

ផ្នែក
ស្វាគមន៍

ARCHITECTURAL DRAWING

1. GENERAL

- 1.1. ALL STRUCTURAL WORKS AND MATERIALS SHALL CONFORM TO BUILDING CODE REQUIREMENT FOR REINFORCED CONCRETE ACI318-05 UNLESS OTHERWISE IN THE DRAWINGS.
- 1.2. ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
- 1.3. DO NOT SCALE. USE WRITTEN DIMENSIONS.
- 1.4. ALL OPENINGS SHALL BE FORMED OR SLEEVED BEFORE PLACING CONCRETE.
- 1.5. PROVIDE ALL NECESSARY INSERTS, CLIP, ANCHORS, TIES, REGLETS AND OTHER FASTENING DEVICES AS REQUIRED TO BE CASTED INTO CONCRETE.

2. EXCAVATION AND PREPARATION OF FOUNDATION BASE

- 2.1. SOIL BEARING TYPE FOUNDATIONS SUCH AS LADDERS, STAIRS, LOCAL SUPPORTS OR MINOR FOUNDATIONS MAY BE SET DIRECTLY ON CONCRETE PAVING OR FOUNDATION.
- 2.2. ALL BASES OF FOUNDATION SHALL BE PREPARED WITH LEVEL AND EVEN WITH ABOUT 50mm THICKNESS LEAN CONCRETE.
- 2.3. ALL MATERIALS USED FOR FILL AND BACKFILL SHALL CONSIST OF MINERAL SOIL SUBSTANTIALLY FREE FROM ORGANIC MATERIALS, TOP SOIL, WOOD, TRASH AND OTHER OBJECTIONABLE MATERIALS WHICH MAY BE COMPRESSIBLE OR WHICH CAN NOT BE PROPERLY COMPACTED.
- 2.4. EACH LAYER OF BACKFILL SHALL BE COMPACTED BY HAND OR MACHINE TAMPERS OR OTHER SUITABLE EQUIPMENT. THE MAXIMUM DRY DENSITY IS 95 PERCENT FOR BUILDING AND PROCESS AREA, 90 PERCENT FOR NON-BUILDING AREA AT OPTIMUM MOISTURE CONTENT DETERMINED BY ASTM D1557 OR EQUIVALENT ONLY IN CASE OF SOIL BEARING TYPE FOUNDATION OR SLAB.

3. CONCRETE WORK

- 3.1. ALL STRUCTURAL CONCRETE, IF NOT SPECIFIED SHALL BE MIXED WITH ORDINARY PORTLAND CEMENT (OPC).
- 3.2. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS OF AGE (CUBE) SHALL BE AS FOLLOWS:
- a) PRESTRESSD PILES

400 ksc.
- b) FOUNDATION, ABUTMENTS, COLUMNS, BEAMS, SLAB & RC. WALL

350 ksc.
- 3.3. THE CONTRACTOR SHALL VERIFY THAT ALL EMBEDDED ITEMS ARE IN POSITION AND SECURELY FASTENED IN PLACE BEFORE PLACING CONCRETE.
- 3.4. CONSTRUCTION JOINT IN POSITION OTHER THAN THOSE SHOWN ON THE DRAWINGS, IF ANY, SHALL BE SUBMITTED BY CONTRACTOR TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
- 3.5. MINIMUM THICKNESS OF 50 mm LEAN CONCRETE SHALL BE PROVIDED TO ALL STRUCTURES IN CONTACT WITH GROUND FOR EXAMPLE UNDERNEATH OF FOUNDATIONS, GRADE BEAMS, GROUND SLABS ETC. UNLESS OTHERWISE SHOWN ON THE DRAWING.
- 3.6. ALL FORMWORKS SHALL BE REMOVED IN A MANNER SUCH THAT THE CONCRETE IS NOT DAMAGED IN ANY WAY.

4. REINFORCING BAR

- 4.1. STEEL REINFORCING BARS SHALL HAVE A MINIMUM YIELD STRENGTH AS THE FOLLOWINGS:
- a) HIGH YIELD DEFORMED BARS DIAMETER NOT GREATER THAN 32 mm.

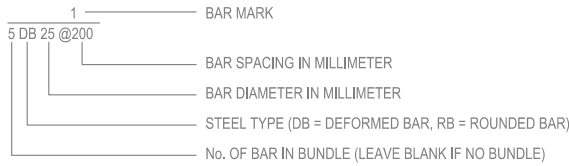
4000 ksc.
- b) HOT ROLLED MILD STEEL BARS

2400 ksc.
- c) STEEL PLATE, WF & OTHER TYPE A-36

2520 ksc.
- d) STAINLESS STEEL

2520 ksc.

4.2. REINFORCEMENT MARKING SYSTEM



- 4.3. MINIMUM DEVELOPMENT LENGTH AND LAP SPLICE FOR REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

BAR SIZE	DEVELOPMENT LENGTH, mm			LAP SPLICE LENGTH, mm		
	TENSION		COMPRESSION	TENSION		COMPRESSION
	TOP BAR	OTHER BAR		TOP BAR	OTHER BAR	
DB10	490	370	200	490	370	360
DB12	580	450	230	580	450	430
DB16	780	600	310	780	600	570
DB20	1210	930	390	1210	930	720
DB25	1520	1170	490	1520	1170	900
DB28	1700	1310	540	1700	1310	1000
DB32	1940	1490	620	1940	1490	1150
REMARKS: - TOP BAR IS DEFINED AS HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 300 mm FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT. - FOR EPOXY-COATED BAR, THE TENSILE DEVELOPMENT LENGTH AND LAP SPLICE LENGTH SHOWN IN THE TABLE SHALL BE INCREASED BY 20%.						

4.4. SPLICING CRITERIA FOR COLUMN

- a) COLUMN WITH REINF. DENSITY LESS THAN 4% CAN BE SPLICED 100%.
- b) COLUMN WITH REINF. ABOVE 4% DENSITY SHALL BE SPLICED IN A WAY THAT AT ANY SECTION REINFORCEMENT PERCENTAGE FROM COLUMN SECTION DOES NOT EXCEED 8%.
- c) LAP SPLICE LENGTH SHALL BE IN ACCORDANCE WITH THE REQUIREMENT OF ACI 318-05.

4.5. ALL HOOKS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318-05.

4.6. CONCRETE COVER WITH THE REQUIREMENTS OF ACI 318-05 CHAPTER 7.7

- a) CORRECT CONCRETE COVER TO REINFORCEMENT SHALL BE MAINTAINED WITH THE AID OF APPROVED SPACERS.
- b) THE COVER SHALL NOT BE LESS THAN AS GIVEN BELOW

STRUCTURAL MEMBER	BAR SIZE	MINIMUM COVER, mm
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	ALL	75
CONCRETE EXPOSED TO EARTH OR WEATHER	≥ DB20	50
	< DB20	40
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	SLAB, WALL, JOIST	> DB36 40
		≤ DB36 20
	BEAM, COLUMN	ALL 40
	SHELL, FOLDED PLATE MEMBER	≥ DB20 20
	< DB20	15

5. STRUCTURAL STEEL

- 5.1. ALL CONNECTIONS SHALL BE WELDED UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 5.2. ALL WELDINGS SHALL BE DONE CONTINUOUSLY ALONG THE EDGES OF CONNECTED PARTS. UNLESS OTHERWISE NOTED ON THE DRAWING, THE SIZE OF FILLET WELDING SHALL BE OF MINIMUM 6mm UNLESS OTHERWISE NOTED ON THE DRAWING.
- 5.3. UNLESS OTHERWISE SPECIFIED ON THE STANDARD OR DETAIL DRAWINGS, THE FOLLOWING FILLET WELDS SHALL BE PROVIDED AND THE WELD SIZE NEED NOT EXCEED THE THICKNESS OF THE THINNER PART JOINT PLATE.

PLATE THICKNESS (t)	WELD SIDE (s)	
	T JOINTS	LAP JOINTS
t < 6	s = t	s = t
6 ≤ t < 9	6	6
9 ≤ t < 14	8	8
14 ≤ t < 19	10	10
19 ≤ t	12	12

- 5.4. ERECTION CLEARANCE SHALL BE ABOUT 5mm UNLESS OTHERWISE NOTED ON THE DRAWINGS.

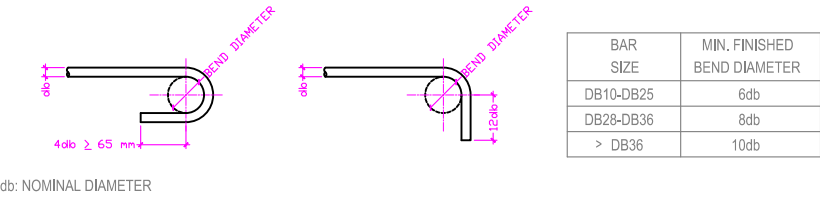
6. ABBREVIATION

D, d, Ø	DIAMETER	RC	REINFORCED CONCRETE
EL	ELEVATION	fy	YIELD STRENGTH OF REINFORCEMENT
PT	POST-TENSIONED	fc'	COMPRESSIVE STRENGTH OF CONCRETE AD 28 DAY (CUBE)
RB	HOT-ROLLED MILD STEEL BAR	Stir	STIRRUP
DB	HIGHT YIELD DEFORMED BAR	@	SPACING (CENTER TO CENTER)
THK	THICKNESS	TYP	TYPICAL

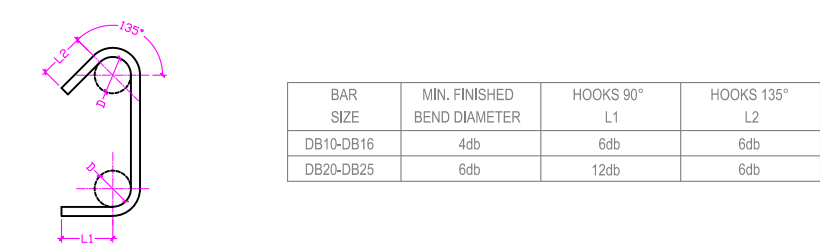
STRUCTURAL GENERAL NOTE

1. STANDARD HOOKS (ACI 318-05 CHAPTER 7.1 AND 7.2)

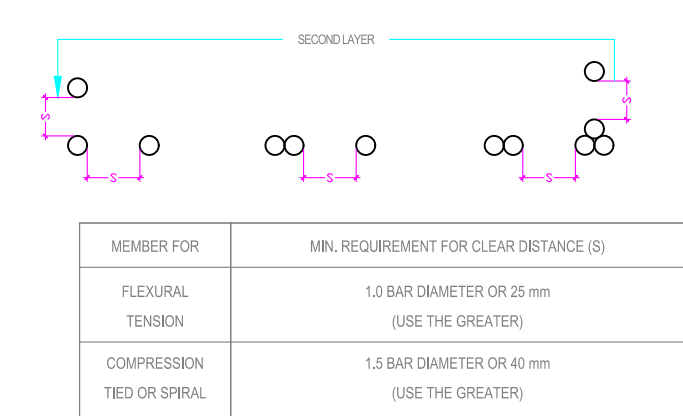
1.1. STANDARD HOOKS FOR MAIN BAR



1.2. STANDARD HOOKS FOR STIRRUP AND TIE

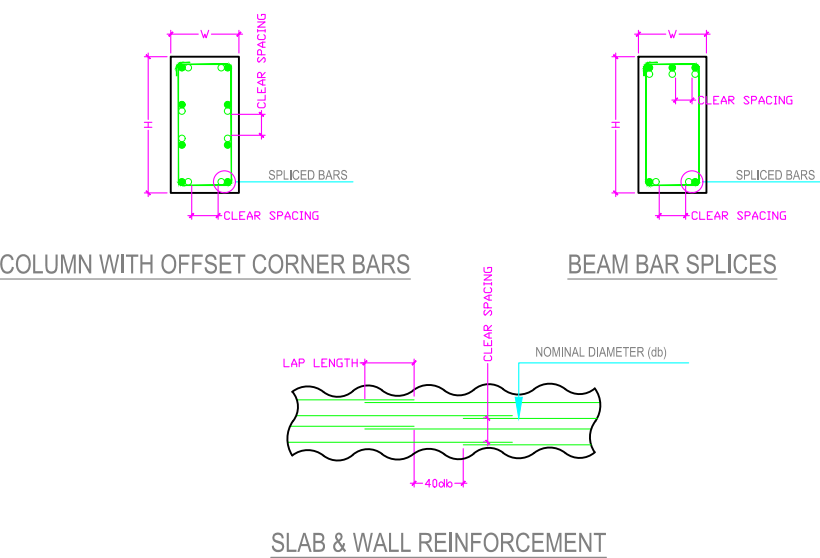


2. MINIMUM CLEAR DISTANCE BETWEEN BARS (ACI 318-05 CHAPTER 7.6)

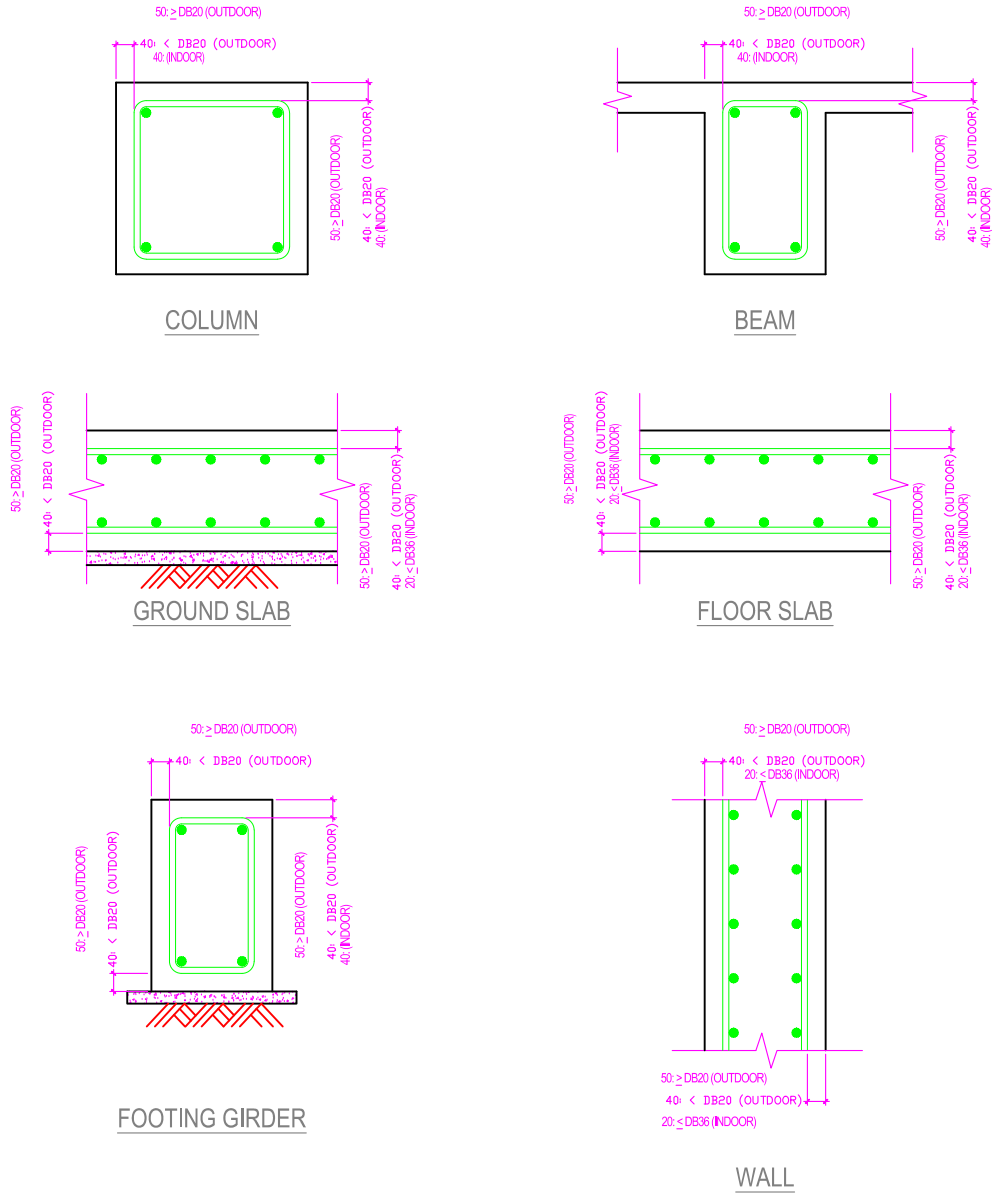


- NOTES:
- BUNDLED BARS SHALL BE TREATED AS A SINGLE BAR WITH DIAMETER DERIVED FROM THE EQUIVALENT TOTAL AREA.
 - MAX. NOMINAL SIZE OF THE AGGREGATE SHALL NOT BE LARGER THAN (3/4)S.

3. STANDARD LAP JOINT (ACI 318-05 CHAPTER 12.15)



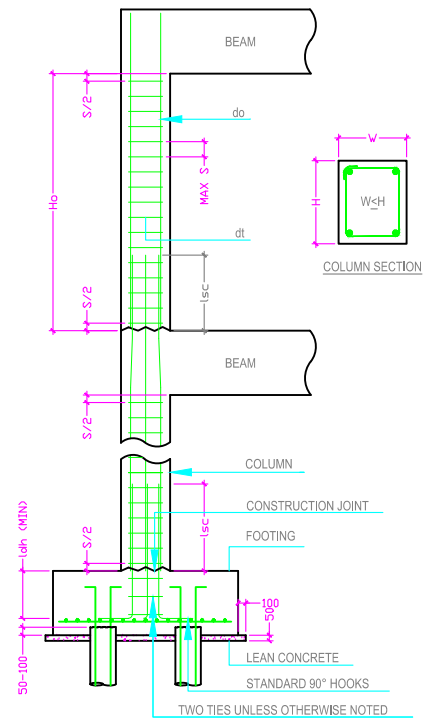
4. MINIMUM CONCRETE PROTECTION FOR REINFORCING (ACI 318-05 CHAPTER 7.7)



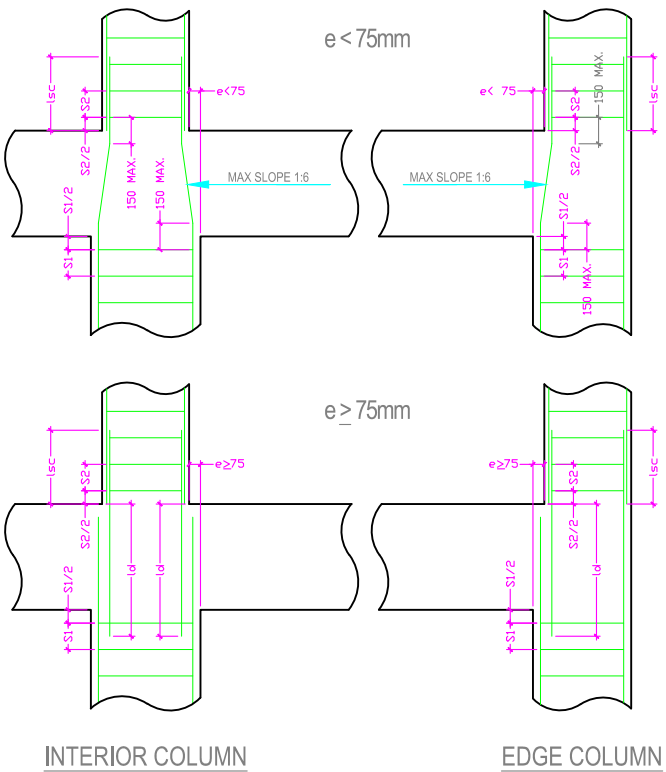
- NOTES:
- UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE CONCRETE COVER FOR STRUCTURES IN SEA WATER SHALL BE NOT LESS THAN 75mm.
 - THE CONCRETE COVER FOR STRUCTURES CONTAINED WATER OR OILY WATER SHALL BE NOT LESS THAN 50mm.
 - THE DIAMETER OF TIE BARS, STIRRUPS AND SLAB RE-BAR SHALL NOT BE MORE THAN D16 IN ORDER TO APPLY MINIMUM CONCRETE PROTECTION ACCORDING TO ACI 318-05 CHAPTER 7.7

5. STANDARD BAR ARRANGEMENT

5.1. FOOTING AND COLUMN
(ACI 318-05 CHAPTER 7.10.5)



5.2. COLUMN OFFSET (ACI 315-05 CHAPTER 7.8.1)



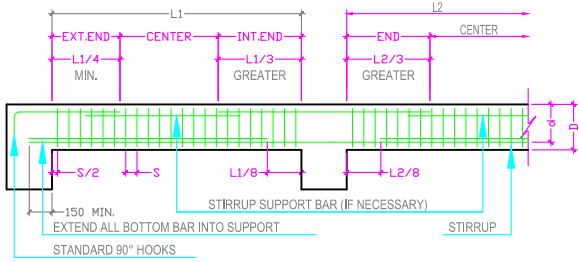
INTERIOR COLUMN

EDGE COLUMN

NOTES:

- lsc: LAP SPLICE LENGTH IN COMPRESSION BAR.
- ld: DEVELOPMENT LENGTH IN TENSION BAR.
- ldt: DEVELOPMENT LENGTH OF STANDARD HOOK IN TENSION BAR.
- S, S1 & S2: DISTANCE OF TIES (S, S1, S2 ≤ 16do OR 48dt OR W).

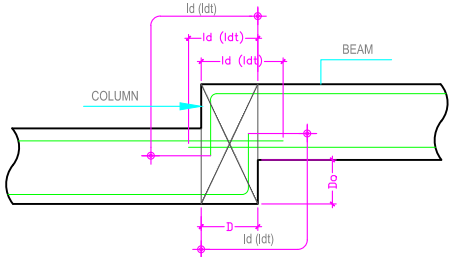
5.3. BEAM AND GIRDER (ACI 318-05 CHAPTER 12.10-12)



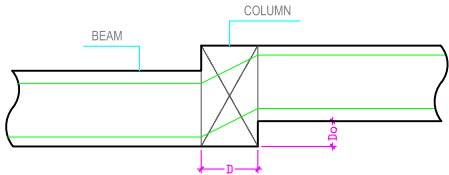
5.4. DIFFERENCE IN BEAM & GIRDER CENTER

a) HORIZONTAL DIFFERENCE

Do > D/6

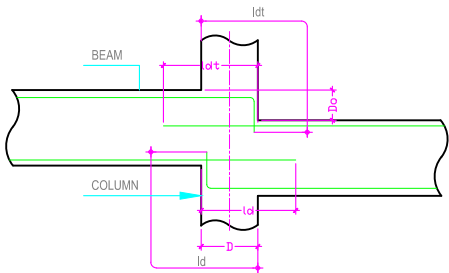


Do ≤ D/6

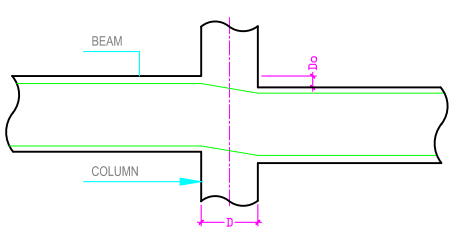


b) VERTICAL DIFFERENCE

Do > D/6



Do ≤ D/6

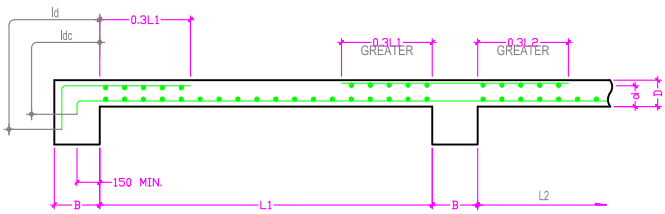


NOTES:

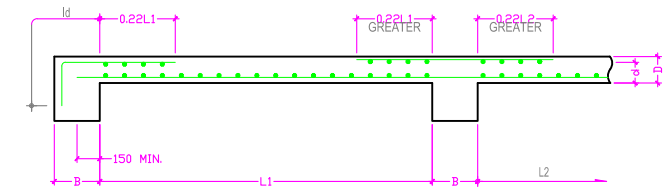
- ld: DEVELOPMENT LENGTH IN TENSION (OTHER BAR).
- ldt: DEVELOPMENT LENGTH IN TENSION (TOP BAR).
- S: DISTANCE OF TIES (S ≤ 16do OR 48dt OR W).

5.5. TWO WAY SLAB (ACI 318-05 FIGURE 13.3)

a) FOR COLUMN STRIP

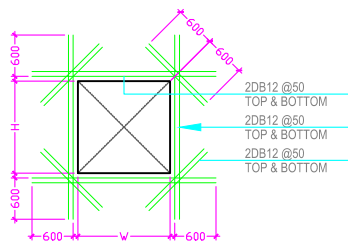


b) FOR MIDDLE STRIP

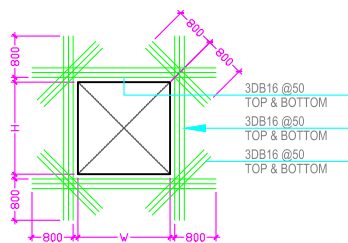


5.6. OPENING IN SLAB (ACI 318-05 CHAPTER 13.4)

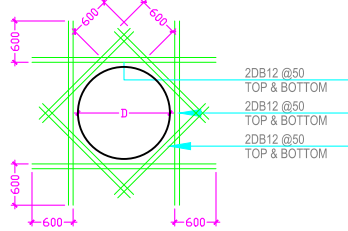
200 < W & H ≤ 600



W & H > 600



D < 200



NOTES:

- ldc: DEVELOPMENT LENGTH IN COMPRESSION BAR.
- ld: DEVELOPMENT LENGTH IN TENSION BAR.
- FOR W & H IN THE ABOVE ARE EQUAL TO OR SMALLER THAN 200mm, BARS SHALL BE REINFORCED MORE THAN THE NUMBER OF THE CUT BARS BY THE OPENING.
- OPENINGS SHALL BE PERMITTED IN SLAB SYSTEMS WITHOUT BEAMS ONLY IN ACCORDANCE WITH ACI 318-05 CHAPTER 13.4.2.1 THROUGH 13.4.2.4.



ប្លង់ទិដ្ឋភាពរួម៖ សាលាបឋមសិក្សាភ្នាក់លើក ខេត្តព្រះវិហារ មុនសាងសង់អគារសិក្សាថ្មី
ចំណាំ៖

ប្លង់ទិដ្ឋភាពរួម៖ សាលាបឋមសិក្សាភ្នាក់លើក ខេត្តព្រះវិហារ ក្រោយសាងសង់អគារសិក្សាថ្មី
ចំណាំ៖

..... ជាព្រំដី

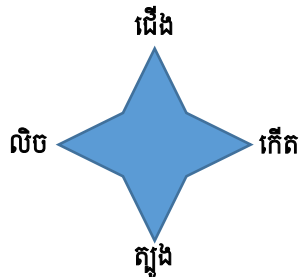
..... ជាព្រំដី

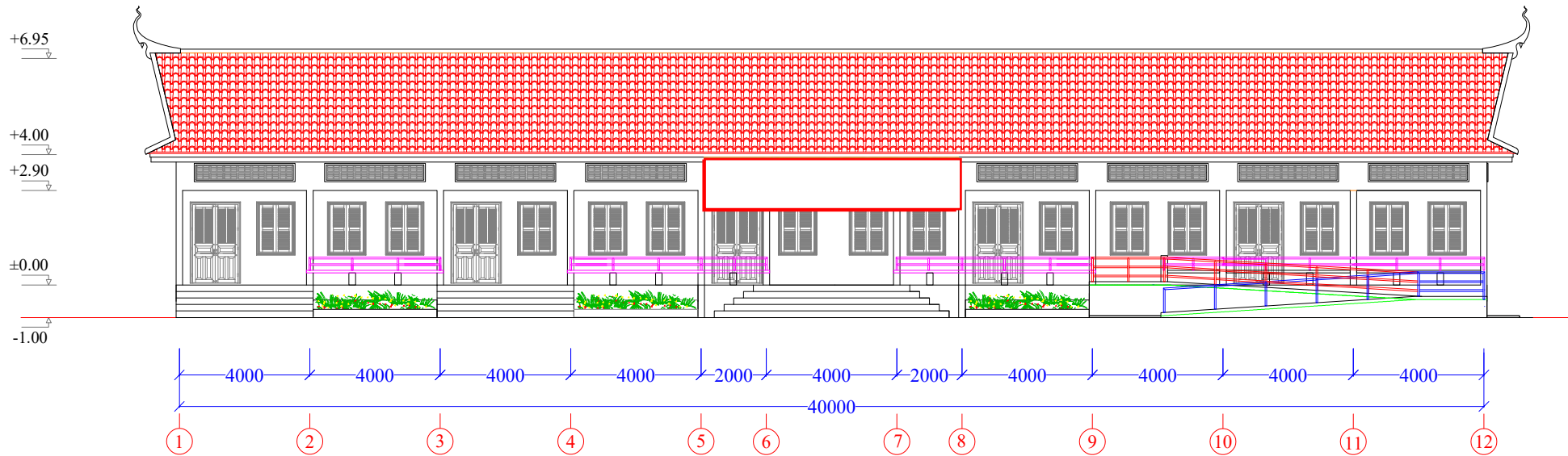
- ① ខ្លោងទ្វារច្រកចូលសាលា ធ្វើពីឈើ
- ② ផ្ទះស្នាក់សម្រាប់គ្រូ ទំហំ (5*6) ធ្វើពីឈើប្រក់សង្ក្រាន
- ③ បណ្ណាល័យ១បន្ទប់ ទំហំ(7*6)ម ធ្វើពីថ្មប្រក់សង្ក្រាន
- ④ & ⑦ បន្ទប់ទឹកថ្មប្រក់សង្ក្រាន មាន 3បន្ទប់ កំពុងប្រើប្រាស់រាល់ថ្ងៃ
- ⑤, ⑥, ⑧ & ⑨ អគារសិក្សាចាស់ ធ្វើពីឈើប្រក់សង្ក្រាន
- ⑩ & ⑪ ស្រះទឹក
- ⑫ ដីទួល និងមានដើមឈើ
- ⑬ ដងទងជាតិចាស់

- ① ខ្លោងទ្វារច្រកចូលសាលា (រៀបចំថ្មី នៅទីតាំងដដែល)
- ② ផ្ទះស្នាក់សម្រាប់គ្រូ ទំហំ (5*6) ធ្វើពីឈើប្រក់សង្ក្រាន (រក្សានៅដដែល)
- ③ បណ្ណាល័យ១បន្ទប់ ទំហំ(7*6)ម ធ្វើពីថ្មប្រក់សង្ក្រាន (រក្សានៅដដែល)
- ④ & ⑦ បន្ទប់ទឹកថ្មប្រក់សង្ក្រាន មាន ៣បន្ទប់ កំពុងប្រើប្រាស់រាល់ថ្ងៃ (ត្រូវកែលម្អបន្ថែម)
- ⑤ & ⑥ អគារសិក្សាចាស់ ធ្វើពីឈើប្រក់សង្ក្រាន (កែលម្អចេញទៅទីតាំងថ្មីដោយសាលា និងសហគមន៍)
- ⑧ & ⑨ អគារសិក្សាចាស់ ធ្វើពីឈើប្រក់សង្ក្រាន (រក្សានៅដដែល)
- ⑩ ស្រះទឹក (រក្សានៅដដែល)
- ⑪ ដីទួល និងមានដើមឈើ (សាលា និងសហគមន៍ នឹងរៀបចំឈូសឆាយឲ្យបានស្អាត)
- ⑫ អគារសិក្សាថ្មី ធ្វើពីថ្មប្រក់ក្បឿង 5បន្ទប់ ទំហំ (40*9)ម មានគម្លាតពីបណ្ណាល័យ 5ម ដោយយកស្មៅផ្នែកខាងមុខ (រៀបចំថ្មី)
- ⑬ ដងទងជាតិថ្មី (រៀបចំកំណែលម្អអគារថ្មី ចម្ងាយ 30ម)

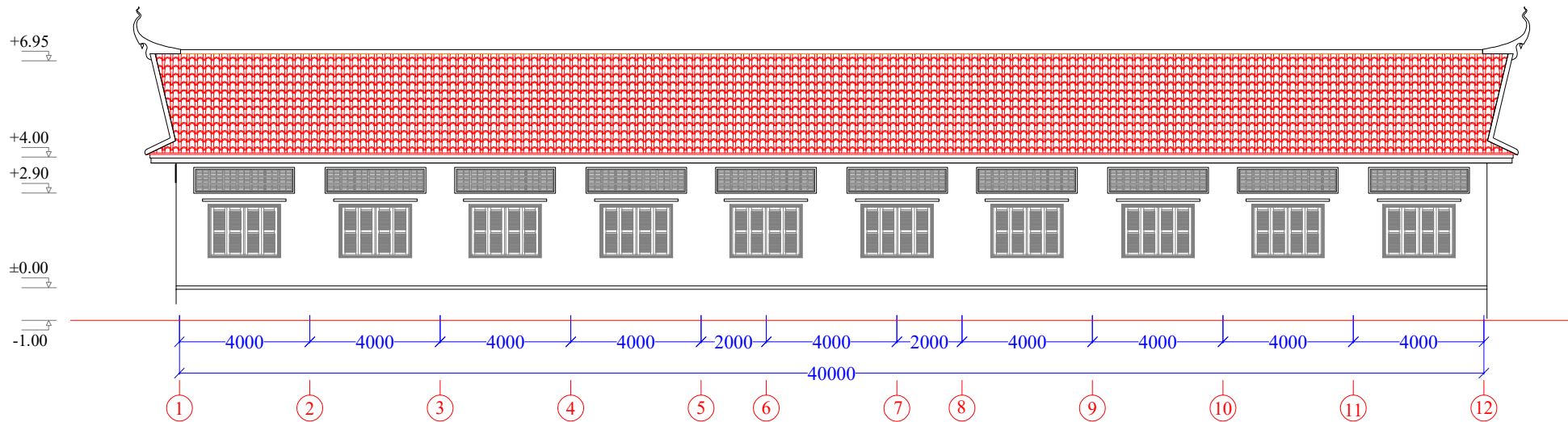
បញ្ជាក់៖

- បច្ចុប្បន្នសាលាមានអណ្តូងទឹក 1 ដែលដំណើរការដោយម៉ាស៊ីនប្រើសាំង ។
- សាលាមិនទាន់មានប្រភពអគ្គិសនីប្រើប្រាស់នៅឡើយទេ (ប្រើប្រាស់ម៉ាស៊ីនភ្លើង ។
- សាលា និងសហគមន៍ នឹងរៀបចំឈូសឆាយបរិវេណ ដែលត្រូវសាងសង់អគារសិក្សាថ្មី បរិវេណដែលប៉ះពាល់ និងរៀបចំកែលម្អអគារចាស់ ឲ្យមានសោភ័ណភាព ។



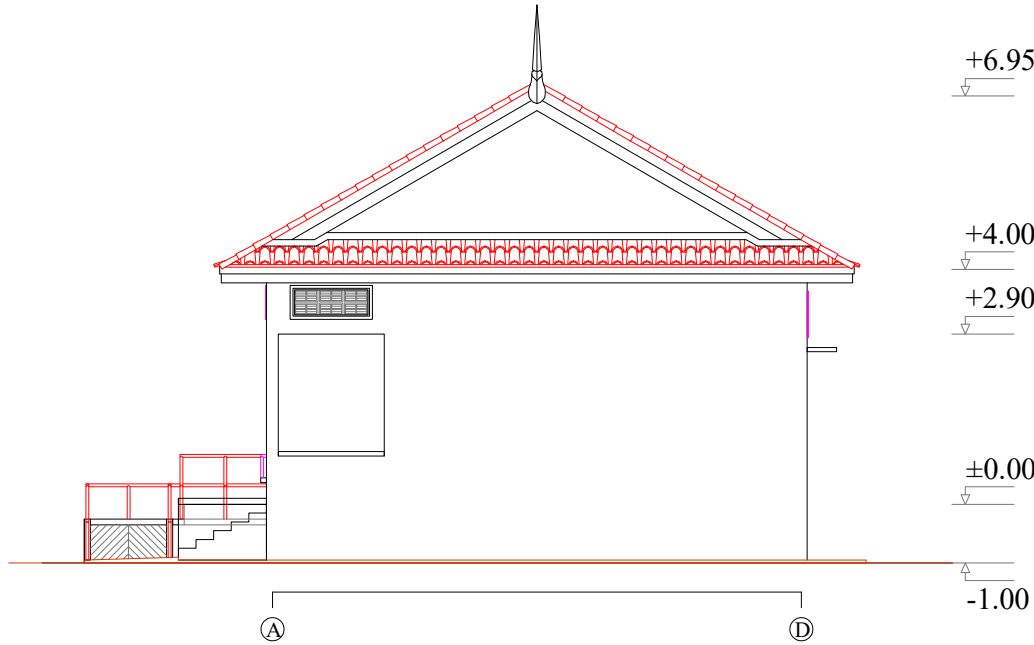


(Front Elevation)

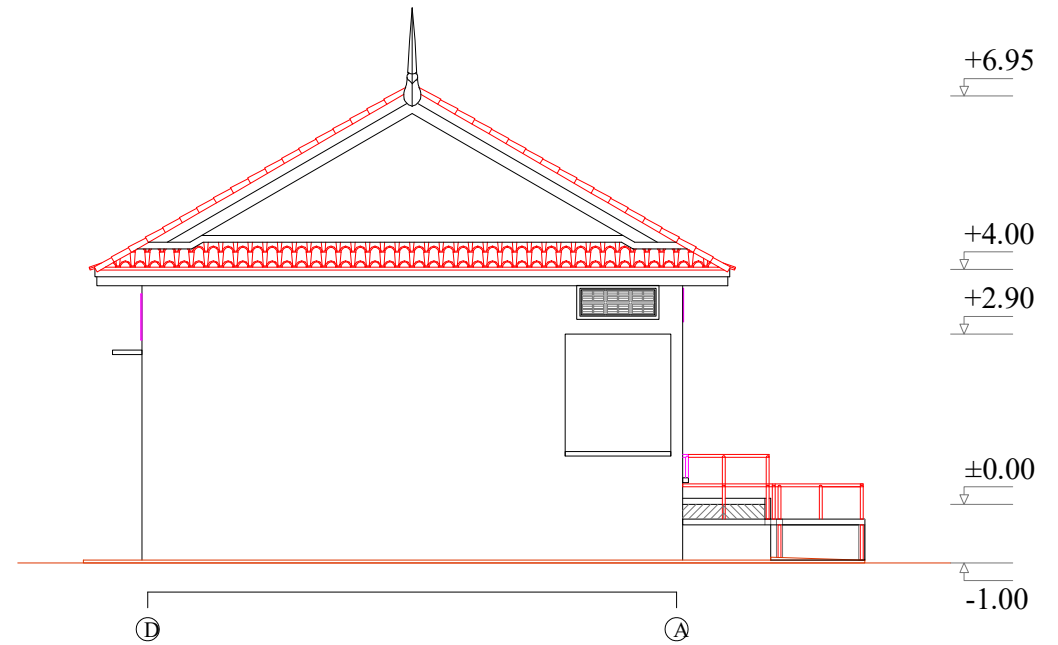


(Rear Elevation)

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-16
				DRAWING TITLE : FRONT AND REAR ELEVATION		SHEET N°:



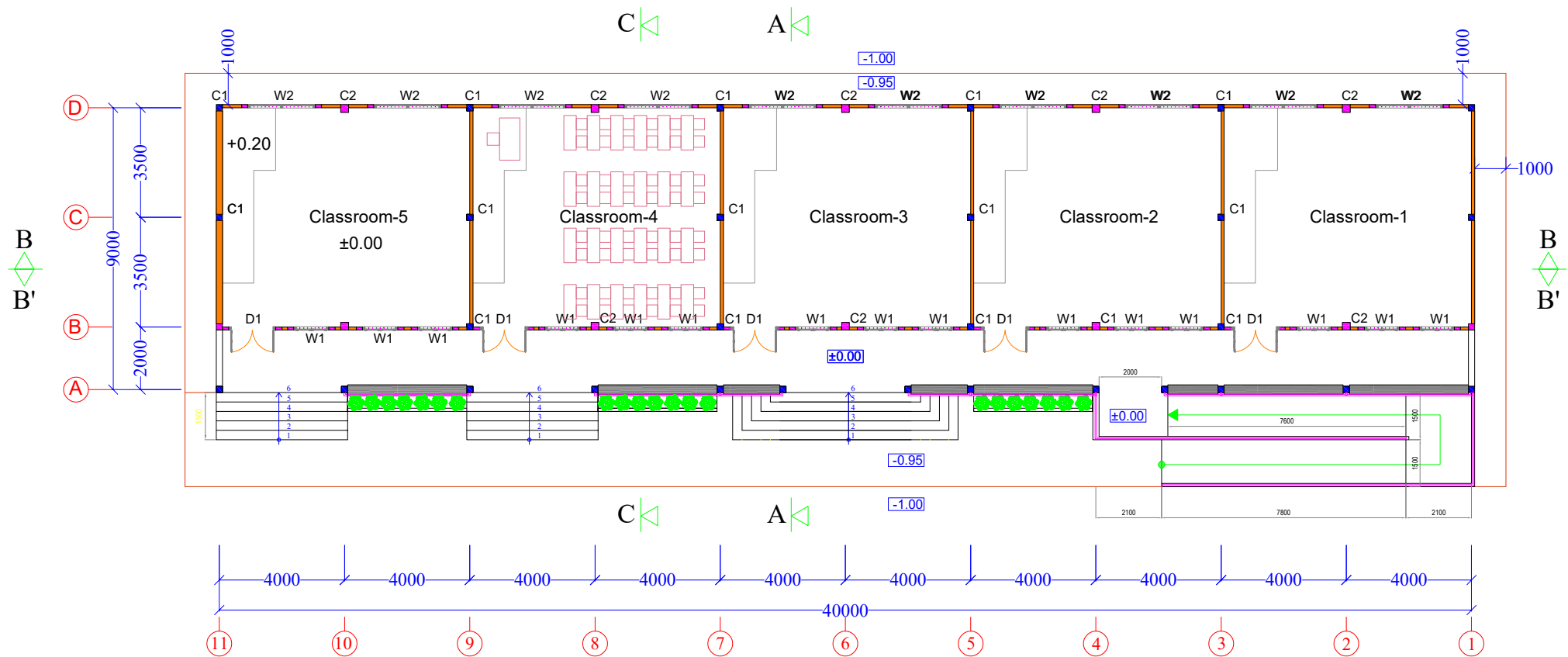
RIGHT ELEVATION



LEFT ELEVATION

APPROVED BY:
DIRECTOR OF DOC

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-16
		DRAWING TITLE : RIGHT AND LEFT ELEVATION		SHEET Nº:	A-03	



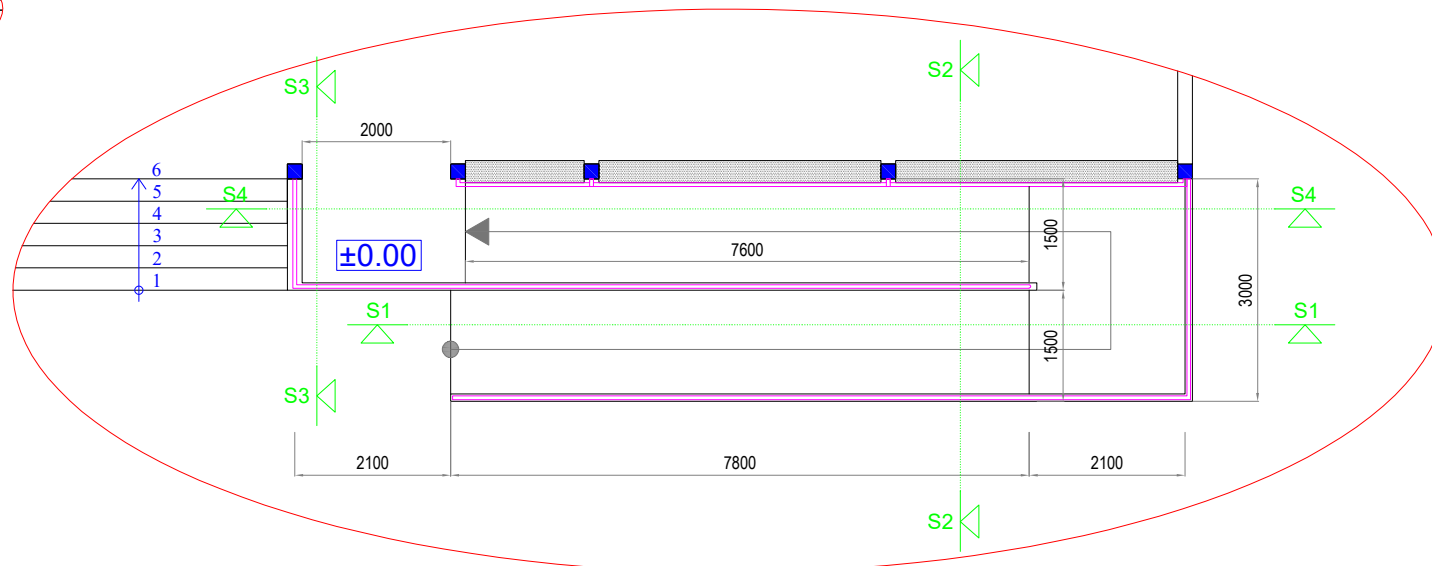
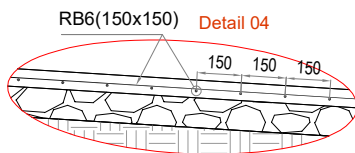
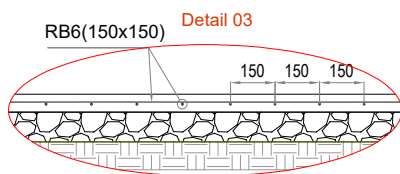
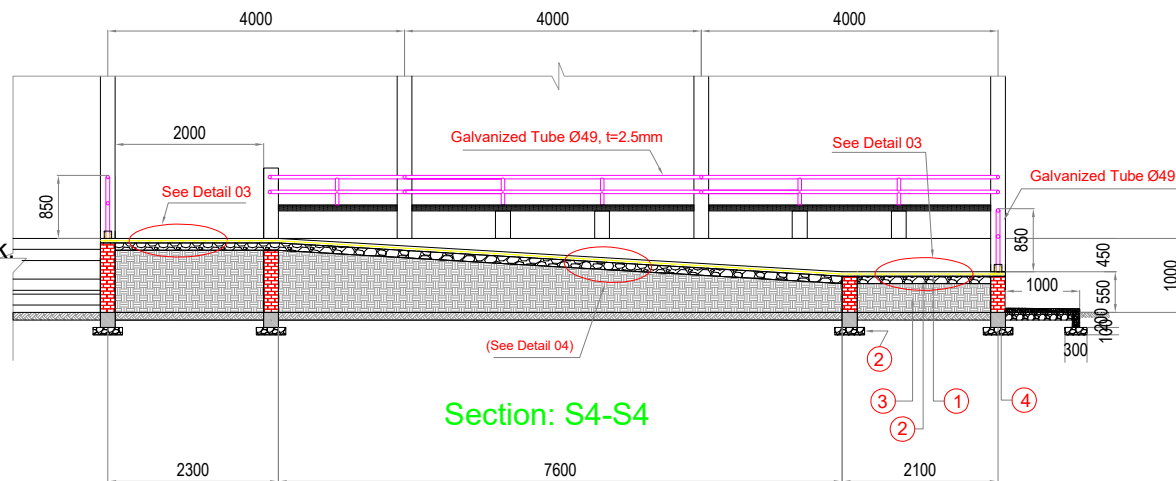
APPROVED BY:
DIRECTOR OF DOC

Floor Plan

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-16
				DRAWING TITLE : FLOOR PLAN	SHEET Nº:	A-04

Note:

- ① -RC. Ramp Slab, 60mm thk.
- ② -Crushed Stone 4x6 Compacted, 100mm thk.
- ③ -Soil back fill and Compacted
- ④ -Solid brick Retaining wall for Ramp, 200mm thk.

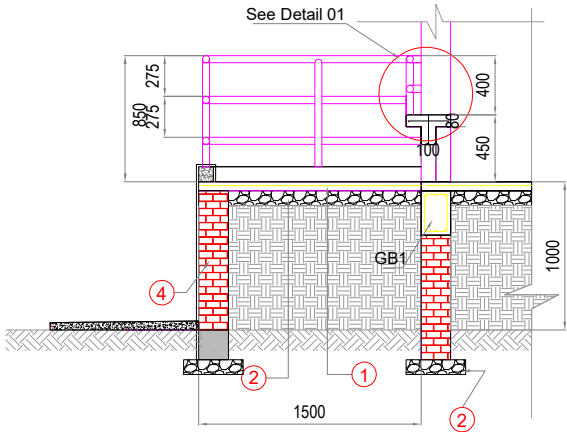


RAMP PLAN

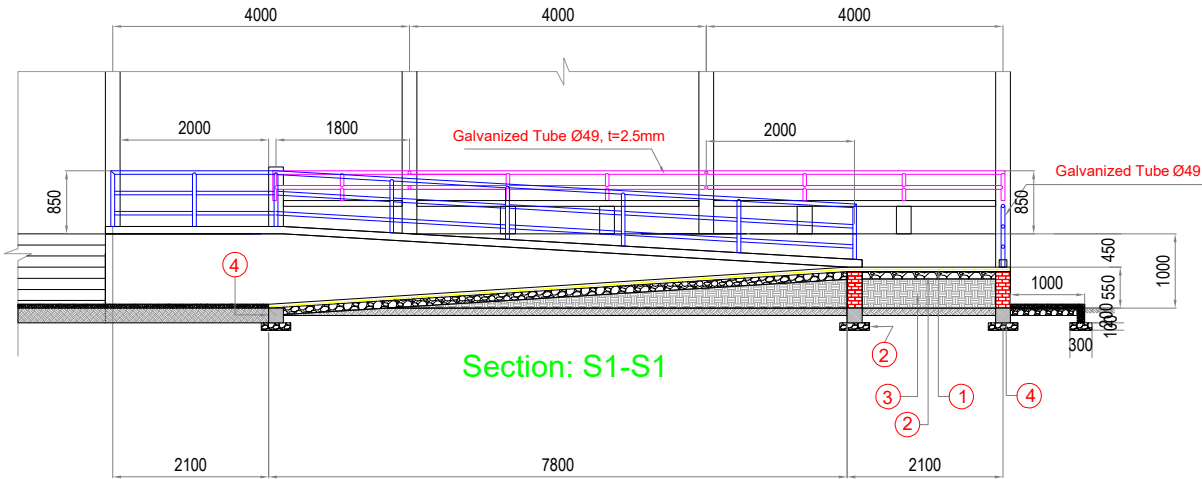
MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-17
				DRAWING TITLE : DETAIL RAMP	SHEET Nº:	A-05

Note:

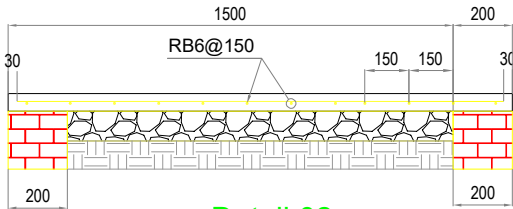
- ① -RC. Ramp Slab, 60mm thk.
- ② -Crushed Stone 4x6 Compacted, 100mm thk.
- ③ -Soil back fill and Compacted
- ④ -Solid brick Retaining wall for Ramp, 200mm thk.



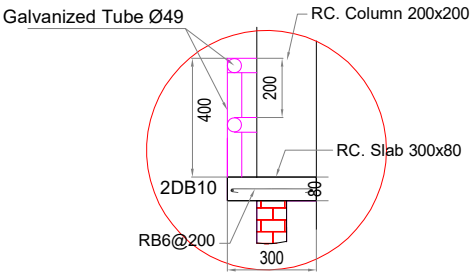
Section: S3-S3



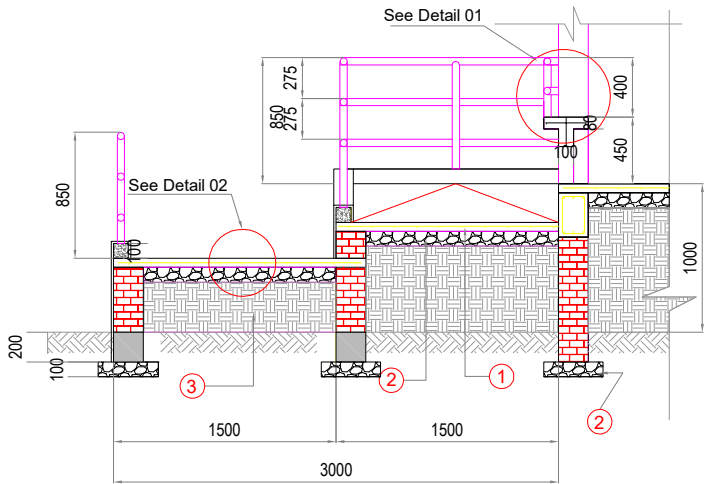
Section: S1-S1



Detail 02

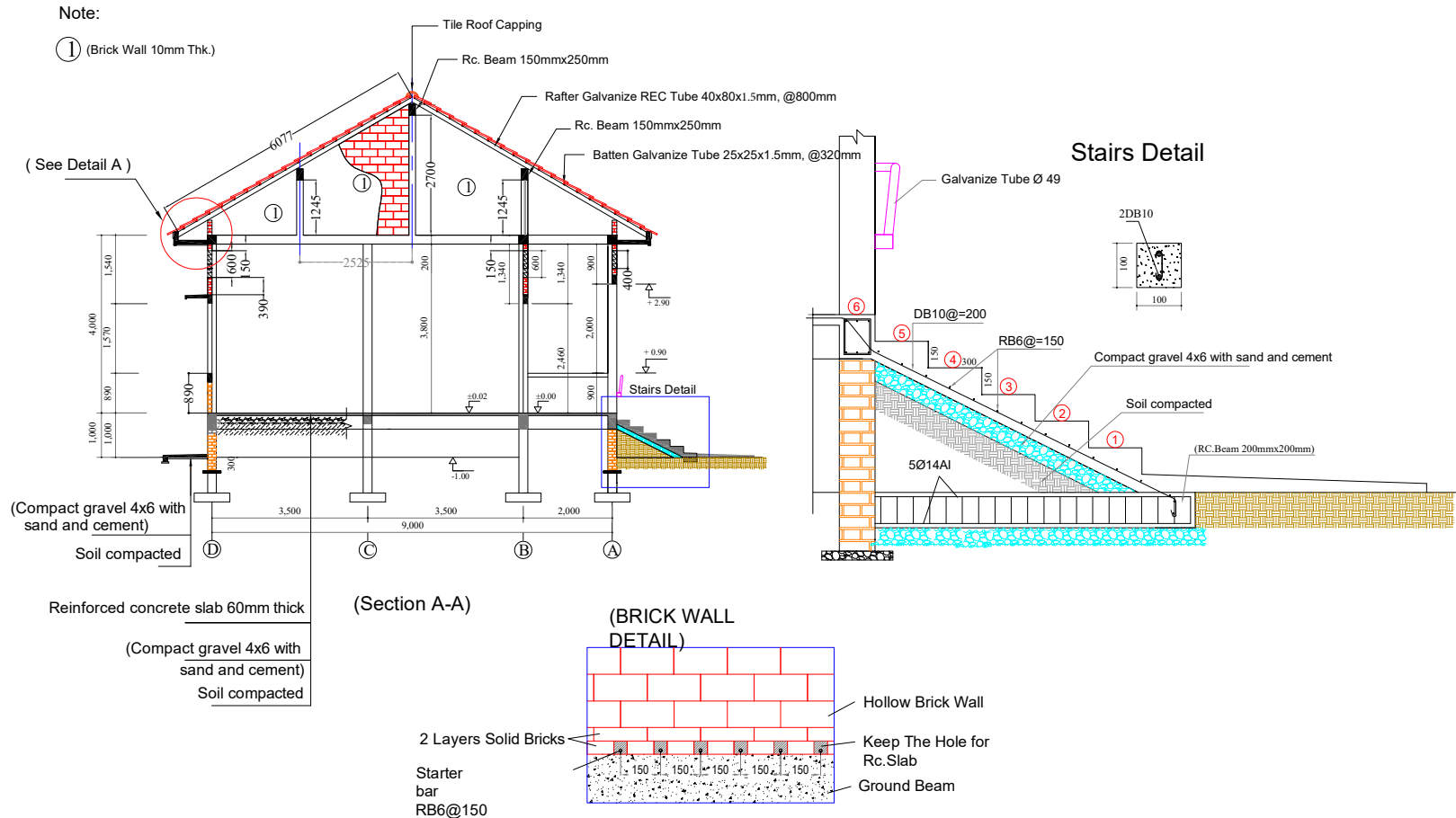


Detail 01

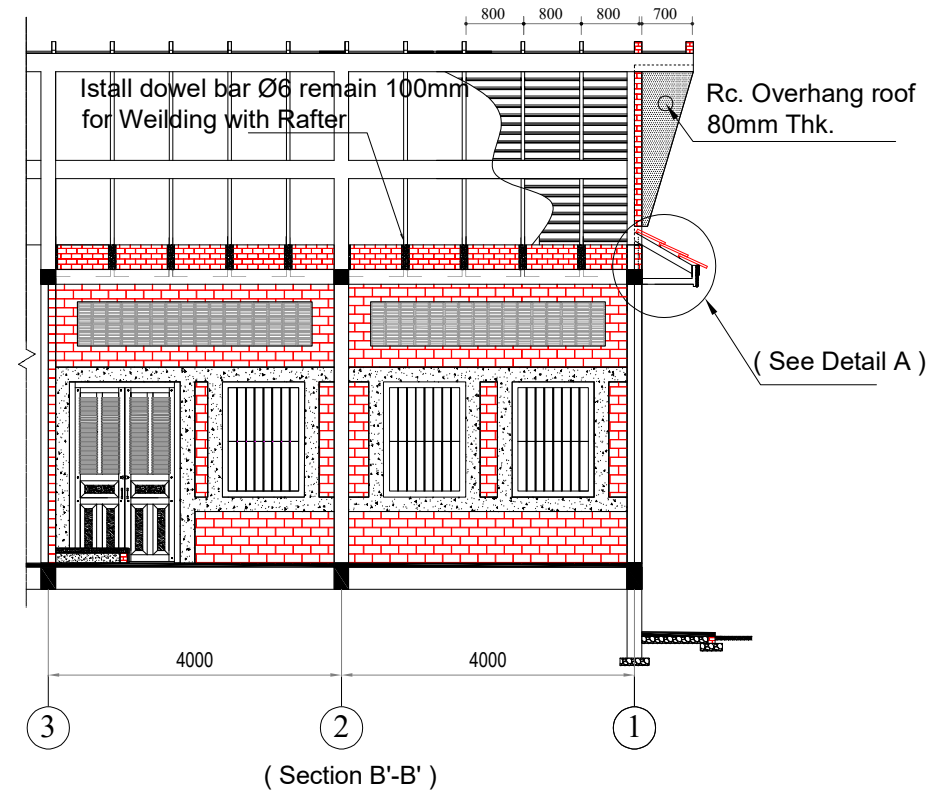
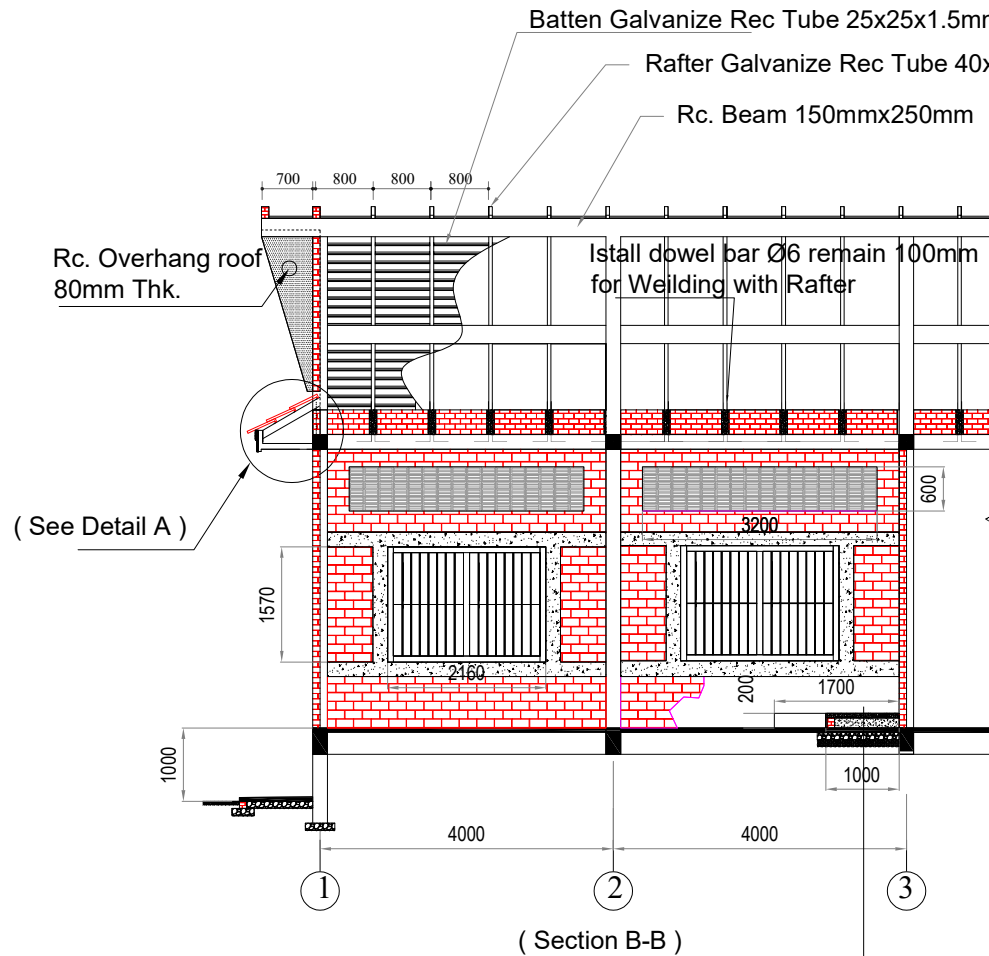


Section: S2-S2

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT :	SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:			SHEETS:	A-17
				DRAWING TITLE :	DETAIL RAMP	SHEET N°:	A-06



MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT :	SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:			SHEETS:	A-17
				DRAWING TITLE :	SECTION B-B	SHEET N°:	A-07



Note :

- All steel roof members must be cleaned and painted with two coats of rust proof paint.
- Rafter are welded to steel bar DB10 connected to the beam reinforcement.

Reinforced concrete slab 50mm thick

Compacted sand

Reinforced concrete slab 60mm thick

(Compact gravel 4x6 with sand and cement)

Soil compacted

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-16
					SHEET N°:	A-08

DRAWING TITLE : SECTION B-B

① (Brick Wall 10mm Thk.)

Note:
 ① (Brick Wall 10mm Thk.)

(See Detail A)

Tile Roof Capping
 Rc. Beam 150mmx250mm
 Rafter Galvanize Rec Tube 40x80x1.5mm, @800mm
 Rc. Beam 150mmx250mm
 Batten Galvanize Rec Tube 25x25x1.5mm, @320mm

60/77
 2700
 1242
 1245
 2,00 2,50 2,500
 1,540 1,570 890 1,000
 4,000
 (RC.Beam 250mmx400mm)
 Lintel 100mmX200mm
 (Rc.Column 250mmx250mm)
 ±0.00
 890
 2,460
 1,340
 600
 900
 +2.90
 +0.90
 450
 400
 -1.00 From entrane level
 3,500 3,500 2,000
 9,000
 D C B A
 Concrete Slab 50mm thk
 (Compact gravel 4x6 with sand and cement)
 (Compacted soil)

(Section C-C)

Back V
 1300 1400
 4000
 ①
 Front V
 1300 1400
 4000
 ③ Top of R.C Slab
 1
 4000
 1 Handr

Technical drawing of a handrail system, showing front, back, and section views with dimensions and material specifications.

Dimensions:

- Overall length: 4000 mm (divided into 1300, 1400, 1300, and 1800 mm segments).
- Overall height: 850 mm.
- Section dimensions (1-1): 400 mm (top section), 80 mm (middle section), 450 mm (bottom section), and 400 mm (right section).
- Handrail diameter: 49 mm (Galvanized Tube).
- Tile size: 300x300 mm (White Chines Ceramic tile).
- Slab thickness: 60 mm (RC Slab).
- Handrail diameter: 10 mm (2DB10).
- Reinforcement spacing: 6 mm (RB6@200).
- Base plate size: 200x300 mm (GB).

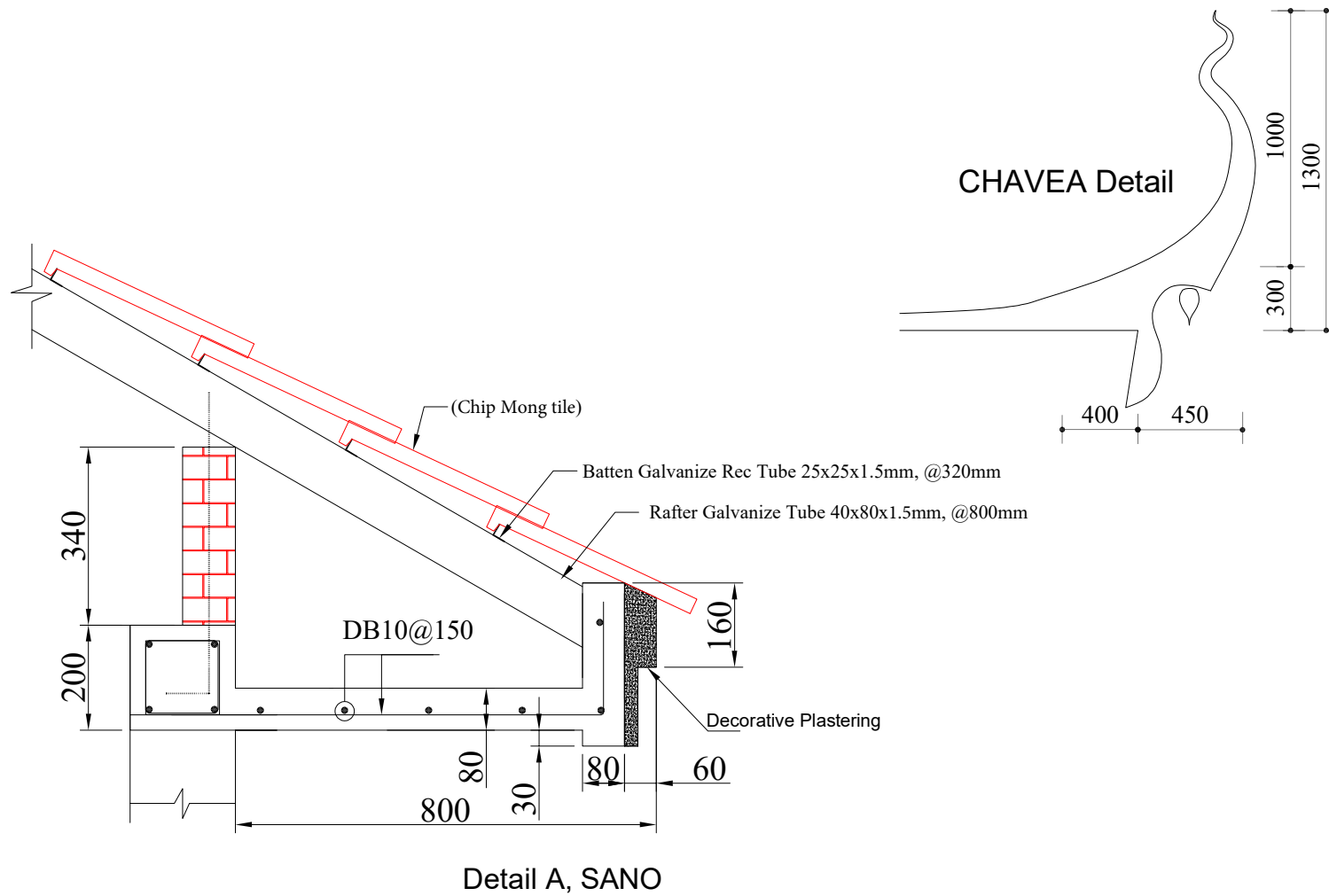
Materials and Components:

- ① Galvanized Tube $\varnothing 49$, $t=1.5$
- ② White Chines Ceramic tile 300x300
- ③ Top of R.C Slab
- RC Slab: 60mm thk.
- Handrail
- GB: 200x300

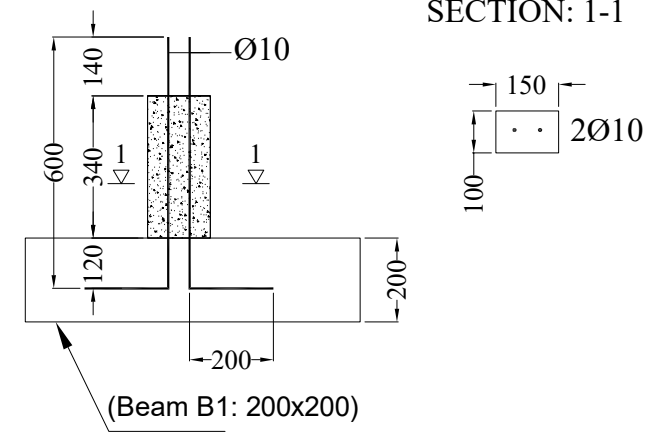
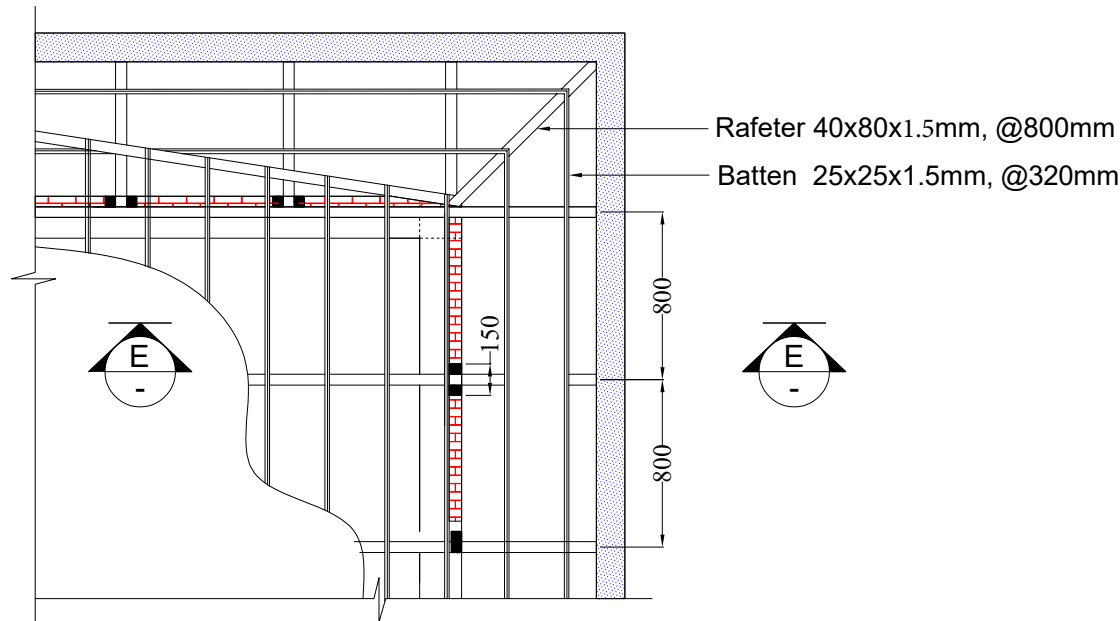
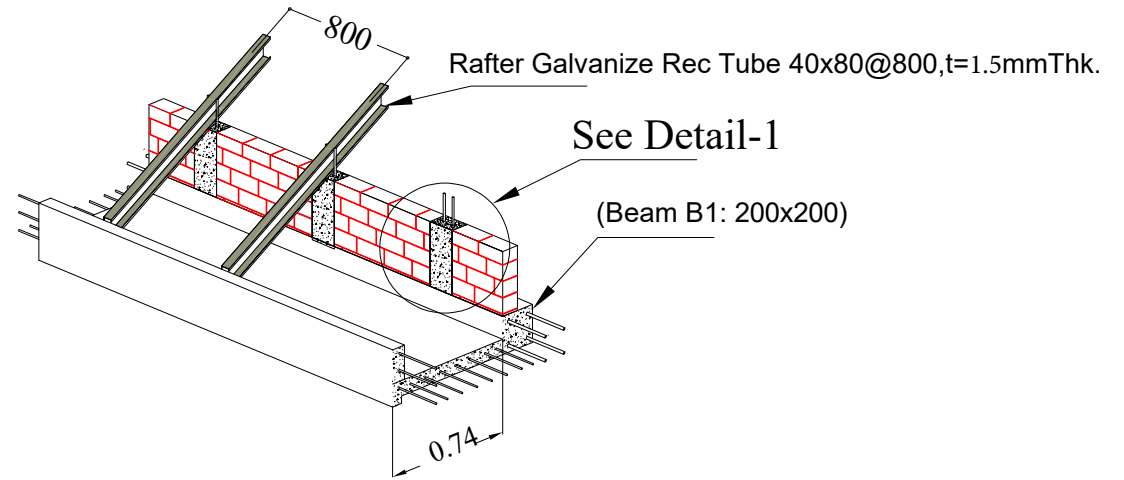
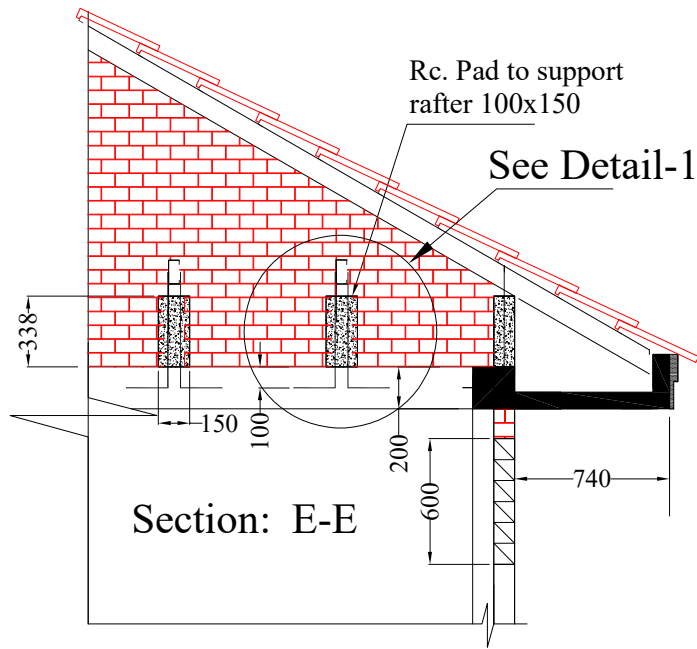
- All steel roof members must be cleaned and painted with two coats of rust proof paint.
- Rafter are welded to steel bar DB10 connected to the beam reinforcement.
- Level -1.00m take from entrane level

APPROVED BY:
DIRECTOR OF DOC

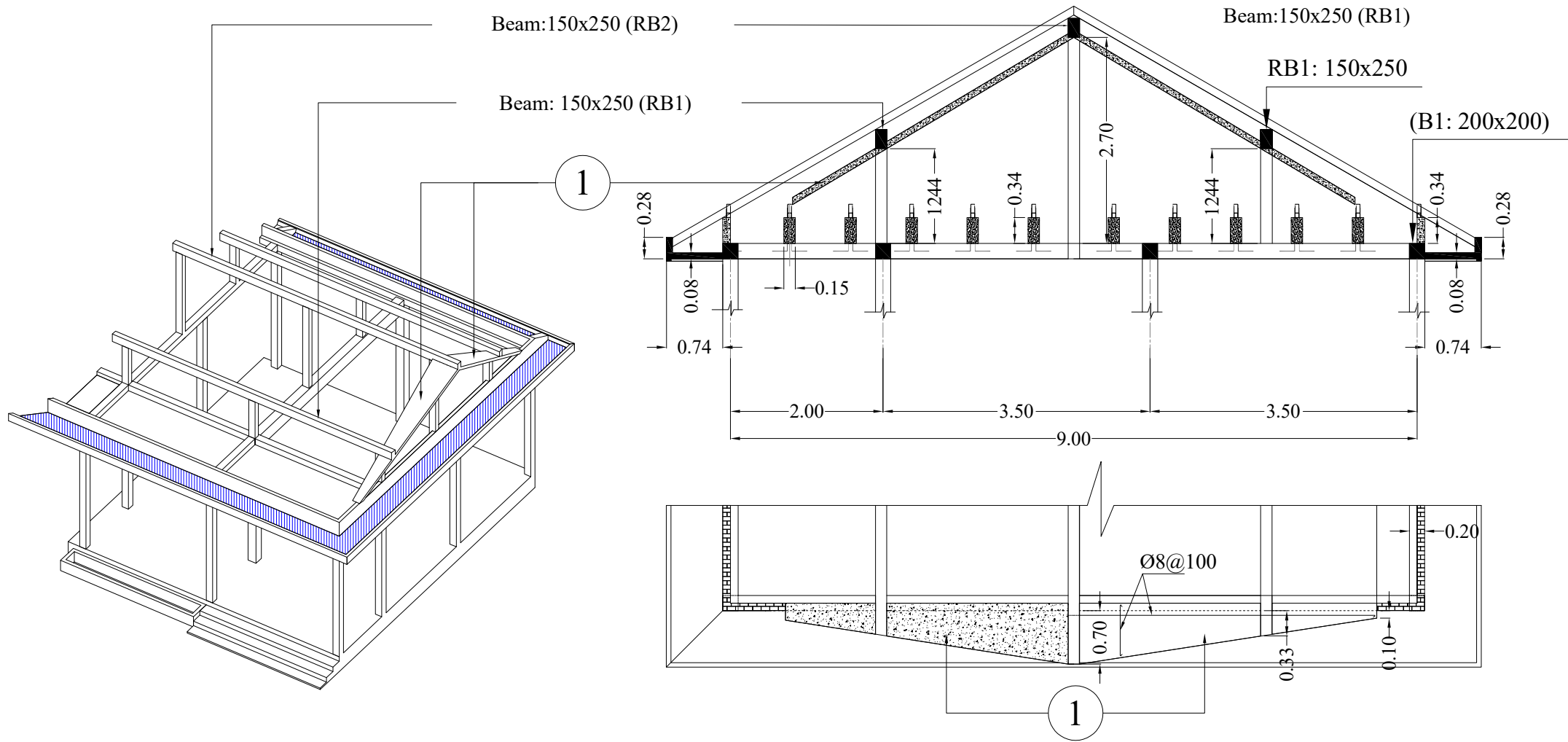
MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-16
				DRAWING TITLE : SECTION C-C AND HANDRAIL DETAILS	SHEET Nº:	A-08



MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-17
				DRAWING TITLE : SECTION B-B		SHEET Nº:



MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:	DRAWING TITLE : RC COLUMN FOR SUPPORT END OF RAFTER DETAIL	SHEETS:	A-17
					SHEET Nº:	A-11

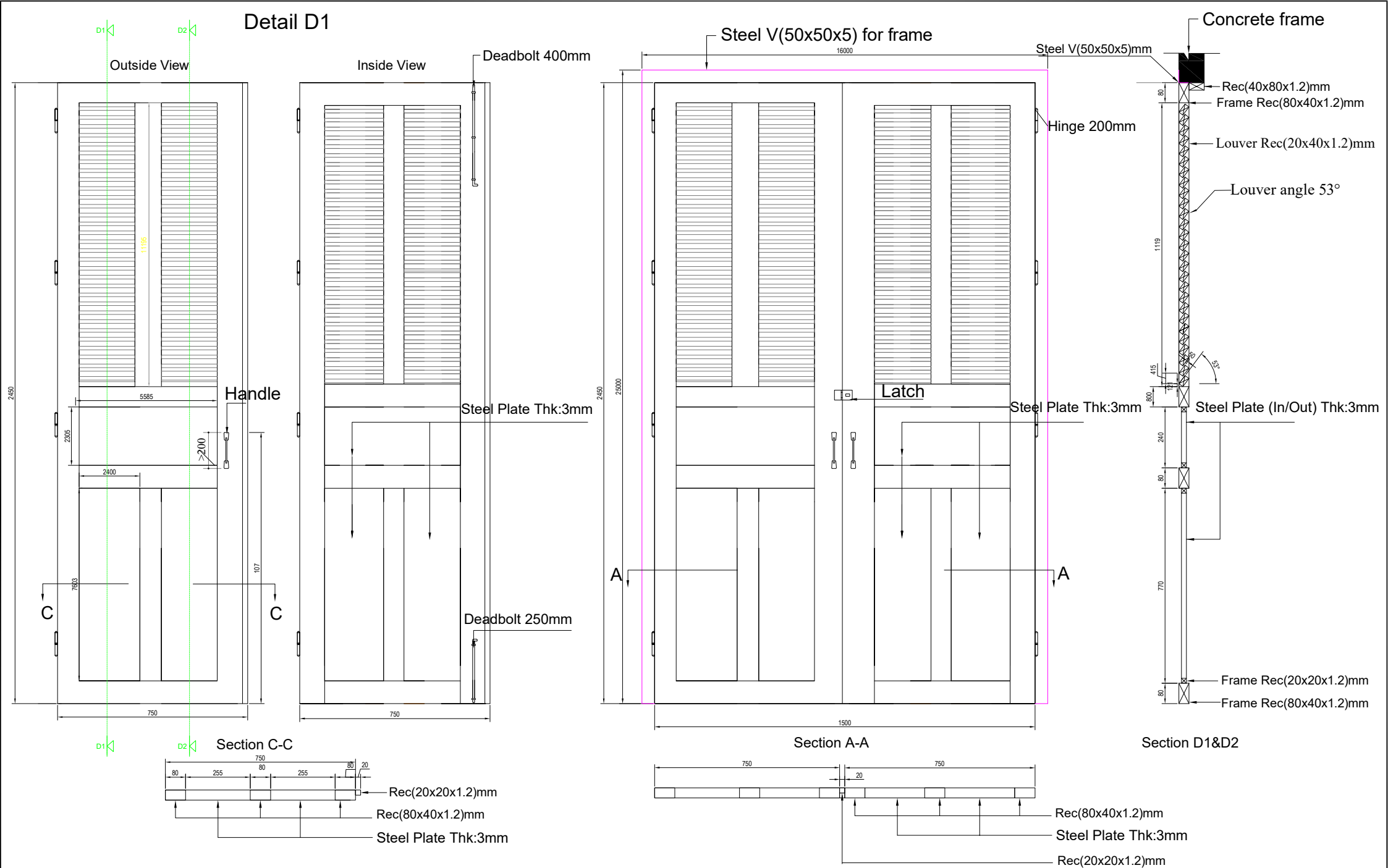


1 Rc. Overhang roof 80mm Thk.

Note:
Rebar of overhang roof Ø8@100

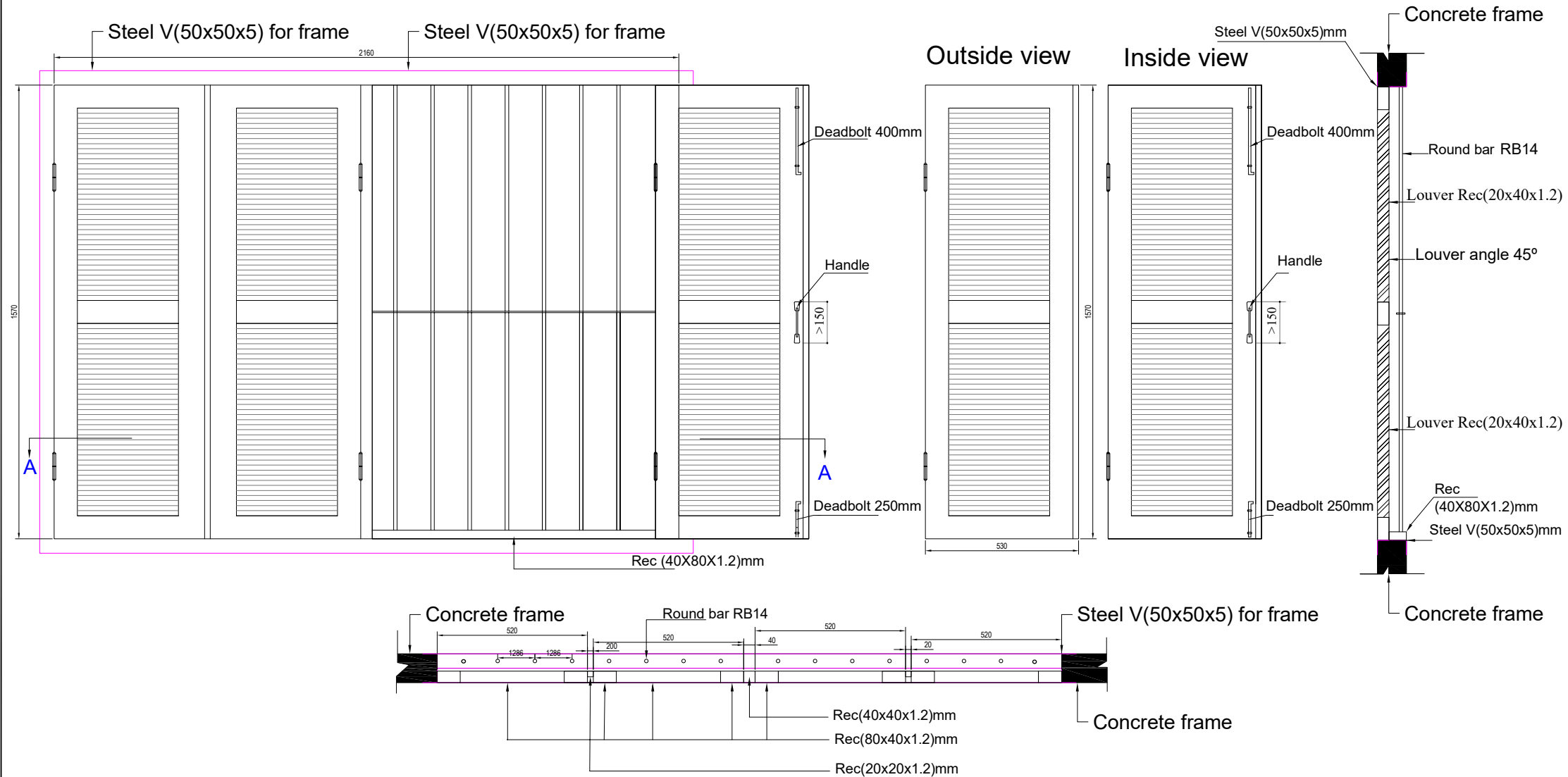
MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:	DRAWING TITLE : RC COLUMN FOR SUPPORT END OF RAFTER DETAIL	SHEETS:	A-17
					SHEET Nº:	A-12

Detail D1



MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-17
		DRAWING TITLE : DOOR D1 DETAIL			SHEET N°:	A-13

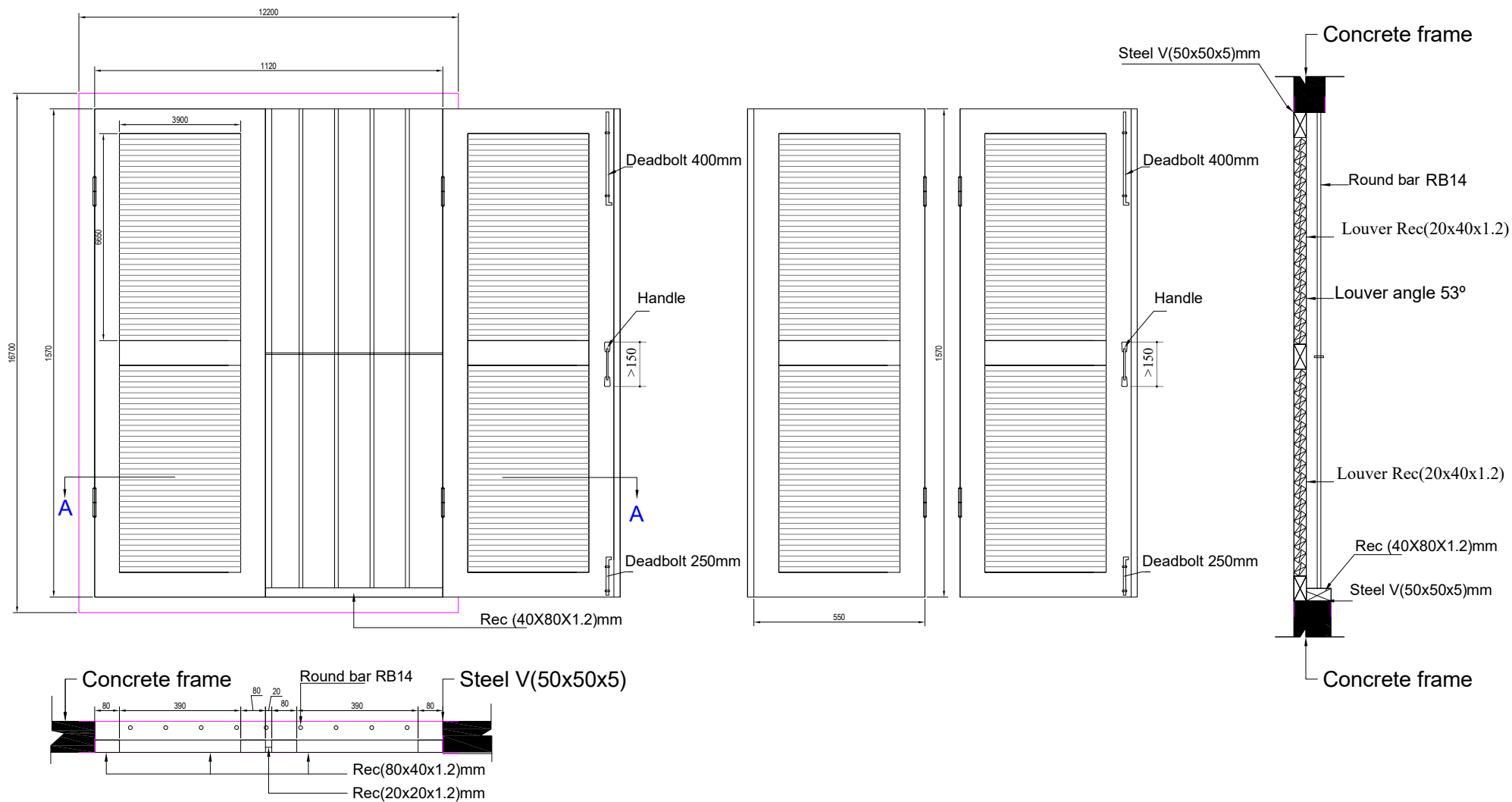
Window detail W2



Section A-A

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-17
				DRAWING TITLE : WINDOW W1 DETAIL	SHEET N°:	A-14

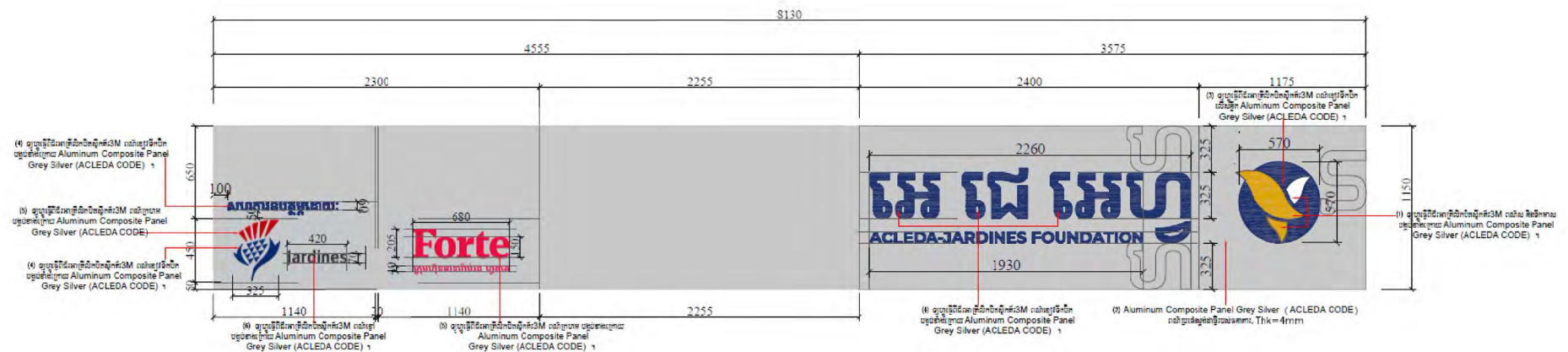
Window detail W1



Section A-A

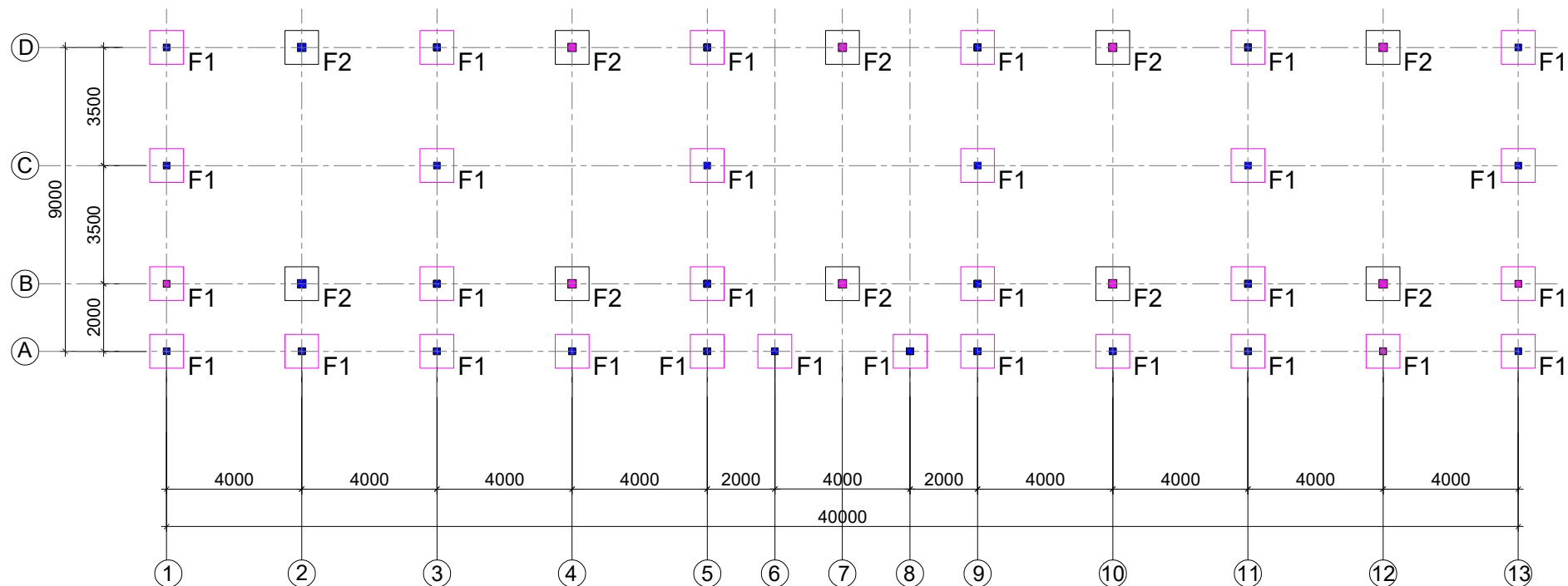
MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-17
				DRAWING TITLE : WINDOW W2 DETAIL	SHEET N°:	A-15

Signboard



MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	A-17
				DRAWING TITLE : Signboard	SHEET N°:	A-17

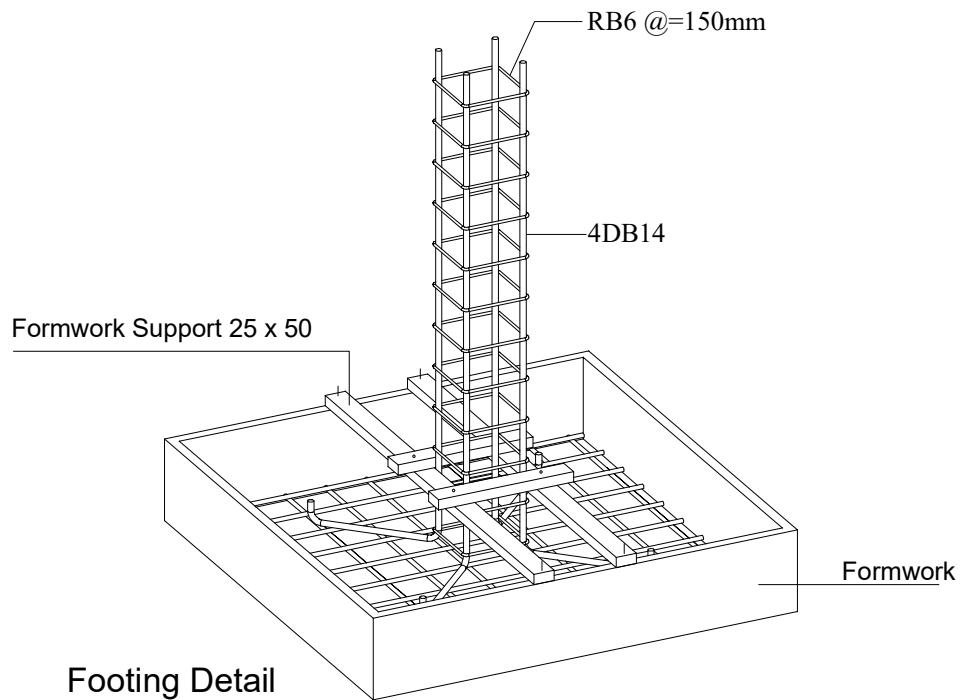
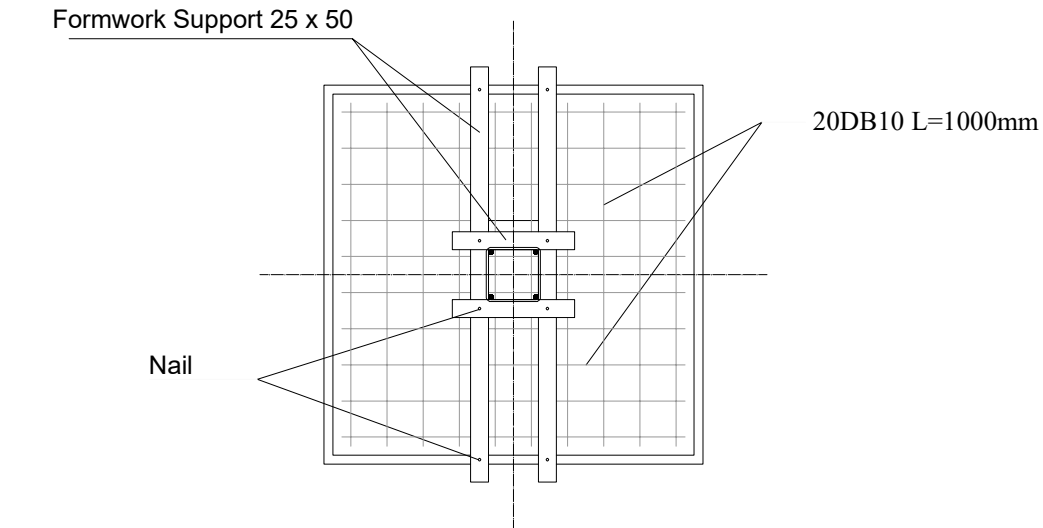
STRUCTURAL DRAWING



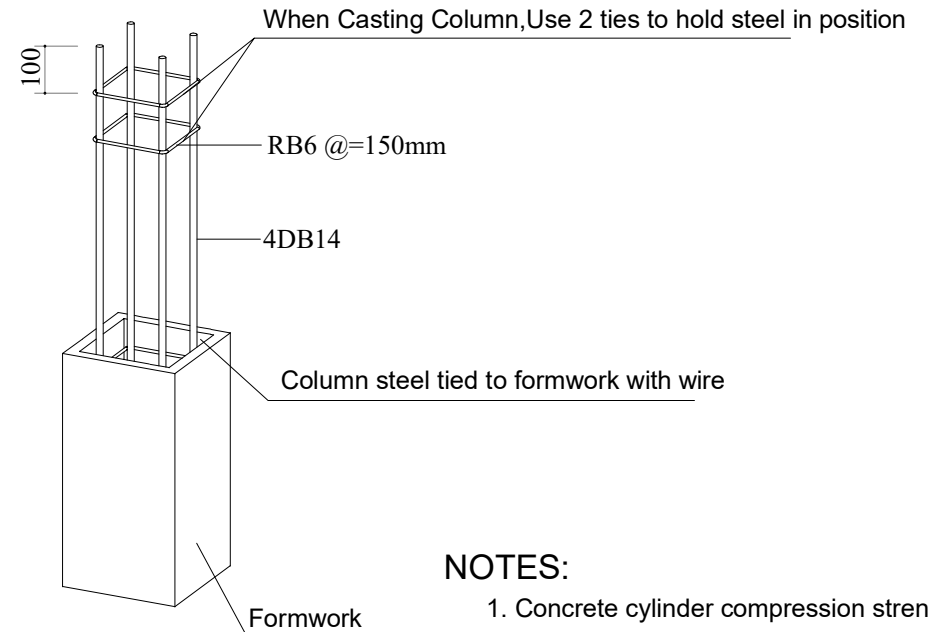
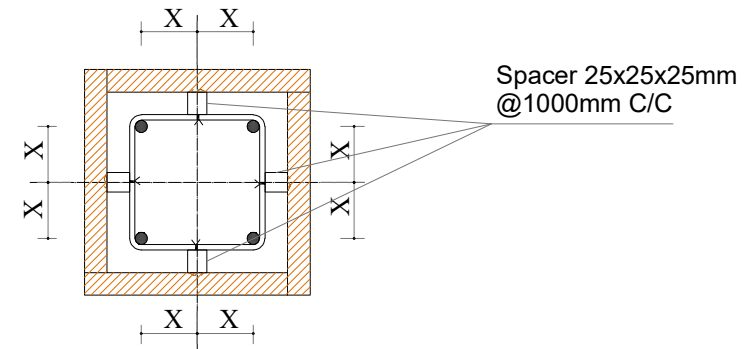
(Pile Group Plan)

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:	DRAWING TITLE : PILE GROUP PLAN	SHEETS:	S16
					SHEET Nº:	S-01

Detail to check before casting footing and column



Footing Detail



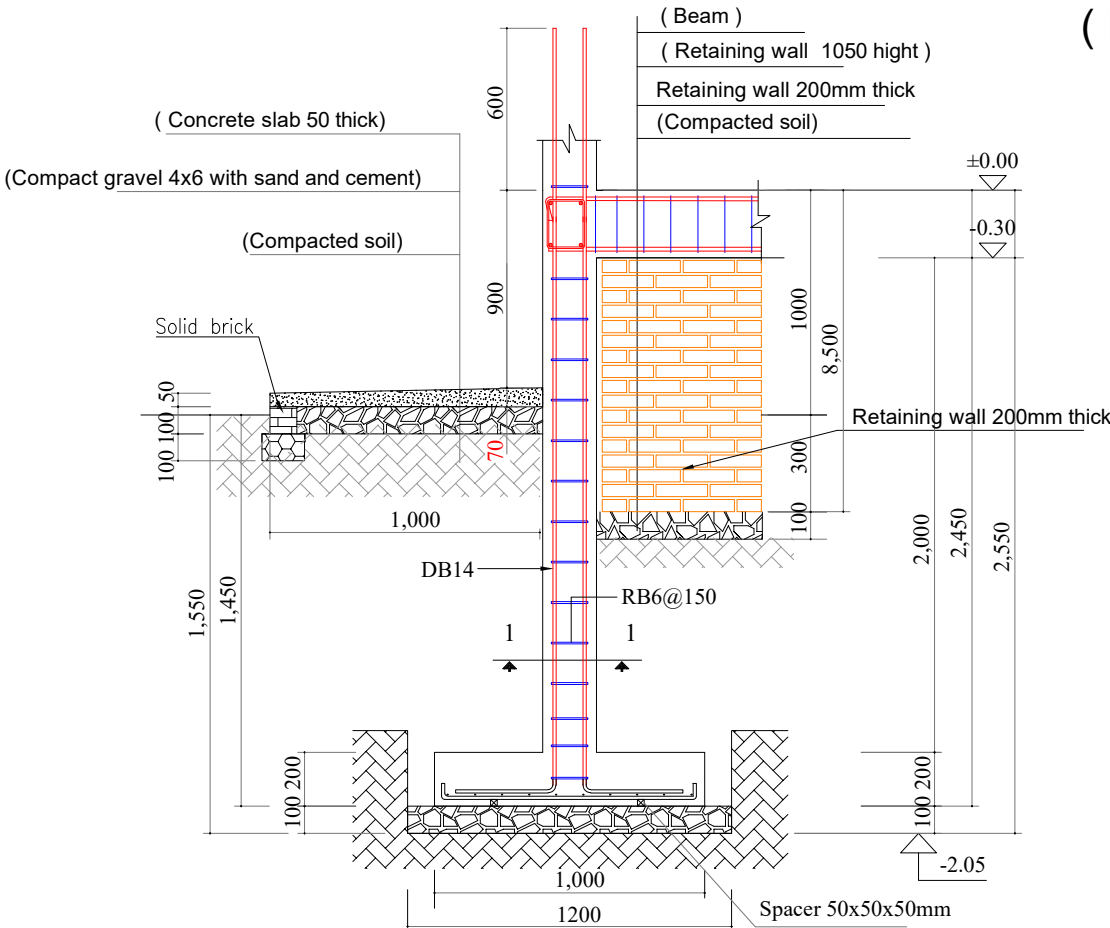
Column Detail

NOTES:

1. Concrete cylinder compression strength, 28days is $f'_c = 25\text{MPa}$
2. DB yield strength $f_y = 390\text{MPa}$
3. RB yield strength $f_y = 235\text{MPa}$
4. Concrete cover rebar column = 25mm

MINISTRY OF EDUCATION, YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE: NO
		CHECKED BY:	DRAWN BY:	DRAWING TITLE : DETAIL TO CHECK BEFORE CASTING FOOTING AND COLUMN	SHEETS: S16
					SHEET Nº: S-02

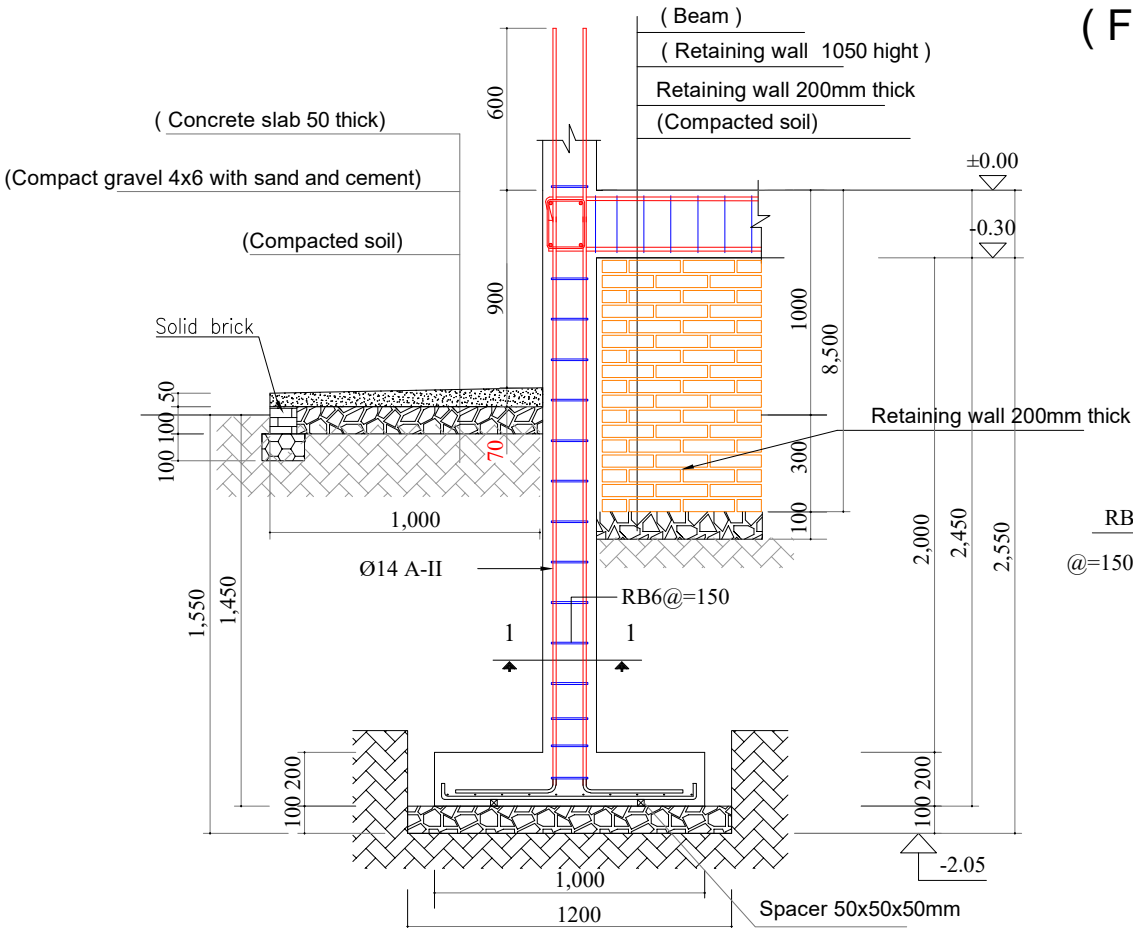
(Footing and column detail F1)



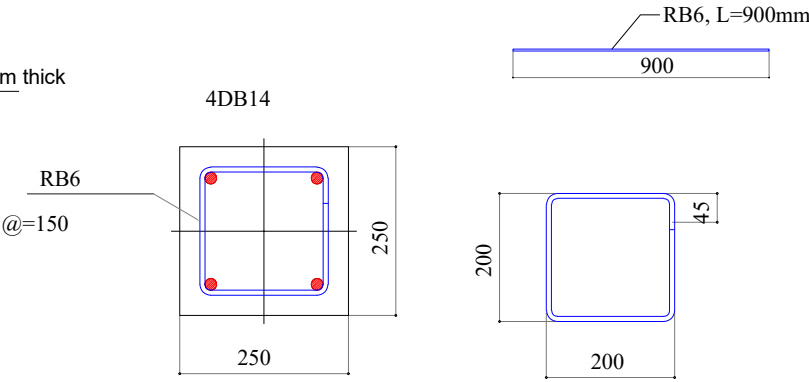
- NOTES:
1. Concrete cylinder compression strength, 28days is $f_c = 25\text{MPa}$
 2. DB yield strength $f_y = 390\text{MPa}$
 3. RB yield strength $f_y = 235\text{MPa}$
 4. Concrete cover rebar column = 25mm

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	S16
		DRAWING TITLE : FOOTING AND COLUMN DETAIL F1			SHEET Nº:	S-03

(Footing and column detail F2)

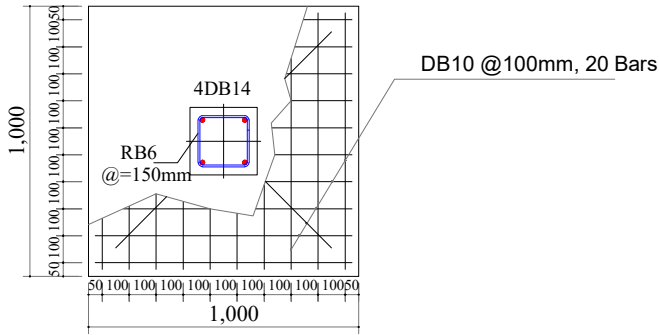


Condition of soil compacting



Section 1-1

Stirrup Detail

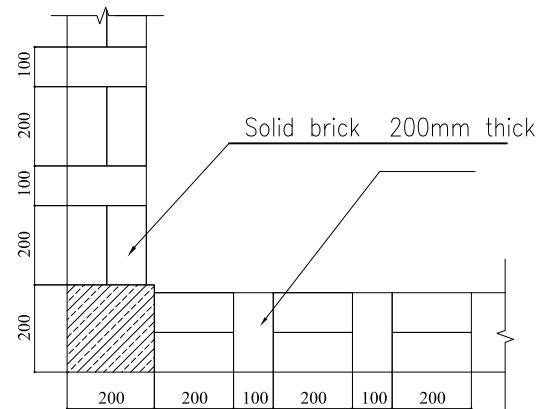
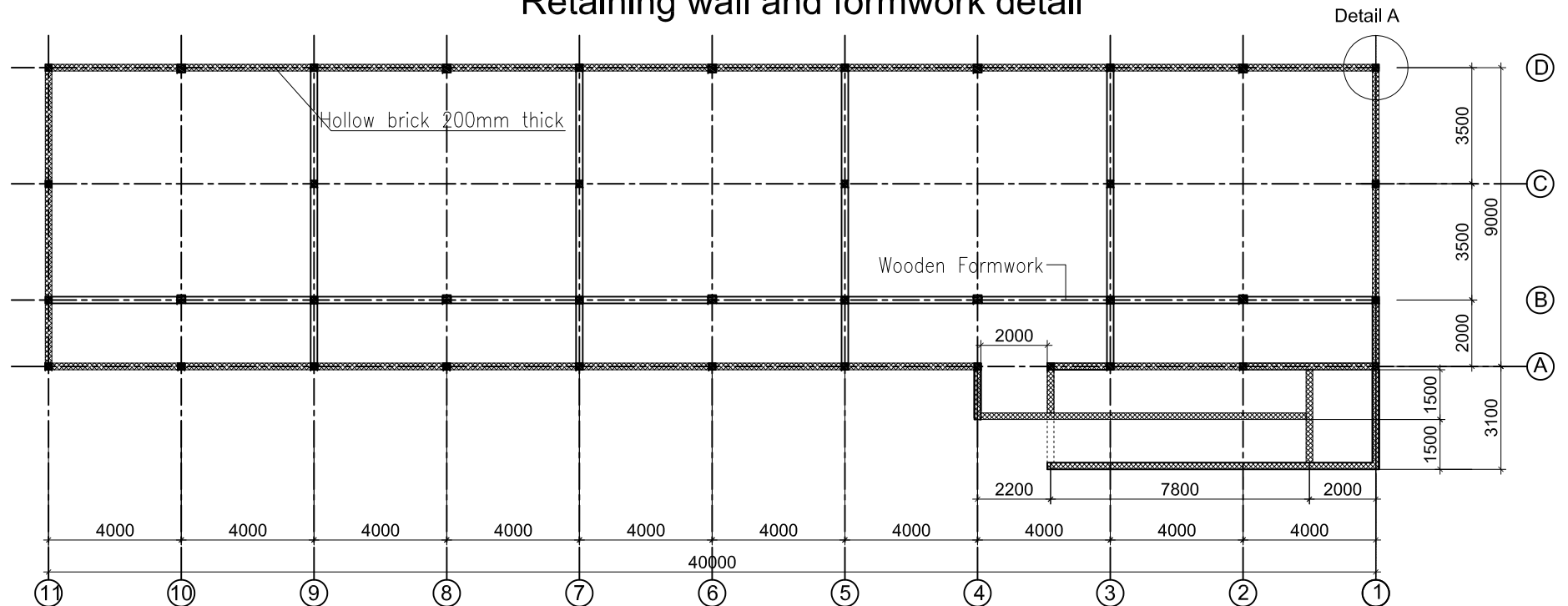


NOTES:

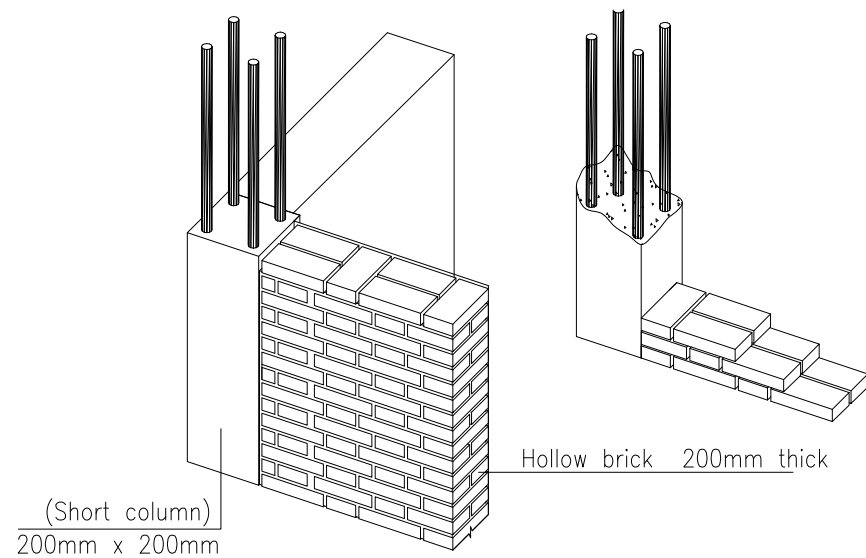
- 1. Concrete cylinder compression strength, 28days is $f_c = 25\text{MPa}$
- 2. DB yield strength $f_y = 390\text{MPa}$
- 3. RB yield strength $f_y = 235\text{MPa}$
- 4. Concrete cover rebar column = 25mm

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	S16
				DRAWING TITLE : FOOTING AND COLUMN DETAIL F2	SHEET Nº:	S-04

Retaining wall and formwork detail

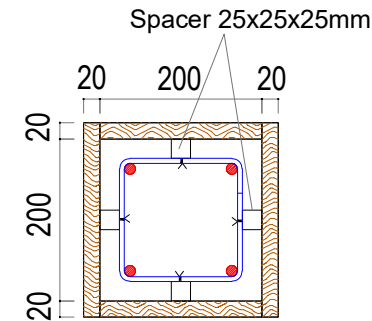
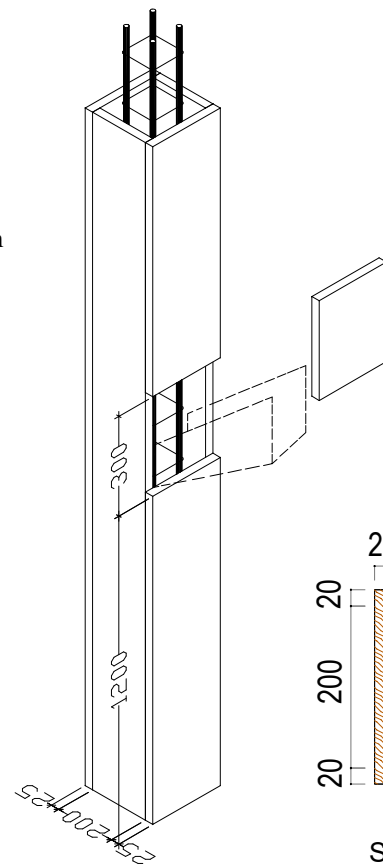
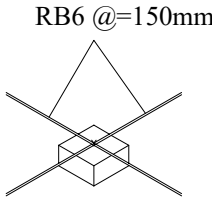
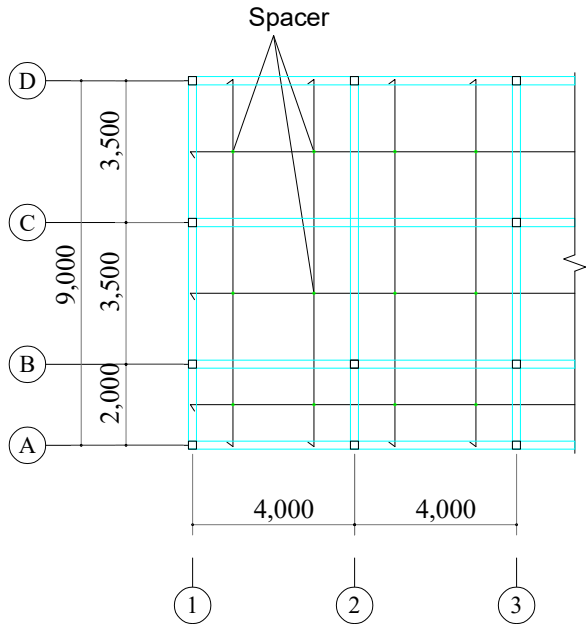
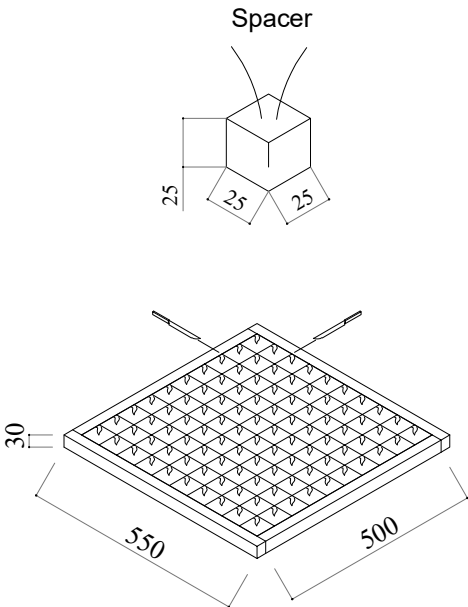


Detail A

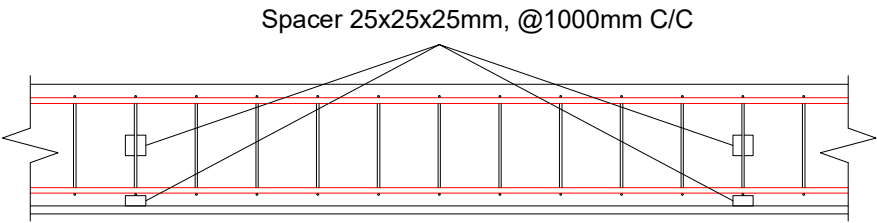


MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	S16
				DRAWING TITLE : RETAINING WALL AND FORMWORK DETAIL	SHEET N°:	S-05

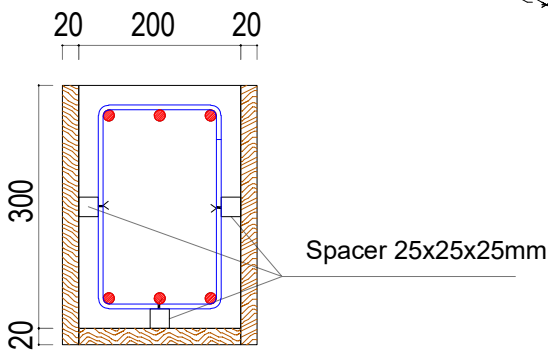
Reinforcement Spacer Detail



Spacer in column



Beam Spacer

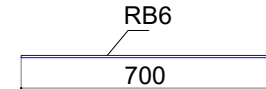
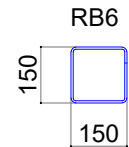
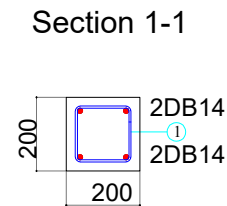
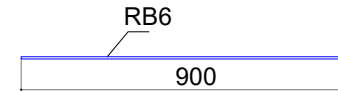
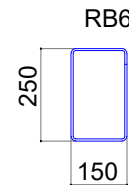
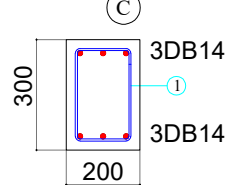
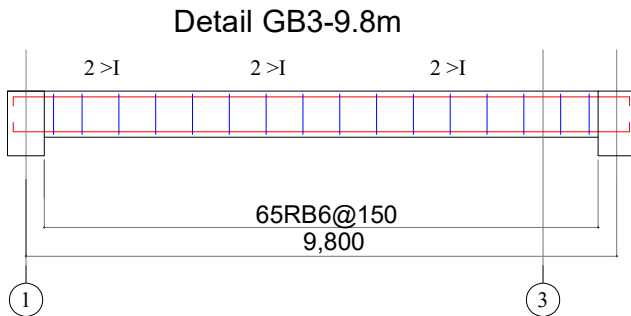
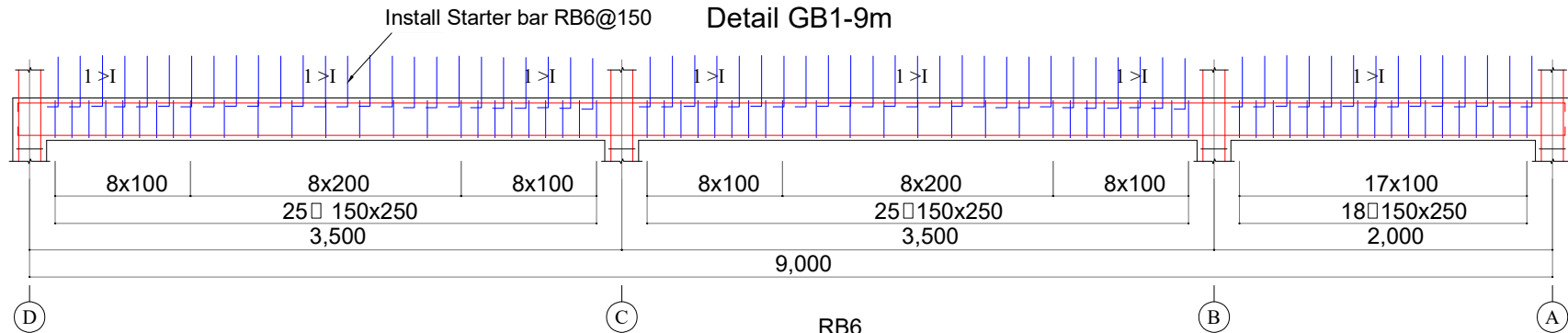
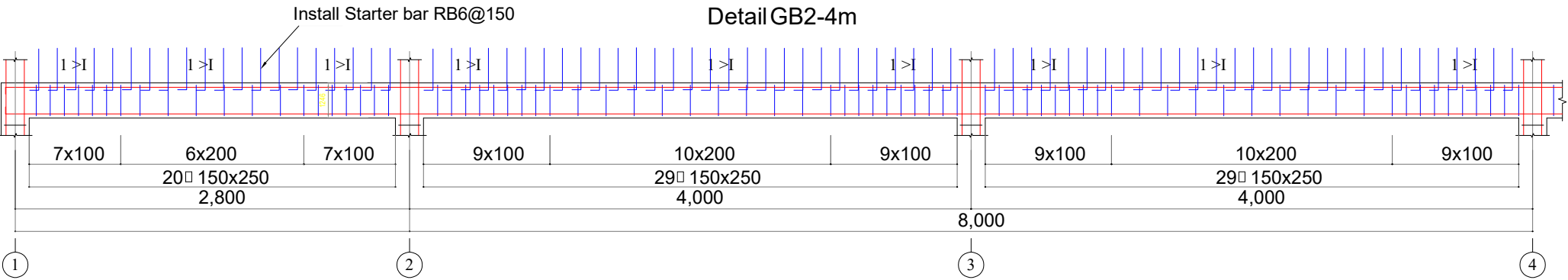


Spacer Detail

NOTES:

- 1. Concrete cylinder compression strength, 28days is $f_c = 25\text{MPa}$
- 2. DB yield strength $f_y = 390\text{MPa}$
- 3. RB yield strength $f_y = 235\text{MPa}$
- 4. Concrete cover rebar column = 25mm

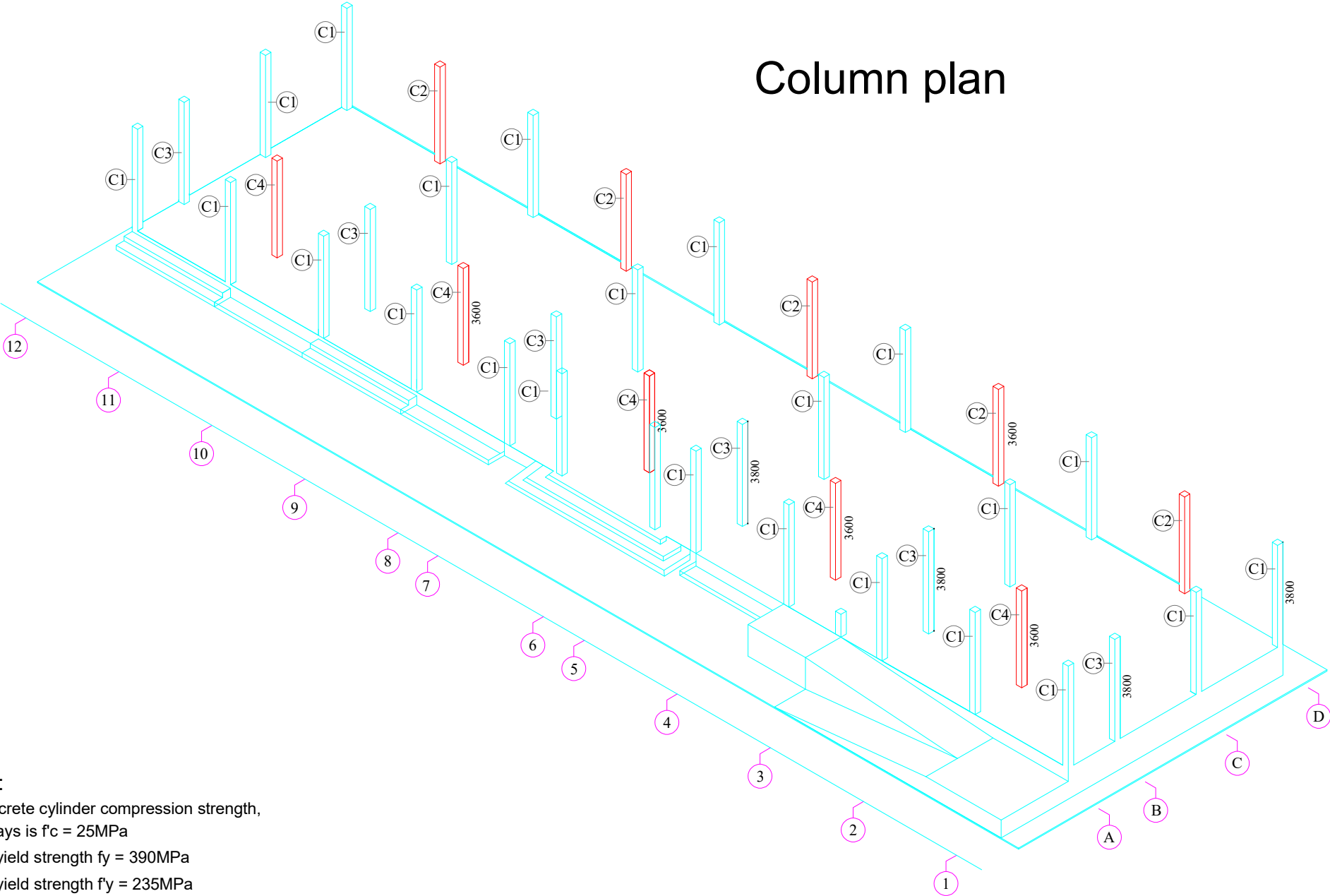
MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	S16
				DRAWING TITLE : REINFORCEMENT SPACER DETAIL	SHEET N°:	S-06



NOTES:

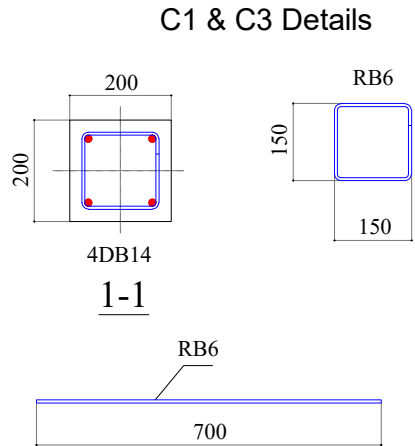
1. Concrete cylinder compression strength, 28days is $f'_c = 25\text{MPa}$
2. DB yield strength $f_y = 390\text{MPa}$
3. RB yield strength $f_y = 235\text{MPa}$
4. Concrete cover rebar column = 25mm

Column plan

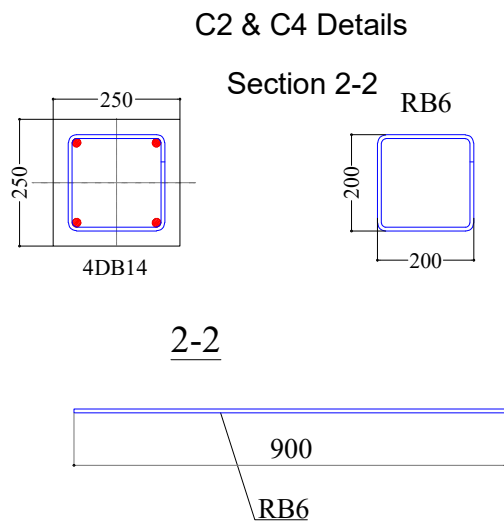


- NOTES:**
- 1. Concrete cylinder compression strength, 28days is $f_c = 25\text{MPa}$
 - 2. DB yield strength $f_y = 390\text{MPa}$
 - 3. RB yield strength $f_y = 235\text{MPa}$
 - 4. Concrete cover rebar column = 25mm

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:	DRAWING TITLE : COLUMN PLAN	SHEETS:	S16
					SHEET Nº:	S-09

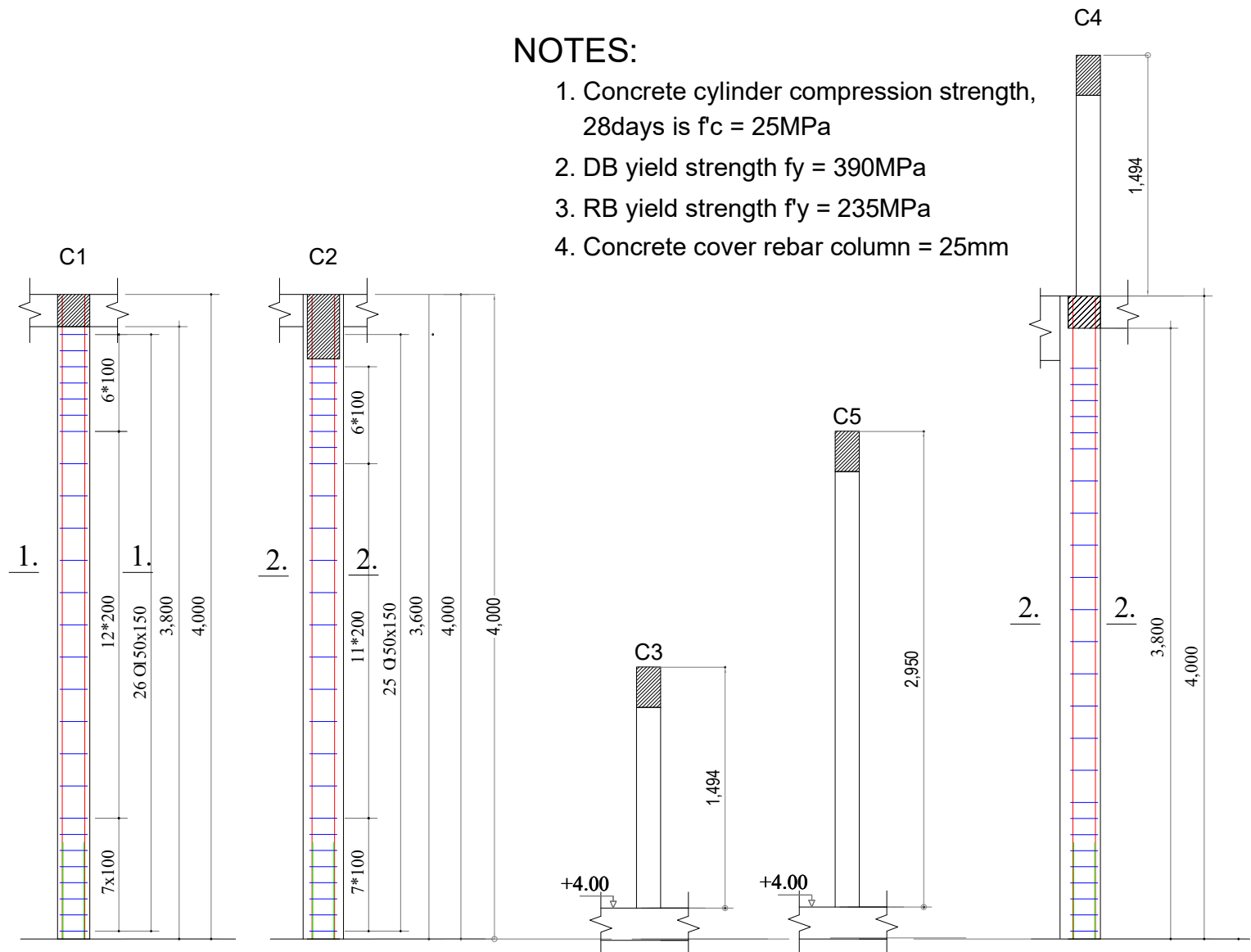


Column detail



NOTES:

1. Concrete cylinder compression strength, 28days is $f_c = 25\text{MPa}$
2. DB yield strength $f_y = 390\text{MPa}$
3. RB yield strength $f_y = 235\text{MPa}$
4. Concrete cover rebar column = 25mm

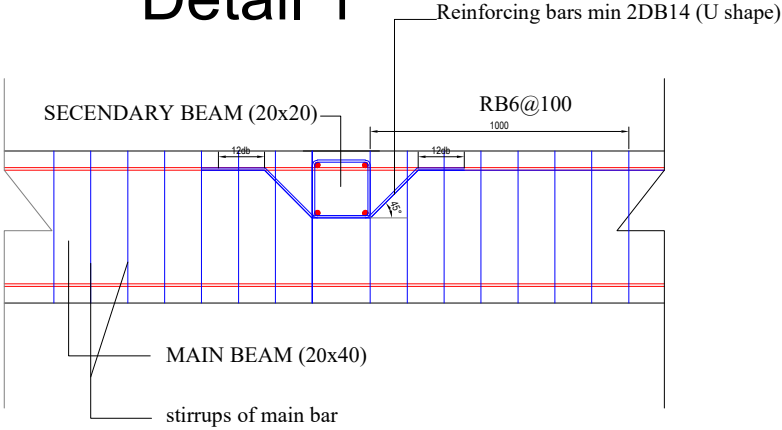
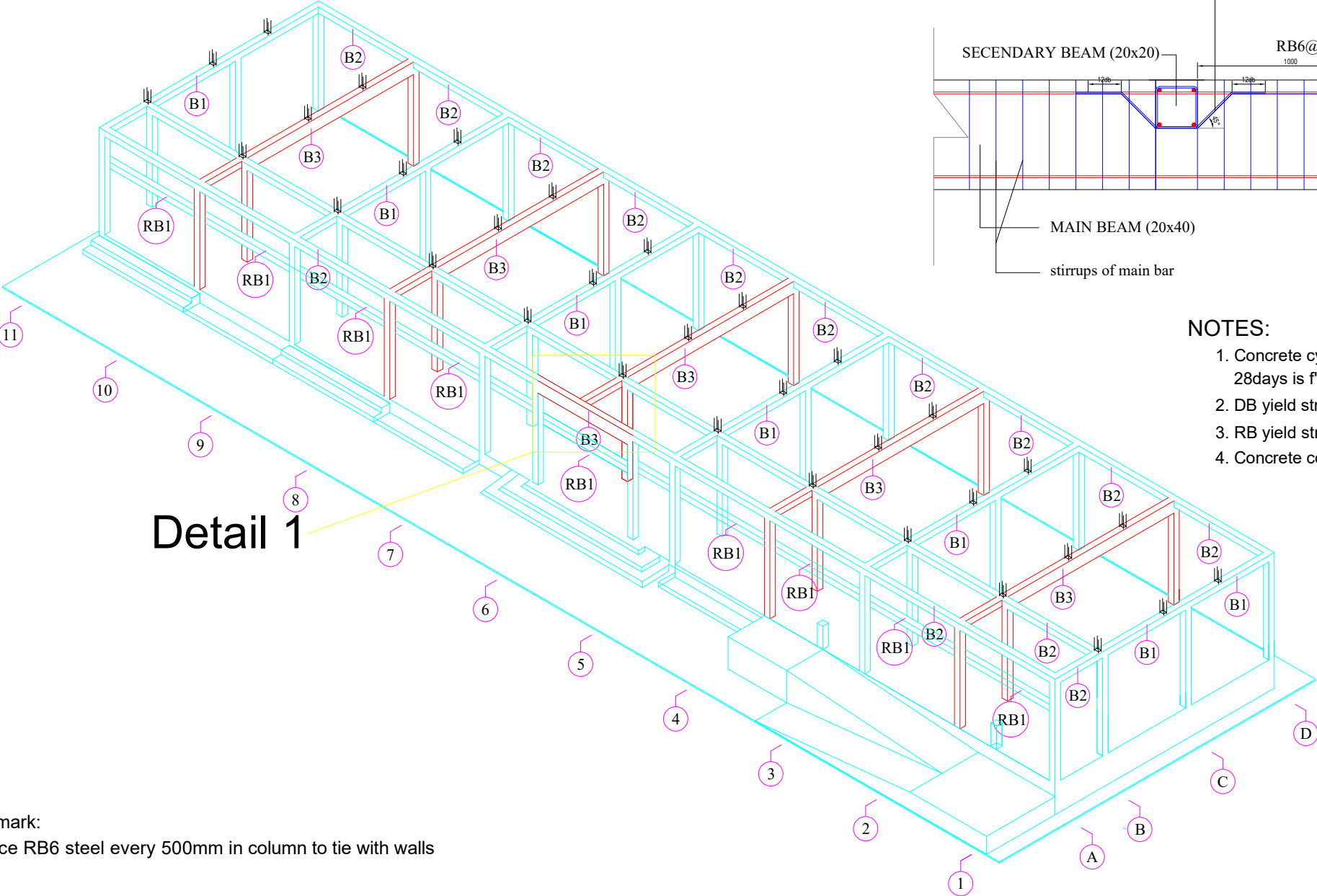


Column Detail

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:	DRAWING TITLE : COLUMN DETAIL	SHEETS:	S16
					SHEET Nº:	S-10

Over Beam Plan

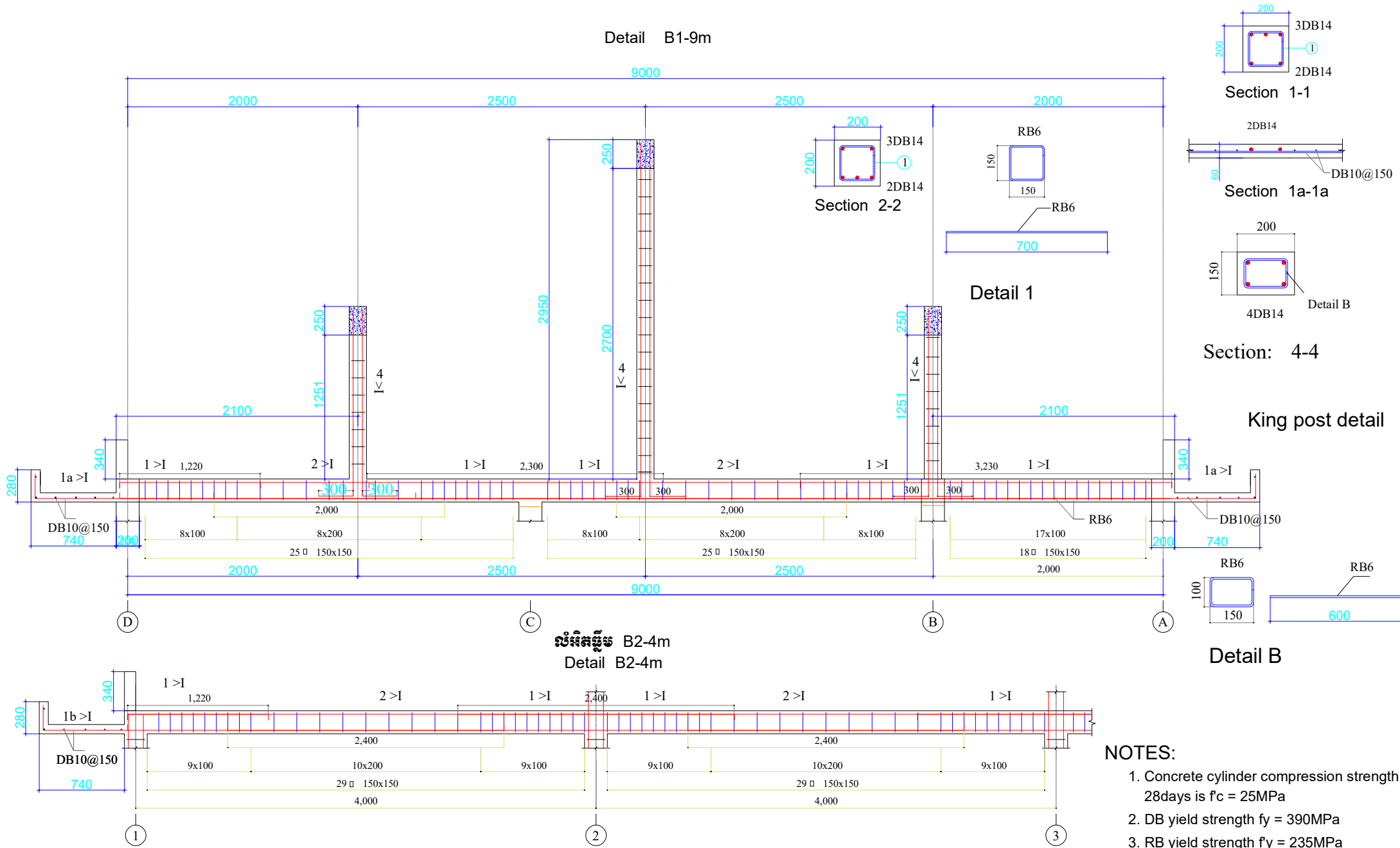
Detail 1



- NOTES:
- 1. Concrete cylinder compression strength, 28days is $f_c = 25\text{MPa}$
 - 2. DB yield strength $f_y = 390\text{MPa}$
 - 3. RB yield strength $f_y = 235\text{MPa}$
 - 4. Concrete cover rebar column = 25mm

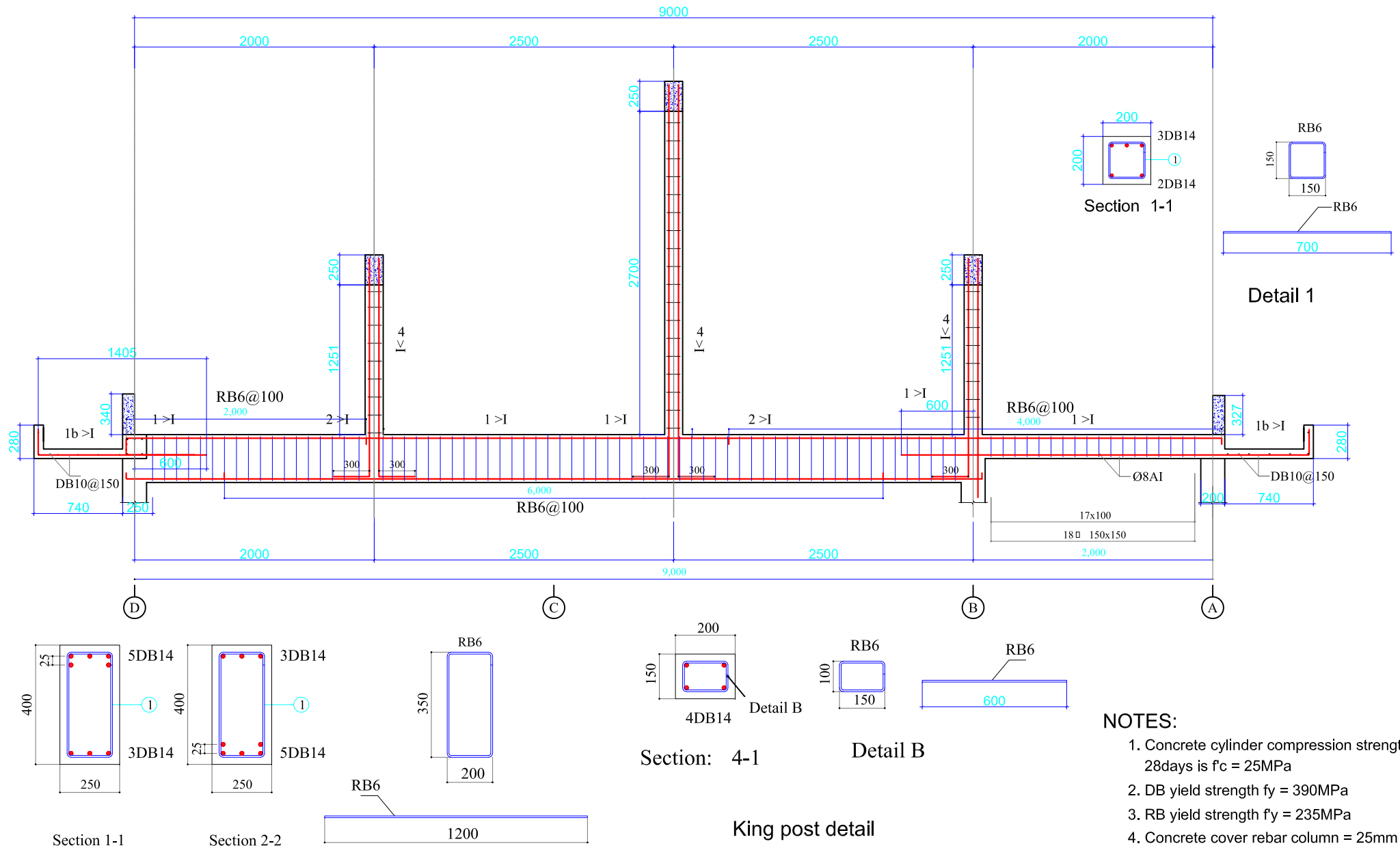
Remark:
Place RB6 steel every 500mm in column to tie with walls

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	S16
		DRAWING TITLE : OVER BEAM PLAN			SHEET N°:	S-11



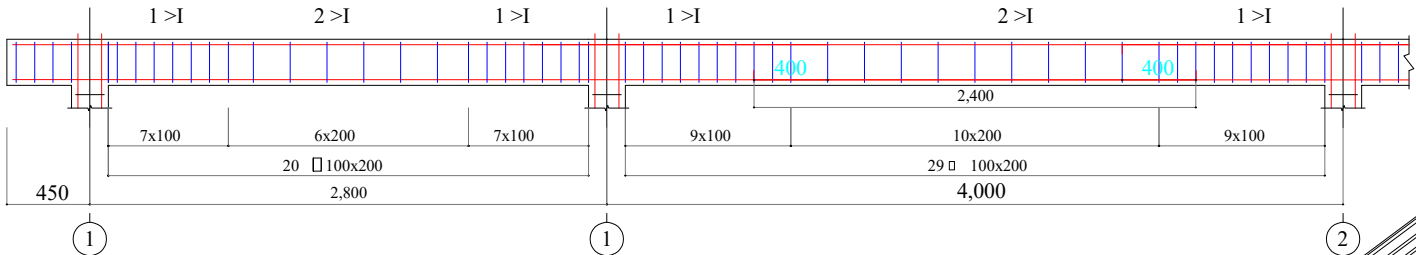
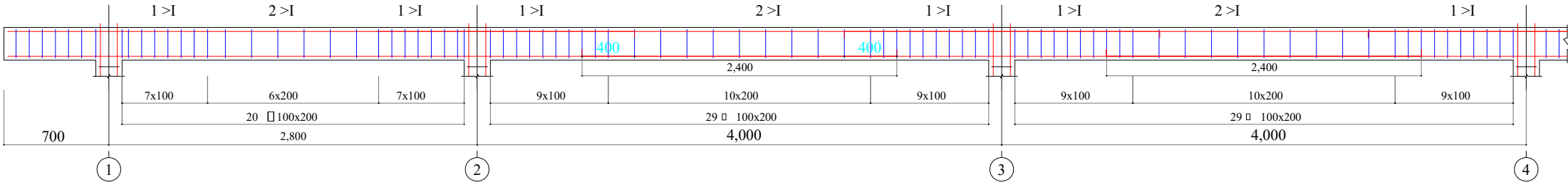
- NOTES:**
- 1. Concrete cylinder compression strength, 28days is $f'_c = 25\text{MPa}$
 - 2. DB yield strength $f_y = 390\text{MPa}$
 - 3. RB yield strength $f_y = 235\text{MPa}$
 - 4. Concrete cover rebar column = 25mm

Detail B3-9m



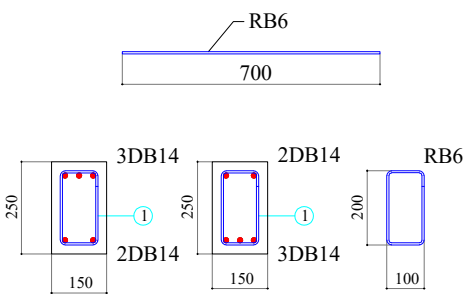
NOTES:

1. Concrete cylinder compression strength, 28days is $f'_c = 25\text{MPa}$
2. DB yield strength $f_y = 390\text{MPa}$
3. RB yield strength $f_y = 235\text{MPa}$
4. Concrete cover rebar column = 25mm



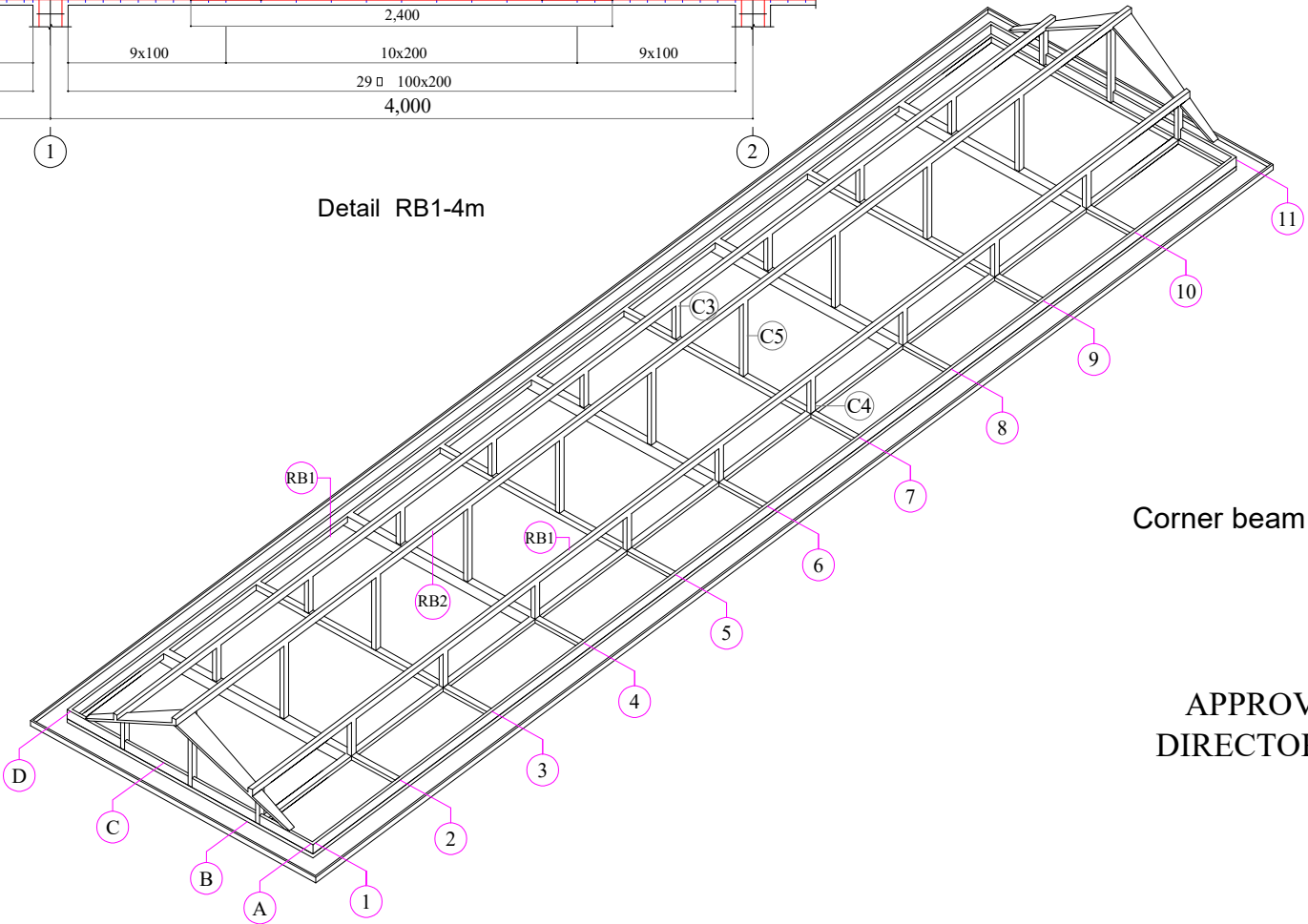
Beam Detail RB2-4m

Detail RB1-4m



Section 1-1 Section 2-2 Detail-1

- NOTES:
- 1. Concrete cylinder compression strength, 28days is $f_c = 25\text{MPa}$
 - 2. DB yield strength $f_y = 390\text{MPa}$
 - 3. RB yield strength $f_y = 235\text{MPa}$
 - 4. Concrete cover rebar column = 25mm



Corner beam detail

APPROVED BY:
DIRECTOR OF DOC

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:	DRAWING TITLE : RIGDE BEAM PLAN AND DETAIL	SHEETS:	S16
					SHEET Nº:	S-14

Architectural floor plan of a structure with overall dimensions of 4,000 mm (width) and 2,500 mm (depth). The plan shows a central corridor (W2) flanked by rooms (W2 and D1). Dimensions are provided for all walls, columns, and openings. A detail callout shows a cross-section of a 100x200 mm RC column with RB6 reinforcement bars at 150 mm spacing. The plan is divided into sections with dimensions 410, 1120, 950, 1120, 200, 200, 1120, 730, 1550, and 200. The total width is 4000 mm and the total depth is 2500 mm. The plan is labeled with 'Detail 1' and 'Detail 3'.

Figure 10: Detail of RC Column and Wall. The figure shows two cross-sectional views of a wall and column assembly. The left view shows a wall (W1) with a central RC column (100x200) and a brickwork section above it. The right view shows a similar wall (W1) with a central RC column (100x200) and a brickwork section above it. Dimensions are provided for both views: 1570 mm height, 820 mm wall thickness, 2160 mm column width, and 200 mm gap. A detail view shows the RC column reinforcement: RB6@150mm and 2DB10.

A-A

Figure 1 shows the dimensions of the experimental setup. The specimen is a rectangle with a height of 1245 mm and a total width of 3,760 mm. The width is divided into five sections: two end sections of 710 mm each and three central sections of 720 mm each. A 'Steel Mesh 50mm' is indicated on the right side of the specimen.

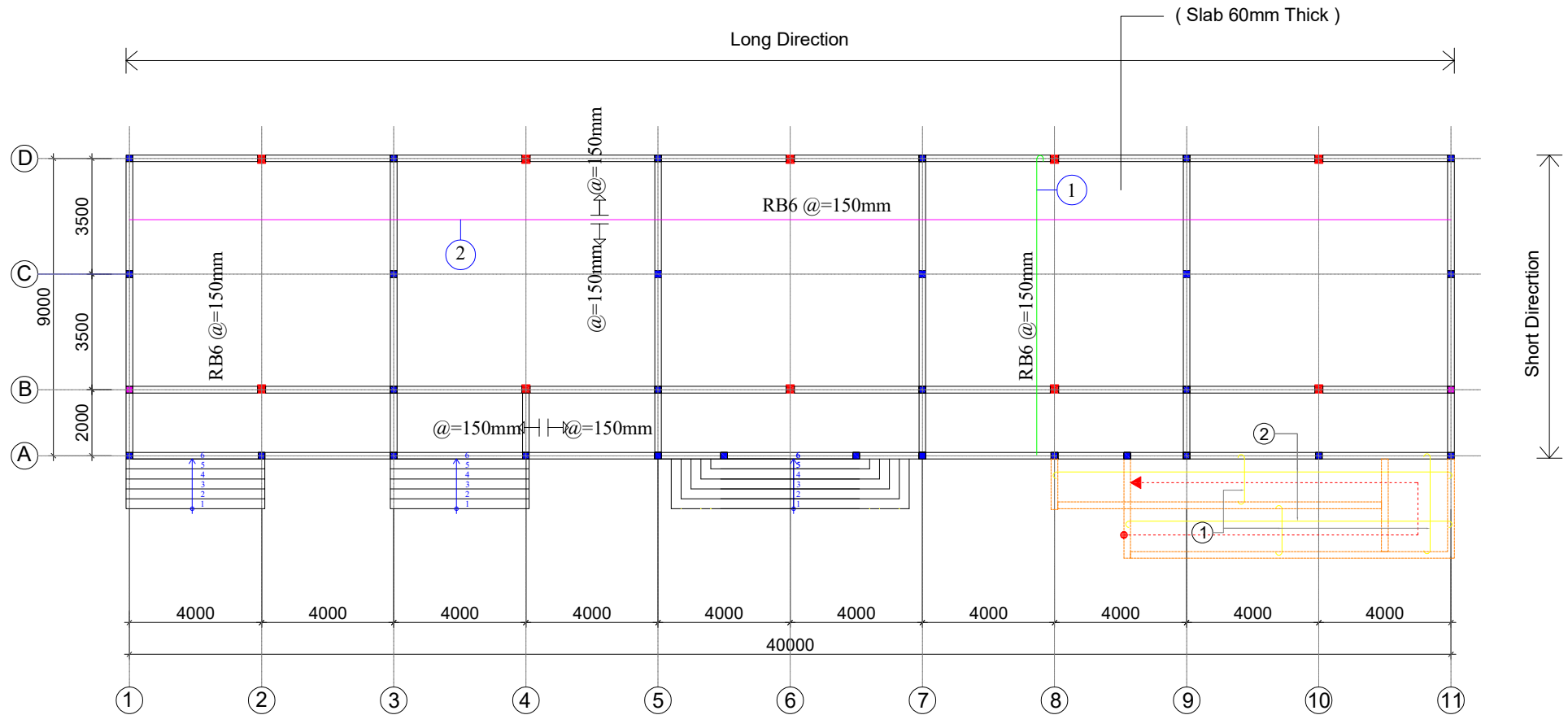
Steel Mesh 50mm

Detail 4

NOTES:

1. Concrete cylinder compression strength, 28days is $f'_c = 25\text{MPa}$
2. DB yield strength $f_y = 390\text{MPa}$
3. RB yield strength $f_y = 235\text{MPa}$
4. Concrete cover rebar column = 25mm

Slab Steel bar Arrangment Detail



NOTES:

1. Concrete cylinder compression strength, 28days is $f'_c = 25\text{MPa}$
2. DB yield strength $f_y = 390\text{MPa}$
3. RB yield strength $f_y = 235\text{MPa}$
4. Concrete cover rebar column = 25mm

APPROVED BY:
DIRECTOR OF DOC

Note:

- ① Place Rebar RB6 in short direction first
- ② Place Rebar RB6 in long direction second

MINISTRY OF EDUCATION,YOUTH AND SPORT	EDUCATION SECTOR SUPPORT PROJECT SPONSORED BY ACLEDA-JARDINES EDUCATION FOUNDATION (AJF)	DATE...../...../.....		PROJECT : SCHOOL BUILDING 1 STORY 5 CLASSROOMS PLINTH LEVEL +1.00M	SCALE:	NO
		CHECKED BY:	DRAWN BY:		SHEETS:	S16
				DRAWING TITLE : SLAB STEEL BAR ARRANGMENT DETAIL	SHEET N ^o :	S-16