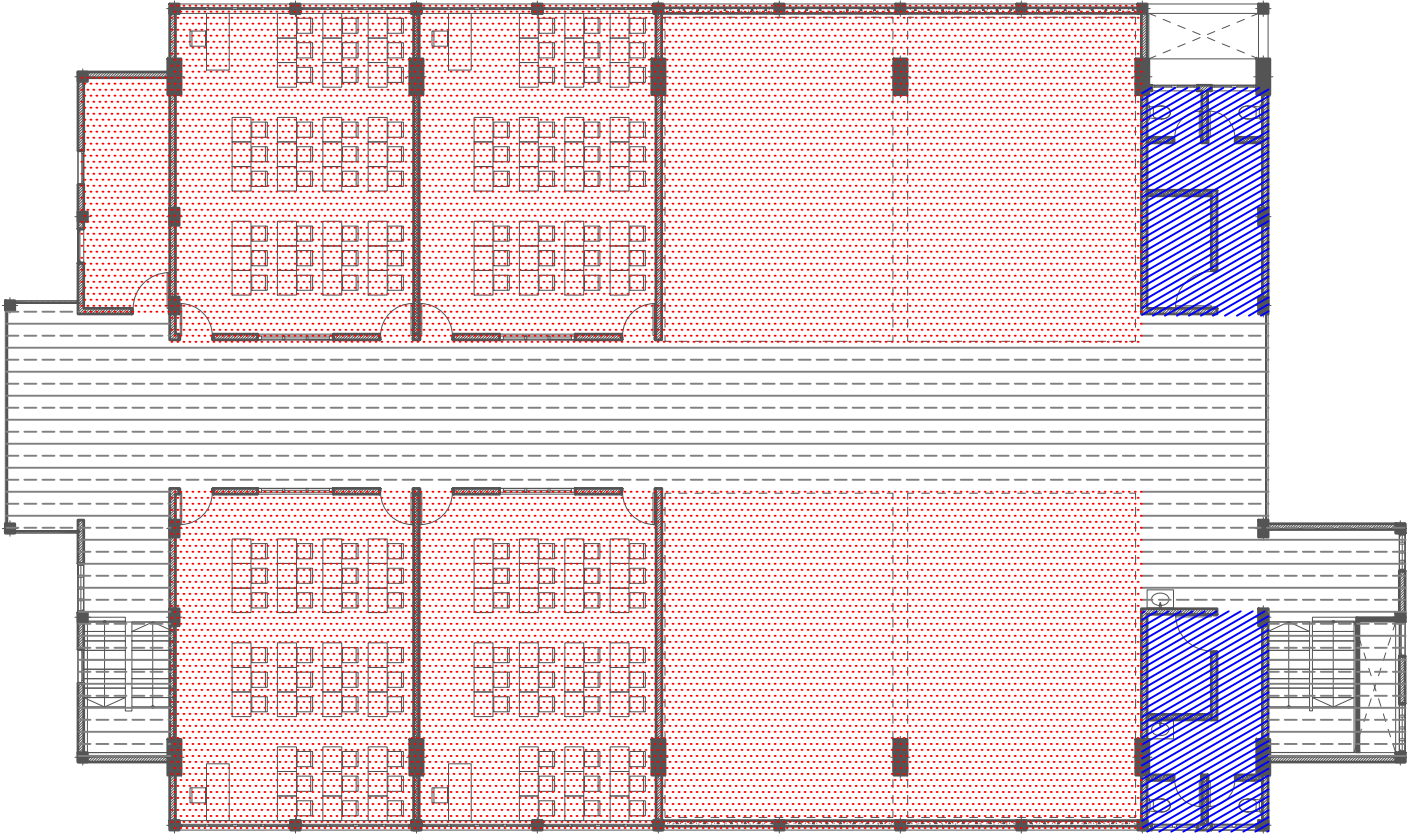
Issue	Date	Description
AMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALÉ, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHNEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT: MINISTRY OF EDUCATION		
ARCHITECT:		
ENGINEER:		
DRAWN:		
CHECKED:		
SCALE: AS GIVEN		
DATE: 07.09.2021		
DWG NO: A 15 / 17		



LEGEND	
CODE	DESCRIPTION
	35mm NORMAL SCREEDING WITH 2.5mm SELF LEVELING CEMENT WITH EPOXY FLOOR PAINT (2 COATS OF EPOXY)
	600x600mm HOMOGENOUS NON-SLIP TILES OVER 25mm SCREEDING (EXTERIOR TILE)

FIRST FLOOR - Floor Finish
SCALE 1:150

Issue	Date	Description
AMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALÉ, REPUBLIC OF MALDIVES		
PROJECT SH BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A.16 / 17		



LEGEND	
CODE	DESCRIPTION
	300X300mm HOMOGENOUS NON-SLIP TILES OVER 25mm SCREEDING (TOILET)
	600X600mm HOMOGENOUS NON-SLIP TILES OVER 25mm SCREEDING (EXTERIOR TILE)
	600X600mm HOMOGENOUS NON-SLIP TILES OVER 25mm SCREEDING (INTERIOR TILE)

Issue	Date	Description
AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & A CLASS ROOMS		
PROJECT REFERENCE		
CLIENT - MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A.17 / 17		

1. General notes

1.1.Do not scale the drawings. All dimensions shall be read from the drawing or computed.Elevations are in millimeters, distances and reinforcement bar sizes are in millimeters.

1.2. In the interpretation of these drawings, indicated dimensions shall govern and distances or sizes shall not be scaled for construction purposes.

1.3. The contractor shall coordinate with the ar, se, ee and other utility and equipment plans for the exact size, number and locations of all sleeves or openings through floor slabs, beams and walls. Any discrepancies or conflict in the setting out lines, levels, details, locations, sizes, reinforcement etc. Of the structural member shall be brought to the attention of the engineer prior to commencement of work.

1.4. All reinforced concrete work shall be done in accordance with the british structural code bs 8110 or ec-en2 building code.

1.5. All structural steel work shall be done in accordance with the british structural code bs5950 parts 1to 9 and ec-en3 in so far as they do not conflict with the local building code requirements.

1.6. All slabs, beams and other structural elements which are not indicated, detailed, designated or inadvertently omitted but are necessary to be coordinated with architectural and other allied engineering plans as well as to complete the structural works in accordance with the intent of the plans and specifications shall be brought up during pre-bids/meetings/negotiations. It is understood that the contractor has provided and included all these items in his bid.

1.7. The contractor shall produce shop drawings and schedules as required for completion of the works and record drawings of the as-built and builder works for the consultant's approval.

1.8. Contractor shall do full coordination between structural, architectural and mep drawings in wet areas to allow for drainage pipes.

1.9. All discrepancies shall be brought to the attention of the consultant engineer proceeding with the work on site.

1.10. All materials to be used in conjunctions shall comply with the requirements of the specified codes, standards and ordinance of relevant building authorities unless noted otherwise in the project specification and /or drawings.

1.11. All dimensions and levels shown on the drawings shall be verified by the contractor . Any discrepancies shall be brought to consultant's attention prior to construction.

1.12. The contractor shall ensure that during construction, no part of the structure is overstressed by excessive construction loads until their completion. Temporary bracing and propping to be provided were required.

1.13. Once the excavation is done to a specified depth, the bearing capacity of the soil shall be confirmed by relevant test, if the value is less than the design bearing capacity the engineer is to be informed immediately.

1.14. The contractor shall submit a method statement for all elements of work and shall not proceed until consultant's written approval is given. The method statement shall provide the contractor's preferable options where such options are available.

1.15. The contractor shall comply with all requirements of the local regulations and requirements of all concerned authorities.

1.16. Quality of concrete finish for all non-plastered columns and beams is to be in accordance with- fair faced concrete as reflected on the architectural drawings and specifications.

1.17. Any structural requirements specified by relevant authorities, which are not covered in notes and specifications are assumed to be duly considered by the contractor.

1.18. All typical details and notes shown on drawings shall apply unless noted otherwise. Typical detail may not necessary be indicated on the plans but shall still apply as shown or described in the details where particular details are noted on the drawings the specified details shall be used.

1.19. The design life of the structure of this project shall maintain a minimum of50 years life period. The primary structural components are to be designed and detailed to satisfy this requirement. Concrete mix supplier shall submit a life cycle analysis which reflect a 50 years design life without maintenance, inspection and repair requirement during this period.

2. Concrete

2.1. All concrete works shall conform to the bs8110 or ec-en, a grade of c25/30 indicates that concrete shall have a fcu compressive strength of 30n/mm2 established from test cubes at 28 days equivalent to a compressive strength of 25n/mm2 established from cylinder tests at 28 days.

concrete mix design shall comply with bs8500-1:2006 as follows:

Miz Number	1	2	3	4
Grade	C30/37	C25/30	C25/30	C16/20
Min cement content (kg/m³)	380	340	340	300
Cement Type	SRC	SRC / OPC	OPC	SRC
Max free W/C ratio	0.4	0.45	0.45	0.55
Slump	75 ± 25	75 ± 25	75 ± 25	100 ± 25
Aggregate	20	20	20	20

mix 1 - used in reinforced concrete works for structures at sea/exposed to sea, water retaining structures and tank structures.

mix 2 - used in reinforced concrete works for ground level and below (sub-structutre) or any reinforced concrete works in contact with soil or water.

mix 3 - used in reinforced concrete works above ground flr lvl (superstructure) for horizontal members (beams/slabs) and vertical members (columns/walls).

mix 4 - used for plain concrete blinding and mass fill.

2.2. Contractor shall implement a trial mix in accordance with the project specifications & authority requirements. Trial mix results shall be submitted for engineer's review & approval prior to commencing concreting.

2.3. Contractor shall submit the details of additives, plasticizers, micro silica, curing compounds, waterproofing agents, etc. Application should follow strictly the manufacturer recommendation. It is contractors responsibility to ensure that all constituents of concrete are compatible to each other.

2.4. Maximum percentage (by weight) of salt contents permissible in aggregates used for concrete, hollow blocks & hourdi blocks, etc, shall be as follows:

- a) acid soluble chlorides in aggregate - (fine 0.03%, coarse 0.02%)
- b) acid soluble sulphate in aggregate - (fine 0.3%, coarse 0.2%)

2.5. Concrete shall be cured by an approved means in accordance with the specifications.

2.6. Aggregates shall be from approved source and in accordance with the specifications.

2.7. Openings, sleeves:

- a) no holes, sleeves or penetrations be placed vertically or horizontally through beams unless approved by the engineer.
- b) no holes to be made in slabs unless approved by the engineer.

2.8. Construction joints:

- a) the contractor shall submit to the engineer for approval a plan marked up showing the location of all construction joints
- b) horizontal construction joints shall not be made in beams, unless approved by the consultant or engineers.
- c) vertical construction joints may be located at midspan of slabs or beams after reviewed and approved by the engineers.
- d) contractor shall submit shear friction and the additional required reinforcement calculation of construction joint at any location) for engineers review and approval.

3. Reinforcement

3.1. The reinforcement used in the reinforced concrete shall be round, deformed type 2 bars marked as (t) to indicate high yield strength of 460n/mm2 to bs4449 or type 500b to ec-en. The carbon equivalent of rebars should not exceed 0.51 for grade 460.

3.2. Reinforcement details shown are indicative. The contractor shall prepare detailed shop drawings & full bar schedules in accordance with the design drawings and shall be cut and bent in accordance with bs 8666 and aci 315-09 for the engineer's approval at least four weeks prior to commencement of reinforced concrete work and after coordinating with all concerned parties.

3.3. Lap lengths and anchorage lengths of reinforcement shall be as per bs 8110 and ec-en. Additional lapping if required to be provided with engineer's approval. The minimum lap length of reinforcement shall be the maximum of (45 bar dia in general and 50 dia for tension) or the values of the table a.

Table a : schedule of lap splices

Bar dia	lap splices length (mm)
10	500
12	600
16	800
20	1000
25	1250

3.4. Spacer bars in beams shall be a minimum t25 or the size of bar if greater at 1000mm c/c; chairs in slabs shall be a minimum t12@1000mm c/c; and minimum ties in walls shall be t8@1000mm c/c.

3.5. Clear cover to reinforcement including links, stirrups, and ties shall be as follows:

A) structure in contact with ground

Footings	= 60mm
Wall and column	= 50mm
Ground beam	= 50mm
Slab at ground level	= 50mm

B) super structure

Columns	= 40mm
Beams	= 35mm
Slabs	= 30mm
Walls	= 40mm
All concrete elements in contact with water/splash zone = 50mm	

3.6. Reinforcement bars to be cut, bent or adjusted to clear all openings and interfering structures to suit at site to the approval of the consultant or engineer.

3.7. For holes in slabs up to 300x300 sq., reinforcement is to be cut and replacement bars fixed adjacent to the hole extending 50x bar diameter beyond the hole.

4. Fire resistance

4.1. All structural concrete members between units on boundaries are designed to maintain fire resistance of 2 hours.

5. Cracking

5.1. The cracking of the structural concrete in general is restricted to 0.30mm.

6. Earthwork & foundations

6.1. Foundation detail design is based on the assumed safe allowable bearing capacity has been taken as 150kpa. The actual requirement for the foundation design is to be verified based on final geotechnical report for the project.

6.2. Excavations for foundations down to formation level shall be carried out by mechanical means, except for the last 100mm of excavation which is to be carried out by manual methods and recommended by geotechnical consultant.

6.3. The formation level of foundation is to be inspected and approved by the geotechnical engineer before commencement of the work.

6.4. Engineering fill (unless specified otherwise as a higher quality material) shall be selected well graded granular material approved by the engineer with a minimum soaked cbr of 15% compacted not exceeding 250mm in layers to 95% maximum dry density as per geotechnical investigation report recommendations in accordance with the specification. However, a minimum cover of 250mm back fill material shall be provided at the top of foundations below the blinding to cast against.

6.5. Efficient site drainage during and after construction of the project should be provided by the contractor.

6.6. Site inspection by a qualified engineer should be carried out after completion of the excavation works and after preparation of the proposed foundation level to ensure that the contact surface is free from any loose/soft layer and properly prepared for the foundation.

7. Concrete workmanship

7.1. All concrete without plaster shall be fair finish unless noted otherwise.

7.2. All concrete surface to have plaster are to be hacked to have an adequate surface key.

7.3. All concrete is to be cured by an approved method-water pounding or curing compound.

7.4. All types of construction joints in concrete shall be at a specified locations and approved by the engineers.

7.5. All substructure concrete works shall be protected with water proofing as per standard details & specifications.

7.6. All concrete shall be compacted using a mechanical vibration process.

7.7. 25x25mm chamfers to external corners and edges shall be provided in accordance with specifications and directed by the engineer.

8. Structural steel

8.1. All structural steel works shall be in accordance with bs 5950 parts 1 to 9 or ec-en3.

8.2. Maximum dimension of holes shall be in accordance with bs 5950 : part 1 : 2000 table 35, unless indicated otherwise.

8.3. The contractor shall provide whatever temporary ties or bracing necessary for a safe and proper erection of the steel structures.

8.4. Welding shall comply with bs en 1011-1: 2009, bs en 1011-2 : 2001 and bs bs en 1011-8 : 2004.

8.5. Contractor shall do a detailed design for aluminum shades and to submit full design calculations and detailed shop drawings for all steel sections and connections to the engineer for approval prior to commencement of fabrication.

8.6. All rolled products and plates shall conform to bs en 10025-2. Cold form welded structural hollow sections shall conform to bs en 10219-1. Hot finish hollow sections shall conform to bs 10210-1 unless noted otherwise on drawings.

8.7. All connections shall be made with minimum 2nos. Galvanized grade 8.8 to bs 3692 with a minimum diameter of 20mm and minimum yield strength of 627mpa and minimum ultimate strength of 765mpa and electrodes to bsd 639, unless noted otherwise.

8.8. Unless noted otherwise on the drawings, all connections shall be in accordance with the following minimum requirements:
A) all welds shall be at least 6mm continuous fillet welds all around.
B) all structural bolted connections should be galvanized minimum 85 micron and with a minimum of 2 bolts per connection. Purlin bolts shall be in accordance with the suppliers recommendations.
C) all gusset plates shall be at least 4mm thick.
D) all cap plates shall be at least 4mm thick.
E) all base plates shall be at least 4mm thick.

8.9. As minimum all structural steel members shall be shot blasted to sa 2.5, galvanized, primed & painted as below unless noted otherwise:
A) hot galvanization (dft 200micron)
B) primer coat to contain 2 coats of zinc rich epoxy primer (dft 75 micron)
C) top coat to contain 2 coats of polyurethane enamel paint (dft 125 micron)

8.10. All structural steel work shall be corrosion protected in accordance with the structural specifications.

8.11. All steel should conform to the following:
A) shs, rhs and chs sections bsen 10210 s275 fy=275mpa
B) all angles and channels u.n.o bsen 10025 s275 fy=275mpa

8.12. All steel columns to be central on grids or equally spaced between grids unless noted otherwise.

8.13. All steel beams to be central on grids or equally spaced between grids unless noted otherwise.

8.14. All steel dimensions are to center line of section unless noted otherwise.

8.15. All bracing is to be set out on the centroids of bracing members and on the center line of beams and columns unless noted otherwise.

8.16. Where bracing is shown offset from center of members the contractor shall design and provide all necessary stiffeners.

8.17. Contractor to provide all leader railing as required to support free edges not trimmed with cold formed or mild steel work. To be provided in accordance with architect 's drawings.

8.18. Location of any connections, splices not shown in the drawings shall be submitted with design for engineer's approval. No splices shall be made unless shown in the drawings and as approved by the engineers.

8.19. Contractor shall do a full coordination between architecture and structural drawings for the steel support for shade elements, locations and sizing connections with structural concrete elements and sections. Care shall be taken to prevent dissimilar metal corrosion.

9. Masonry blocks

9.1. Design and construction of all blocks shall comply with bs 5628 : parts 1.2 & 3 : 1992 or en-ec6. The contractor shall submit a construction method statement prior to commencing the works.

9.2. Wall ties in accordance with bs 1248 - cp 121 part 1.73.

9.3. All block wall joints to manufacturers specifications.

9.4. All block work walls are to be considered as non-load bearing partitions unless noted otherwise in drawings.

9.5. Block walls shall be reinforced horizontally and vertically as per manufacturers requirements.

9.6. Masonry wall mechanical properties

young's modulus	= 3.5e+006 kn/m2
poisson's ratio	= 0.25
density	= 20kn/m3
min.compressive strength	= 3.5 mpa

10. Design & loading

10.1. Consultant design
design and construction of reinforced concrete structural members, shall be in accordance with bs8110 & ec-en2 and the structural steel members to bs 5950 & ec-en3.

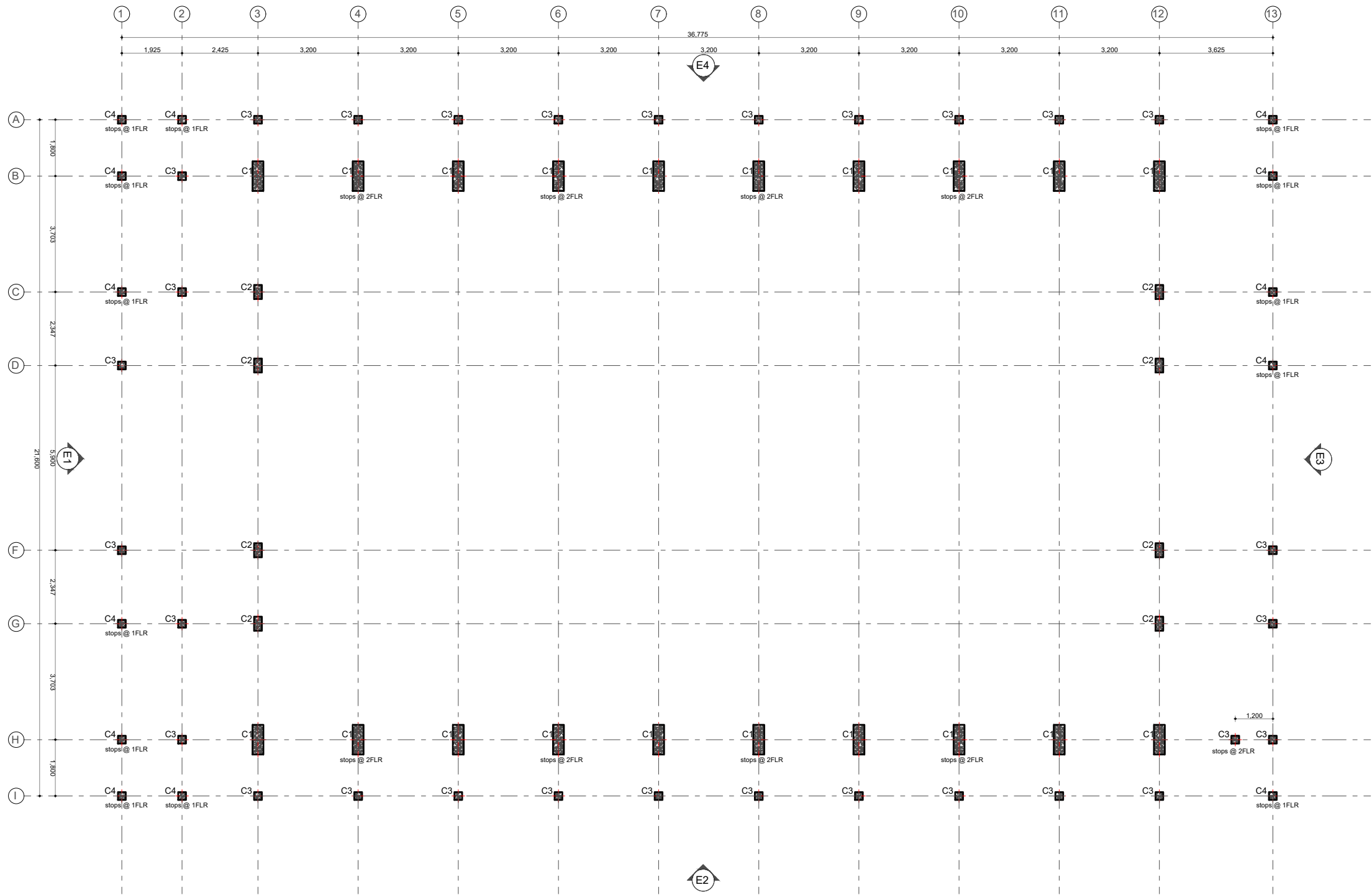
10.2. Contractor design
the contractor is responsible for the design of all temporary works. (shoring for excavation, signage... Etc) and the following items of permanent secondary works. (subjected to engineers review and approval)
a) precast concrete elements
b) architectural facade and support steelwork
c) non load bearing feature columns
d) all secondary steel works
e) structural steelwork connections
f) structural support for mep services
g) shade structures
h) balustrade and crash barrier
i) structural glass
j) interior signage

the design of the primary structure is considering the interfaces with these structures) loading reactions, opening...etc.) And were detailed to accommodate these elements into the design.
the contractor shall submit a full detail design for the wall and boundary wall foundation, also the contractor to do full coordination between the structural foundation for villas (including the water tanks, and the boundary wall for clashes, the contractor shall produce shop drawings for the boundary walls for engineer's approval.

10.3. Loading
a) superimposed (dead loads & live loads) as per bs 6399 or en-ec1.
b) self-weight & densities as per bs 648 or en-ec1.
c) wind loads as per bs 6399 or en-ec1 (mean wind speed = 25m/s).

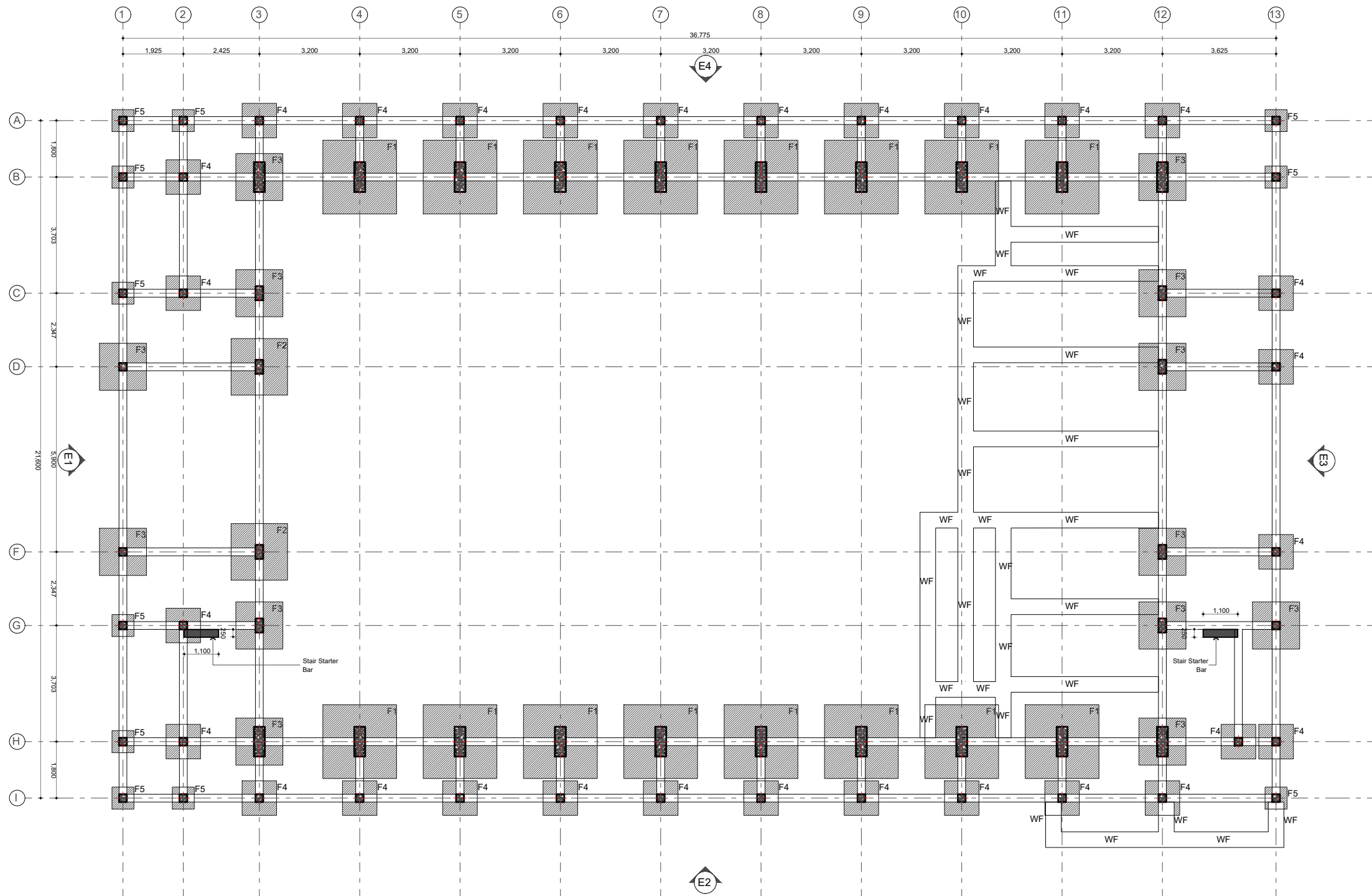
11. Timber

11.1. All timbers shall be in accordance with bs 5268 or ec-en5



COLUMN LAYOUT
SCALE 1:150

Issue:	Date:	Description:
AMMENDMENTS:		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 01 / 27		



Foundation Notes:

Dimensions	Reinforcement	Foundation Depth
F1 2350X2350X375	T12@ 125C/C B/W (B)	1275 mm
F2 1800X1800X375	T12@ 150C/C B/W (B)	1275 mm
F3 1500X1500X300	T10@ 150C/C B/W (B)	1200 mm
F4 1100X1100X300	T10@ 150C/C B/W (B)	1200 mm
F5 700X700X300	T10@ 150C/C B/W (B)	1200 mm

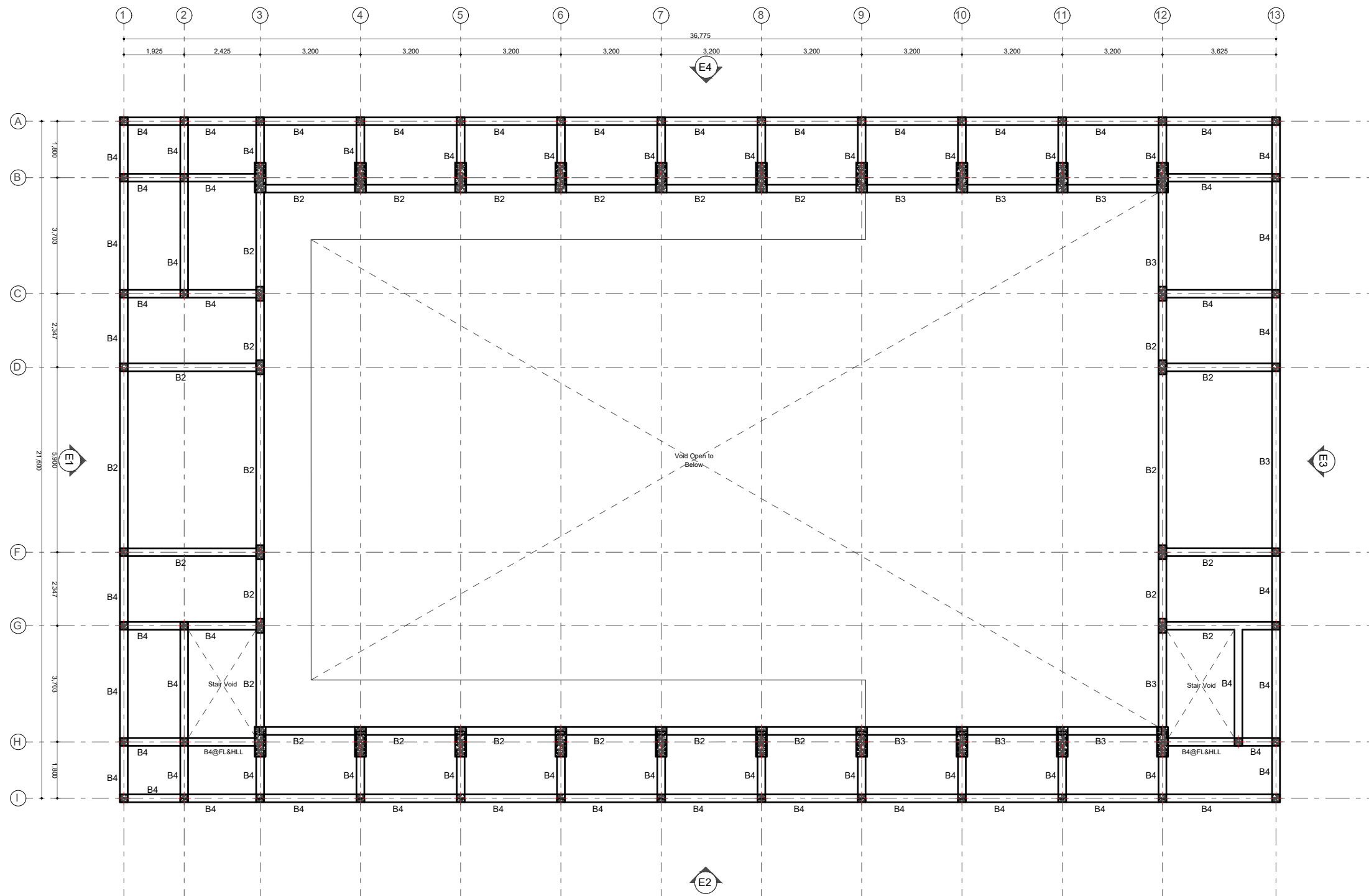
Foundation Depth = as specified on Pad Footing
Ground Slab = 100mm thick RC slab on fill reinforced with T10@200C/C (B/W)

All Footings are to be laid on top of 50mm thick lean concrete
Add waterproofing admixture and apply waterproofing to all substructure (below ground elements)

All Tie Beams are TB1

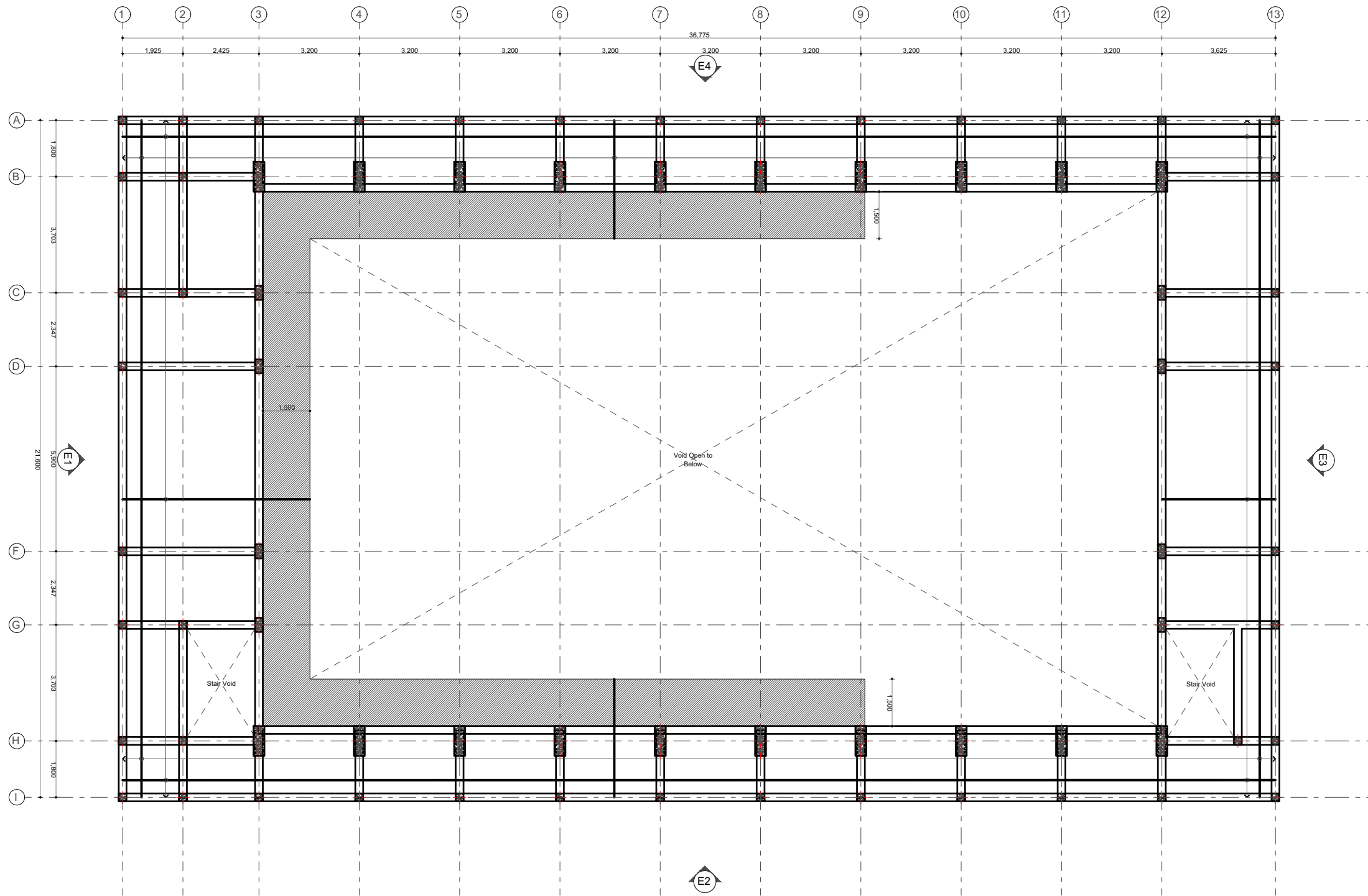
Issue	Date	Description
AMMENDMENTS.		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 02 / 27		

FOUNDATION PLAN
SCALE 1:150



FIRST FLOOR BEAM PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALÉ, REPUBLIC OF MALDIVES		
PROJECT SH. BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT: MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 03 / 27		



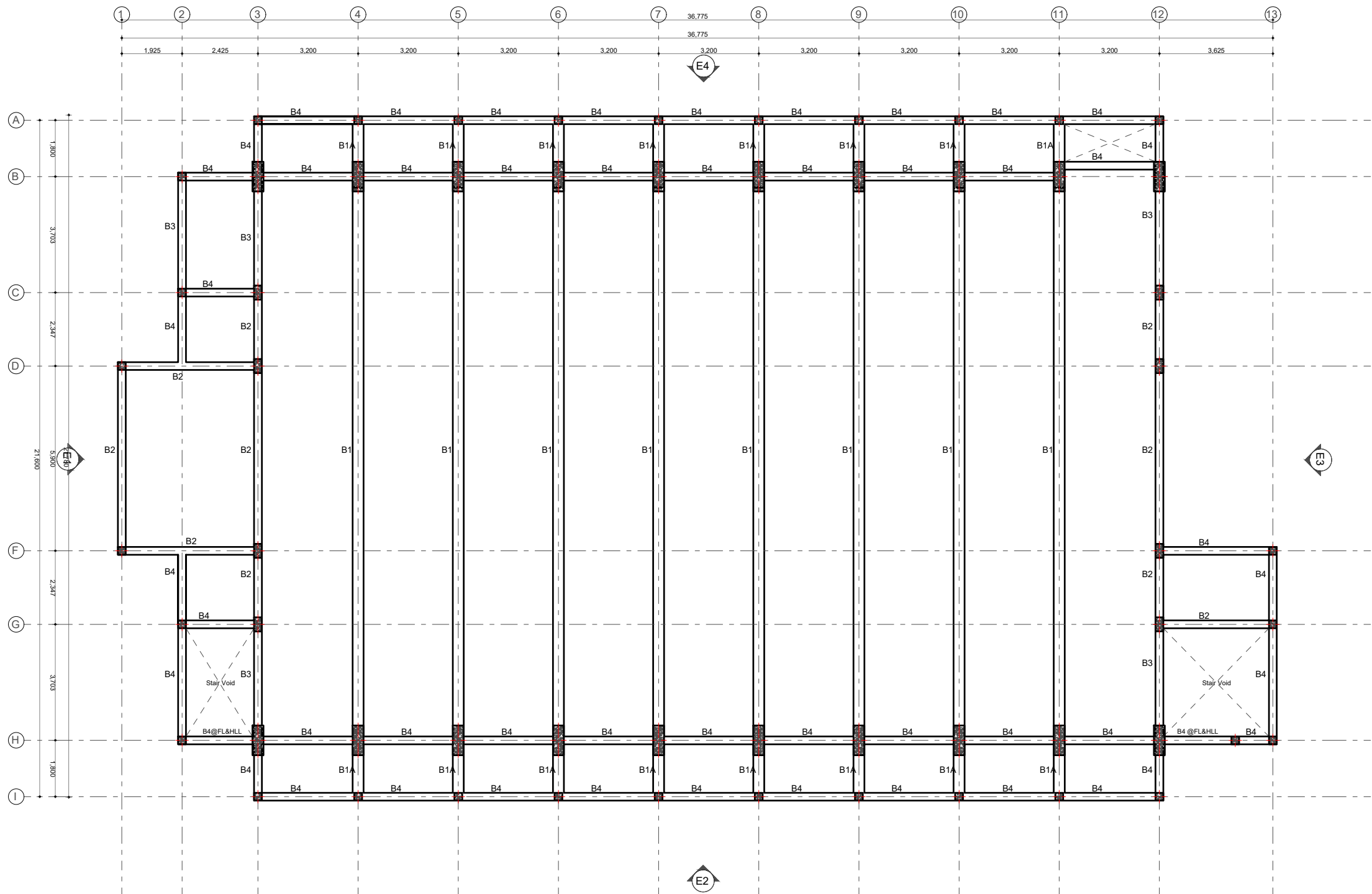
Notes:

Slab thickness = 160mm
Slab thickness = 150mm

Bottom Reinforcement = T10@150 C/C B/W (not shown)
Top Reinforcement = T12@100 C/C (as shown, unless specified)
Distribution Steel = T12@100 C/C (unless specified)
Reinforcement discontinuous at voids

FIRST FLOOR REINFORCEMENT PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 04 / 27		



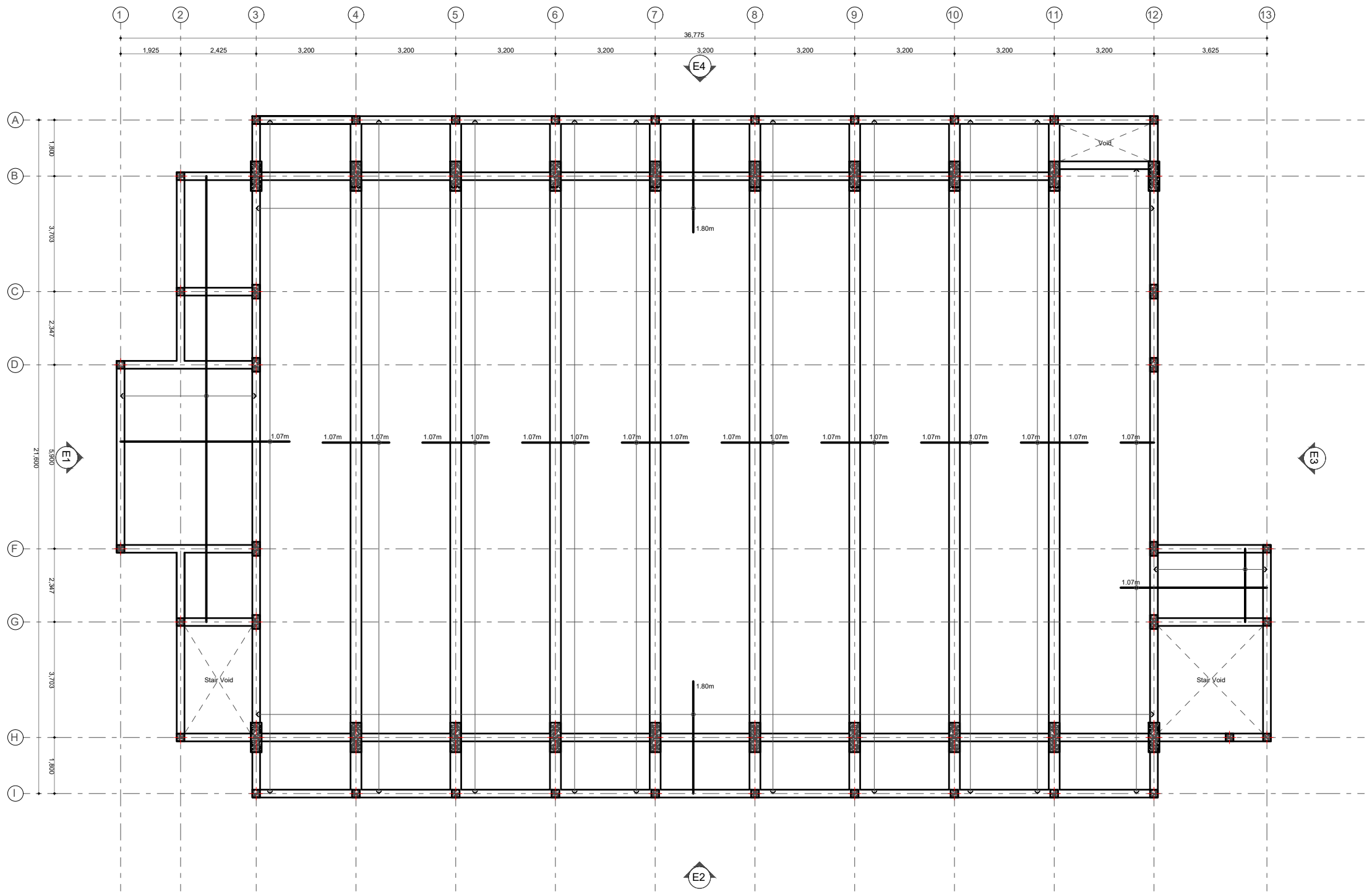
Notes:

Slab thickness = 150mm

Bottom Reinforcement = T10@150 C/C B/W (not shown)
Top Reinforcement = T10@300 C/C B/W (not shown)
Additional Top Reinforcement = T10@300 C/C (as shown)
Reinforcement discontinued at voids

SECOND FLOOR BEAM PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : 5 05 / 27		

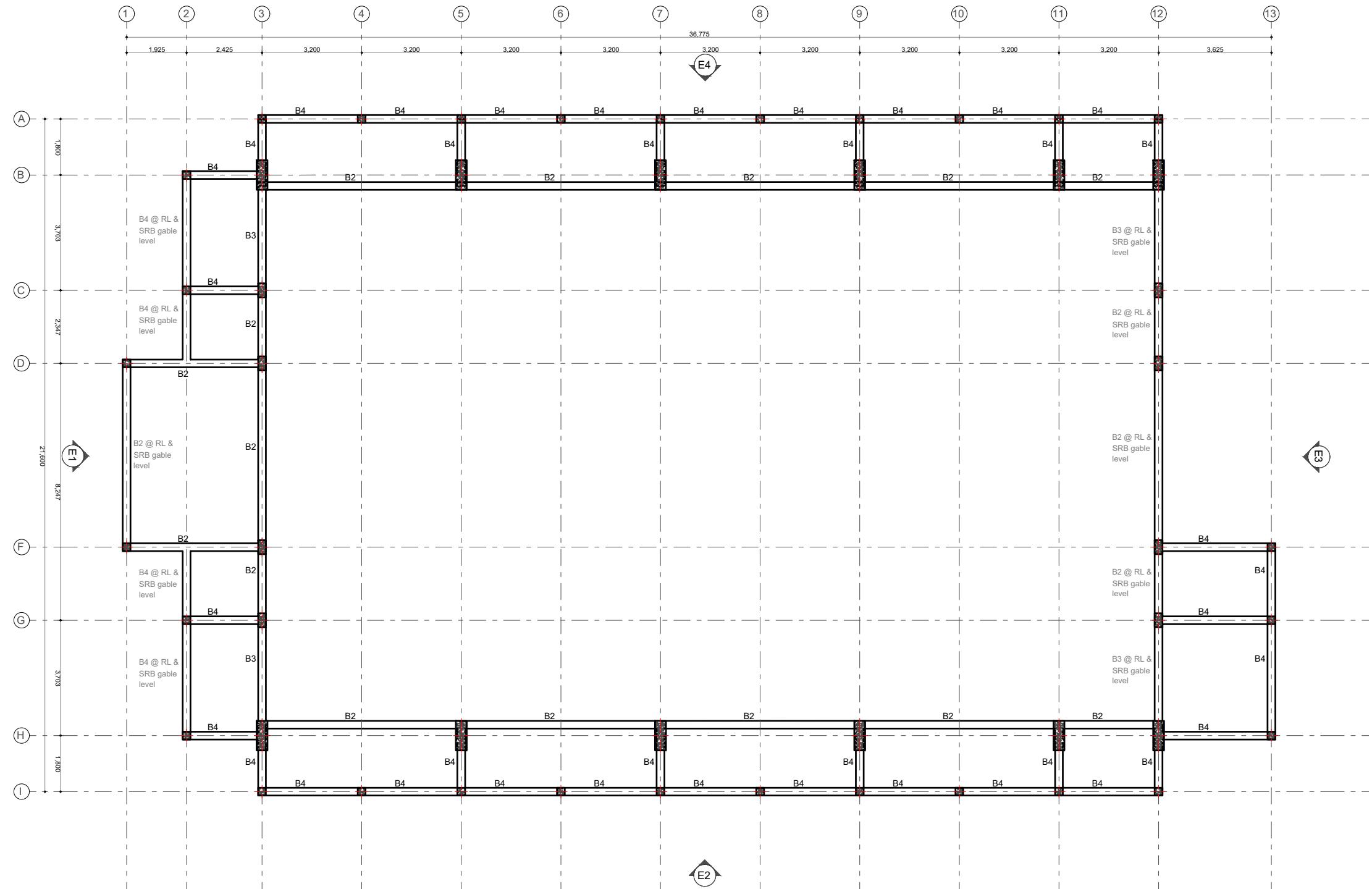


Notes:

Slab thickness = 140mm
Bottom Reinforcement = T10@150 C/C B/W (not shown)
Top Reinforcement = T10@150 C/C B/W (not shown)

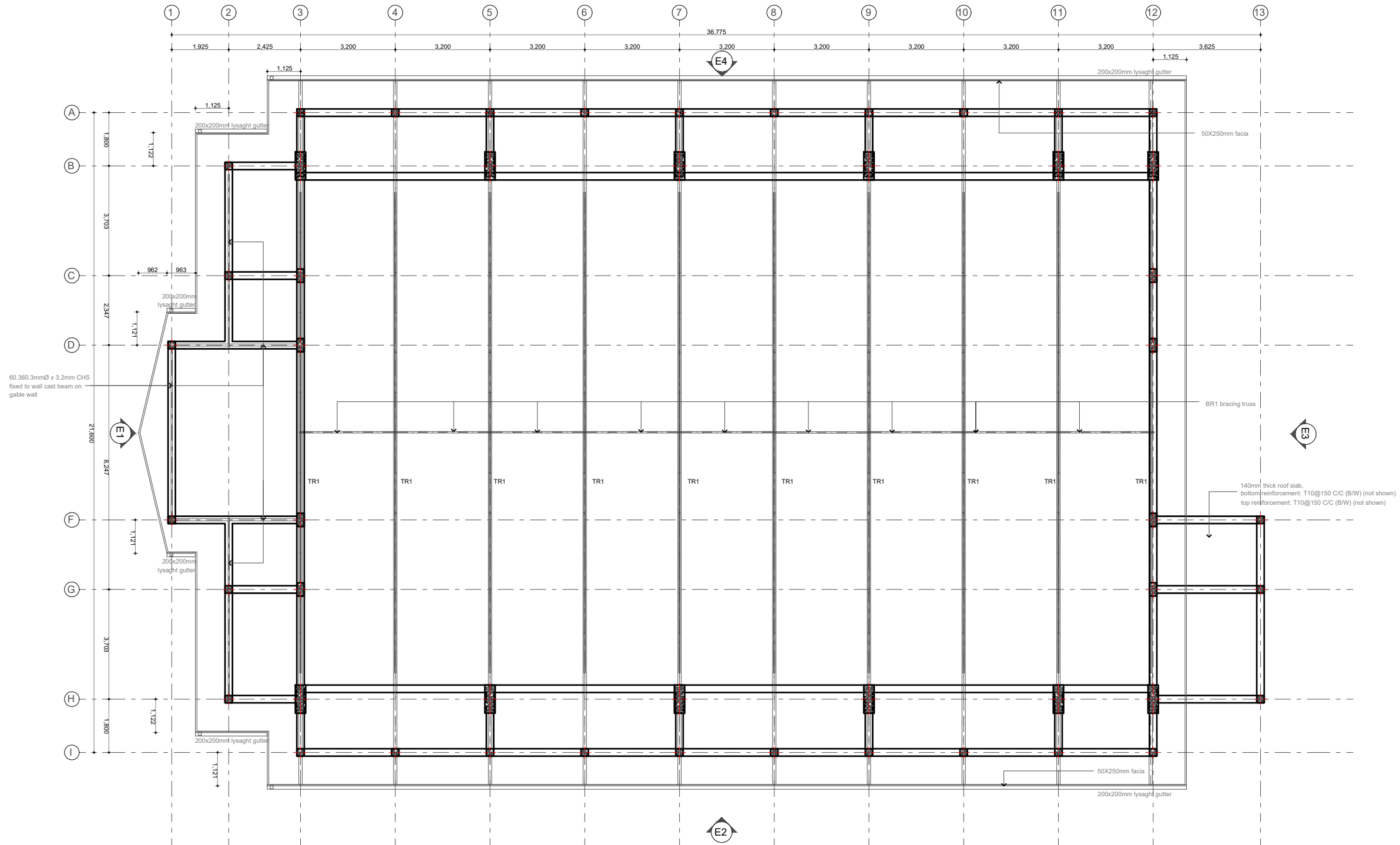
SECOND FLOOR REINFORCEMENT PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION, MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 06 / 27		



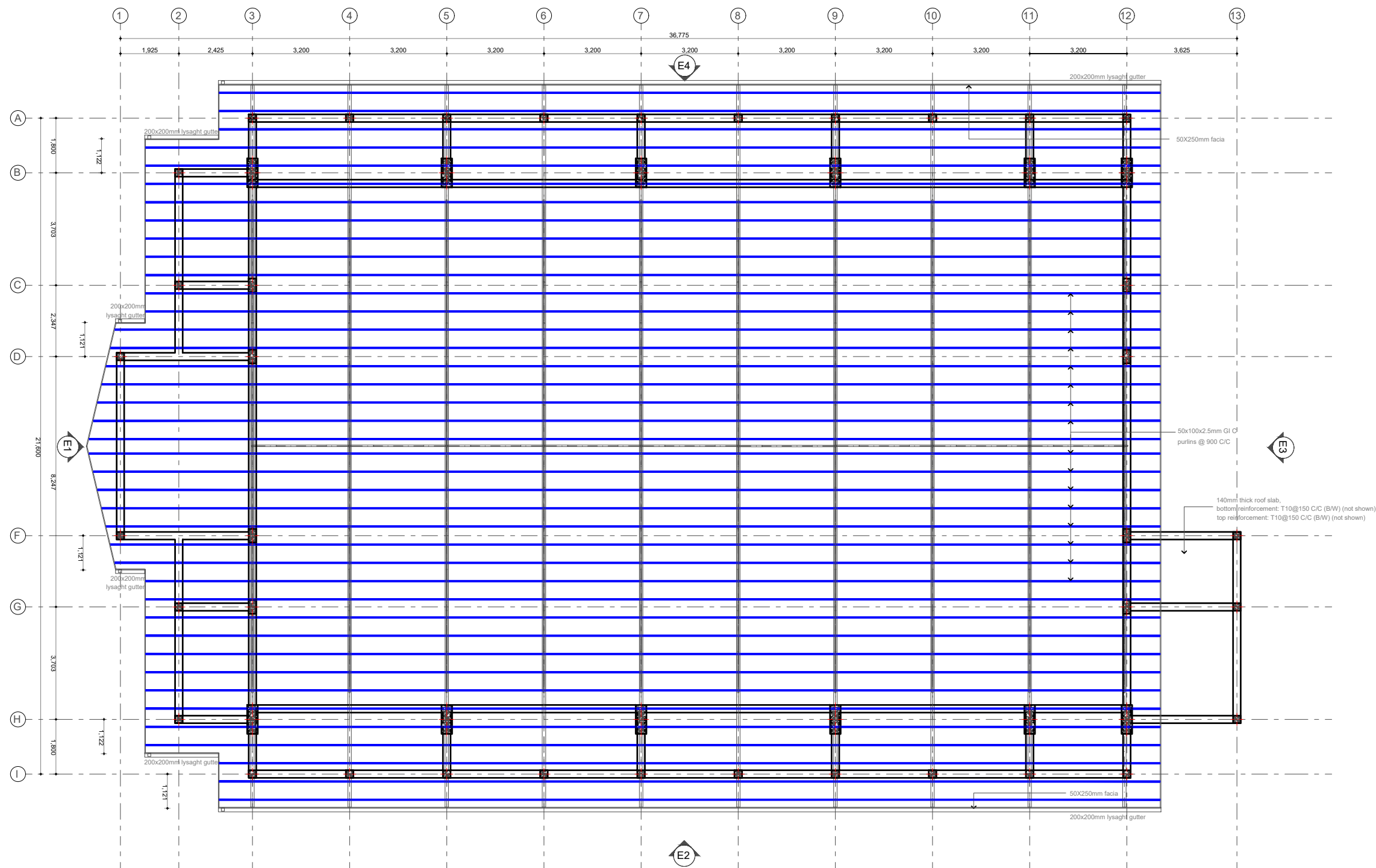
ROOF BEAM PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALÉ, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 07 / 27		



ROOF TRUSS PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILLEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : 5.08 / 27		



ROOF FRAMING PLAN
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 09 / 27		

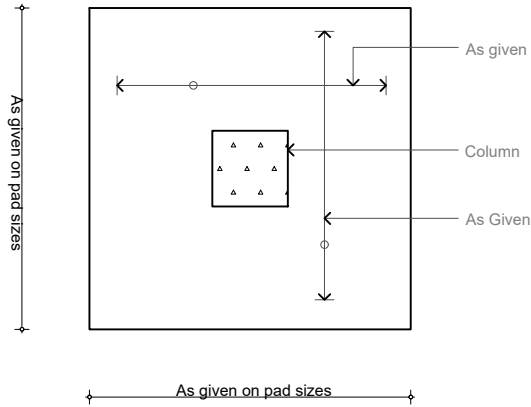
Foundation Notes:

	Dimensions	Reinforcement	Foundation Depth
F1	2350X2350X375	T12@ 125C/C B/W (B)	1275 mm
F2	1800X1800X375	T12@ 150C/C B/W (B)	1275 mm
F3	1500X1500X300	T10@ 150C/C B/W (B)	1200 mm
F4	1100X1100X300	T10@ 150C/C B/W (B)	1200 mm
F5	700X700X300	T10@ 150C/C B/W (B)	1200 mm

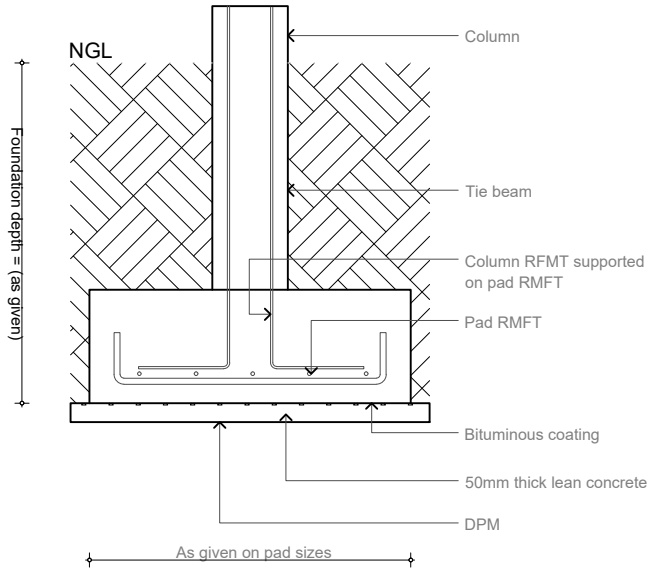
Foundation Depth = as spercified on Pad Footing
Ground Slab = 100mm thick RC slab on fill reinforced with T10@200C/C (B/W)

All Footings are to be laid on top of 50mm thick lean concrete
Add waterproofing admixture and apply waterproofing to all substructure (below ground elements)

All Tie Beams are TB1

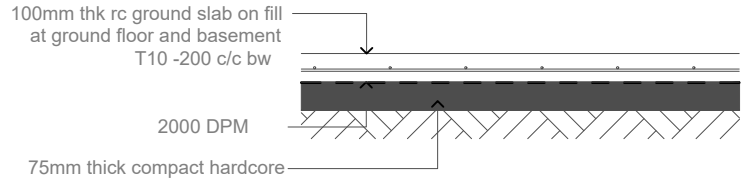


Plan View



Sectional View

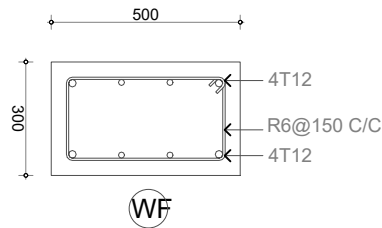
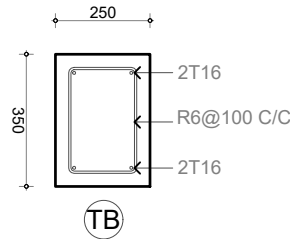
Typical Footing Detail
1:20



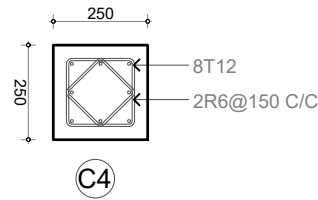
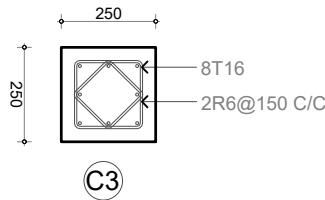
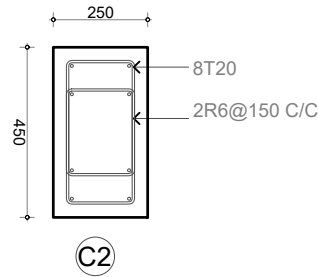
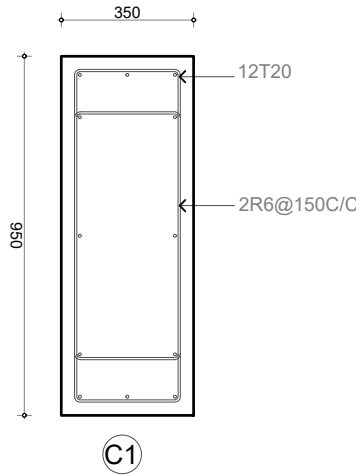
NOTE:
All cover blocks shall be casted using grade C 25 / 30 concrete with 5-10 mm aggregates

For slab, rebar spacer chairs spacing shall be minimum 1m spacing or 1 no. per 1 sqm

Typical Ground Slab Construction Detail
1:20

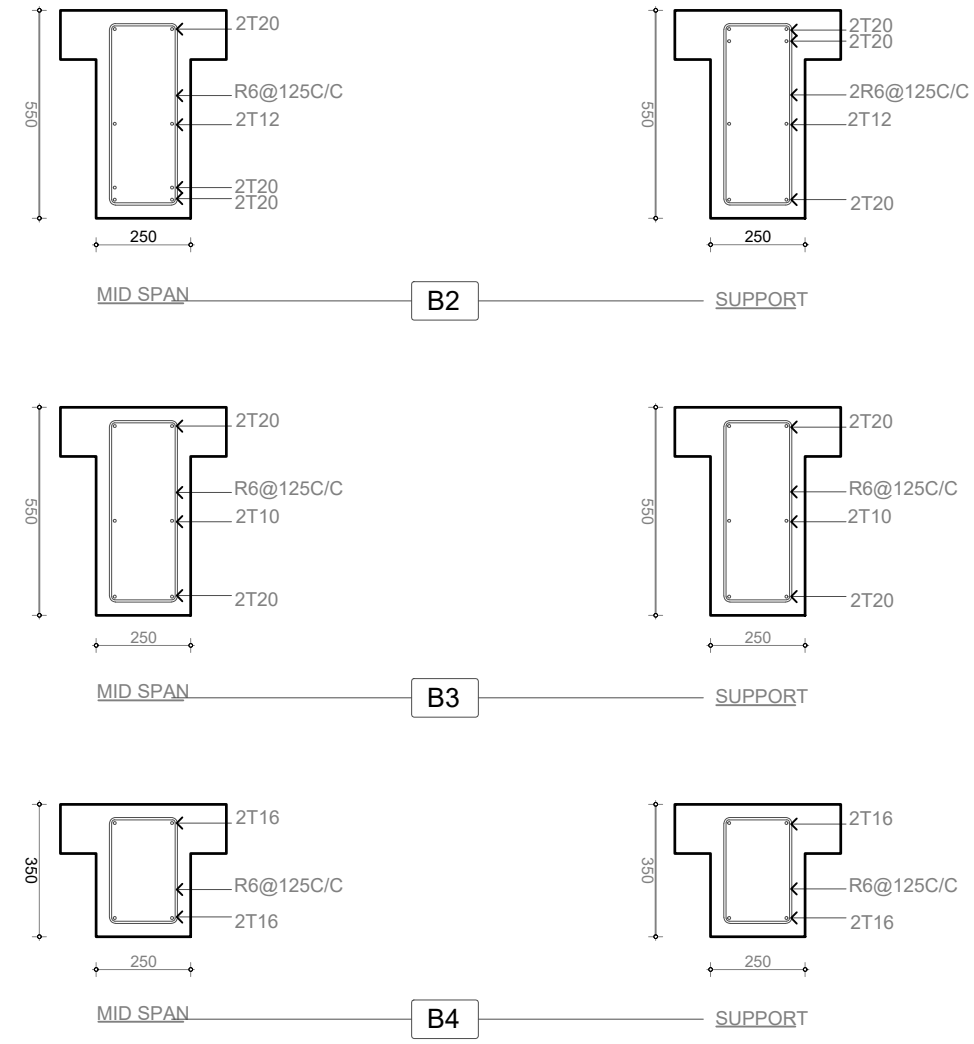
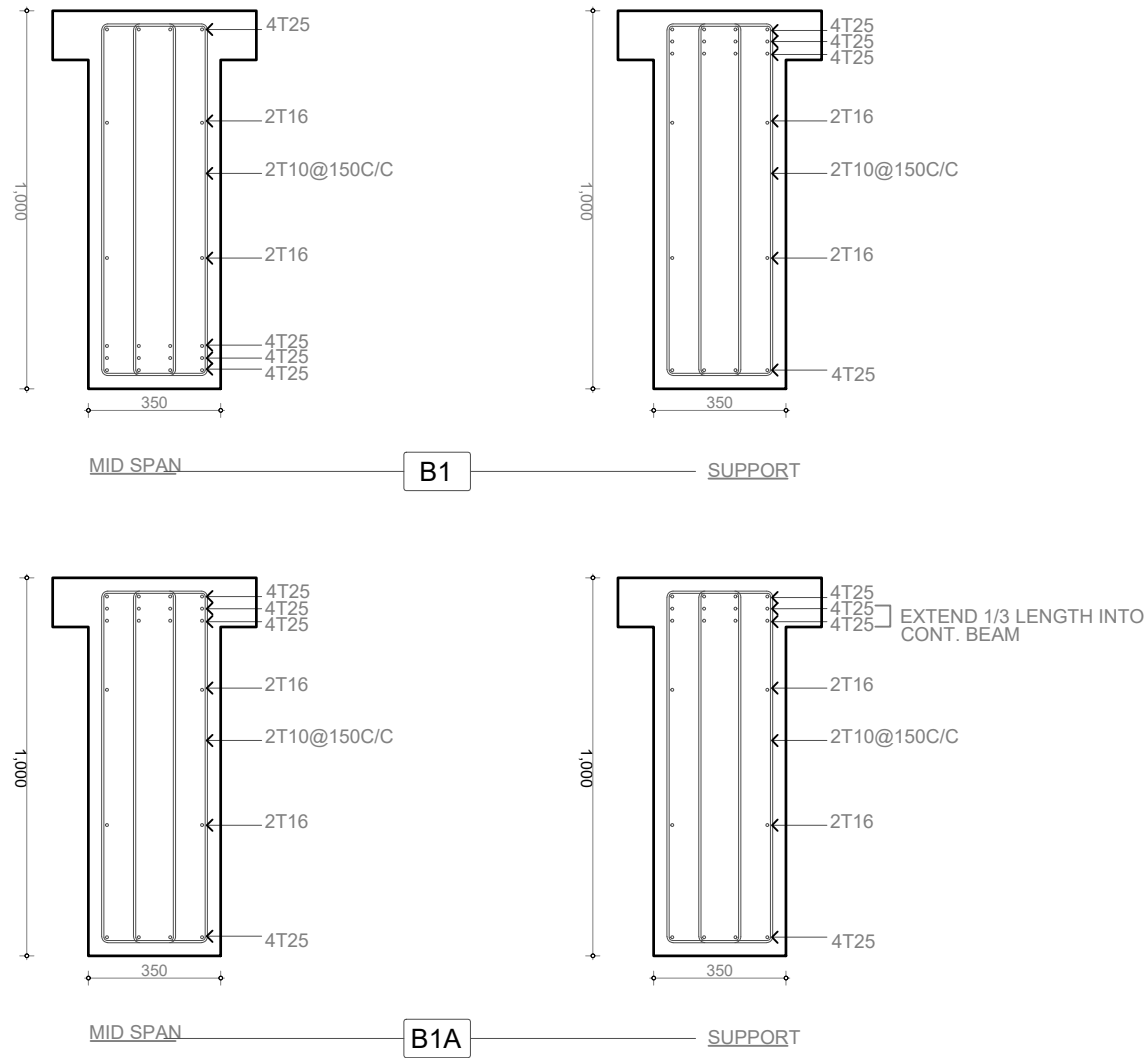


Tie Beam Details
1:20



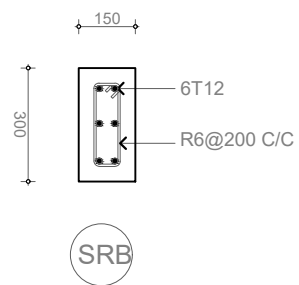
Columns Details
1:20

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 10 / 27		

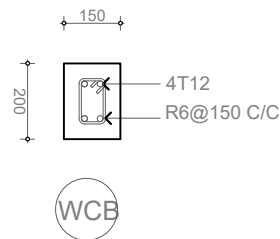


Beams Details
1:20

Notes:
Spacer bars shall be provided for B1 & B1A in between top and bottom layer rebars with 25mm bar @ 1000 C/C

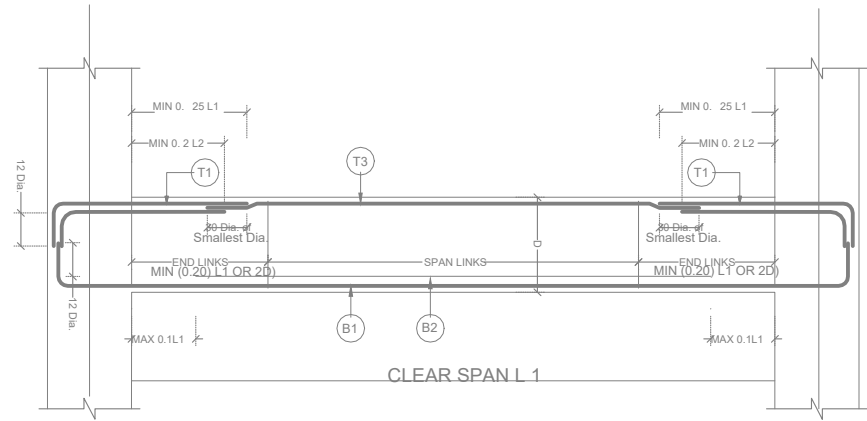


Sloping Roof Beam Detail (cast on top of gable wall)
1:20



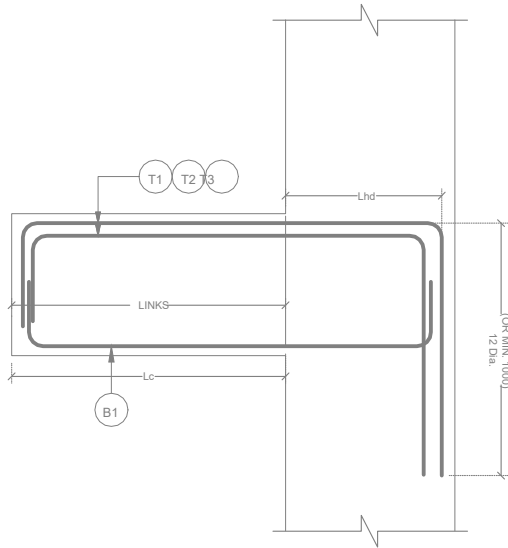
Wall Cast Beam Detail
1:20

Issue	Date	Description
AMMENDMENTS.		
<p>PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES</p>		
<p>PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS</p>		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 11 / 27		



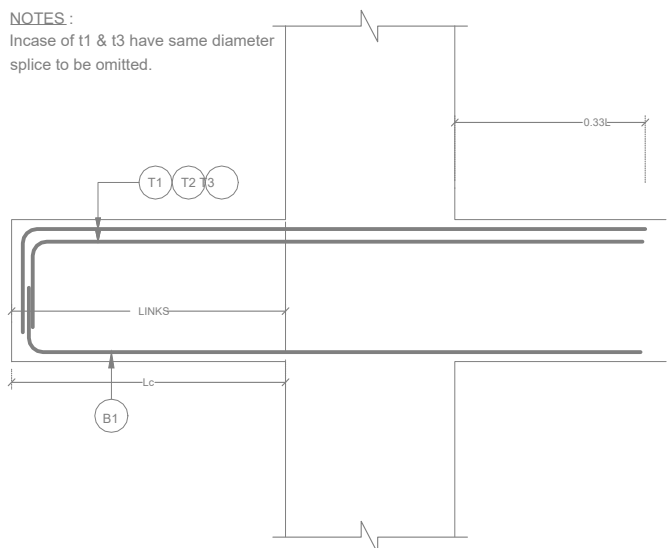
SIMPLE BEAM DETAILS

NTS



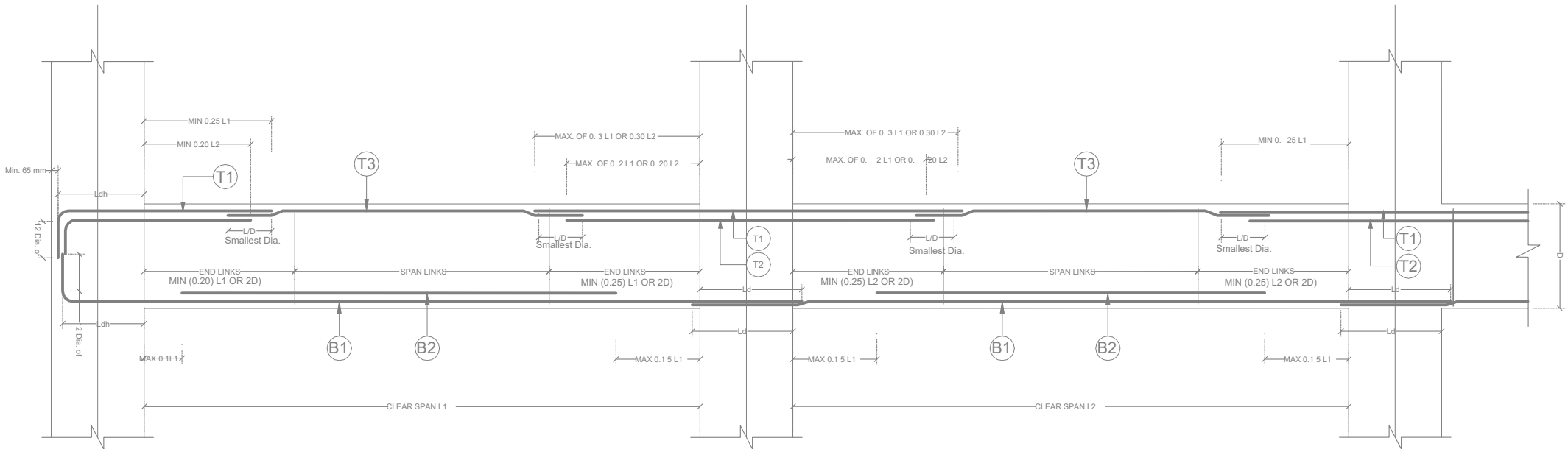
TYPICAL CANTELEVER BEAM FROM COLUMN

NTS



TYPICAL CANTELEVER BEAM CONTINUOUS

NTS



CONTINUOUS BEAM DETAILS

NTS

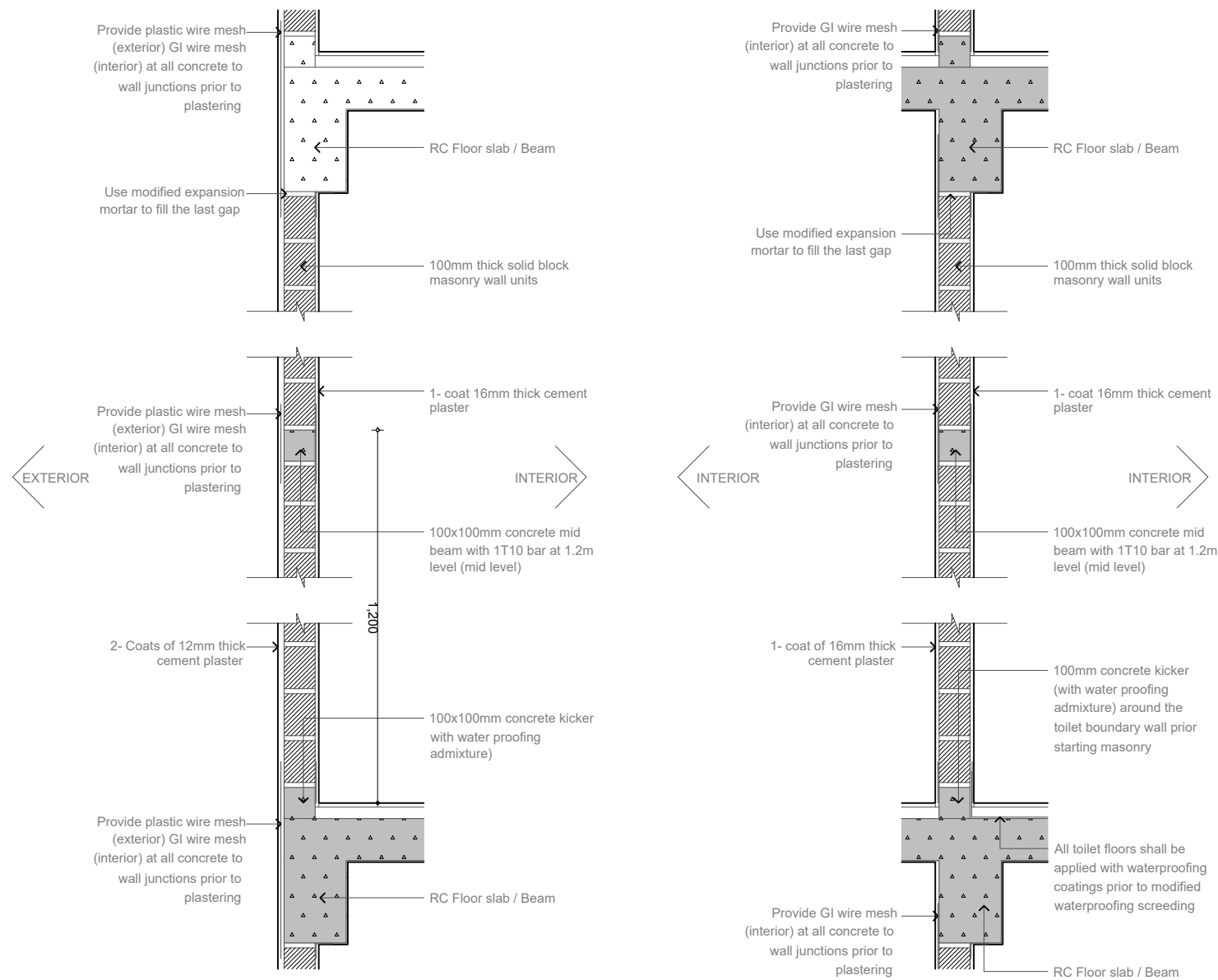
Notes:

1. First stirrups location shall be s/2 from the face of the column/ support.
2. Place one b bar in each bottom corner and one t bar in each top corner of the stirrup cage.
3. Condition shown is at columns. Where beams and girder intersect, use typical interior girder section.
4. All bottom bars and top bars shall be placed in one layer unless two layers are noted in the beam schedule. Where to layers are noted provide 25 mm clear between layers. If two layers are noted place bar b1 above bar b and bar t above t1.
5. Length of exterior top bars are given only when straight bar occurs otherwise hooked bars are required.
6. Where a member is supported by a column, but has another member running perpendicular to it at the same column, the first stirrup spacing shall start from the face of the column and not from the face of the transverse beam.
7. Top & bottom reinforcement lapping of both main rebars can be ignored if the main rebars at left and right side of lapping location are identical.
8. For 'column width less or equal 2m l'='column width'/2. For 'column width' greater than 2m, l'=1m

Supplementary abbreviations:

- B1 - continuous bottom bars.
B2 - additional bottom bars
CE - cantilevered end
D - depth of member, mm
EE - each end
EF - each face
FL - full length
EW - each way
H - aci standard hook
ITB - interior top bar
LE - left end
LG - length
P - paired stirrups
RE - right end
REM - remainder
S - side bars
T1 - top bars at internal supports
T2 - top bars at mid-span
T3 - top bars at end support
W - width of member, mm

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 12/ 27		

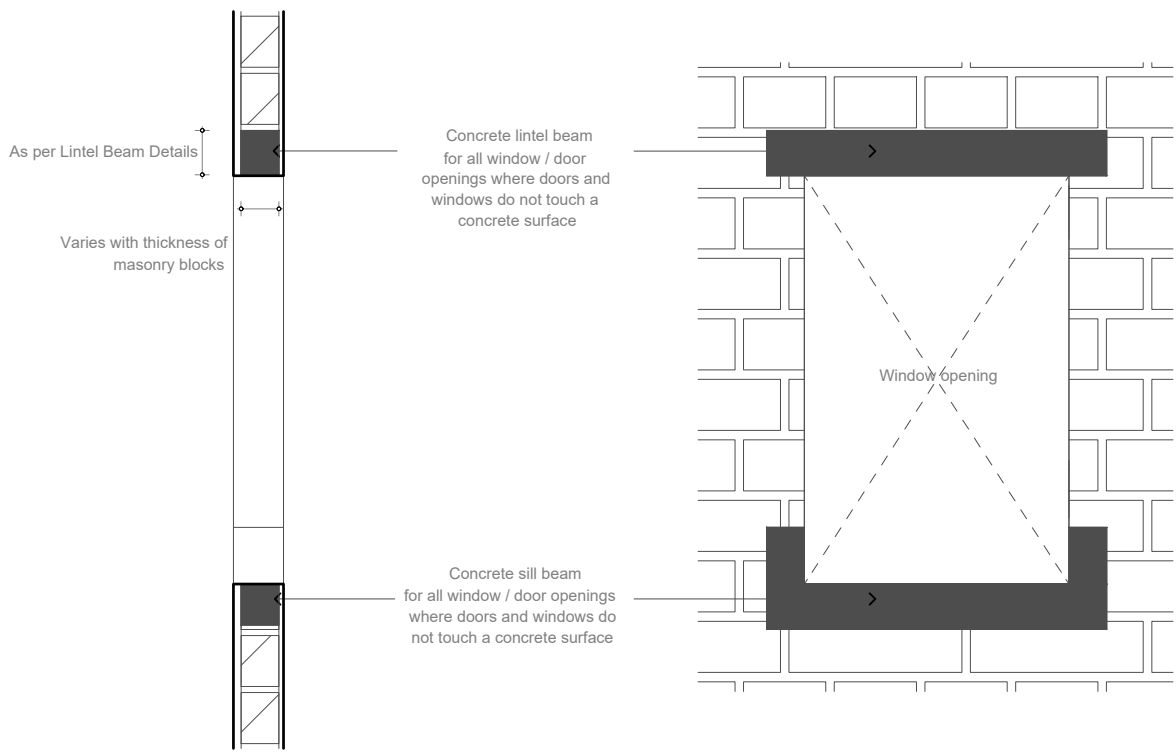


Typical Wall Construction Detail
1:20

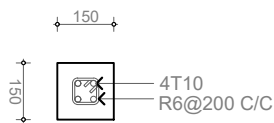
Note :

- * Concrete surfaces shall be thoroughly cleaned with water & applied with mastercast 141 or equivalent bonding mortar prior to plastering.
- * Plastering mortar mix shall be 1:4 (cement: sand) ratio.
- * Plaster mix shall be modified using fibre wool & mastercast 141 or equivalent plasticisers as per manufacturer's specification.
- * Height of placing blocks shall be maximum 1.2m per day.
- * After initial coat of plastering, water curing shall be provided for minimum 3 days & after final coat water curing shall be provided for 7 days.

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 13/ 27		

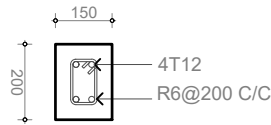


Typical Window Construction Detail
1:20



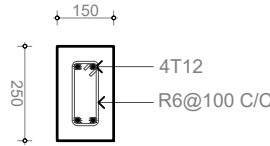
LB1

Sill Beam Detail
1:20



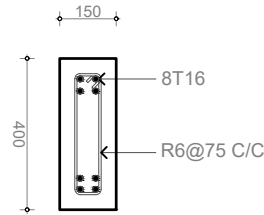
LT1

LINTELS OVER ALL DOORS, WINDOWS
(THAT DOES NOT RISE TO BEAM LEVEL)
LT1 FOR WINDOWS < 1.5M



LT2

LINTELS OVER ALL DOORS, WINDOWS
(THAT DOES NOT RISE TO BEAM LEVEL)
LT2 FOR WINDOWS > 1.5M & <3.0M



LT3

LINTELS OVER ALL DOORS, WINDOWS
(THAT DOES NOT RISE TO BEAM LEVEL)
LT3 FOR WINDOWS > 3.0M & <6.0M

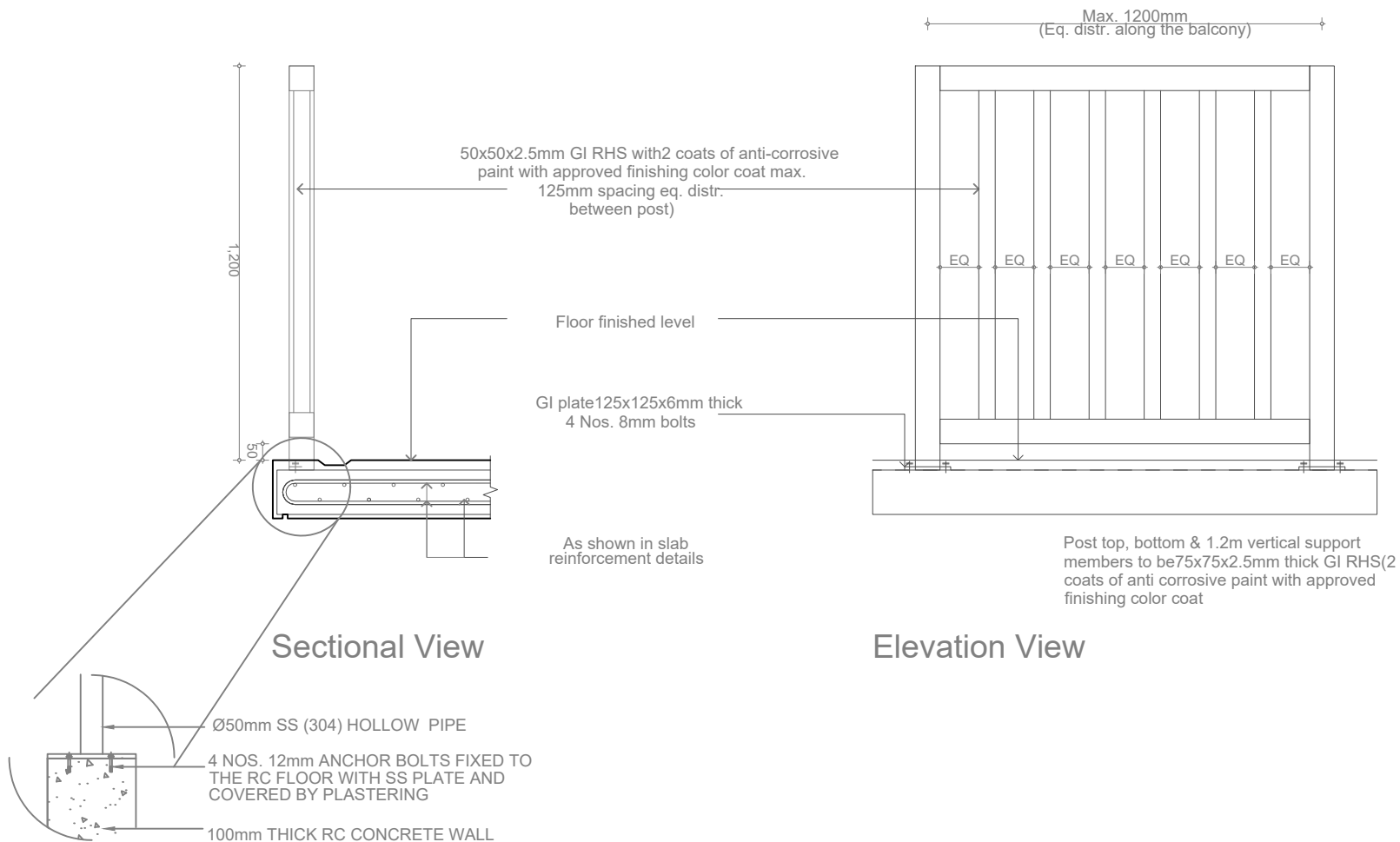
Lintel Beam Details
1:20

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE', REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 14 / 27		



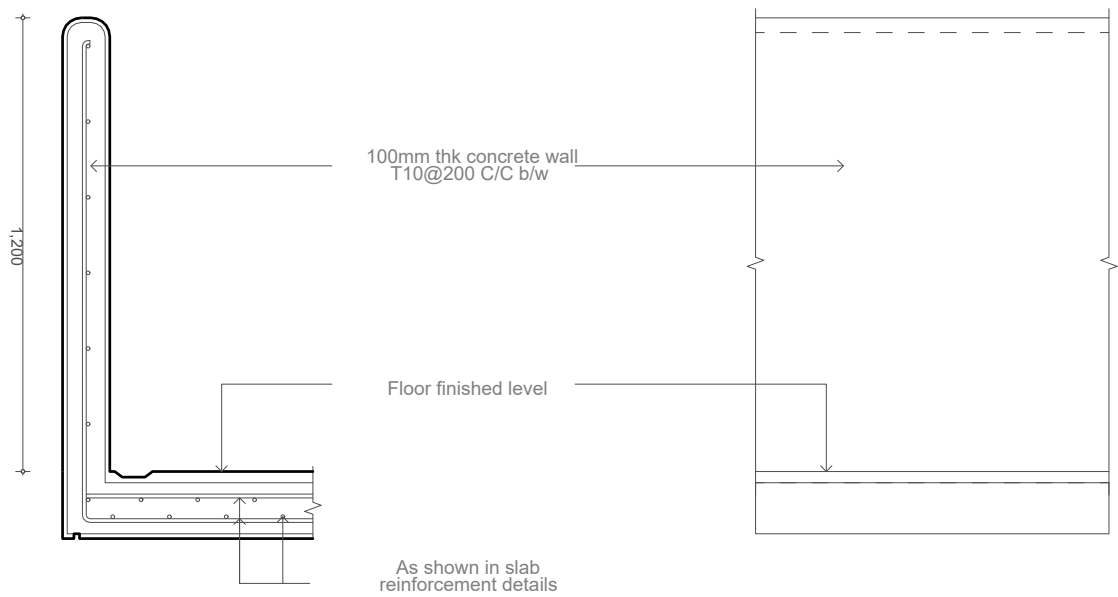
Top to Bottom Detail D-24
1:50

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 15/ 27		



Balcony 01 Railing Detail
1:20

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 16/ 27		

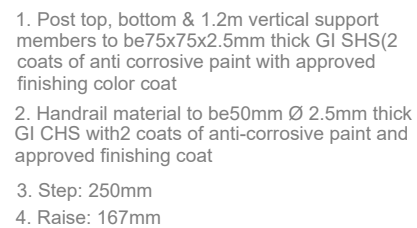
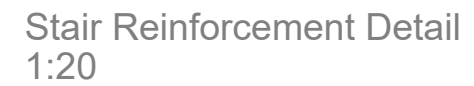


Sectional View

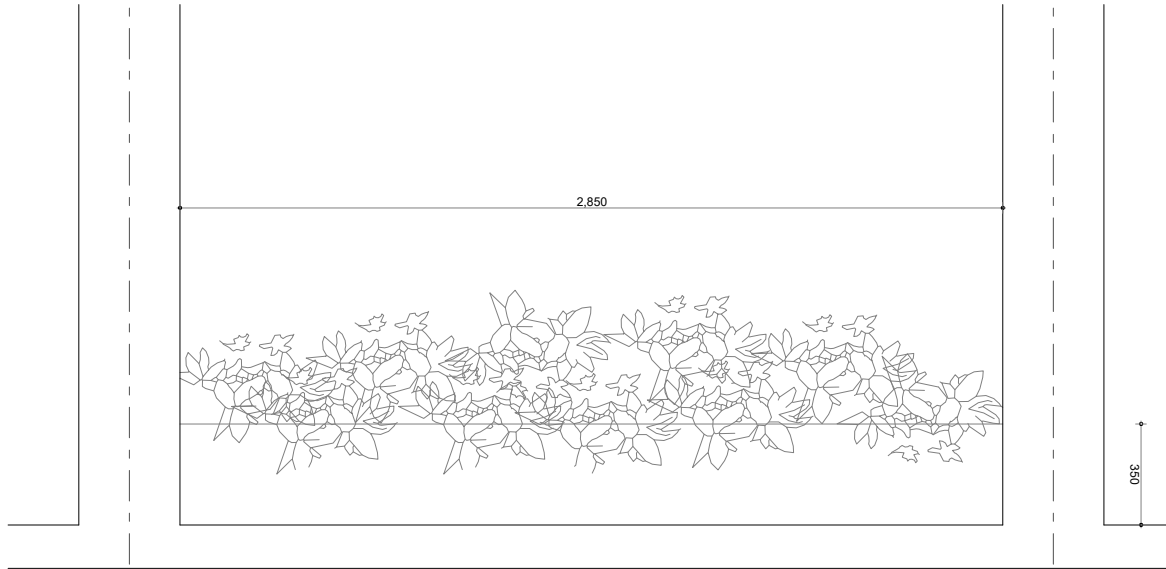
Elevation View

Balcony Detail 02
1:20

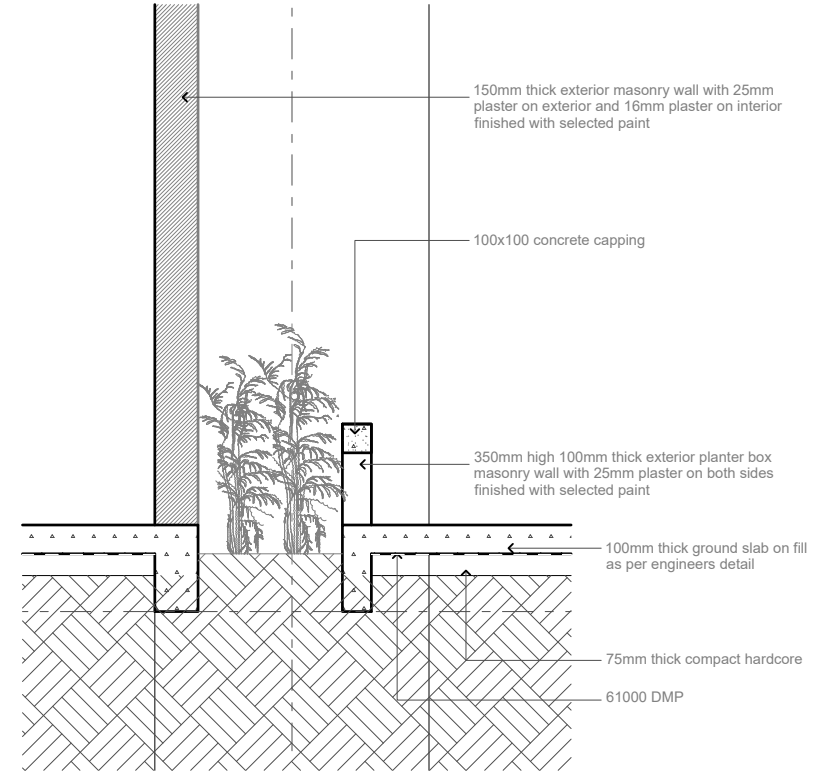
Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 17 / 27		



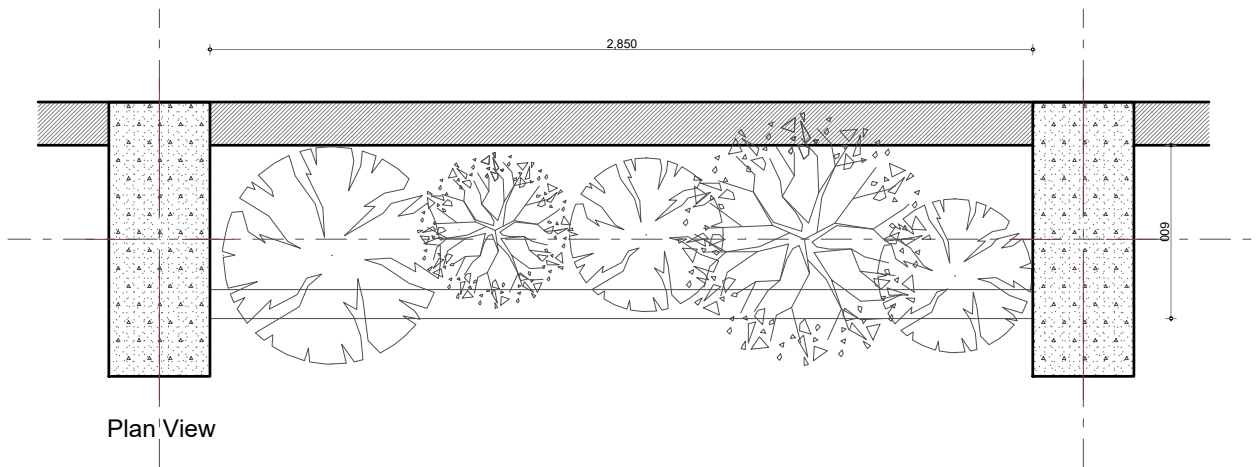
Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 18 / 27		



Elevation View



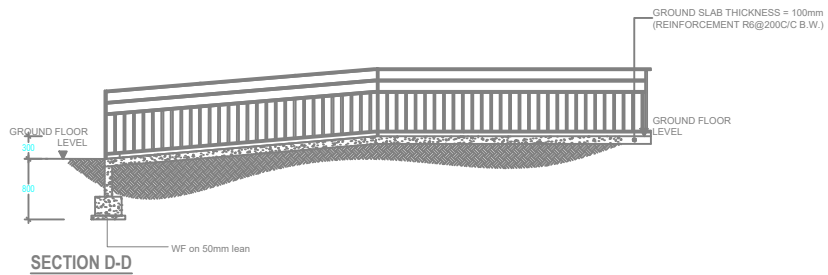
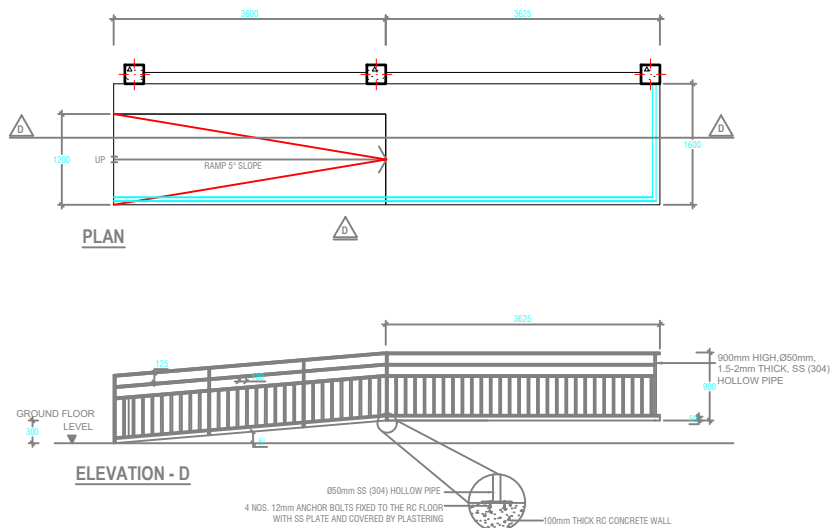
Sectional View



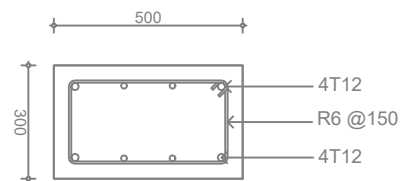
Plan View

Planter box detail
1:20

Issue	Date	Description
AMMENDMENTS.		
<p>PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES</p> <p>PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS</p>		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 19 / 27		



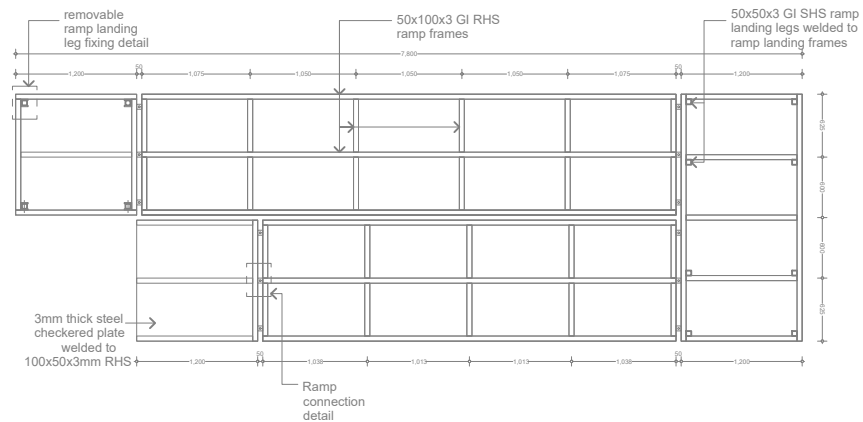
DETAIL - BUILDING ENTRANCE RAMP
SCALE 1:30



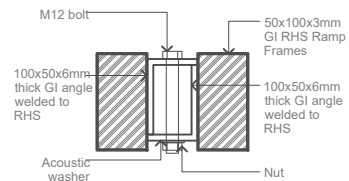
Wall Footing (WF) Detail
Scale = 1:20

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : A 20 / 27		

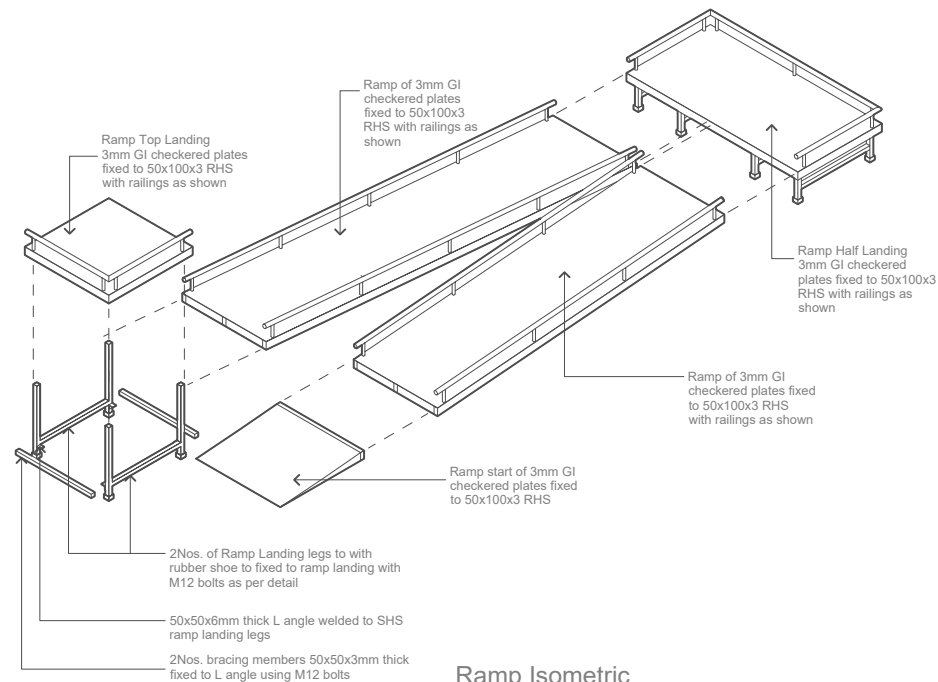
1:50



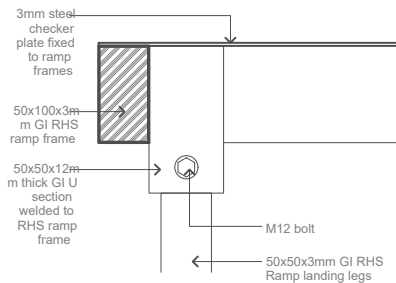
Ramp Framing Detail
1:50



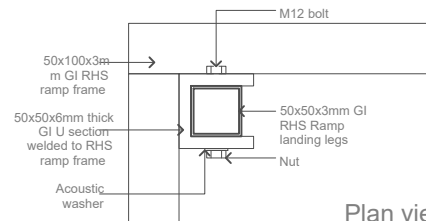
Ramp Connection Detail
1:5



Ramp Isometric
1:50



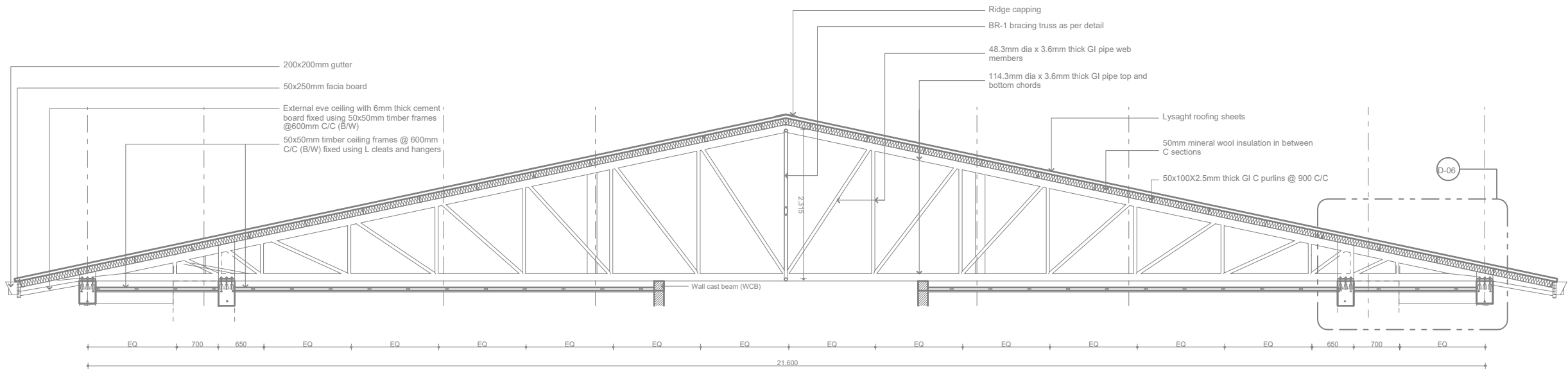
Elevation view



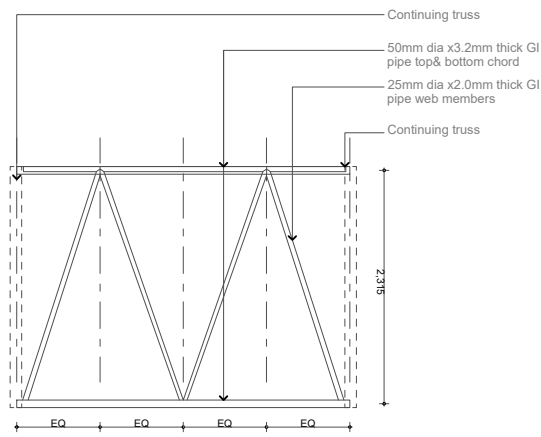
Plan view

Ramp Fixing Detail
1:5

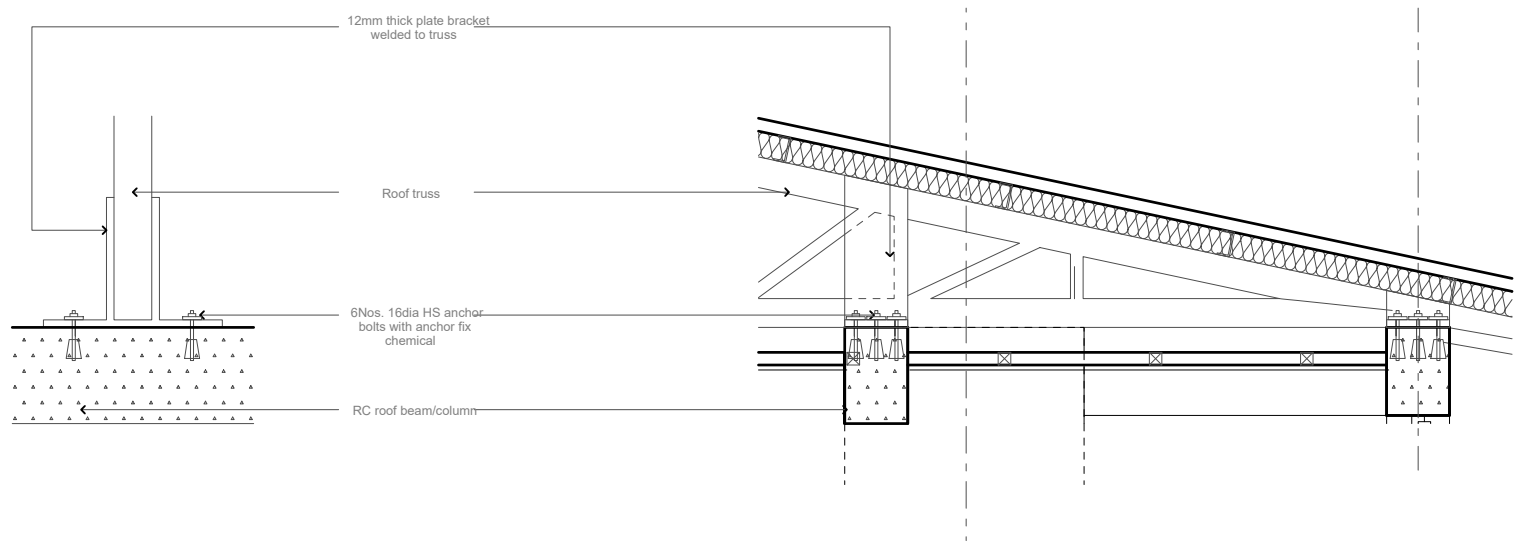
Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 21 / 27		



Truss Detail - TR1
1:50



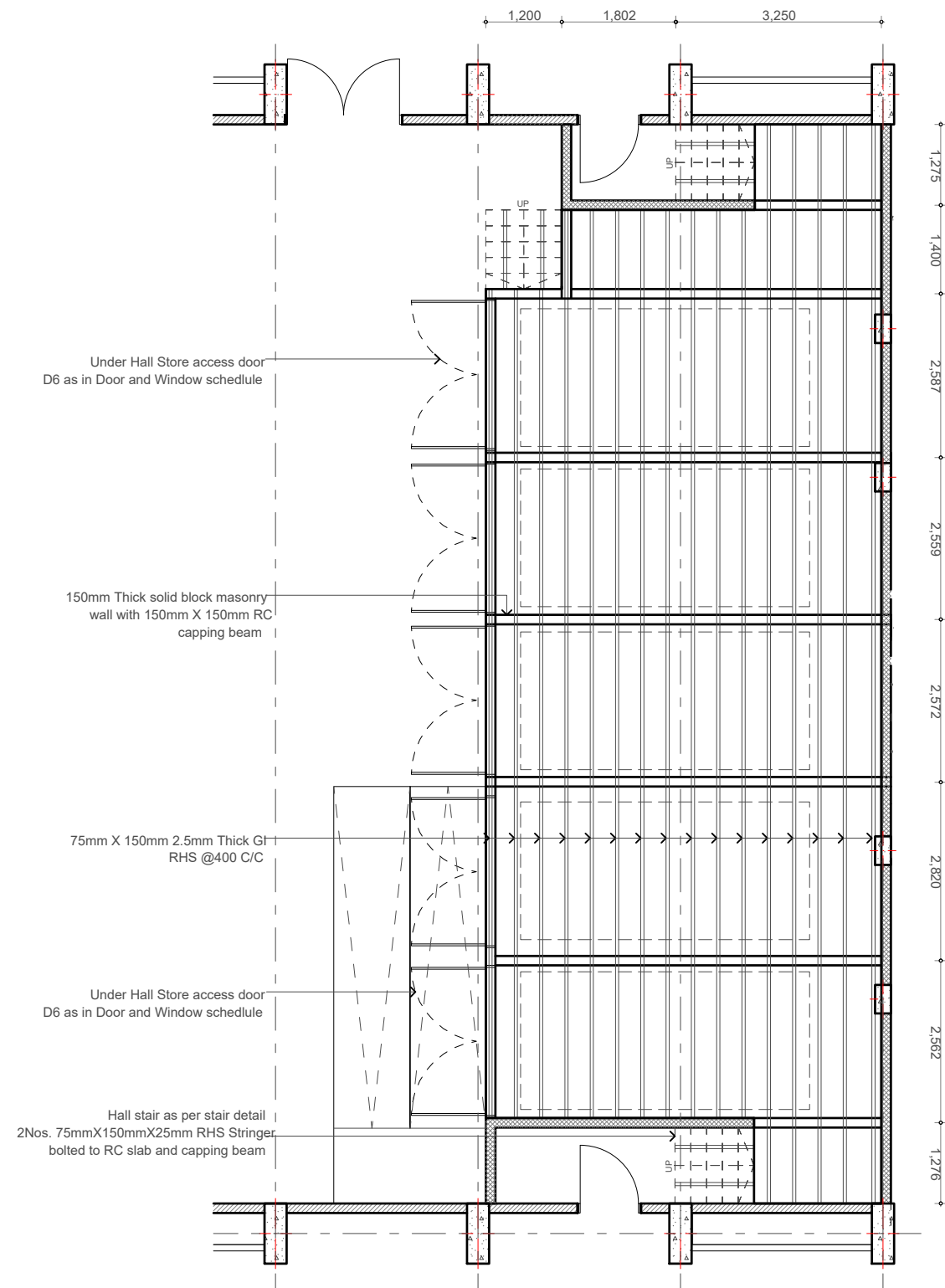
Bracing Truss Detail - BR1
1:50



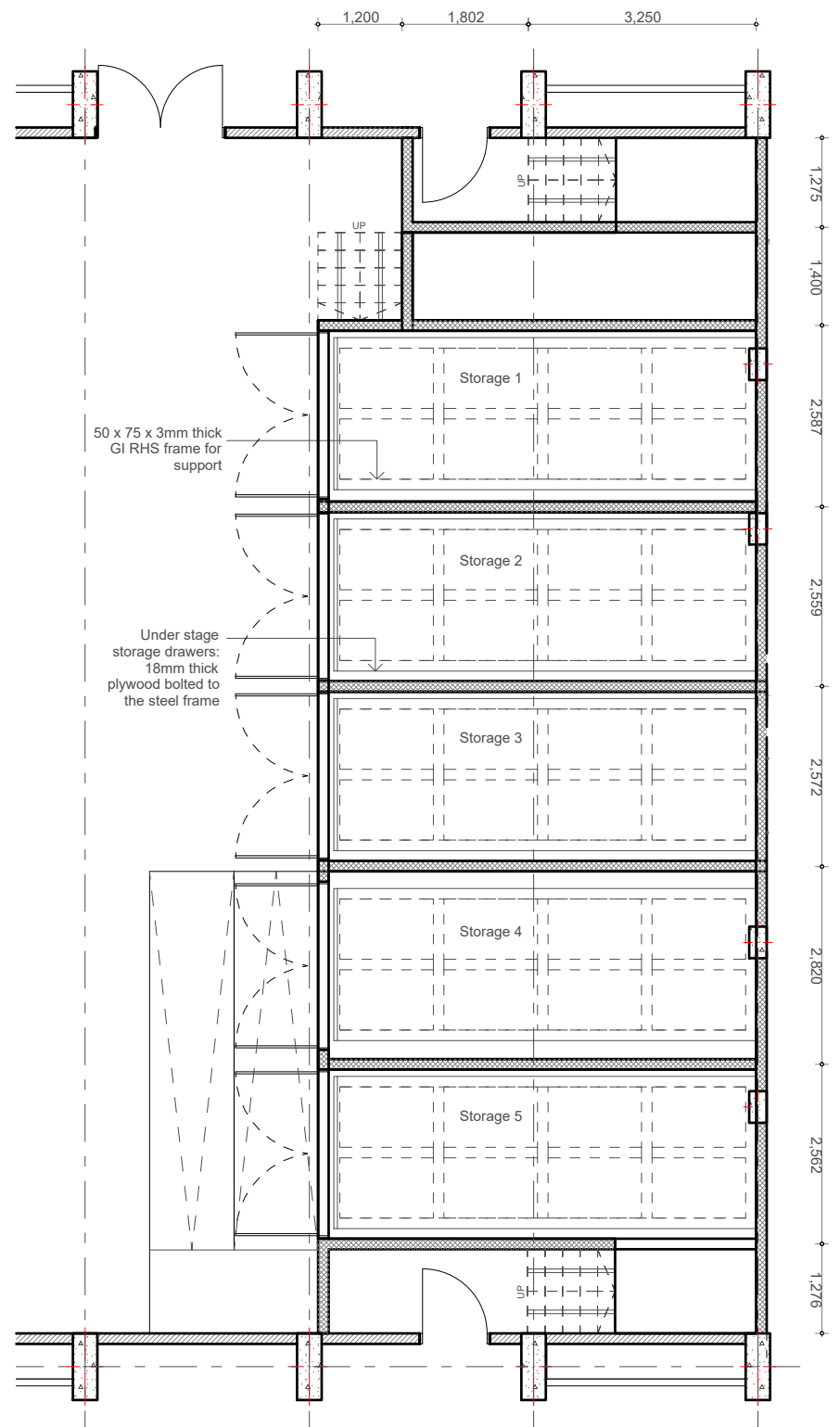
Truss blow up detail - D 06
1:20

Notes:
All the CHS shall have minimum yield stress of 275MPa
All welds shall be 6mm thick full parameter fillet welds
All truss ends shall be capped with 6mm plates
All truss members shall be protected with anti corrosive coatings

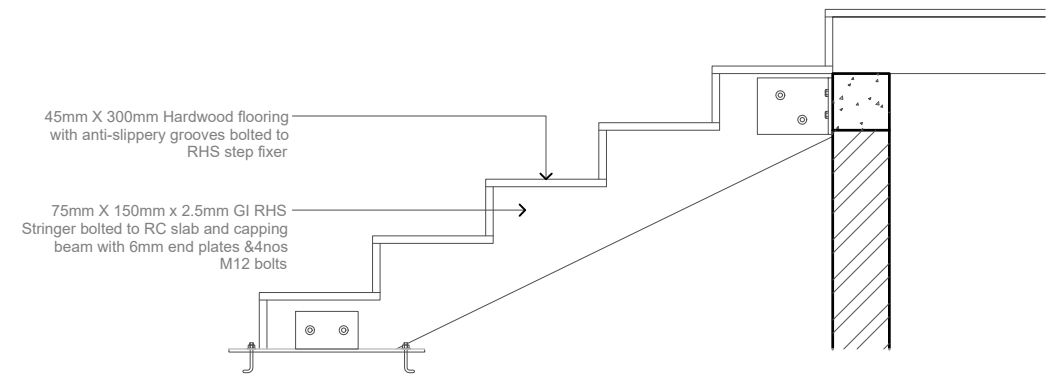
Issue	Date	Description
AMMENDMENTS		
<p>PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES</p> <p>PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS</p> <p>PROJECT REFERENCE</p> <p>CLIENT MINISTRY OF EDUCATION</p> <p>ARCHITECT :</p> <p>ENGINEER :</p> <p>DRAWN :</p> <p>CHECKED :</p> <p>SCALE : AS GIVEN</p> <p>DATE : 07.09.2021</p> <p>DWG NO : S 22 / 27</p>		



Stage Framing Detail
1:100

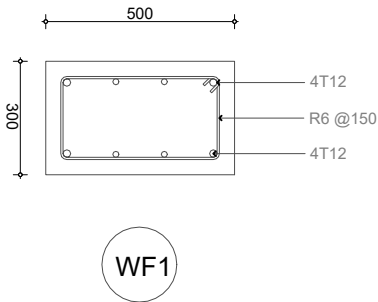
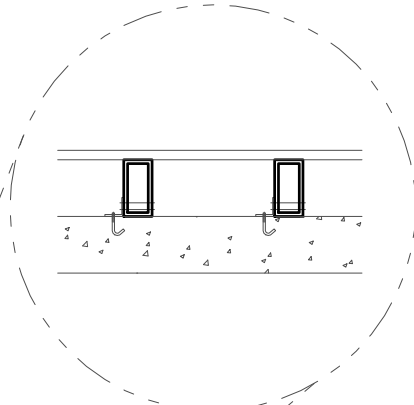
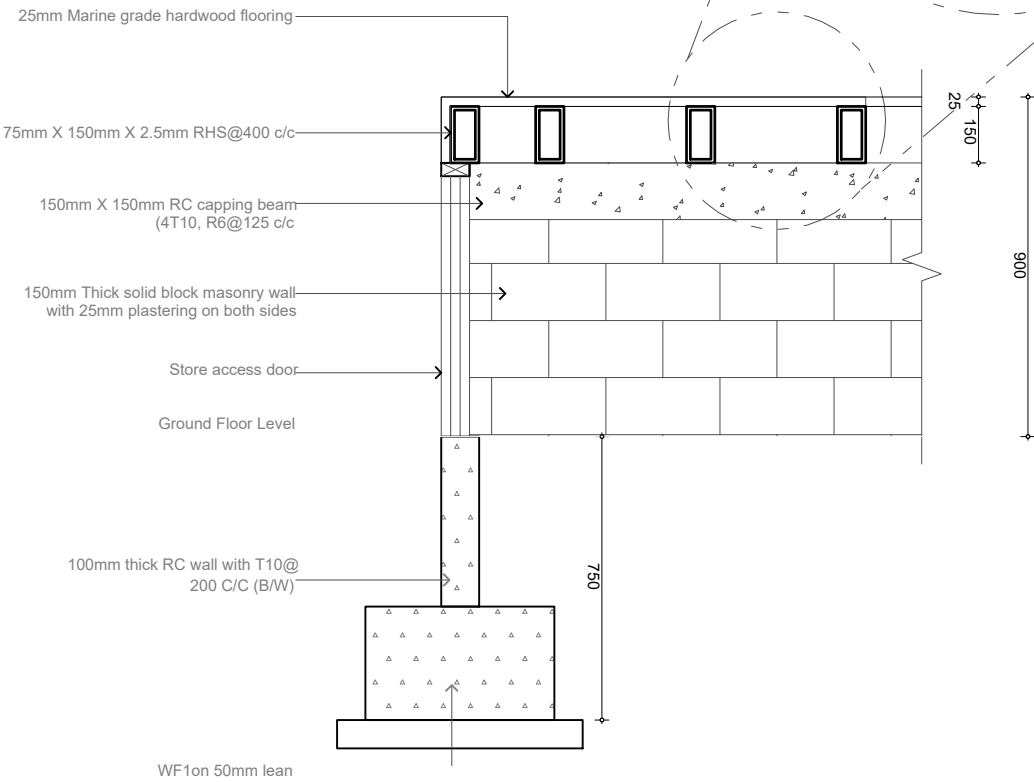
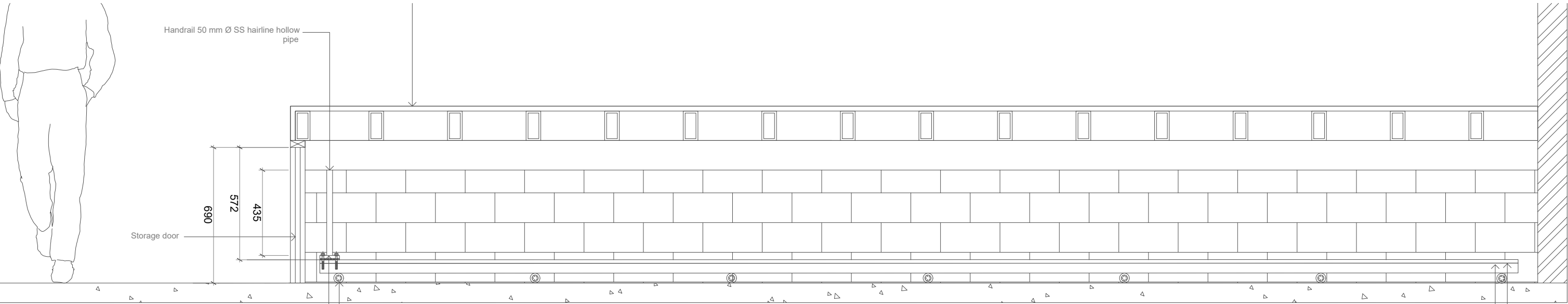


Stage Drawer Detail
1:100



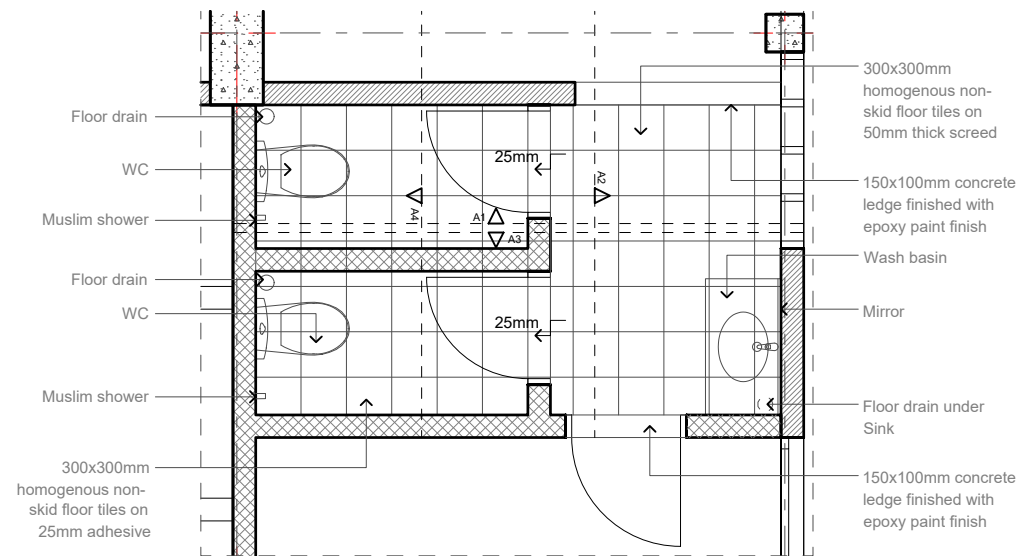
Hall Stair Detail
1:20

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 23 / 27		

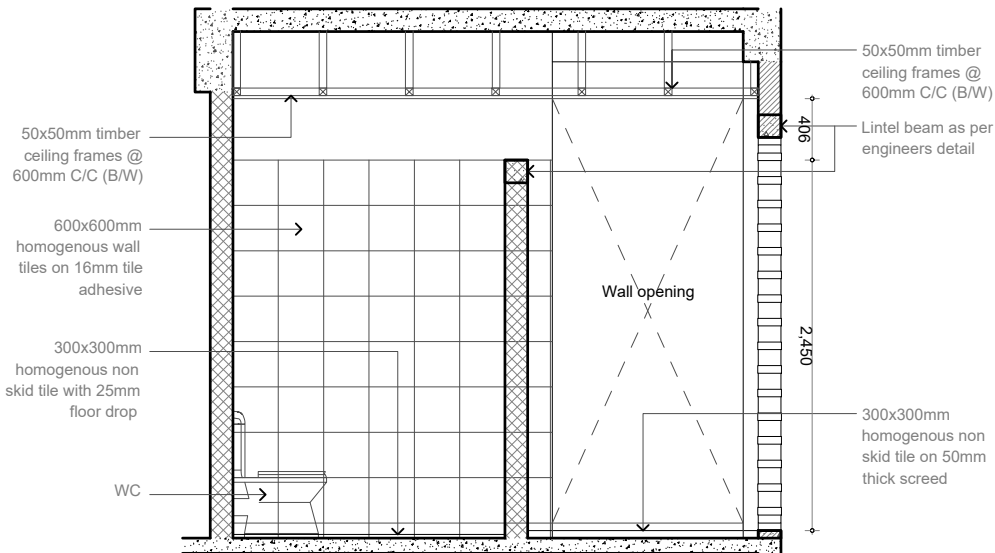


Wall FootinG Detail
Scale1:20

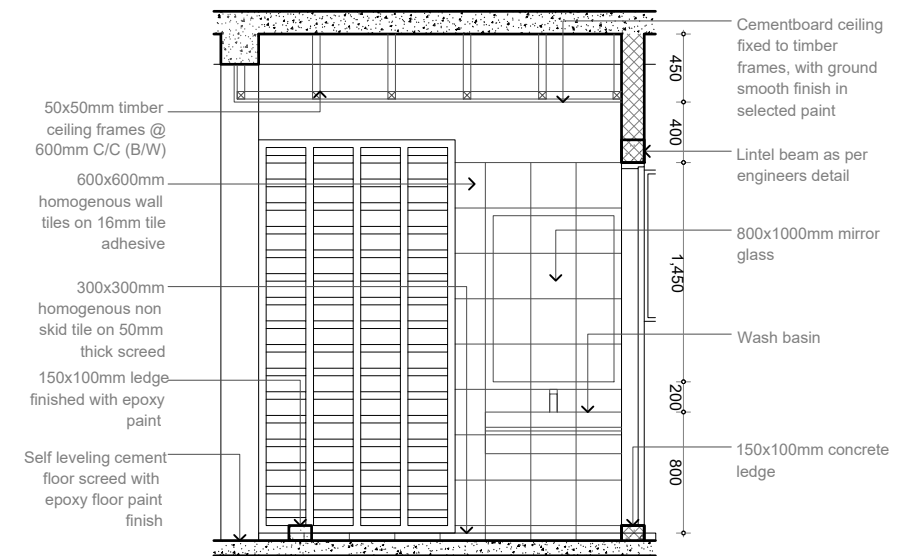
Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 24 / 27		



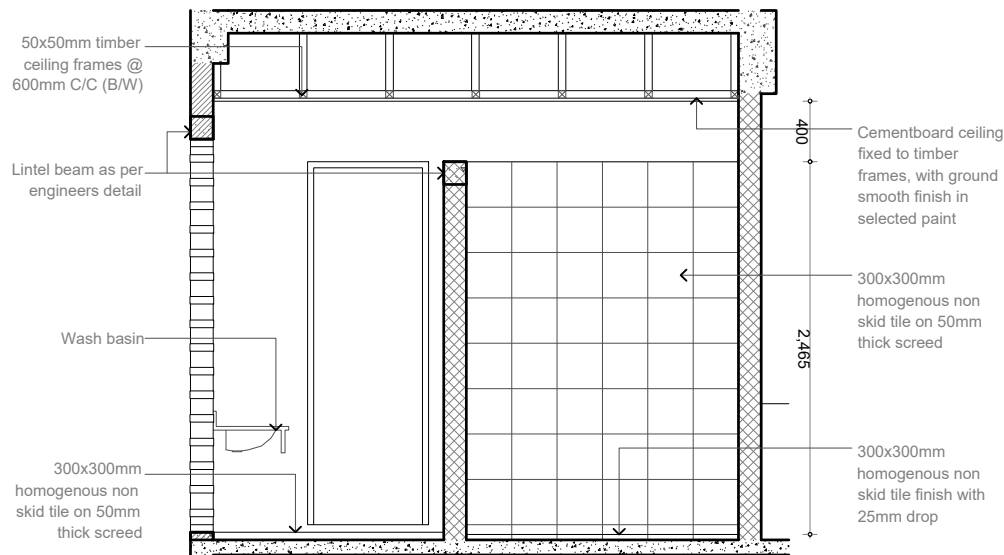
Toilet (F) Ground Floor Plan
1:50



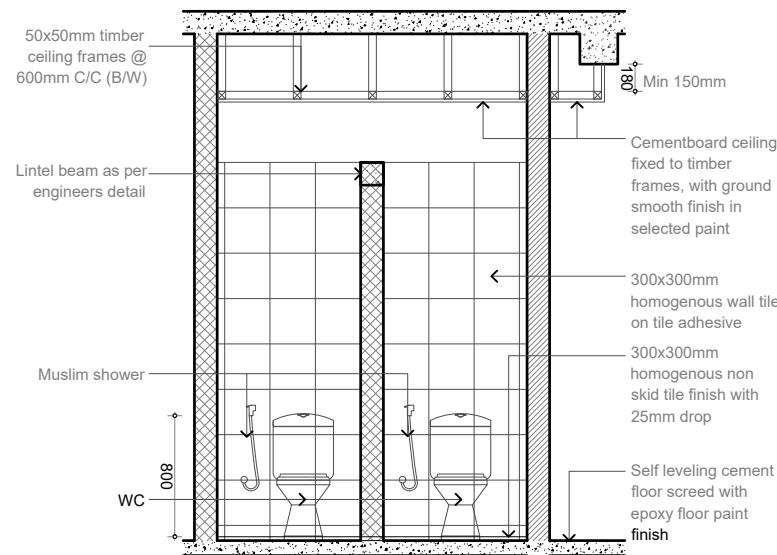
Interior Elevation A1
1:50



Interior Elevation A2
1:50

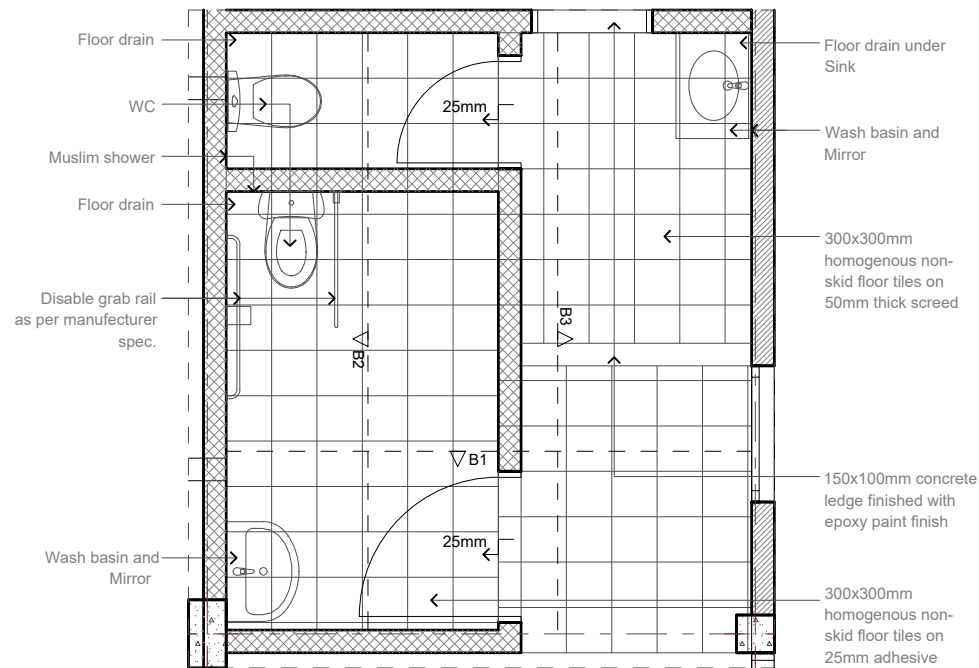


Interior Elevation A3
1:50

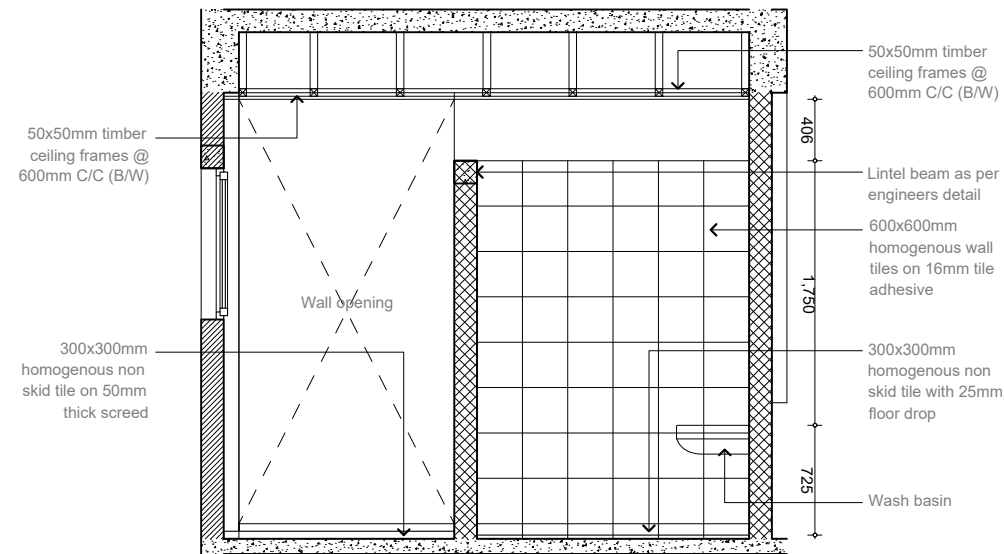


Interior Elevation A4
1:50

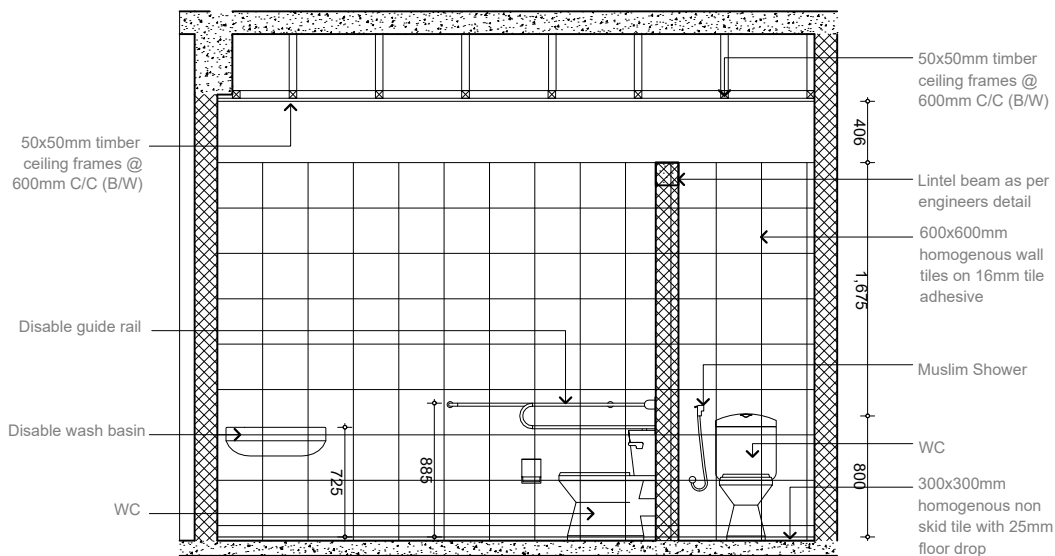
Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 25 / 27		



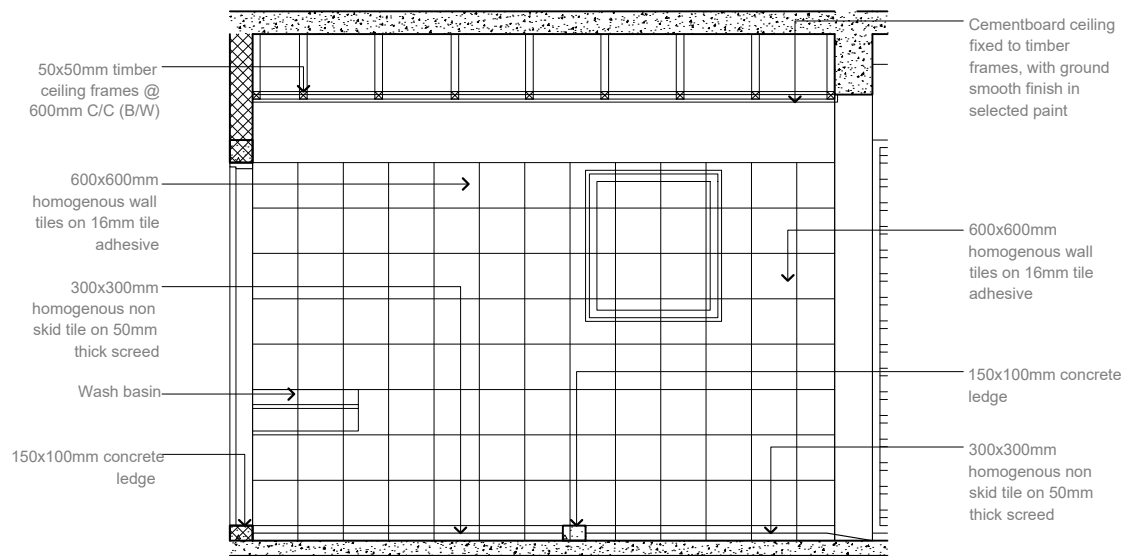
Toilet (M) Ground Floor Plan View
1:50



Interior Elevation B1
1:50

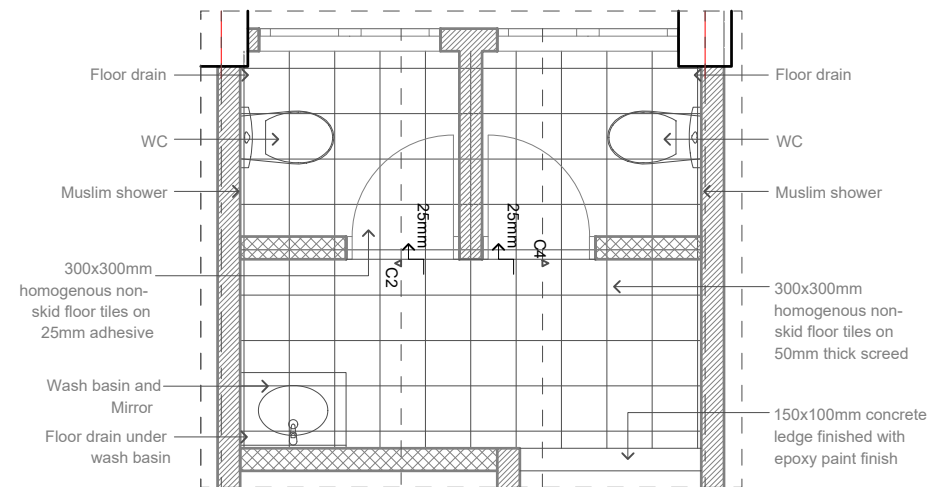


Interior Elevation B2
1:50

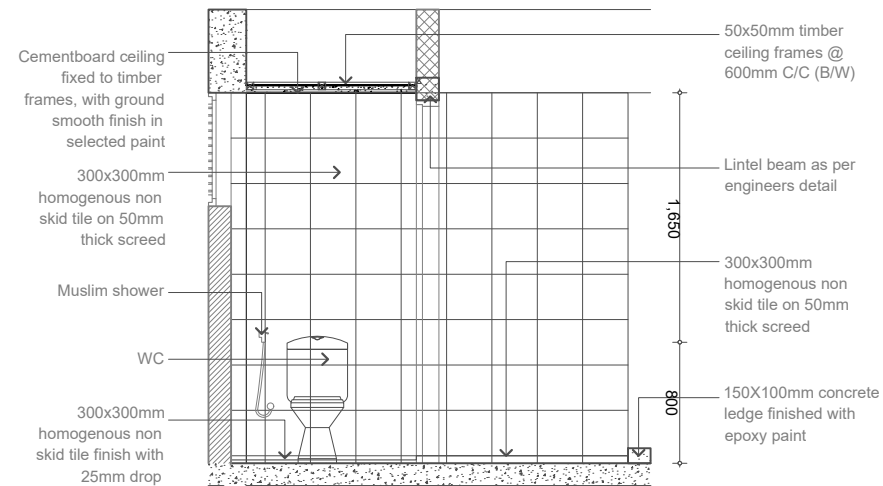


Interior Elevation B4
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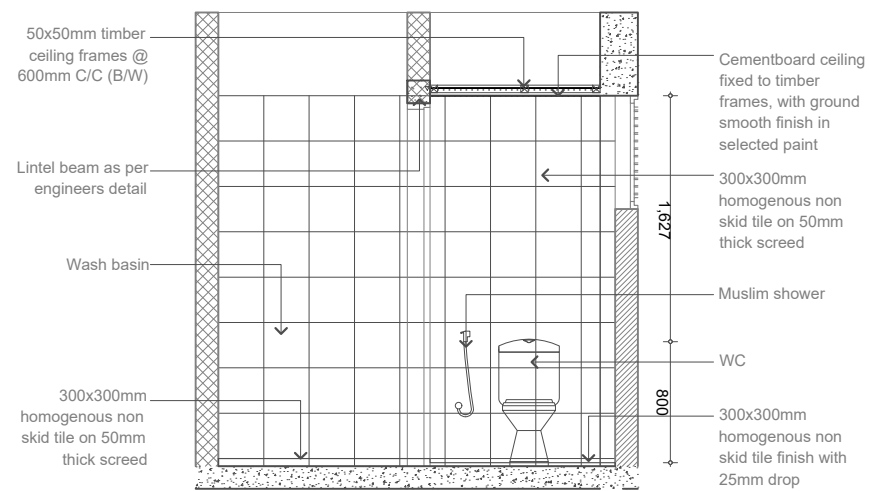
Issue	Date	Description
AMMENDMENTS.		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 26 / 27		



Toilet Detail (typical) Second Floor Plan View
1:50



Interior Elevation C2
1:50



Interior Elevation C1
1:50

Issue	Date	Description
AMMENDMENTS.		
<p>PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES</p>		
<p>PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS</p>		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : S 27/ 27		

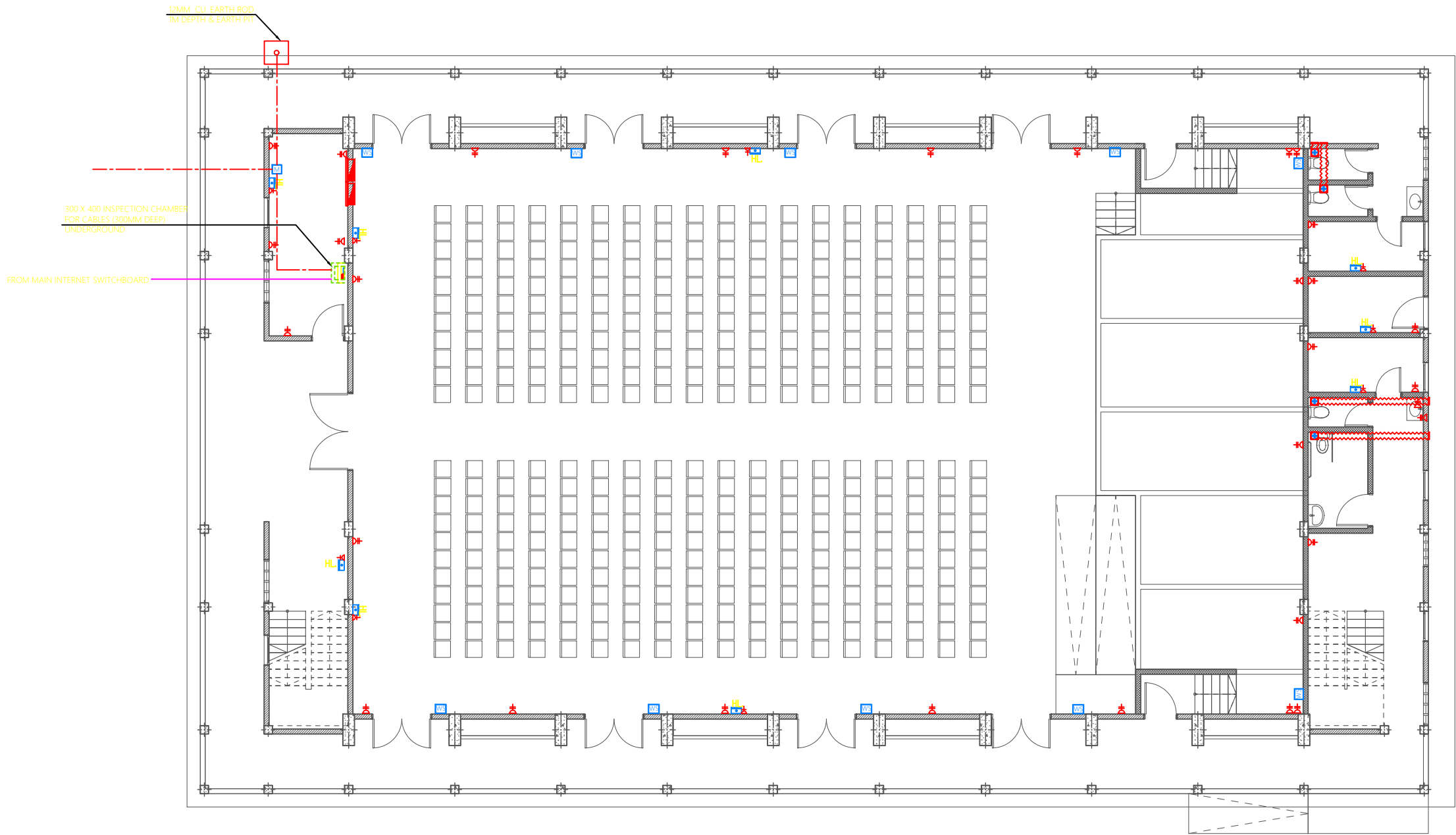
BUILDING SERVICES DRAWINGS OF
PROPOSED 03 STOREY
**MULTI PURPOSE HALL AND 4 CLASSROOM BLOCK,
SH. BILEFFAHEE SCHOOL**

Legend

- 13A Twin Socket
- 13A Power Socket
- Distribution Board
- HL
- Computer Network Outlet
- Emergency Light
- WS
- M
- Public Address System
- Computer Network Twin Outlet
- HDMI Socket

- Ceiling Mounted Exhaust Fan 90m3/hr
- Main Incoming Cable For Power PVC Duct Below Ground
- 82Ø PVC Duct For Internet Cables Lead In Below Ground Slab

Notes: -
- All Twin Sockets At 300mm From F.F.L Except Stated Otherwise
- All Computer, Telephone Points At 300mm From F.F.L.
- All electrical components shall be connected to respective Distribution Box in the same area as the component.
- All electrical components in common areas, corridors and staircase should be connected to Common Area DB
- Wall Speaker shall be connected to Public address system of school



GROUND FLOOR - Power & AC Layout
SCALE 1:150

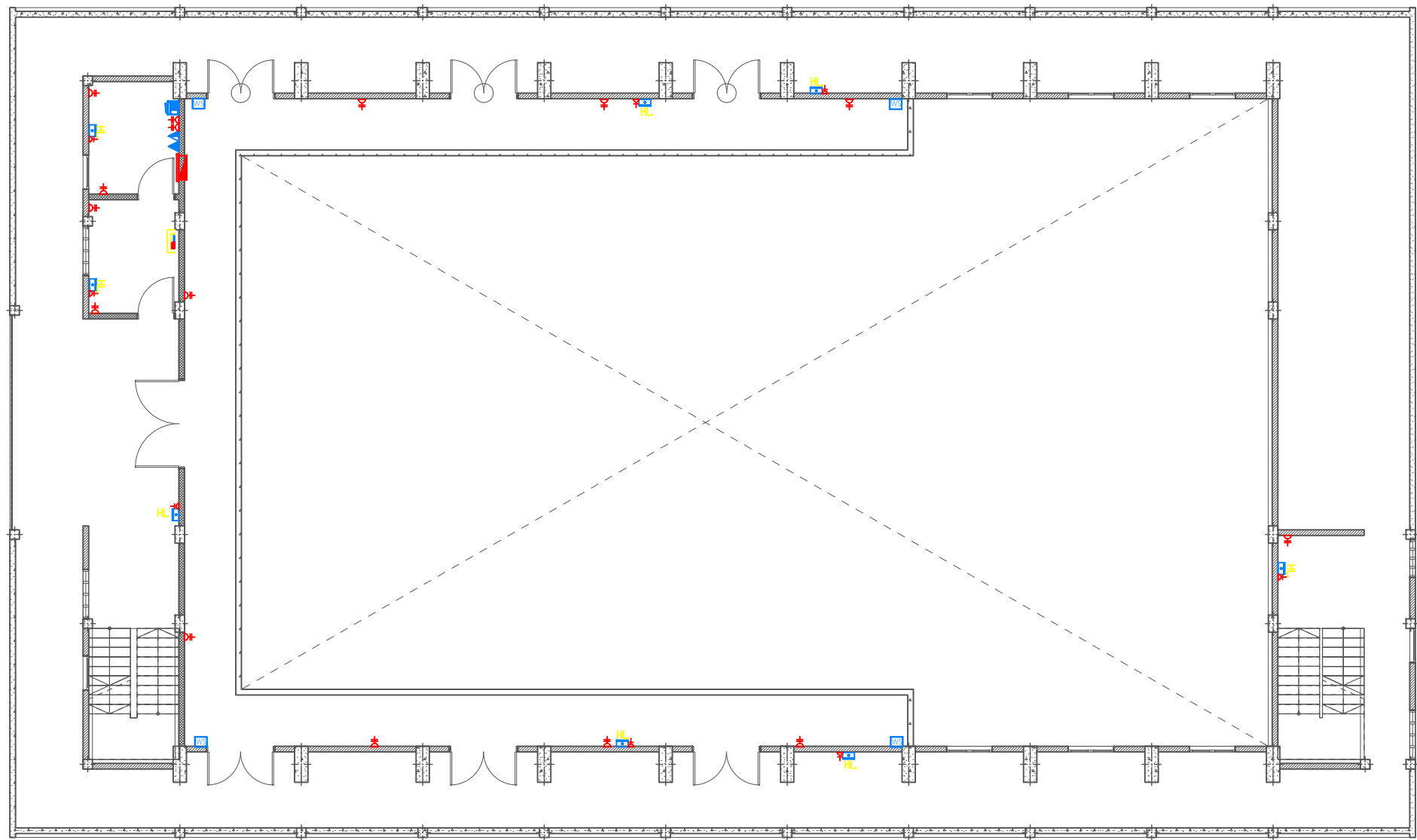
Issue	Date	Description
AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 01 / 09		

Legend

- 13A Twin Socket
- 13A Power Socket
- Distribution Board
- HL
- Computer Network Outlet
- Emergency Light
- Wall Mounted Speaker
- Electricity Meter
- Public Address System
- Computer Network Twin Outlet
- HDMI Socket

- Ceiling Mounted Exhaust Fan 90m3/hr
- Main Incoming Cable For Power PVC Duct Below Ground
- 82Ø PVC Duct For Internet Cables Lead In Below Ground Slab

Notes: -
- All Twin Sockets At 300mm From F.F.L. Except Stated Otherwise
- All Computer, Telephone Points At 300mm From F.F.L.
- All electrical components shall be connected to respective Distribution Box in the same area as the component.
- All electrical components in common areas, corridors and staircase should be connected to Common Area DB
- Wall Speaker shall be be connected to Public address system of school



FIRST FLOOR - Power & AC Layout
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 02 / 09		

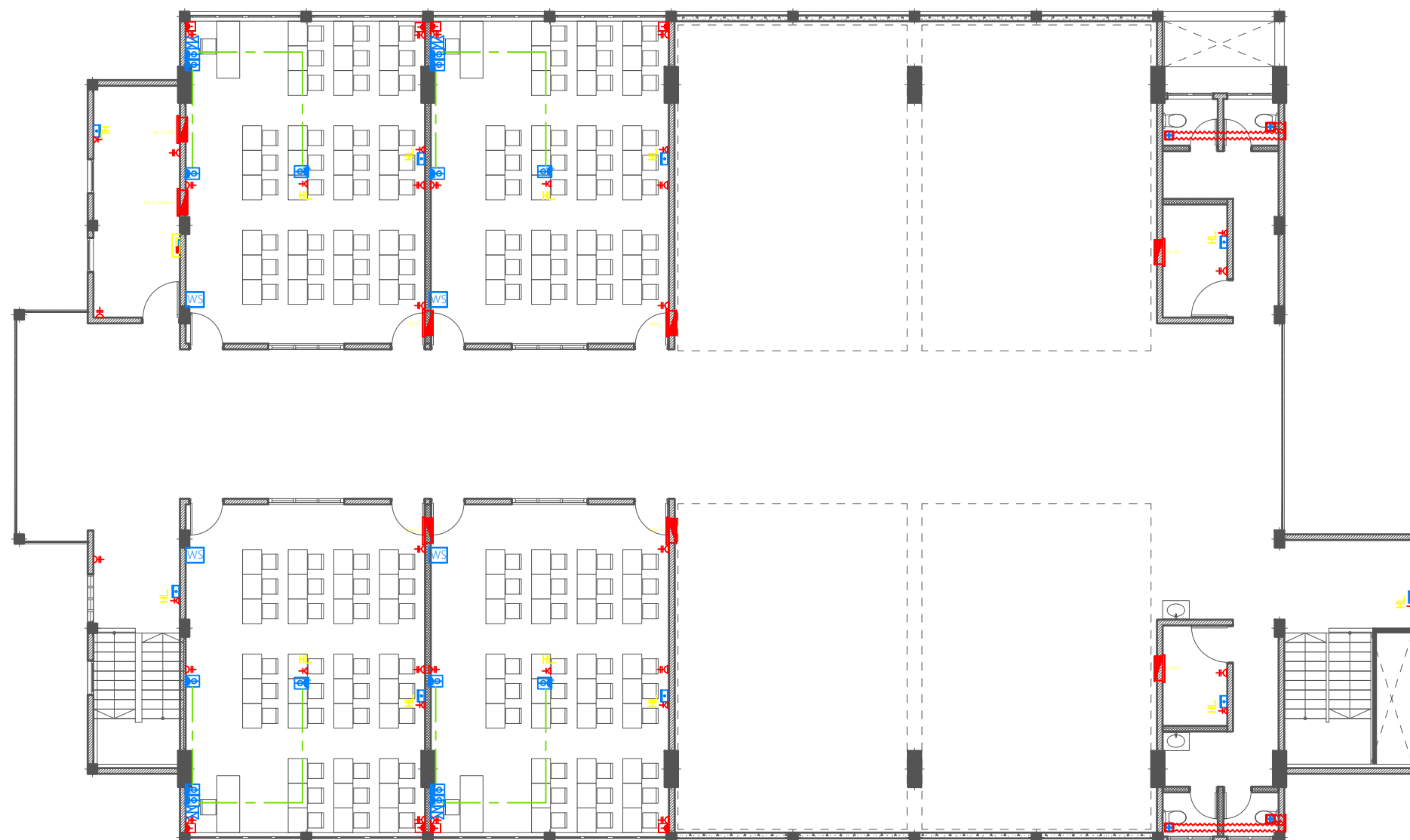
Legend

- 13A Twin Socket
- 13A Power Socket
- 15A Switched Socket @ H.L.
- Distribution Board
- HL.
- Computer Network Outlet
- Emergency Light
- WS
- Electricity Meter
- Public Address System
- Computer Network Twin Outlet
- HDMI Socket

- Ceiling Mounted Exhaust Fan 90m3/hr
- Main Incoming Cable For Power PVC Duct Below Ground
- 82Ø PVC Duct For Internet Cables Lead In Below Ground Slab

Notes: -












- All Twin Sockets At 300mm From F.F.L. Except Stated Otherwise
- All Computer, Telephone Points At 300mm From F.F.L.
- All electrical components shall be connected to respective Distribution Box in the same area as the component.
- All electrical components in common areas, corridors and staircase should be connected to Common Area DB
- Wall Speaker shall be connected to Public address system of school

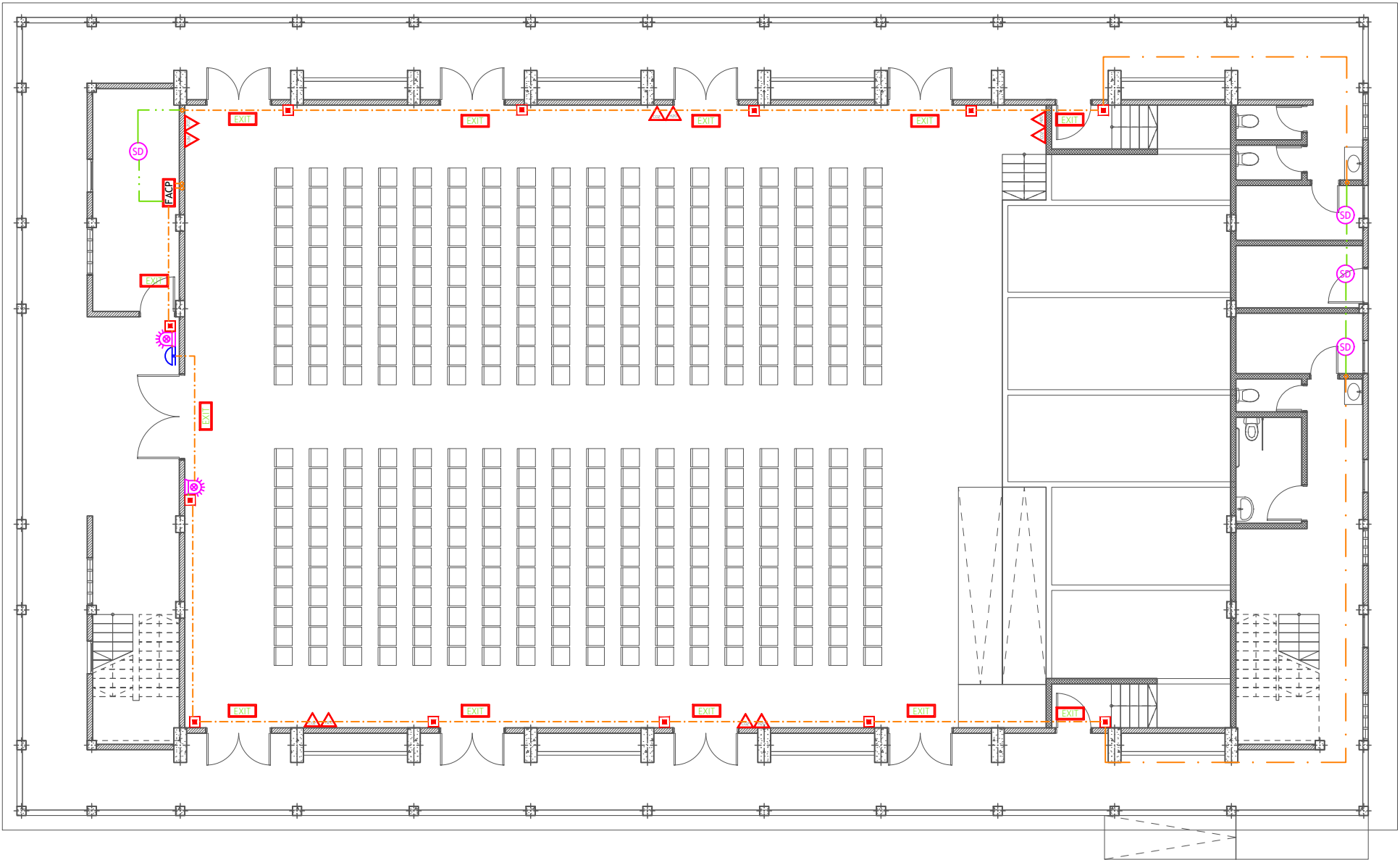


SECOND FLOOR POWER & ACV LAYOUT
SCALE 1:150

Issue	Date	Description
AMMENDMENTS:		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT: MINISTRY OF EDUCATION		
ARCHITECT:		
ENGINEER:		
DRAWN:		
CHECKED:		
SCALE: AS GIVEN		
DATE: 07.09.2021		
DWG NO: E 03 / 09		

Legend

-  CO₂ Extinguisher (load: 2kg) In Polycarbonate Enclosure
-  DCP Extinguisher (load: 6kg) In Polycarbonate Enclosure
-  H₂O Extinguisher (load: 9L) In Polycarbonate Enclosure
-  Manual Call Point (At 1200mm from F.F.L.)
-  Smoke Detector
-  Beacon
-  Sounder Bell
-  2.5mm² Fire Retardant Low Smoke (FRLS) Cables In FRLS Conduits (Running Underground)
-  2.5mm² Fire Retardant Low Smoke (FRLS) Cables In FRLS Conduits (Above False Ceiling or Through Slab)
-  Fire Alarm Control Panel
-  Exit Sign





GROUND FLOOR - FDP Layout


SCALE 1:150


Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 04 / 09		


Legend


- 


CO₂ Extinguisher (load: 2kg) In Polycarbonate Enclosure
- 


DCP Extinguisher (load: 6kg) In Polycarbonate Enclosure
- 


H₂O Extinguisher (load: 9L) In Polycarbonate Enclosure
- 


Manual Call Point (At 1200mm from F.F.L.)
- 


Smoke Detector
- 

Beacon
- 

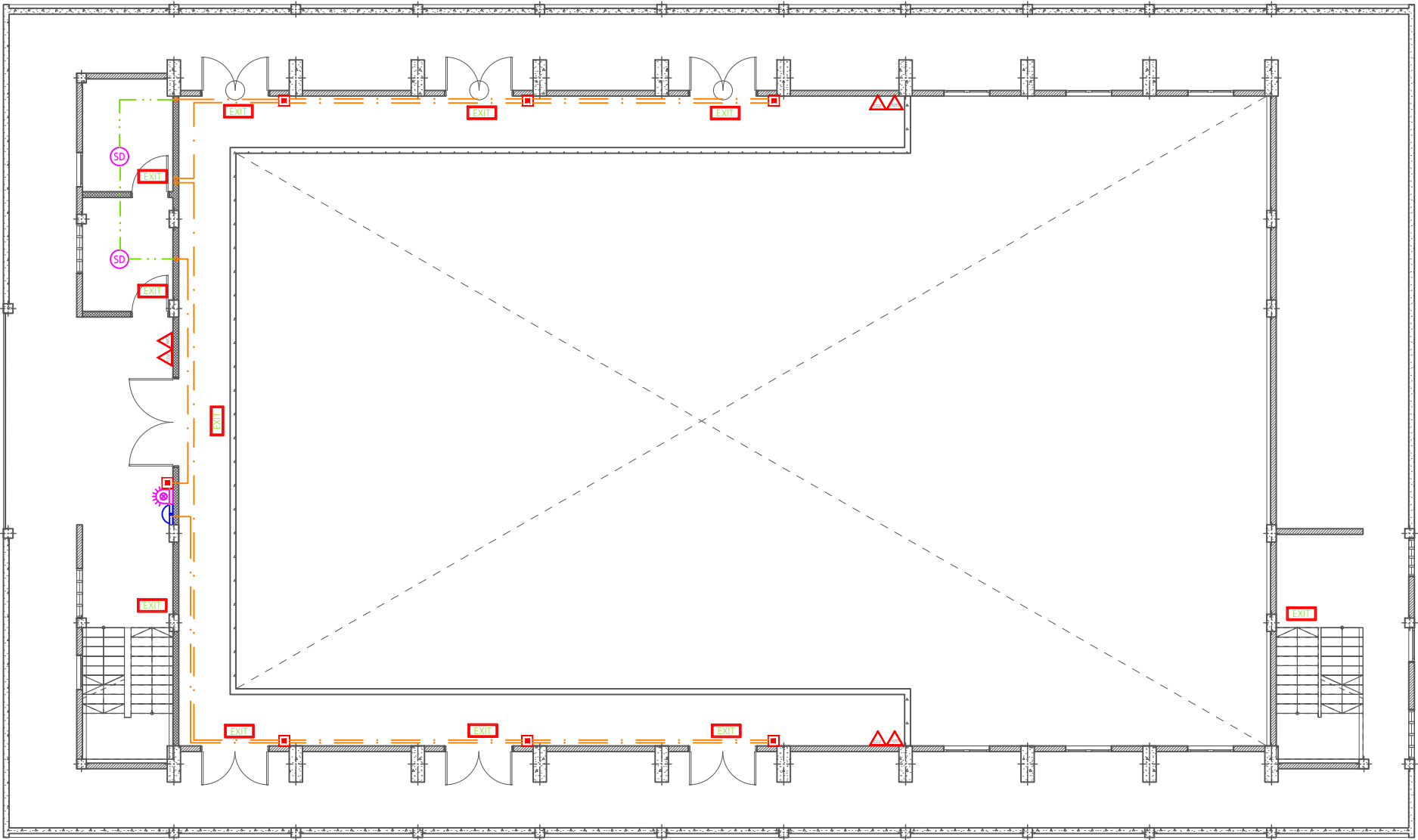
Sounder Bell
- 

2.5mm² Fire Retardant Low Smoke (FRLS) Cables In FRLS Conduits
(Running Underground)
- 

2.5mm² Fire Retardant Low Smoke (FRLS) Cables In FRLS Conduits
(Above False Ceiling or Through Slab)
- 

FACP Fire Alarm Control Panel
- 

EXIT Exit Sign














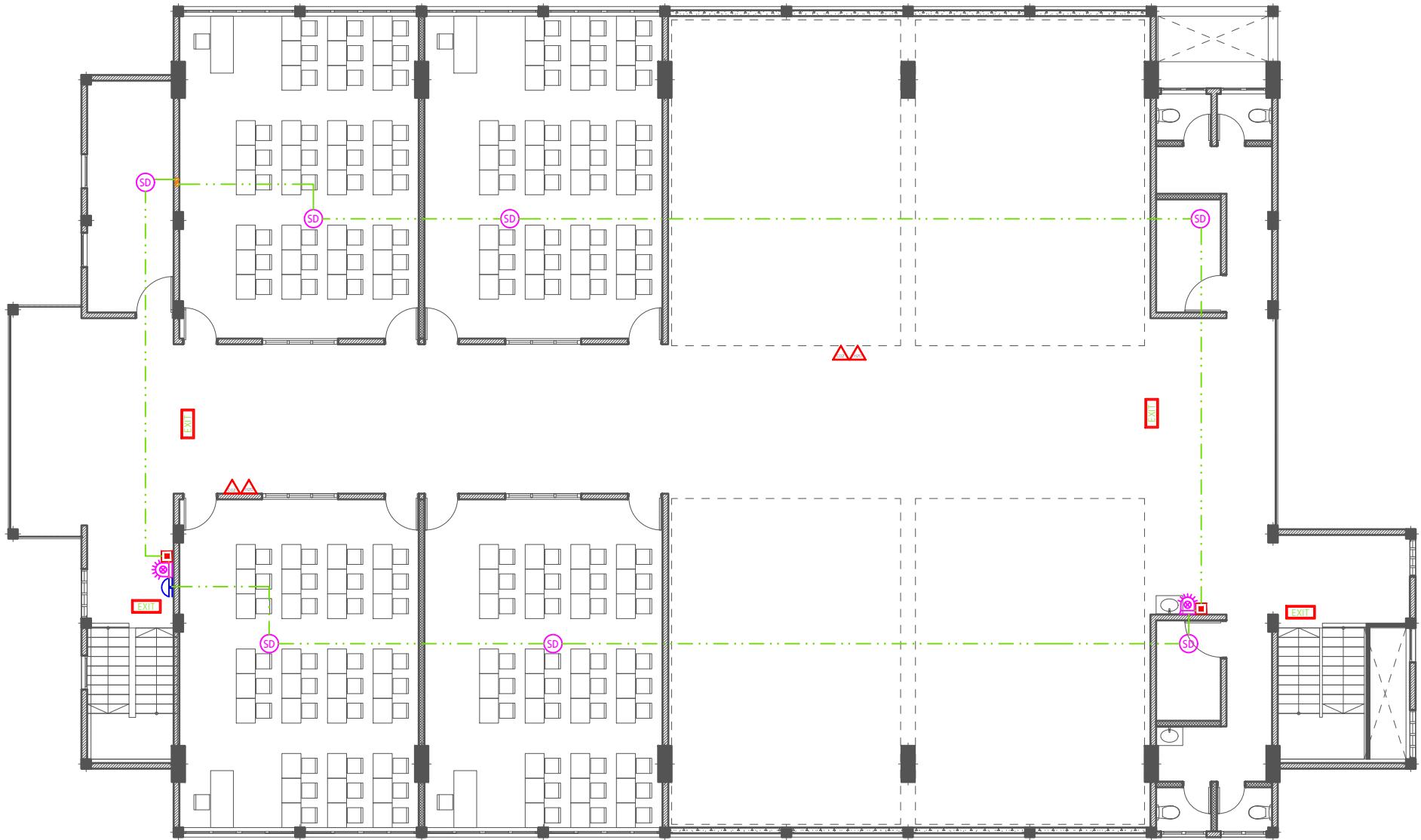
FIRST FLOOR - FDP Layout

SCALE 1:150

Issue	Date	Description
AMMENDMENTS:		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 05 / 09		

Legend











-  CO₂ Extinguisher (load: 2kg) In Polycarbonate Enclosure
-  DCP Extinguisher (load: 6kg) In Polycarbonate Enclosure
-  H₂O Extinguisher (load: 9L) In Polycarbonate Enclosure
-  Manual Call Point (At 1200mm from F.F.L.)
-  Smoke Detector
-  Beacon
-  Sounder Bell
-  2.5mm² Fire Retardant Low Smoke (FRLS) Cables In FRLS Conduits (Running Underground)
-  2.5mm² Fire Retardant Low Smoke (FRLS) Cables In FRLS Conduits (Above False Ceiling or Through Slab)
-  Fire Alarm Control Panel
-  Exit Sign

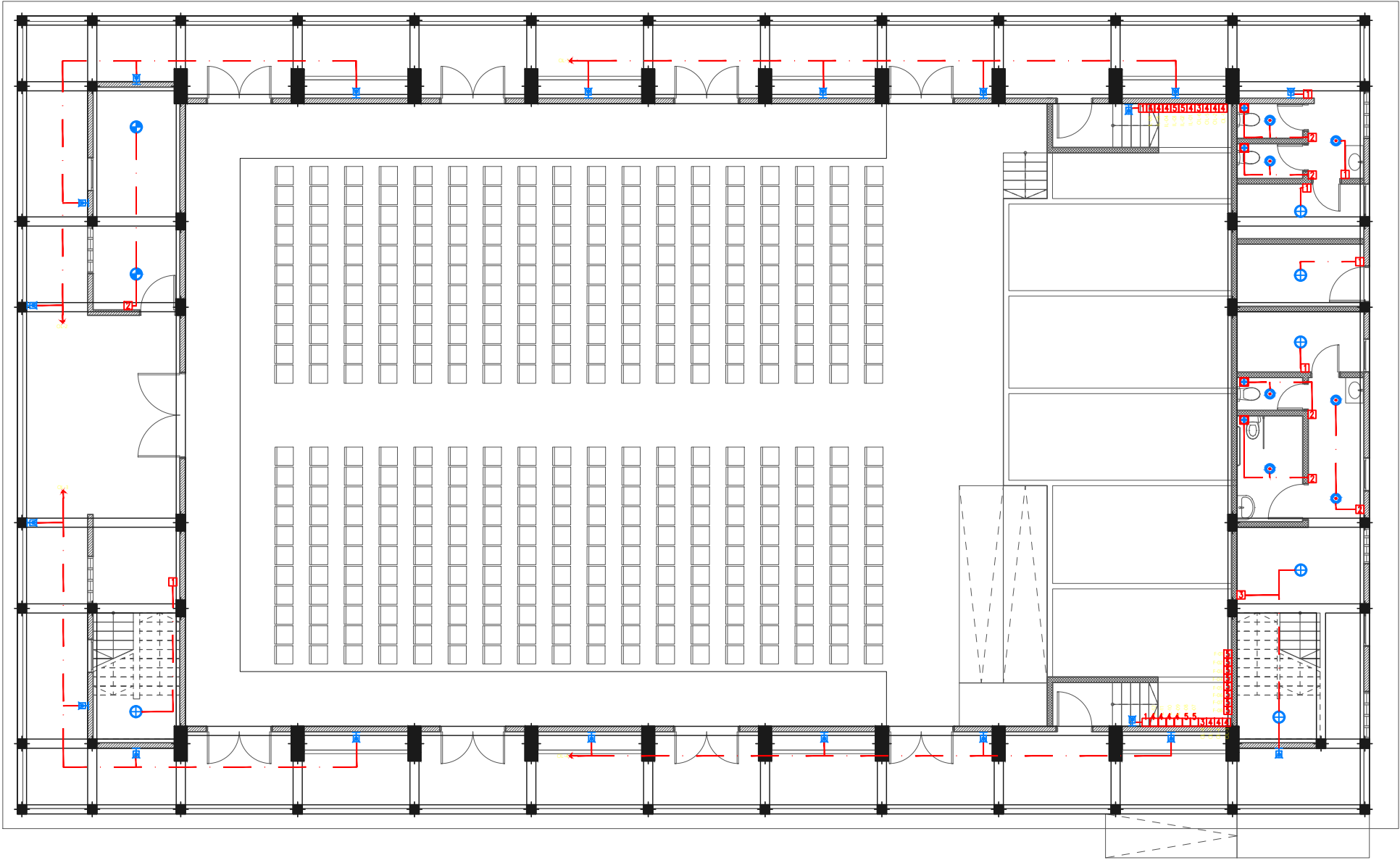


SECOND FLOOR - FDP LAYOUT
SCALE 1:150

Issue	Date	Description
AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 06 / 09		

Legend

-  Ceiling Light (18W)
-  Ceiling Light (12W)
-  Recessed Ceiling Light (12W)
-  Ceiling Down Light (18W) - Weather Proof
-  Weather Proof Wall Light IP55 (12W)
-  3 Ft Led Tube Light
-  2 x 50W PLL Tube Light
-  Light and Fan Switch (1 Gang - 5 Gang)
-  42" To 48" Ceiling Fan
-  Ceiling Mounted Exhaust Fan 90m3/hr

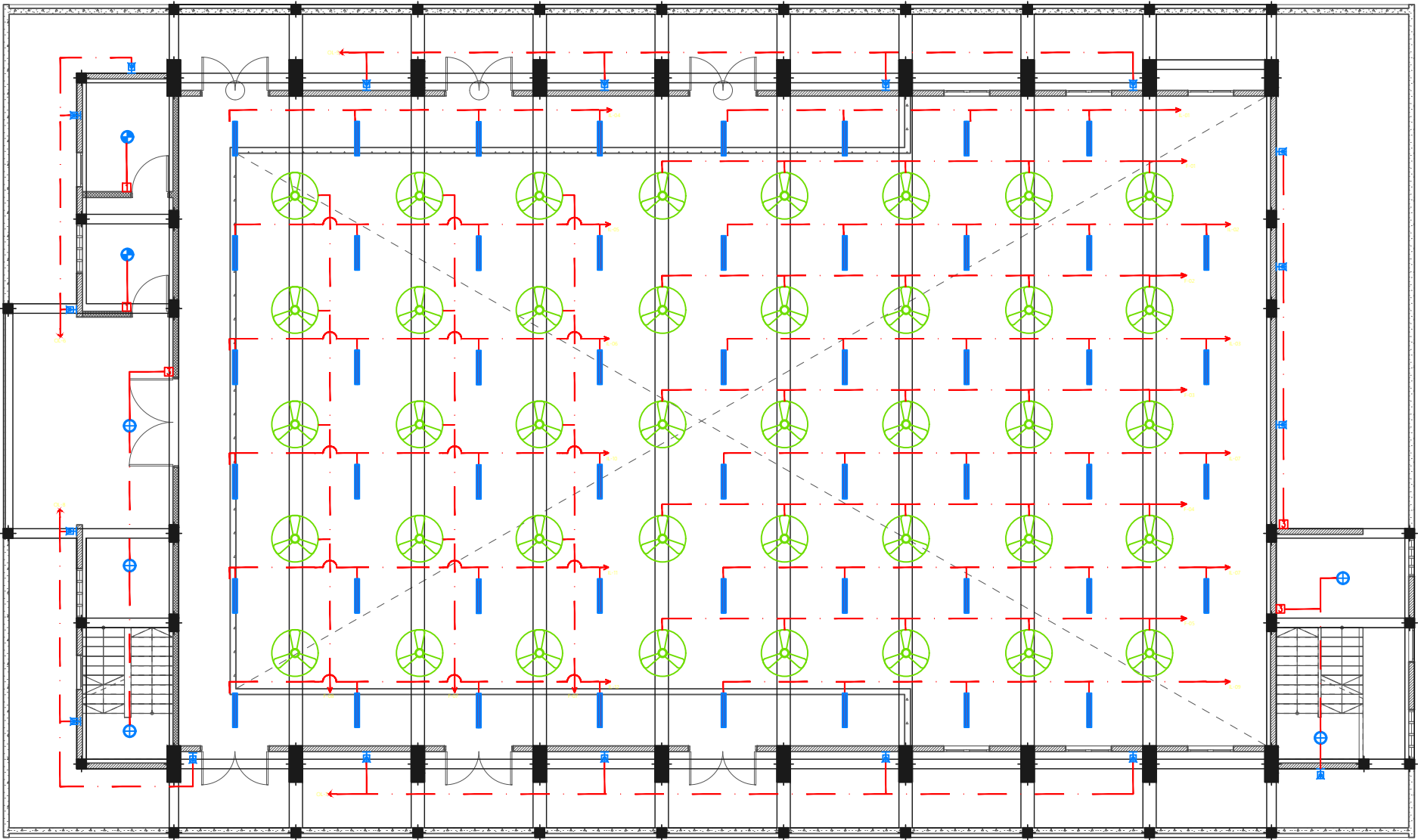


GROUND FLOOR - Lighting Plan
SCALE 1:150

Issue	Date	Description
AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALÉ, REPUBLIC OF MALDIVES		
PROJECT SH BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT: MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 07 / 09		

Legend











- Ceiling Light (18W)
- Ceiling Light (12W)
- Recessed Ceiling Light (12W)
- Ceiling Down Light (18W) - Weather Proof
- Weather Proof Wall Light IP55 (12W)
- 3 Ft Led Tube Light
- 2 x 50W PLL Tube Light
- Light and Fan Switch (1 Gang - 5 Gang)
- 42" To 48" Ceiling Fan
- Ceiling Mounted Exhaust Fan 90m3/hr

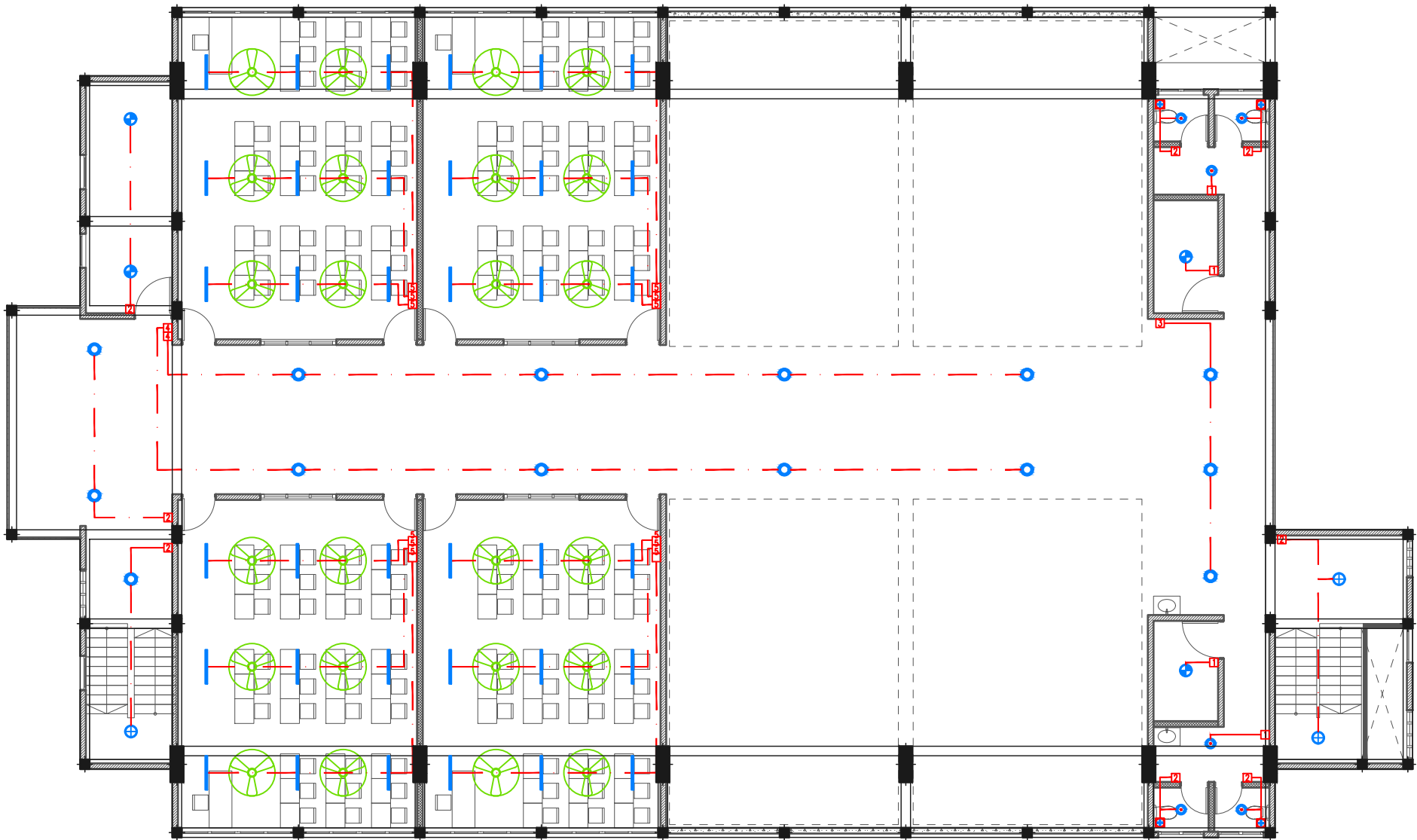


FIRST FLOOR - Lighting Layout
SCALE 1:150

Issue	Date	Description
AMMENDMENTS:		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH. BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 08 / 09		

Legend

-  Ceiling Light (18W)
-  Ceiling Light (12W)
-  Recessed Ceiling Light (12W)
-  Ceiling Down Light (18W) - Weather Proof
-  Weather Proof Wall Light IP55 (12W)
-  3 Ft Led Tube Light
-  2 x 50W PLL Tube Light
-  Light and Fan Switch (1 Gang - 5 Gang)
-  42" To 48" Ceiling Fan
-  Ceiling Mounted Exhaust Fan 90m3/hr



SECOND FLOOR - Lighting Layout
SCALE 1:150

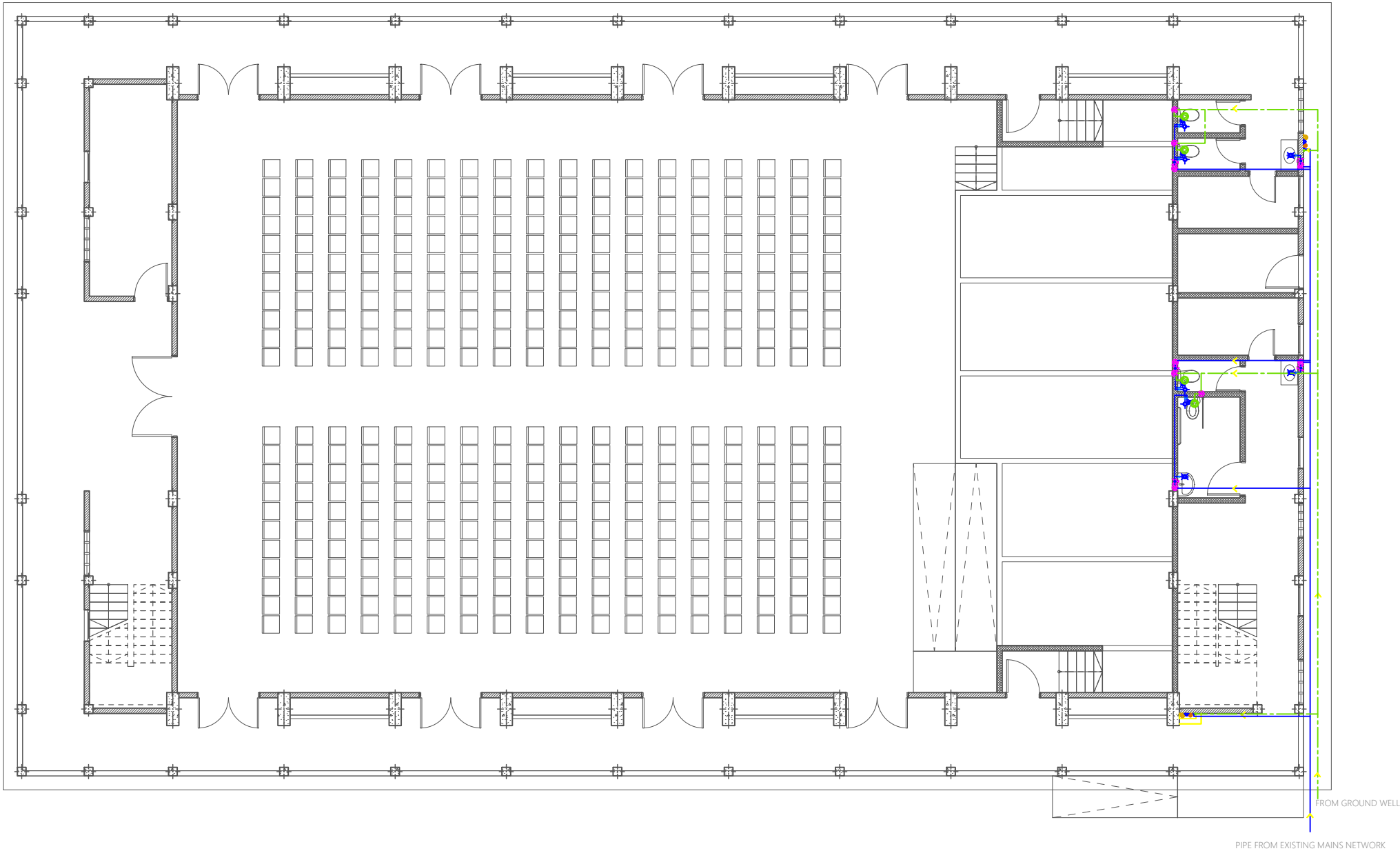
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AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E-09/09		

Legend

- 16Ø Cold Water Supply To Basin Faucet
- 16Ø Cold Water Supply To Bidet Shower
- 16Ø Cold Water Supply To Cistern
- Gate Valve
- Rise In Wall
- Drop In Wall
- Angle Valve with cap for Ground Water Supply
- 25Ø Cold Water Supply Pipes Running Underground
- 20Ø Cold Water Supply Pipes Running In Wall
- 20Ø Cold Water Supply Pipes Running Above False Ceiling
- 20Ø Cold Water Supply Pipes Running Underground
- 25Ø Ground Water Supply Pipes

Notes: -

- All Cold Water Pipes Should Be PVC
- Sll Hot Water Pipes Should Be PPR



GROUND FLOOR - Plumbing Layout

SCALE 1:150

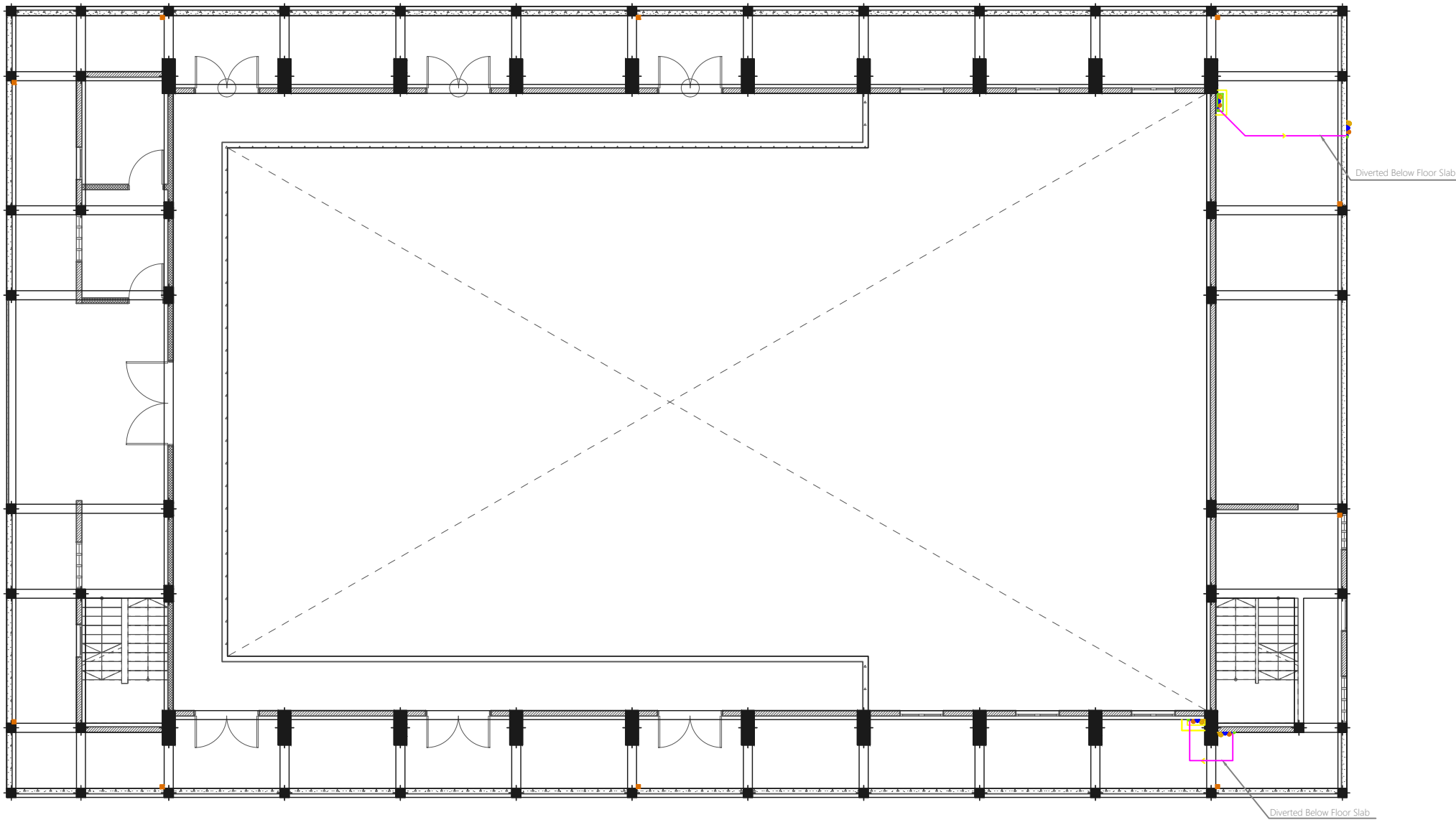
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AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : P 01 / 07		

Legend

- 16Ø Cold Water Supply To Basin Faucet
- 16Ø Cold Water Supply To Bidet Shower
- 16Ø Cold Water Supply To Cistern
- Gate Valve
- Rise In Wall
- Drop In Wall
- Angle Valve with cap for Ground Water Supply
- 25Ø Cold Water Supply Pipes Running Underground
- 20Ø Cold Water Supply Pipes Running In Wall
- 20Ø Cold Water Supply Pipes Running Above False Ceiling
- 20Ø Cold Water Supply Pipes Running Underground
- 25Ø Ground Water Supply Pipes

Notes: -

- All Cold Water Pipes Should Be PVC
- SII Hot Water Pipes Should Be PPR



FIRST FLOOR - Plumbing Layout

SCALE 1:150

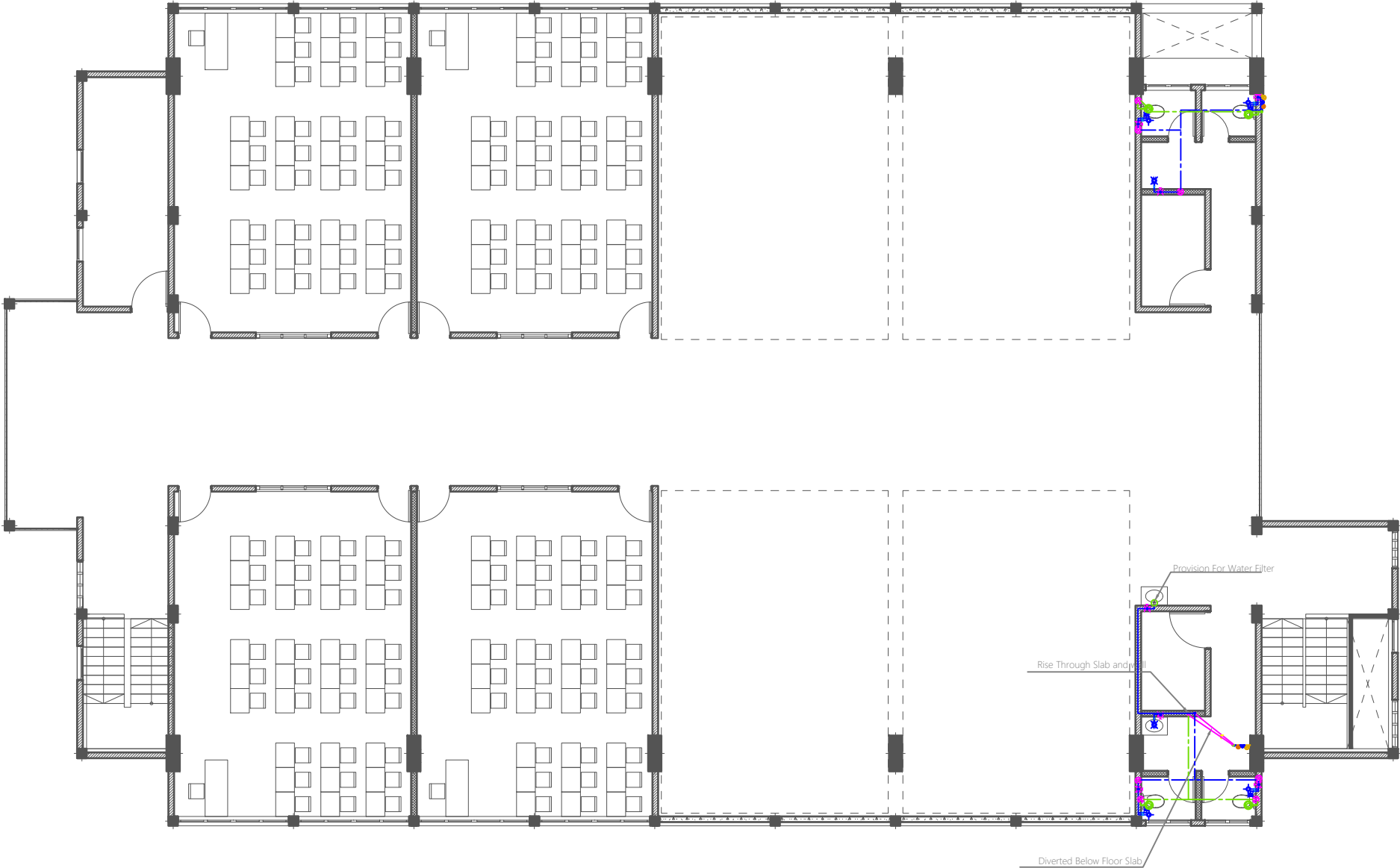
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AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT:		
ENGINEER:		
DRAWN:		
CHECKED:		
SCALE: AS GIVEN		
DATE: 07.09.2021		
DWG NO.: P.02 / 07		

Legend

- 16Ø Cold Water Supply To Basin Faucet
- 16Ø Cold Water Supply To Bidet Shower
- 16Ø Cold Water Supply To Cistern
- Gate Valve
- Rise In Wall
- Drop In Wall
- Angle Valve with cap for Ground Water Supply
- 25Ø Cold Water Supply Pipes Running Underground
- 20Ø Cold Water Supply Pipes Running In Wall
- 20Ø Cold Water Supply Pipes Running Above False Ceiling
- 20Ø Cold Water Supply Pipes Running Underground
- 25Ø Ground Water Supply Pipes

Notes: -

- All Cold Water Pipes Should Be PVC
- Sll Hot Water Pipes Should Be PPR



SECOND FLOOR - Plumbing Layout

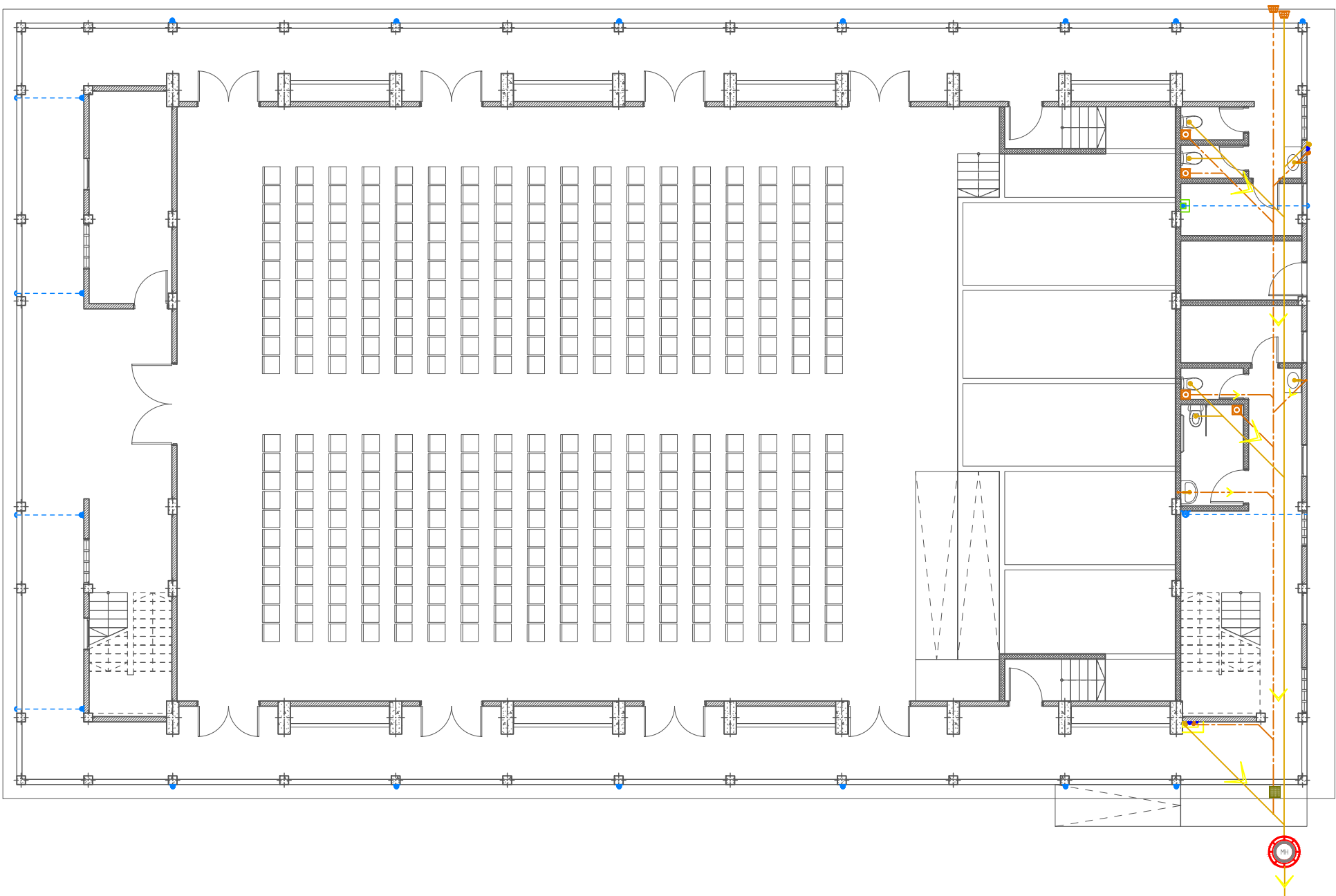
SCALE 1:150

Issue	Date	Description
AMMENDMENTS:		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT: MINISTRY OF EDUCATION		
ARCHITECT:		
ENGINEER:		
DRAWN:		
CHECKED:		
SCALE: AS GIVEN		
DATE: 07.09.2021		
DWG NO: P 03 / 07		

- Legend
- Floor Drain
 - Floor Gully
 - 110Ø Soil Pipe (uPVC Pipe)
 - 110Ø Soil Vent Pipe (uPVC Pipe)
 - 82Ø Waste Pipe (uPVC Pipe)
 - 82Ø Waste Vent Pipe (uPVC Pipe)
 - 40Ø Waste Pipe (uPVC Pipe)
 - 63Ø Manhole Vent Pipe (uPVC Pipe)
 - 110Ø Rain Water Pipes (uPVC Pipe)
 - Clean Out Point
 - Bottle Trap
 - Manhole
 - Gully Trap

Notes: -

- All Drainage Pipes Should Have At A Slope Of 1/150
- All Floor Drains Should Have 'P' Traps

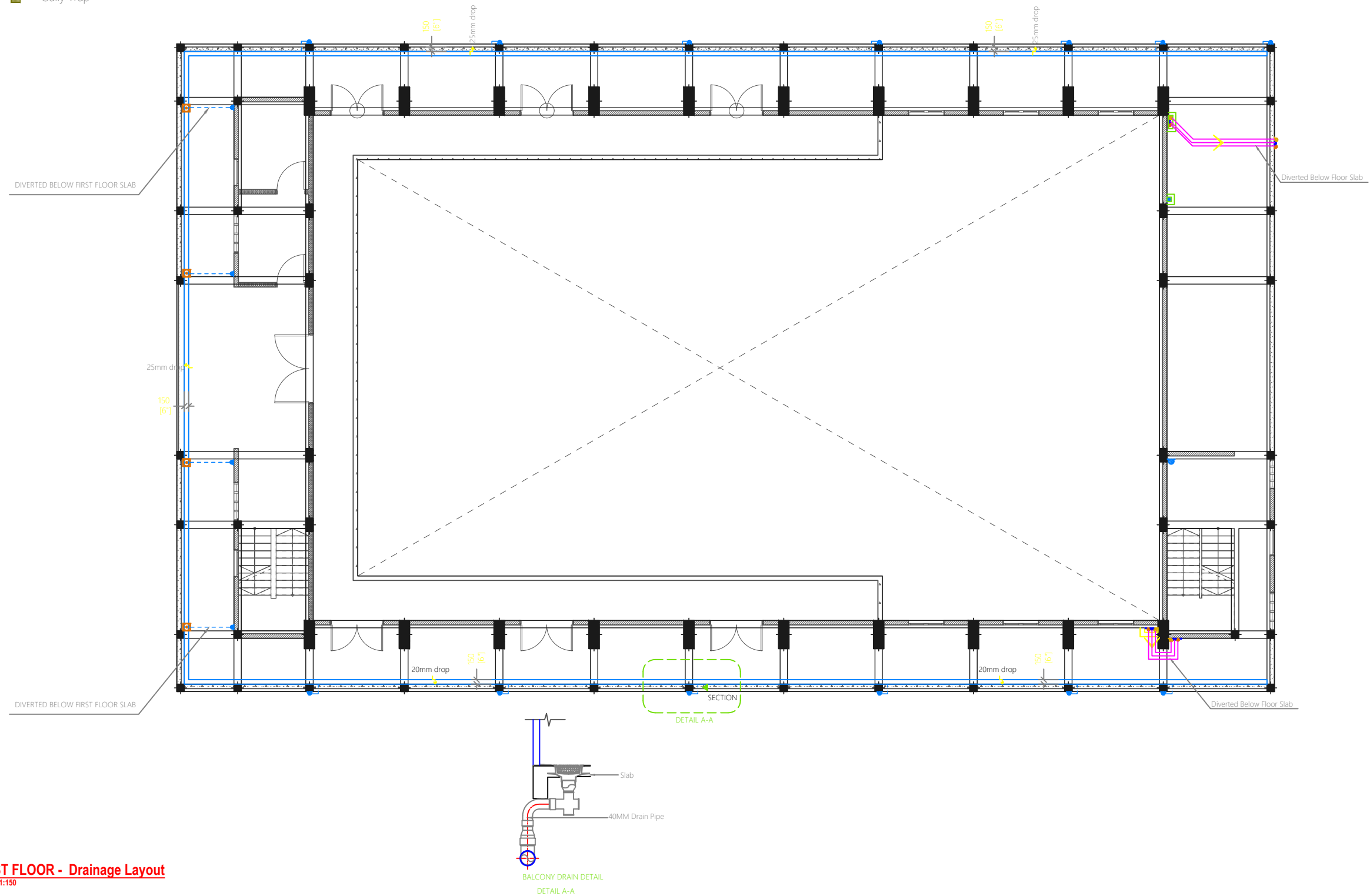


CONNECTED TO EXISTING MAIN SEWER NETWORK

GROUND FLOOR - Drainage Layout
SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALÉ, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT: MINISTRY OF EDUCATION		
ARCHITECT:		
ENGINEER:		
DRAWN:		
CHECKED:		
SCALE: A5 GIVEN		
DATE: 07.09.2021		
DWG NO: P 04 / 07		

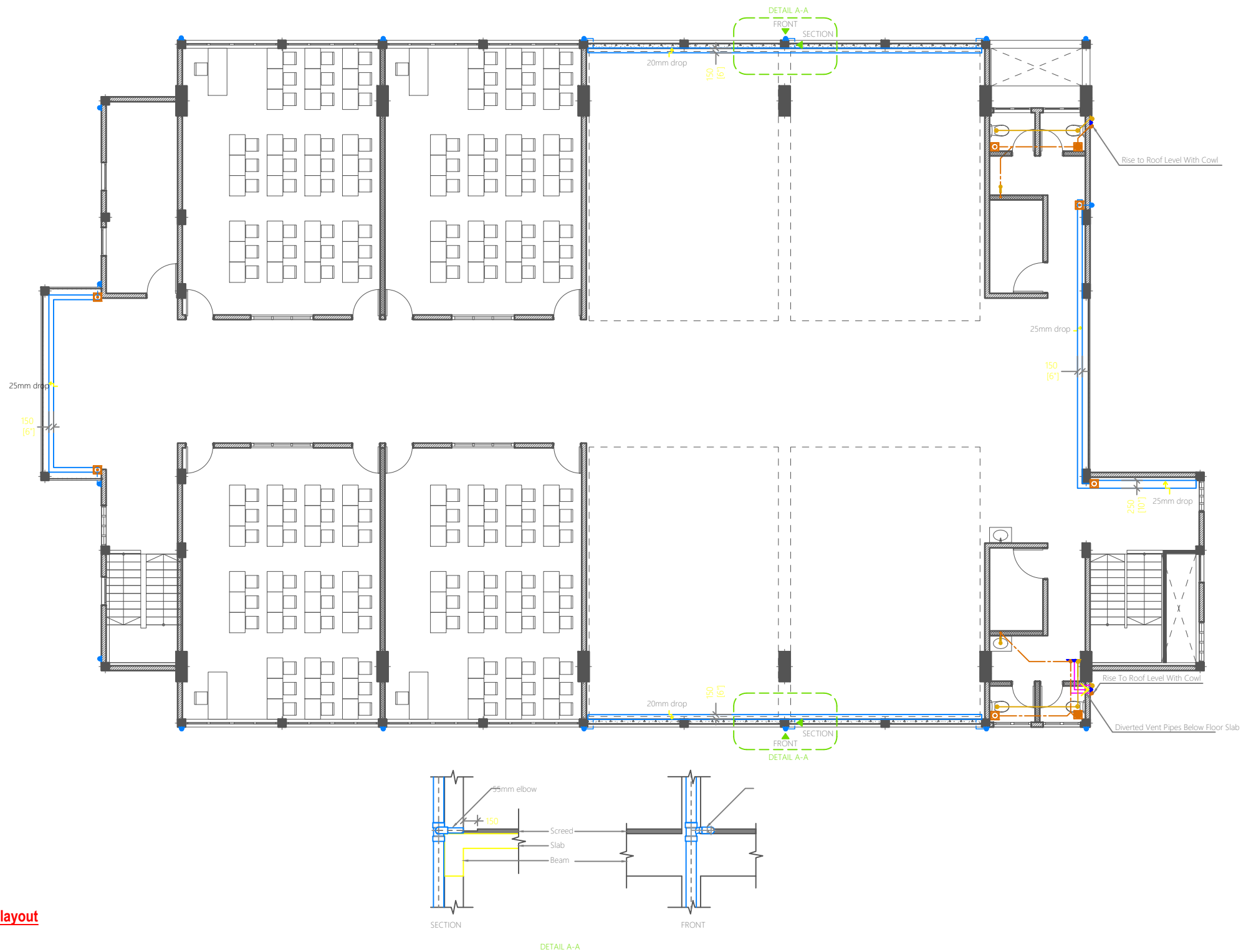
- Legend
- Floor Drain
 - Floor Gully
 - 110Ø Soil Pipe (uPVC Pipe)
 - 110Ø Soil Vent Pipe (uPVC Pipe)
 - 82Ø Waste Pipe (uPVC Pipe)
 - 82Ø Waste Vent Pipe (uPVC Pipe)
 - 40Ø Waste Pipe (uPVC Pipe)
 - 63Ø Manhole Vent Pipe (uPVC Pipe)
 - 110Ø Rain Water Pipes (uPVC Pipe)
 - Clean Out Point
 - Bottle Trap
 - Manhole
 - Gully Trap



FIRST FLOOR - Drainage Layout
SCALE 1:150

Issue	Date	Description
AMMENDMENTS		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALÉ, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : P 05 / 07		

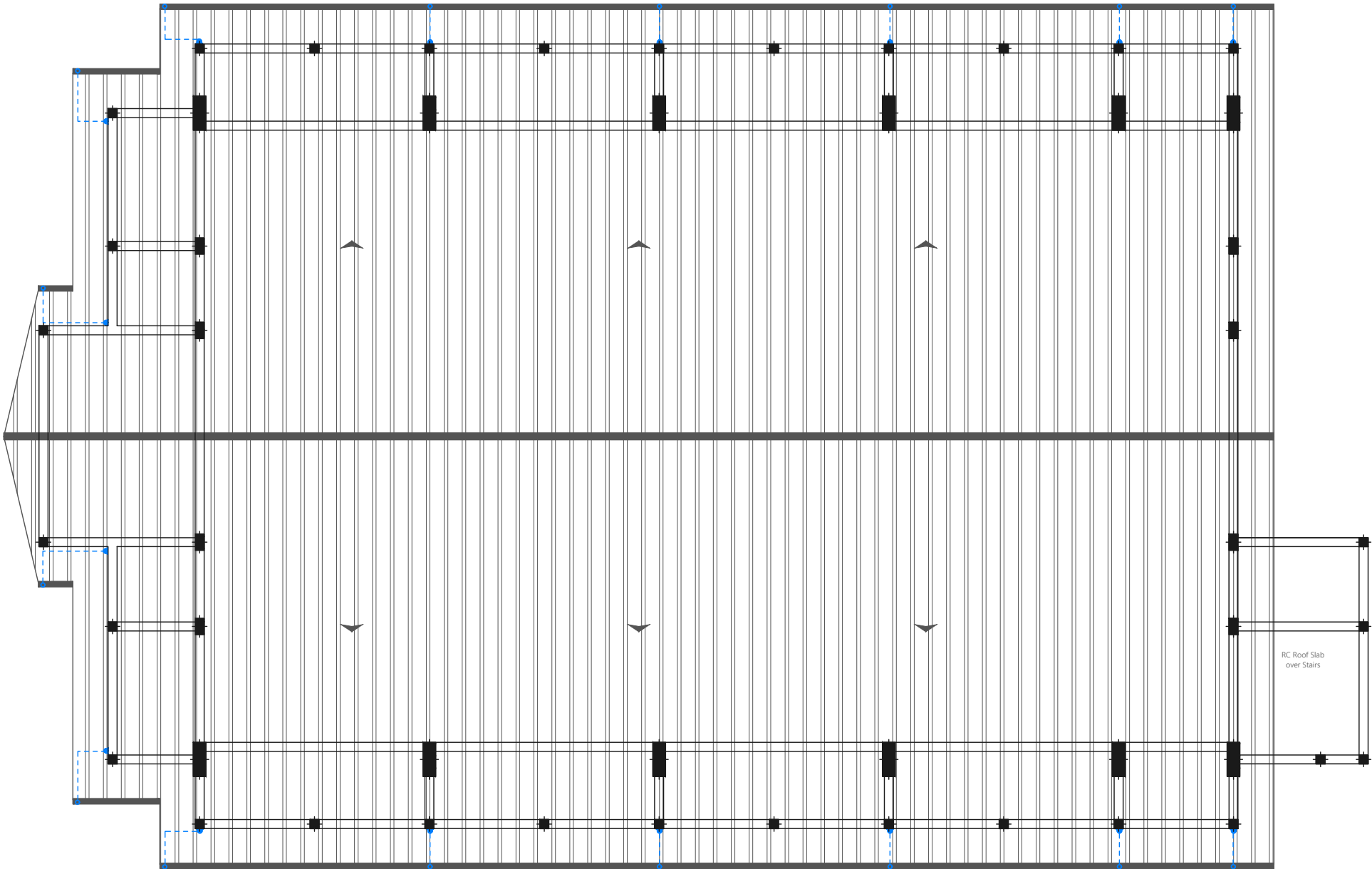
- Legend
- Floor Drain
 - Floor Gully
 - 110Ø Soil Pipe (uPVC Pipe)
 - 110Ø Soil Vent Pipe (uPVC Pipe)
 - 82Ø Waste Pipe (uPVC Pipe)
 - 82Ø Waste Vent Pipe (uPVC Pipe)
 - 40Ø Waste Pipe (uPVC Pipe)
 - 63Ø Manhole Vent Pipe (uPVC Pipe)
 - 110Ø Rain Water Pipes (uPVC Pipe)
 - Clean Out Point
 - Bottle Trap
 - Manhole
 - Gully Trap



SECOND FLOOR - Drainage layout
SCALE 1:150

Issue	Date	Description
AMMENDMENTS:		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT : MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : P 06 / 07		

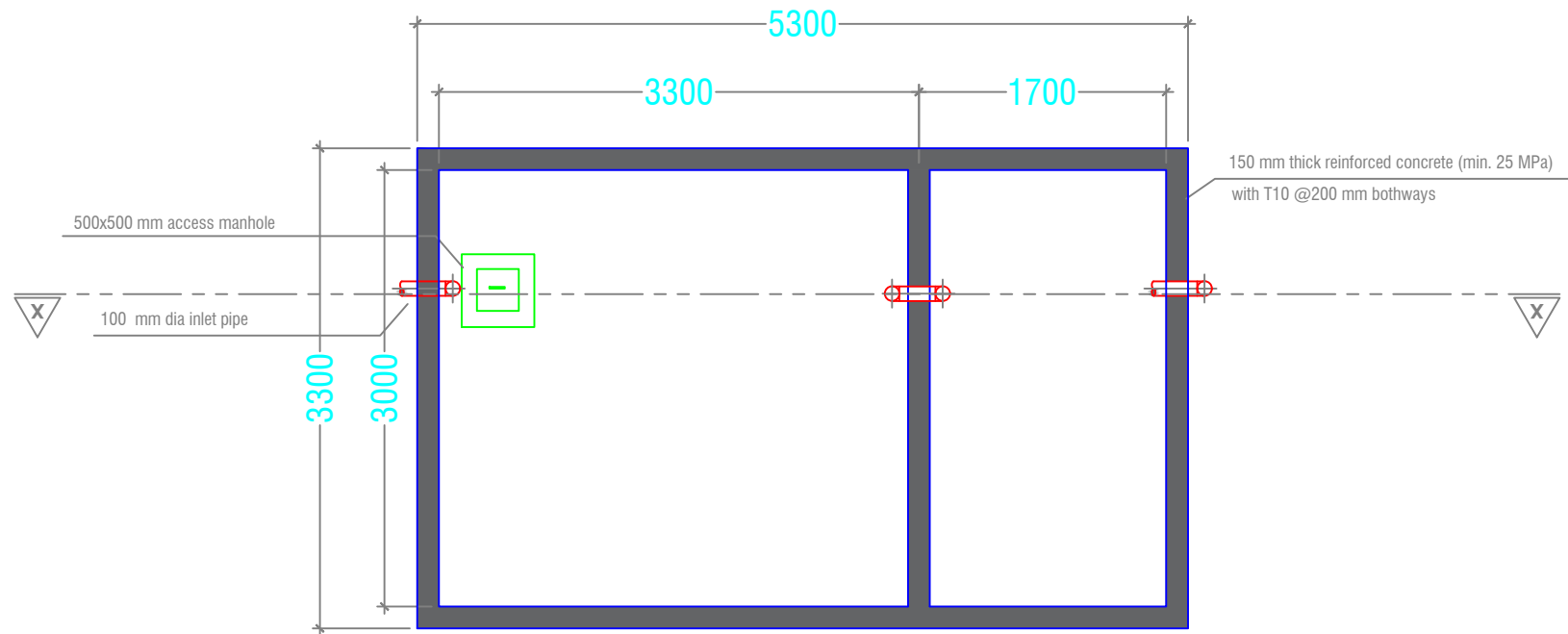
- Legend
- Floor Drain
 - Floor Gully
 - 110Ø Soil Pipe (uPVC Pipe)
 - 110Ø Soil Vent Pipe (uPVC Pipe)
 - 82Ø Waste Pipe (uPVC Pipe)
 - 82Ø Waste Vent Pipe (uPVC Pipe)
 - 40Ø Waste Pipe (uPVC Pipe)
 - 63Ø Manhole Vent Pipe (uPVC Pipe)
 - 110Ø Rain Water Pipes (uPVC Pipe)
 - Clean Out Point
 - Bottle Trap
 - Manhole
 - Gully Trap



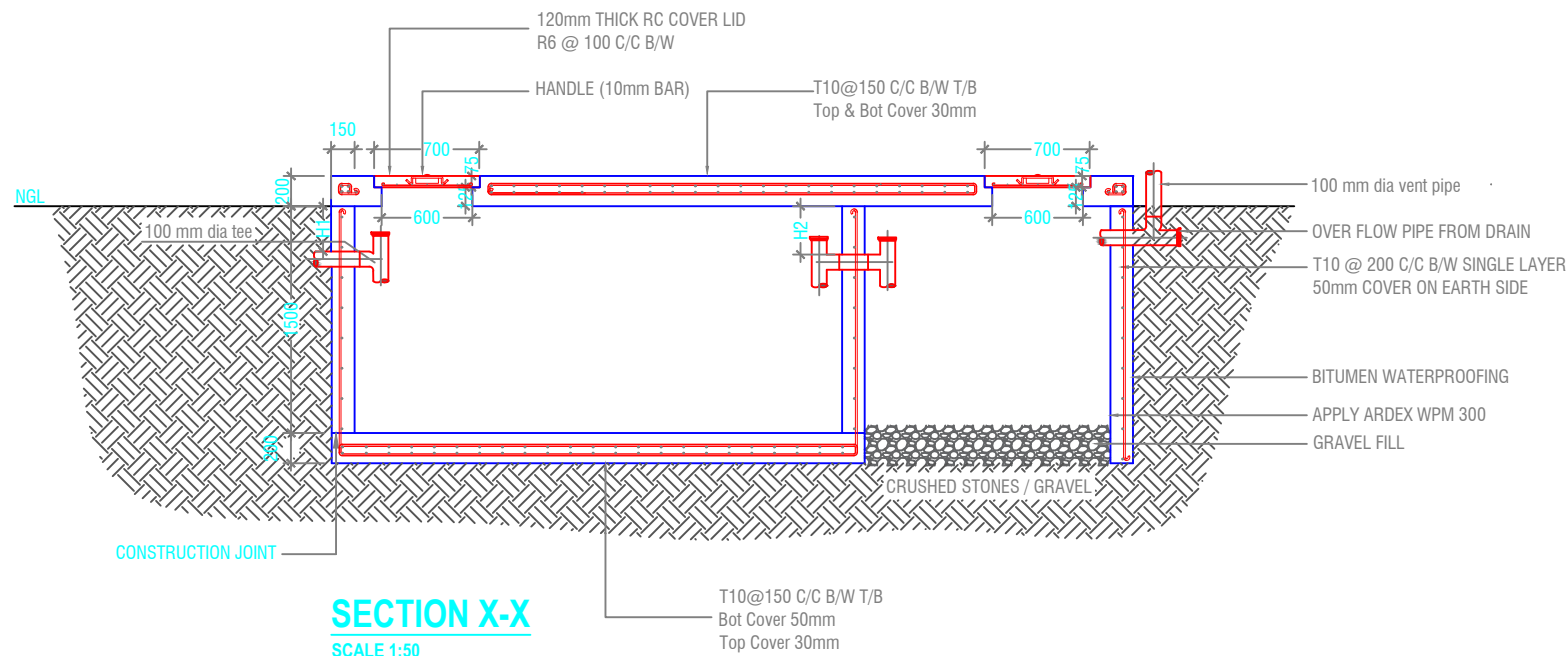
ROOF - Drainage layout

SCALE 1:150

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : P.07 / 07		



PLAN
SCALE 1:50



SECTION X-X
SCALE 1:50

SEPTIC TANK DETAIL
SCALE 1:50



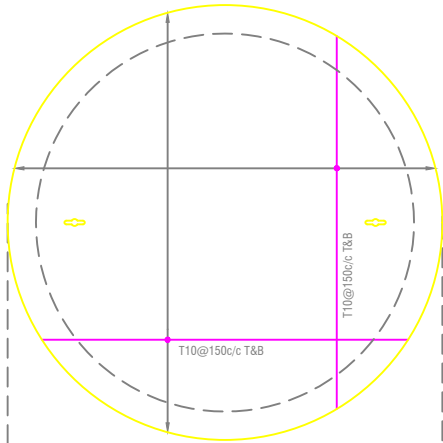
NOTE:

H1 < H2

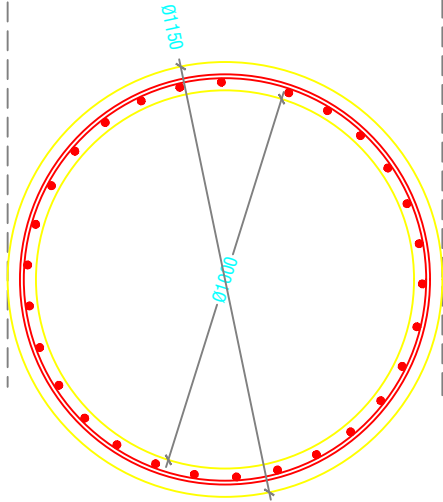
- TOP AND BOTTOM OF SEPTIC TANK SHOULD BE OF 200mm THICK
- BITUMINOUS WATERPROOFING TO BE APPLIED BELOW GROUND SURFACE
- REINFORCEMENT TO HAVE A COVER OF 50mm FROM EARTH

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE, REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
PROJECT REFERENCE		
CLIENT MINISTRY OF EDUCATION		
ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 09/ 09		

WATER TANK WALL TOP & BOTTOM SLAB



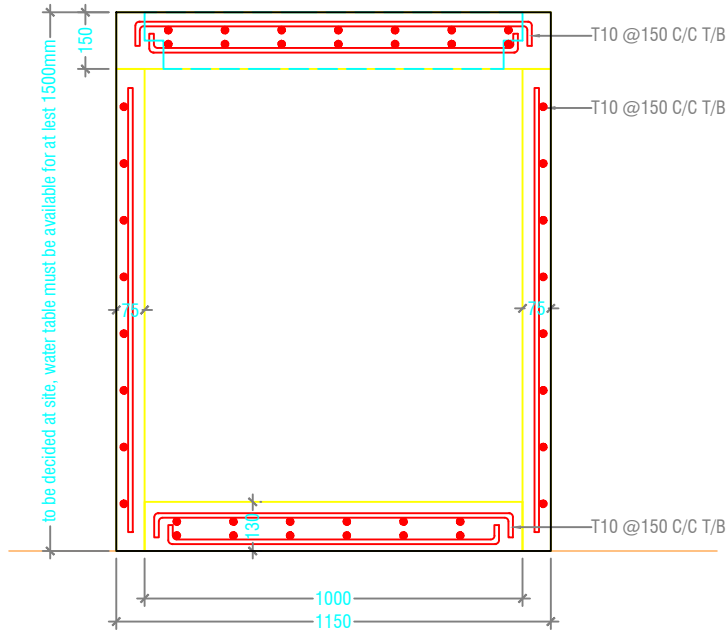
WATER TANK WALL REINF.



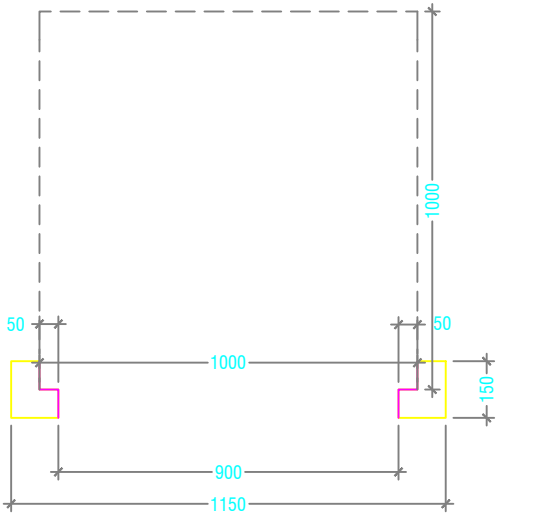
WATER TANK DETAILS

SCALE 1:20

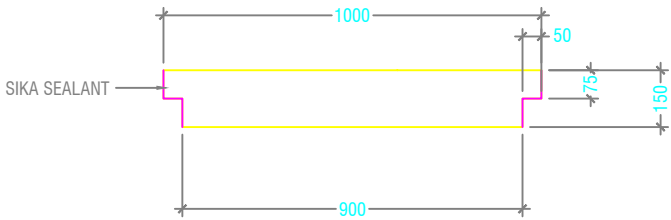
WATER TANK SECTION



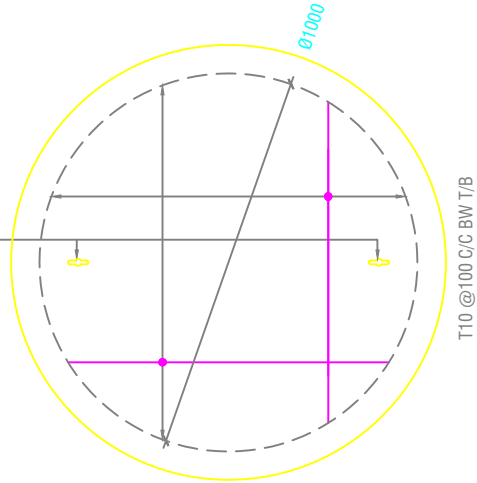
ELEVATION



SECTION



PLAN



NOTE:

- ALL CONCRETE WORKS BELOW GROUND AND AT TERRACE LEVEL TO BE TREATED WITH 'SIKA' WATERPROOFING CHEMICAL OR EQUIVALENT
- PROVIDE PROVISION FOR WATER ENTRANCE THROUGH THE BASE

WATER TANK LID DETAILS

SCALE 1:20

Issue	Date	Description
AMMENDMENTS.		
PHYSICAL FACILITIES DEVELOPMENT SECTION MINISTRY OF EDUCATION, MALE', REPUBLIC OF MALDIVES		
PROJECT SH.BILEFFAHEE SCHOOL MULTIPURPOSE HALL & 4 CLASS ROOMS		
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ARCHITECT :		
ENGINEER :		
DRAWN :		
CHECKED :		
SCALE : AS GIVEN		
DATE : 07.09.2021		
DWG NO : E 09/ 09		