



*Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
AL-Salam Ophthalmic Hospital*

Done by :

*Osama Abu E'ram*

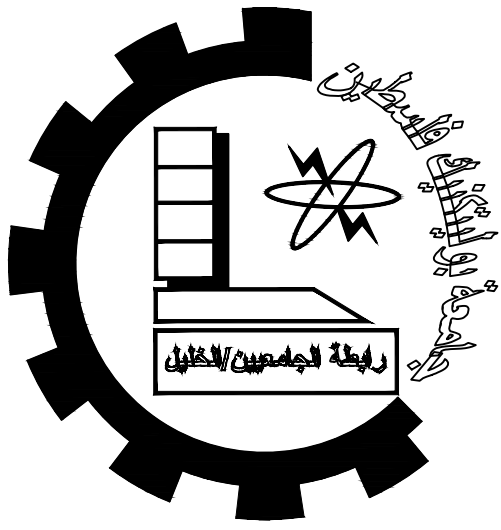
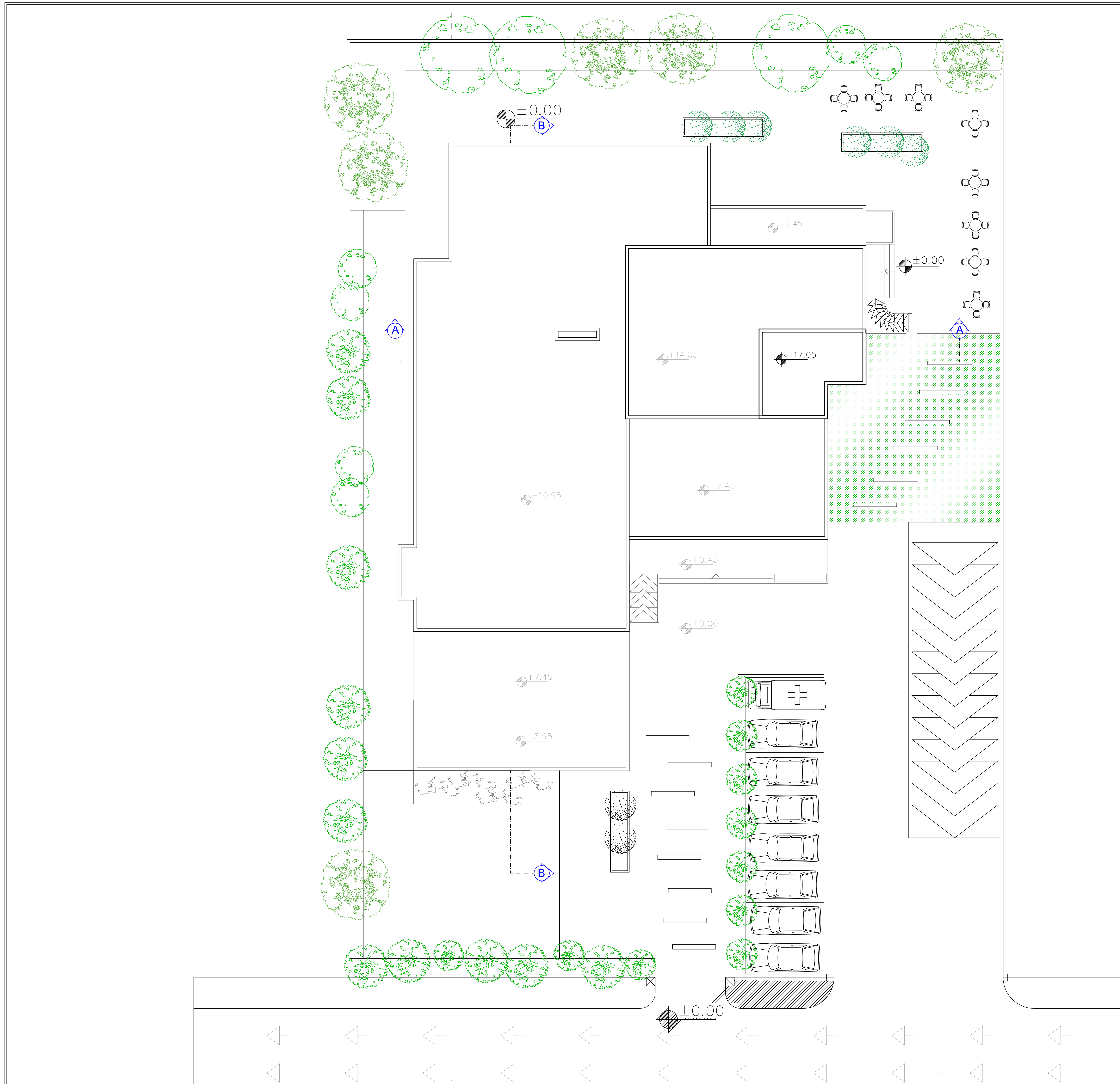
*Ali Badawi*

*Dr. Maher Amro.*  
Supervisor



*21. August. 2022*

DATE



Palestine Polytechnic University

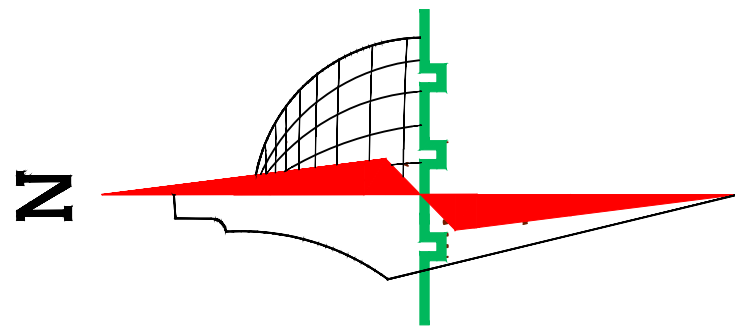
College of Engineering

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Al-Salam Ophthalmic Hospital



**Legend :**

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

**Site Plan**

Supervisor

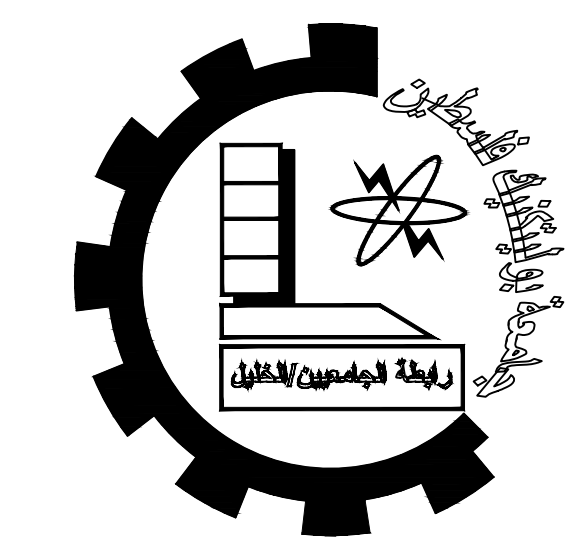
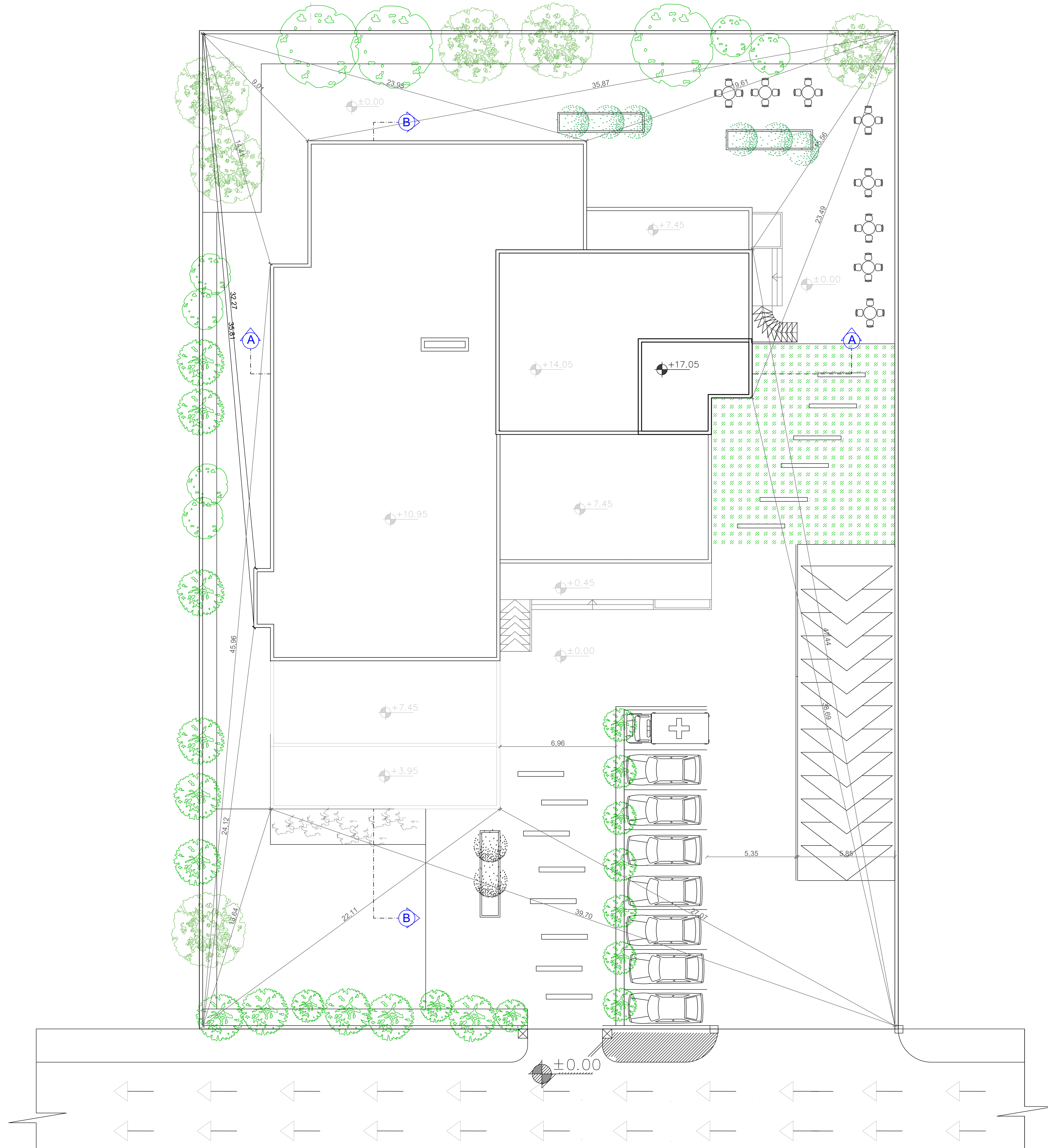
Dr.Maher Amro.

Done by :

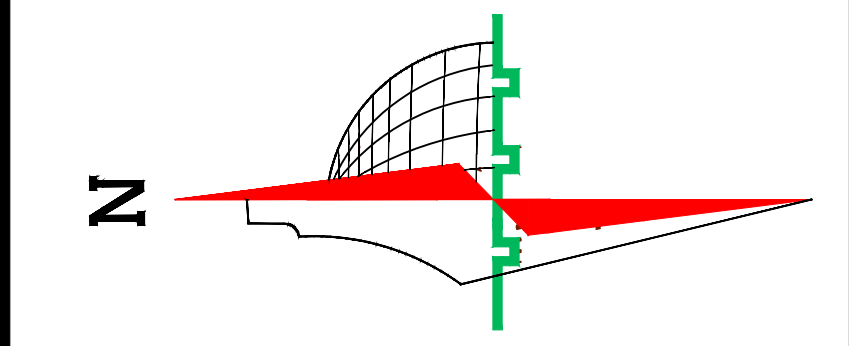
Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A00	21/8/2022



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 Civil Engineering Department  
 Civil Engineering  
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 Al-Salam Ophthalmic Hospital



**Legend :**

Stone	Gravel
R.Concrete	Wood
Concrete	HEXAGONAL TILES
Hollow Block	BAKLAVA TILES
isolating materials	GRASS

DRAWING TITLE :

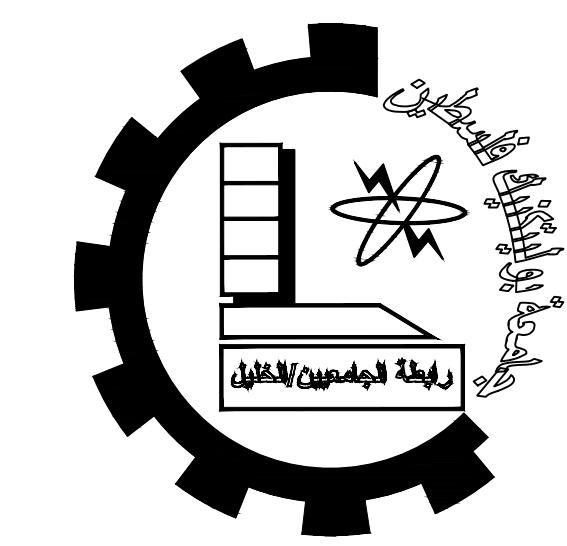
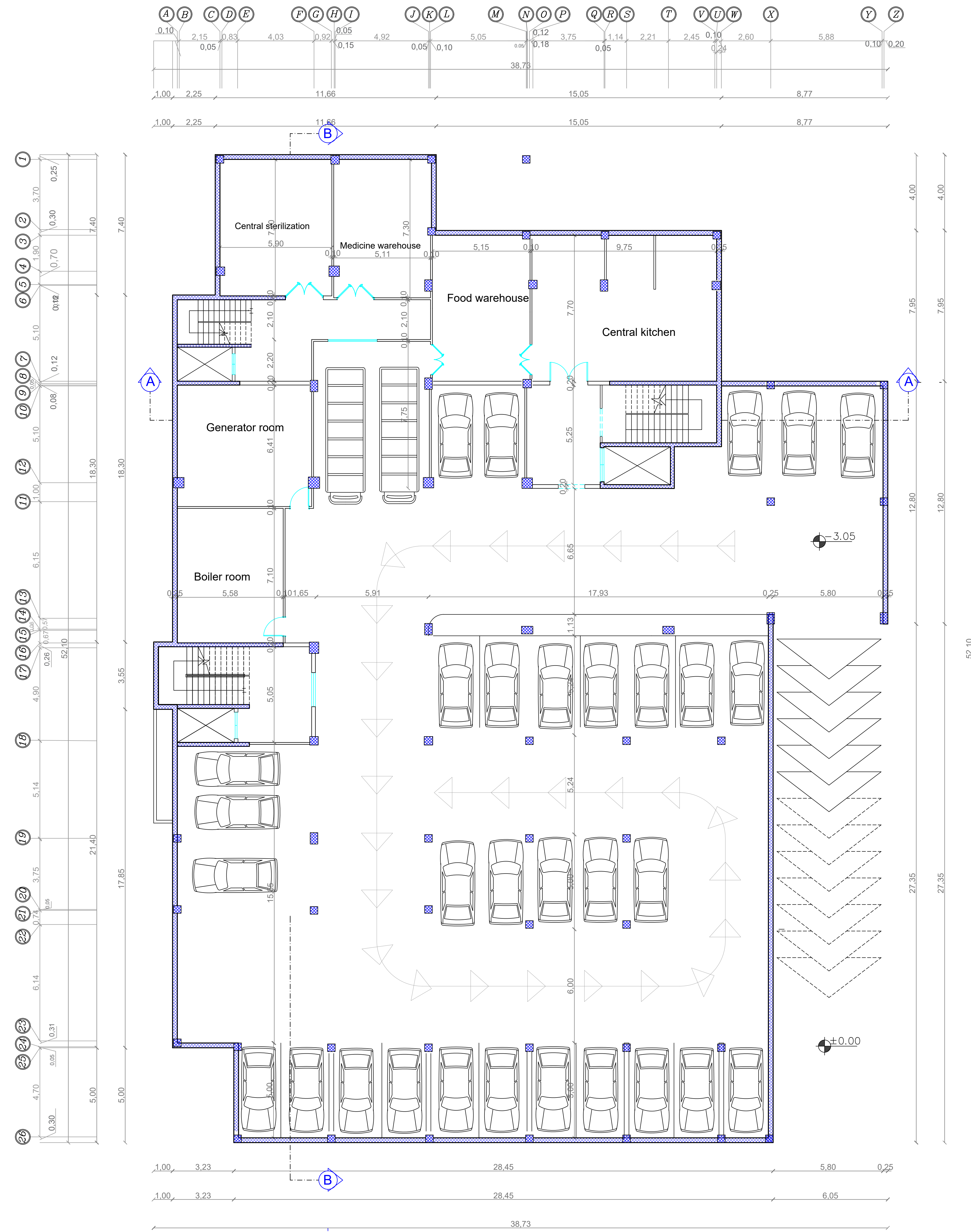
*Site Plan Dimensions*

Supervisor  
 Dr.Maher Amro.

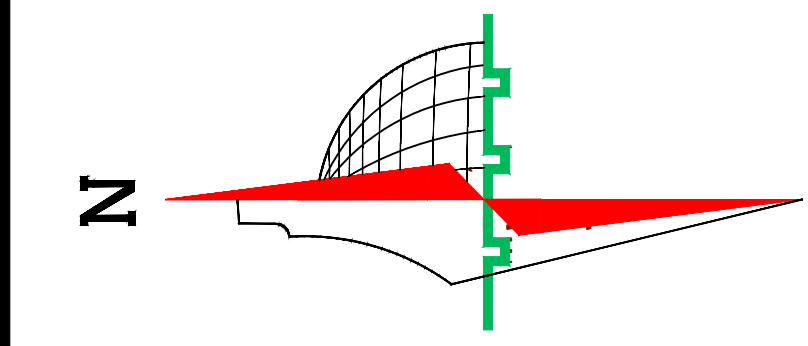
Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A01	21/8/2022

*Basement Floor Dimensions Plan*  
Scale 1 : 100



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**Legend :**

Stone	Gravel
R.Concrete	Wood
Concrete	HEXAGONAL TILES
Hollow Block	BAKLAVA TILES
isolating materials	GRASS

DRAWING TITLE :

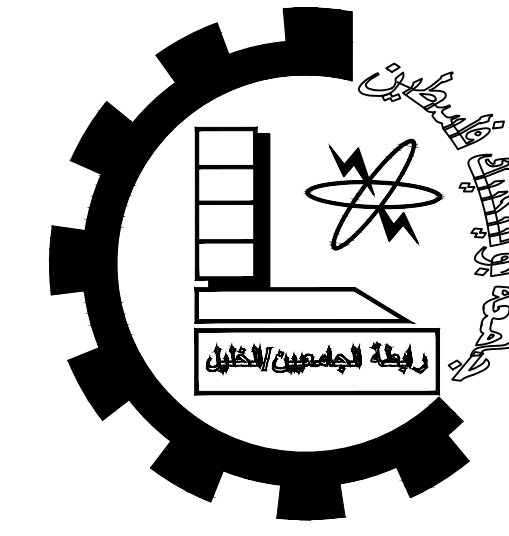
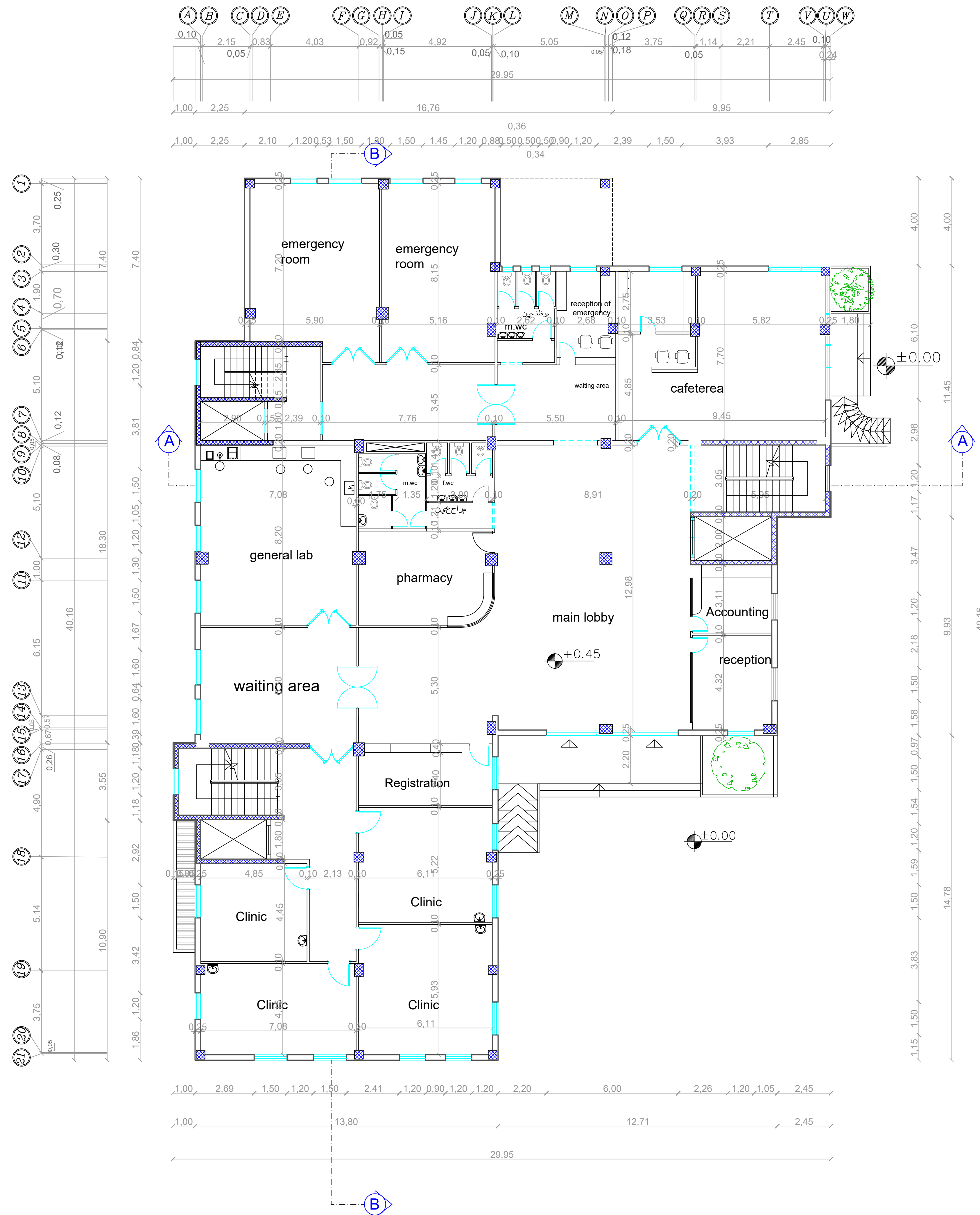
*Basement floor Dim plan*

Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A02	21/8/2022

Ground Floor Dimensions Plan  
Scale 1 : 100



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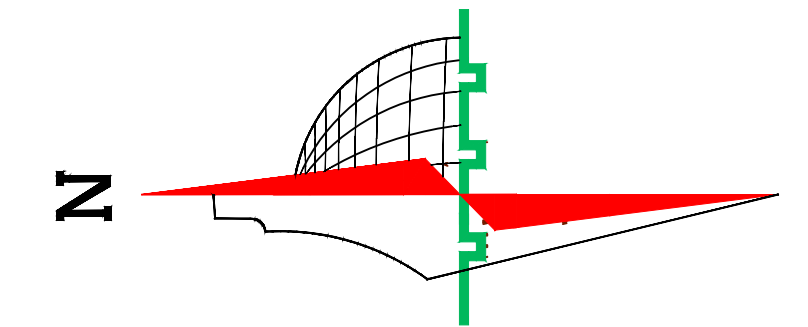
College of Engineering

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Legend :

- Stone
- R.Concrete
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- Gravel
- Wood
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- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Ground Floor Dim. Plan

Supervisor

Dr.Maher Amro.

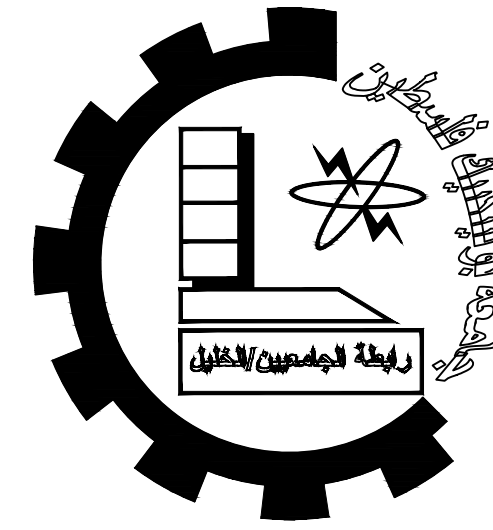
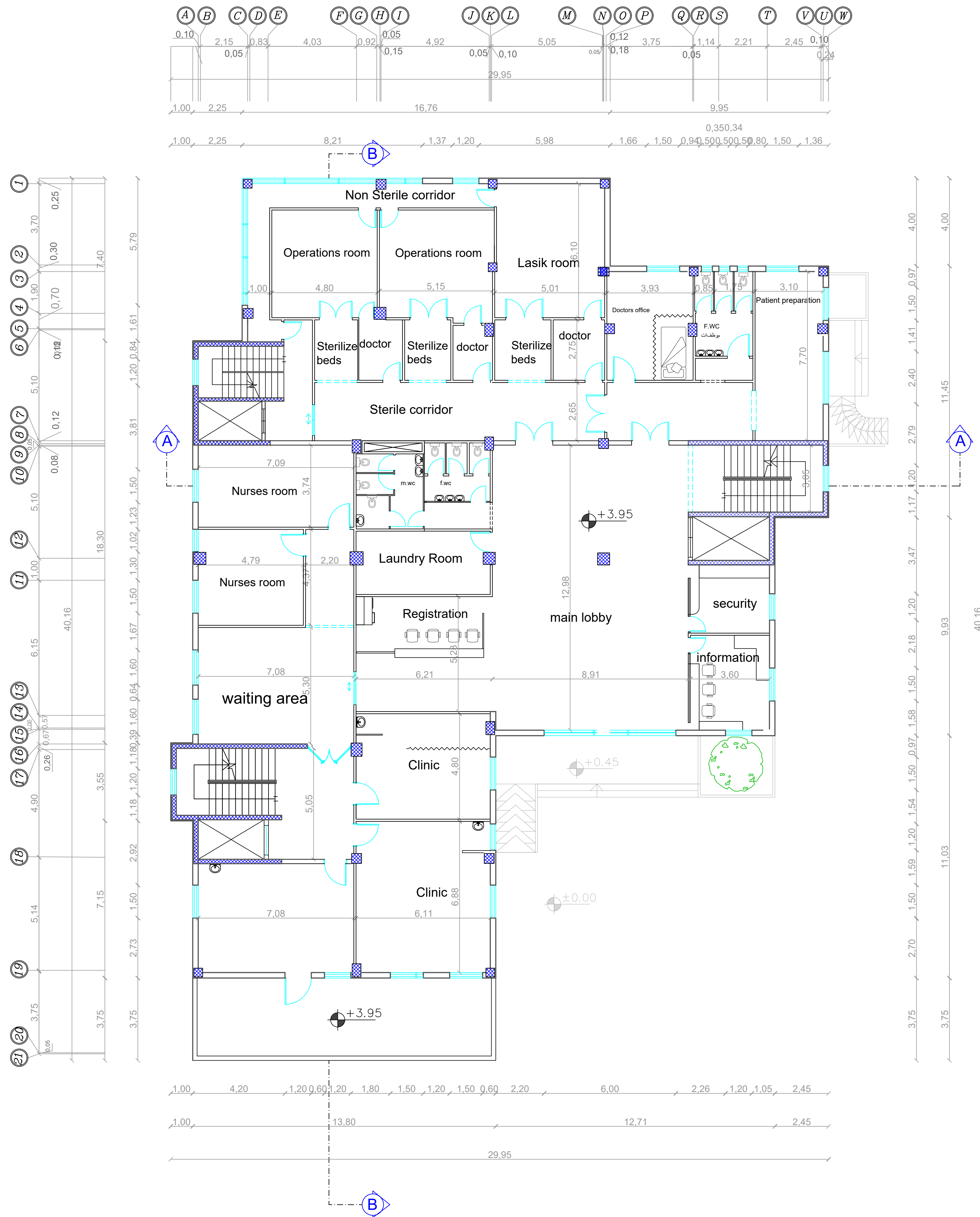
Done by :

Osama Abu E'ram

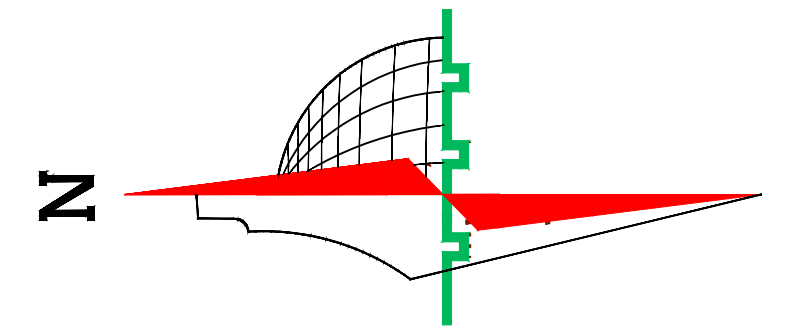
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A03	21/8/2022

First Floor Dimensions Plan  
Scale 1 : 100



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Legend :

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- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

First Floor Dim. Plan

Supervisor

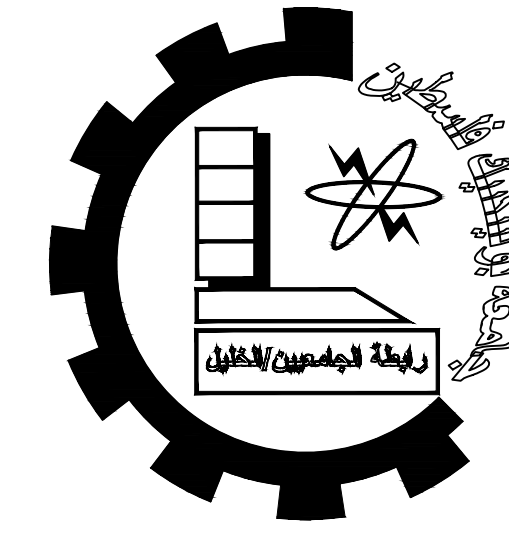
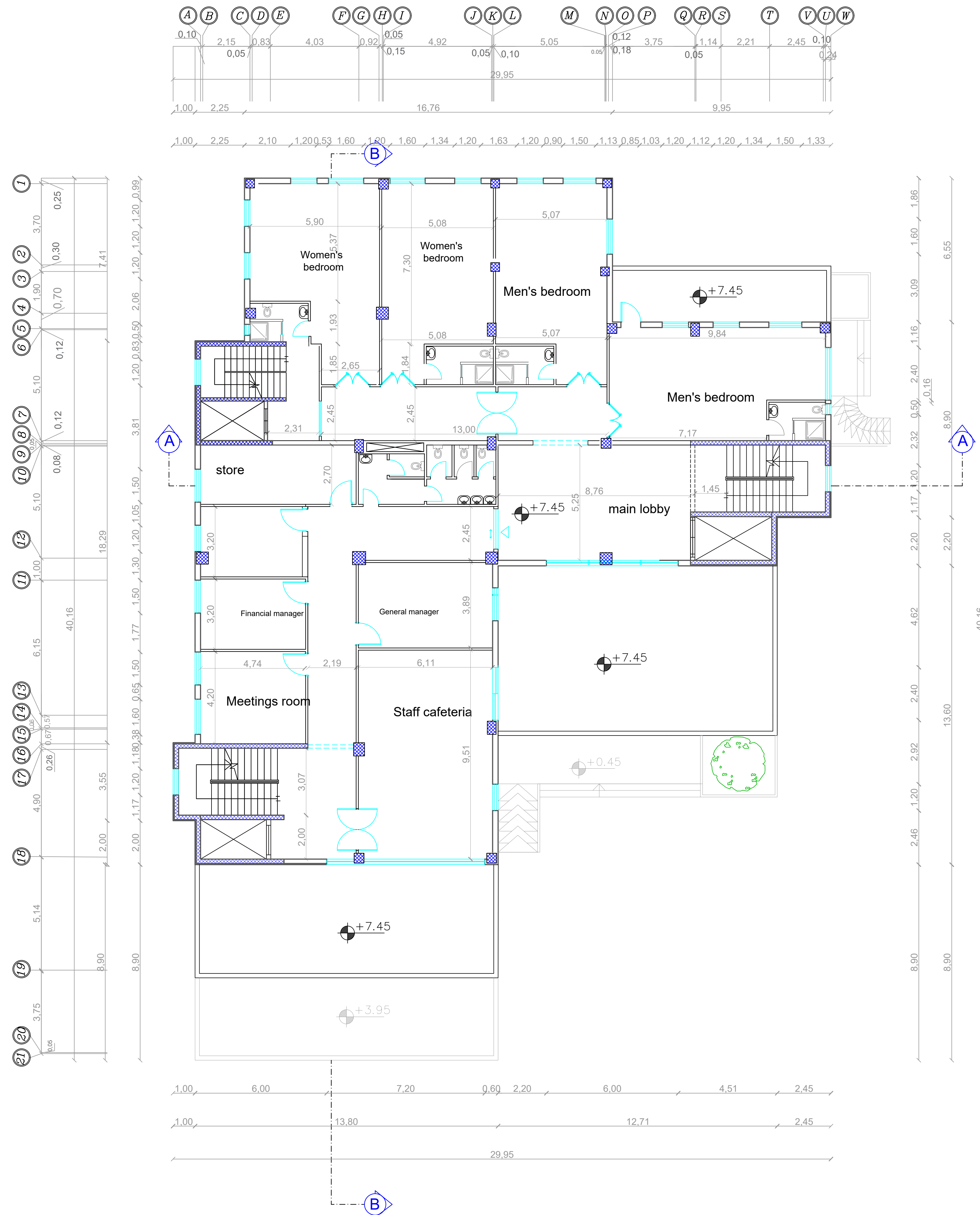
Dr.Maher Amro.

Done by :

Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
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Second Floor Dimensions Plan  
Scale 1 : 100



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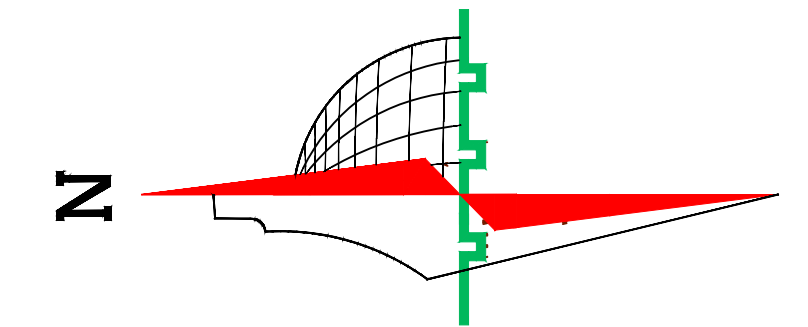
College of Engineering

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Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Second Floor Dim. Plan

Supervisor

Dr.Maher Amro.

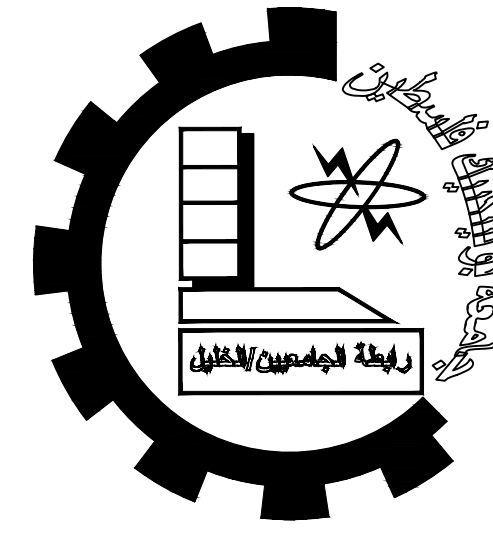
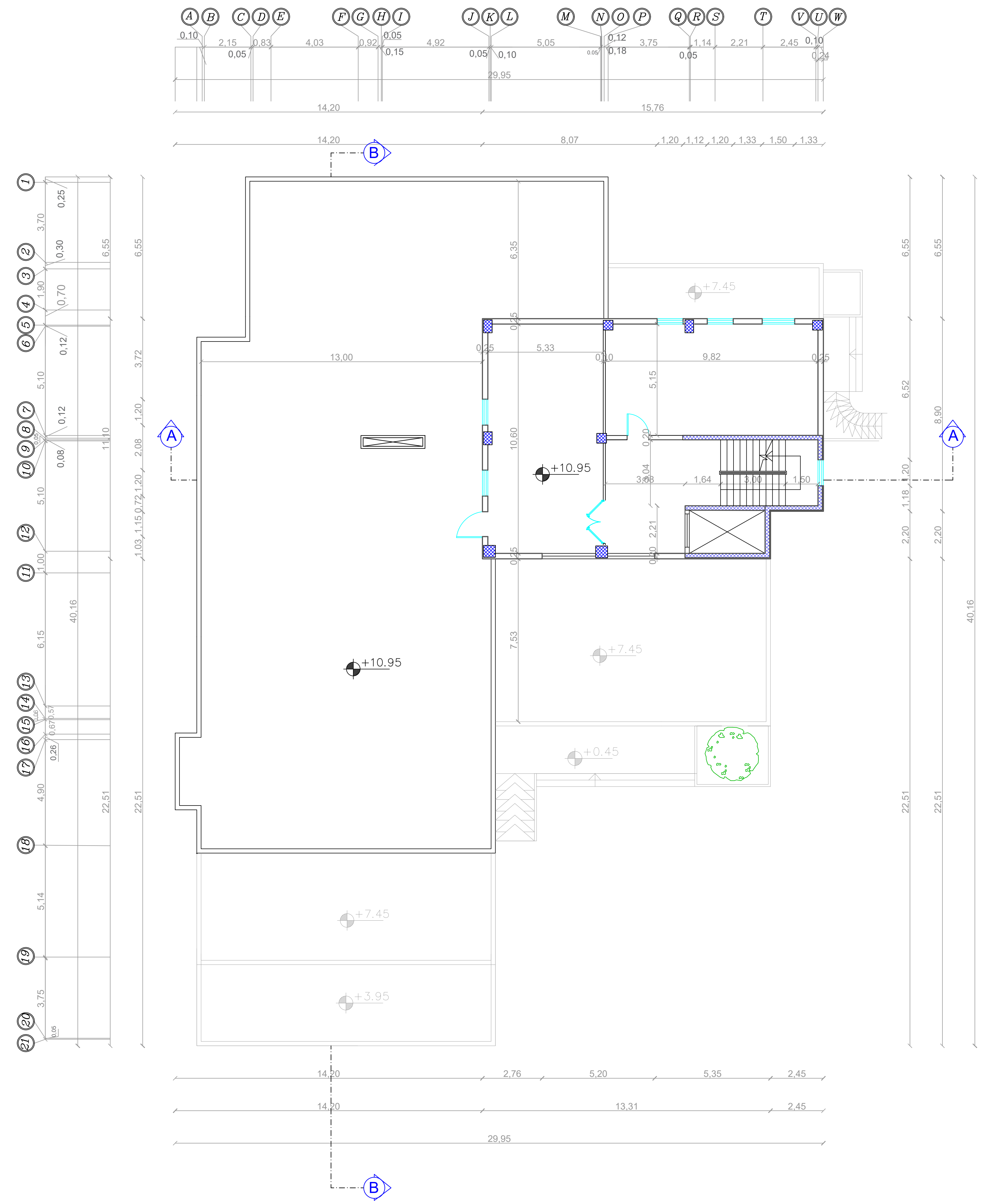
Done by :

Osama Abu E'ram

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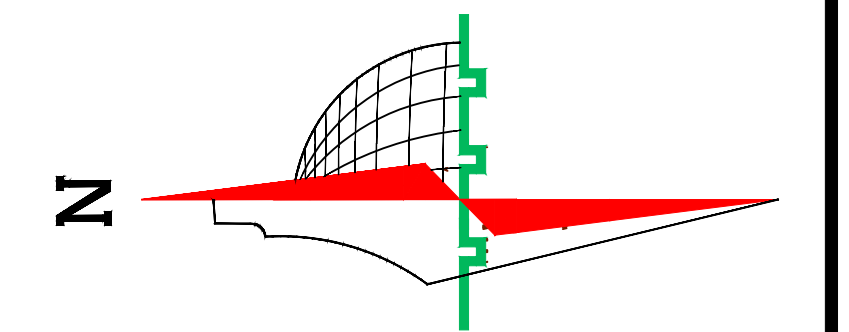
SCALE	No. of DRAW	DATE
1/100	A05	21/8/2022

Third Floor Dimensions Plan  
Scale 1 : 100



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Legend :

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- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Third Floor Dim. Plan

Supervisor

Dr.Maher Amro.

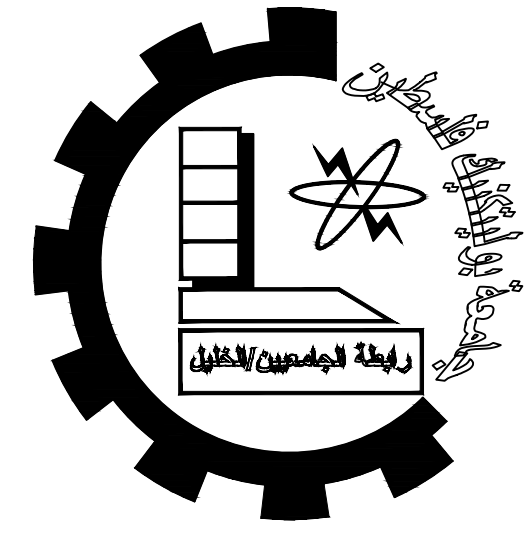
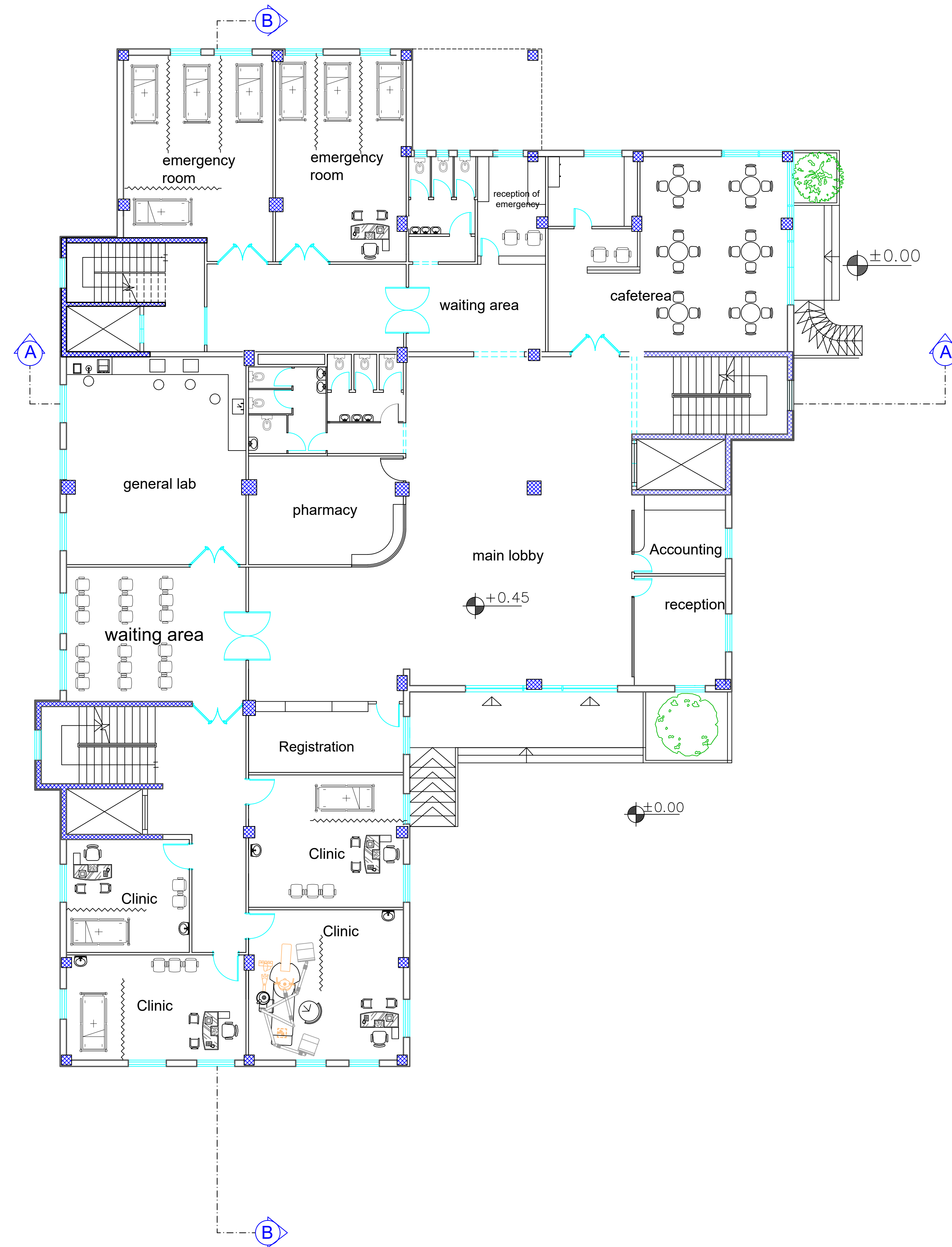
Done by :

Osama Abu E'ram

Ali Badawi

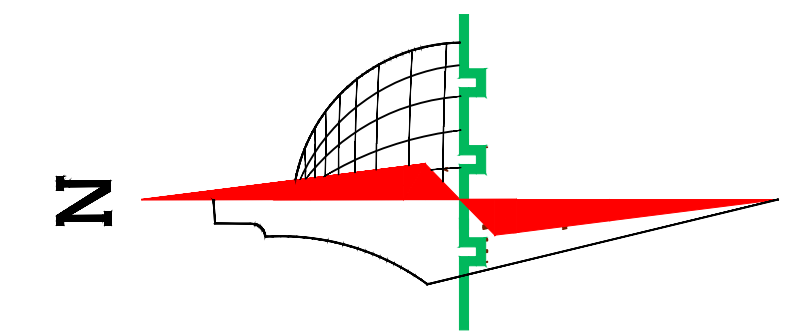
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1/100	A06	21/8/2022

Ground Floor Furniture Plan  
Scale 1 : 100



Palestine Polytechnic University  
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Legend :

- Stone
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- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Ground Floor Furn Plan

Supervisor

Dr.Maher Amro.

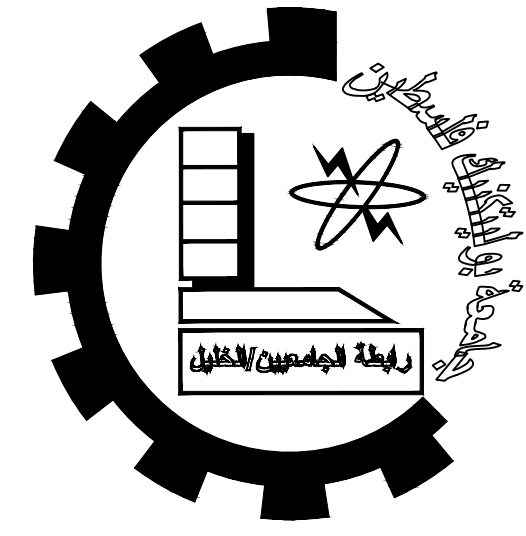
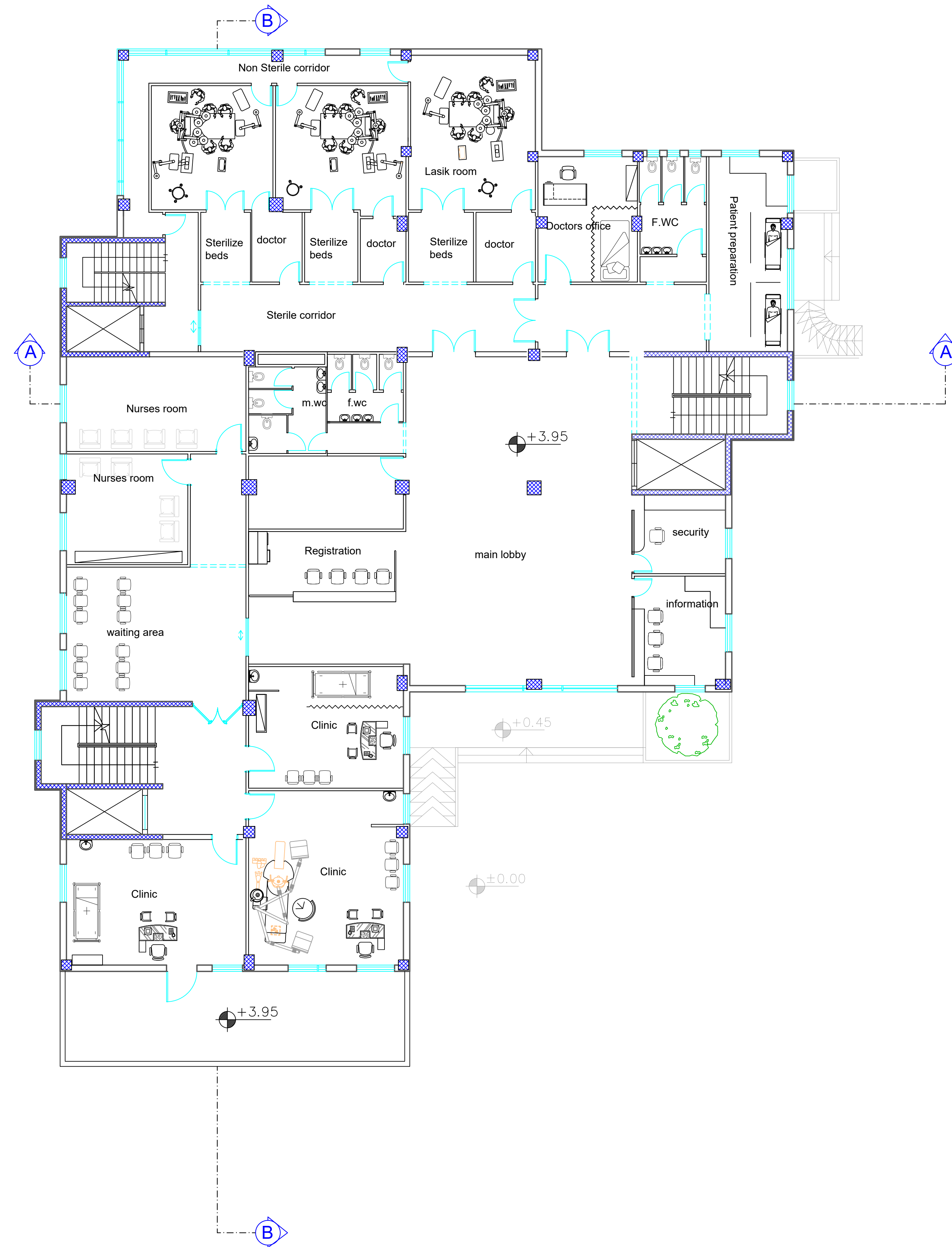
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Osama Abu E'ram

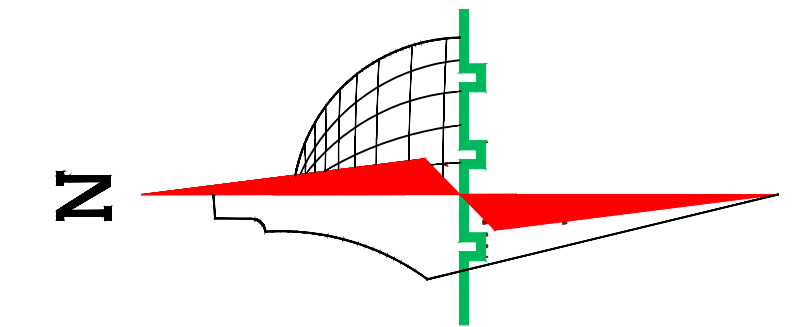
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A07	21/8/2022

First Floor Furniture Plan  
Scale 1 : 100



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Legend :

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- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

First Floor Furn Plan

Supervisor

Dr.Maher Amro.

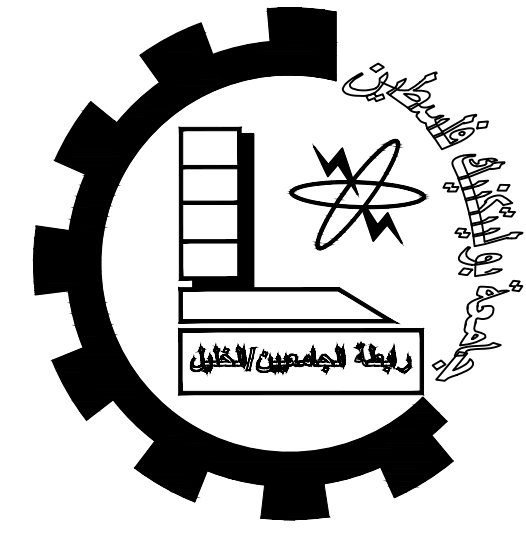
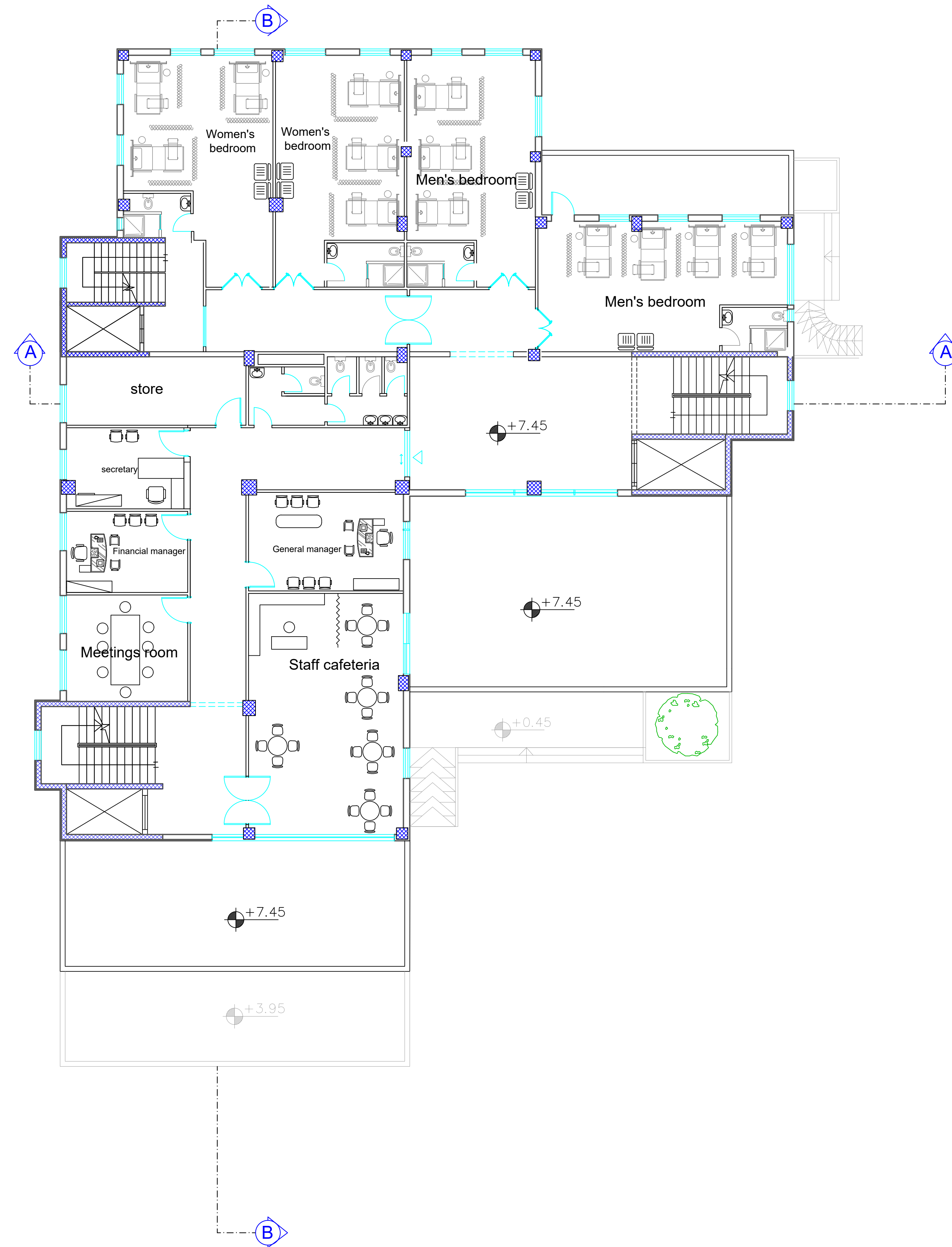
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Osama Abu E'ram

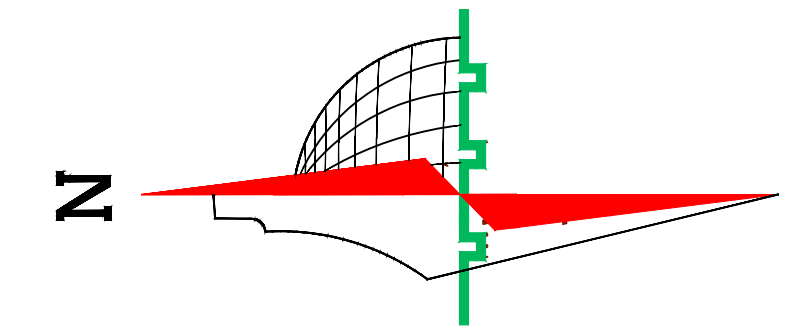
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A08	21/8/2022

Second Floor Furniture Plan  
Scale 1 : 100



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Legend :

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- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Second Floor Furn Plan

Supervisor

Dr.Maher Amro.

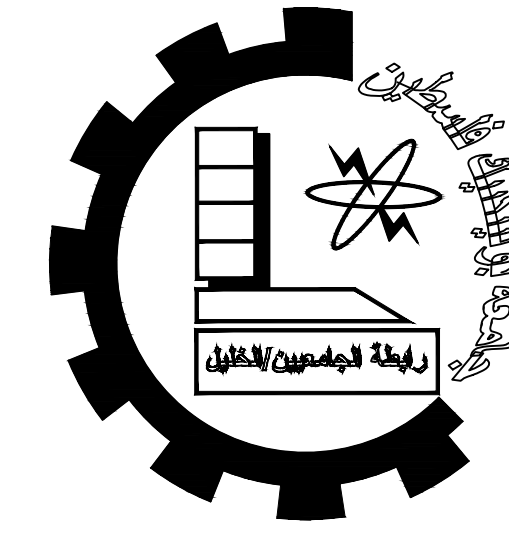
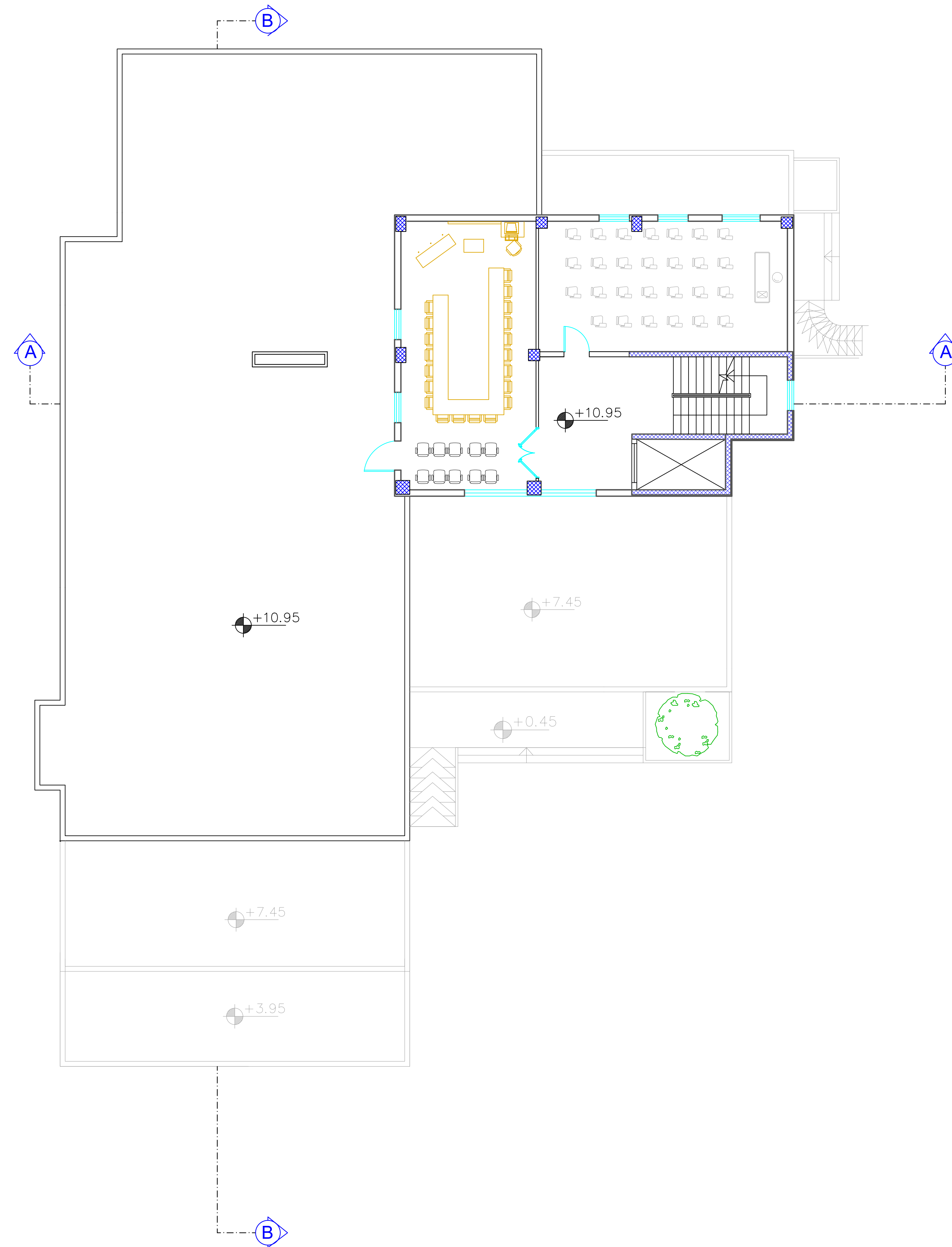
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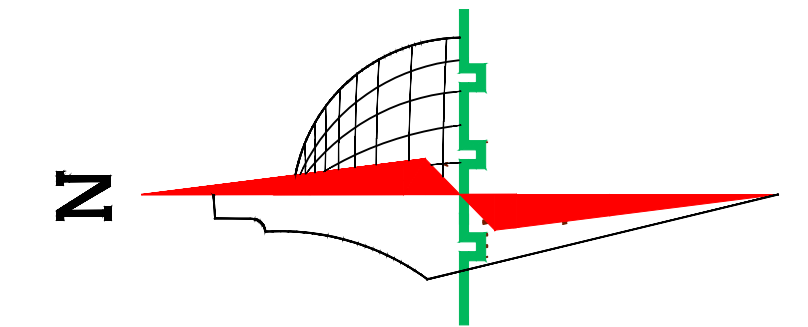
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A09	21/8/2022











Third Floor Furniture Plan  
Scale 1 : 100



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Legend :

-  Stone
-  R.Concrete
-  Concrete
-  Hollow Block
-  isolating materials
-  Gravel
-  Wood
-  HEXAGONAL TILES
-  BAKLAVA TILES
-  GRASS

DRAWING TITLE :

*Third Floor Furn Plan*

Supervisor

Dr.Maher Amro.

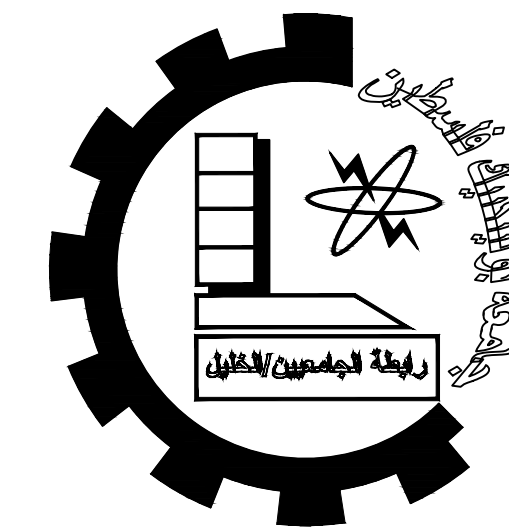
Done by :

*Osama Abu E'ram*  
*Ali Badawi*

SCALE	No. of DRAW	DATE
1/100	A10	21/8/2022

West Elevation (Main)

Scale 1 : 100



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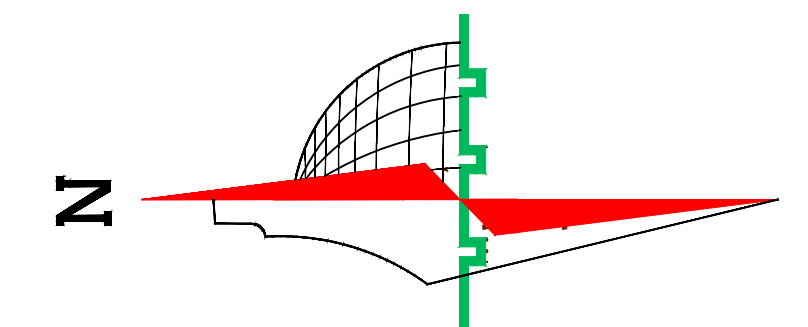
College of Engineering

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Legend :

	Stone		Gravel
	R.Concrete		Wood
	Concrete		HEXAGONAL TILES
	Hollow Block		BAKLAVA TILES
	isolating materials		GRASS

DRAWING TITLE :

West Elevation (Main)

Supervisor

Dr.Maher Amro.

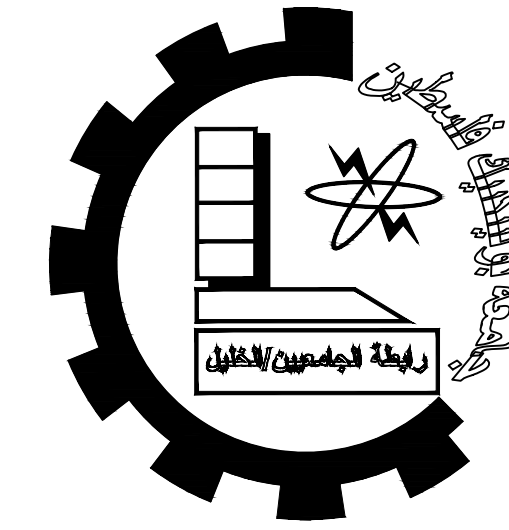
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Osama Abu E'ram

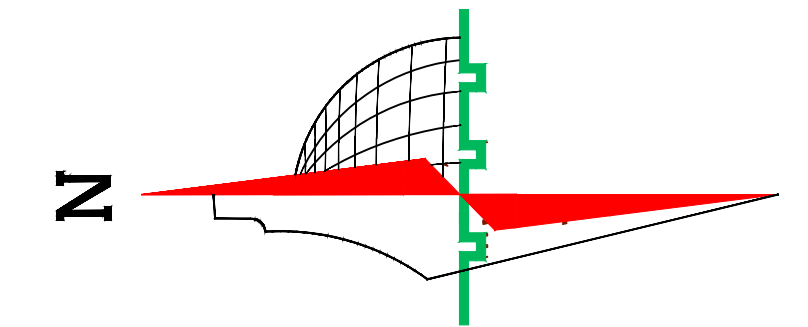
Ali Badawi

SCALE	No. of DRAW	DATE
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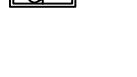





East Elevation  
Scale 1 : 100



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Graduation Project  
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Legend :

-  Stone
-  R.Concrete
-  Concrete
-  Hollow Block
-  isolating materials
-  Gravel
-  Wood
-  HEXAGONAL TILES
-  BAKLAVA TILES
-  GRASS

DRAWING TITLE :

*East Elevation*

Supervisor

Dr.Maher Amro.

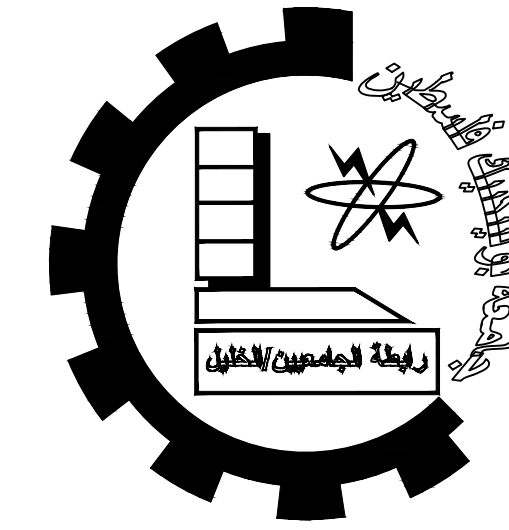
Done by :

*Osama Abu E'ram*

*Ali Badawi*

SCALE	No. of DRAW	DATE
1/100	A12	21/8/2022

North Elevation  
Scale 1 : 100



Palestine Polytechnic University

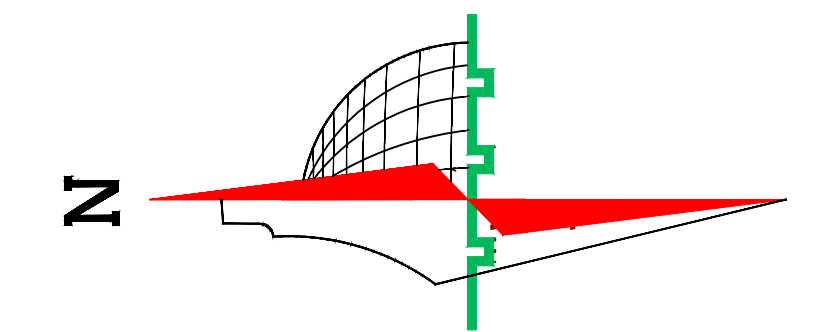
College of Engineering

Civil Engineering Department

Civil Engineering

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Al-Salam Ophthalmic Hospital



Legend :

	Stone		Gravel
	R.Concrete		Wood
	Concrete		HEXAGONAL TILES
	Hollow Block		BAKLAVA TILES
	isolating materials		GRASS

DRAWING TITLE :

North Elevation

Supervisor

Dr.Maher Amro.

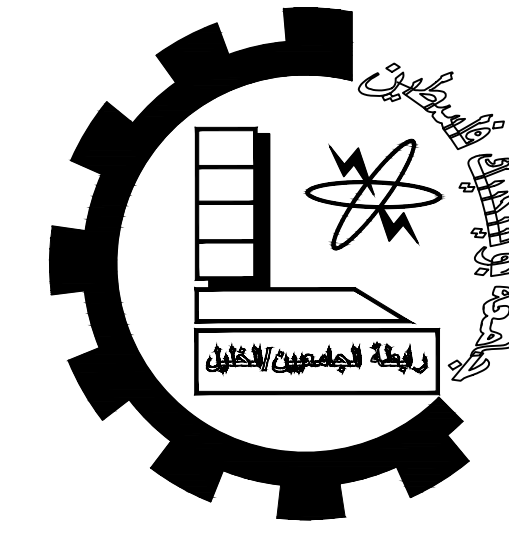
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Osama Abu E'ram

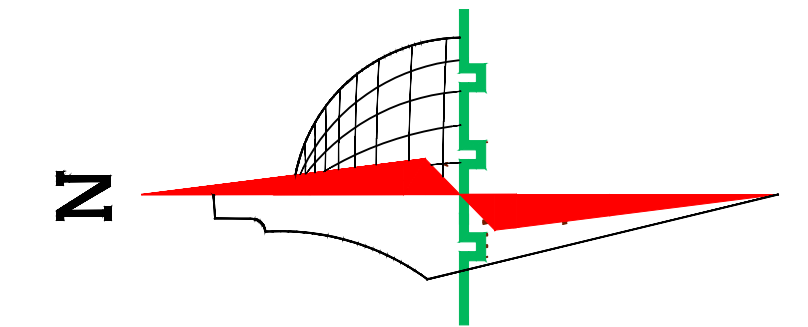
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A13	21/8/2022

South Elevation  
Scale 1 : 100



Palestine Polytechnic University  
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Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- |                     |                 |
|---------------------|-----------------|
| Stone               | Gravel          |
| R.Concrete          | Wood            |
| Concrete            | HEXAGONAL TILES |
| Hollow Block        | BAKLAVA TILES   |
| isolating materials | GRASS           |

DRAWING TITLE :

South Elevation

Supervisor

Dr.Maher Amro.

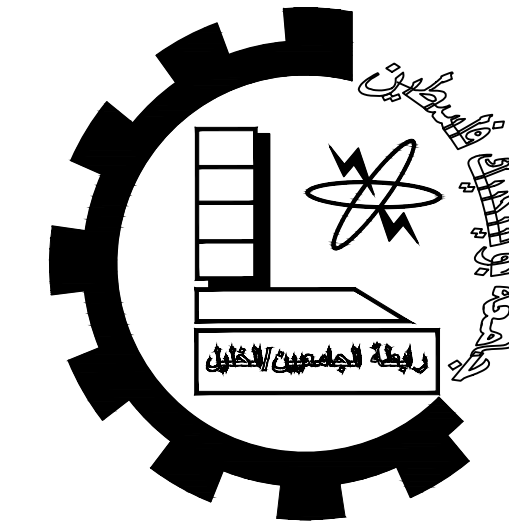
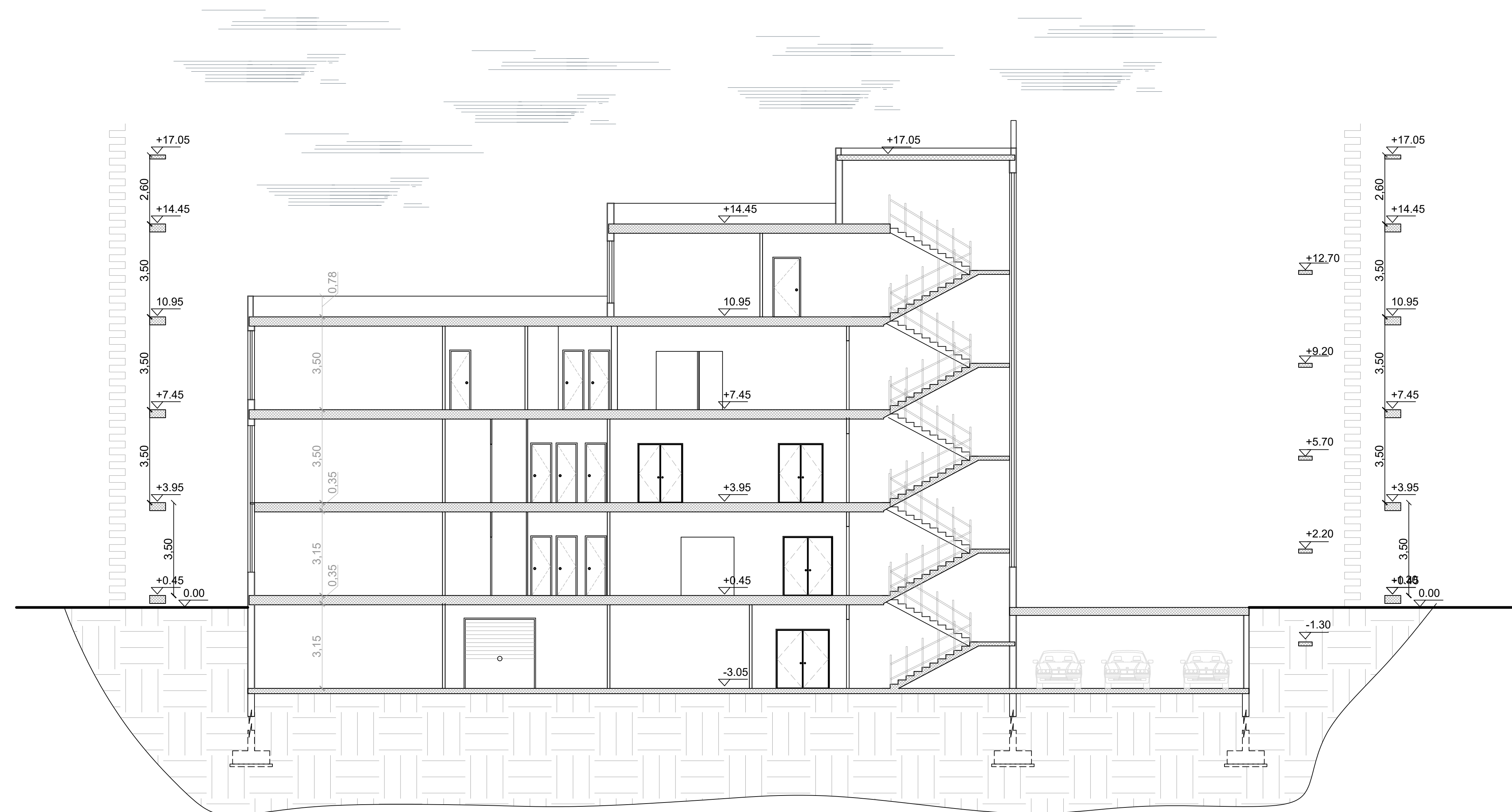
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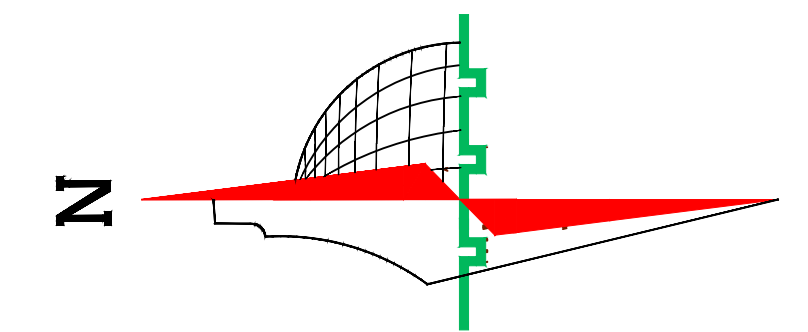
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A14	21/8/2022

Section A-A  
Scale 1 : 100



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Legend :

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- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Section A-A

Supervisor

Dr.Maher Amro.

Done by :

Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	A15	21/8/2022



## Structural Design Criteria & Specifications & Construction Requirements

### GENERAL NOTES

#### 1. CODE OF PRACTICE

Detailing and workmanship shall be according to ACI 318-11, and the technical specifications provided.  
Approved equivalent international codes shall be accepted.  
Design for concrete done according to ACI 318-11  
Uniform Building Code (UBC 97) For the definition of lateral Seismic Loading.

#### 2. DIMENSIONS

- a) GRAVITY LOADS ESTIMATION ARE IN ACCORDANCE OF JORDAN
- b) UNLESS OTHERWISE INDICATED ON DRAWINGS ELEVATIONS ARE IN METERS, DISTANCES AND DIMENSIONS IN m., REINFORCEMENT BAR SIZES IN mm.

#### 3. DRAWINGS

- 1- Structural drawings shall be read in conjunction with Architectural.
- 2- Sleeves and openings smaller than 200x200mm are not shown on the Structural drawings .  
For required openings refer to Architectural . Mechanical and Electrical drawings .
- 3- Contractor shall prepare working drawings and bar bending schedules for reinforcement in a format agreed with the engineer .
- 4- Contractor shall supply detailed drawings and calculations for all support and temporary works and propping systems as applicable and all other relevant information subject to the Engineer's approval prior to commencement of construction .

#### 4. REINFORCEMENT

- 1- Reinforcement shall be deformed high strength steel bars of characteristic strength of 420 Mpa complying with ASTM standards or equivalent for diameters 10mm & above .
- 2- Reinforcement shall be deformed steel bars of characteristic strength of 420 MPa complying with ASTM standards Or equivalent for diameters 8mm & above .
- 3- Contractor to provide bar bending schedule.
- 4- Where bar length is not specified , longest practicable bar length shall be employed with staggered lap splices. Lap length shall be 30 times bar diameter .

#### 5. REINFORCED CONCRETE

The following two types of reinforced concrete shall be employed:

- B350 - Grade 350 for foundations.  
B300 - Grade 300 for all other reinforced concrete members
- B300 - 30\*0.8= 24 MPa(Because it is rectangular section)  
Minimum cement content, per cubic meter, shall be:  
B300 - 300 kilograms
- B350 - 35\*0.8= 28 MPa(Because it is rectangular section)  
Minimum cement content, per cubic meter, shall be:  
B350 - 350 kilograms

#### 6. PLAIN CONCRETE

The following type of plain concrete shall be employed:

- B 200 - Grade 200 concrete of characteristic cubestrength equal to 16 MPa, minimum cement content of 200 kilograms per cubic metre, and a maximum water:cement ratio of 0.50 to be used for blinding concrete under foundations.

#### 7. AGGREGATES

Maximum aggregate size shall be 25 mm.

#### 8. FOUNDATIONS

- Contractor shall adhere strictly to the geotechnical report for this project. He shall be responsible to determine strata characteristics at the appropriate levels:
- Allowable Bearing capacity =500 KN/m<sup>2</sup> .
- Foundations are designed for four floors .

#### 9. BACK Fill

All back fill material shall conform to specifications and shall be properly tested . No back filling is permitted around .

### GENERAL RULES

#### 1. NOTATION

T.B=TOP BARS  
B.B=BOTTOM BARS  
S= SPACING.  
∅ or T = DIAMETER FOR STEEL BARS .  
⊙ or / = INDICATES THAT THE FOLLOWING NUMBER IS THE SPACING BETWEEN BARS.

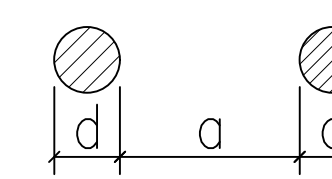
#### 2. COVER

Clear concrete cover to reinforcement shall be :

20mm for ribs 40mm for beams 40mm for columns  
40mm for Beams, slabs and joists.  
25mm for Post-tension slabs .

Reinforcing bars of girder shall be anchored over the center line of column,  
And reinforcing bars of sub-beam shall be anchored over the center line of girder.

#### 3. Min. Bar Spacing



Unless otherwise shown below, sub-beam and cantilever beam shall be conformed

Bar spacing "a" shall be not less than the greatest in the following three cases:

- 1) 25 mm
- 2) 1.5 d
- 3) 1.25 times the max. size of coarse aggregate.

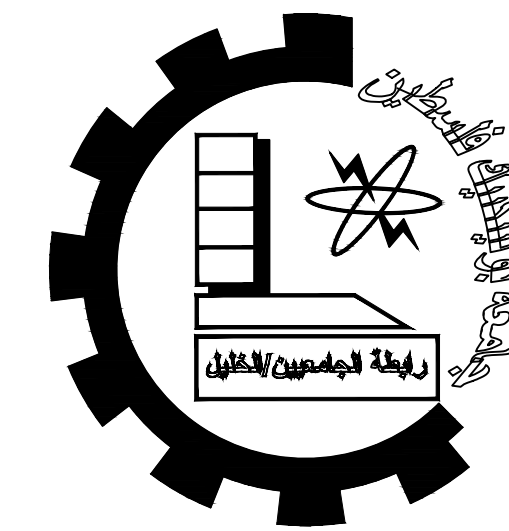
#### Standard Hook Details and Bar Bends

End position

Hook details	Secondary Steel	Main Steel	Application	
180°	D 1e	4d 12d	5d 14d	16mm dia. bar and larger
135°	D 1e	4d 12d	--	13mm dia. bar and smaller
90°	D 1e	4d 12d	--	T- and L-shape stirrups
135° 90°	D 1e 1'e	4d 8d 10d	--	90° 135° Spacer bar

Intermediate position

Hook details	Secondary Steel
90°	D 3d and over
or	D 4d and over
45°	D 5d and over
	D 8d



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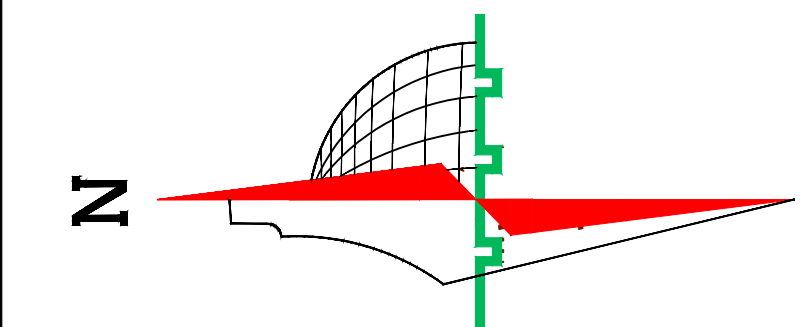
College of Engineering

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



#### Legend :

	Stone		Gravel
	R.Concrete		Wood
	Concrete		HEXAGONAL TILES
	Hollow Block		BAKLAVA TILES
	isolating materials		GRASS

DRAWING TITLE :

General Notes

Supervisor

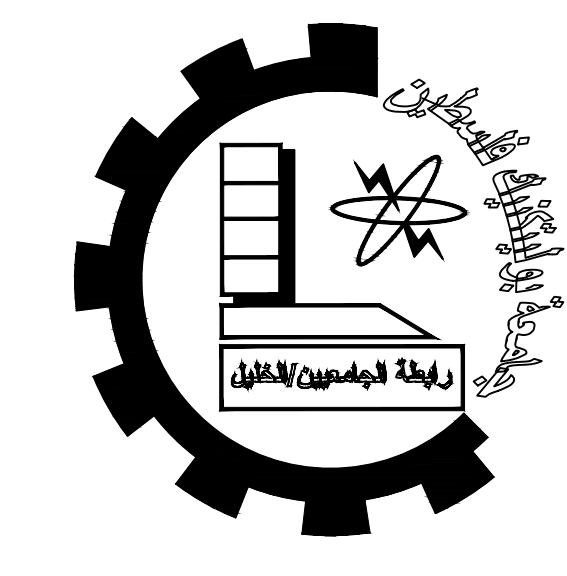
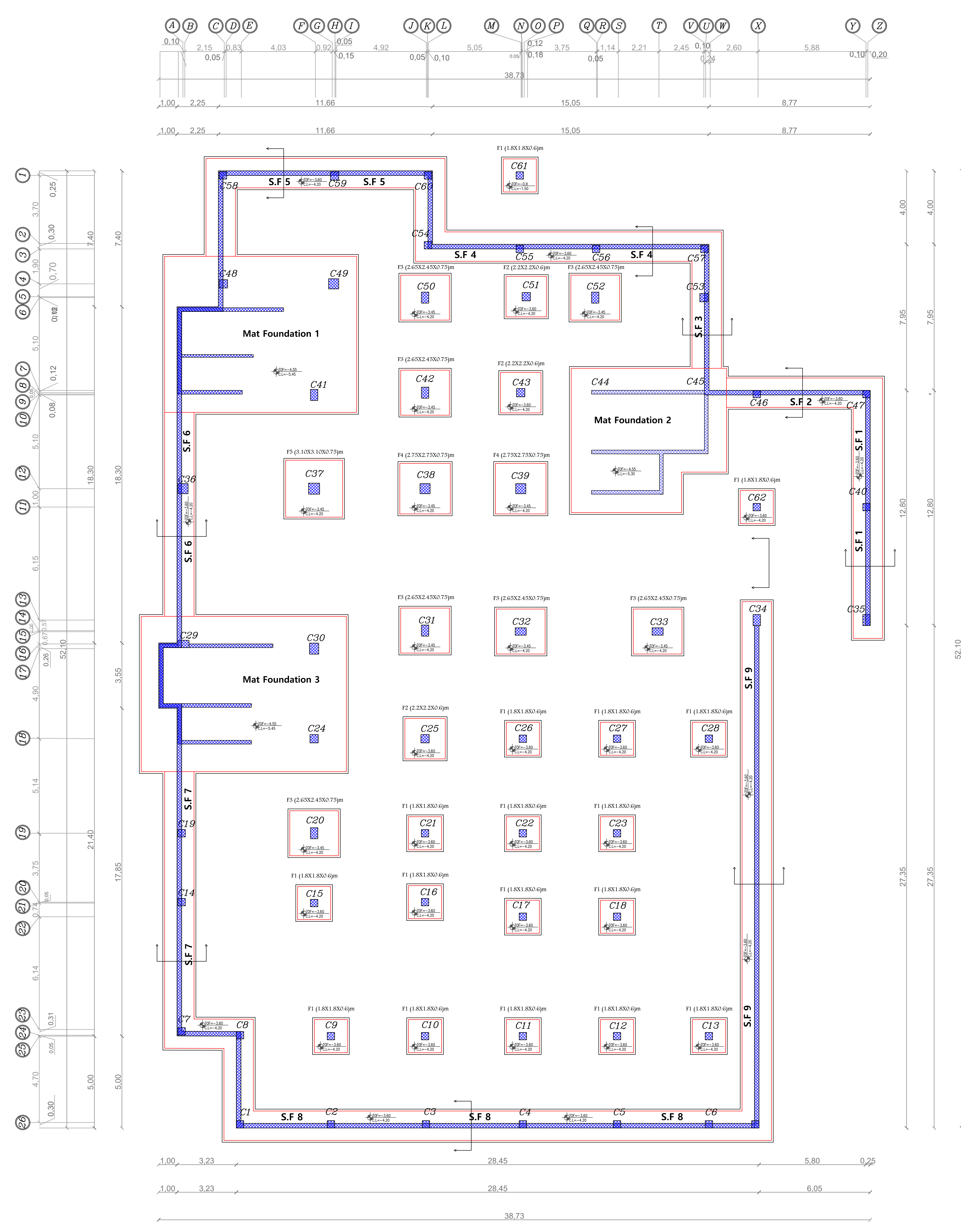
Dr.Maher Amro.

Done by :

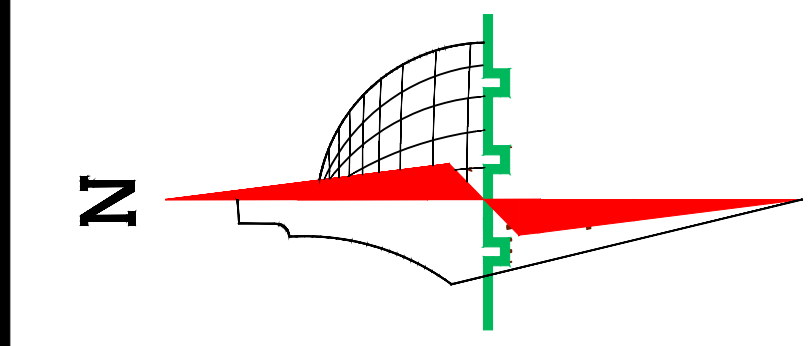
Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S00	21/8/2022



Palestine Polytechnic University  
 College of Engineering  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
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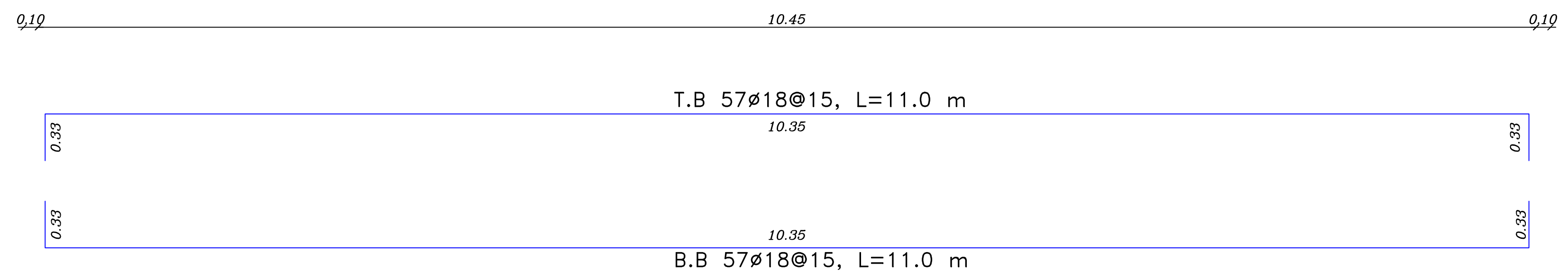
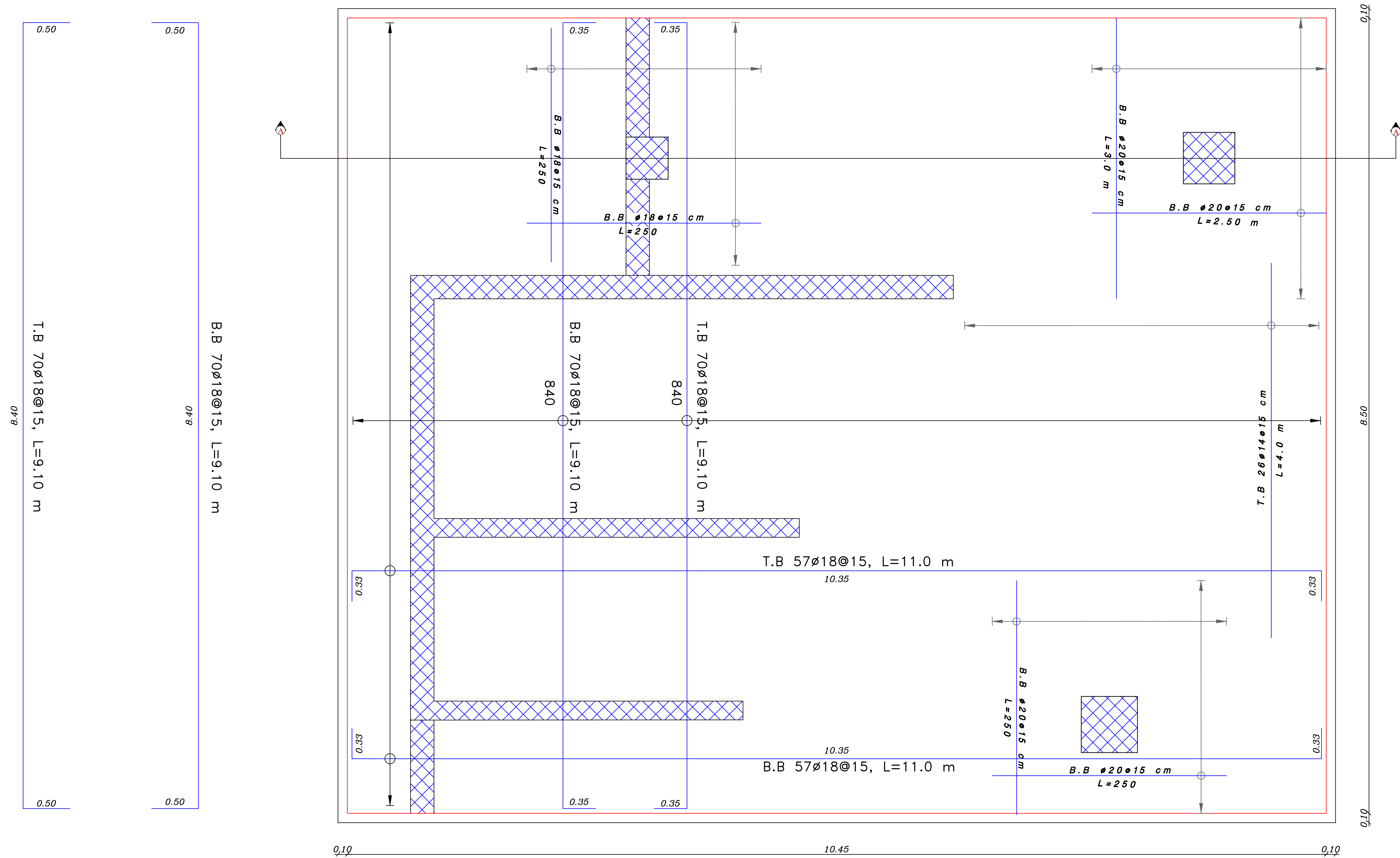
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**Foundations Plan**

Supervisor  
 Dr.Maher Amro.

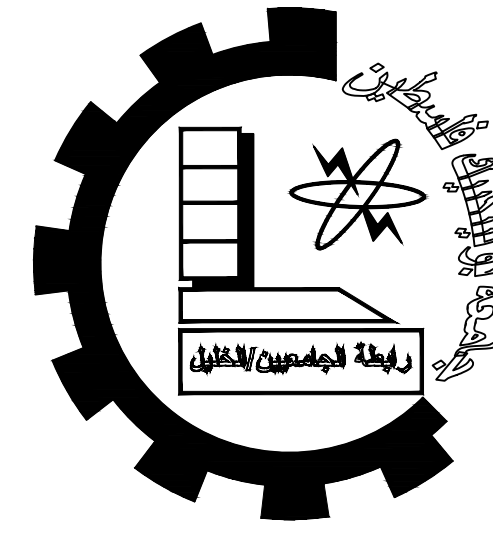
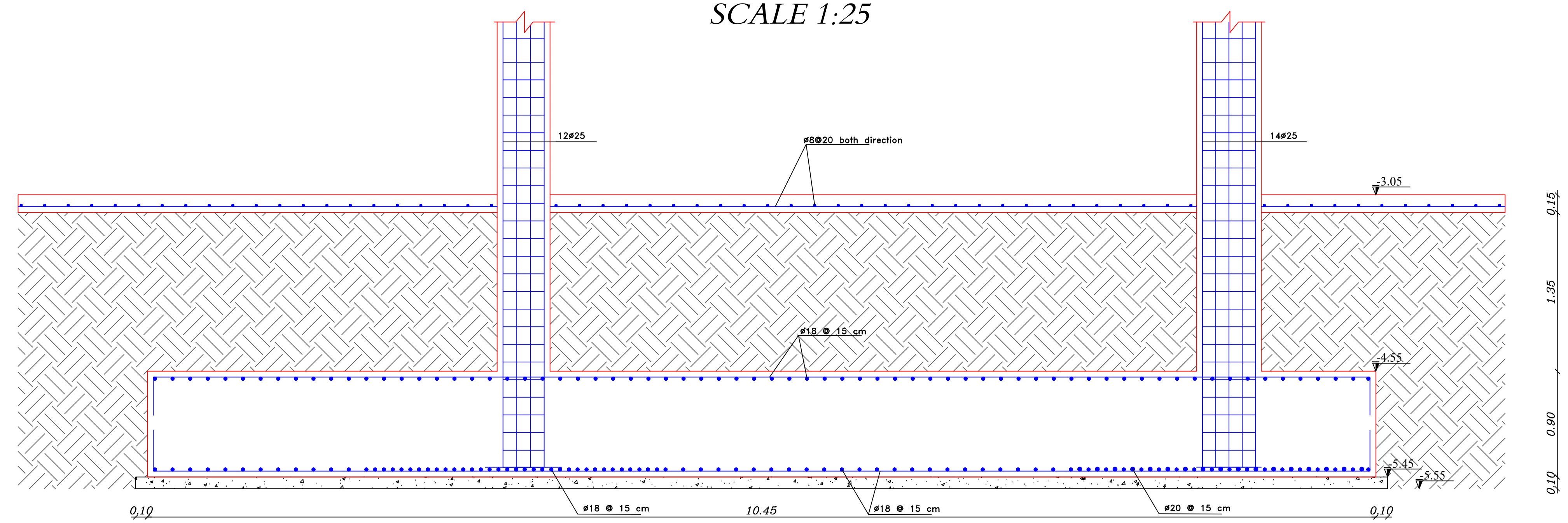
Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S01	21/8/2022

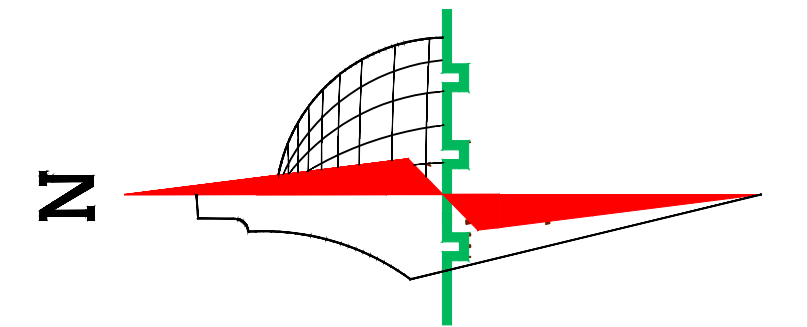
MAT Foundation 1  
SCALE 1:25



Section A-A  
SCALE 1:25



Palestine Polytechnic University  
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Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Mat Footing 2

Supervisor

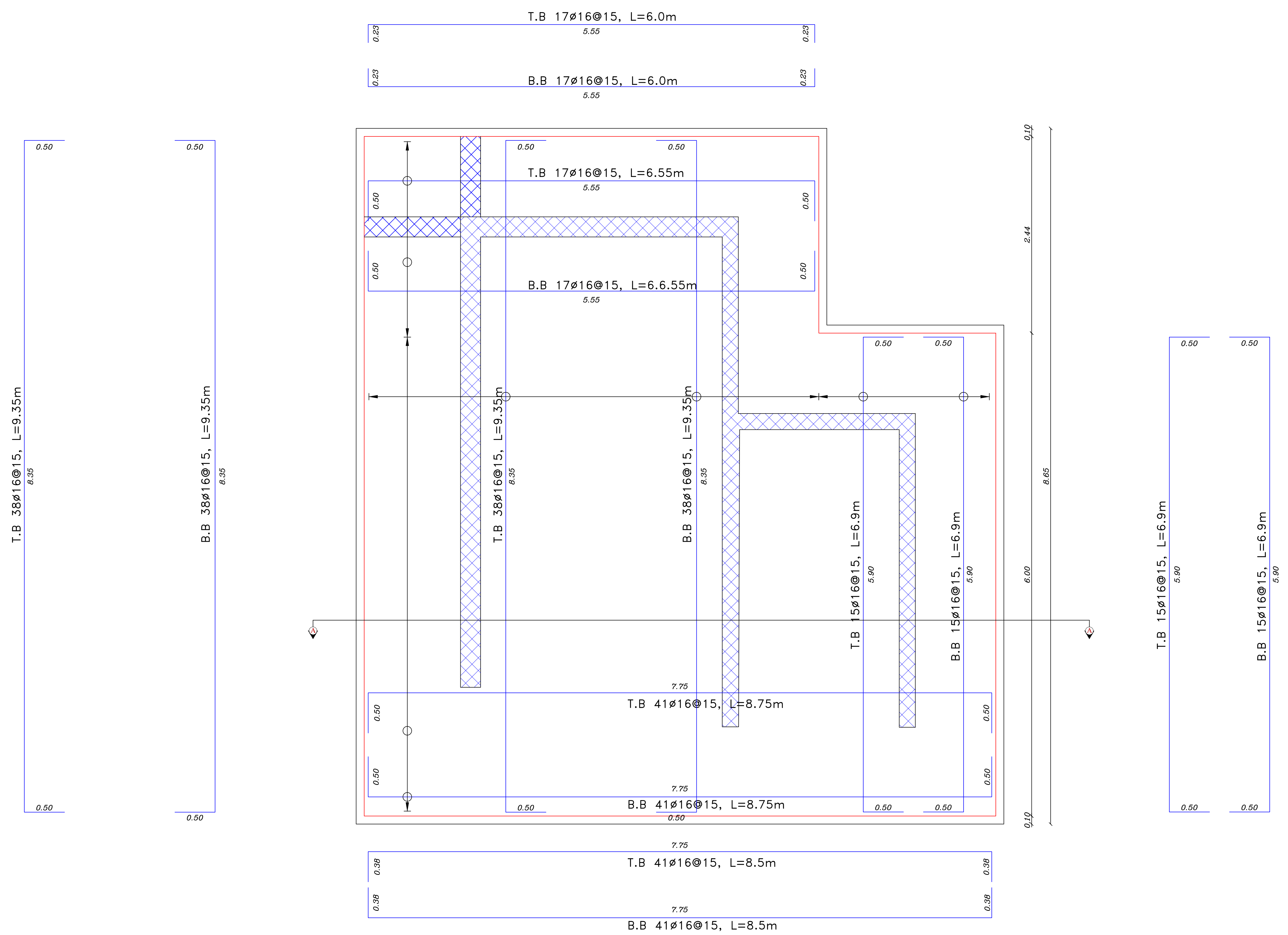
Dr.Maher Amro.

Done by :

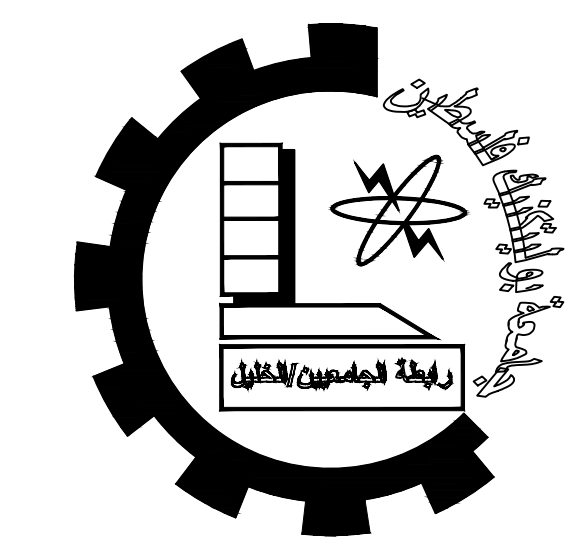
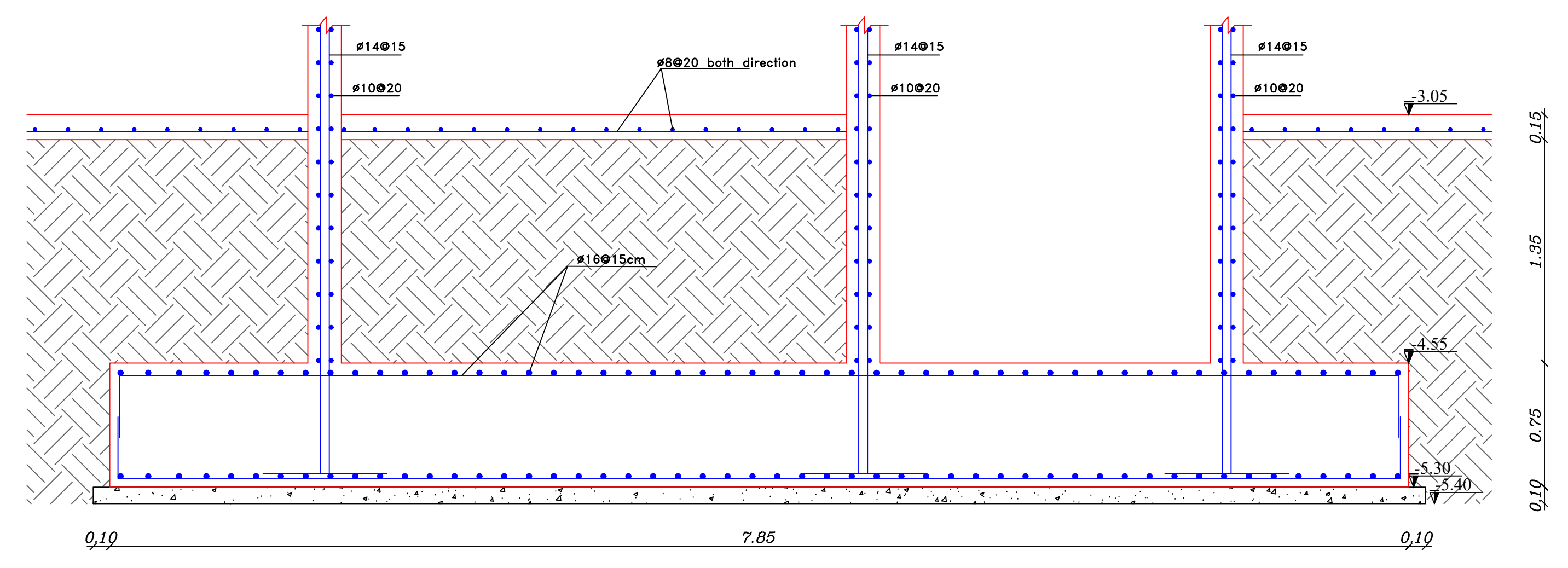
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S02	21/8/2022

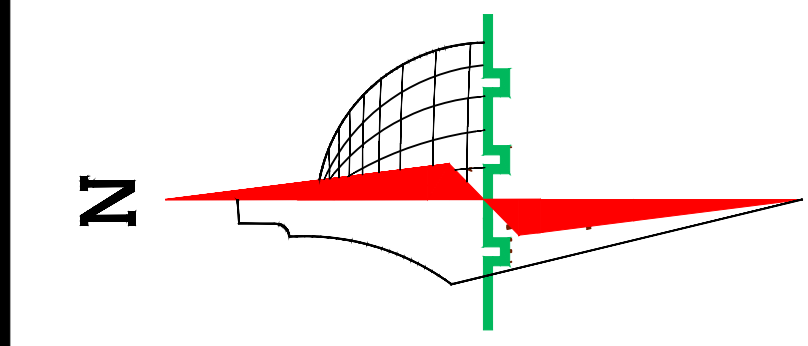
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*SCALE 1:25*



*Section A-A*  
*SCALE 1:25*



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
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**Legend :**

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

*Mat Footing 2*

Supervisor

Dr.Maher Amro.

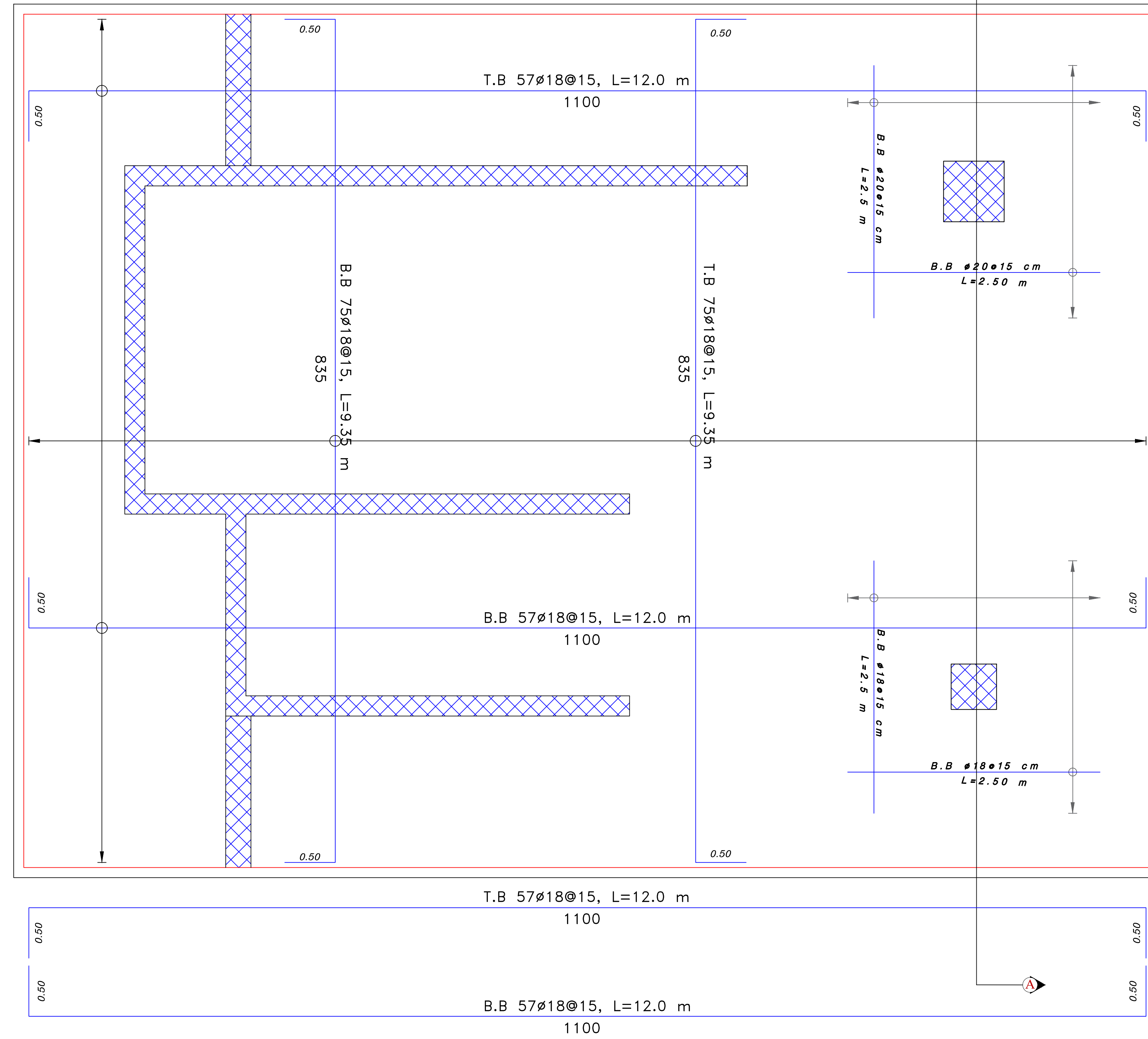
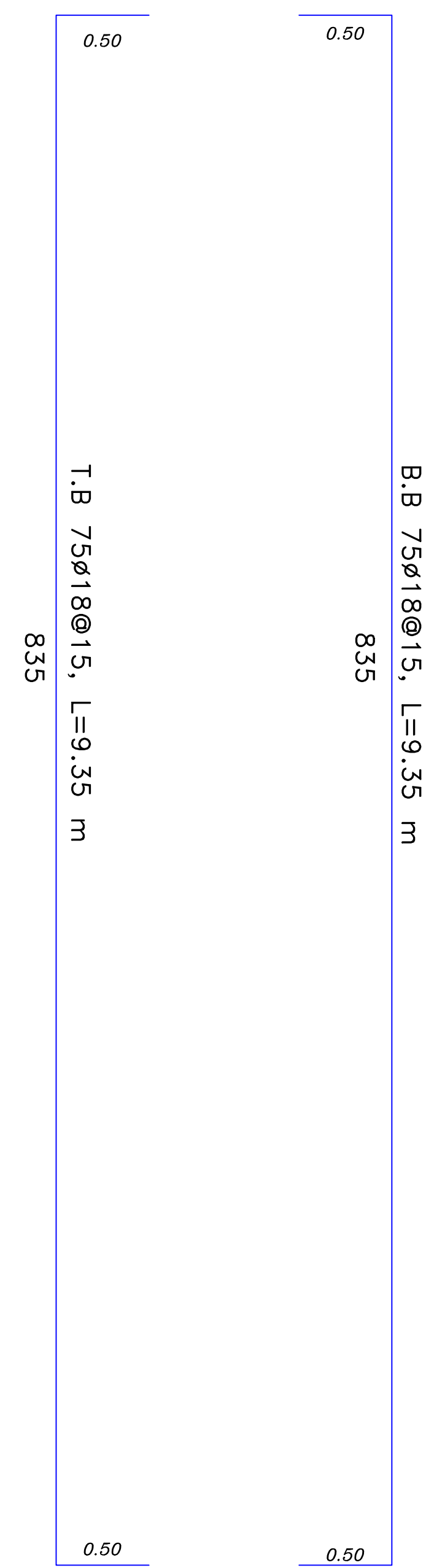
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*Osama Abu E'ram*

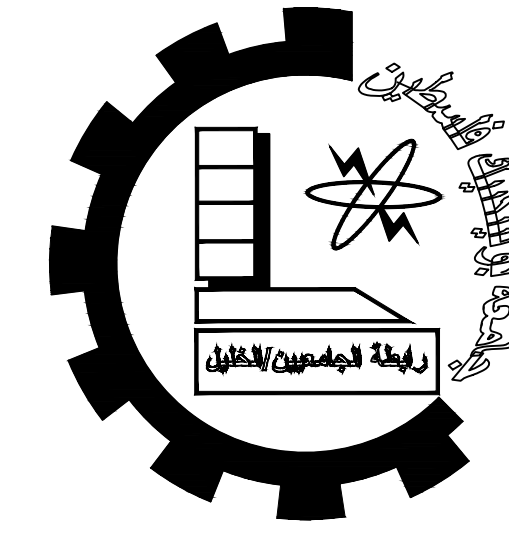
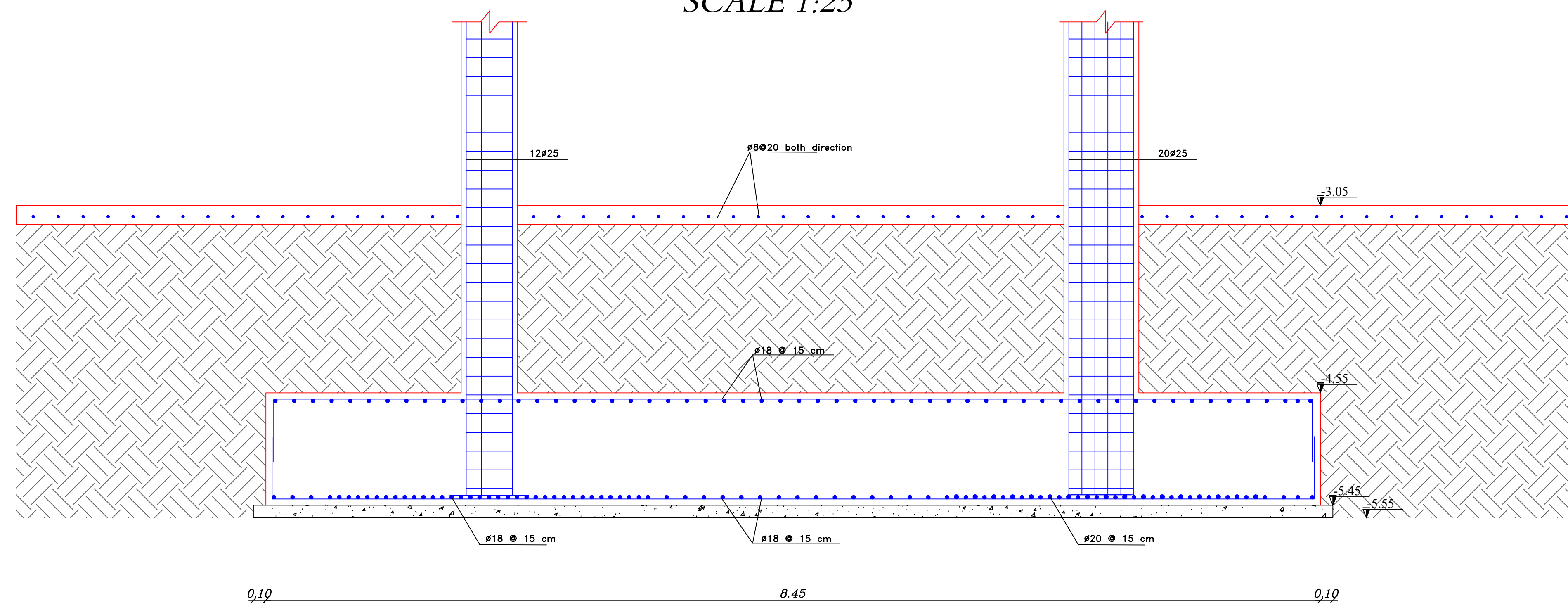
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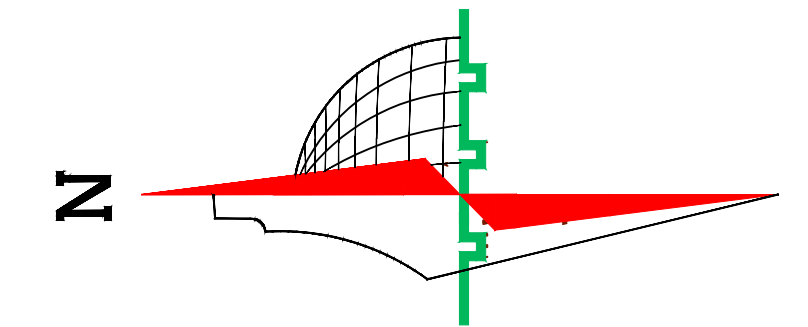
MAT Foundation 3  
SCALE 1:25



Section A-A  
SCALE 1:25



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Mat Footing 3

Supervisor

Dr.Maher Amro.

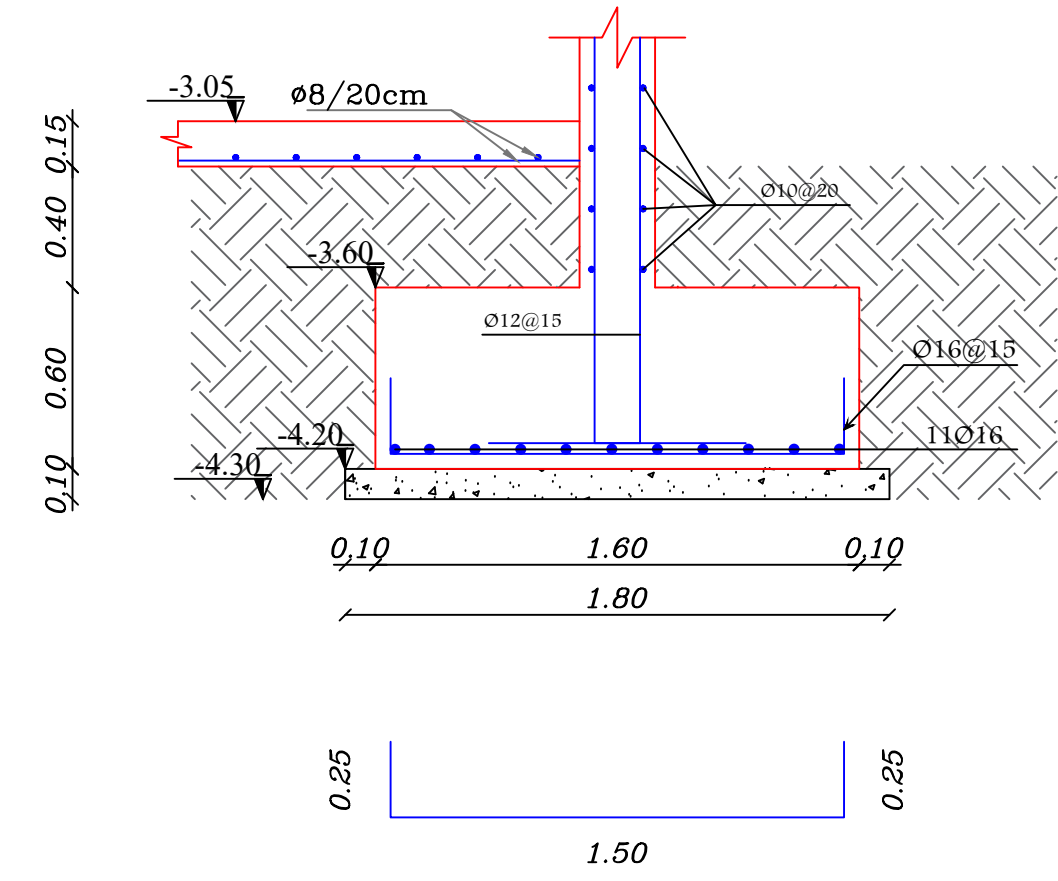
Done by :

Osama Abu E'ram

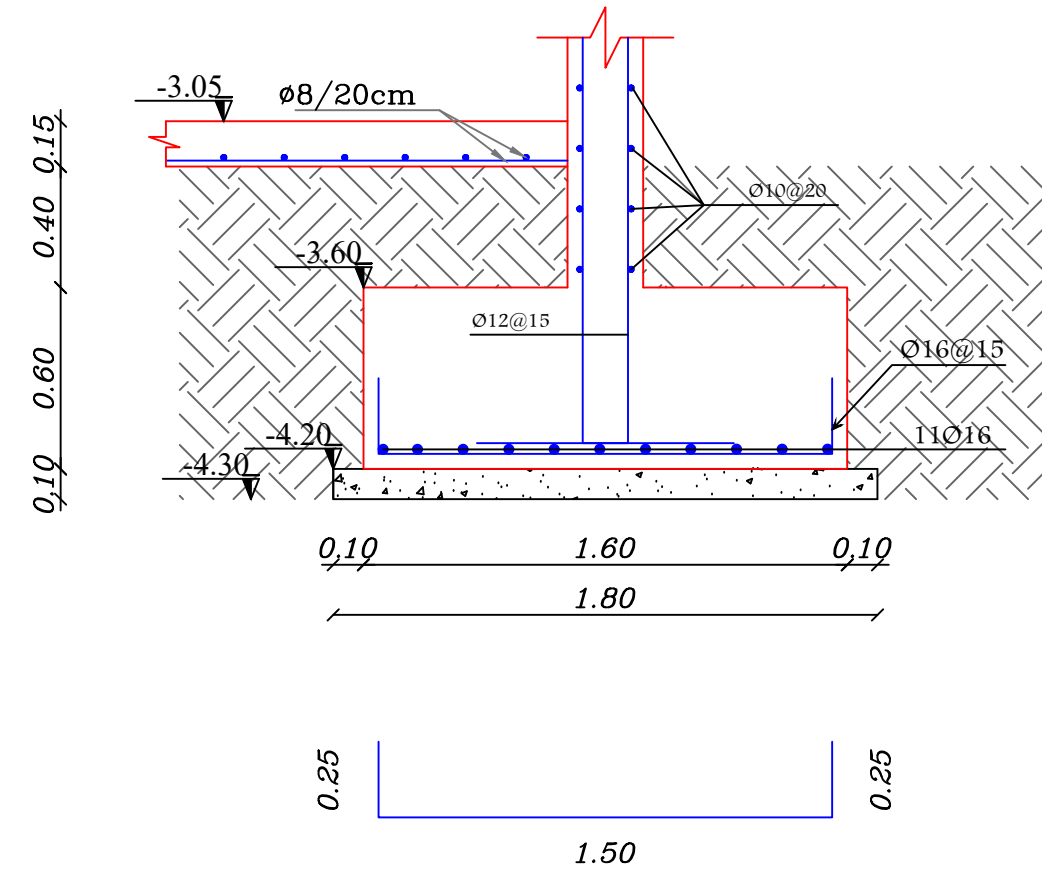
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S04	21/8/2022

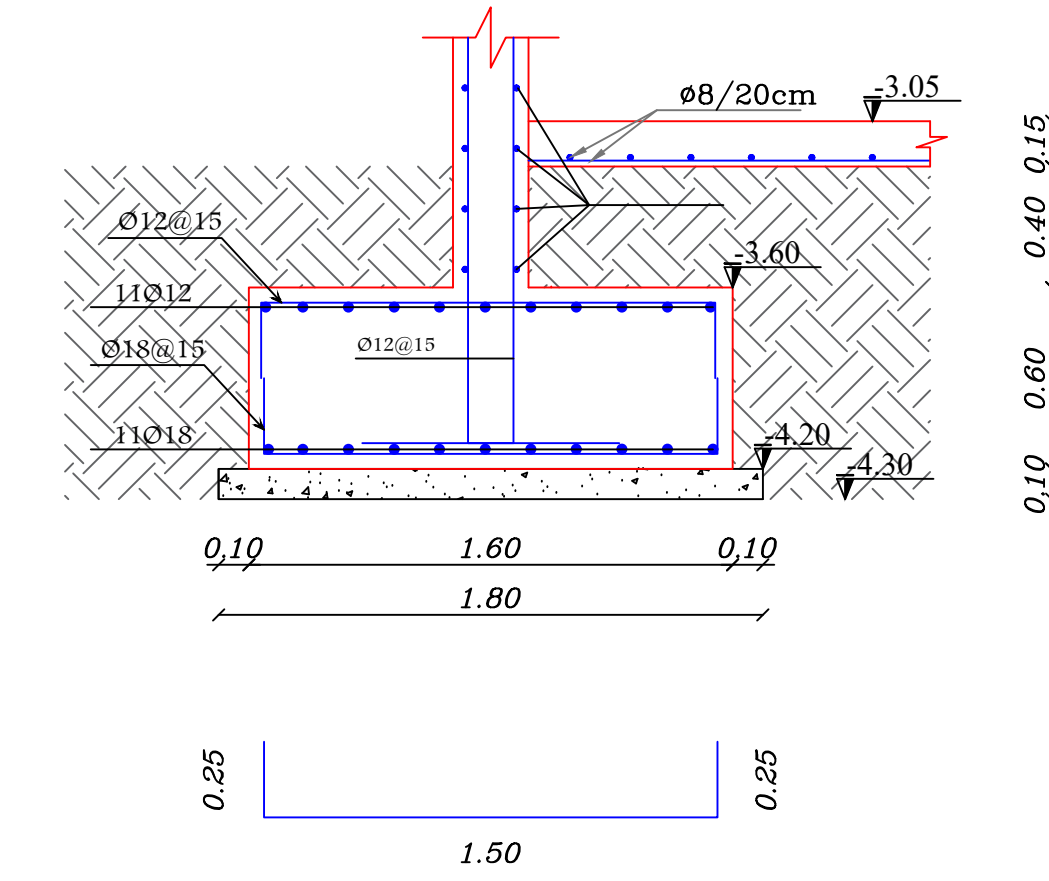
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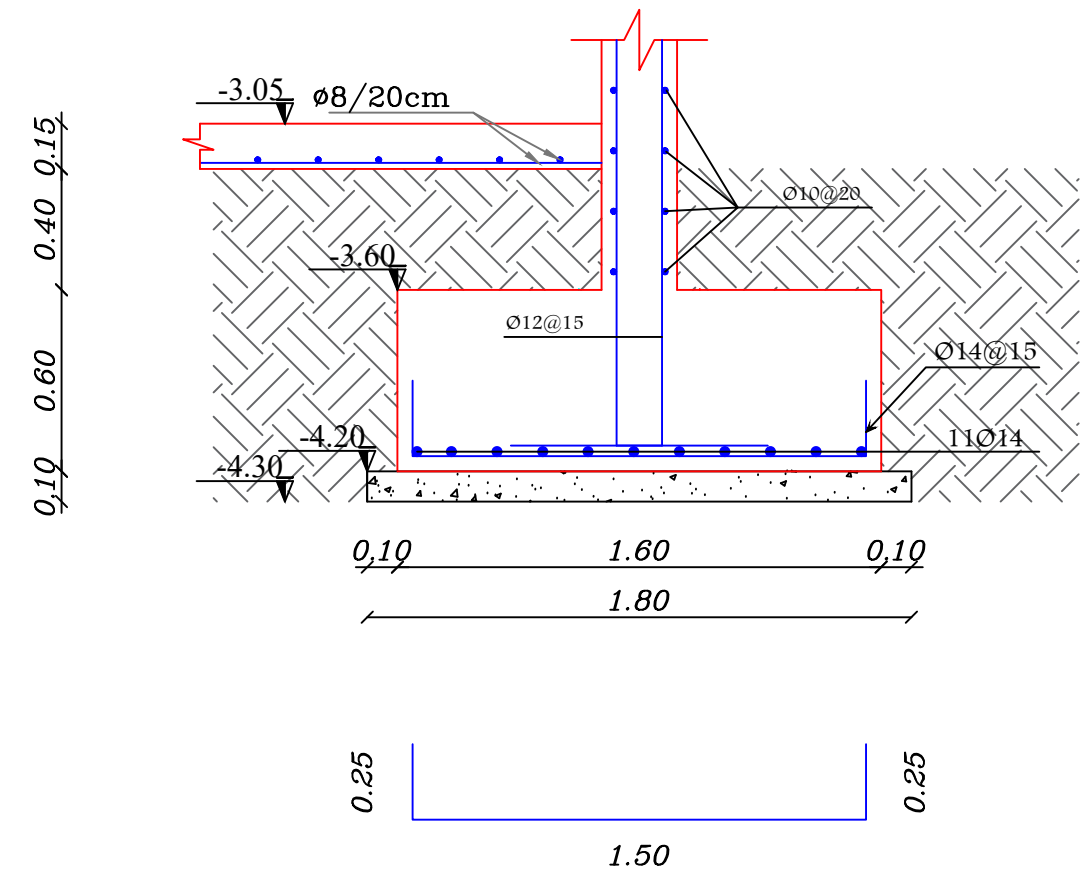
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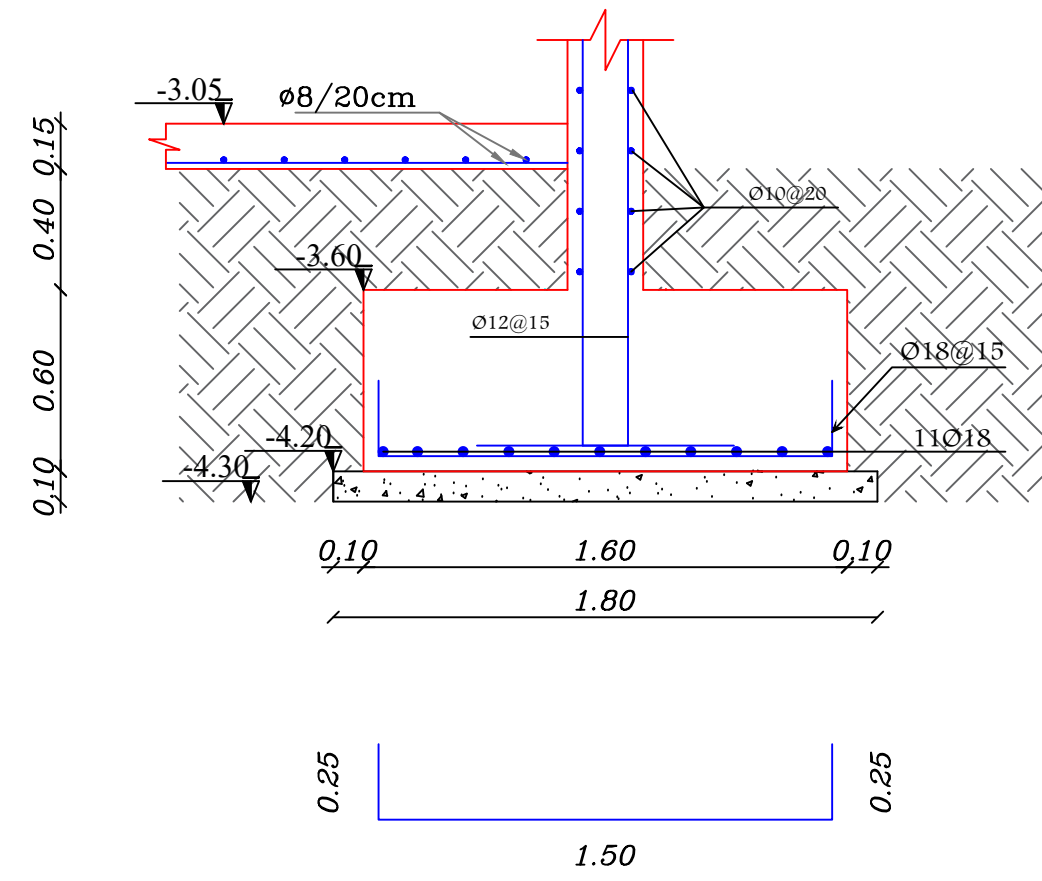
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Section 7-7  
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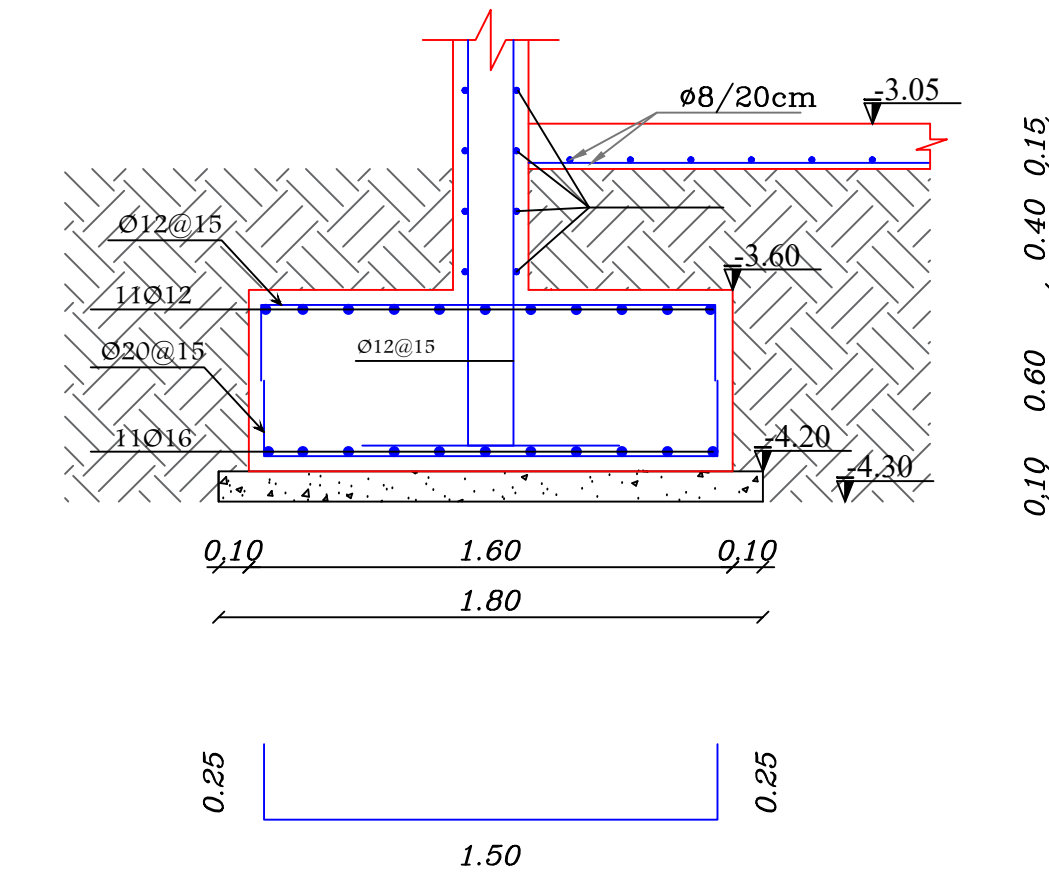
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Section 2-2  
SCALE 1:25



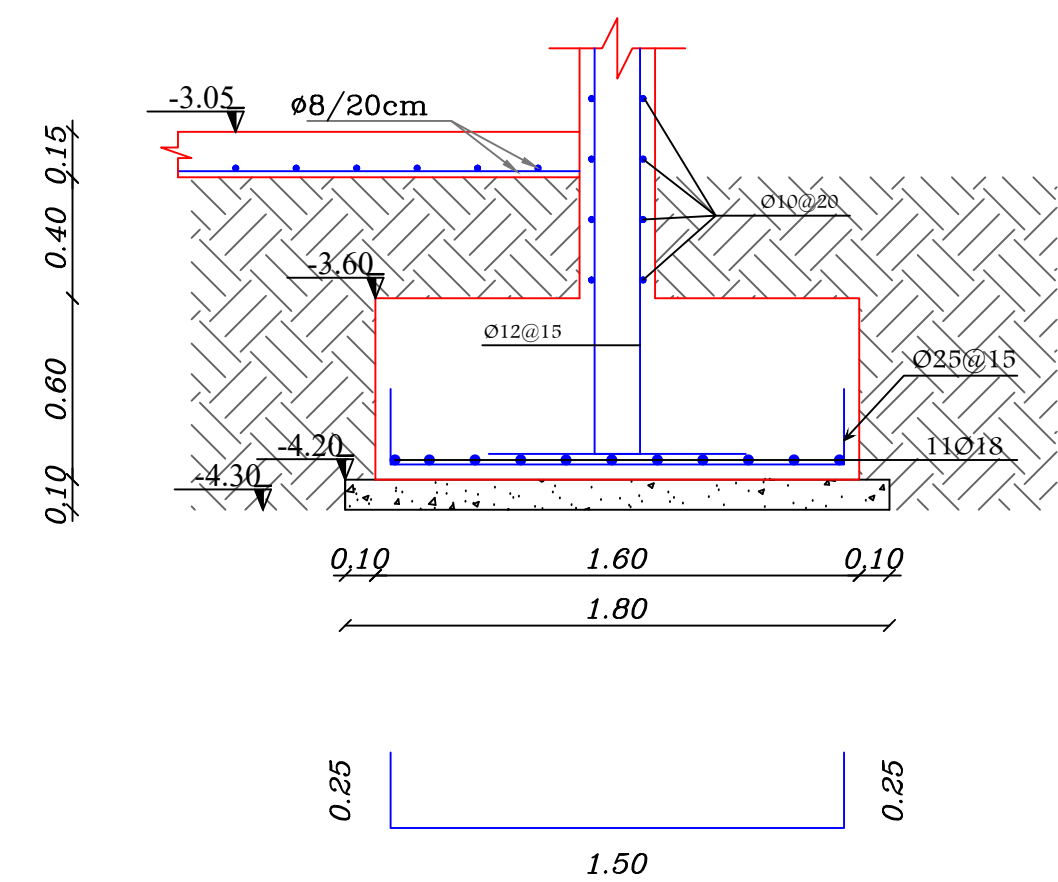
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Section 5-5  
SCALE 1:25



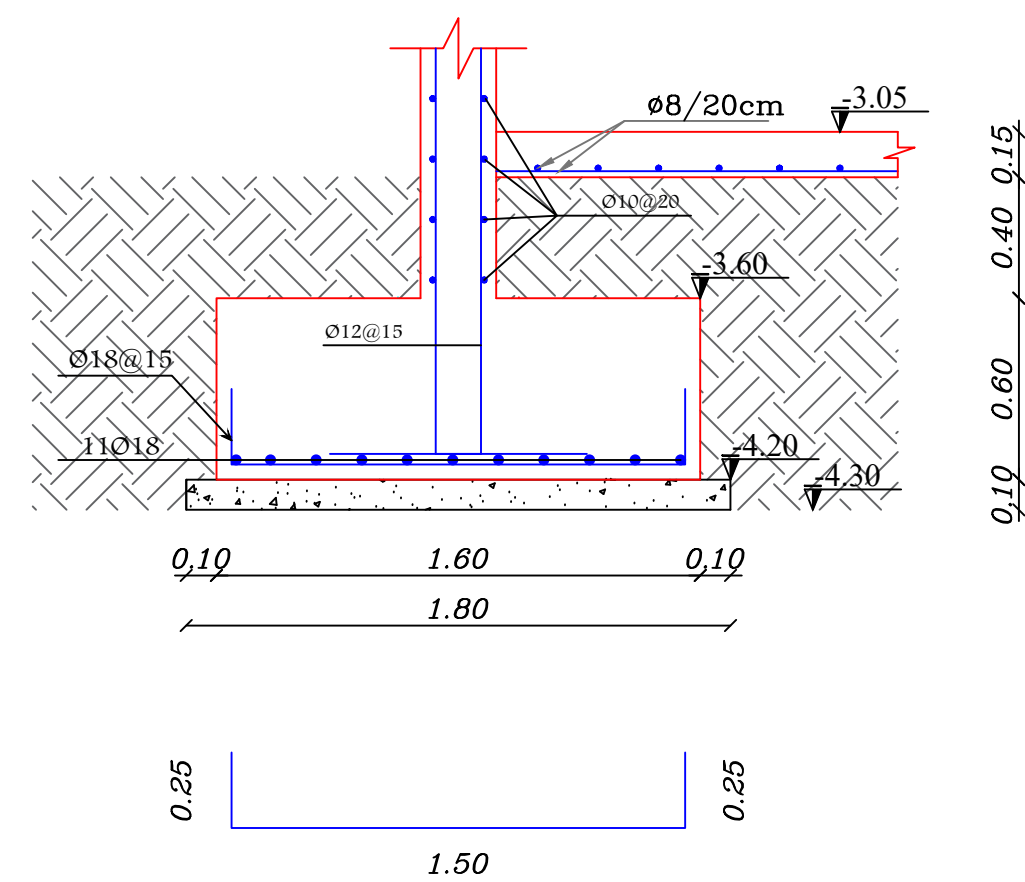
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Section 8-8  
SCALE 1:25



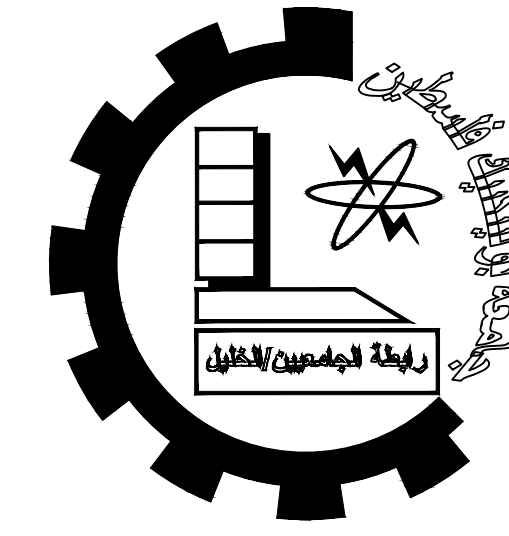
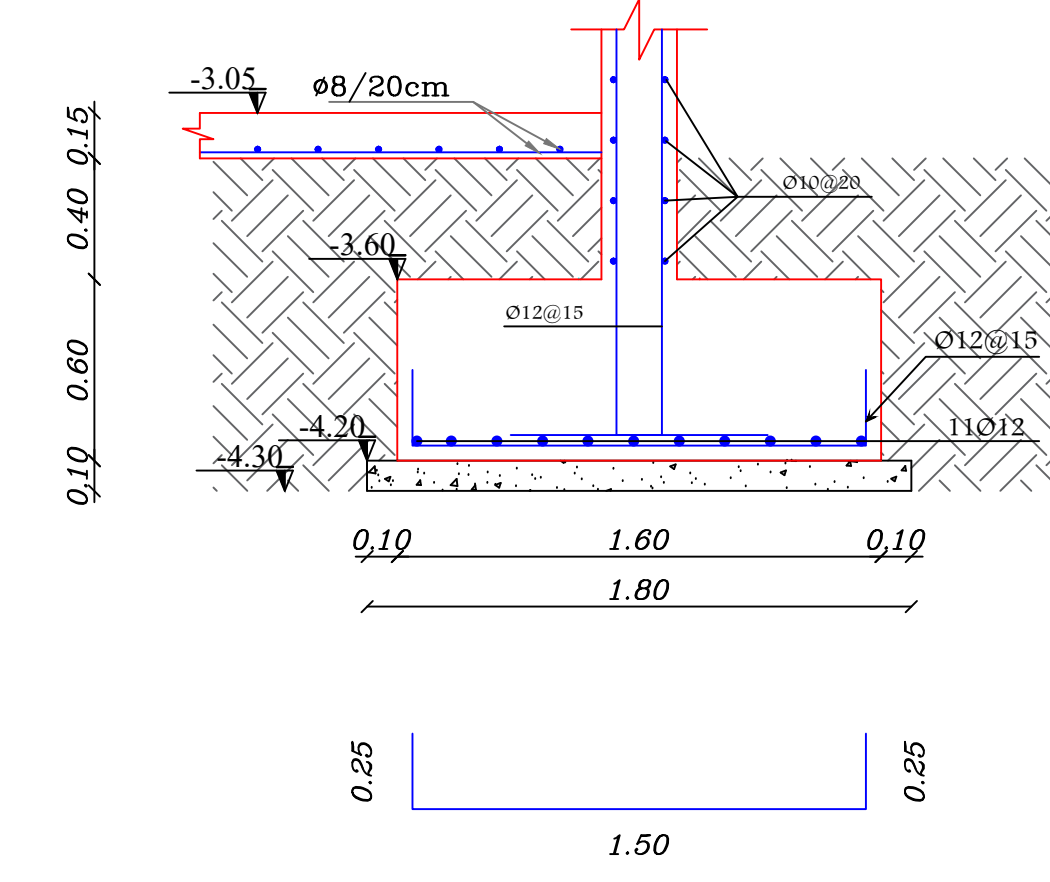
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Section 3-3  
SCALE 1:25



Strip Footing 6  
Section 6-6  
SCALE 1:25



Strip Footing 9  
Section 9-9  
SCALE 1:25



Palestine Polytechnic University

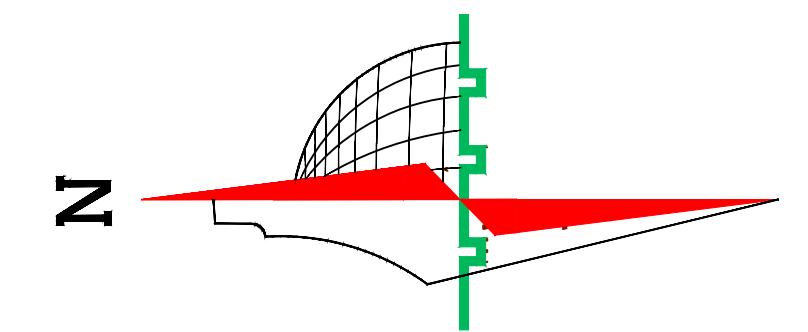
College of Engineering

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

F1 & F2

Supervisor

Dr.Maher Amro.

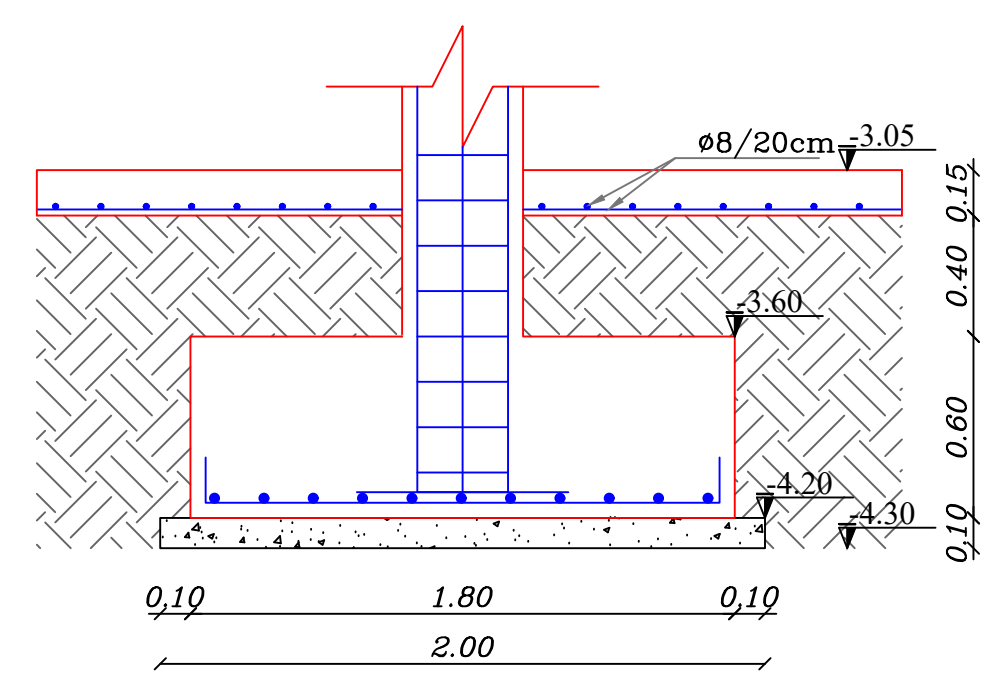
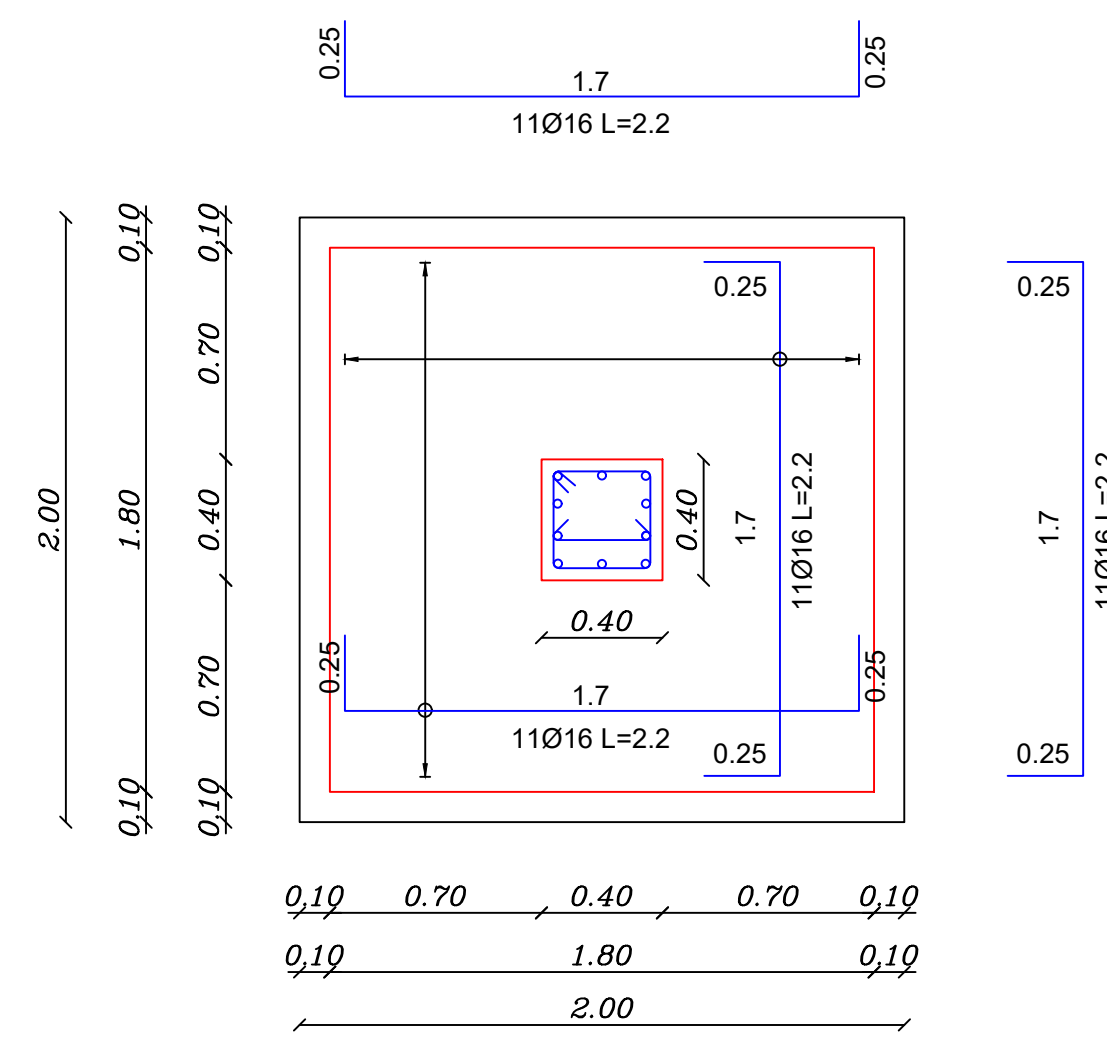
Done by :

Osama Abu E'ram

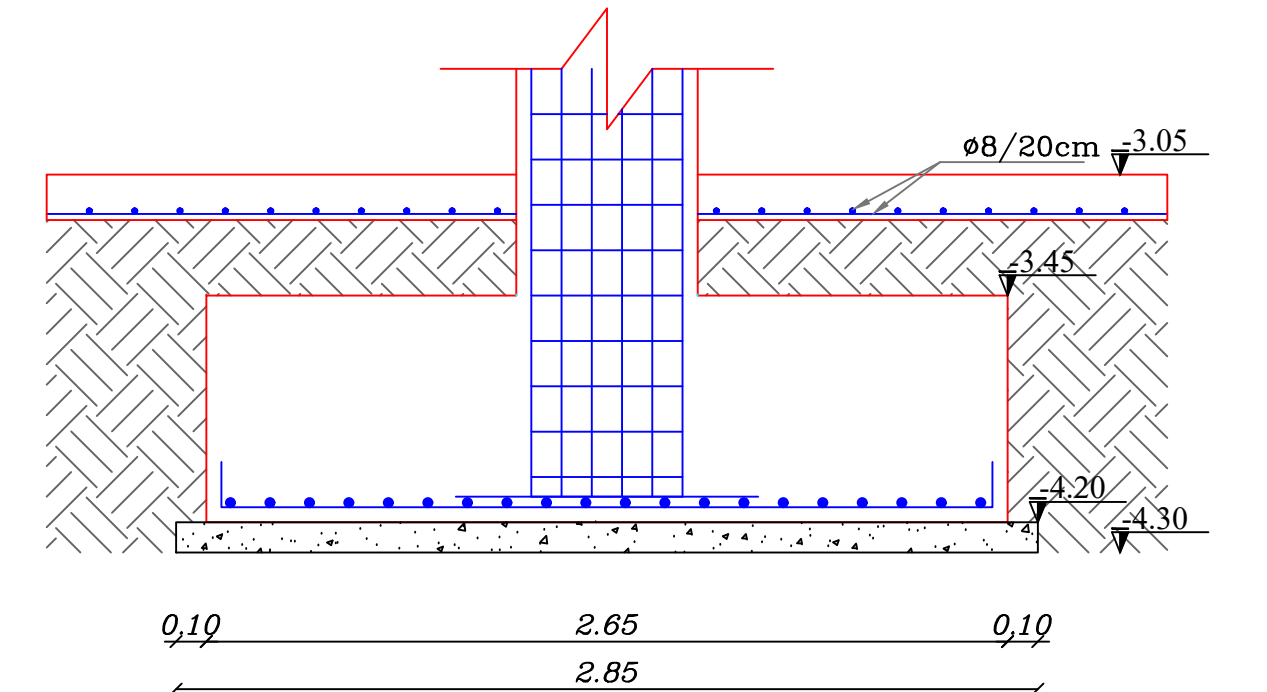
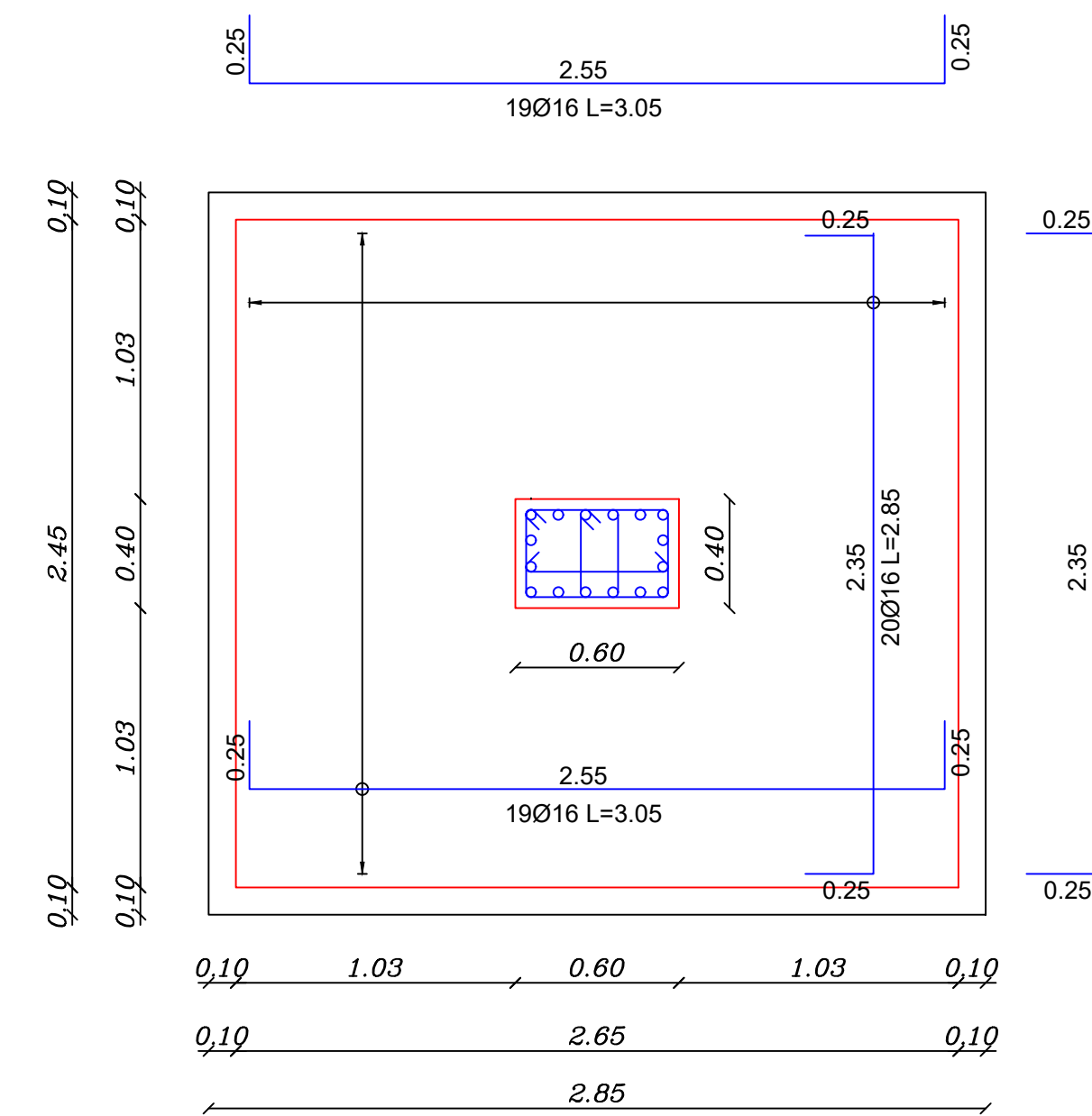
Ali Badawi

SCALE	No. of DRAW	DATE
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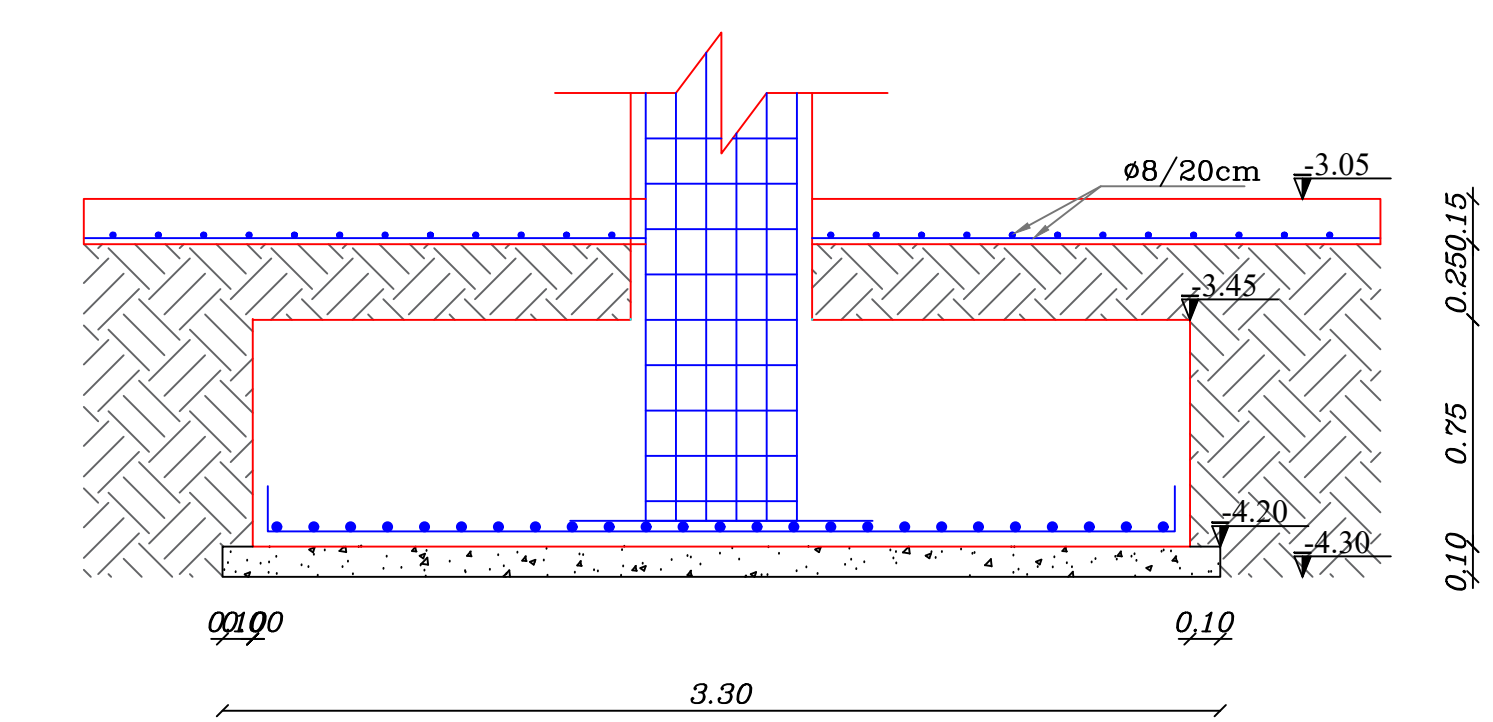
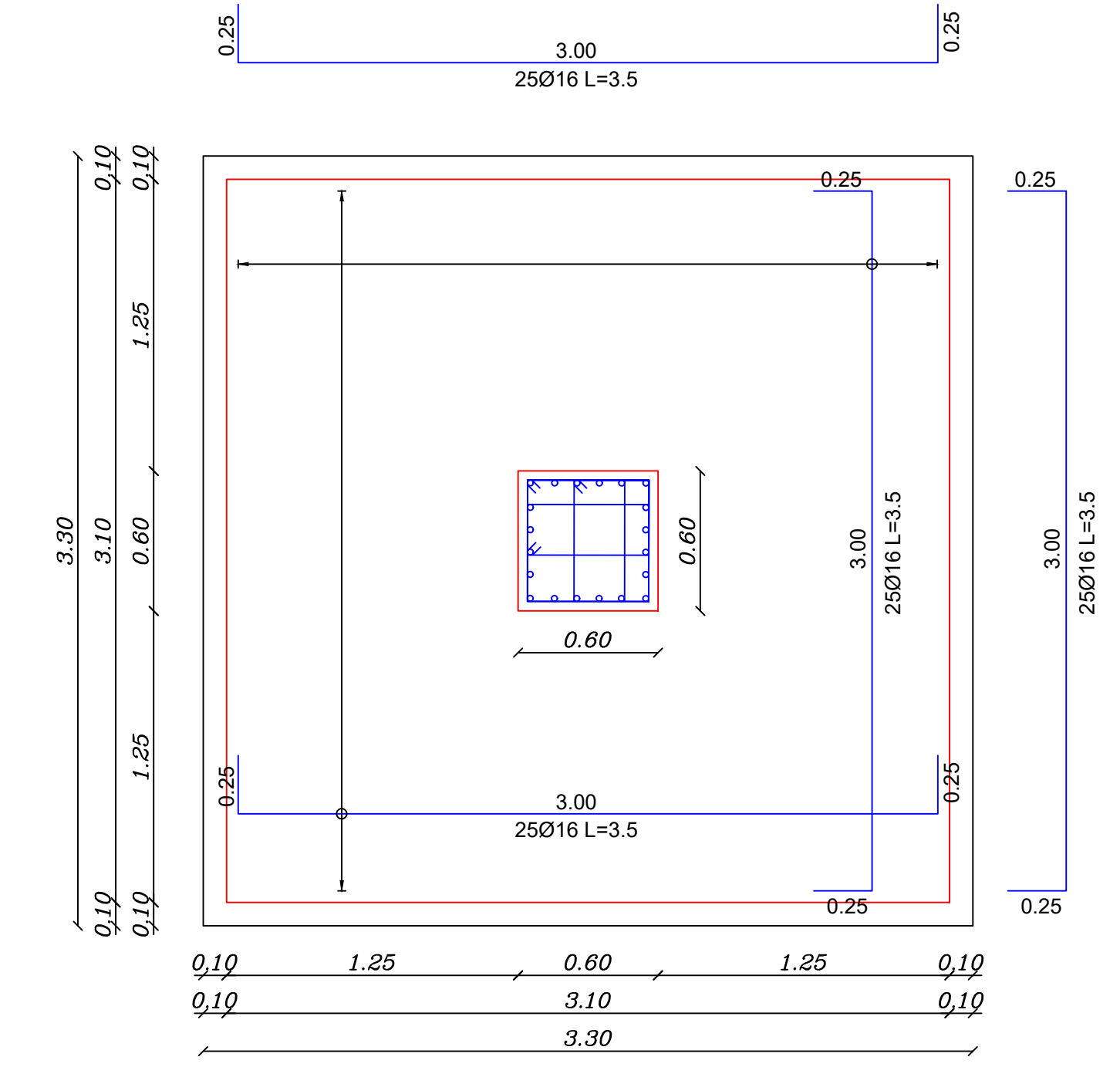
F1(1.8X1.8X0.6)m  
SCALE 1:25



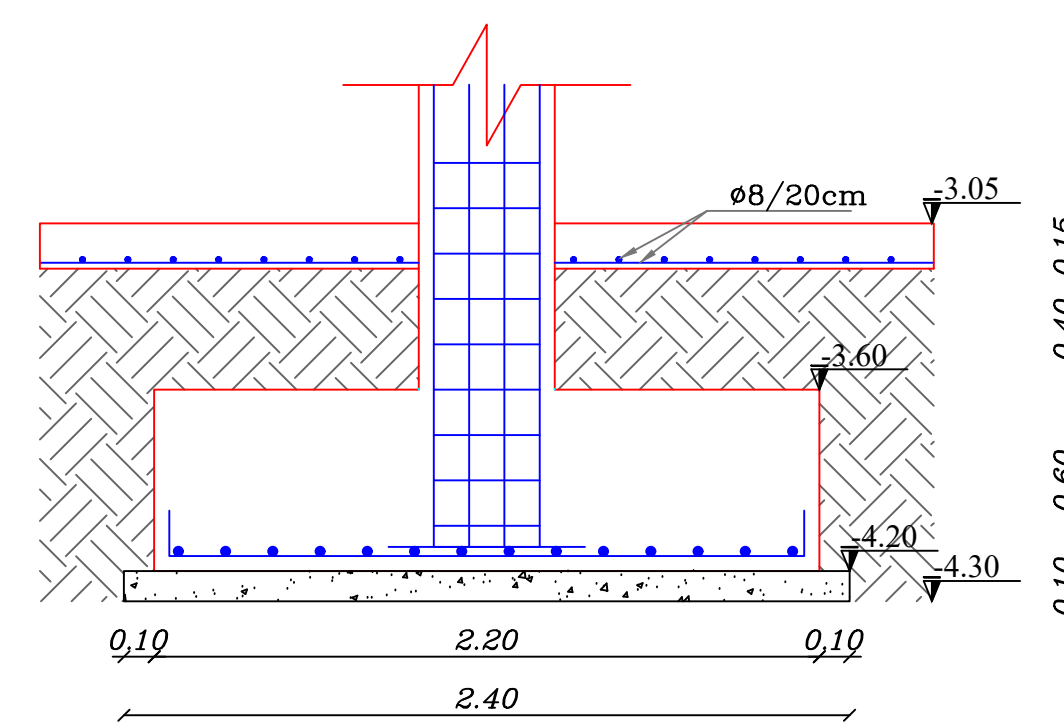
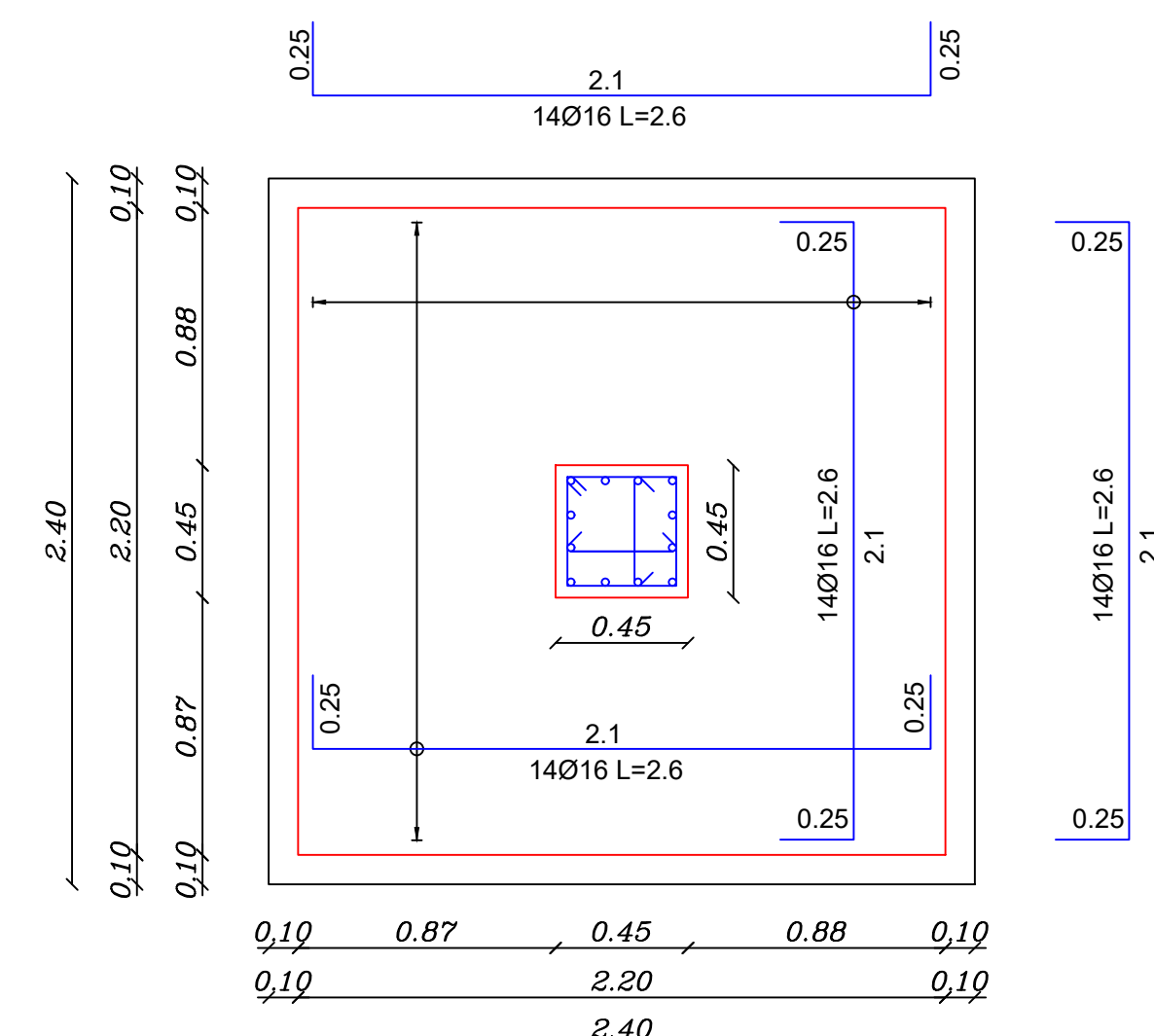
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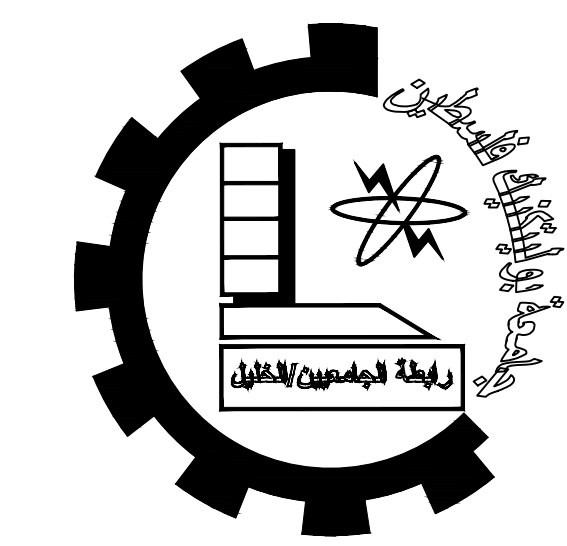
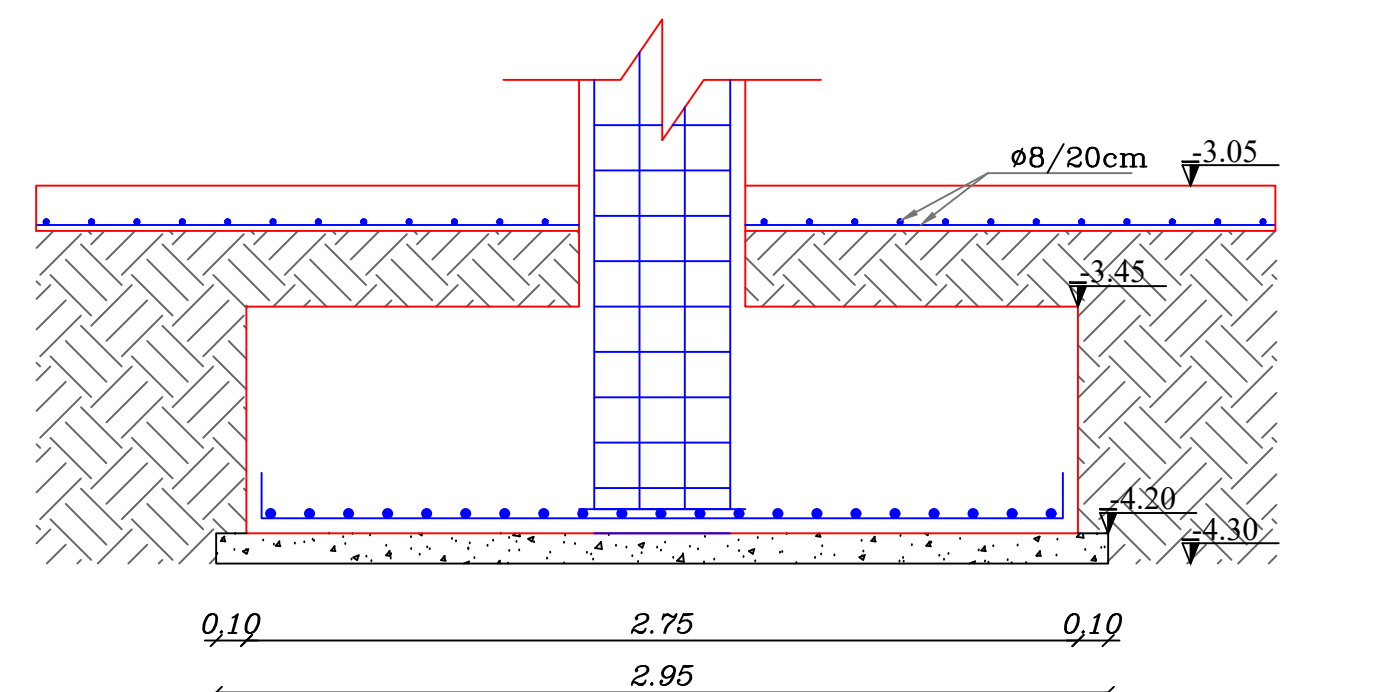
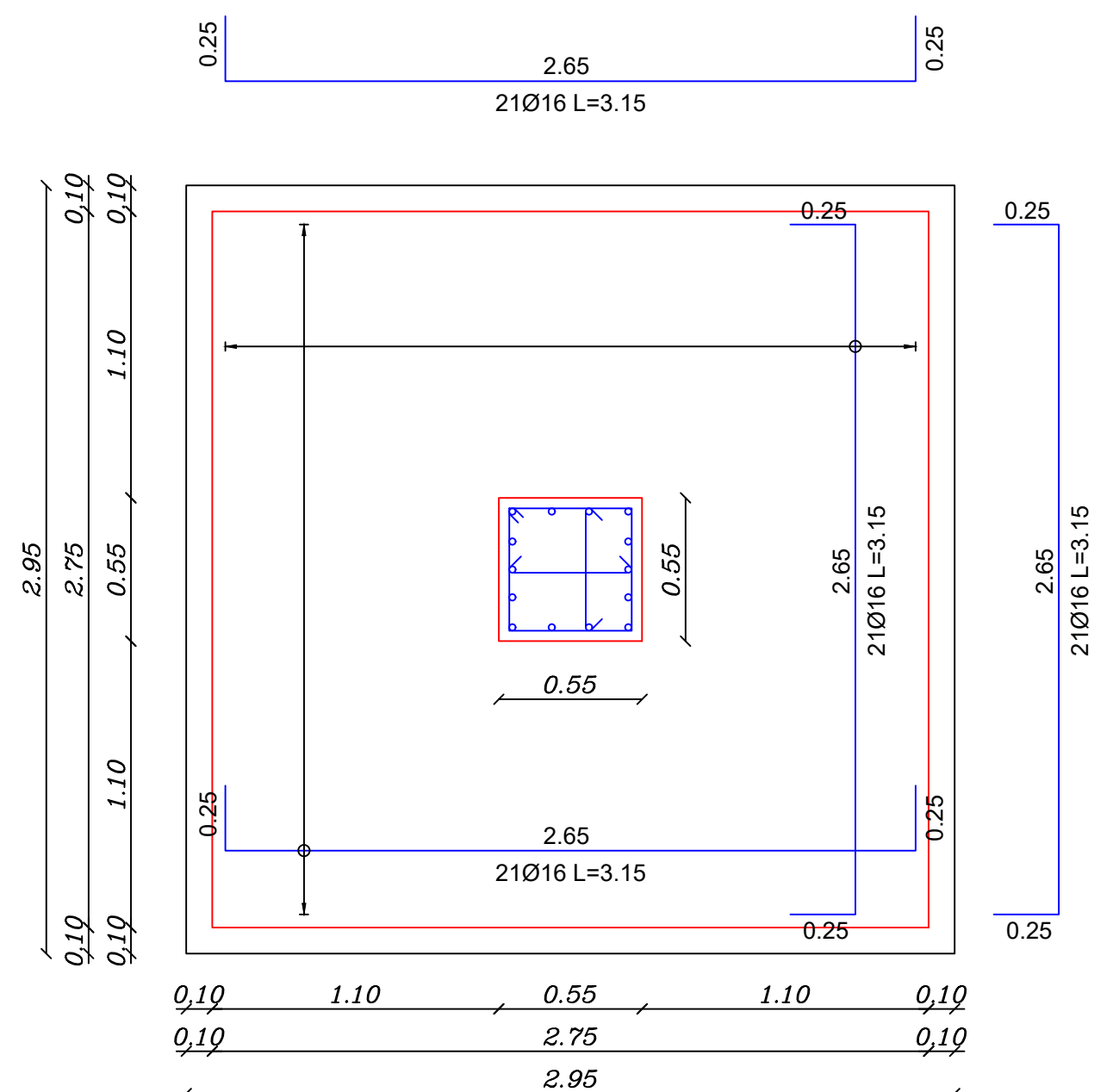
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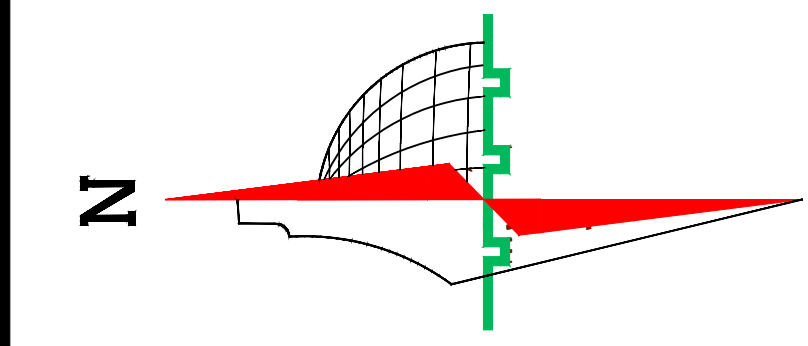
F2(2.20X2.20X0.6)m  
SCALE 1:25



F4(2.75X2.75X0.6)m  
SCALE 1:25



Palestine Polytechnic University  
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Civil Engineering  
Graduation Project  
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- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

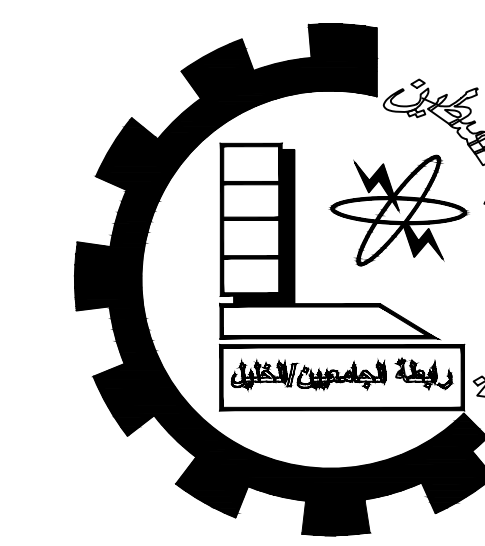
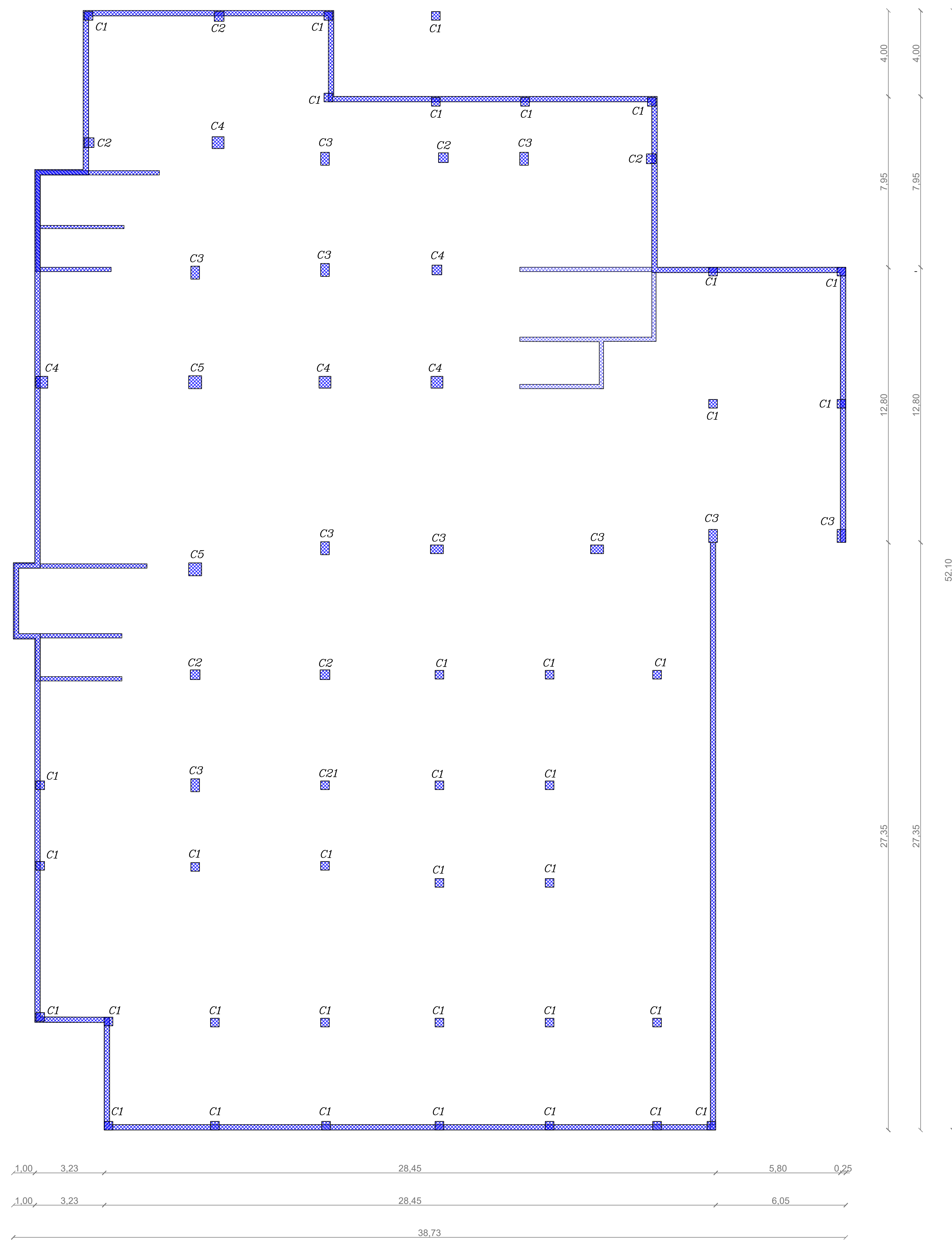
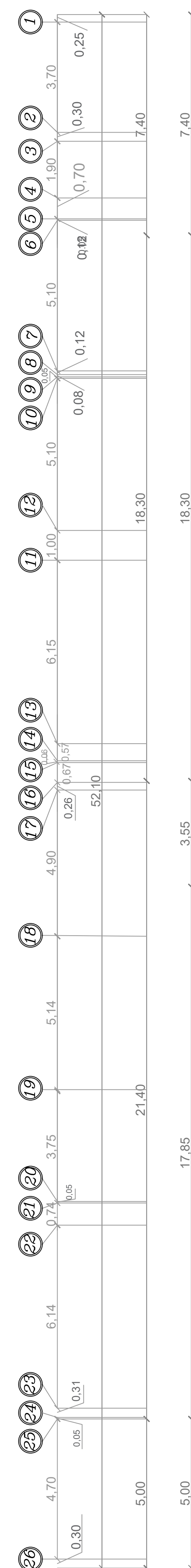
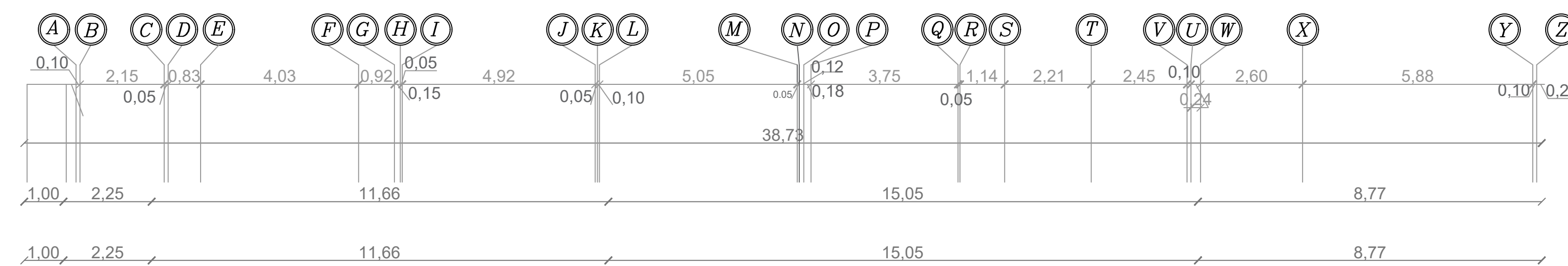
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F1 & F2

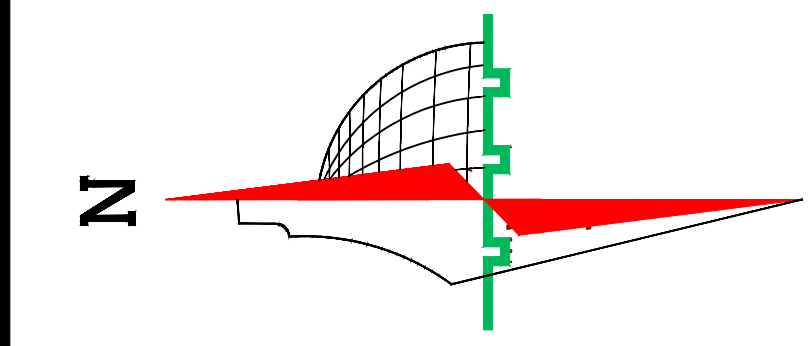
Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S06	21/8/2022



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 Civil Engineering  
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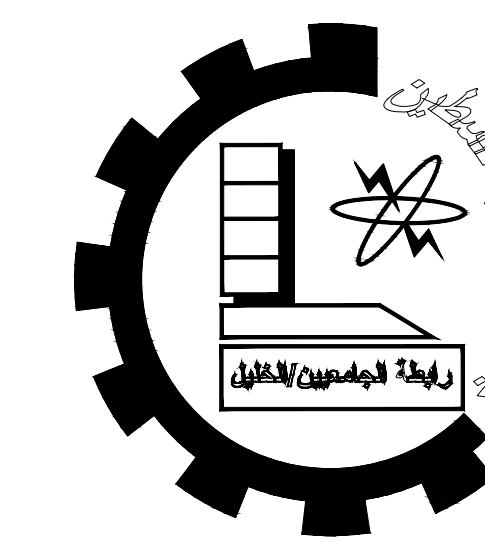


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**Columns Plan**  
 Supervisor  
 Dr.Maher Amro.

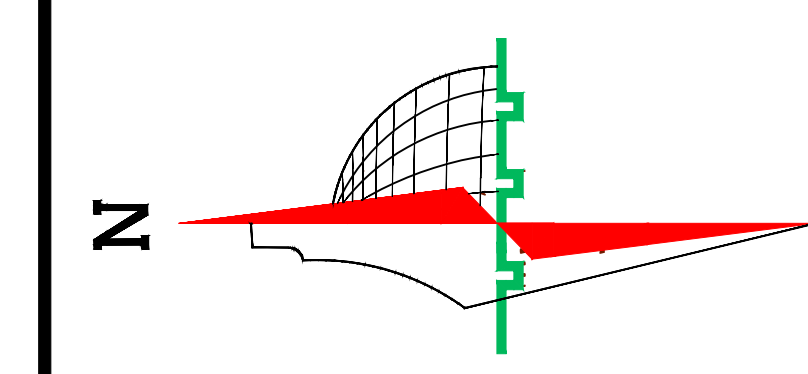
Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S07	21/8/2022

# Columns detailings (C1 , C2)



Palestine Polytechnic University  
 Engineering College  
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 Civil Engineering  
 Graduation Project  
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- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - insulating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

DRAWING TITLE :

*Columns C1&C2*

Supervisor  
 Dr.Maher Amro.

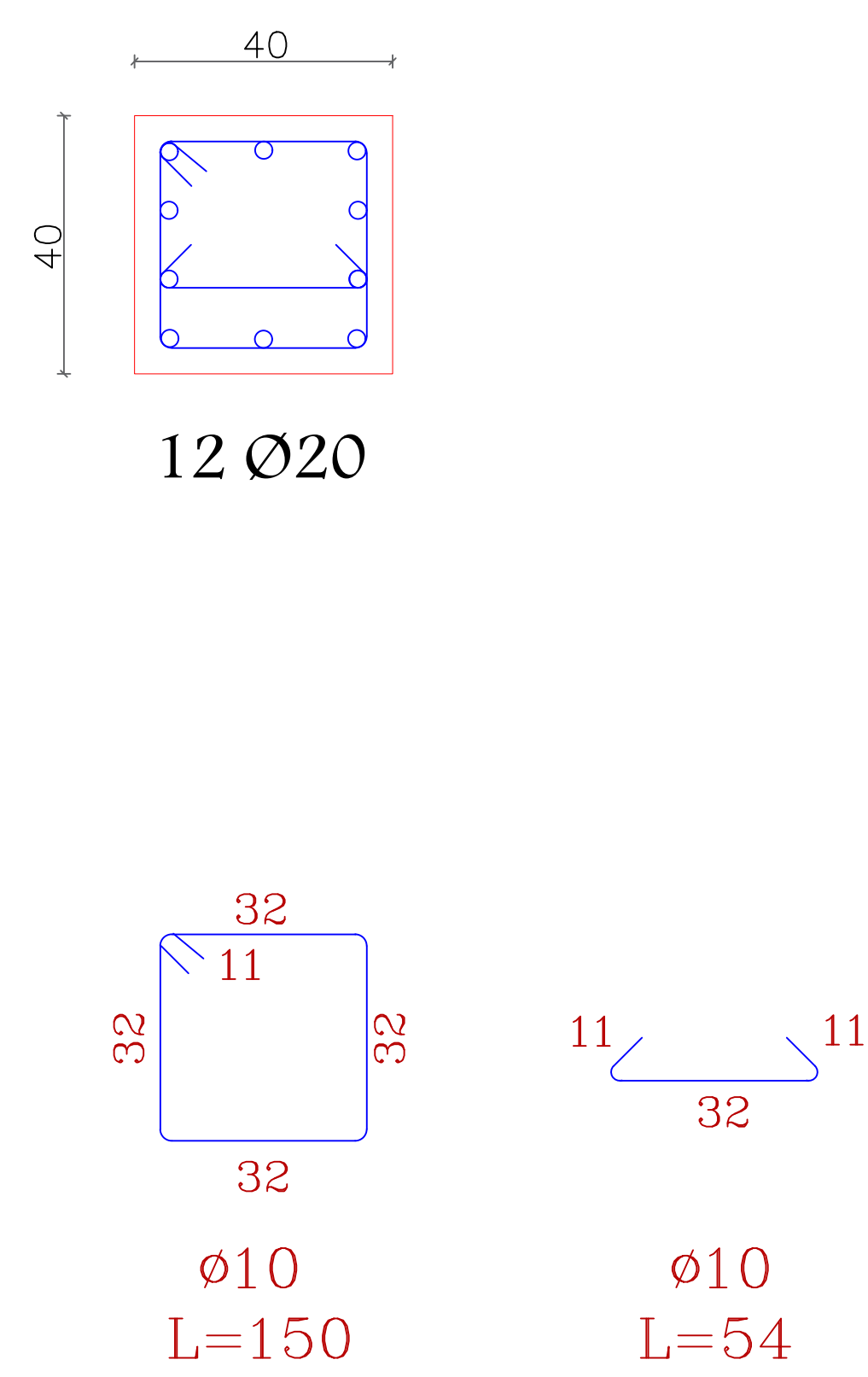
Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
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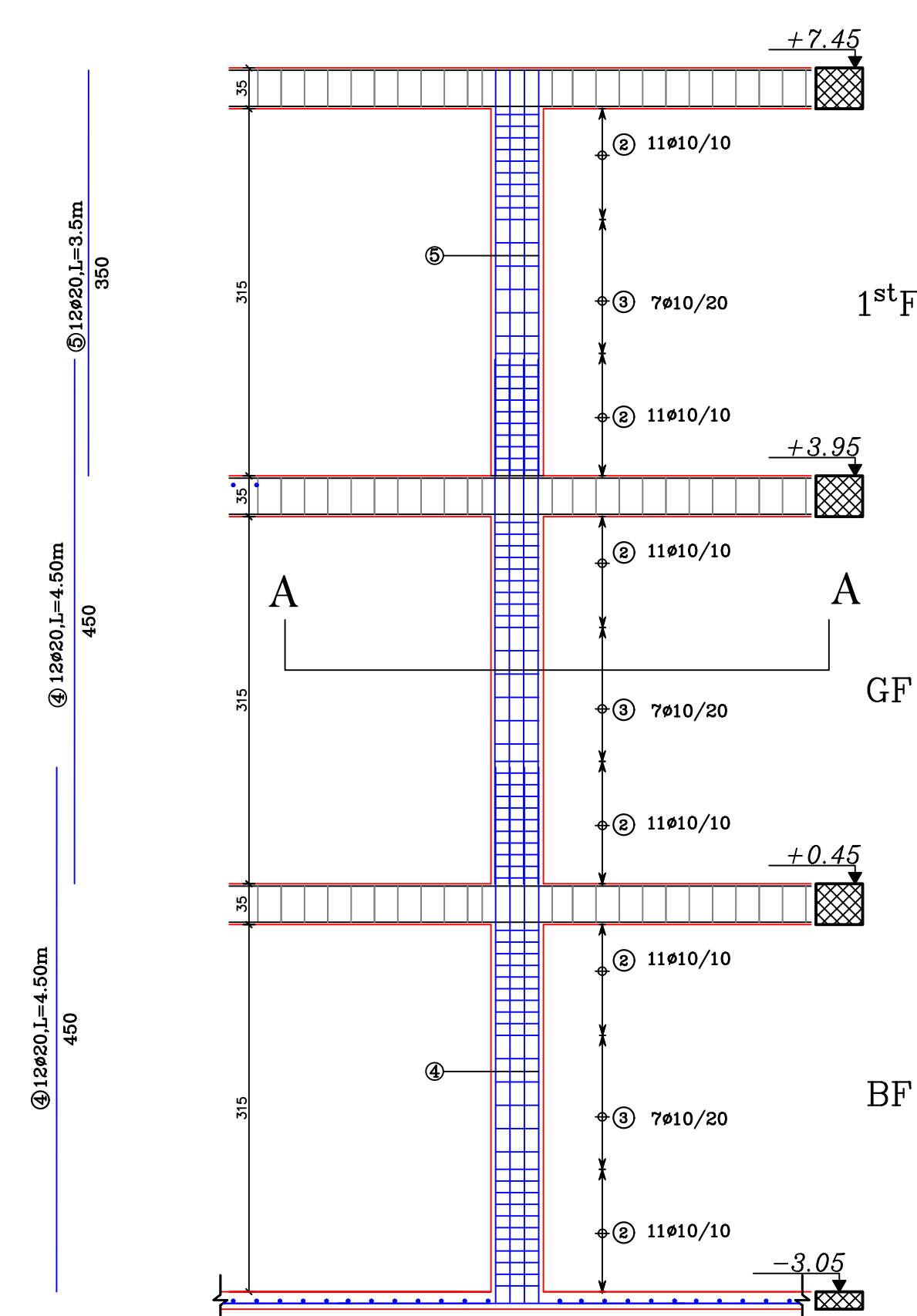
*\*Typical shear Reinforcement*

## C1

### Section A-A



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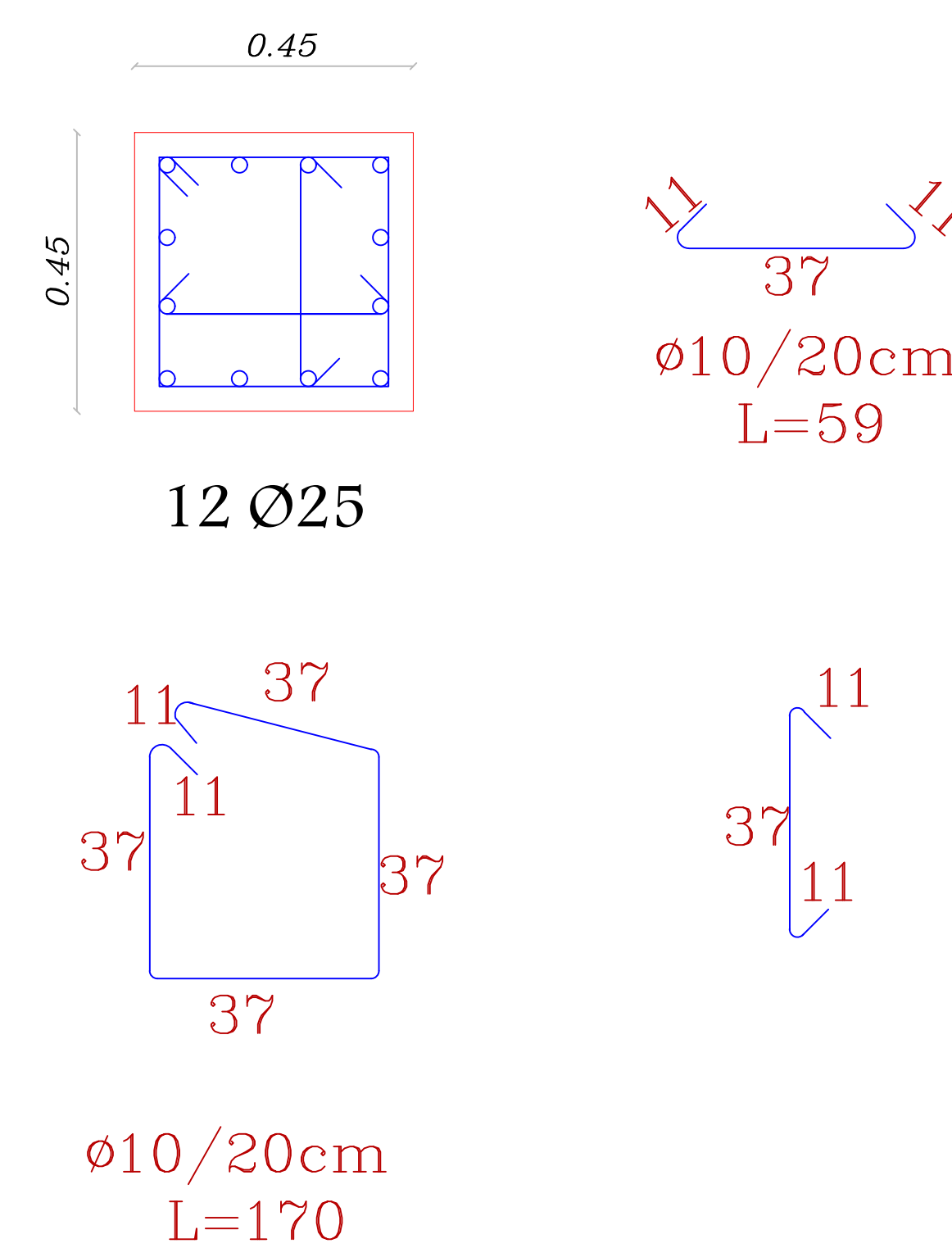


Scale:1/50

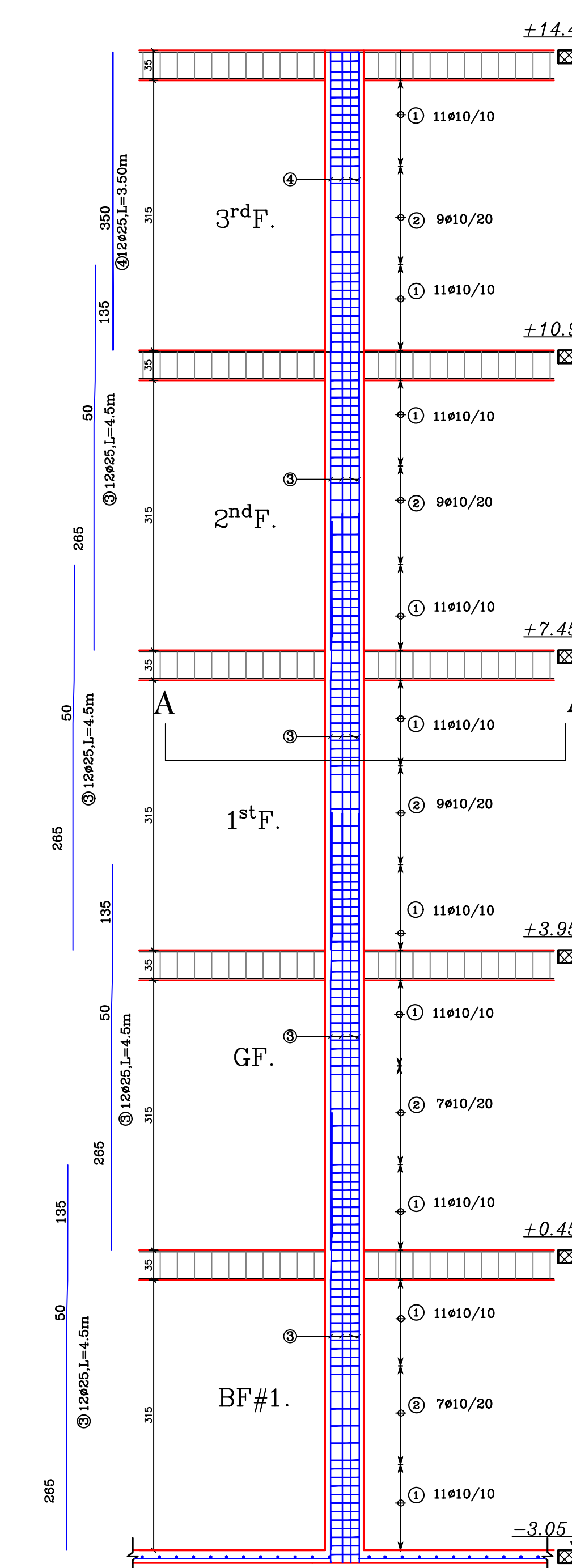
*\*Typical shear Reinforcement*

## C2

### Section A-A



Scale:1/10

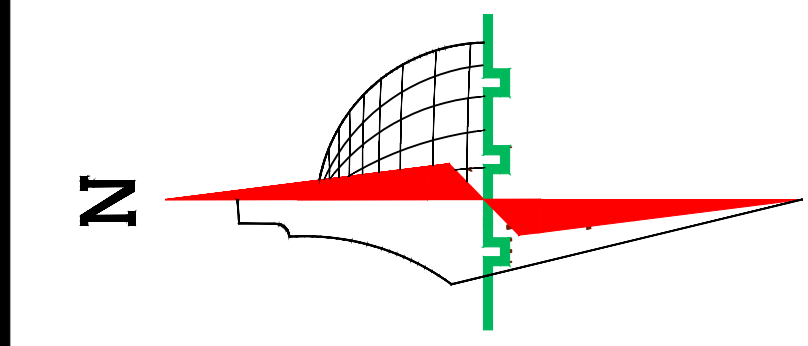


Scale:1/50

# Columns detailing's (C3 , C4)



Palestine Polytechnic University  
 Engineering College  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

DRAWING TITLE :  
**Columns C1&C2**

Supervisor  
 Dr.Maher Amro.

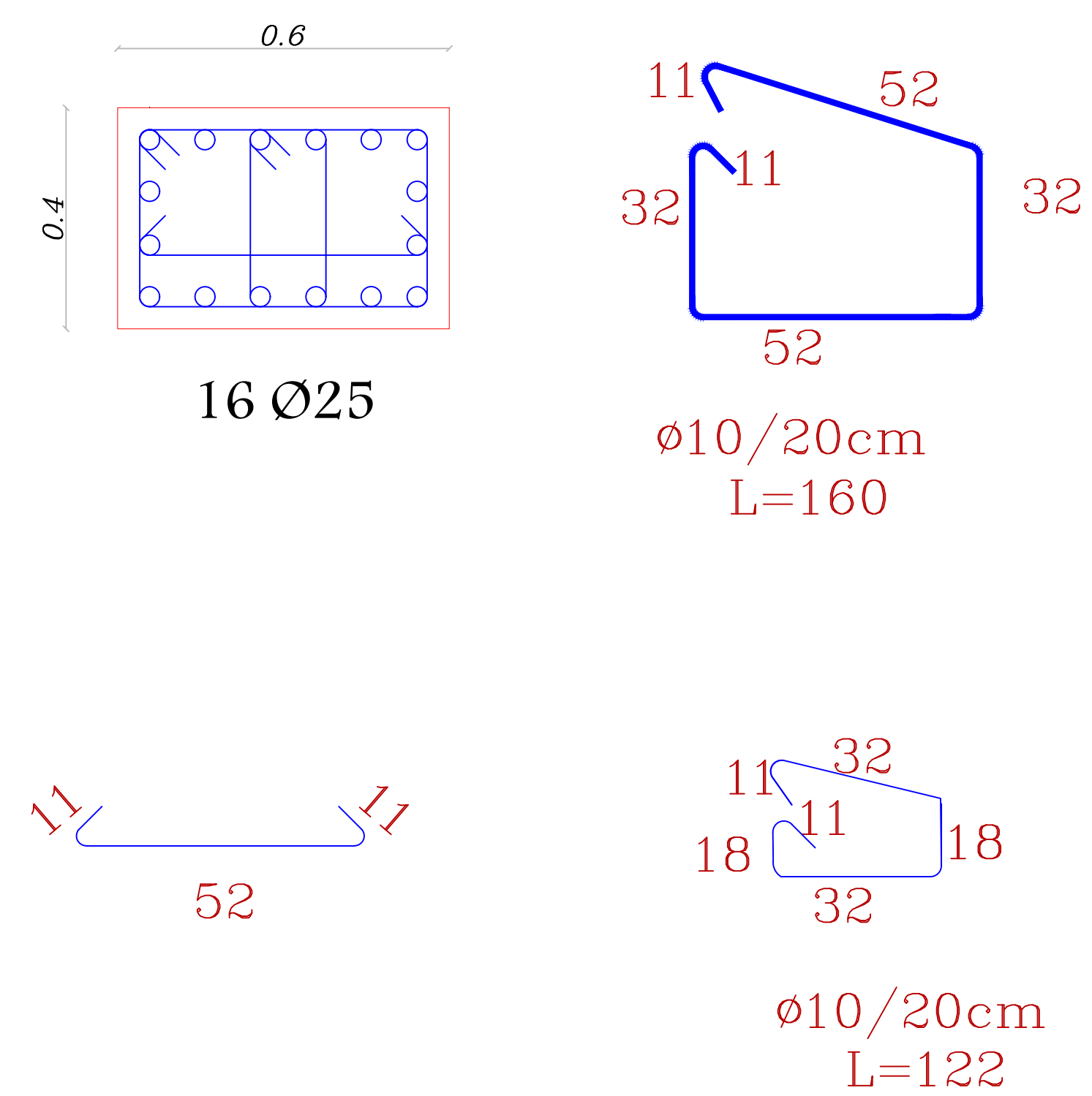
Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S09	21/8/2022

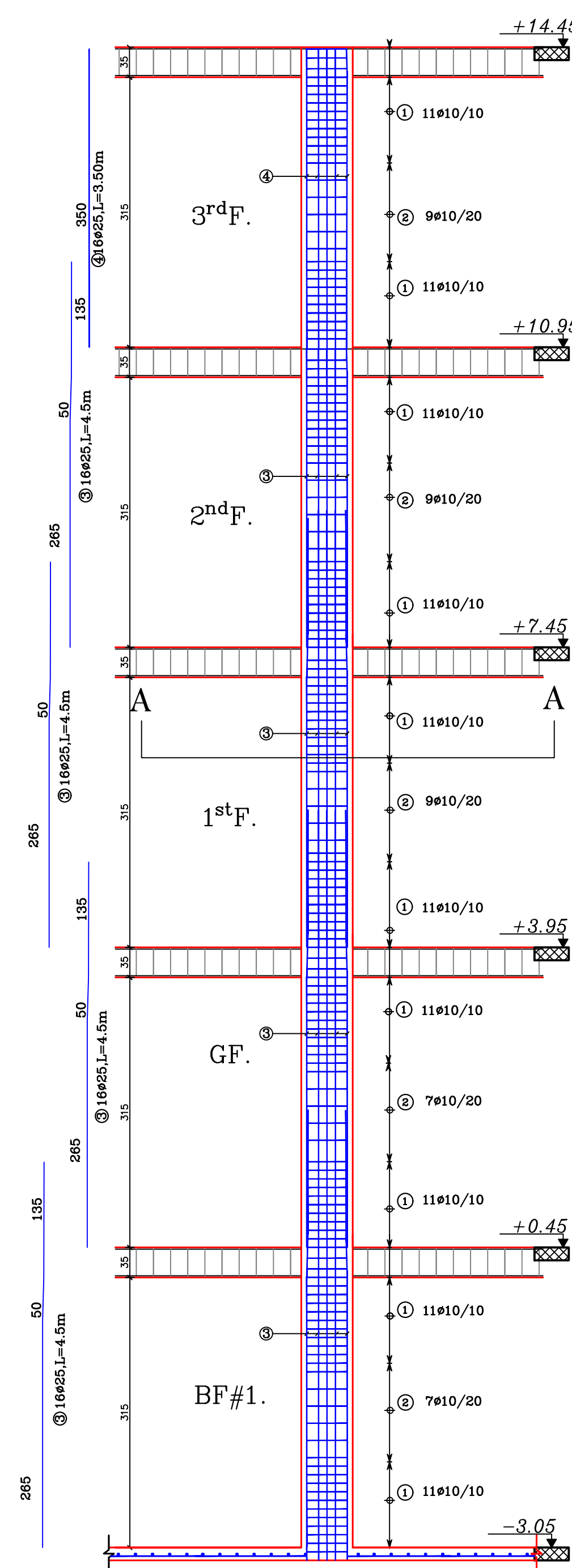
\*Typical shear Reinforcement

## C3

### Section A-A



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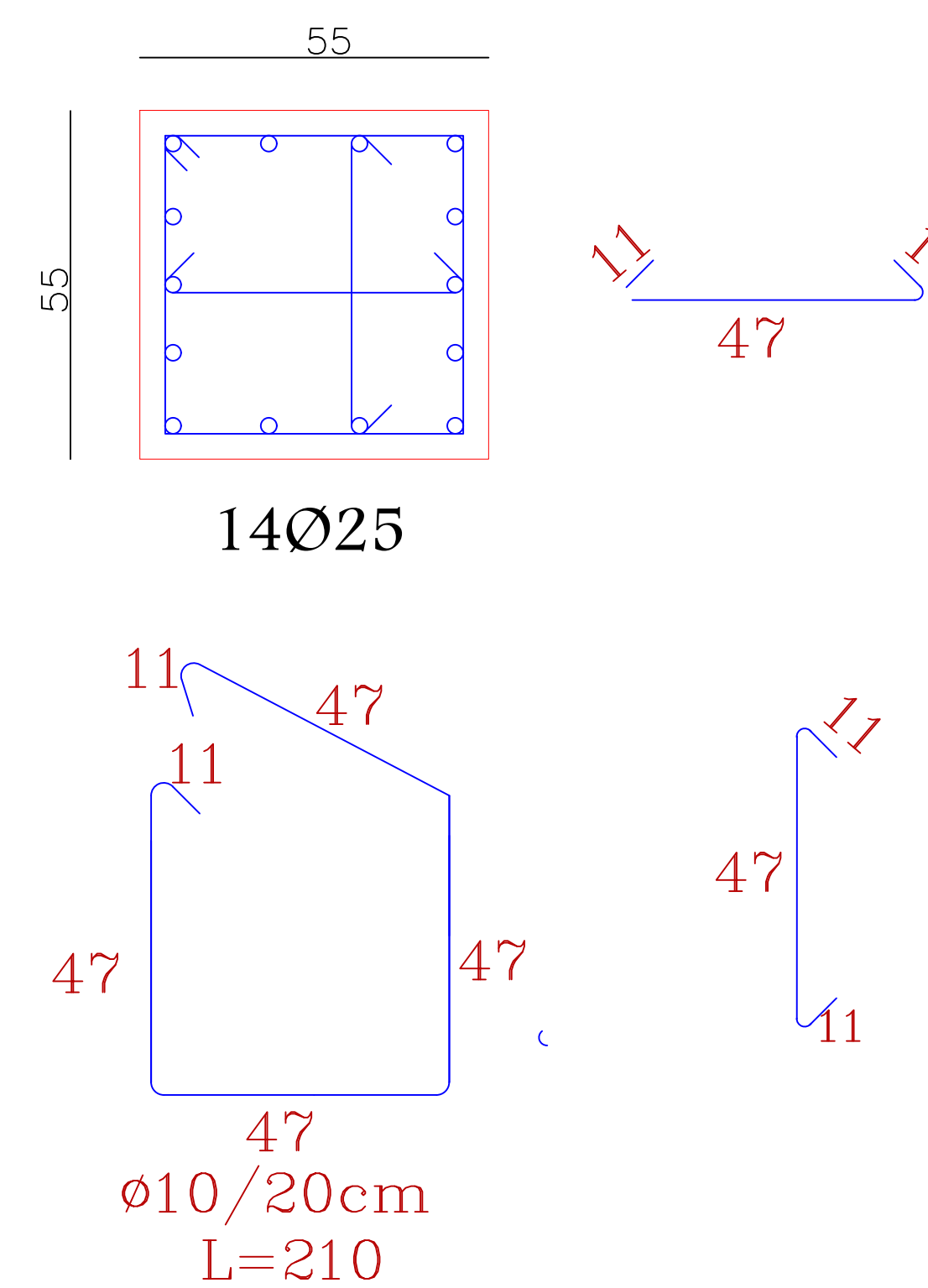


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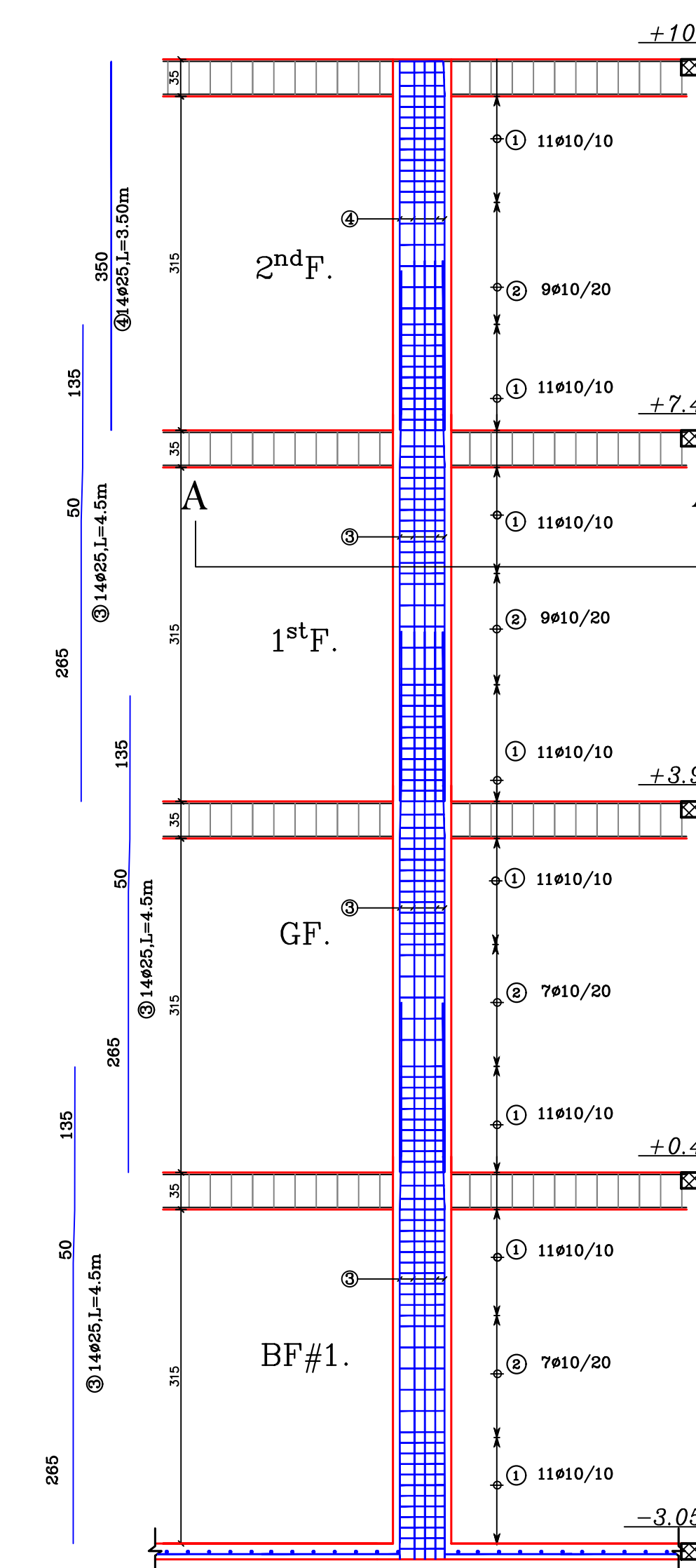
\*Typical shear Reinforcement

## C4

### Section A-A



Scale:1/10

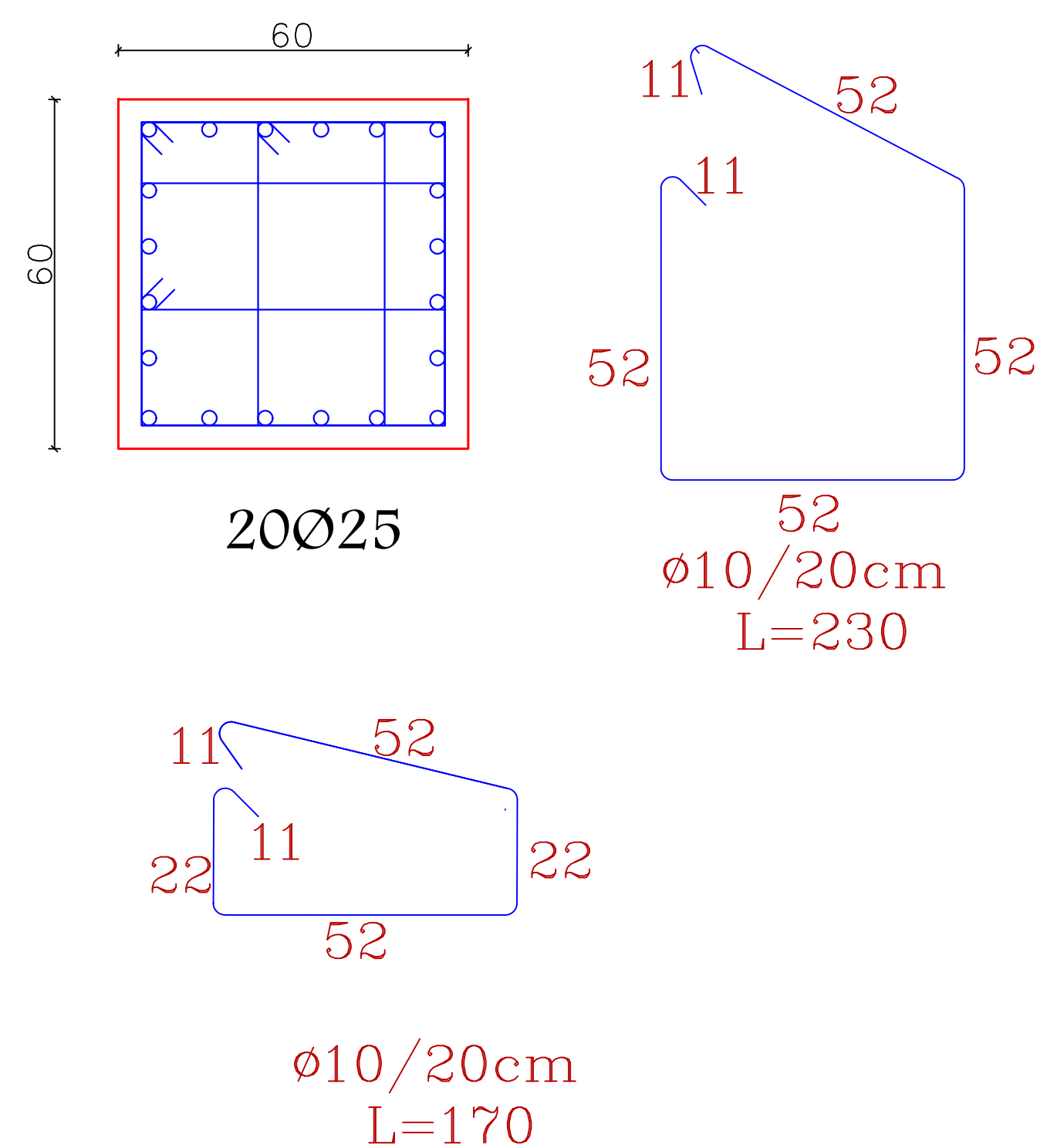


Scale:1/50

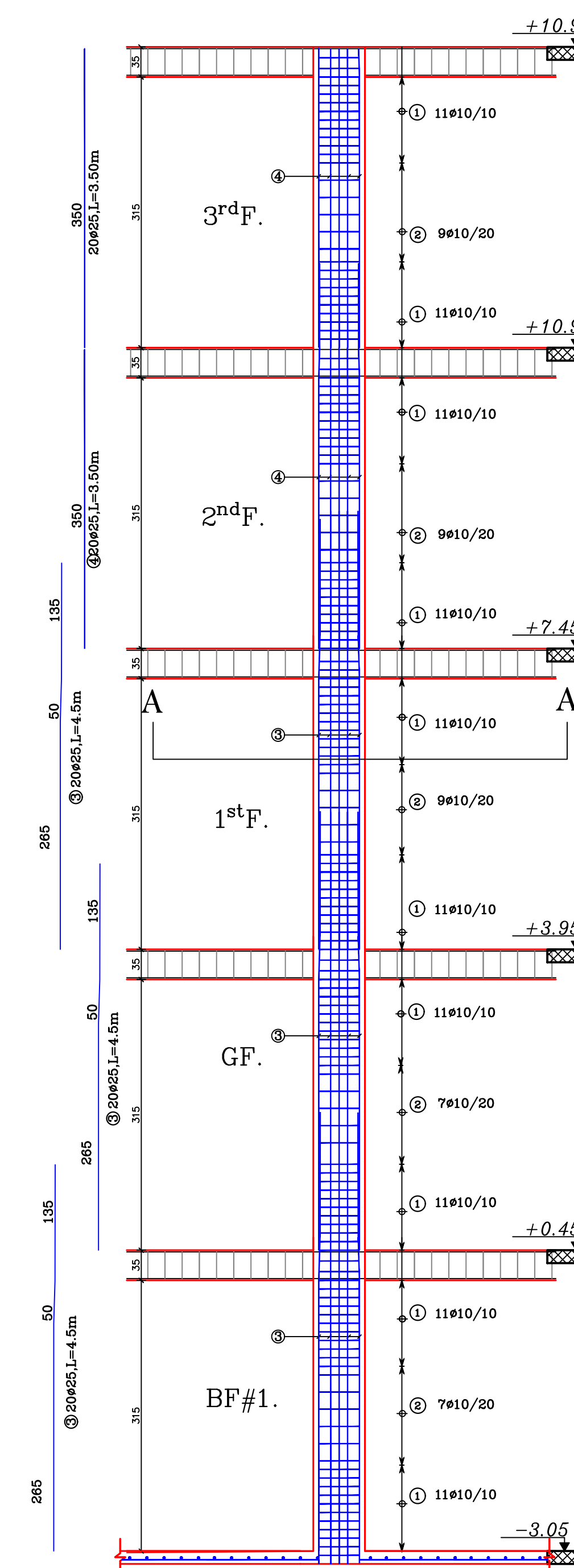
# Column detailing (C5)

\*Typical shear  
Reinforcement

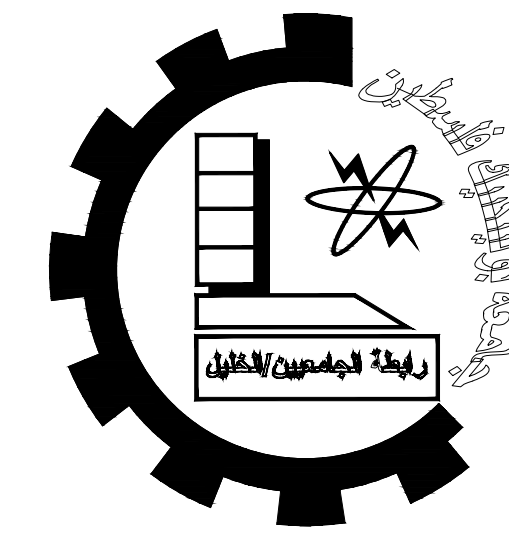
## Section A-A



Scale:1/10



Scale:1/50



Palestine Polytechnic University

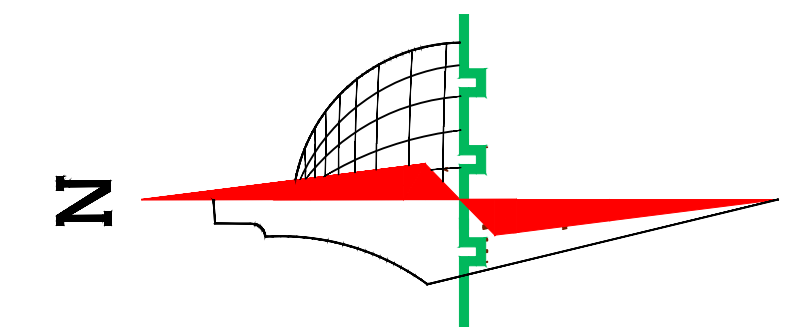
Engineering College

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



### Legend :

	Stone		Gravel
	R.Concrete		Wood
	Concrete		HEXAGONAL TILES
	Hollow Block		BAKLAVA TILES
	isolating materials		GRASS

DRAWING TITLE :

Columns C1&C2

Supervisor

Dr.Maher Amro.

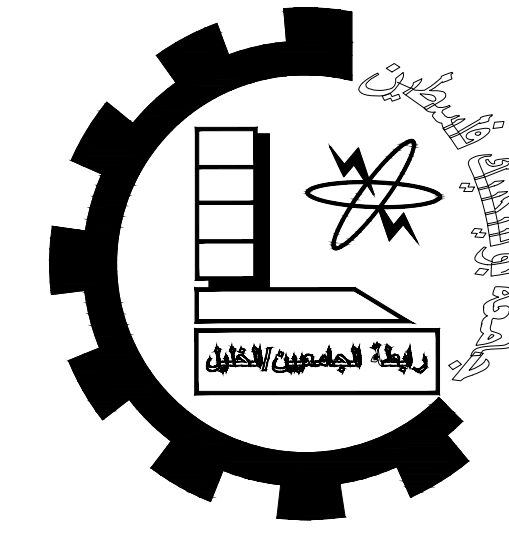
Done by :

Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S10	21/8/2022

Floor	Column's Design Sections				
	C1	C2	C3	C4	C5
	DL = 1000 KN LL = 500 KN	DL = 1500 KN LL = 750 KN	DL = 2000 KN LL = 1000 KN	DL = 2500 KN LL = 1000 KN	DL = 3250 KN LL = 1150 KN
C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C17, C18, C22, C23, C27, C28, C34, C35, C40, C46, C47, .C54, C55, C56, C57, C58, C60, C61, C62, C19	C24, C25, C45, C48 C51, C53, C59	C20, C31, C32, C33 C41, C42, C50, C52	C43, C45, C48 C51, C53, C59	C30, C37	
Basment 1st	 12Ø20	 12 Ø25	 16 Ø25	 14Ø25	 20Ø25
Ground Floor	 12Ø20	 12 Ø25	 16 Ø25	 14Ø25	 20Ø25
1st Floor	 12Ø20	 12 Ø25	 16 Ø25	 14Ø25	 20Ø25
2nd Floor		 12 Ø25	 16 Ø25	 14Ø25	 20Ø25
3rd Floor		 12 Ø25	 16 Ø25	 14Ø25	 20Ø25



Palestine Polytechnic University

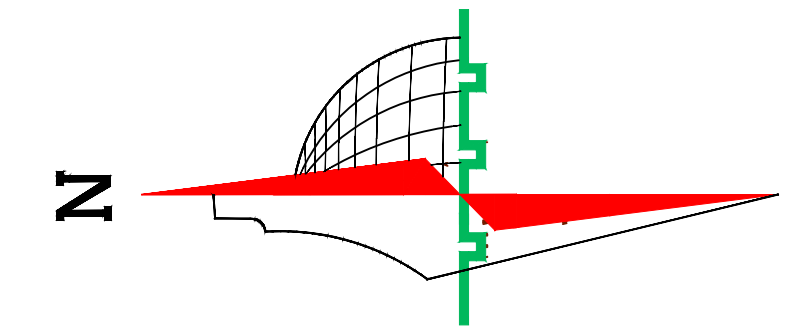
Engineering College

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



**Legend :**

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

*Columns Detaling*

Supervisor

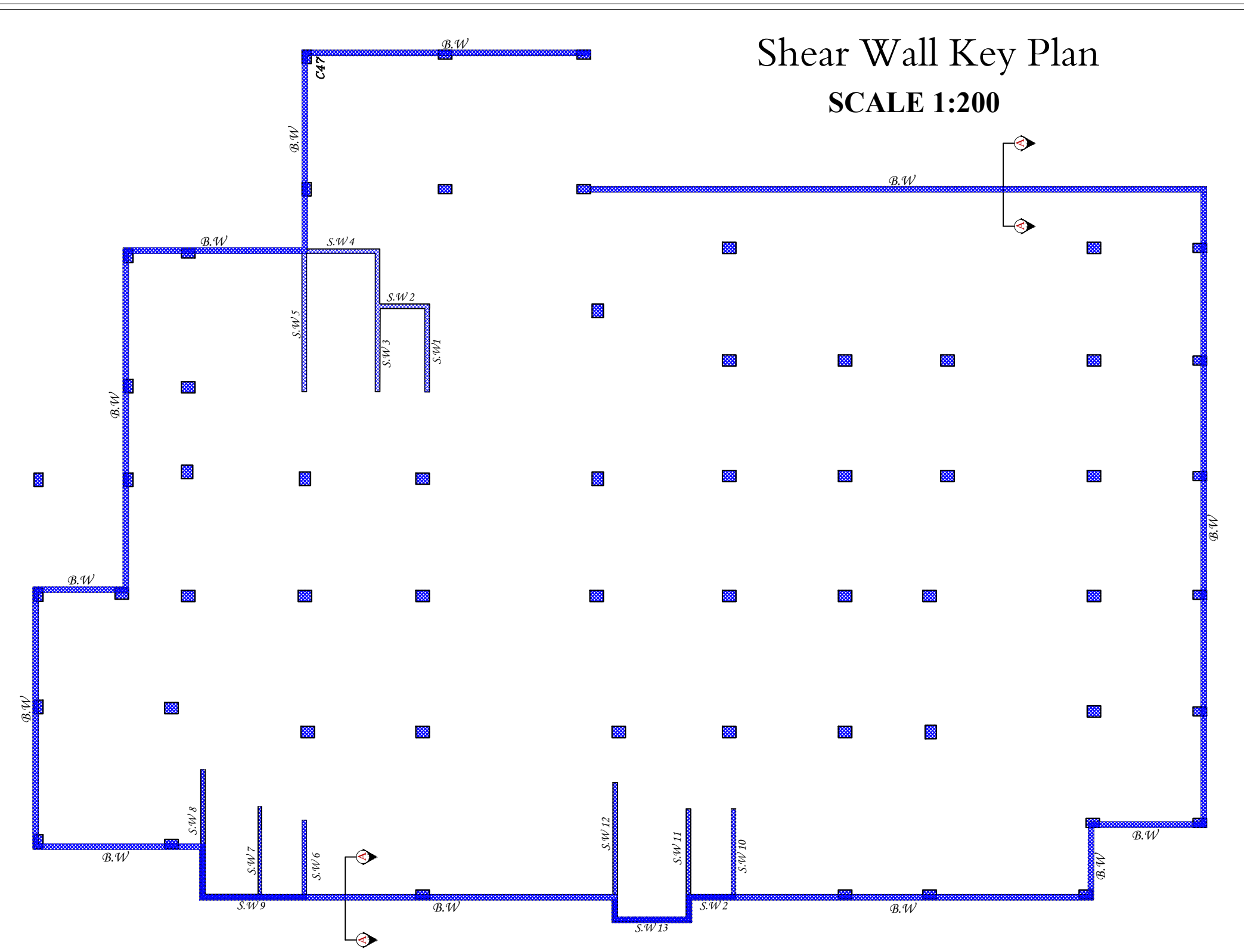
Dr.Maher Amro.

Done by :

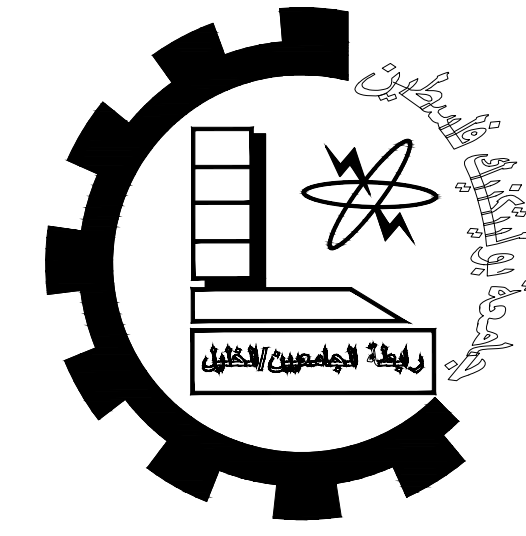
*Osama Abu E'ram*

*Ali Badawi*

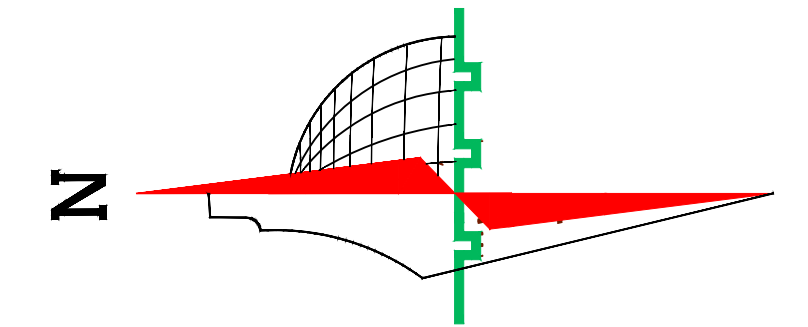
SCALE	No. of DRAW	DATE
1/100	S11	21/8/2022



# Shear walls ( B.W & 1)



Palestine Polytechnic University  
 College of Engineering  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



### Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

*B.W & S.W1*

Supervisor

Dr.Maher Amro.

Done by :

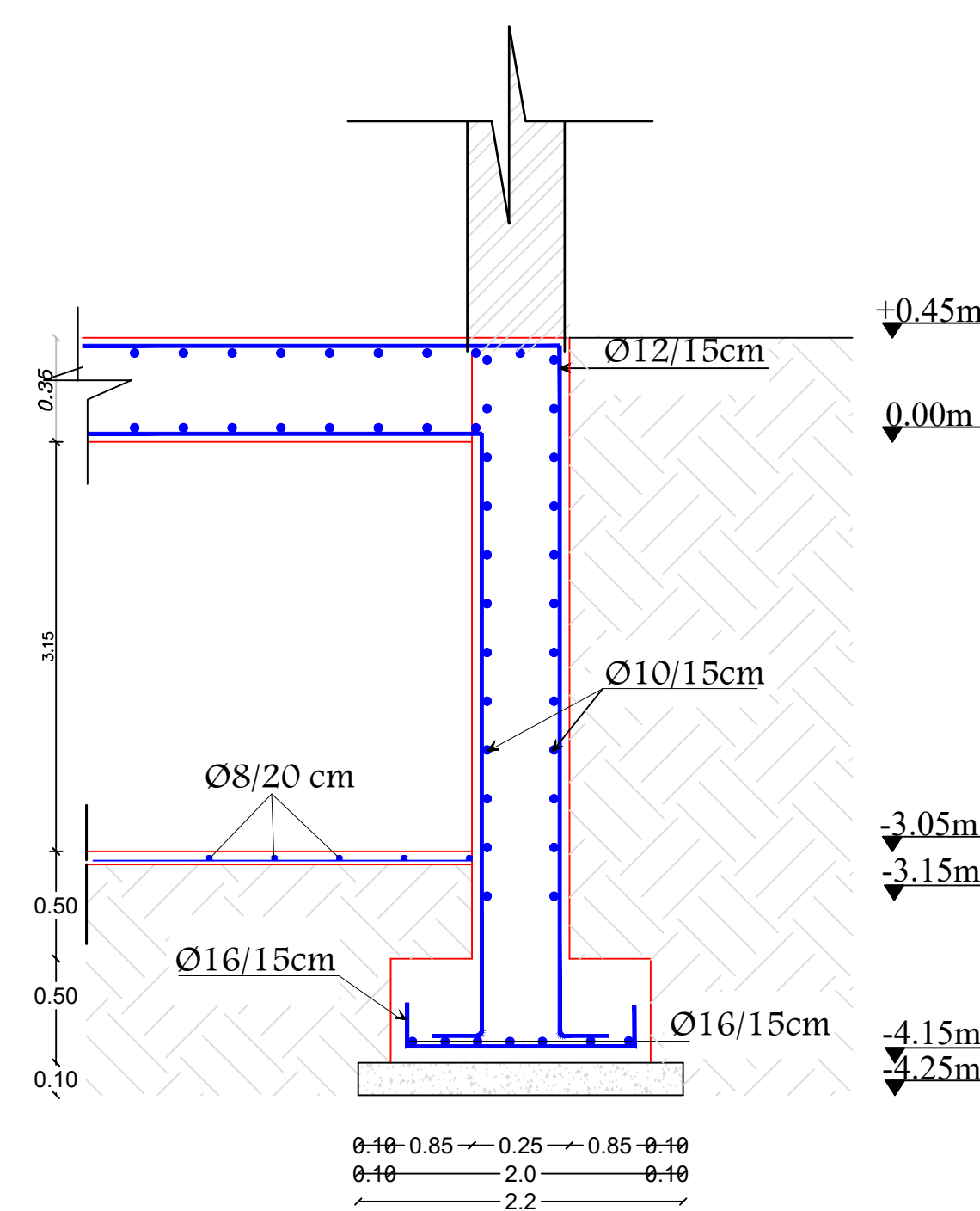
*Osama Abu E'ram*

*Ali Badawi*

SCALE	No. of DRAW	DATE
1/100	S12	21/8/2022

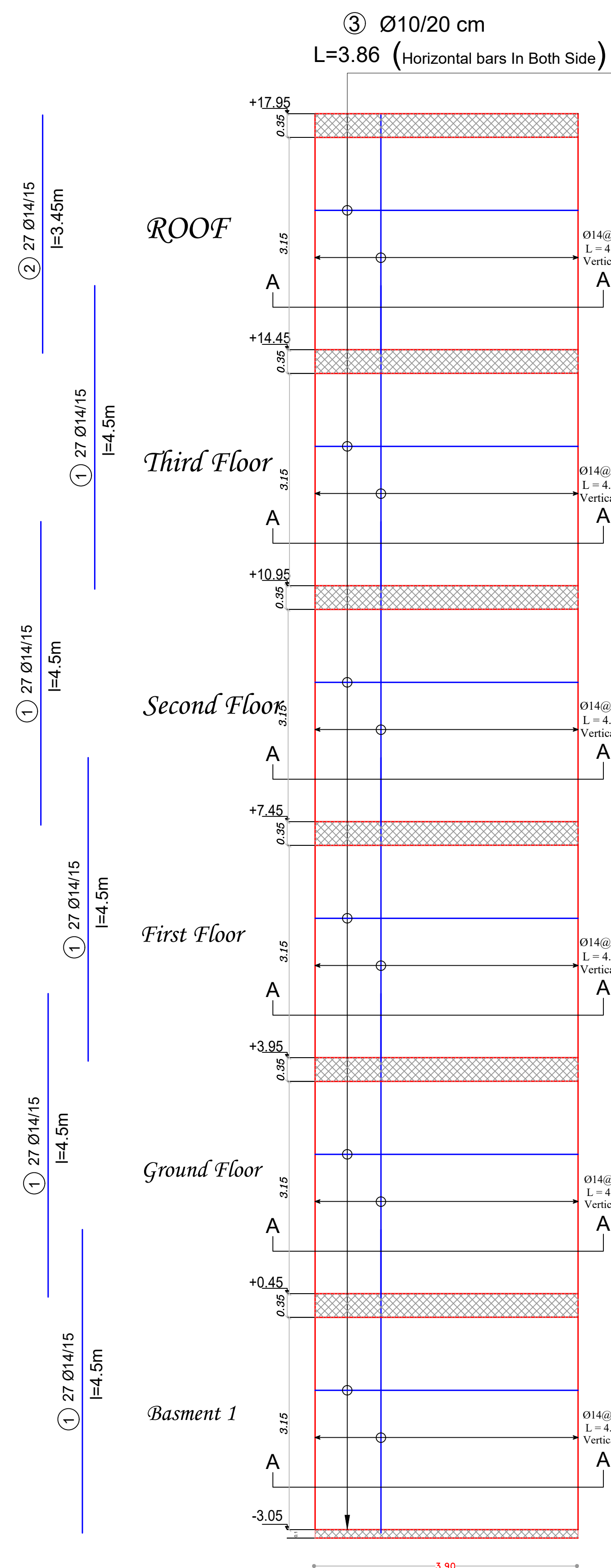
## SECTION 1-1

## B.W



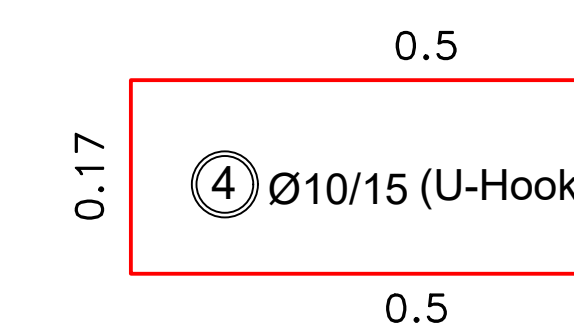
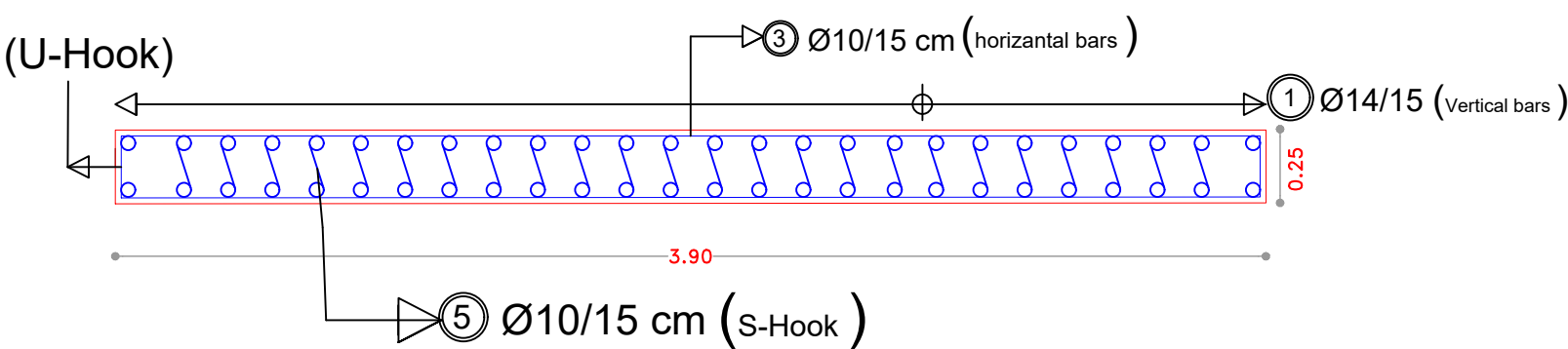
Scale:1/100

## S.W 1

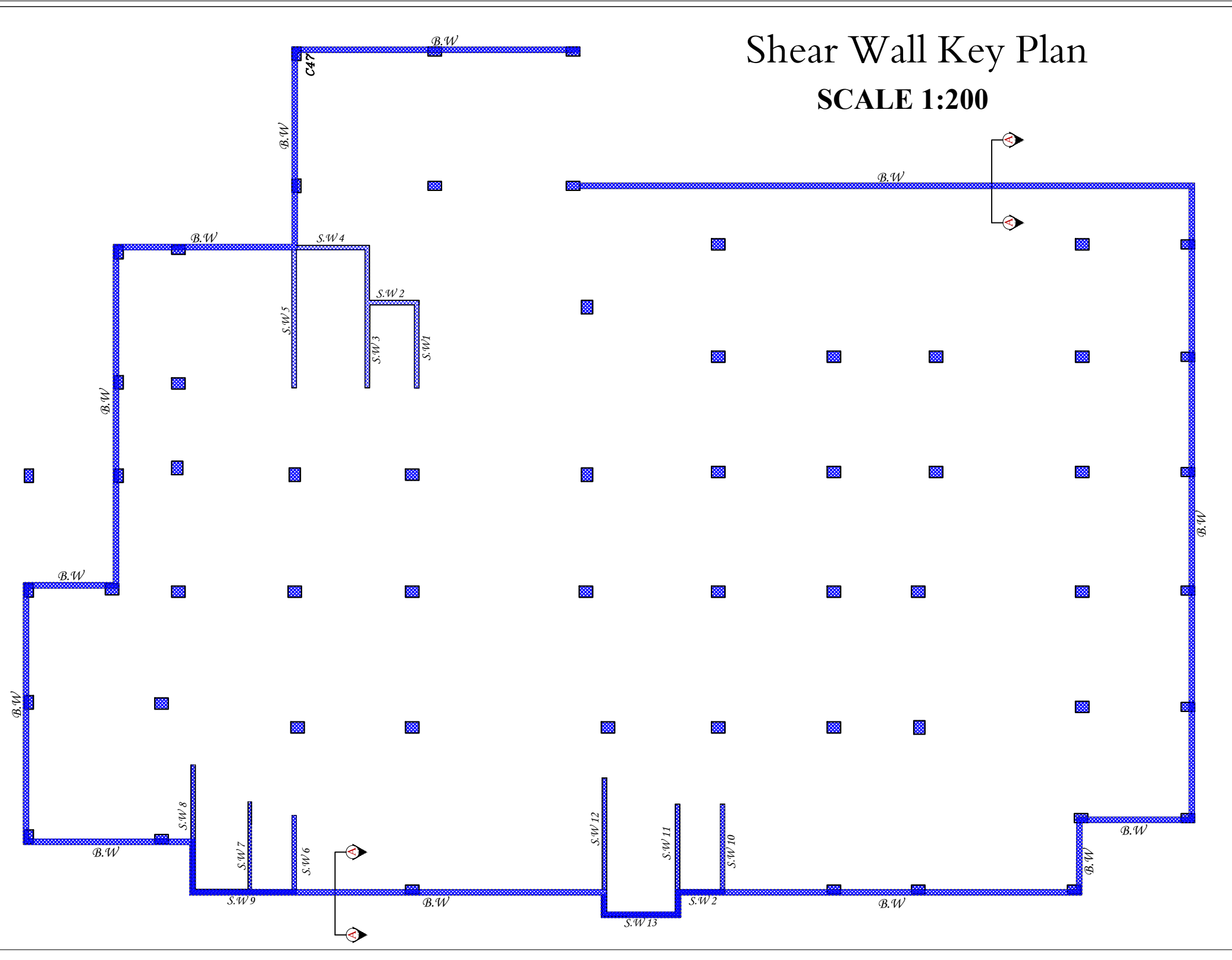


Scale:1/50

## section(A-A)

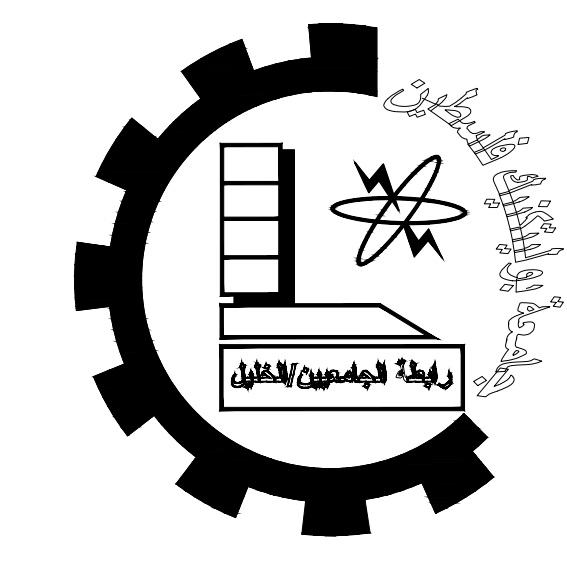
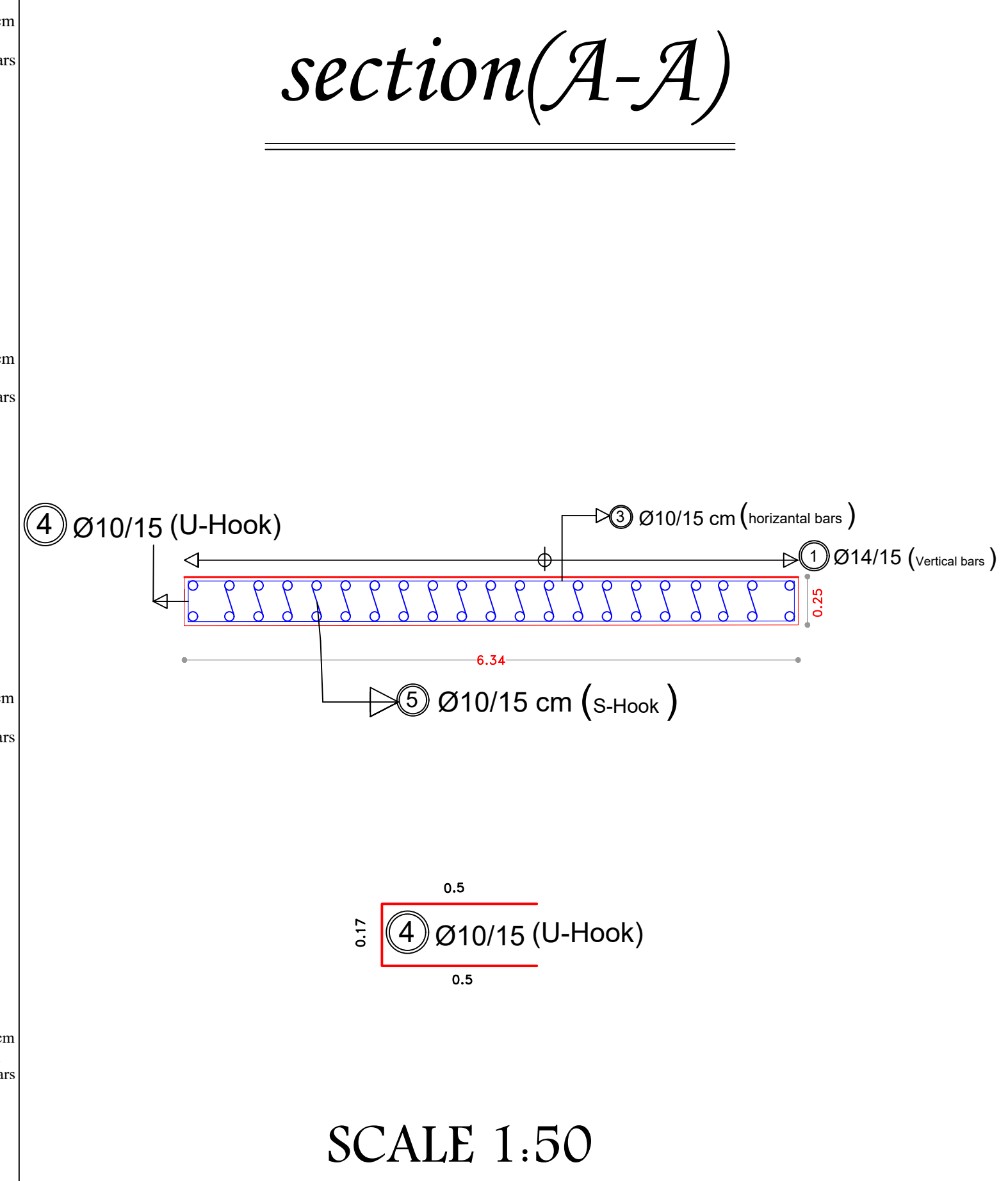
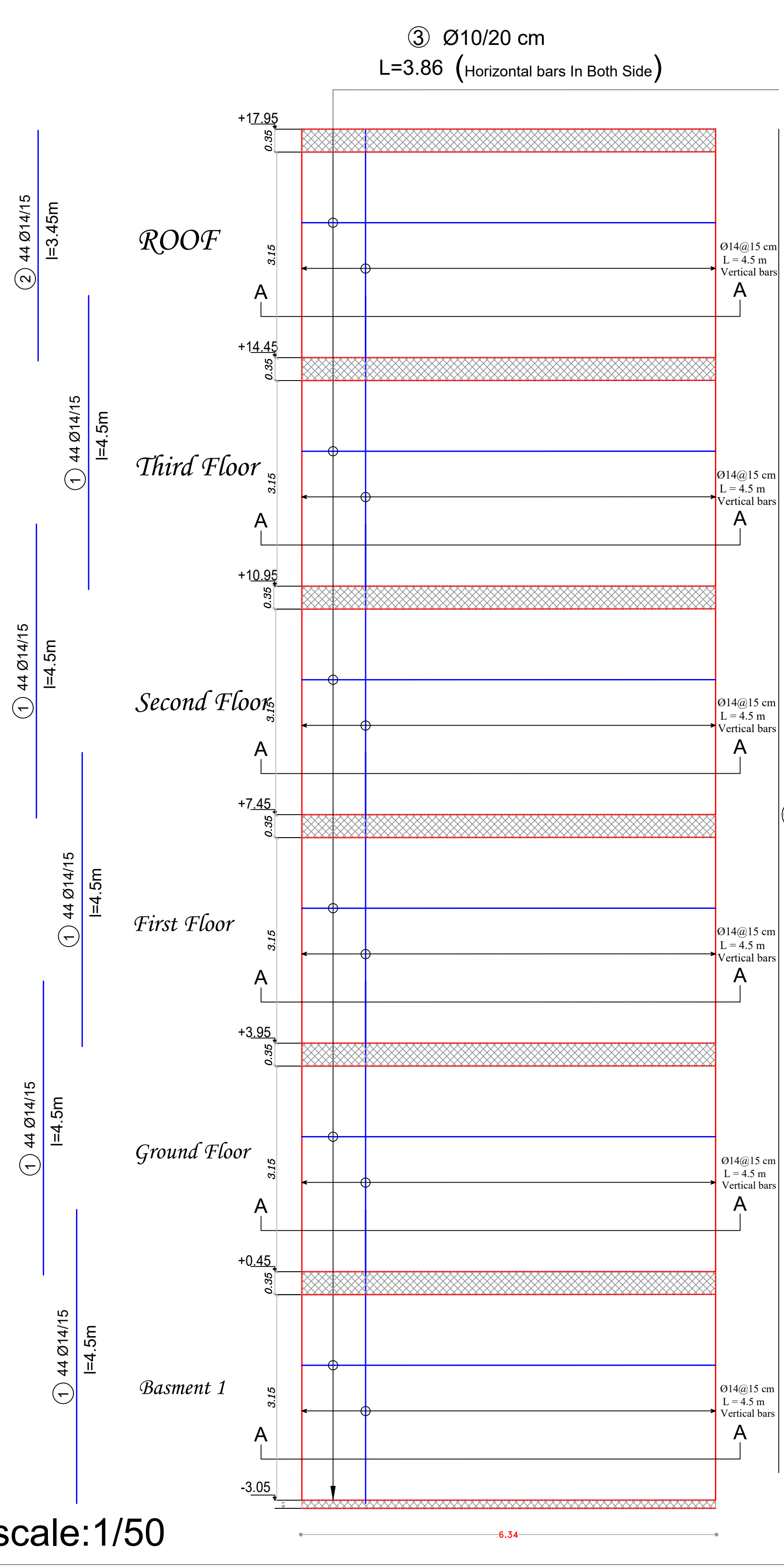
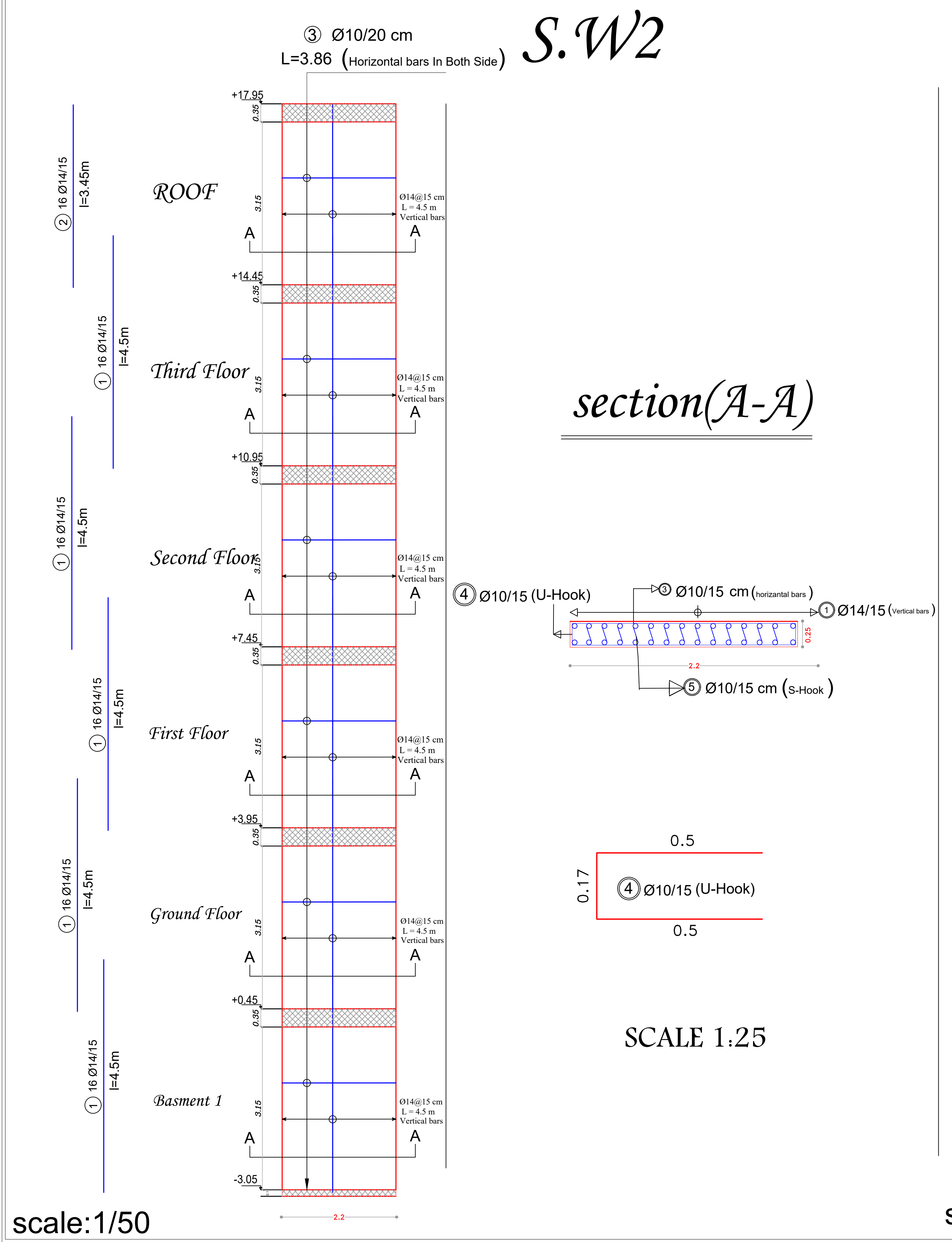


SCALE 1:25

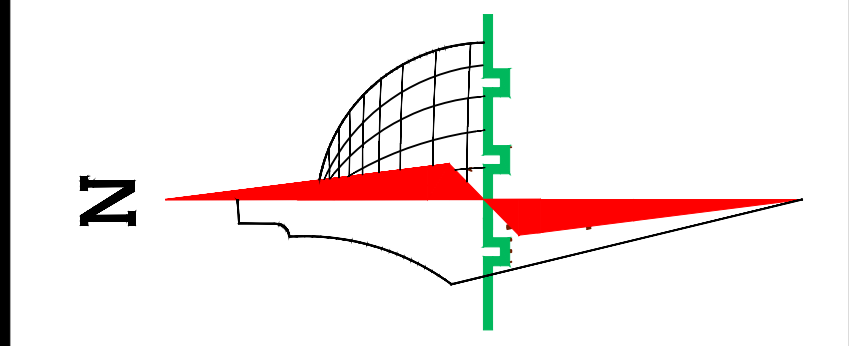


# Shear walls 2 & 3

S.W3



Palestine Polytechnic University  
 Engineering College  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



**Legend :**

Stone	Gravel
R.Concrete	Wood
Concrete	HEXAGONAL TILES
Hollow Block	BAKLAVA TILES
isolating materials	GRASS

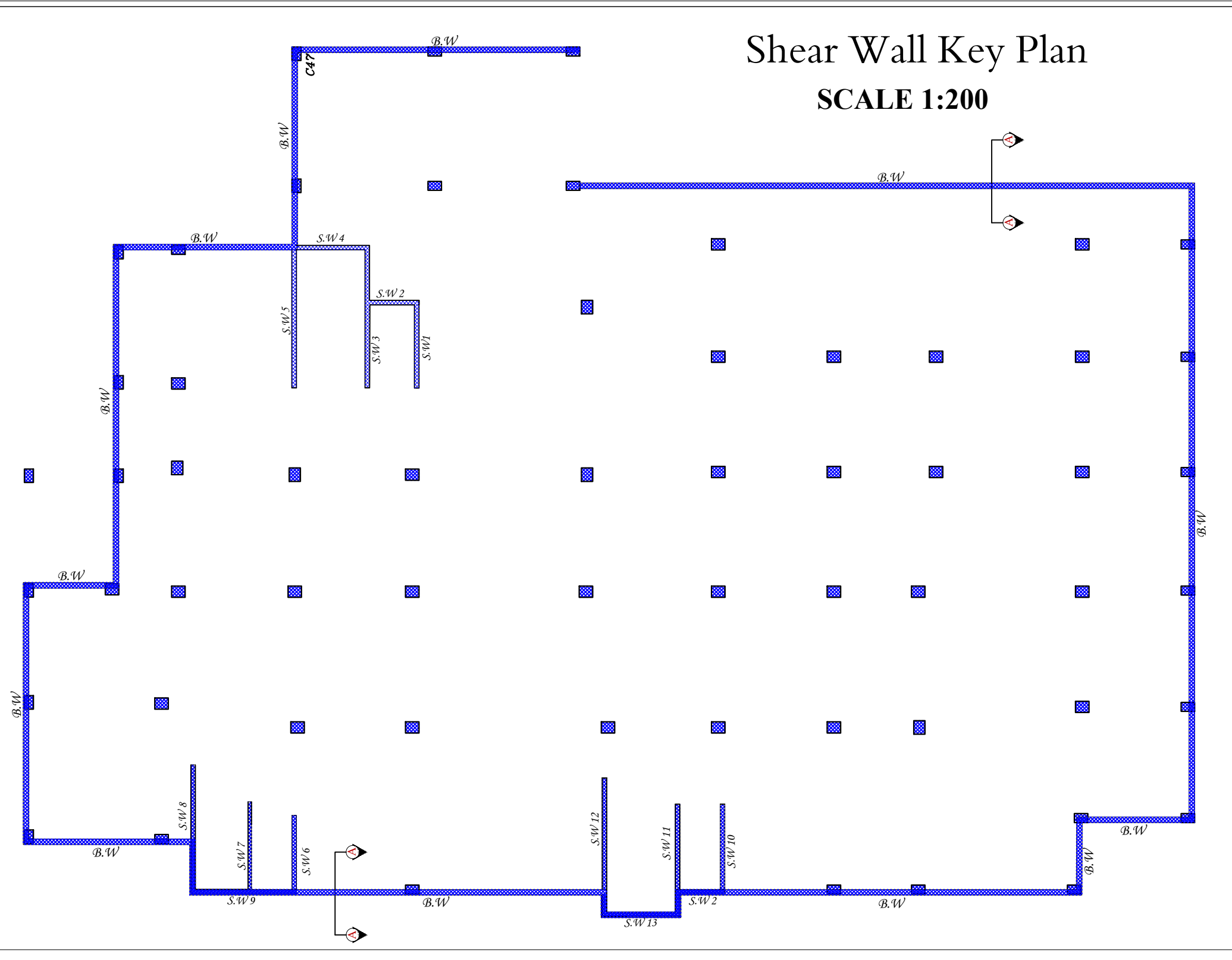
DRAWING TITLE :  
**Shear walls 2&3**  
 Supervisor  
 Dr.Maher Amro.

Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S13	21/8/2022

scale:1/50

scale:1/50

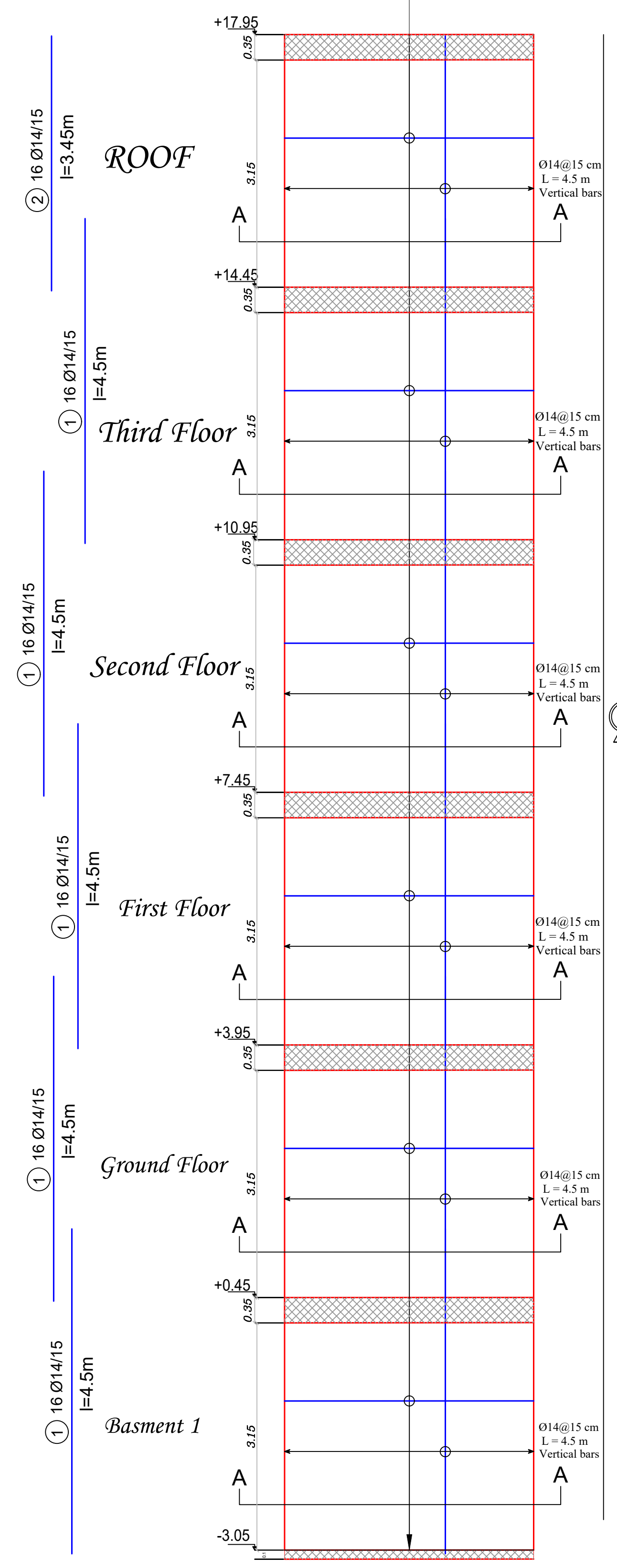


# Shear walls 4 & 5

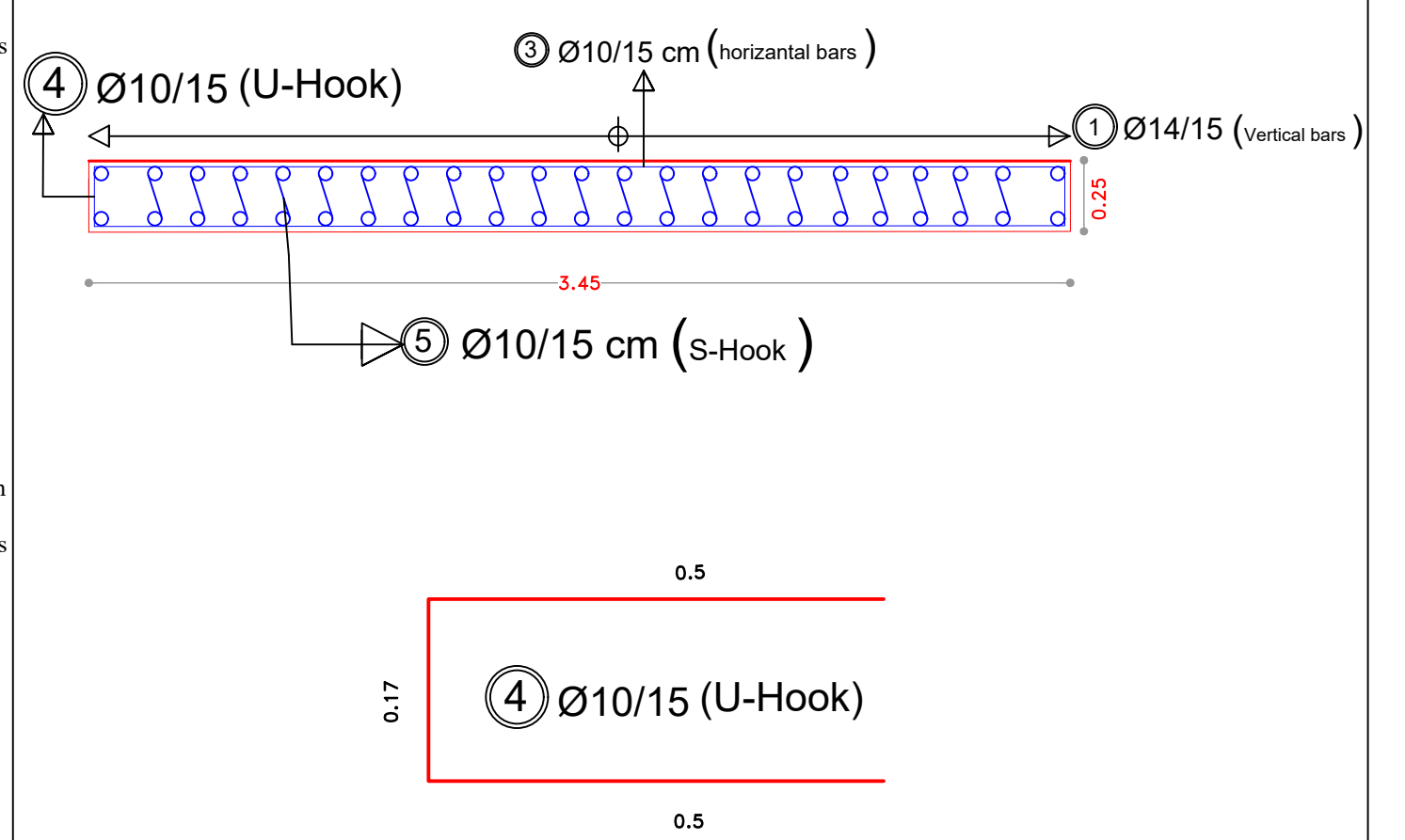
S.W 5

③ Ø10/20 cm  
L=3.86 (Horizontal bars In Both Side) **S.W 4**

③ Ø10/20 cm  
L=3.86 (Horizontal bars In Both Side)

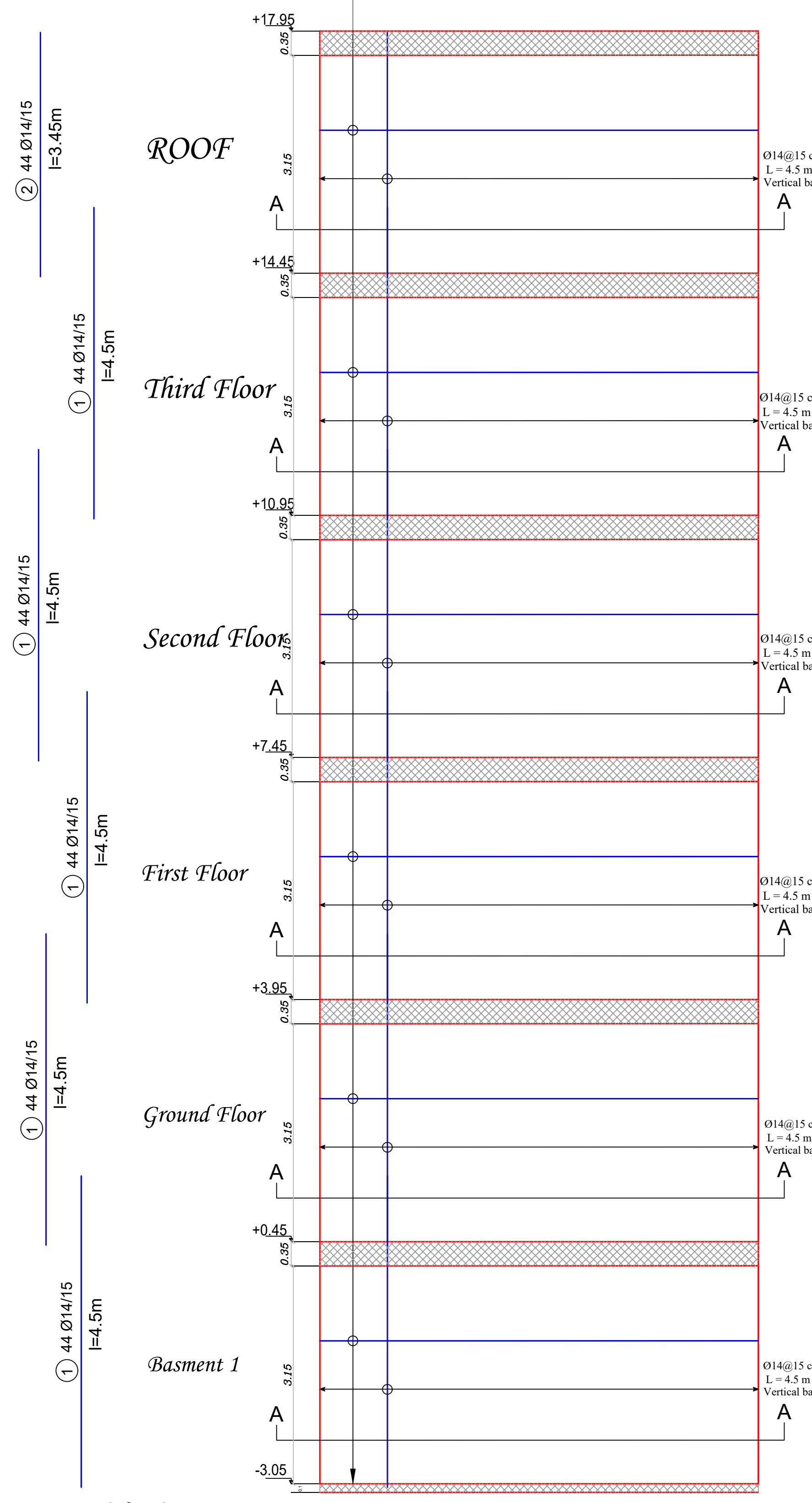


*section(A-A)*

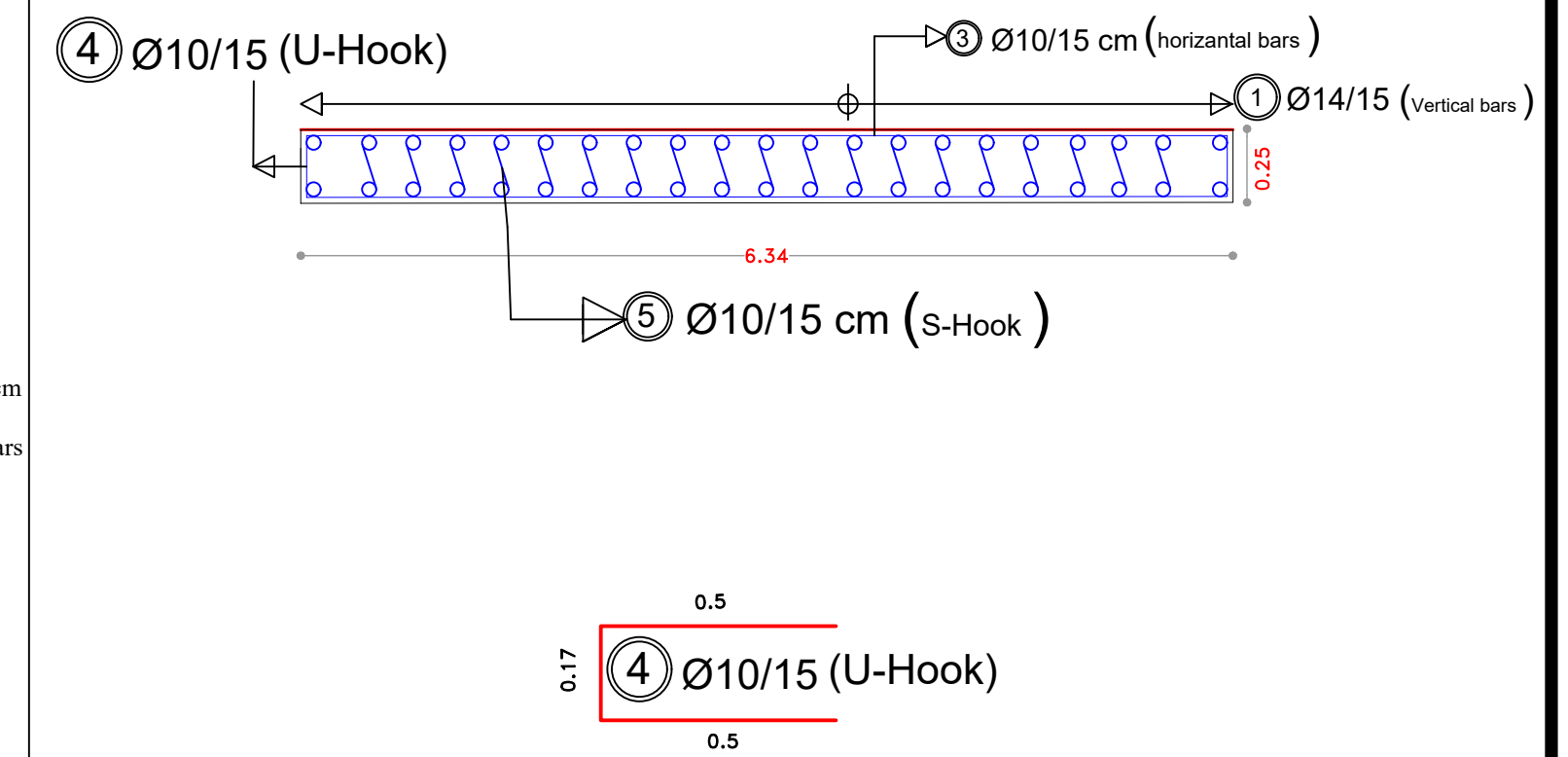


SCALE 1:25

scale:1/50

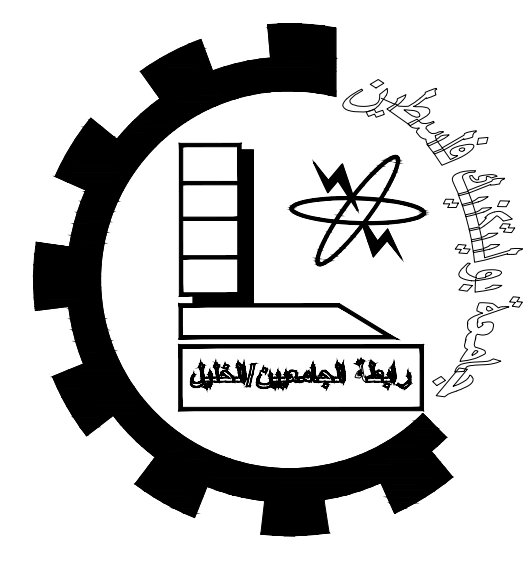


*section(A-A)*

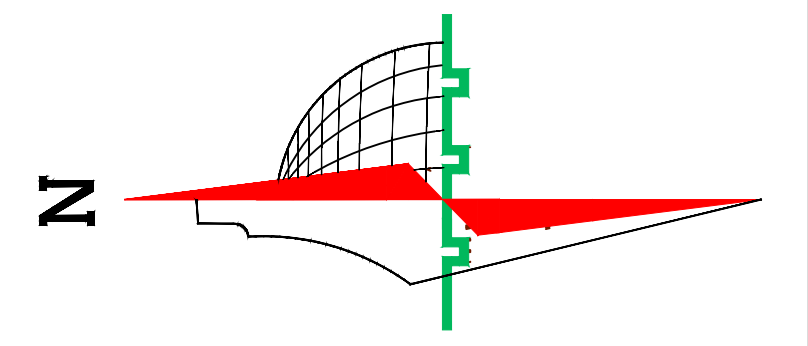


SCALE 1:50

scale:1/50



Palestine Polytechnic University  
Engineering College  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materiales
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

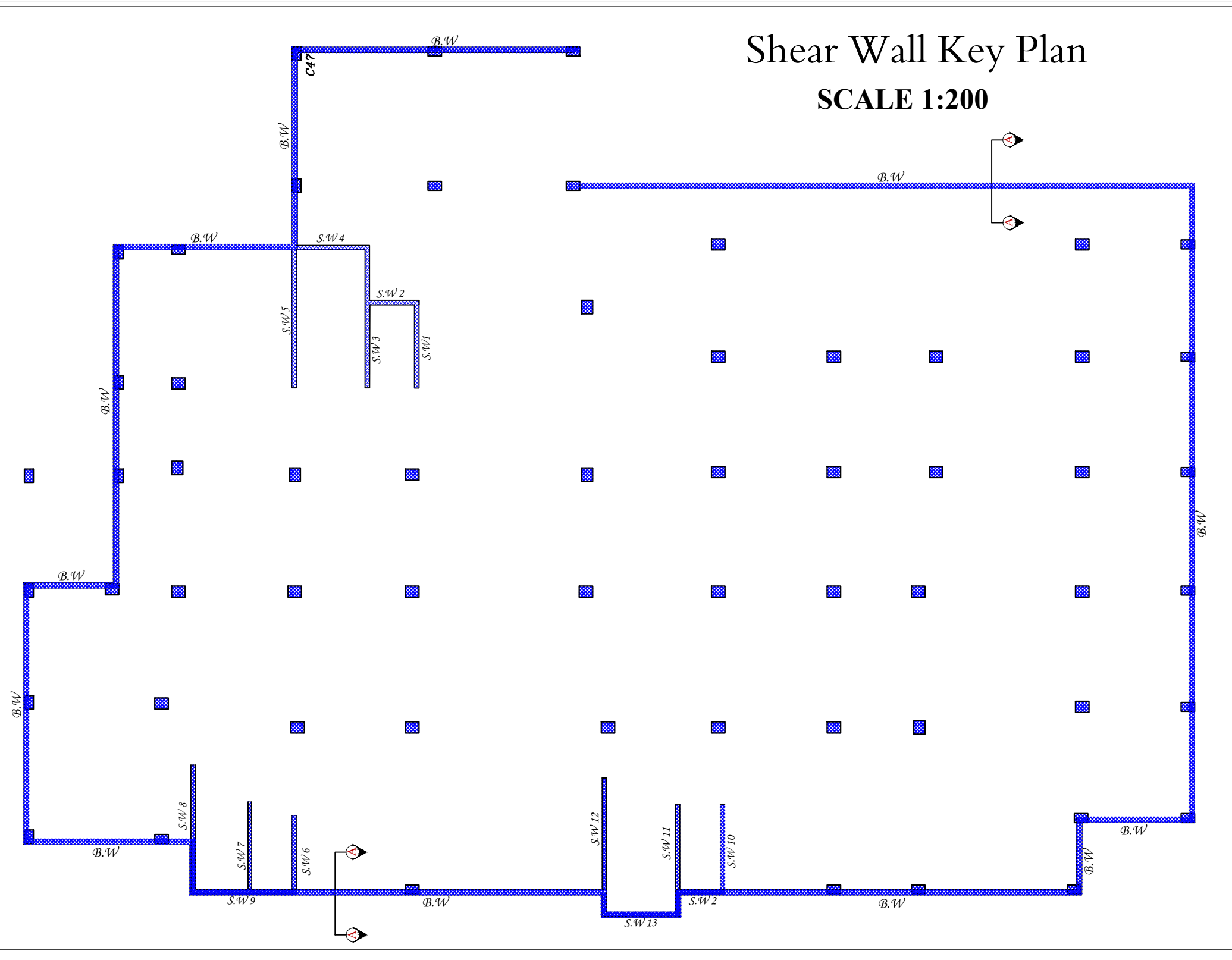
DRAWING TITLE :

*Shear walls 4 & 5*

Supervisor  
Dr.Maher Amro.

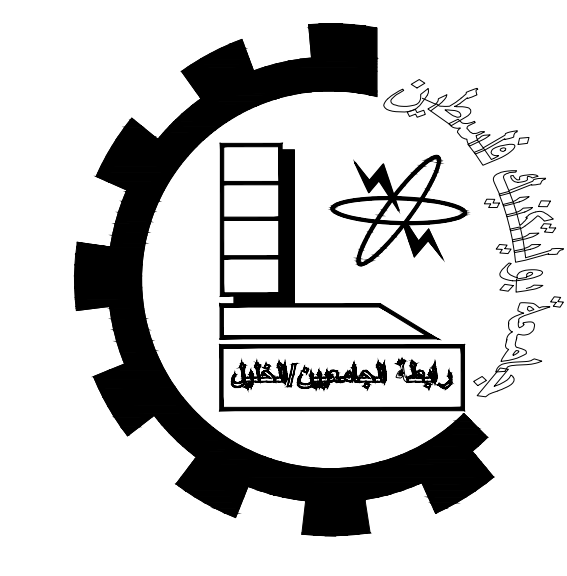
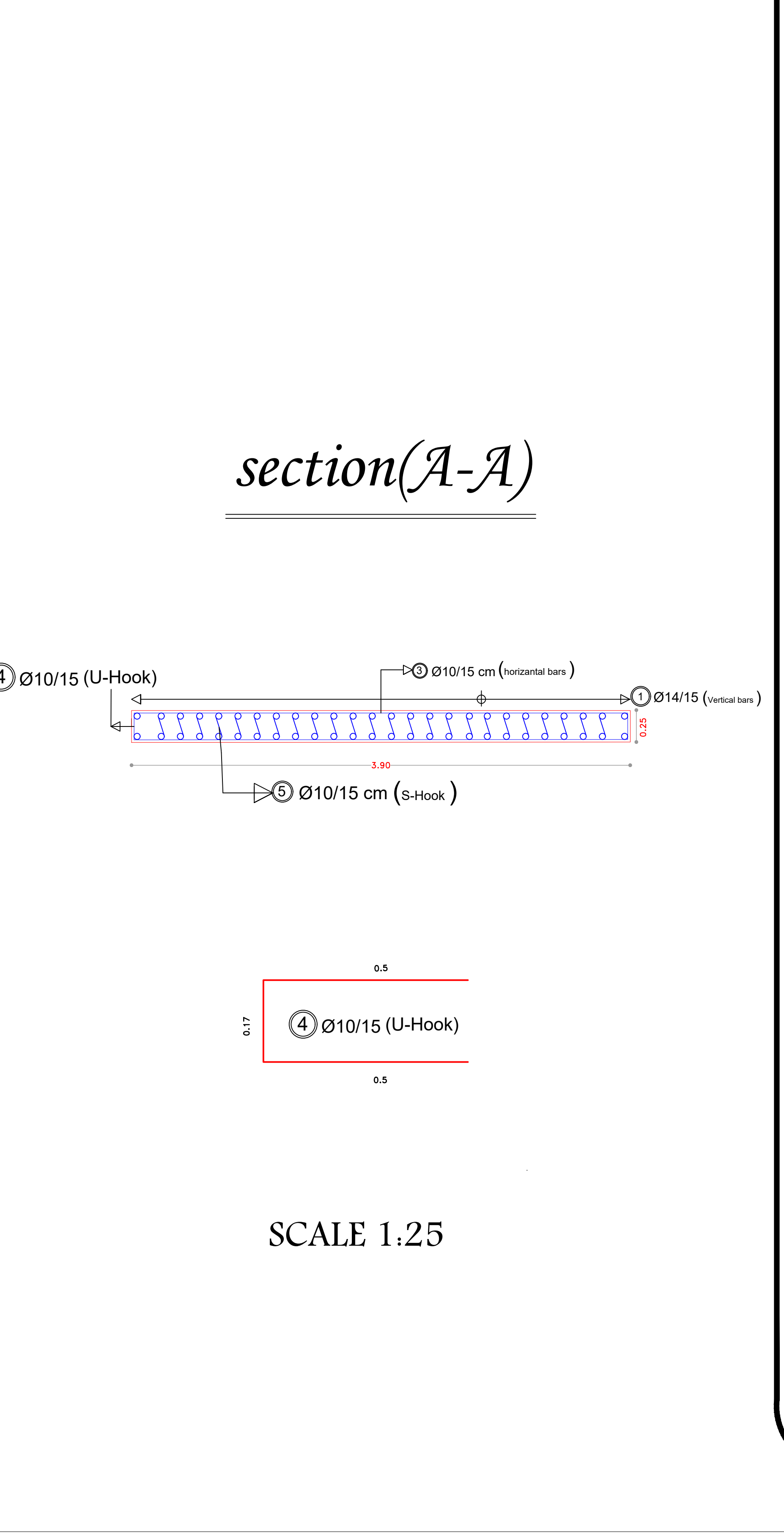
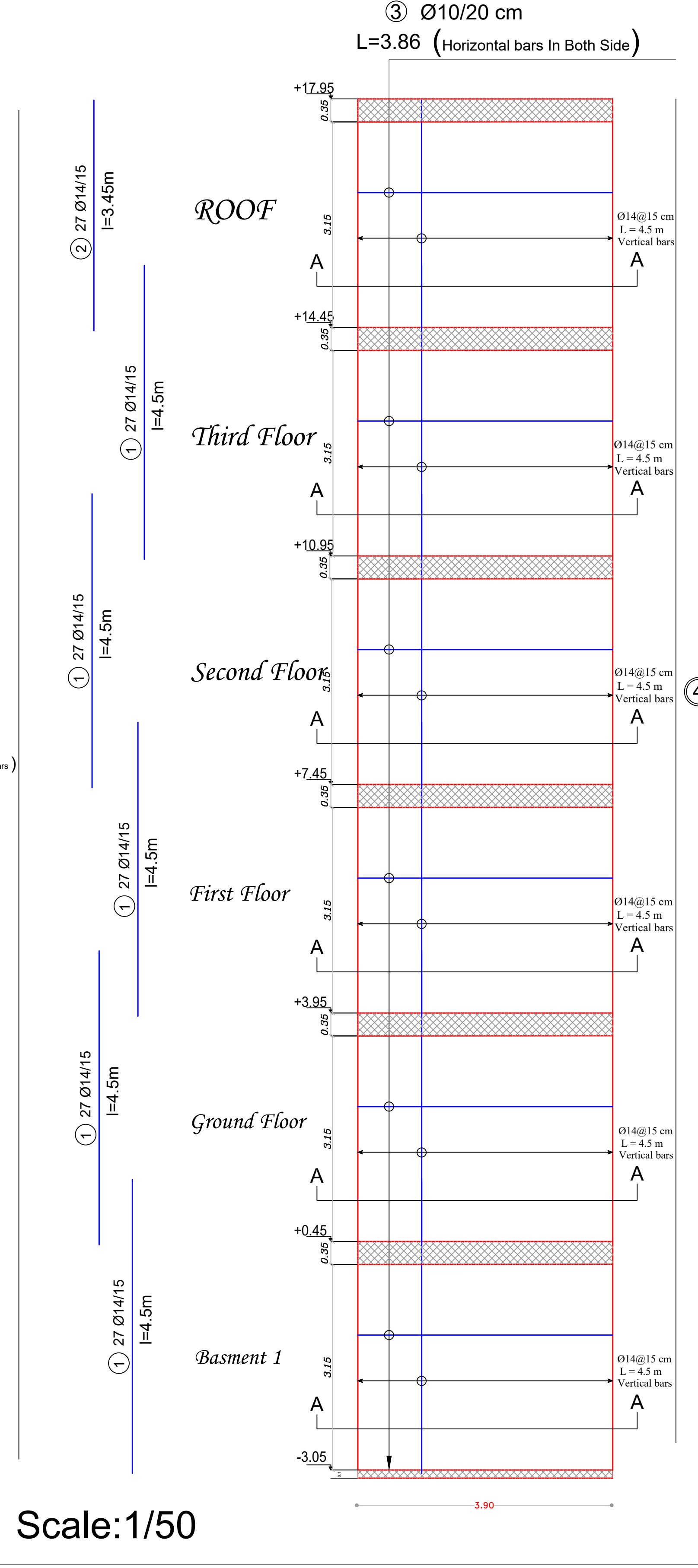
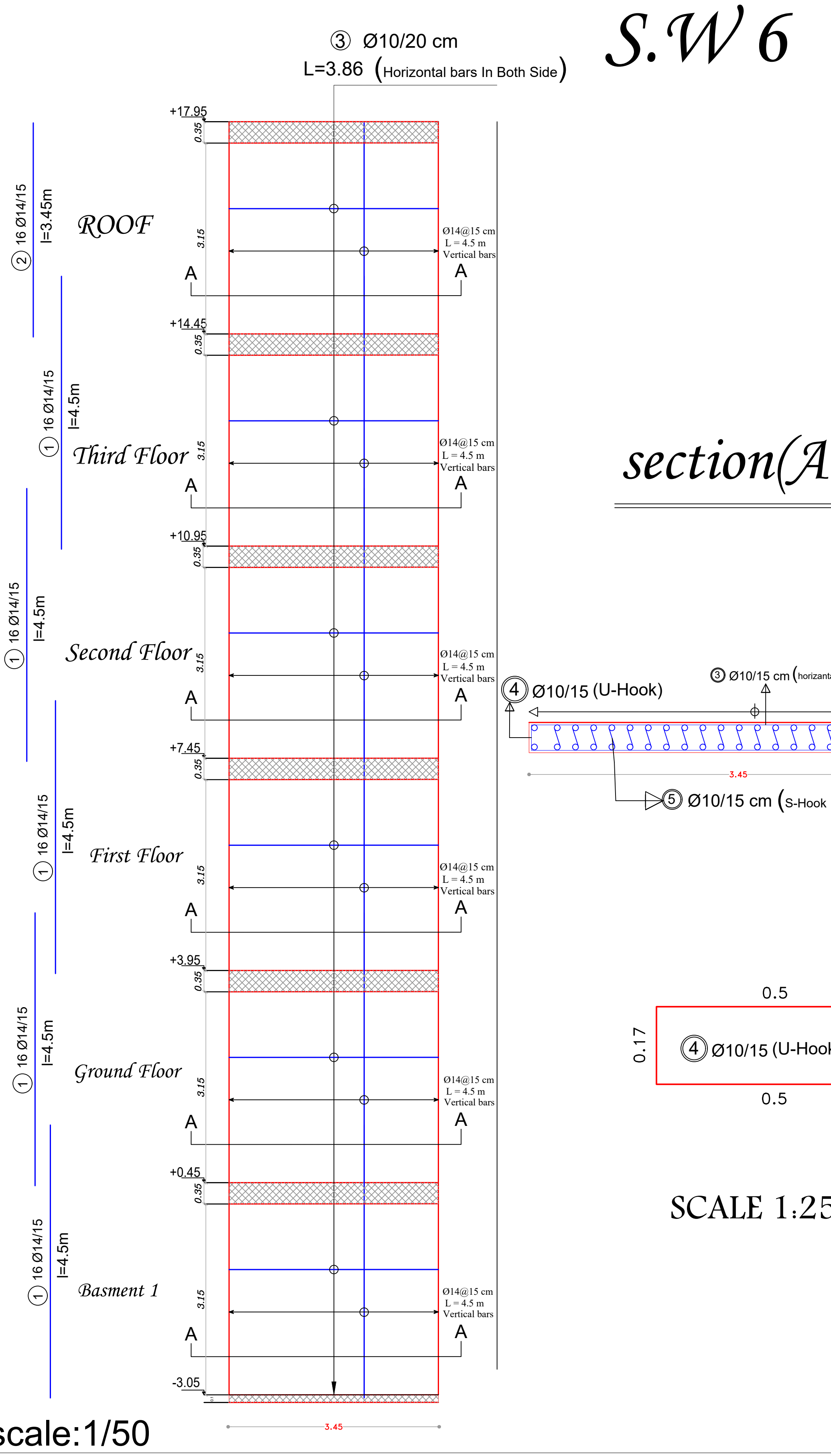
Done by :  
*Osama Abu E'ram*  
*Ali Badawi*

SCALE	No. of DRAW	DATE
1/100	S14	21/8/2022

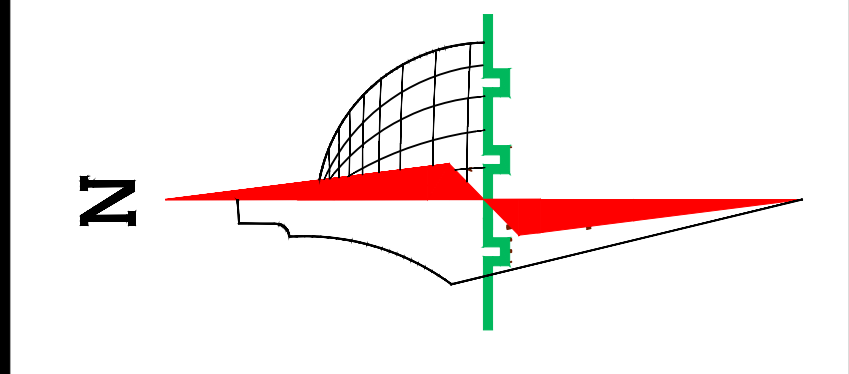


# Shear walls 6 & 7

S.W 7



Palestine Polytechnic University  
 Engineering College  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



**Legend :**

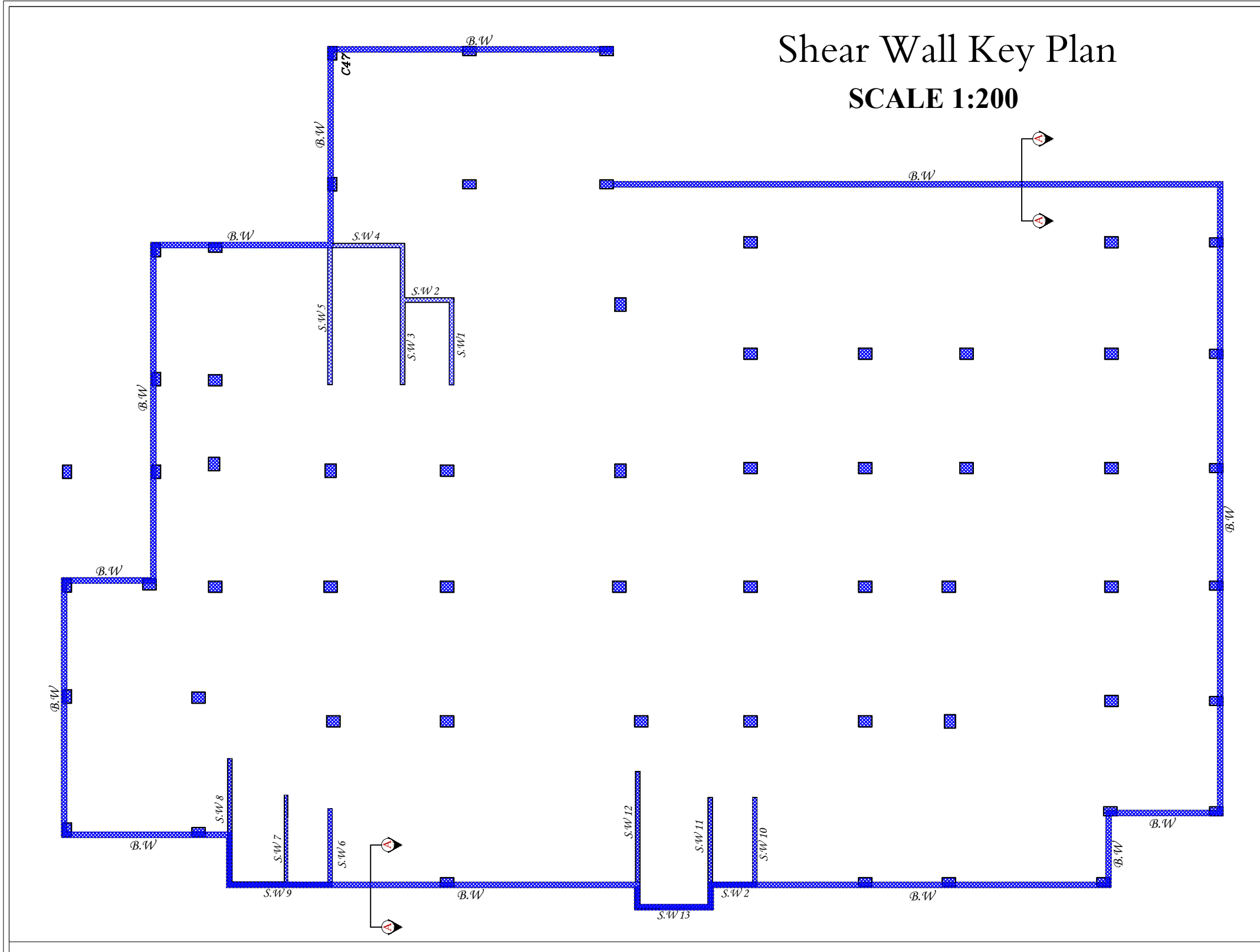
	Stone		Gravel
	R-Concrete		Wood
	Concrete		HEXAGONAL TILES
	Hollow Block		BAKLAVA TILES
	insulating materials		GRASS

DRAWING TITLE :  
**Shear walls 6 & 7**

Supervisor  
 Dr.Maher Amro.

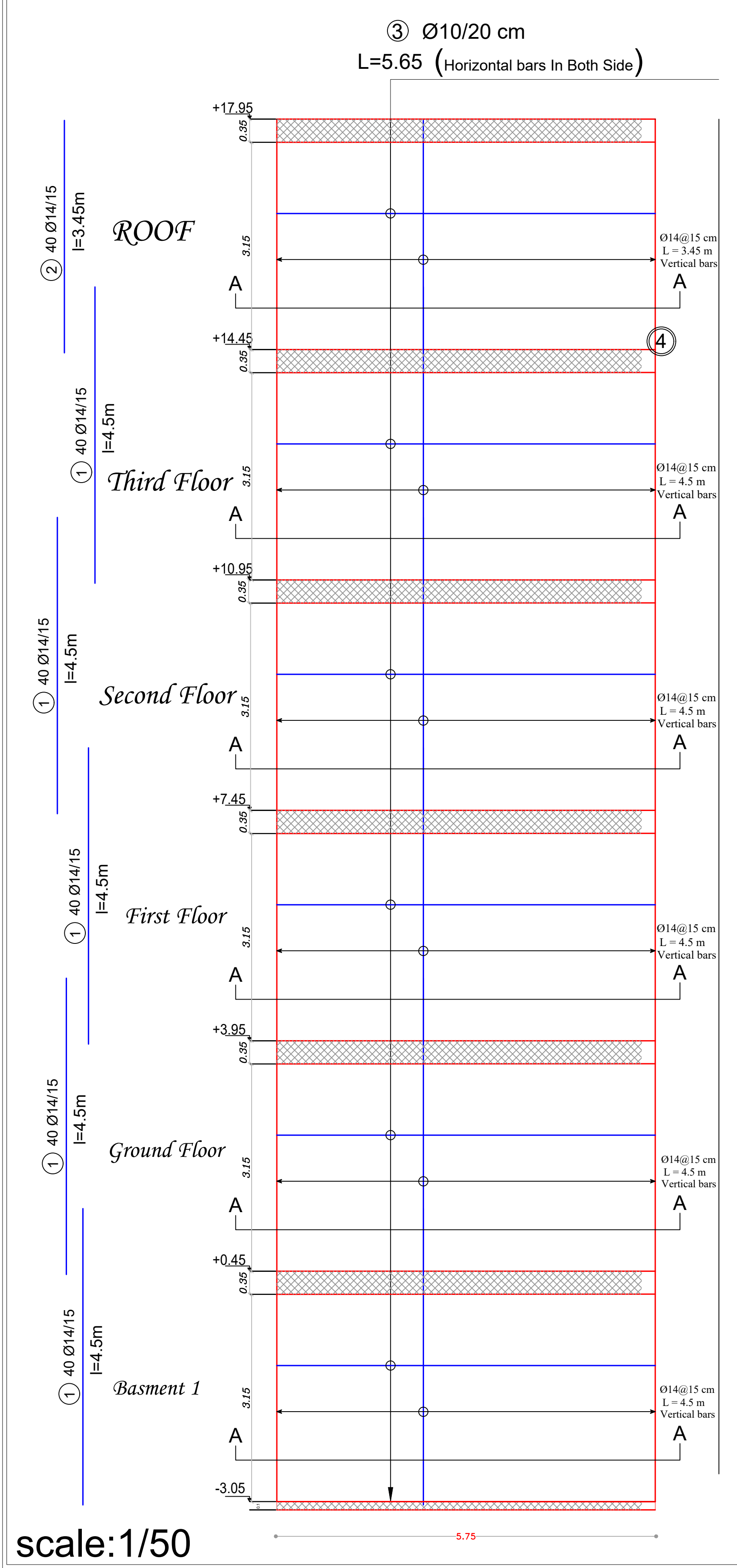
Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S15	21/8/2022



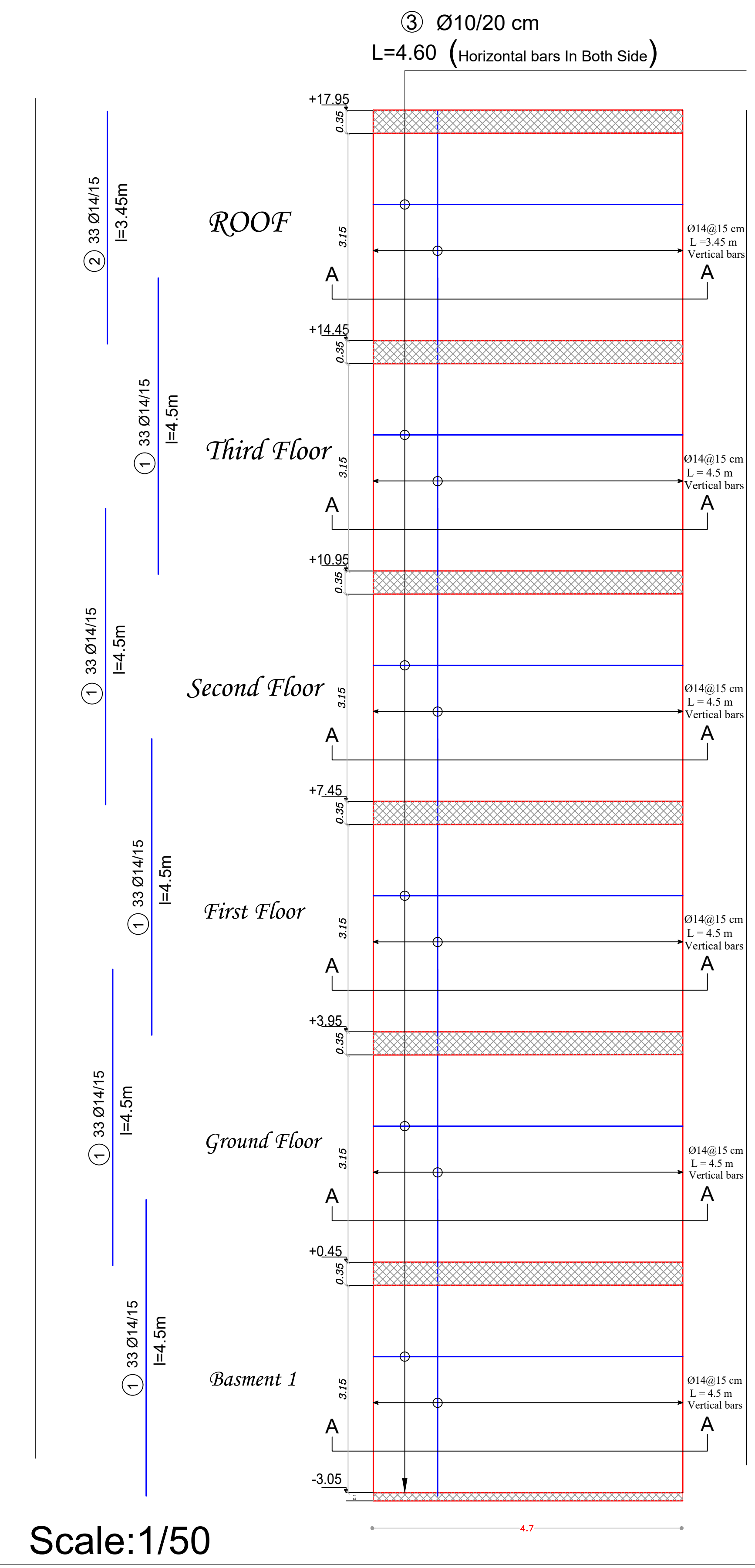
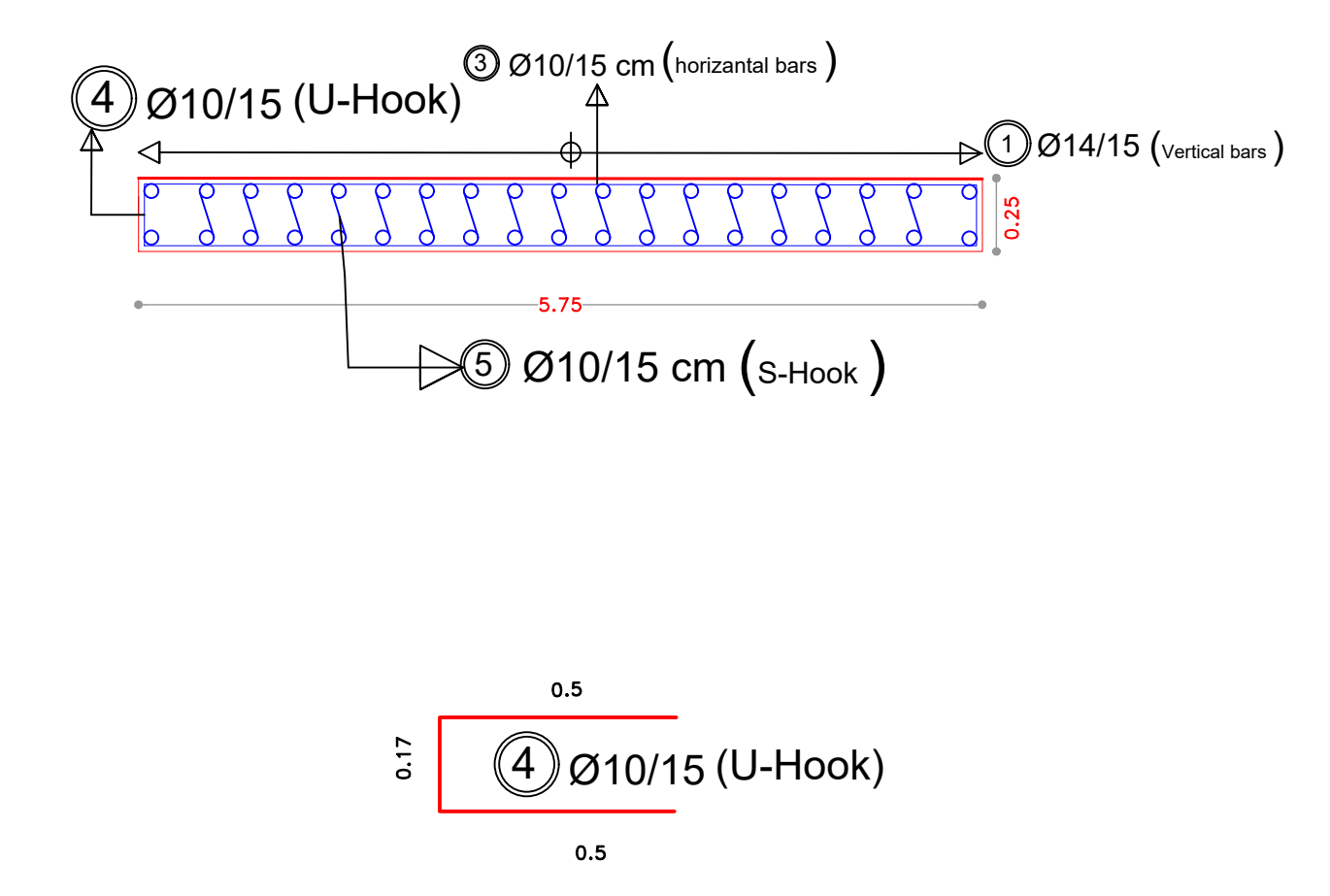
# Shear walls 8 & 9

S.W 9

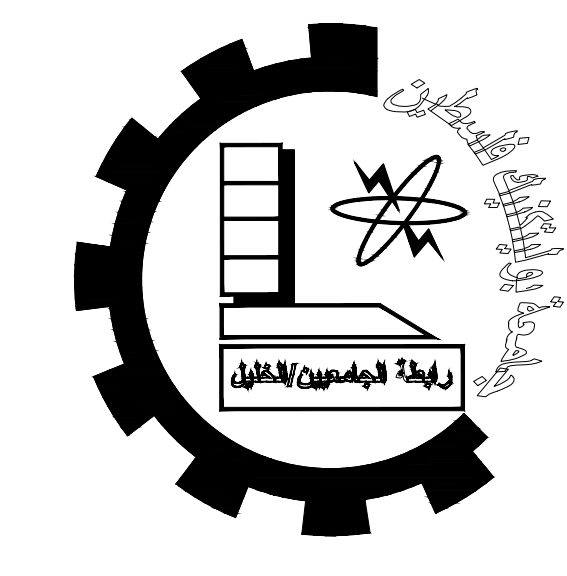
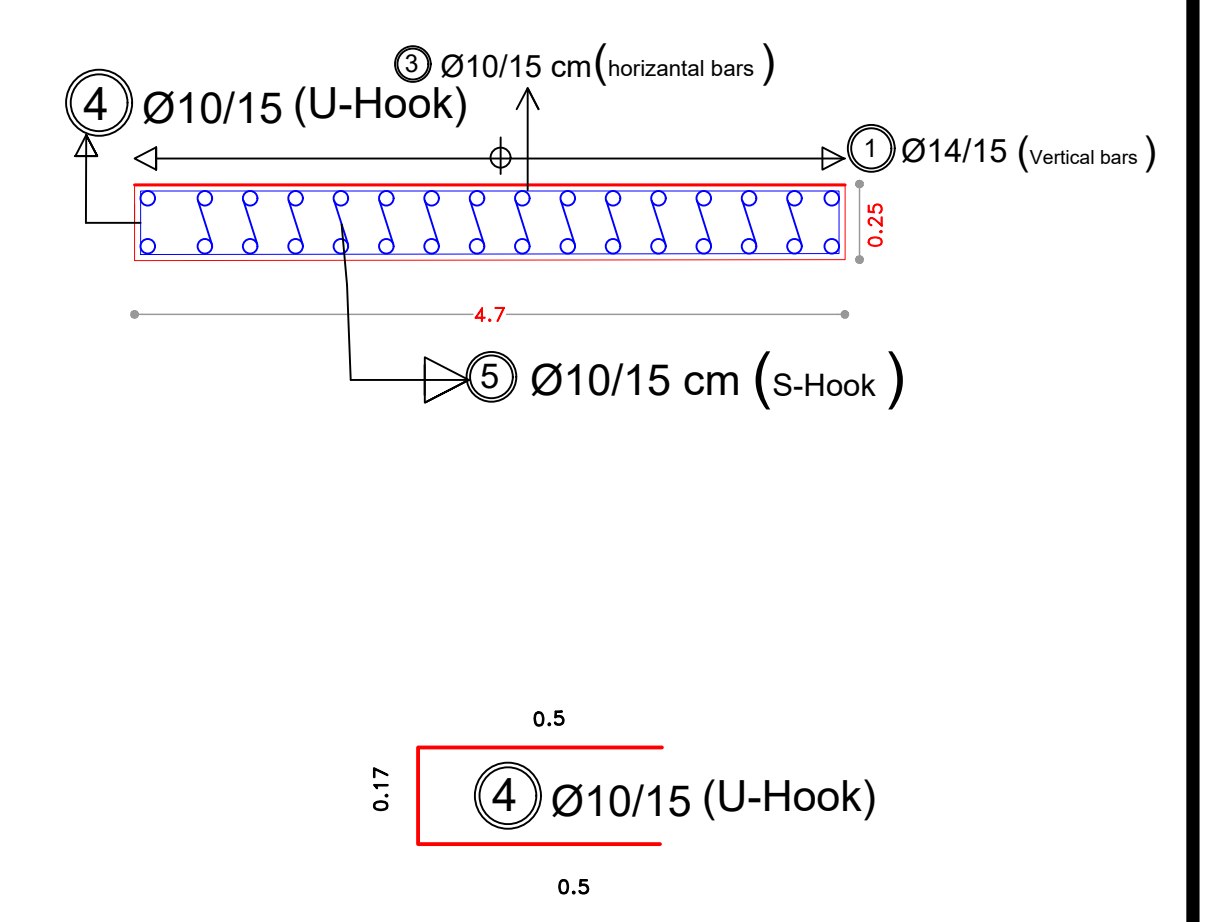


S.W 8

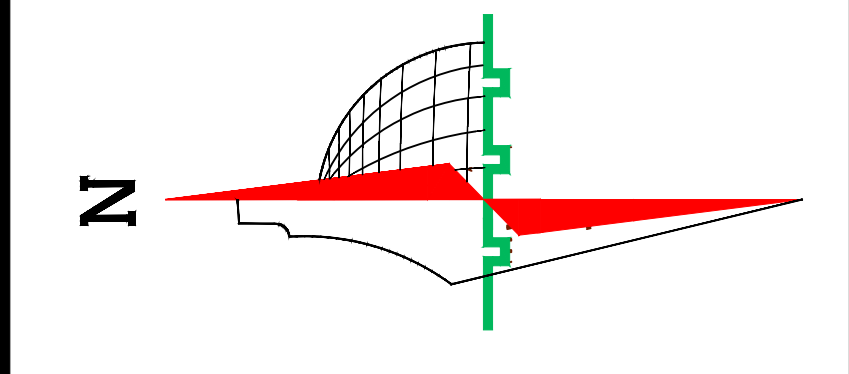
section(A-A)  
SCALE 1: 50



section(A-A)  
SCALE 1: 50



Palestine Polytechnic University  
Engineering College  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R-Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

DRAWING TITLE :  
**Shear walls 8 & 9**

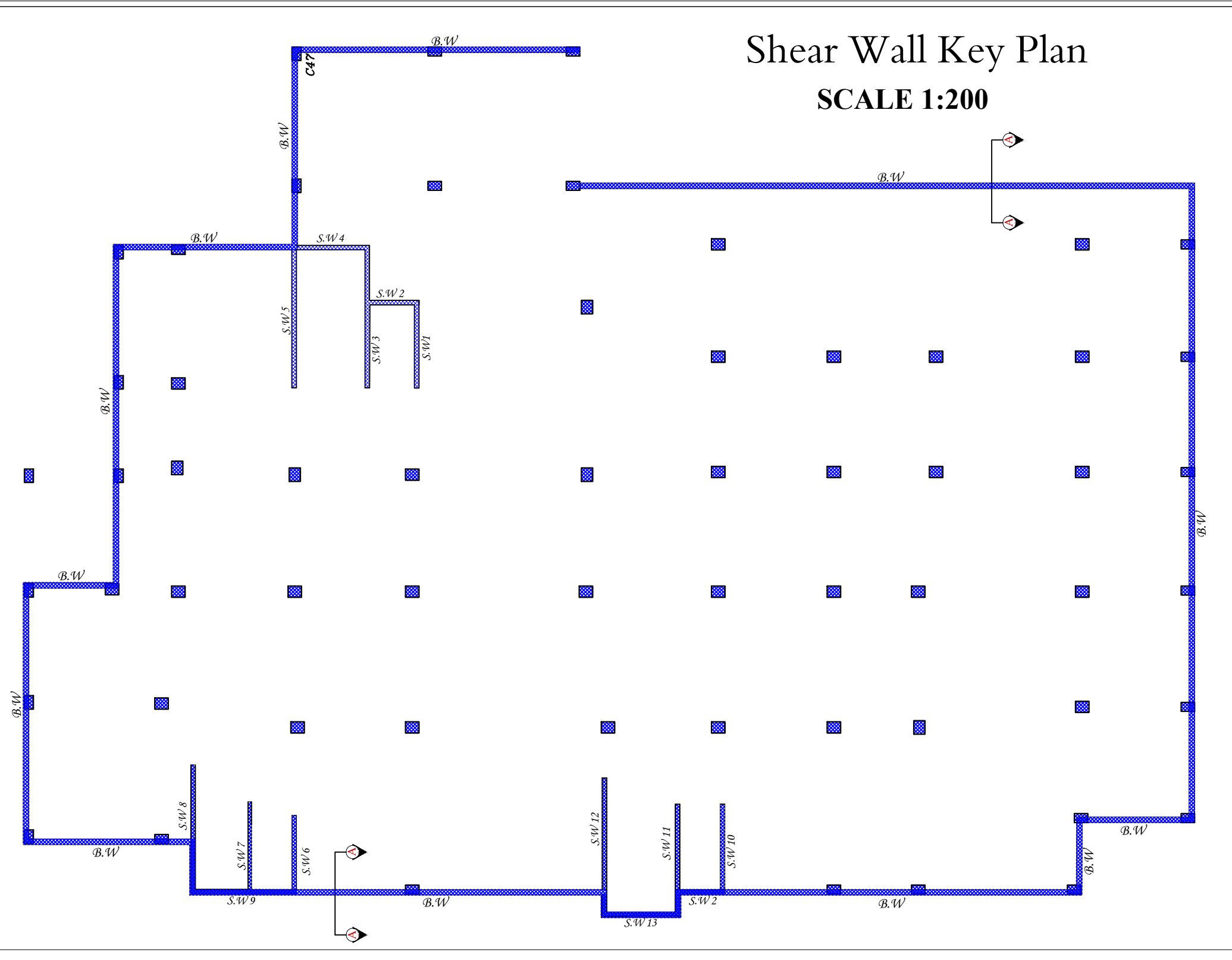
Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S16	21/8/2022

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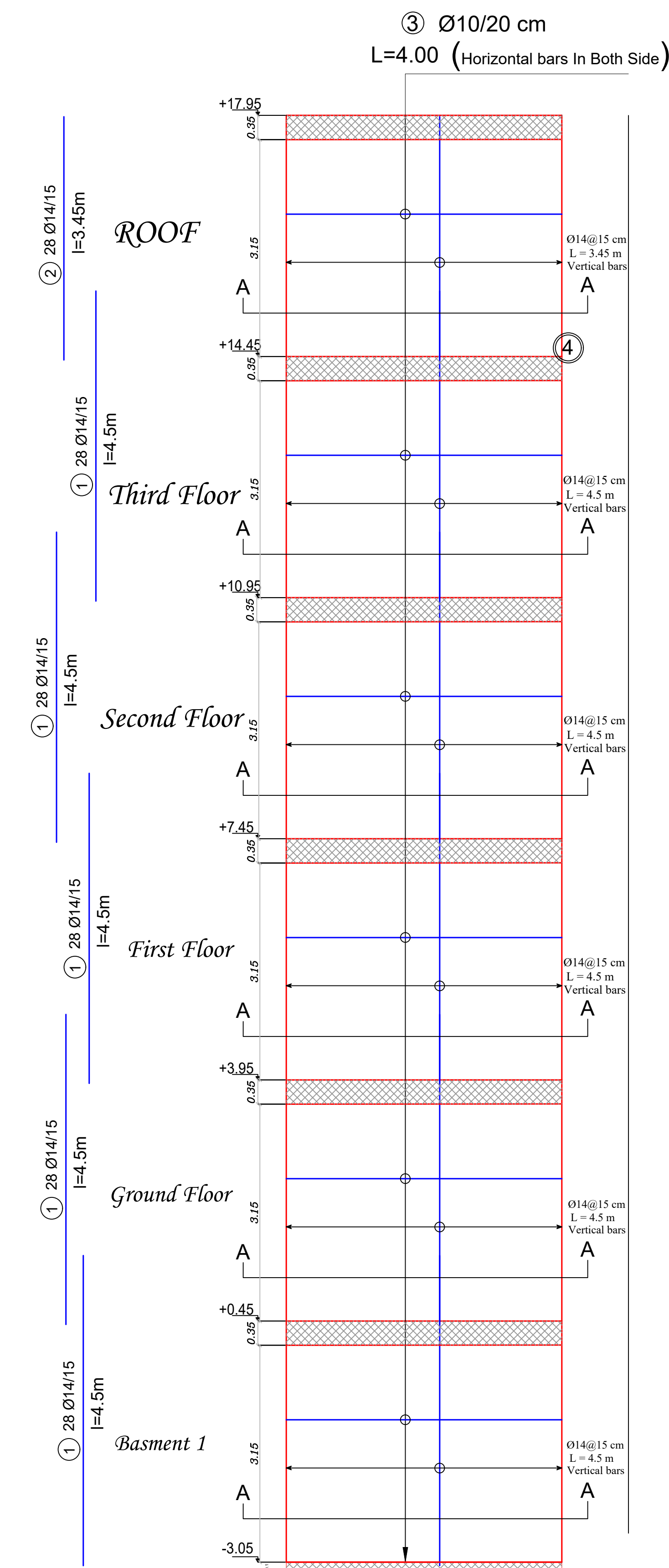
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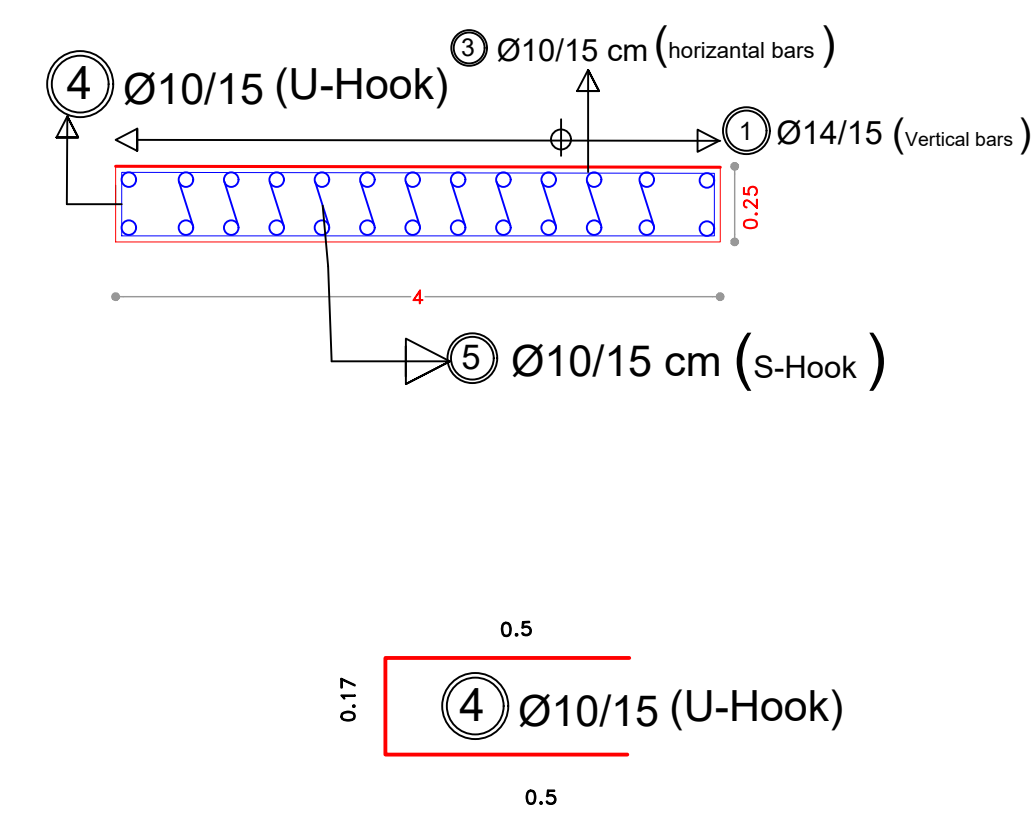
# Shear walls 10 & 11

S.W 11

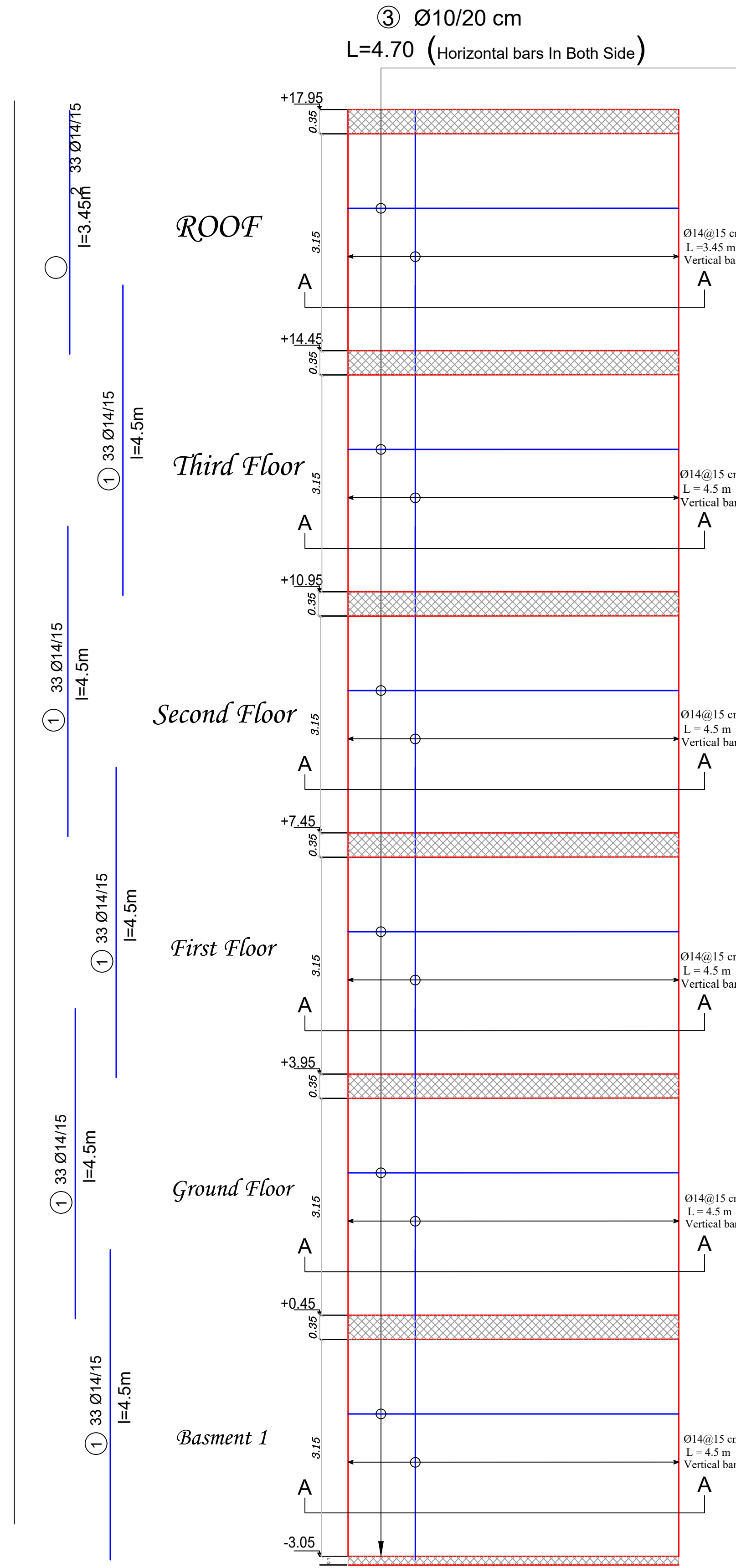
S.W 10



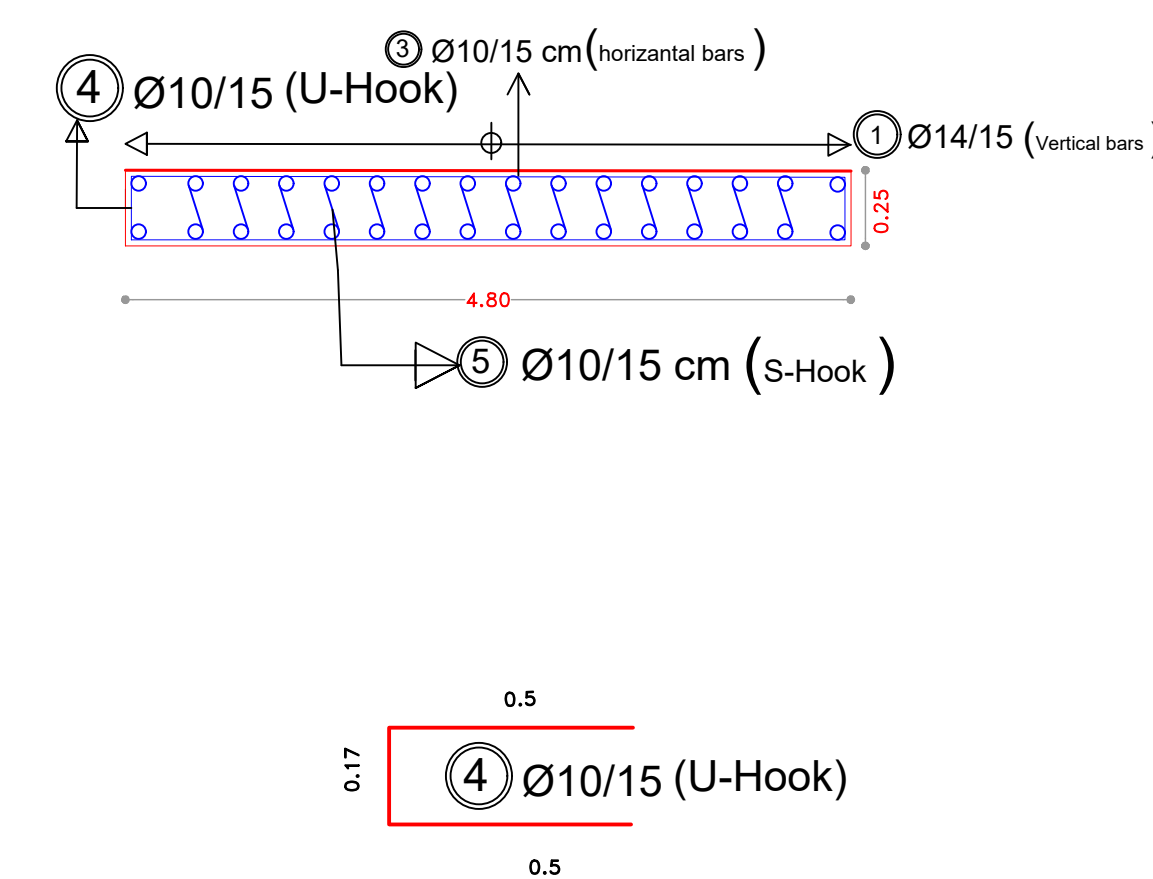
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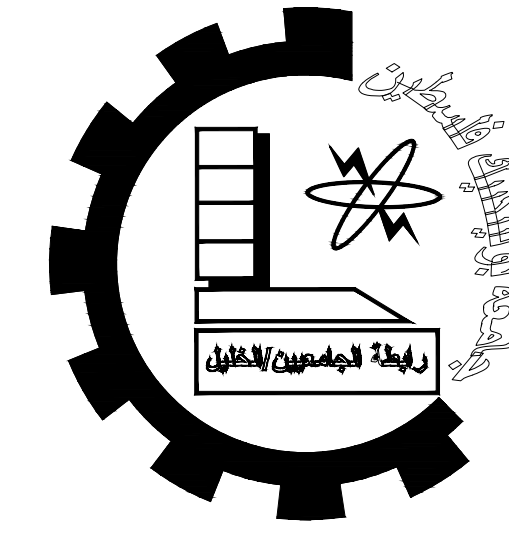
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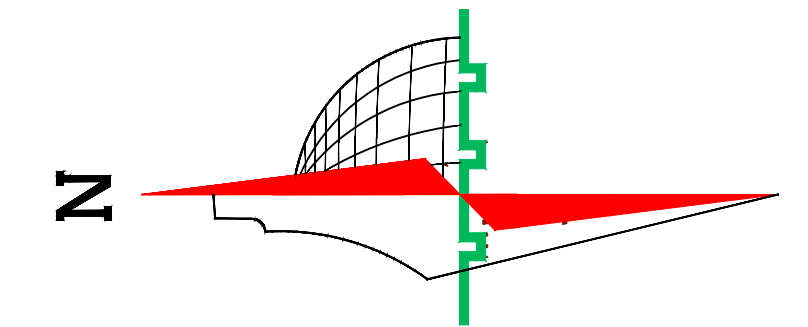
section(A-A)  
SCALE 1: 50



Scale:1/50



Palestine Polytechnic University  
Engineering College  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Shear walls 10 & 11

Supervisor

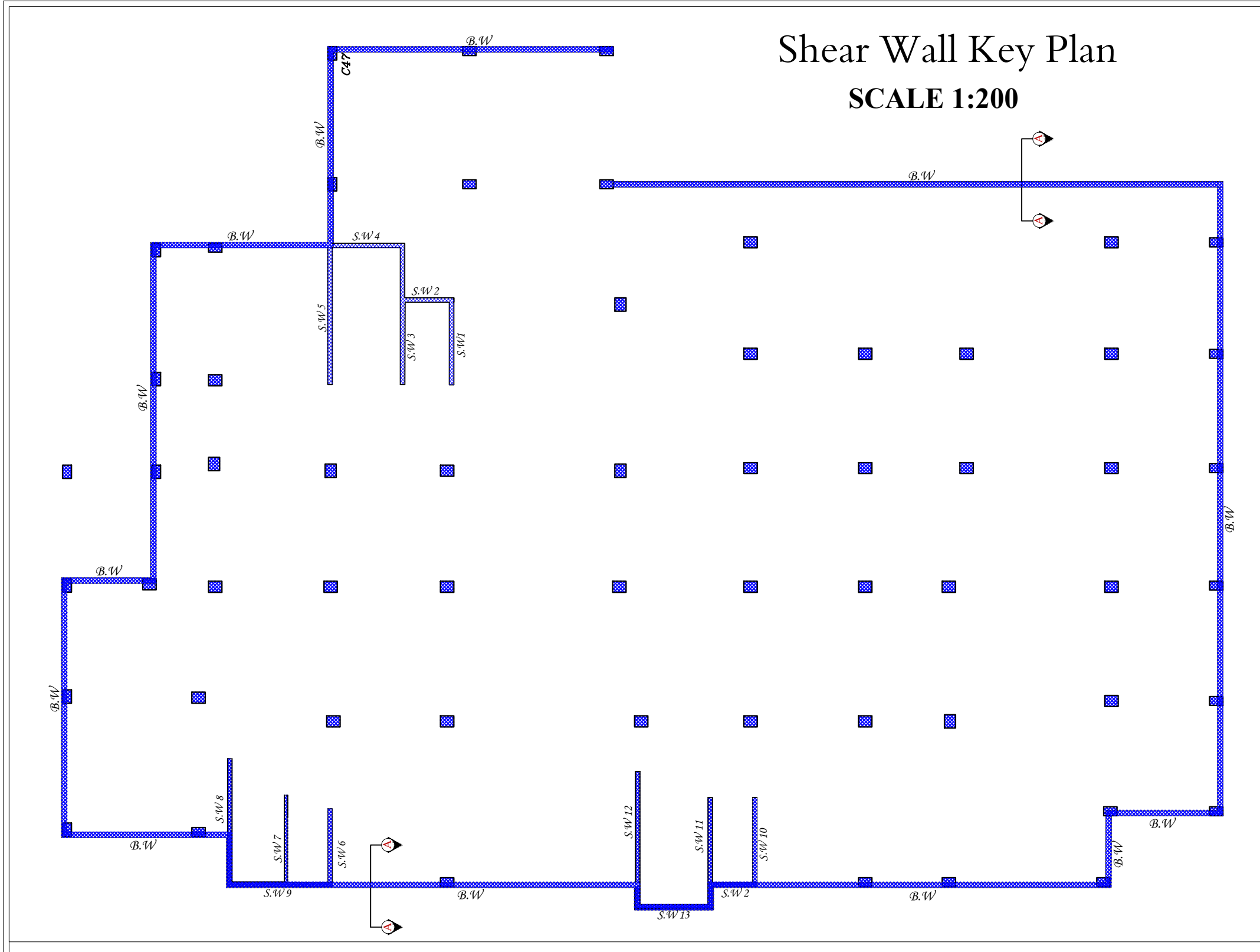
Dr.Maher Amro.

Done by :

Osama Abu E'ram

Ali Badawi

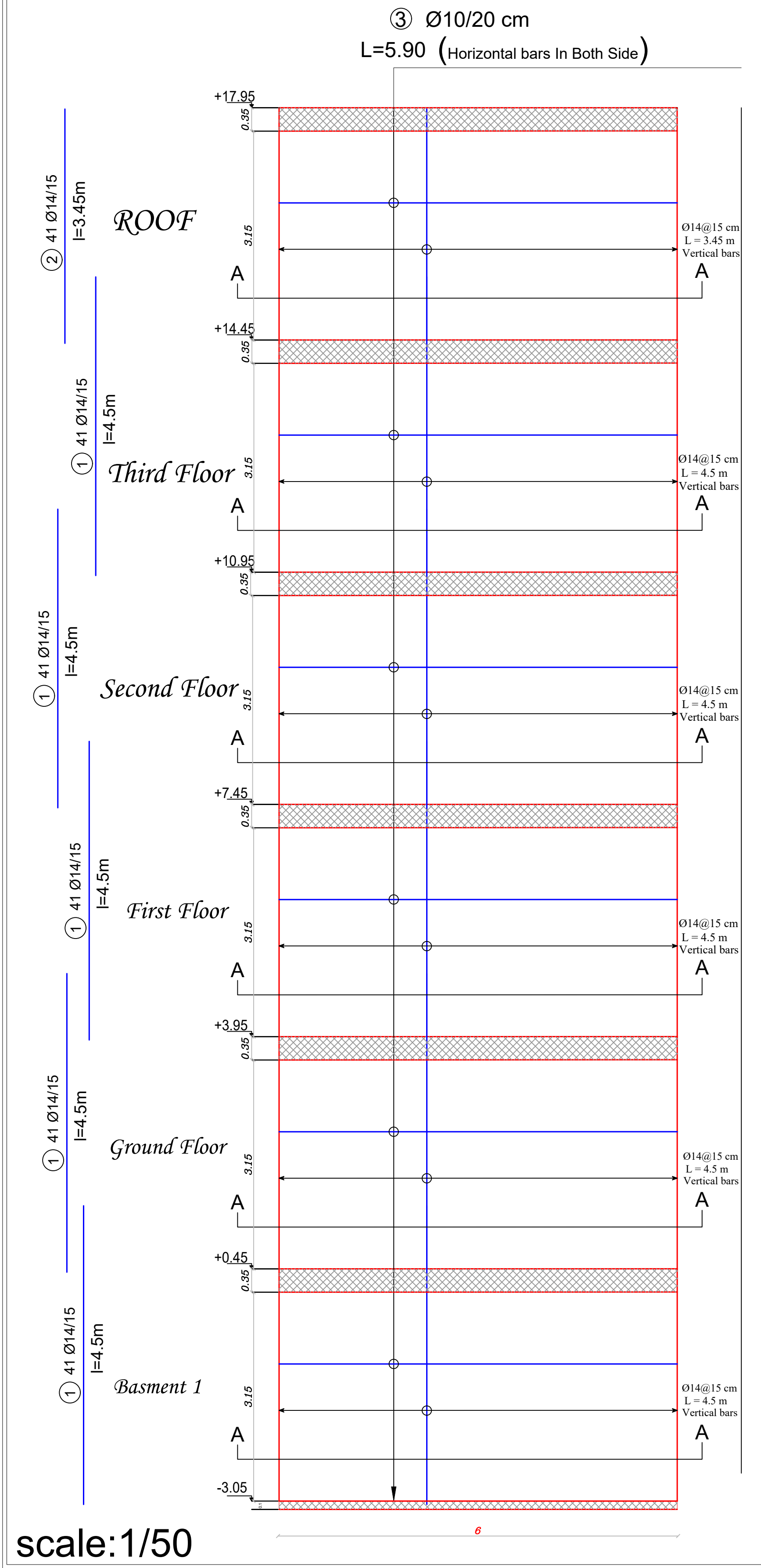
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1/100	S17	21/8/2022



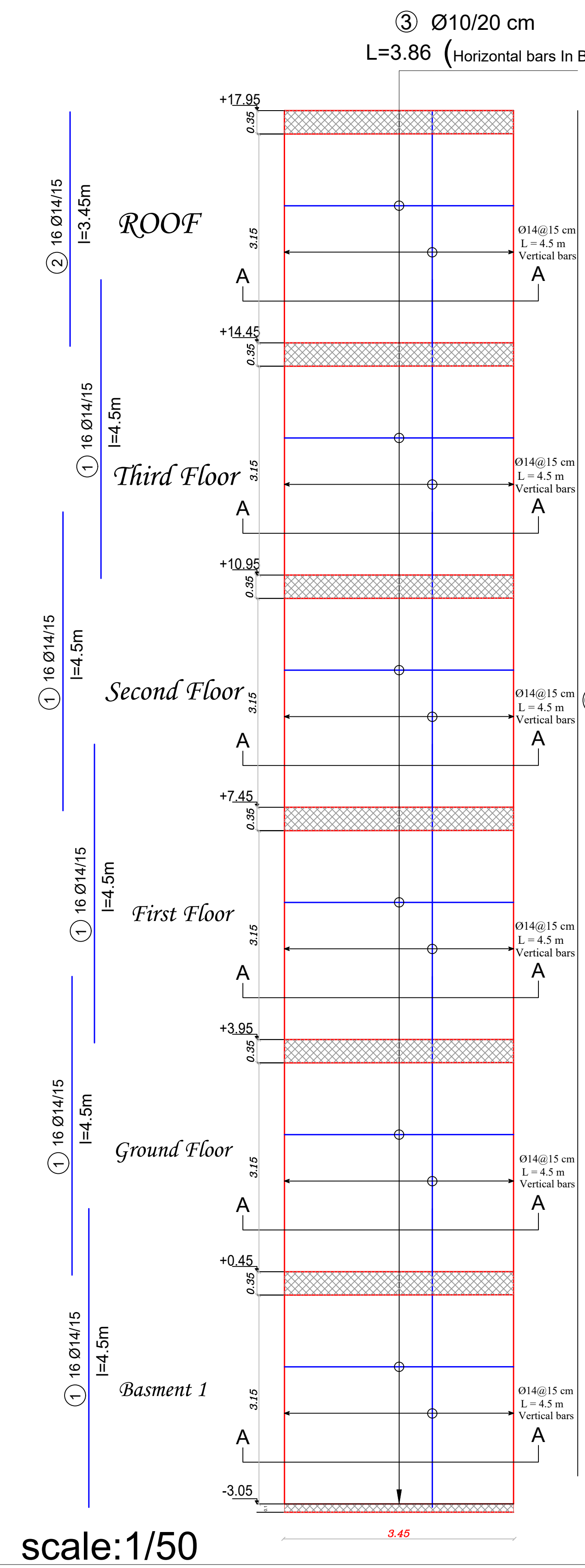
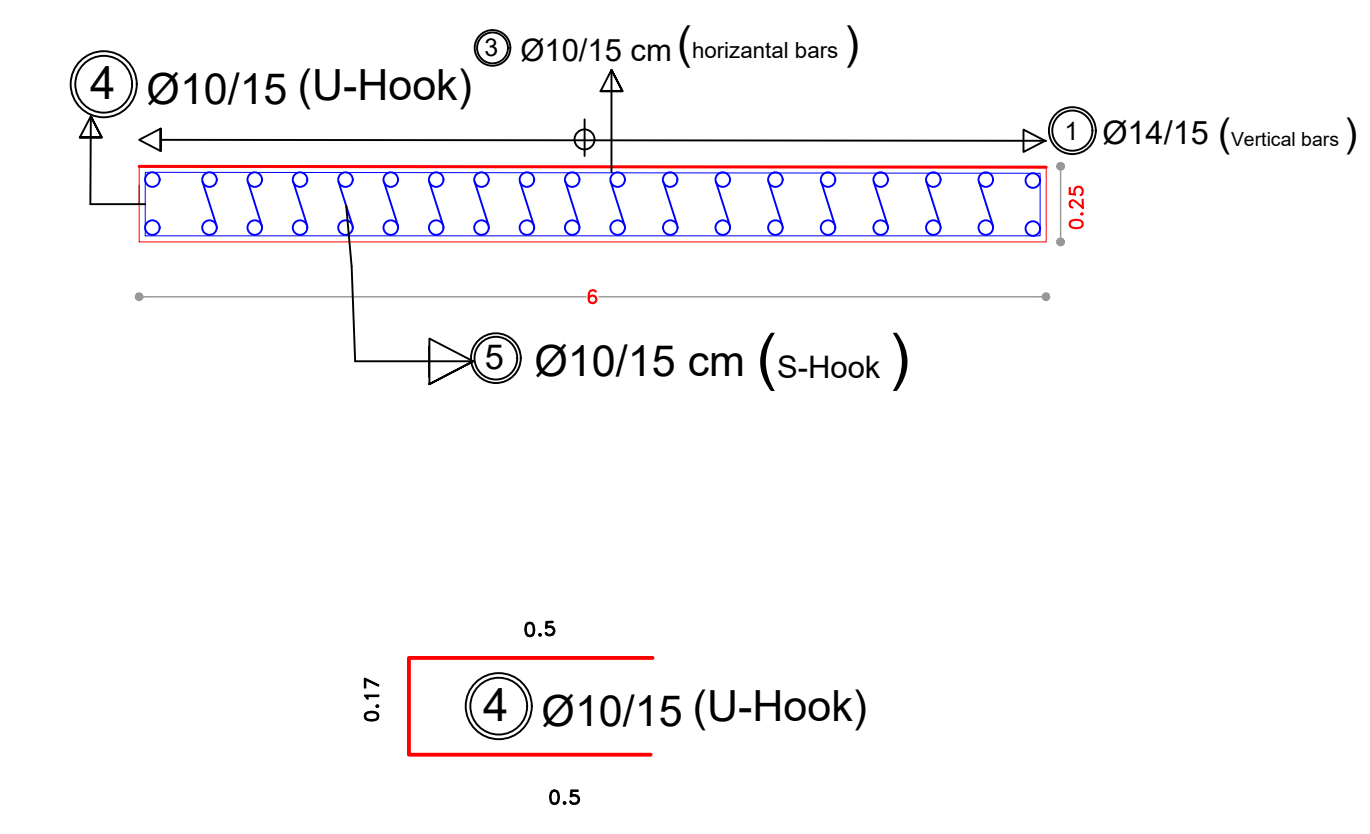
# Shear walls 12 & 13

S.W 13

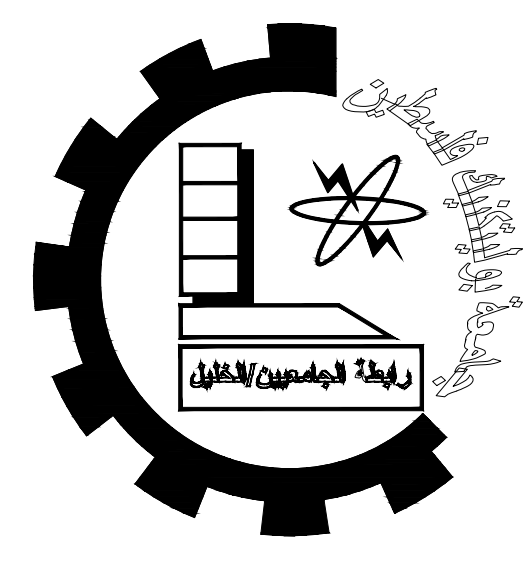
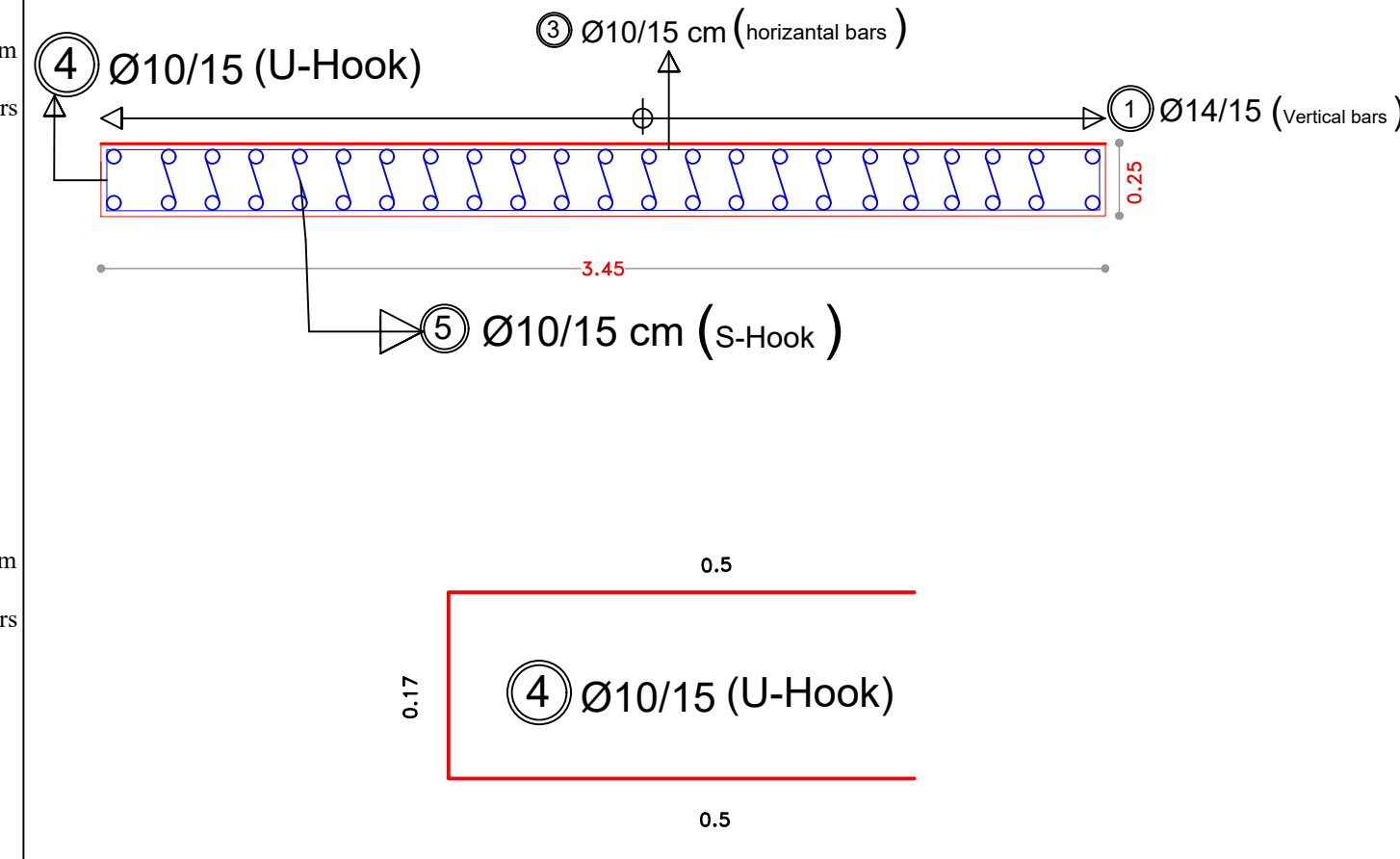
S.W 12



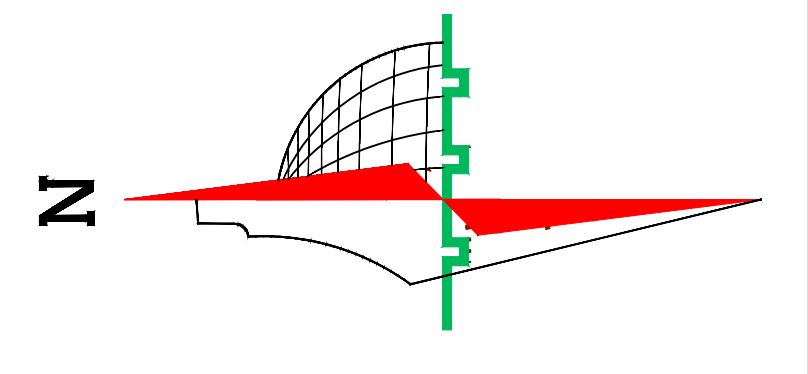
section(A-A)  
SCALE 1: 50



section(A-A)  
SCALE 1:25



Palestine Polytechnic University  
Engineering College  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

DRAWING TITLE :  
**Shear walls 12 & 13**

Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

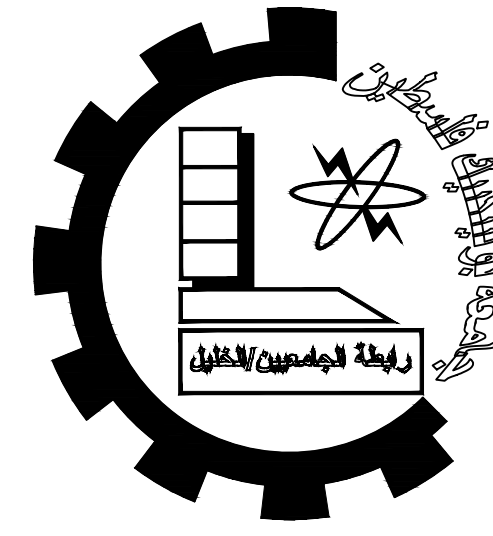
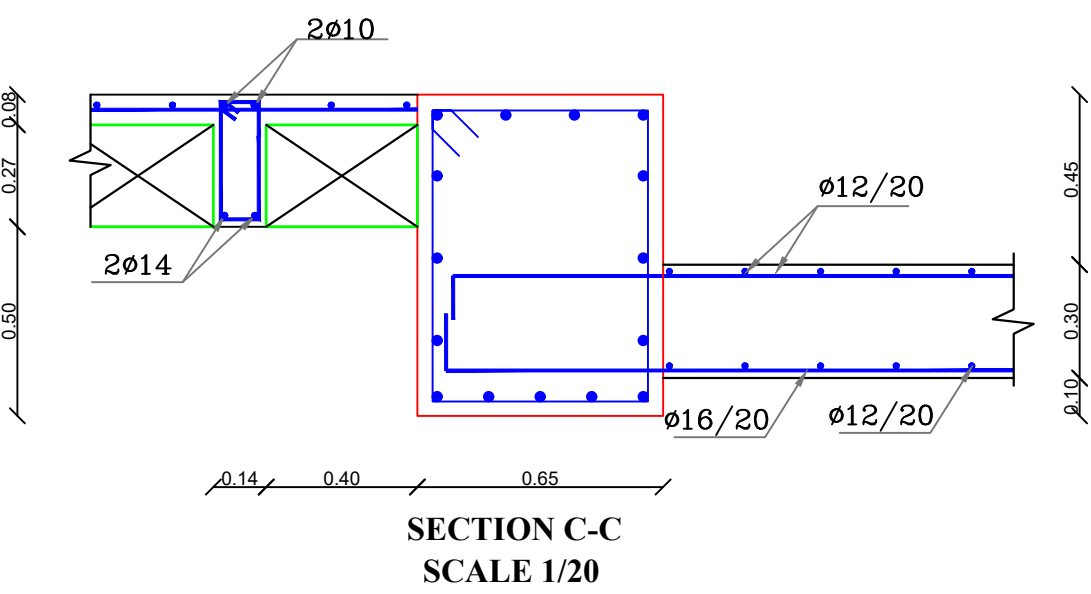
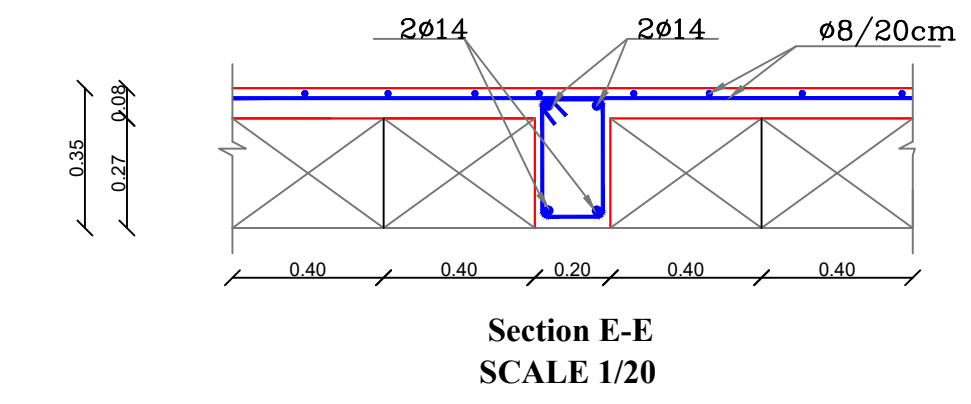
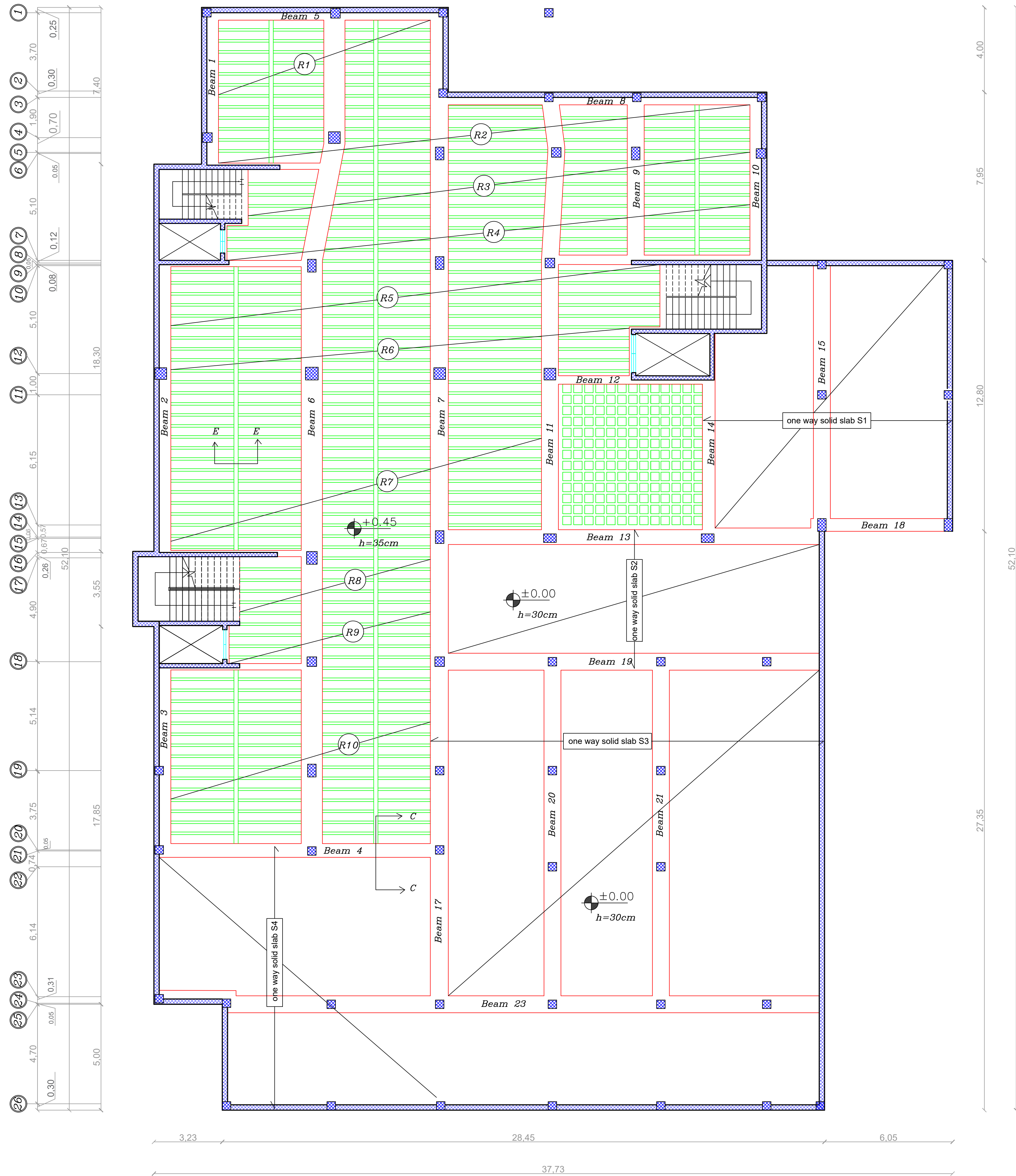
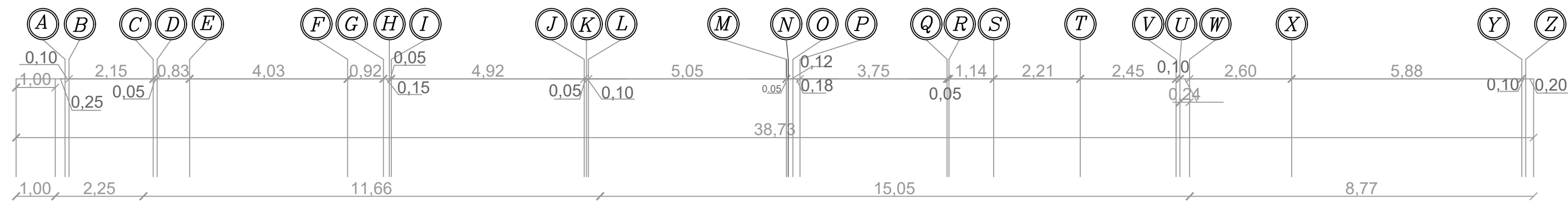
SCALE	No. of DRAW	DATE
1/100	S18	21/8/2022

scale:1/50

scale:1/50

Basement Floor Slab Distribution of Ribs

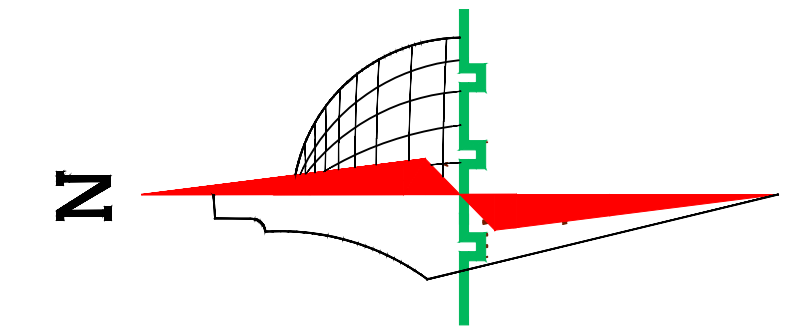
Scale 1 : 100



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Basement Floor Slab  
Distribution of Ribs

Supervisor

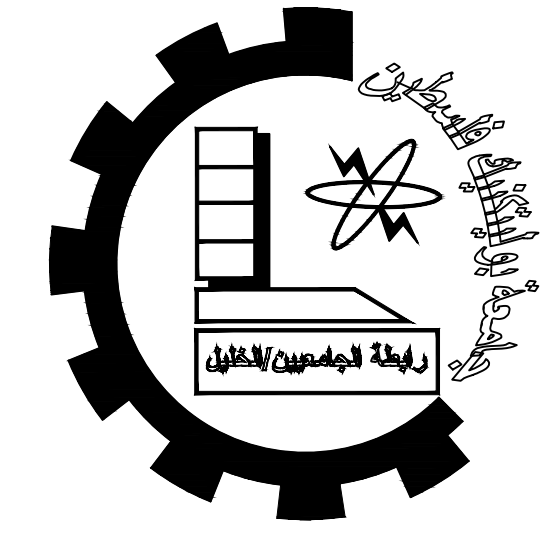
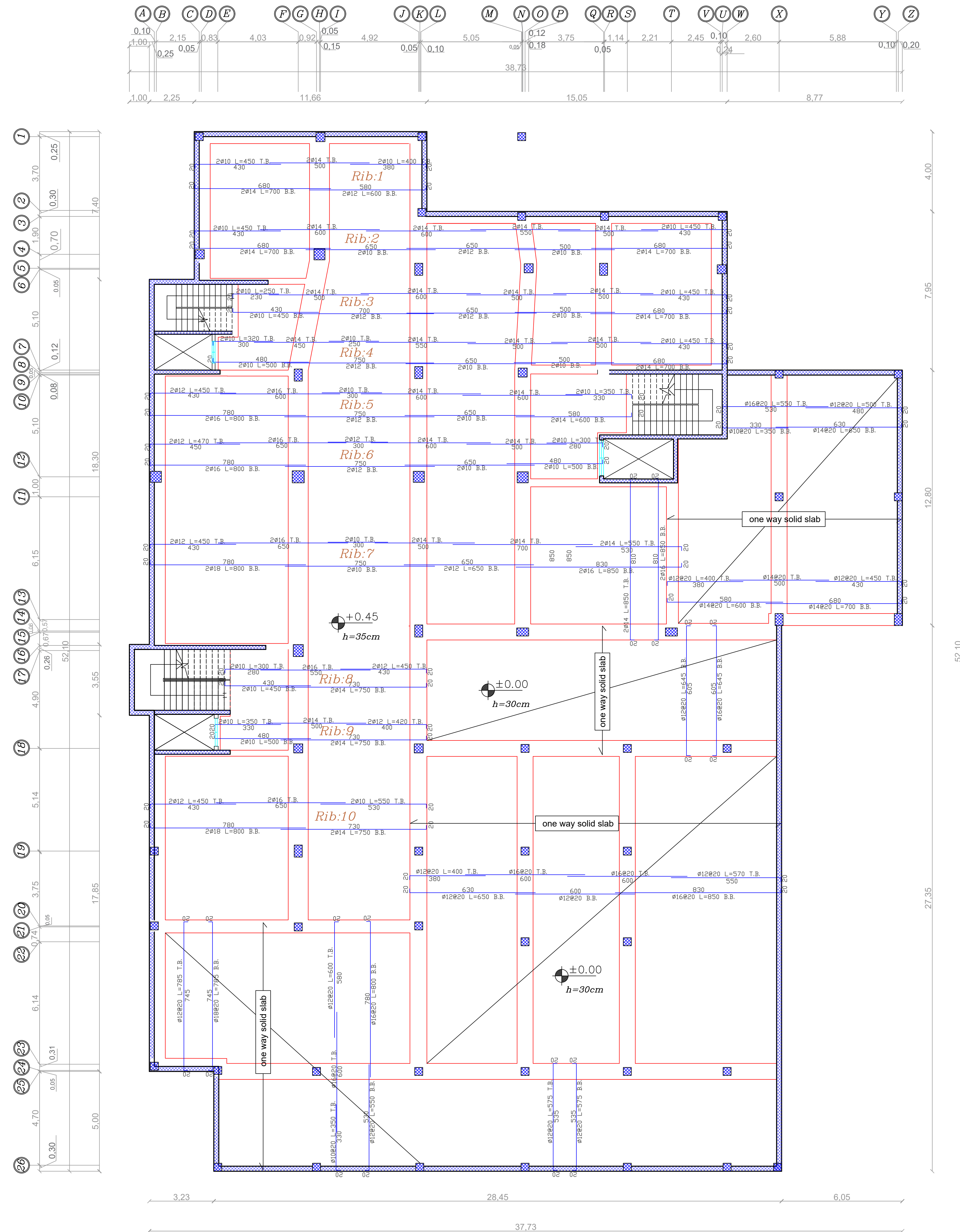
Dr.Maher Amro.

Done by :

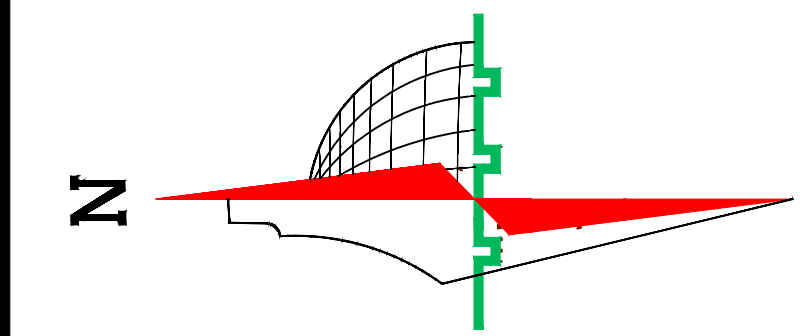
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S19	21/8/2022

Basement Floor Slab Reinforcement  
Scale 1 : 100



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Basement Floor Slab  
Reinforcement

Supervisor

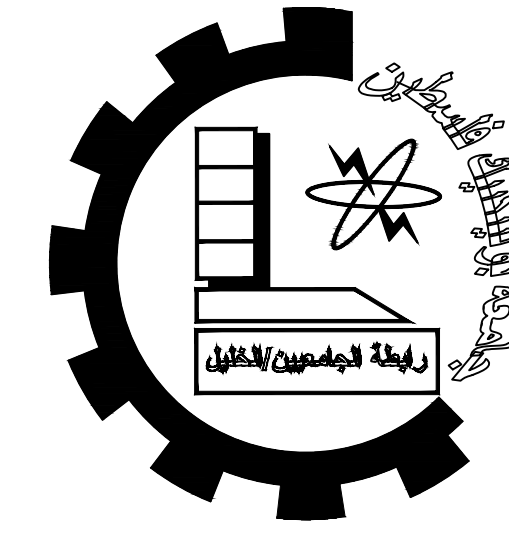
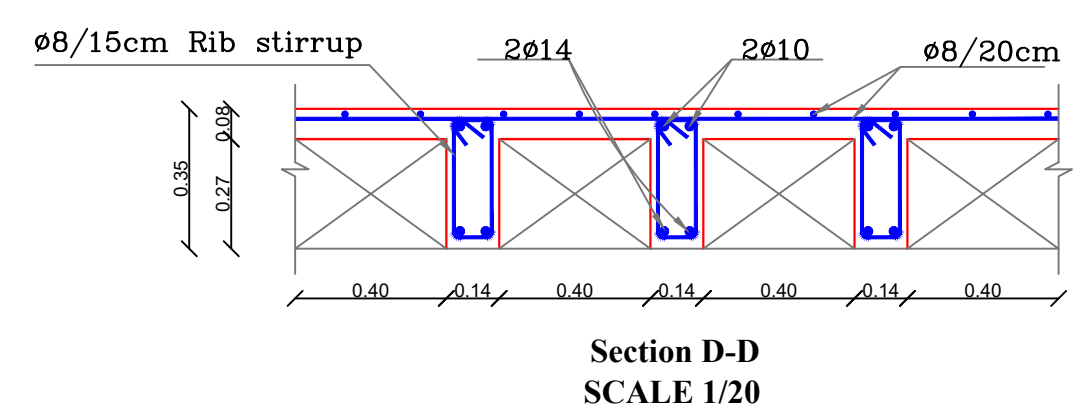
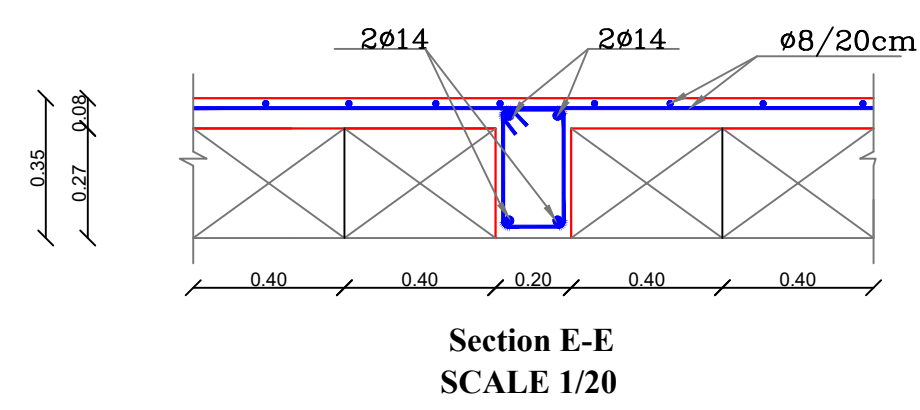
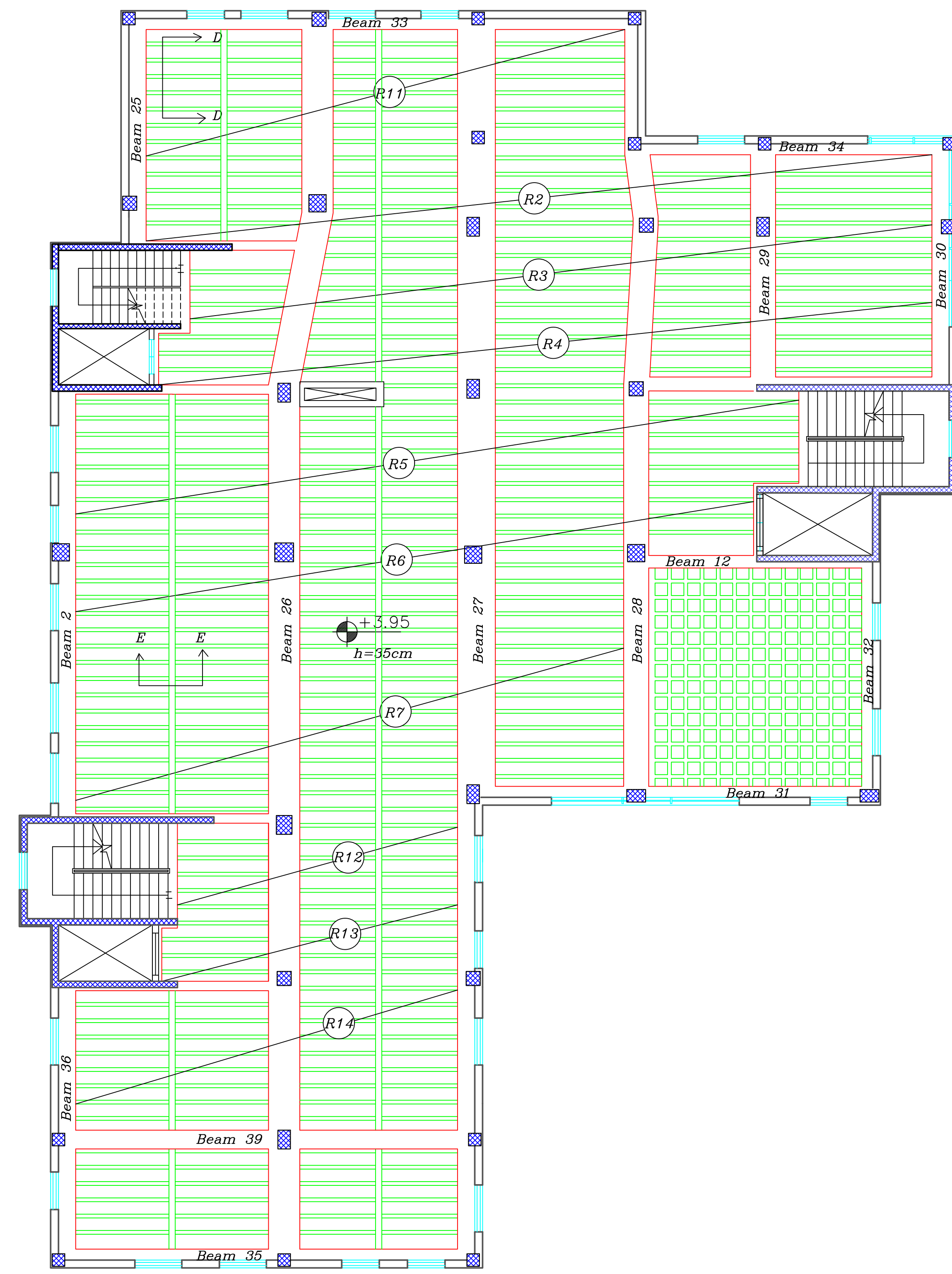
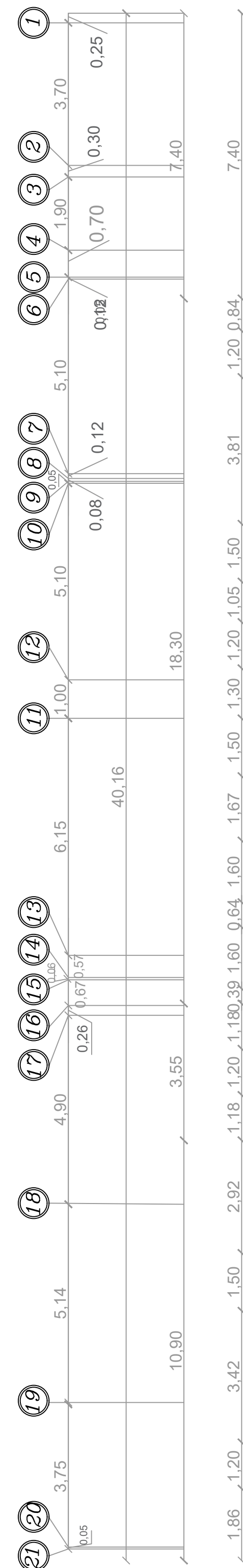
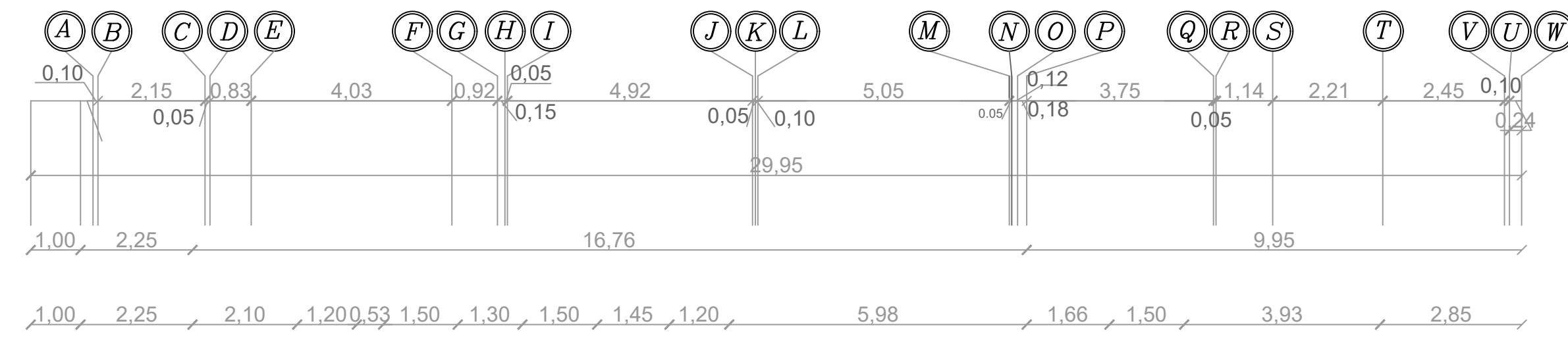
Dr.Maher Amro.

Done by :

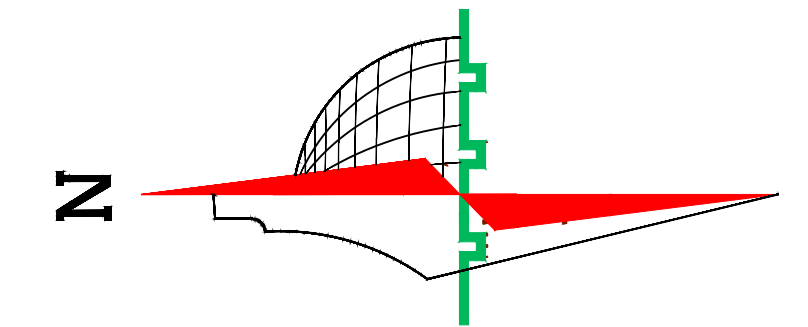
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S20	21/8/2022

Ground Floor Slab Distribution of Ribs  
Scale 1 : 100



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Ground Floor Slab  
Distribution of Ribs

Supervisor

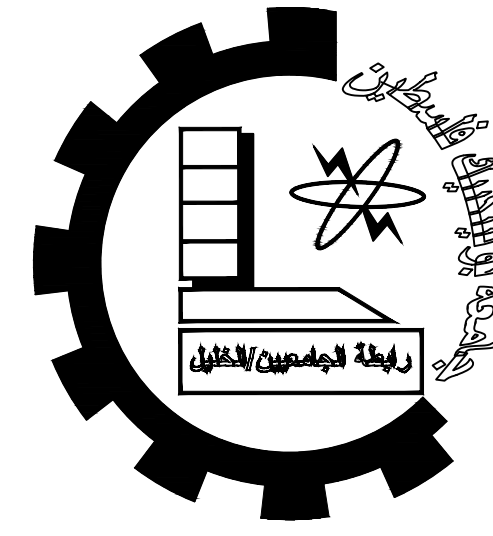
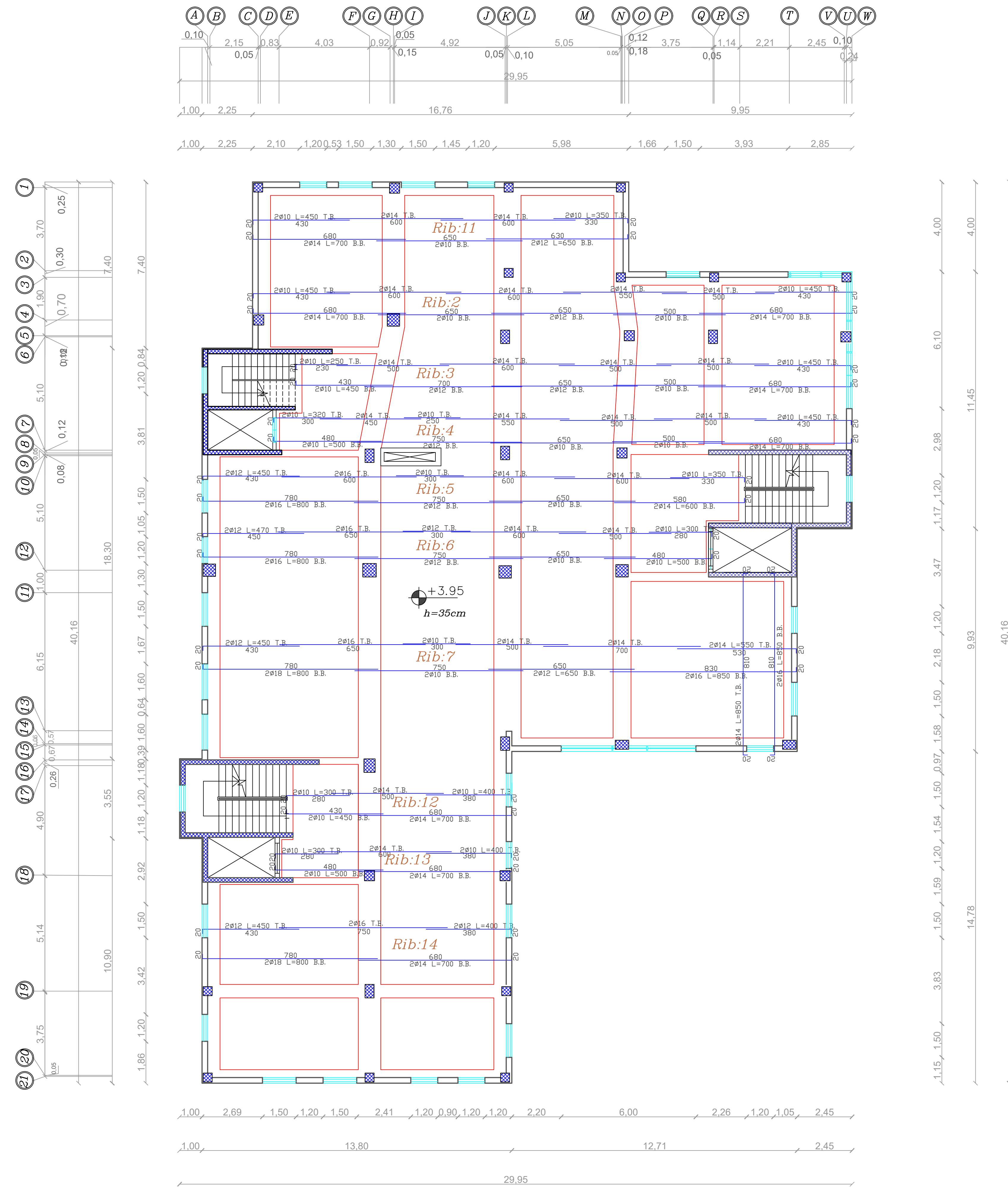
Dr.Maher Amro.

Done by :

Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S21	21/8/2022

Ground Floor Slab Reinforcement  
Scale 1 : 100



Palestine Polytechnic University

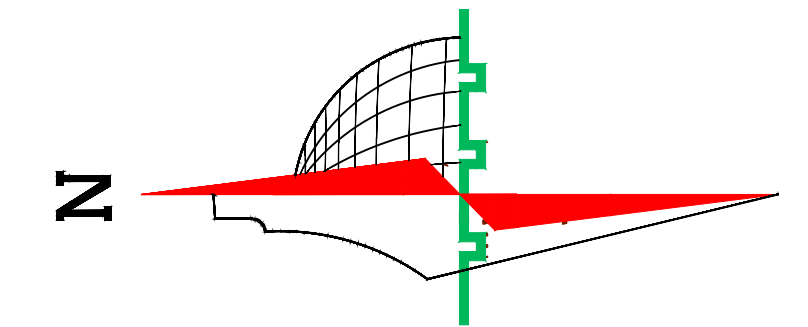
College of Engineering

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Ground Floor Slab  
Reinforcement

Supervisor

Dr.Maher Amro.

Done by :

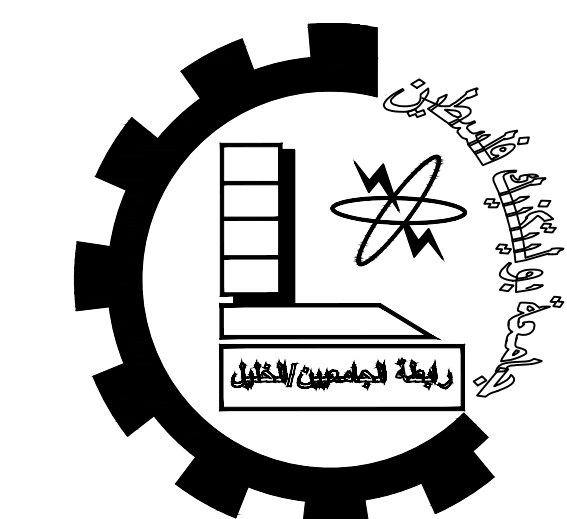
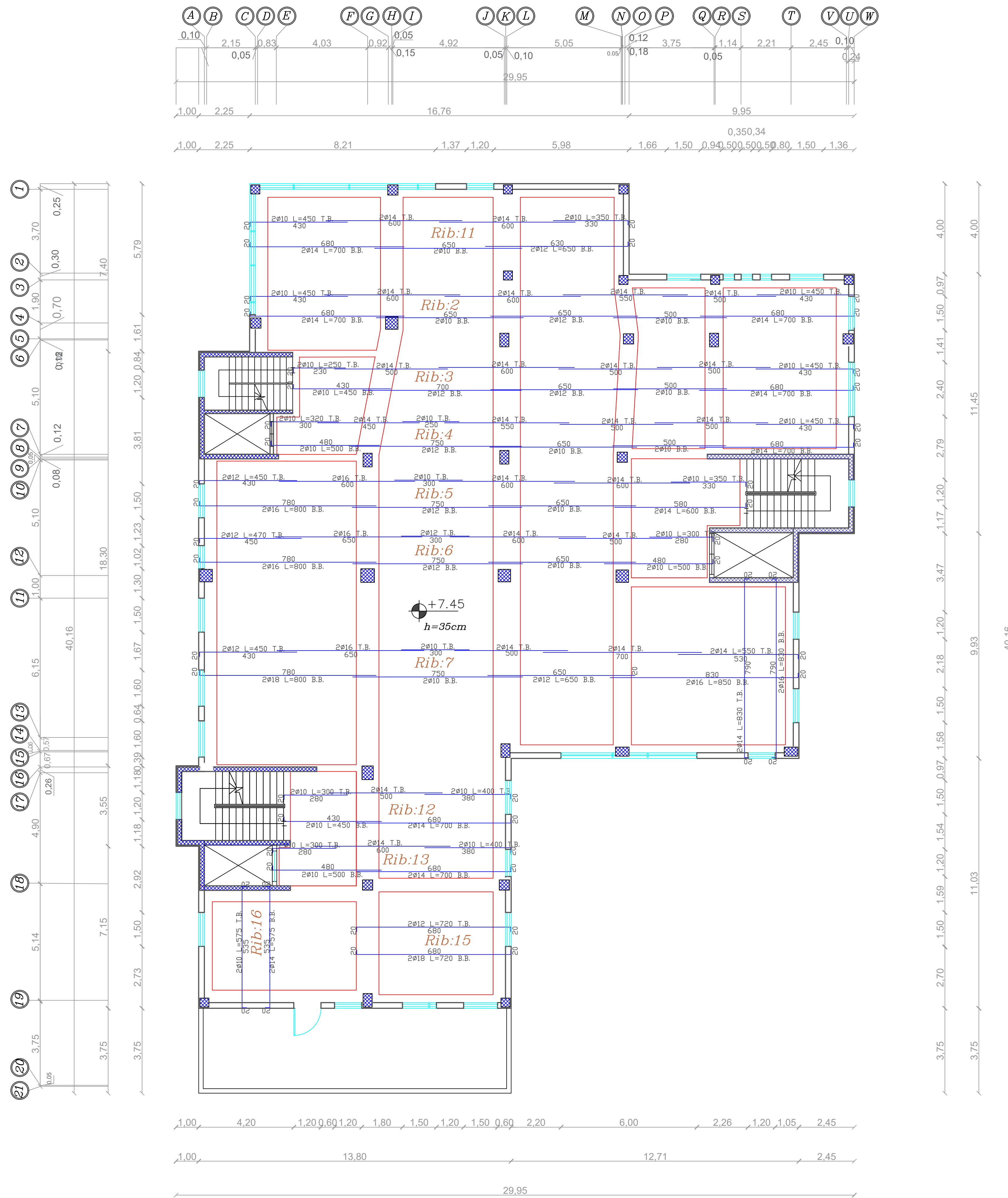
Osama Abu E'ram

Ali Badawi

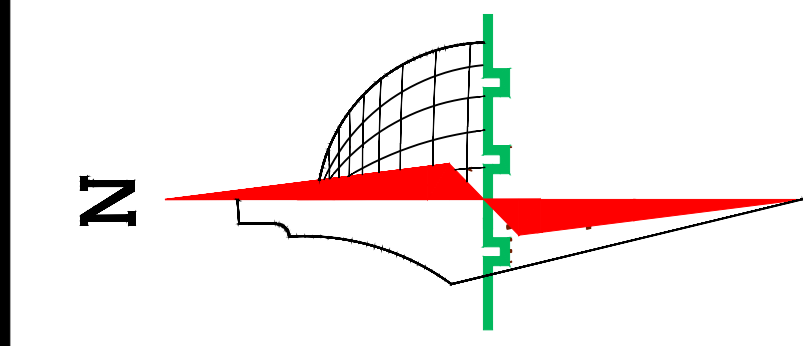
SCALE	No. of DRAW	DATE
1/100	S22	21/8/2022



First Floor Slab Reinforcement  
Scale 1 : 100



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



**Legend :**

	Stone		Gravel
	R.Concrete		Wood
	Concrete		HEXAGONAL TILES
	Hollow Block		BAKLAVA TILES
	isolating materials		GRASS

DRAWING TITLE :  
**First Floor Slab Reinforcement**

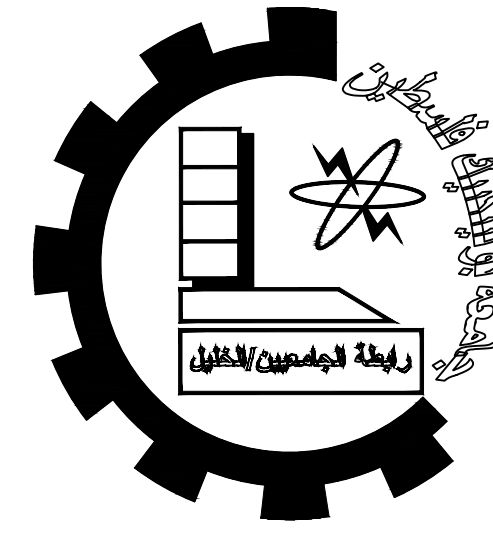
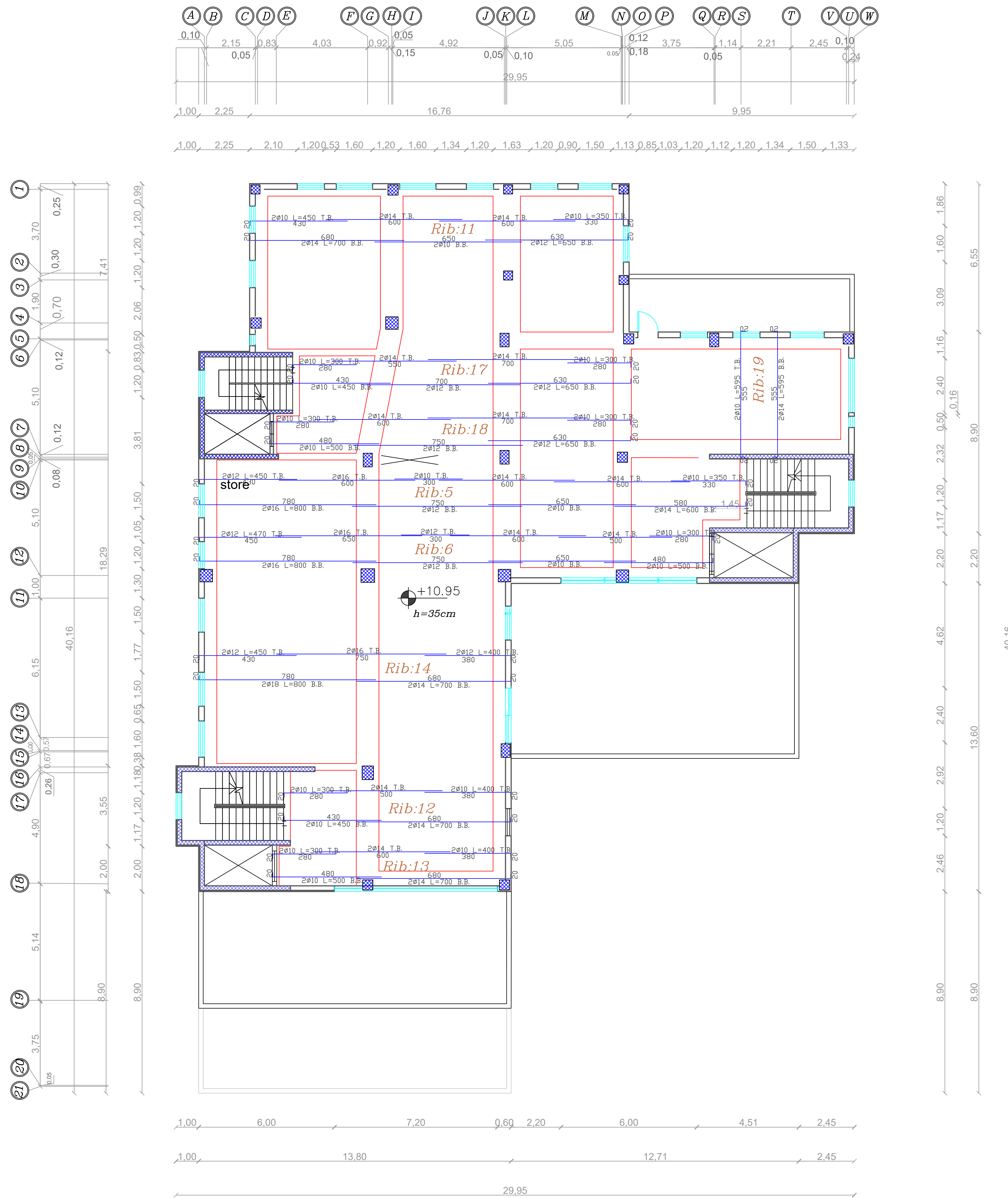
Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S24	21/8/2022



Second Floor Slab Reinforcement  
Scale 1 : 100



Palestine Polytechnic University

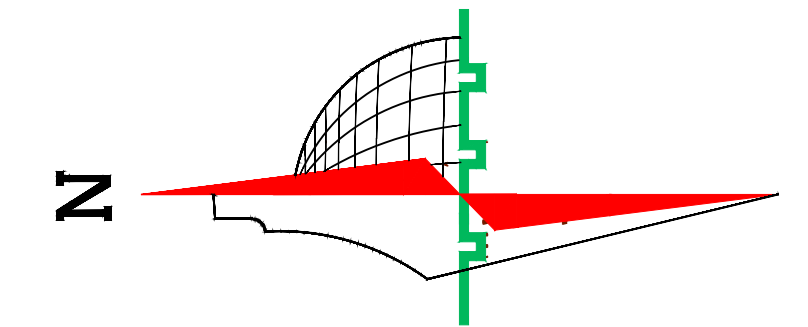
College of Engineering

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Second Floor Slab  
Reinforcement

Supervisor

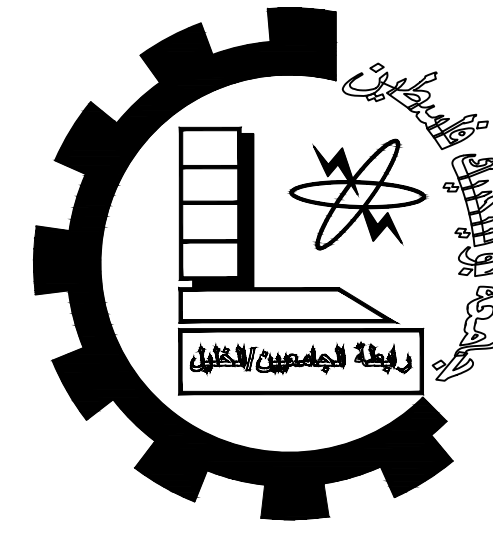
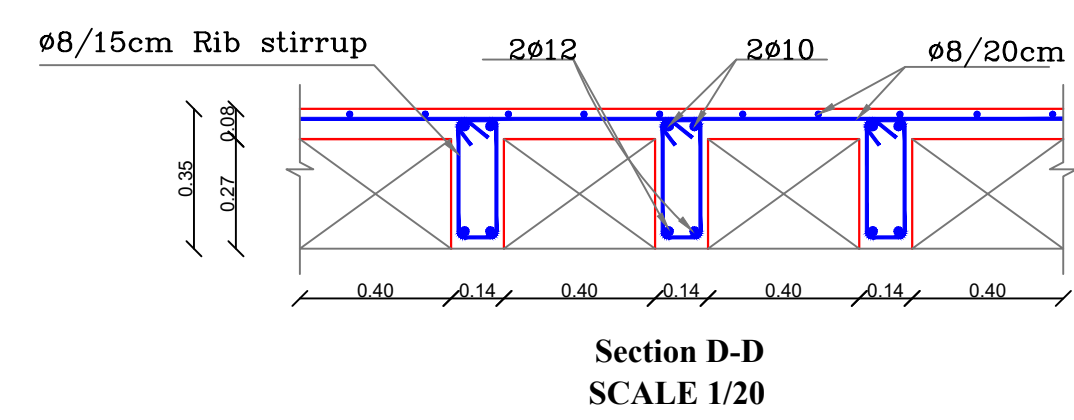
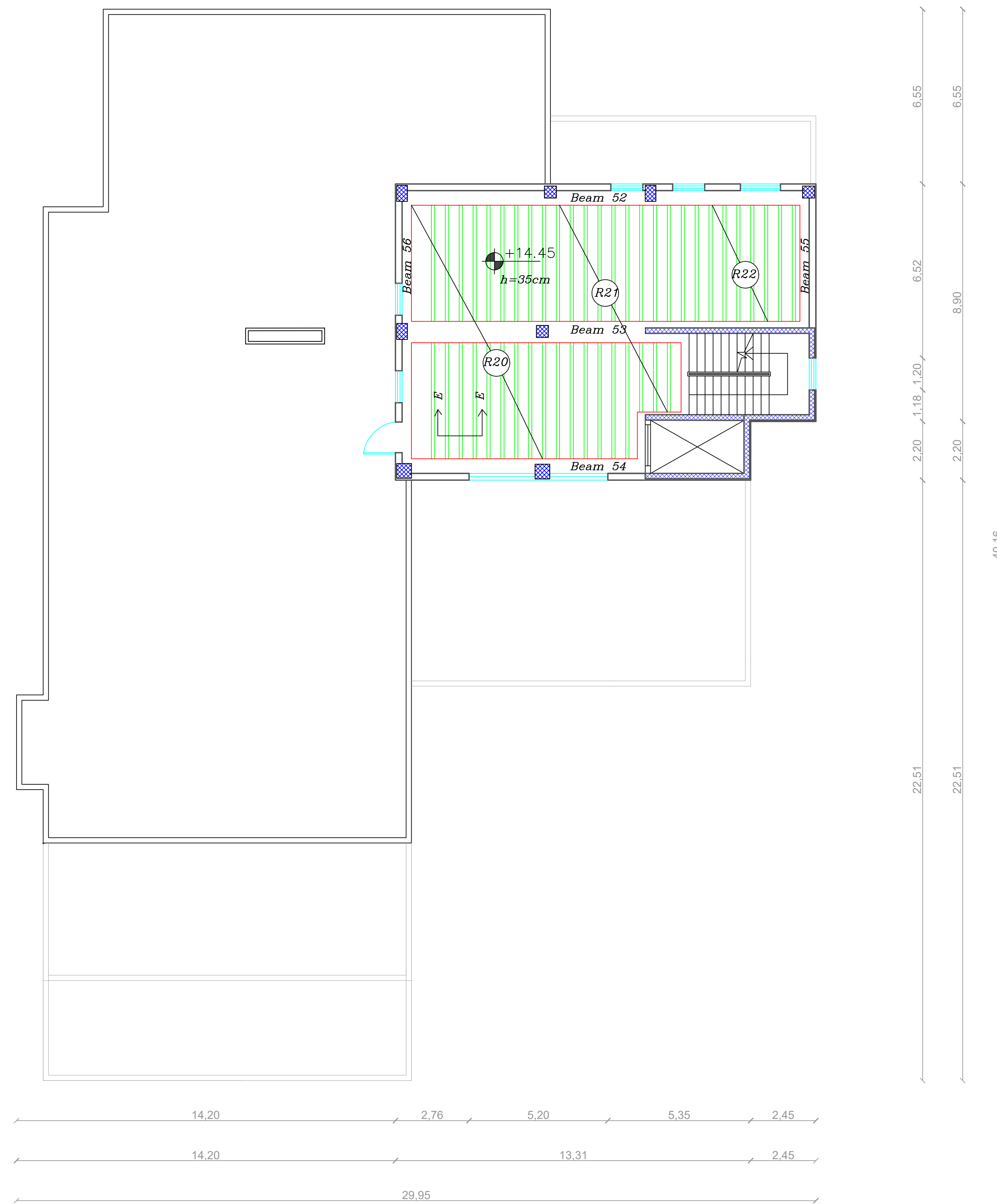
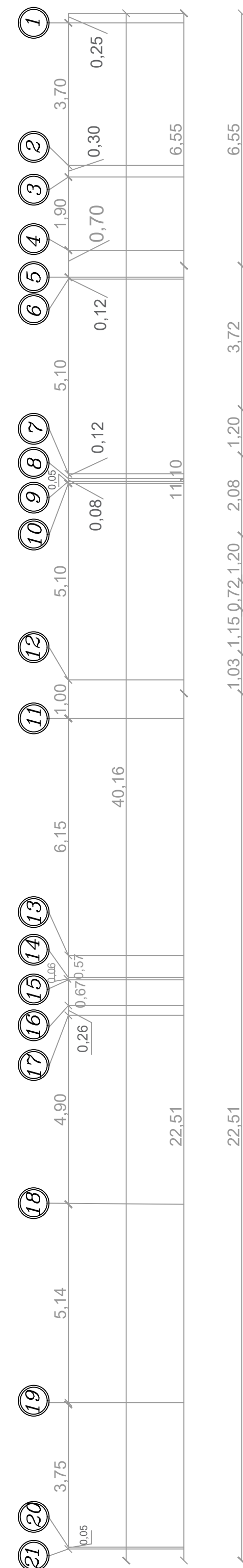
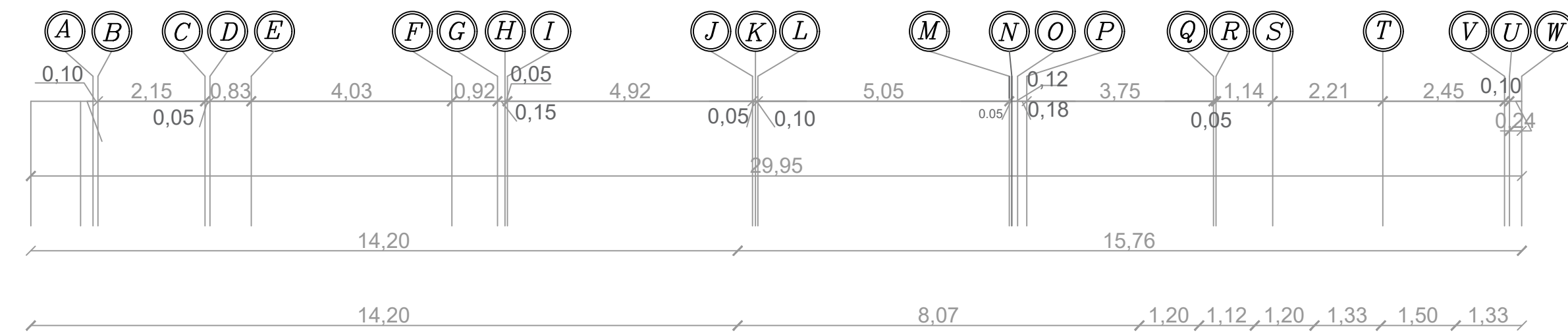
Dr.Maher Amro.

Done by :

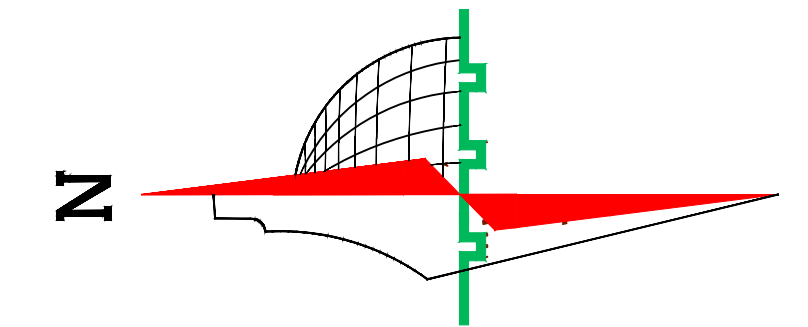
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S26	21/8/2022

Third Floor Slab Distribution of Ribs  
Scale 1 : 100



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Third Floor Slab  
Distribution of Ribs

Supervisor

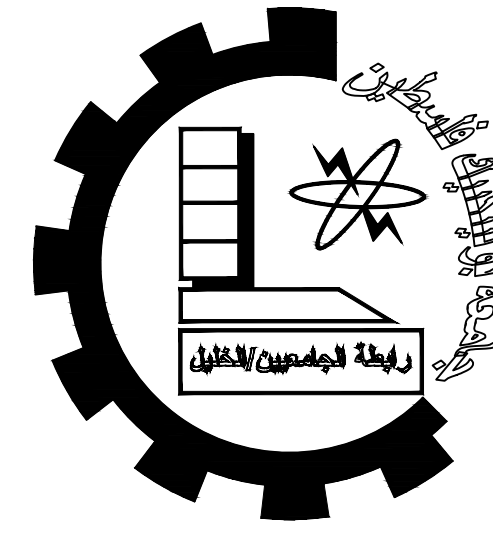
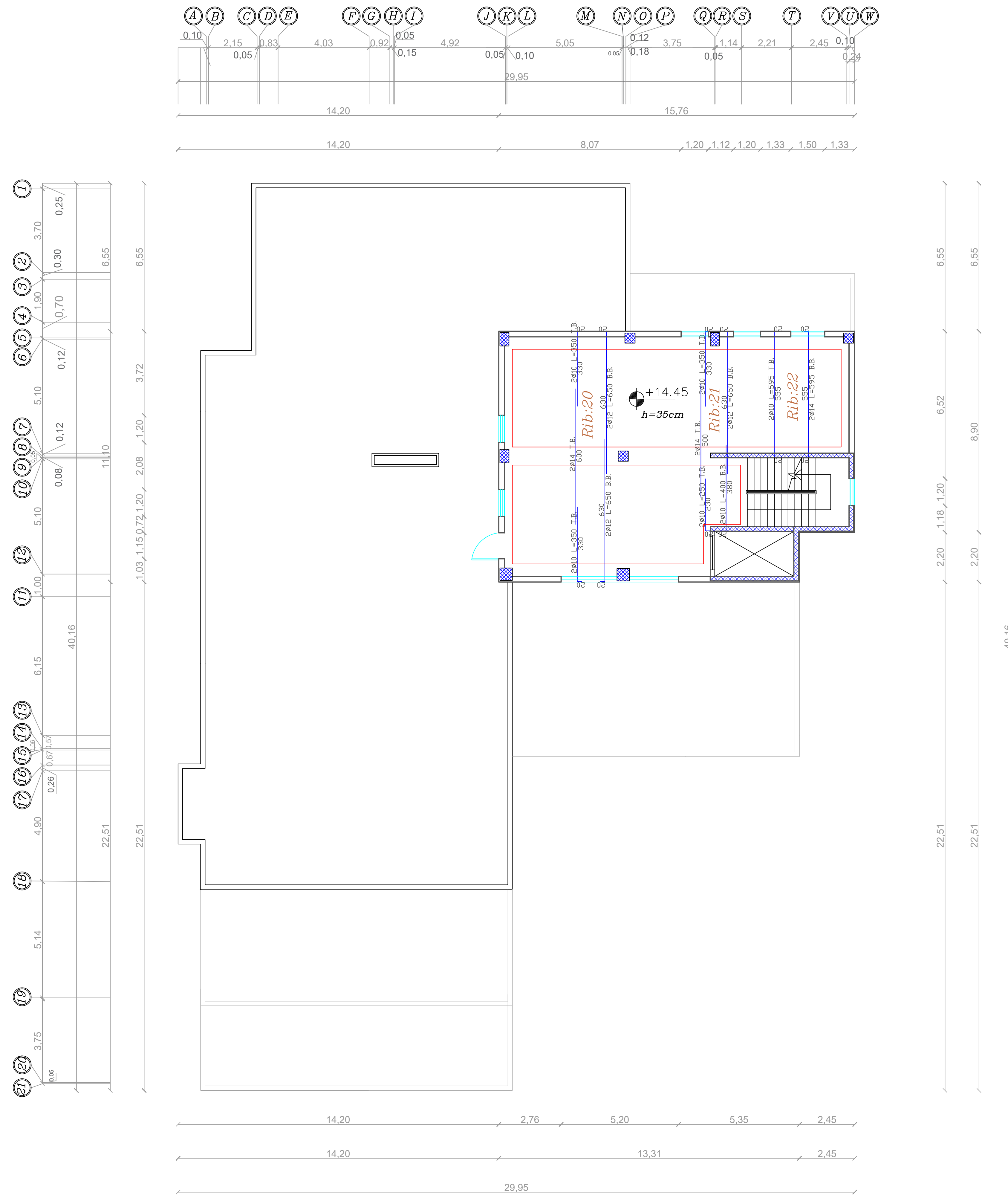
Dr.Maher Amro.

Done by :

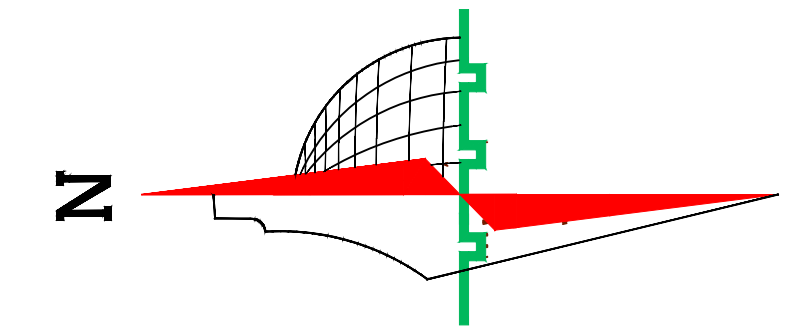
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S27	21/8/2022

Third Floor Slab Reinforcement  
Scale 1 : 100



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Third Floor Slab  
Reinforcement

Supervisor

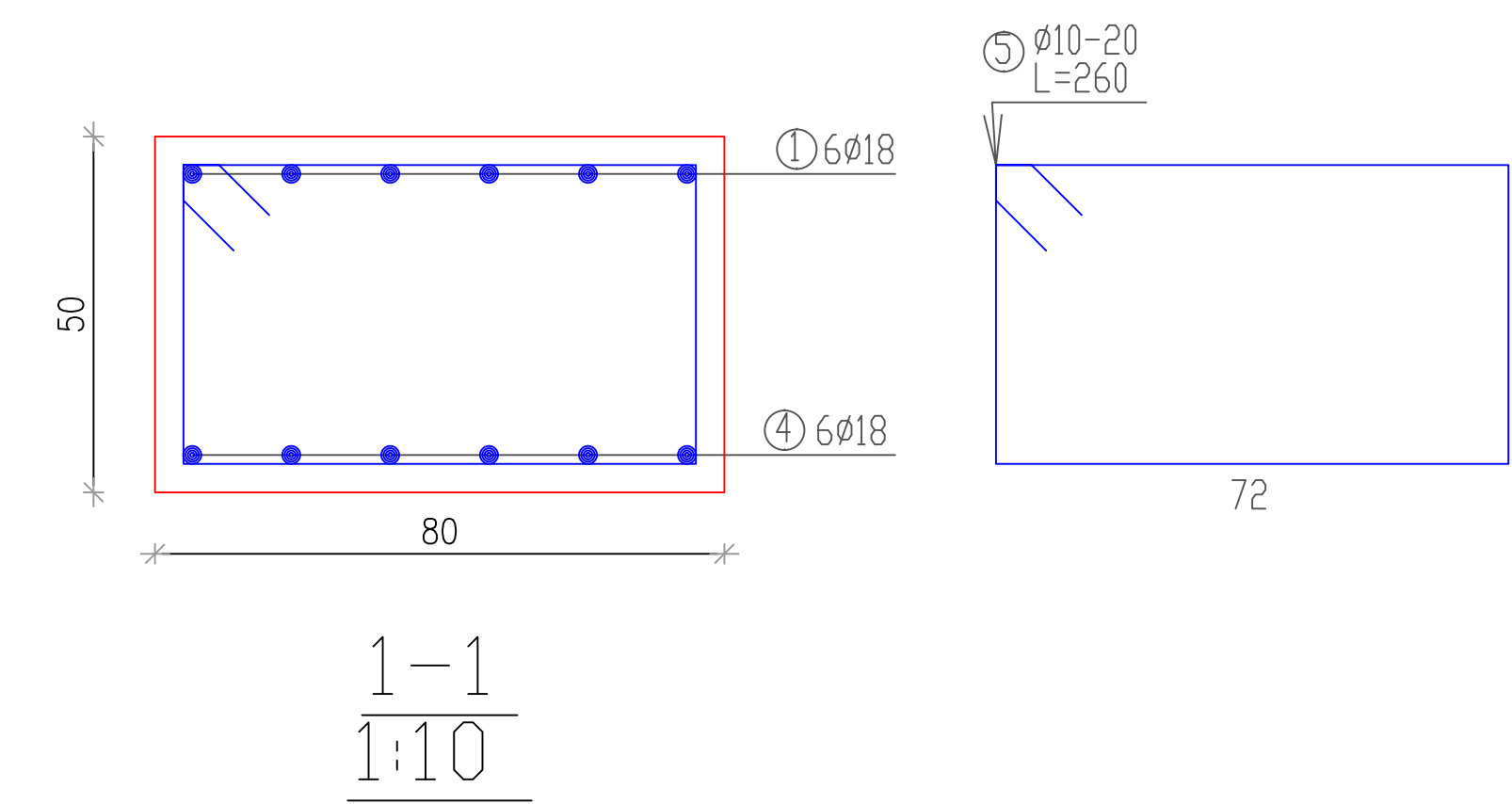
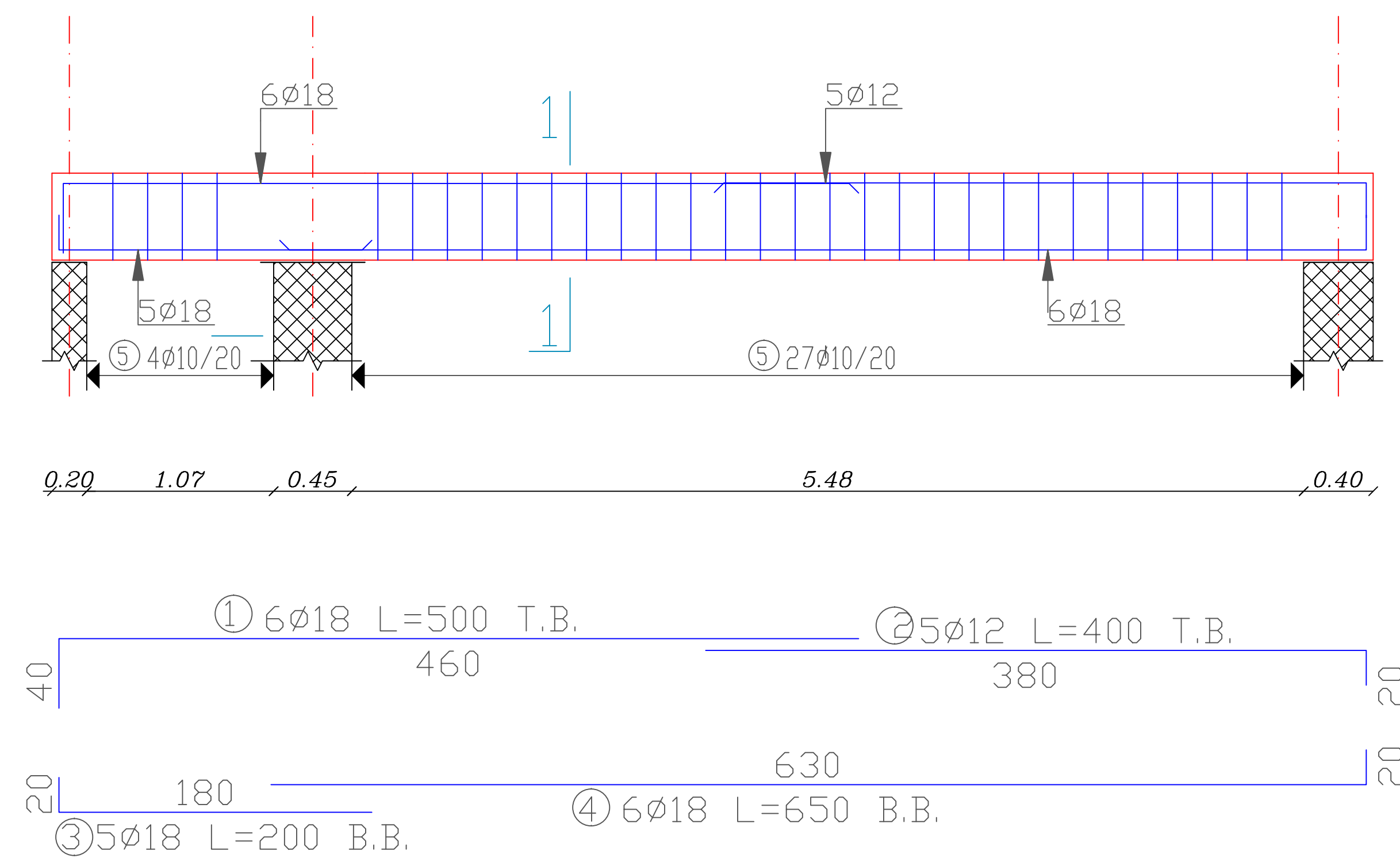
Dr.Maher Amro.

Done by :

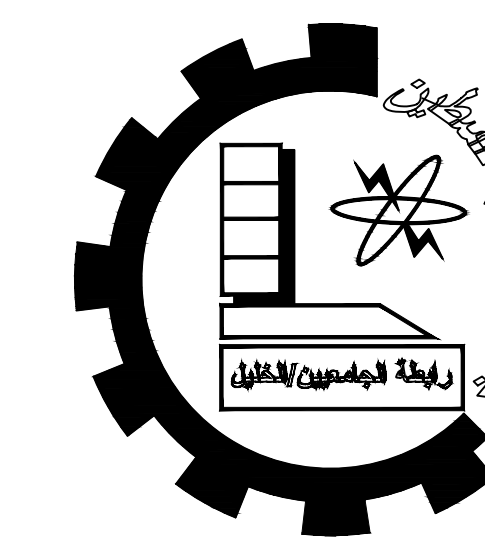
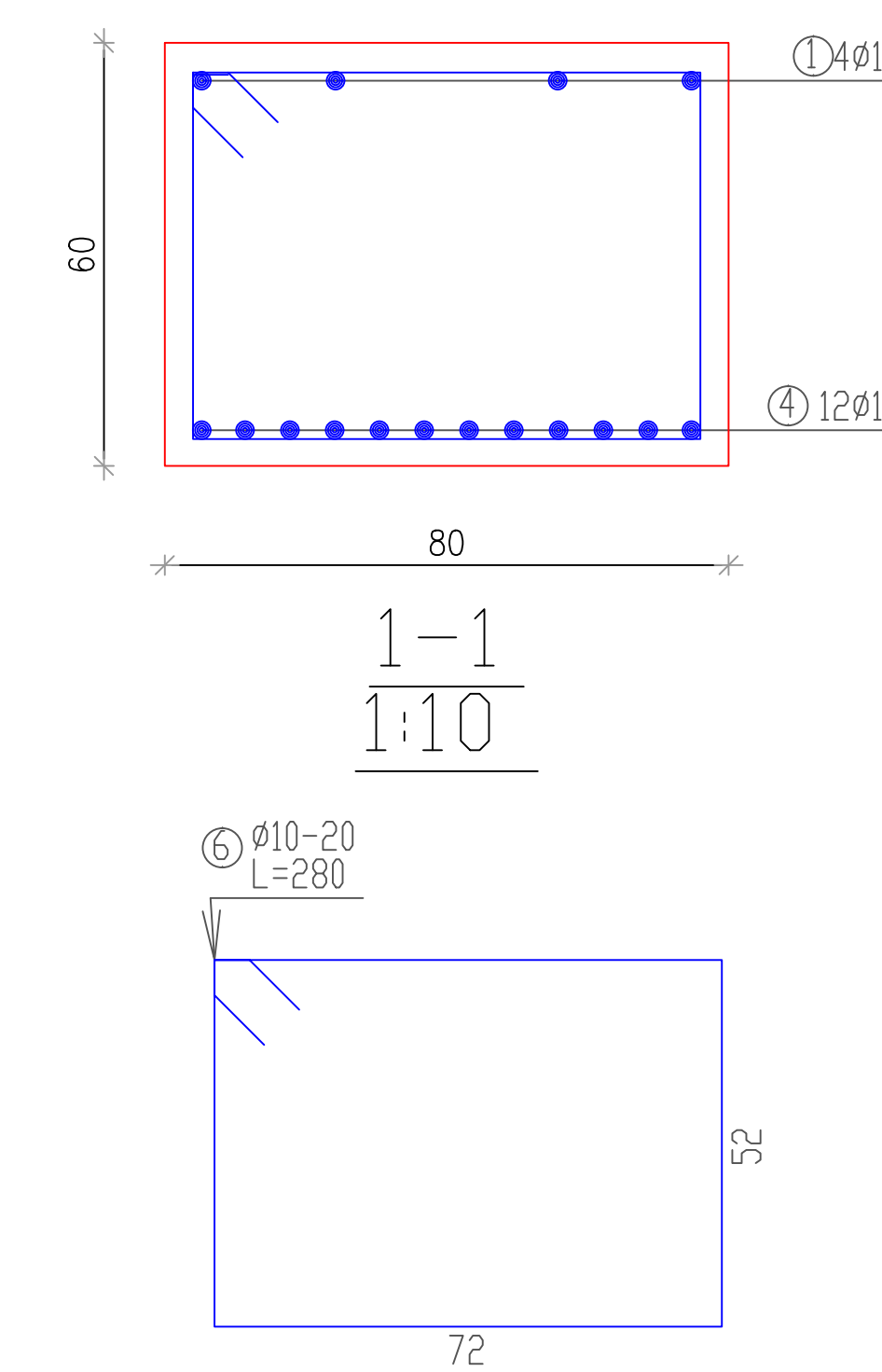
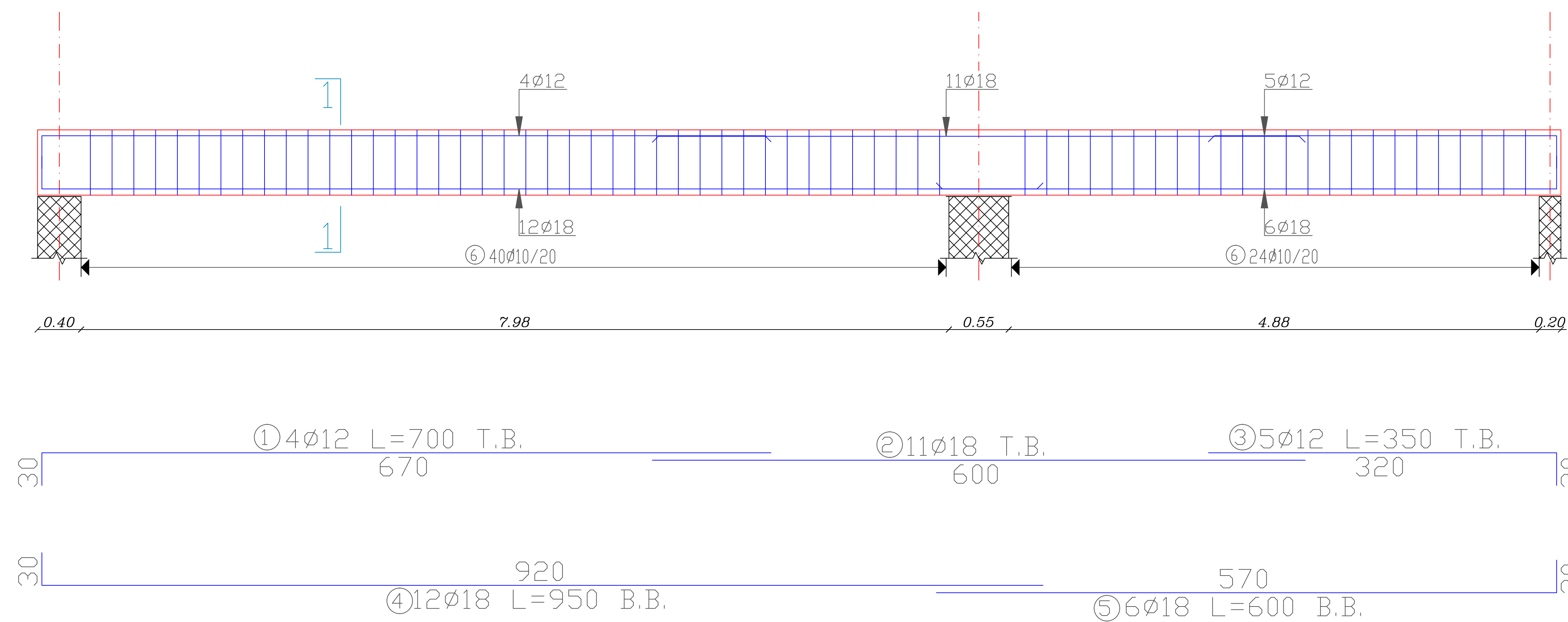
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	S28	21/8/2022

Beam : 1  
Scale 1:25

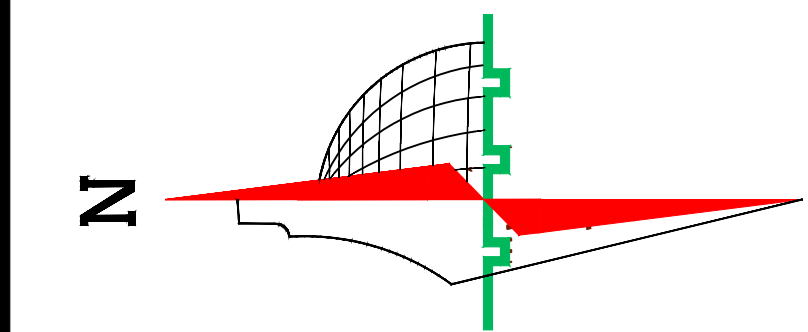


Beam : 2  
Scale 1:25



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project

Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

BEAMS 1&2

Supervisor

Dr.Maher Amro.

Done by :

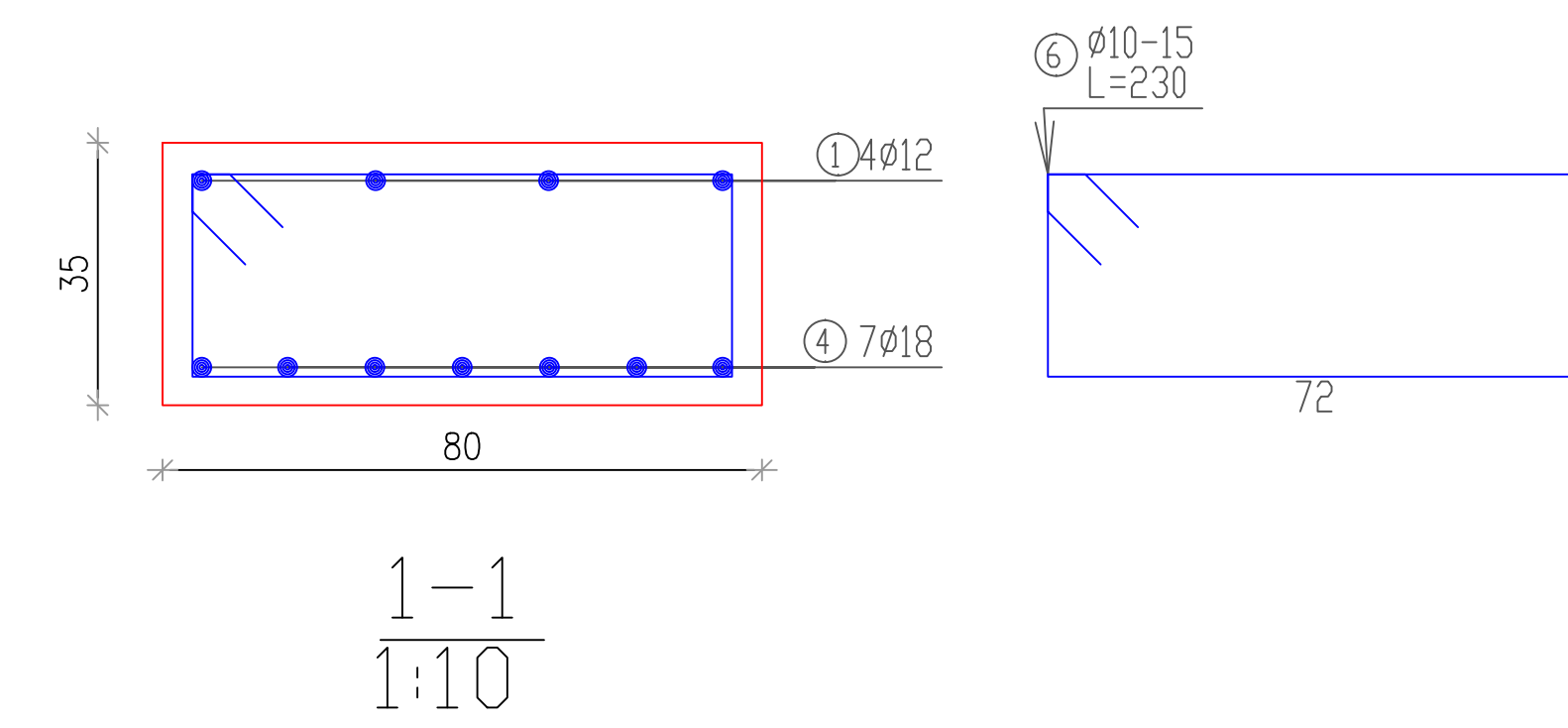
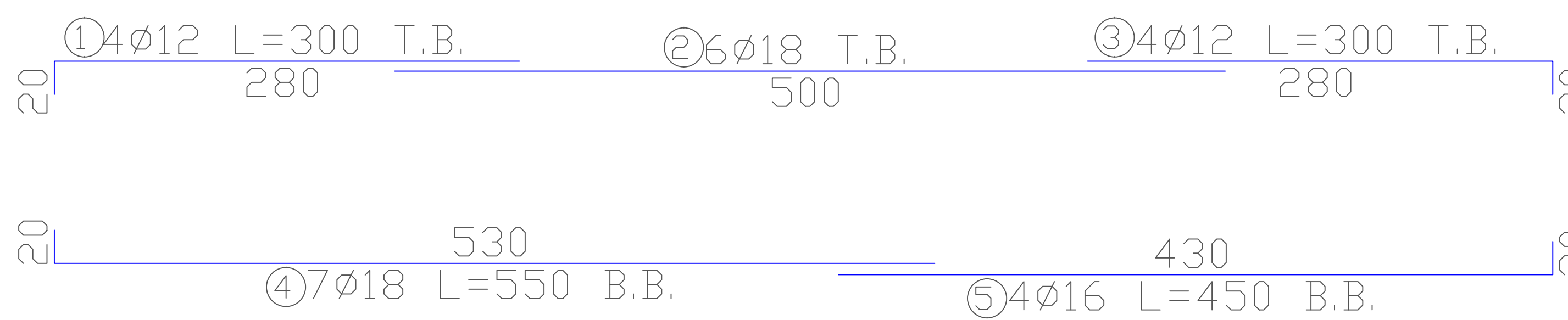
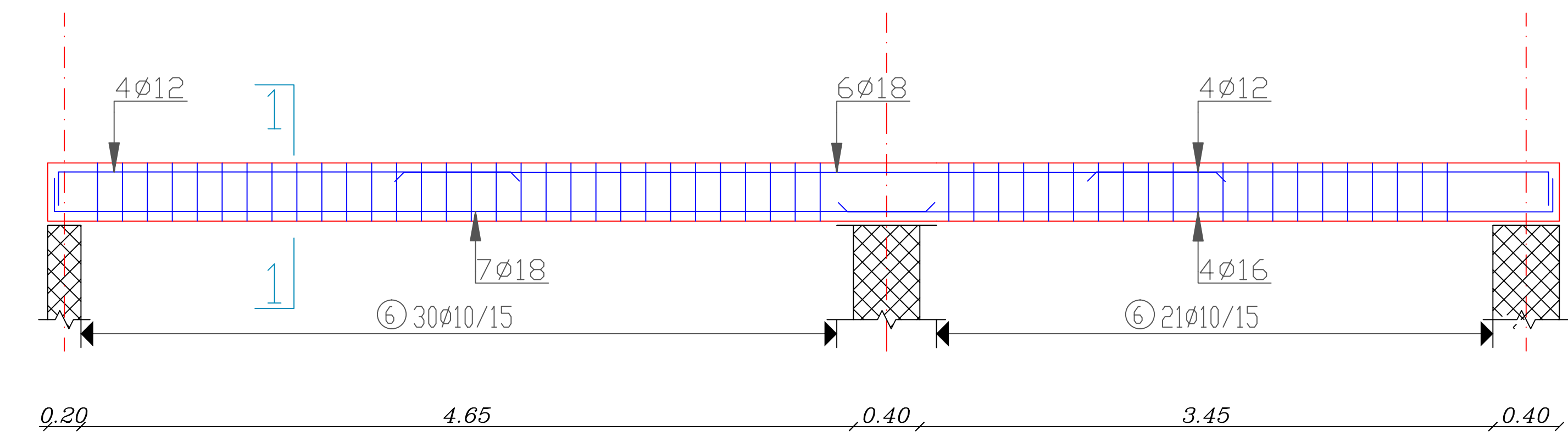
Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B00	21/8/2022

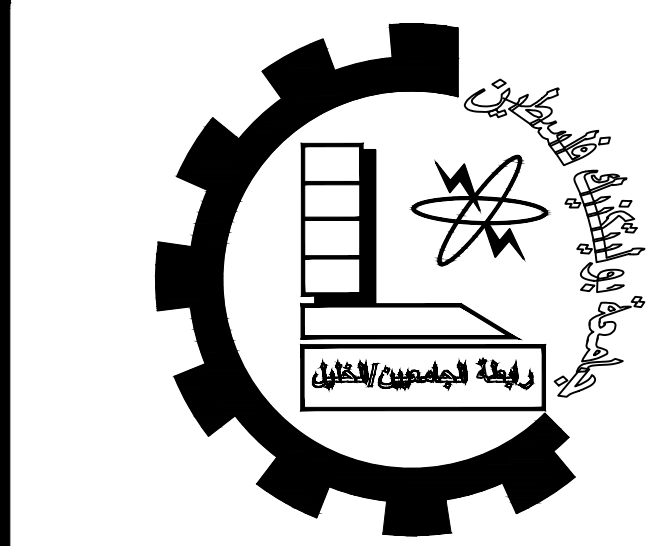
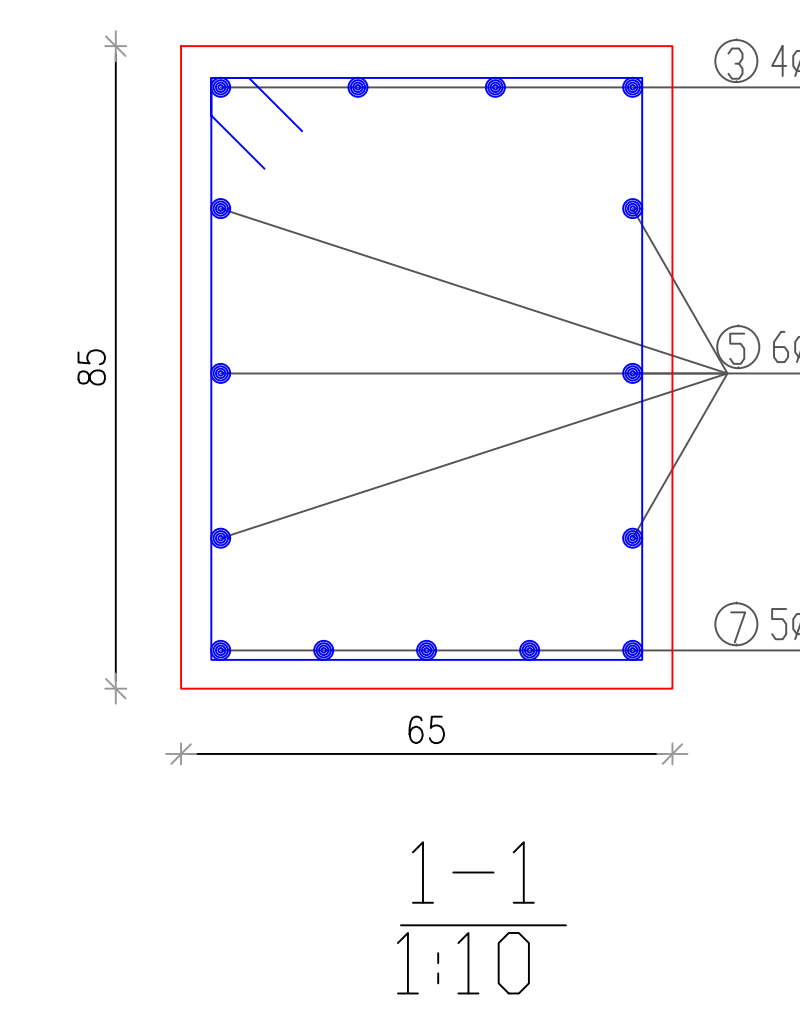
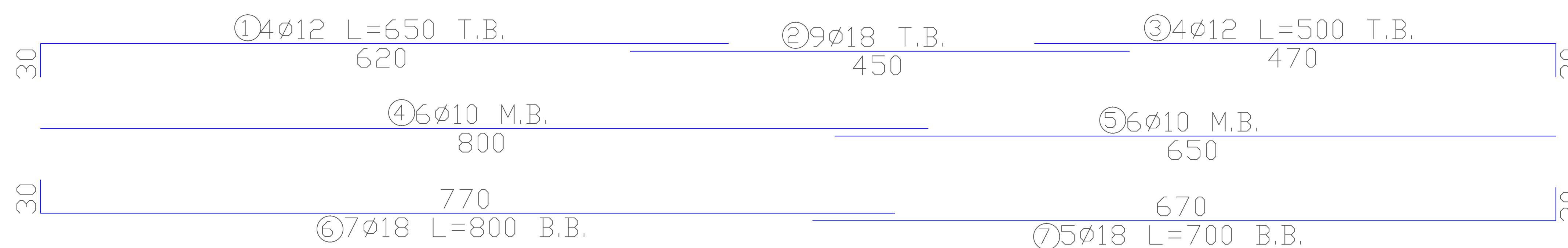
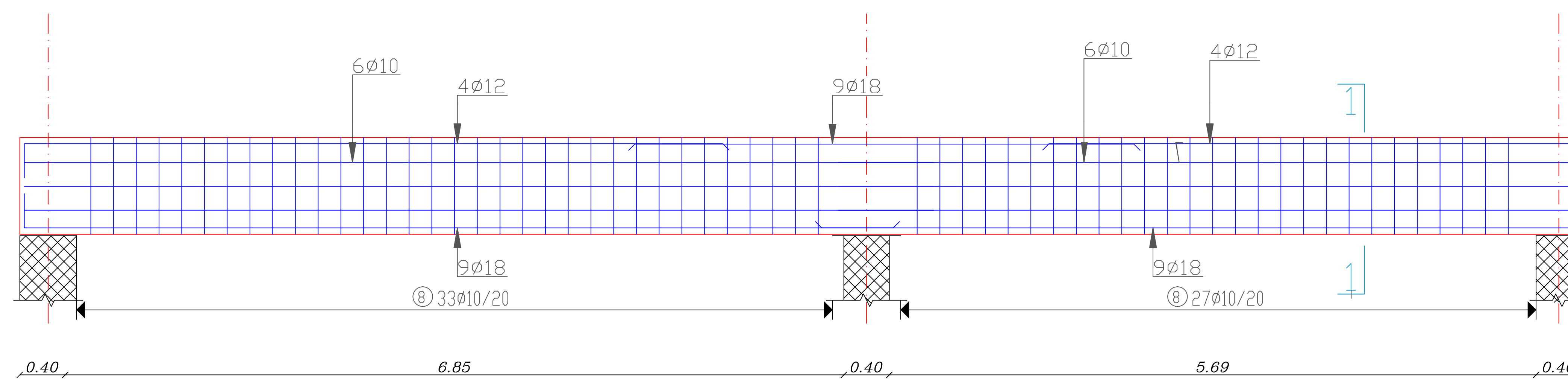
Beam : 3

Scale 1:25



Beam : 4

Scale 1:25



Palestine Polytechnic University

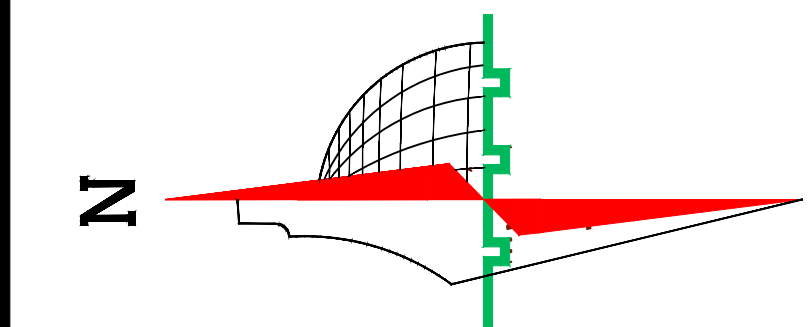
College of Engineering

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

**BEAMS 3&4**

Supervisor

Dr.Maher Amro.

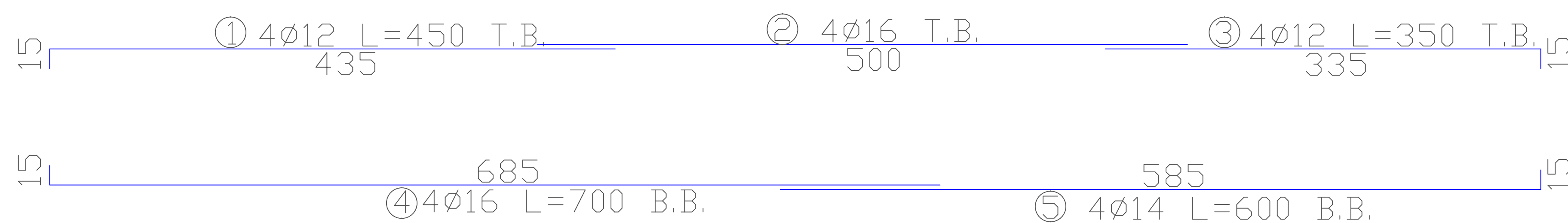
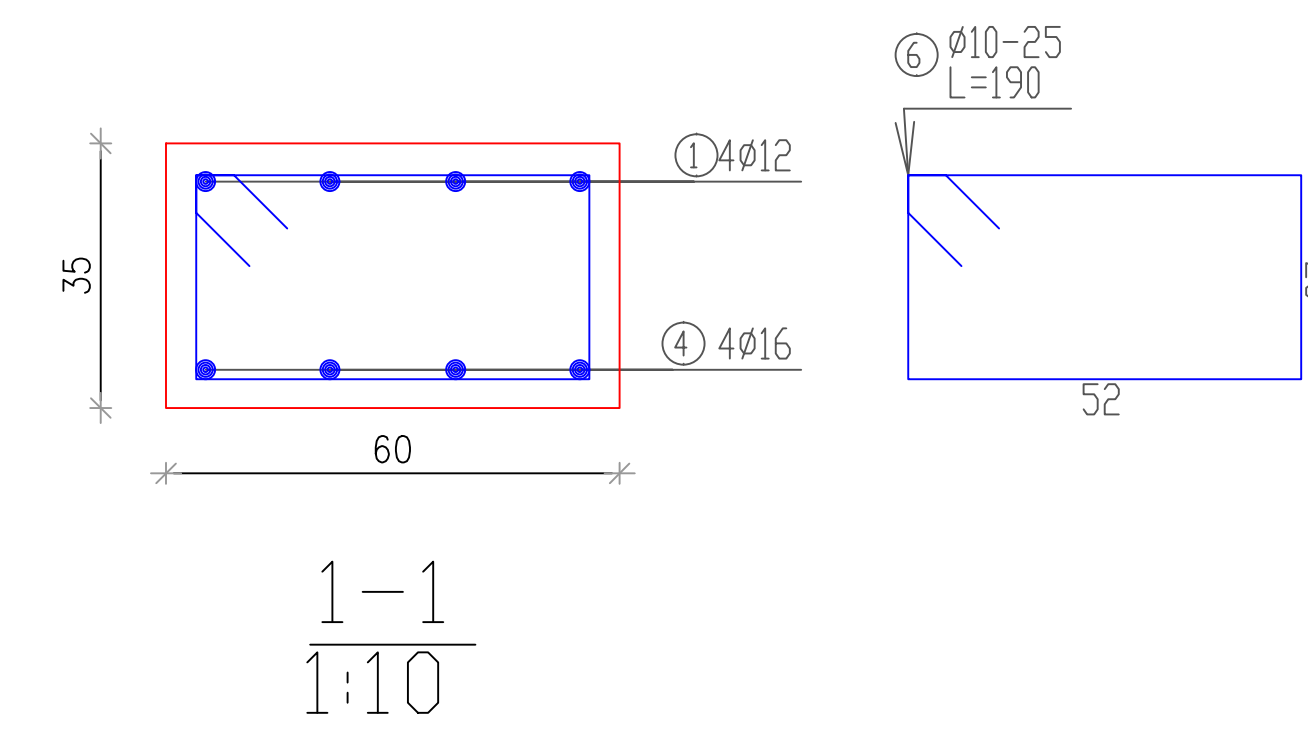
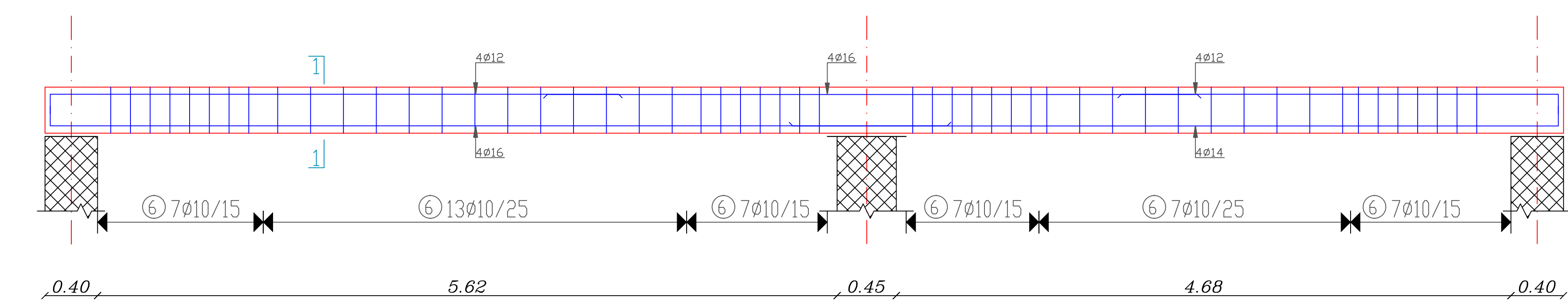
Done by :

Osama Abu E'ram

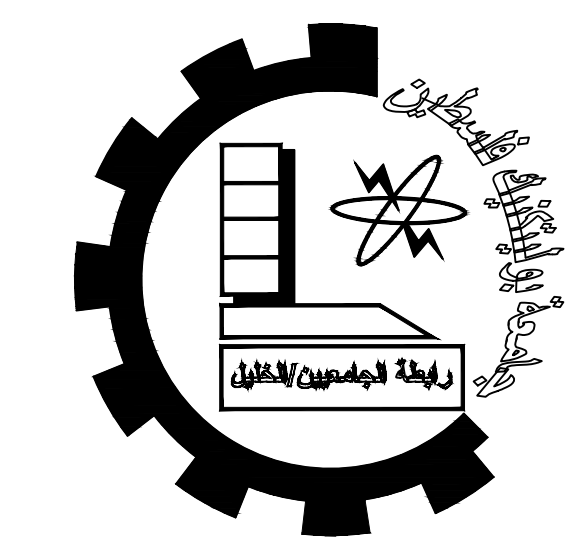
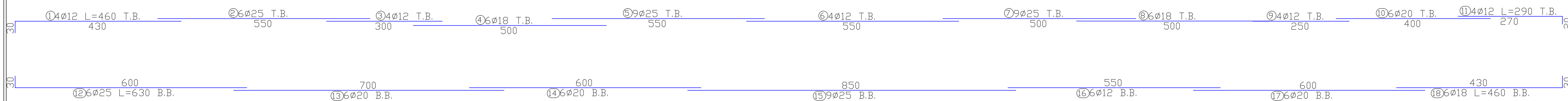
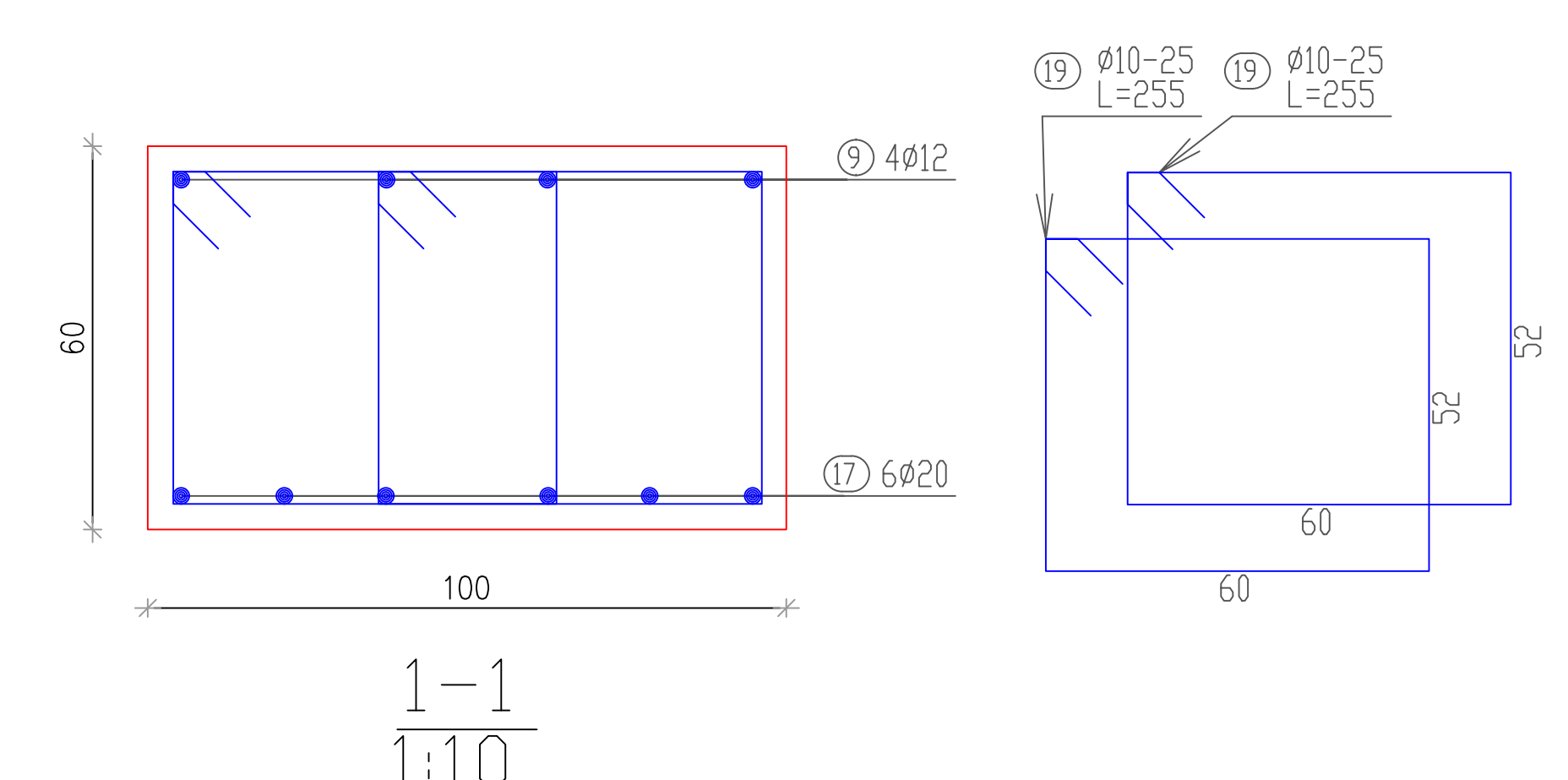
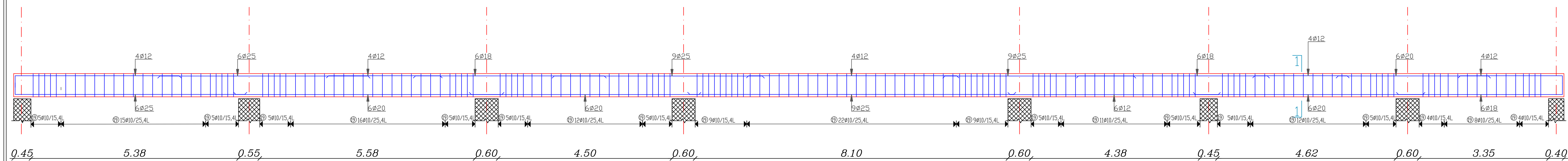
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B01	21/8/2022

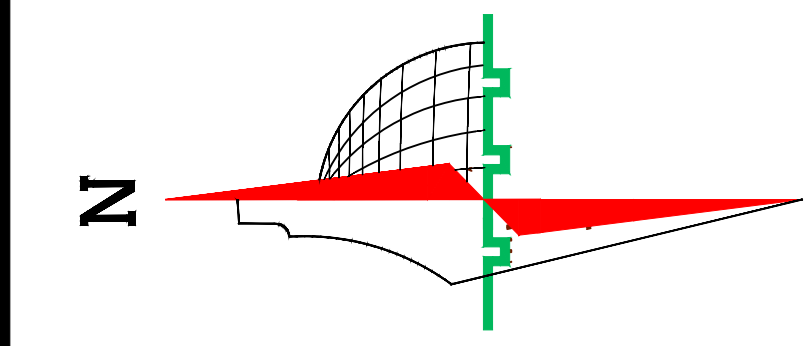
Beam : 5  
Scale 1:25



Beam : 6  
Scale 1:50



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

DRAWING TITLE :

**BEAMS 5&6**

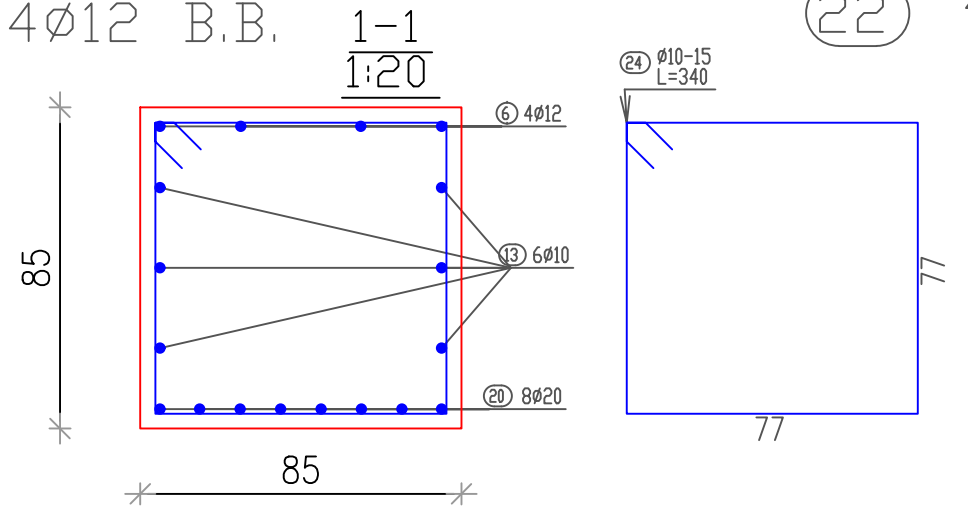
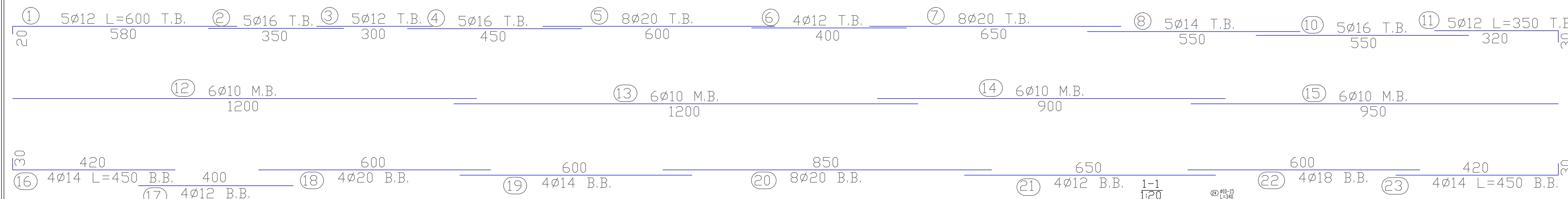
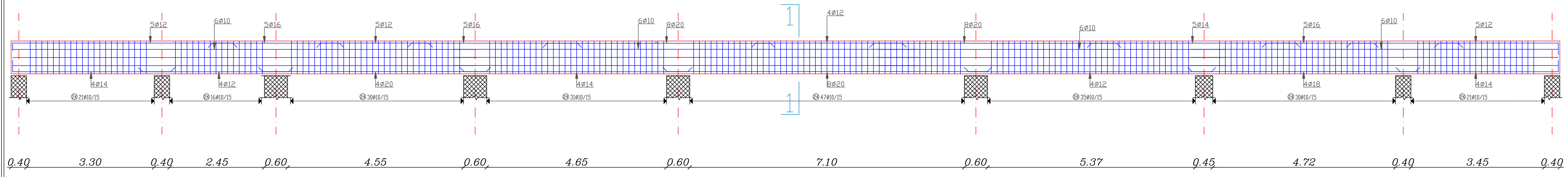
Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B02	21/8/2022

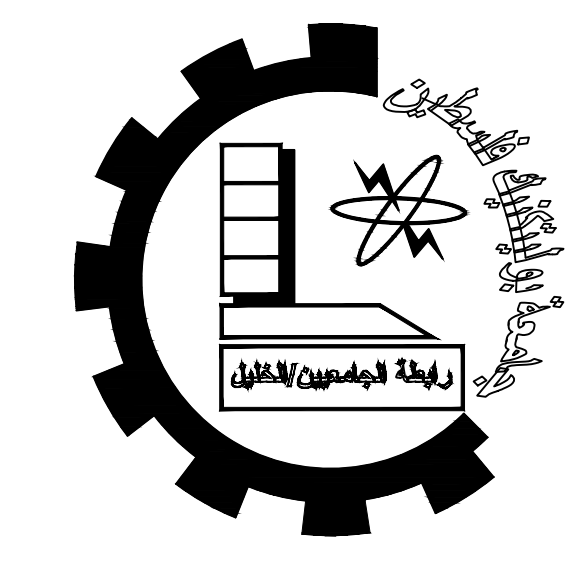
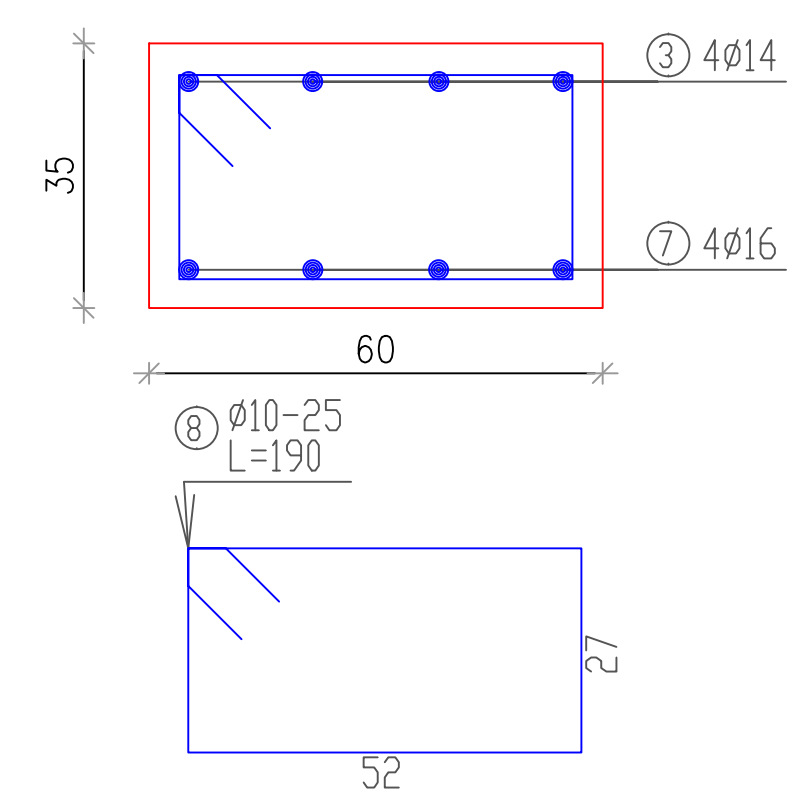
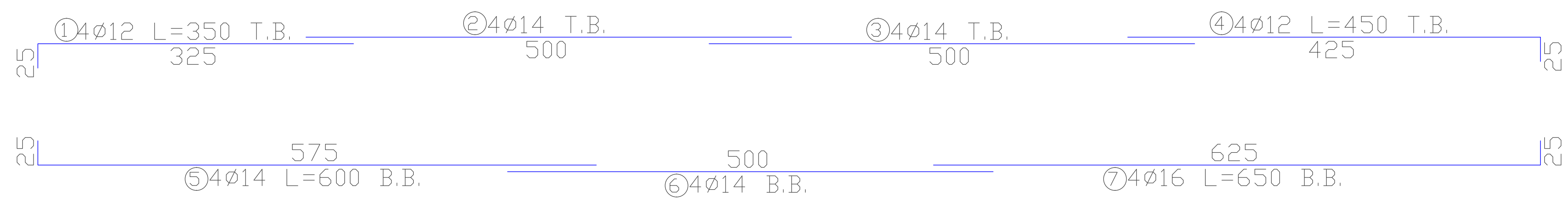
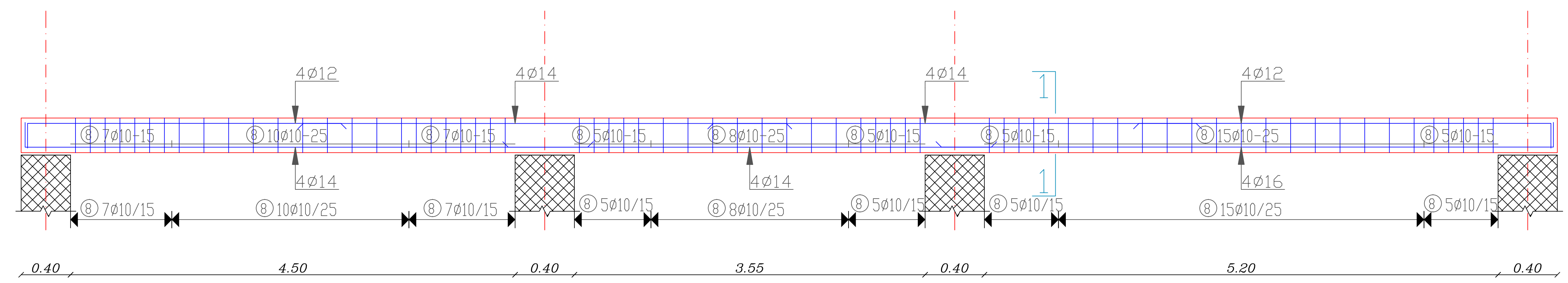
Beam : 7

Scale 1:50

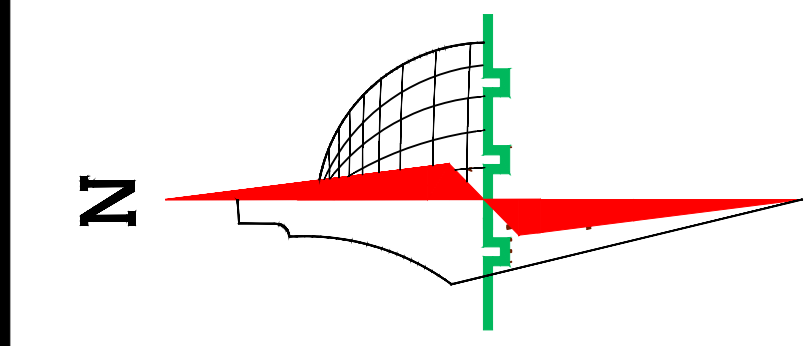


Beam : 8

Scale 1:25



Palestine Polytechnic University  
 College of Engineering  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

**BEAMS 7&8**

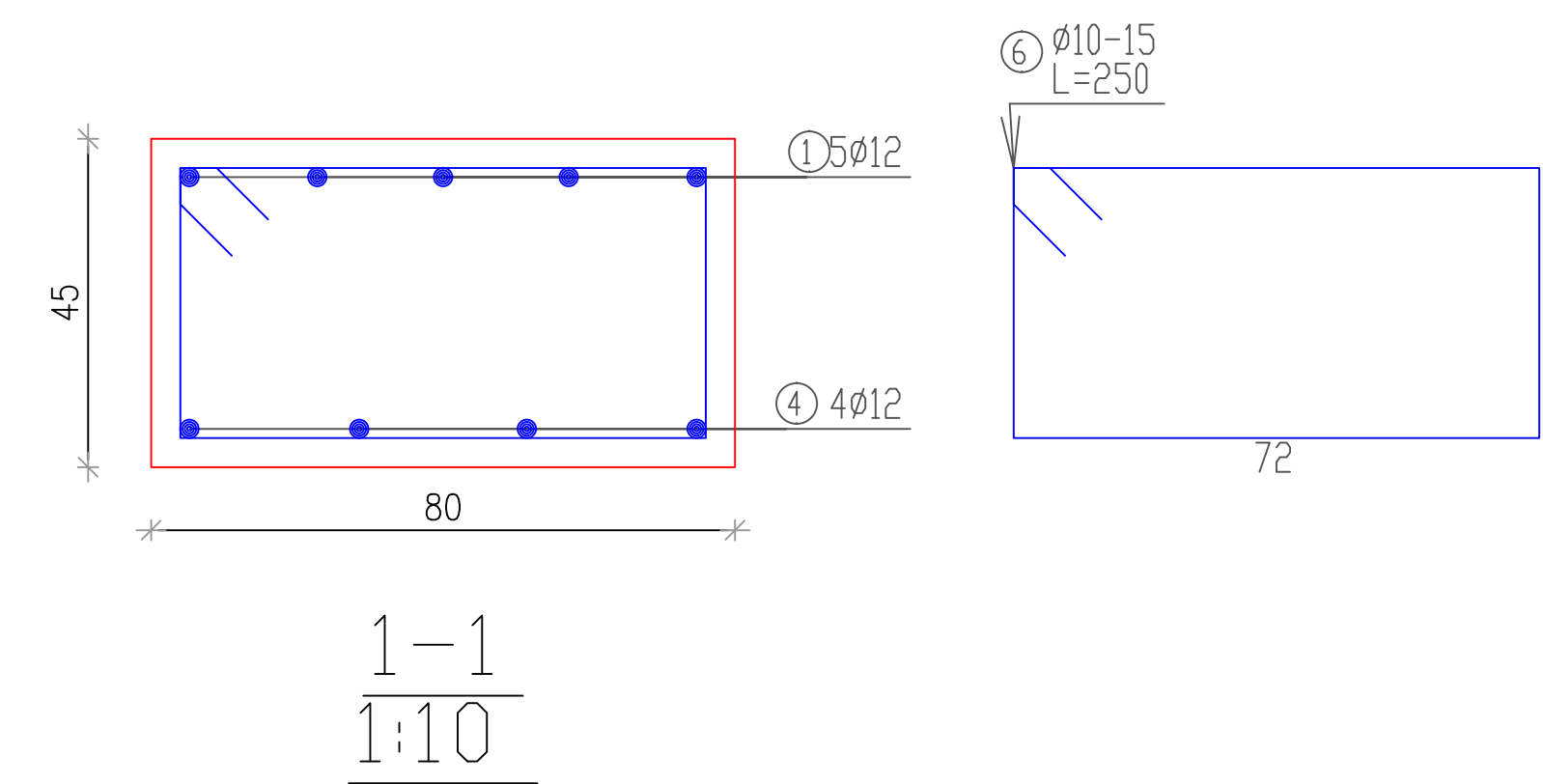
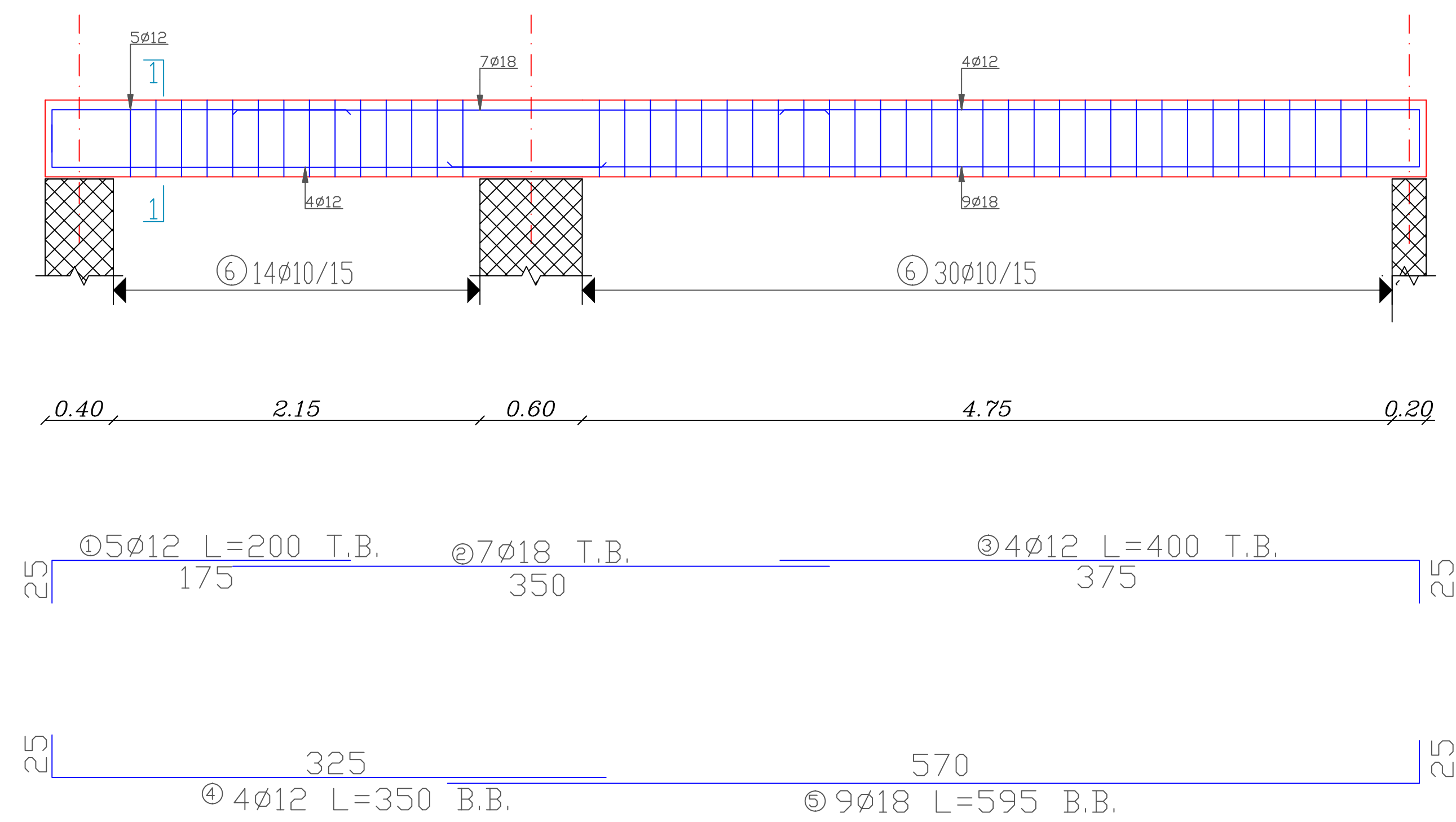
Supervisor  
 Dr.Maher Amro.

Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B03	21/8/2022

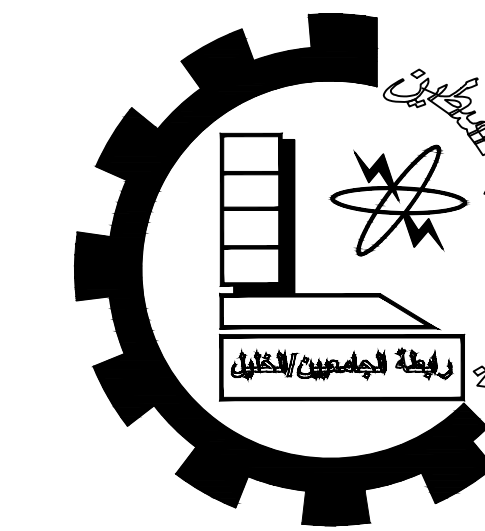
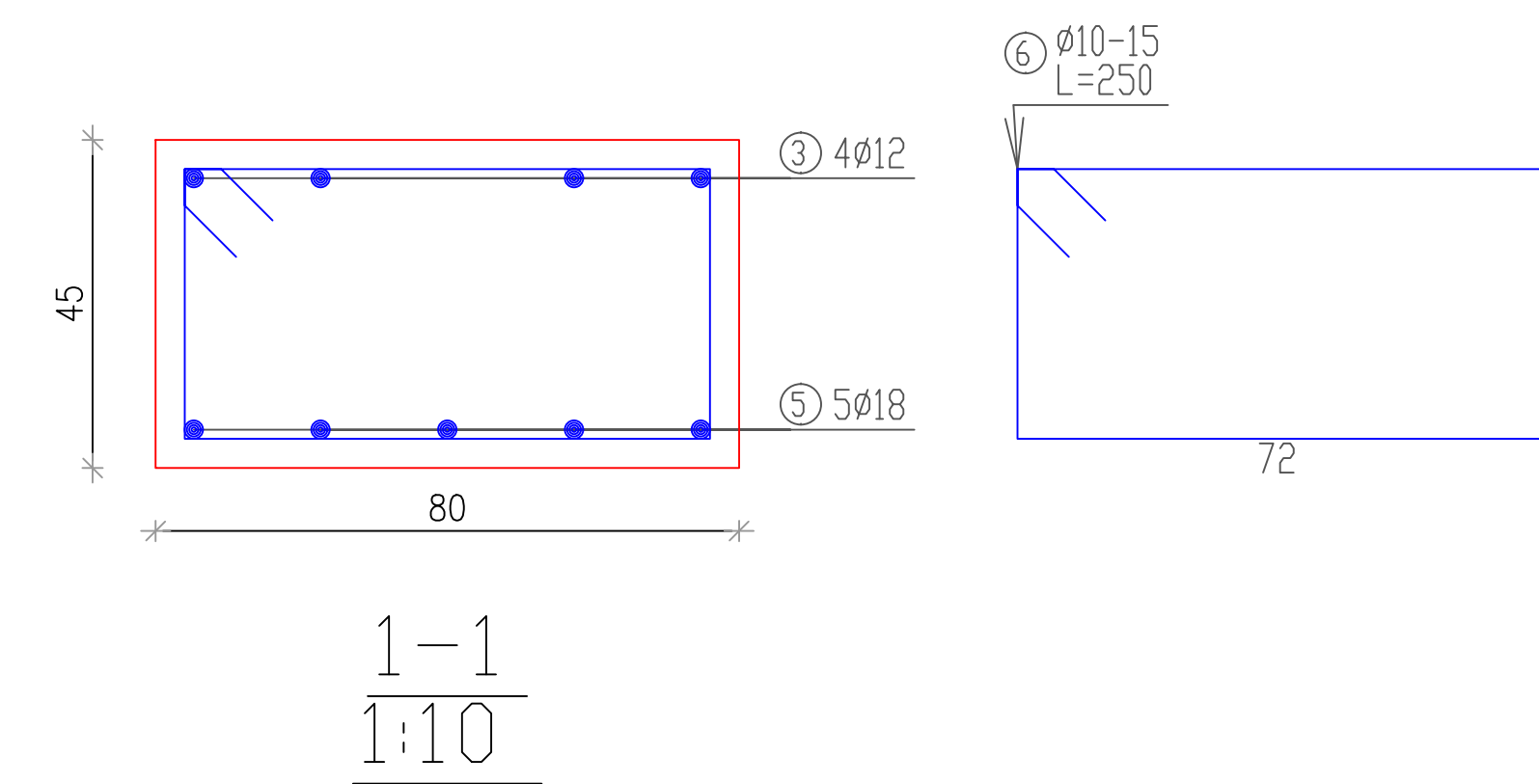
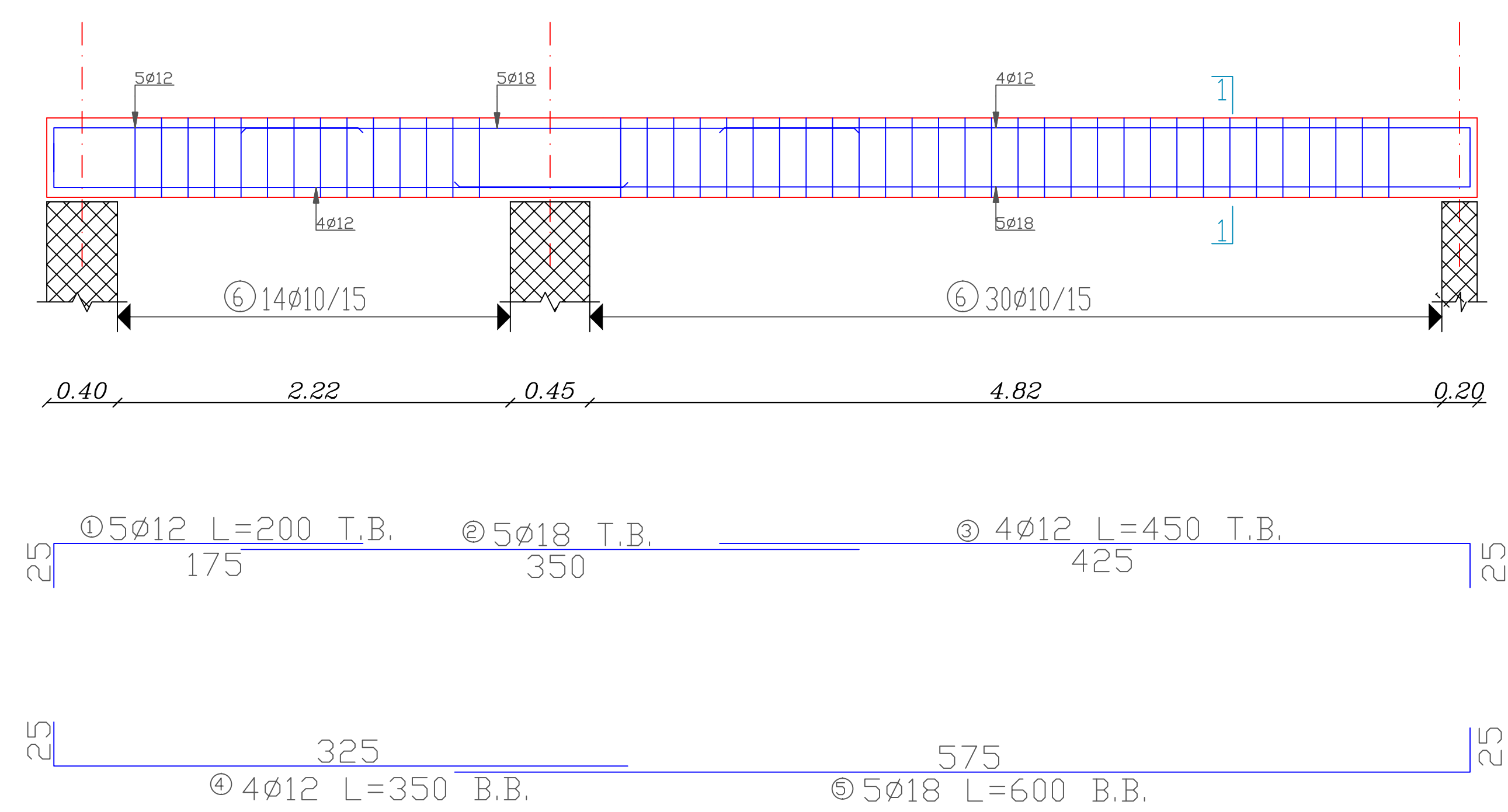
Beam : 9

Scale 1:25

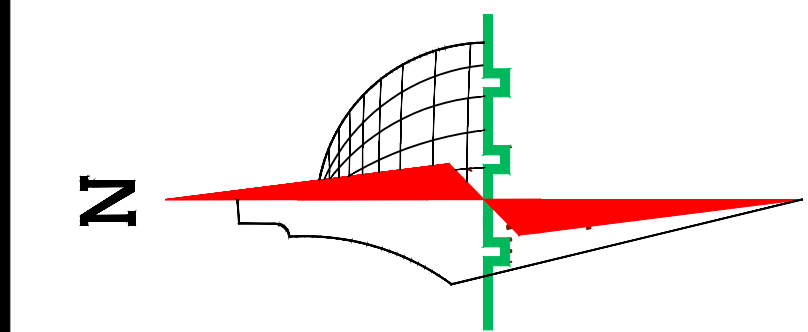


Beam : 10

Scale 1:25



Palestine Polytechnic University  
 College of Engineering  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materiales
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

BEAMS 9&10

Supervisor

Dr.Maher Amro.

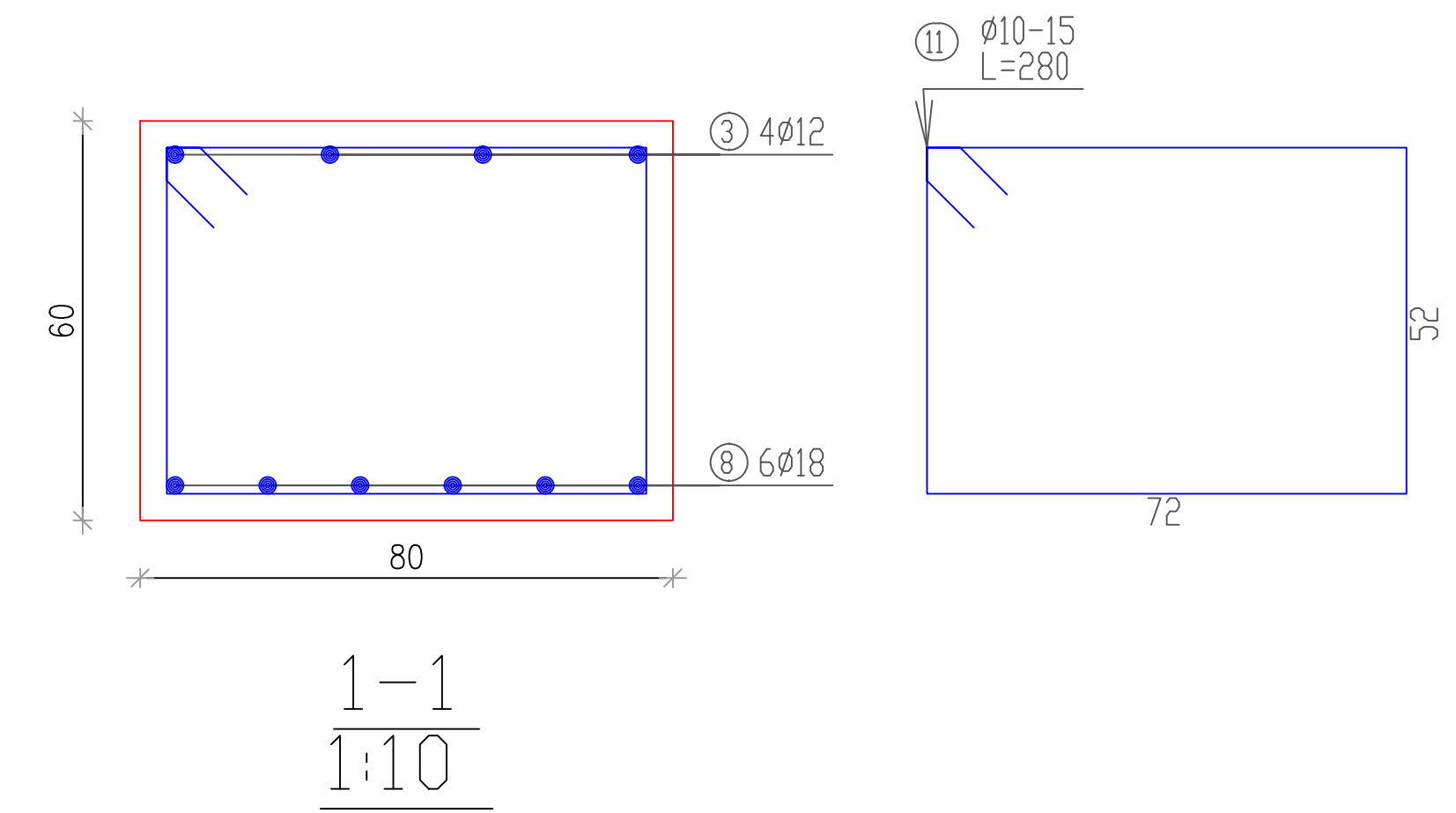
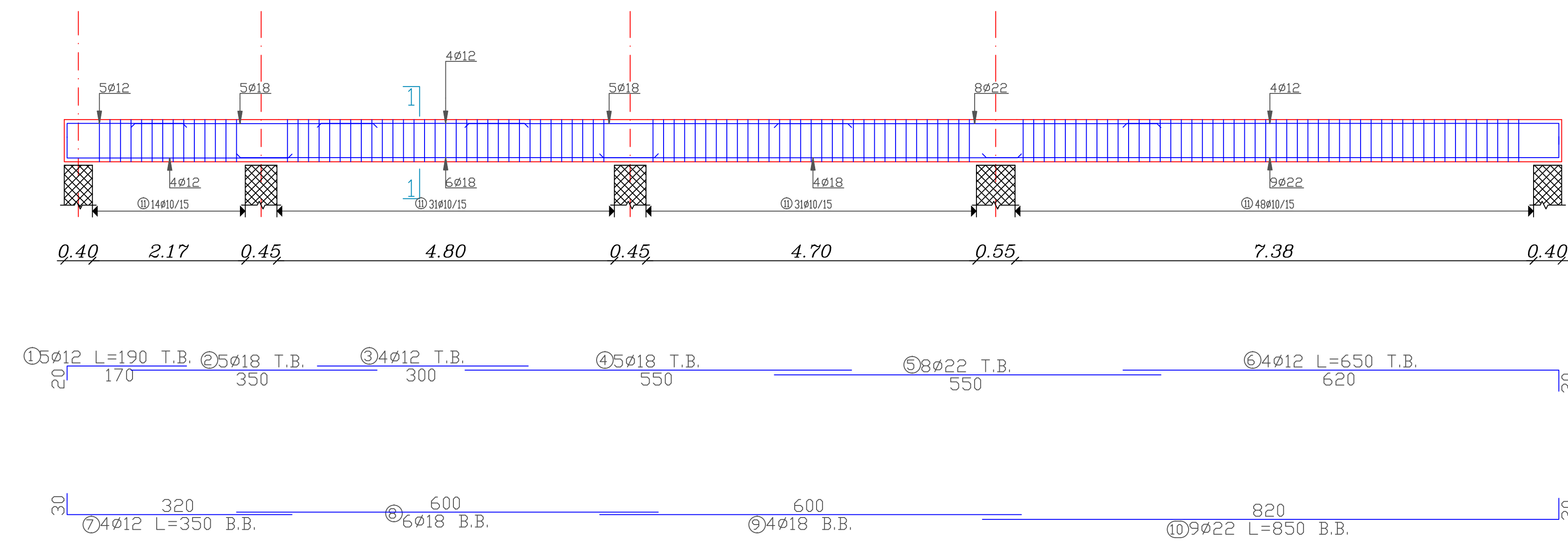
Done by :

Osama Abu E'ram

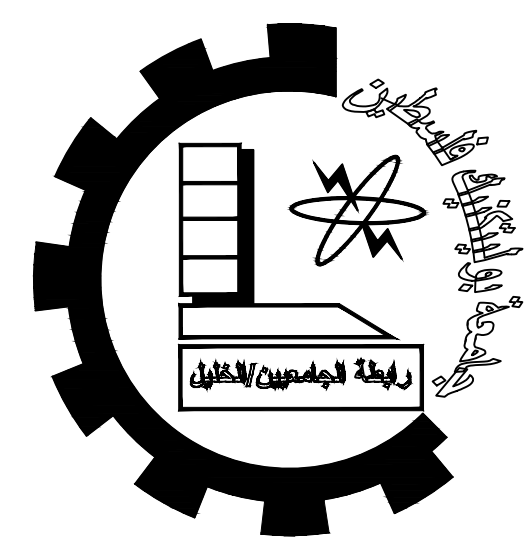
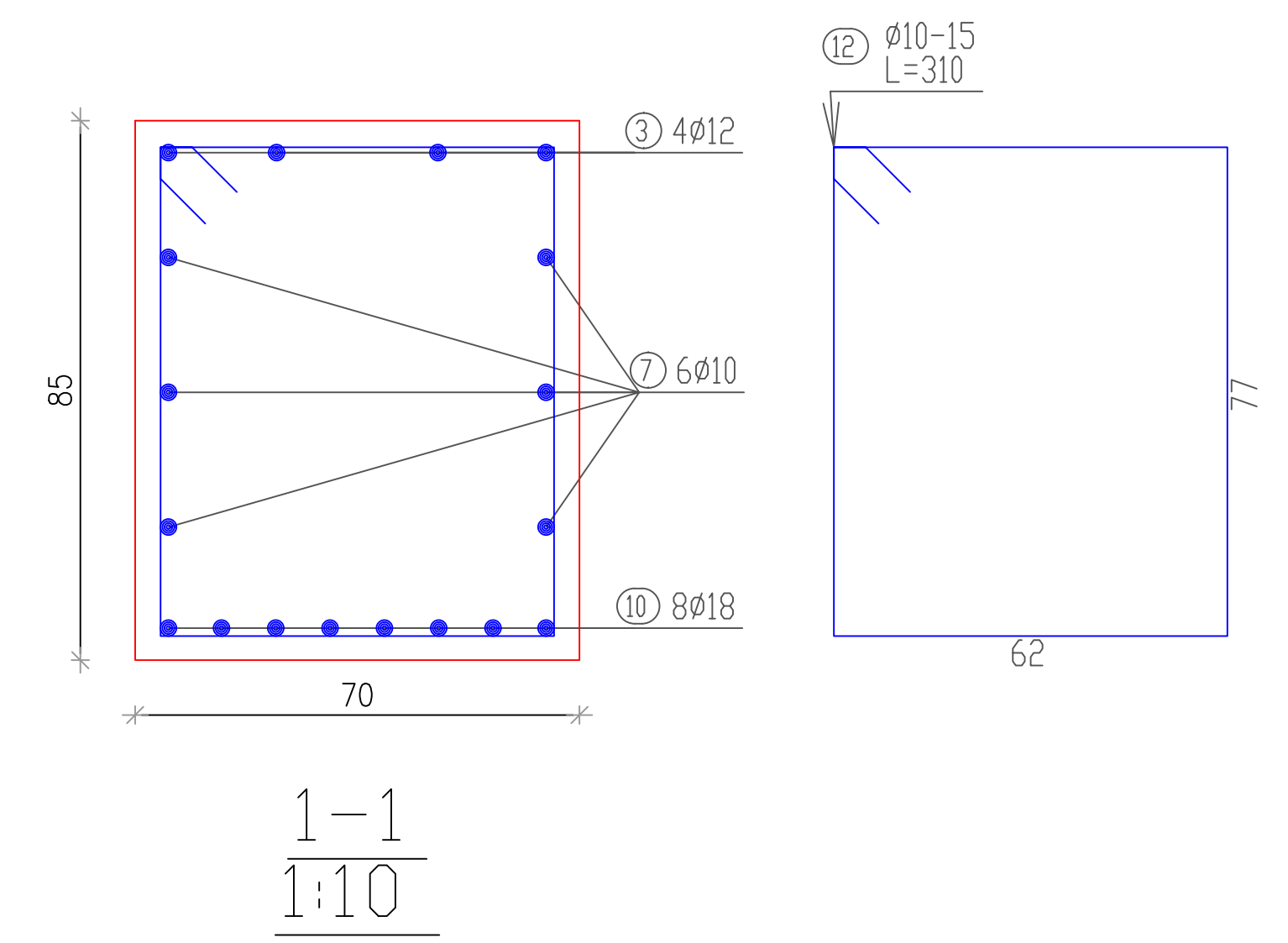
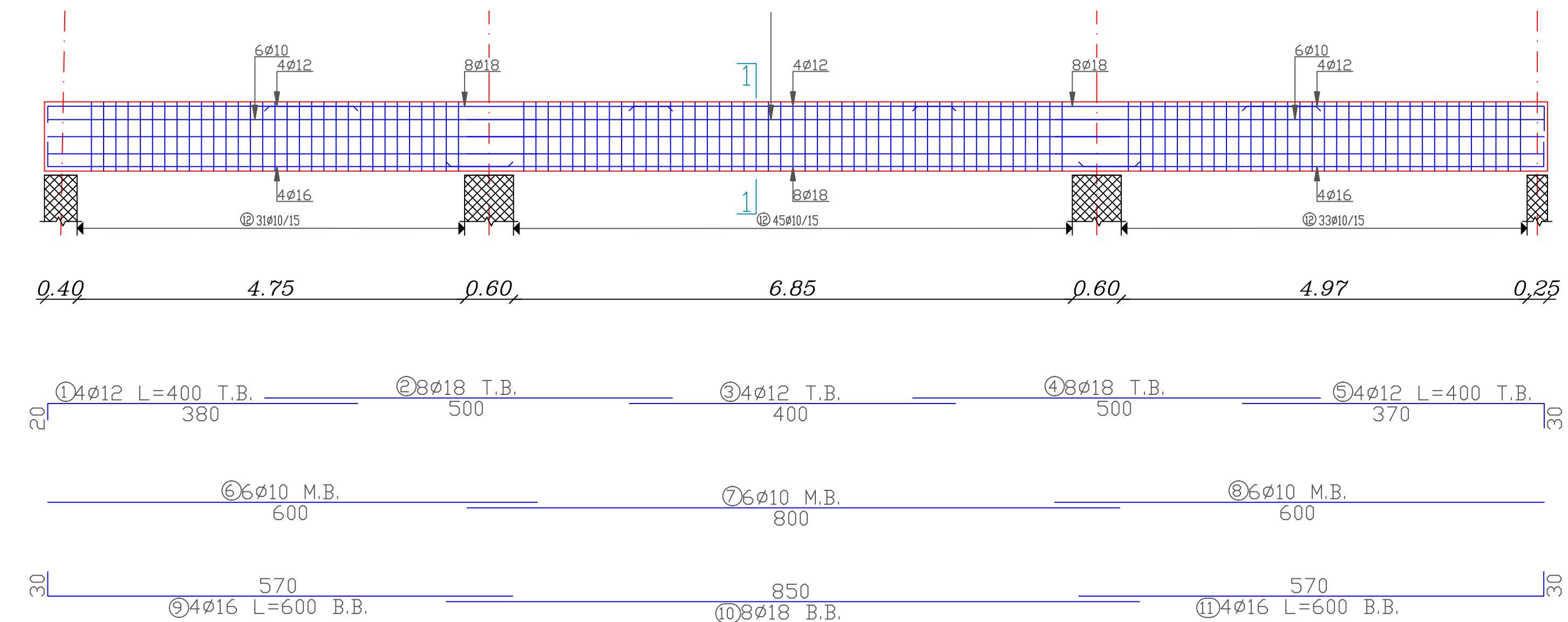
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B04	21/8/2022

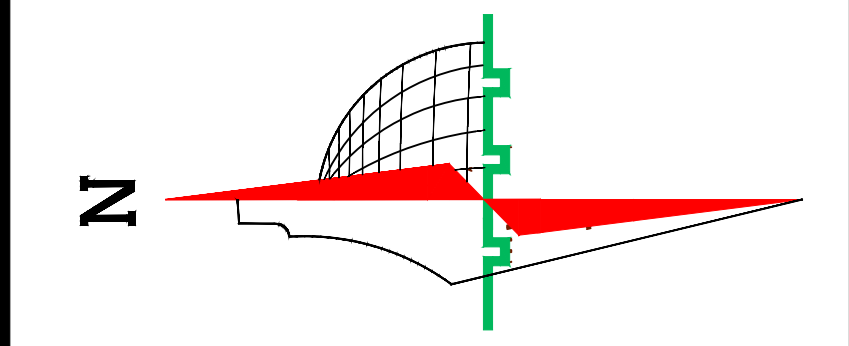
Beam : 11  
Scale 1:50



Beam : 13  
Scale 1:50



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

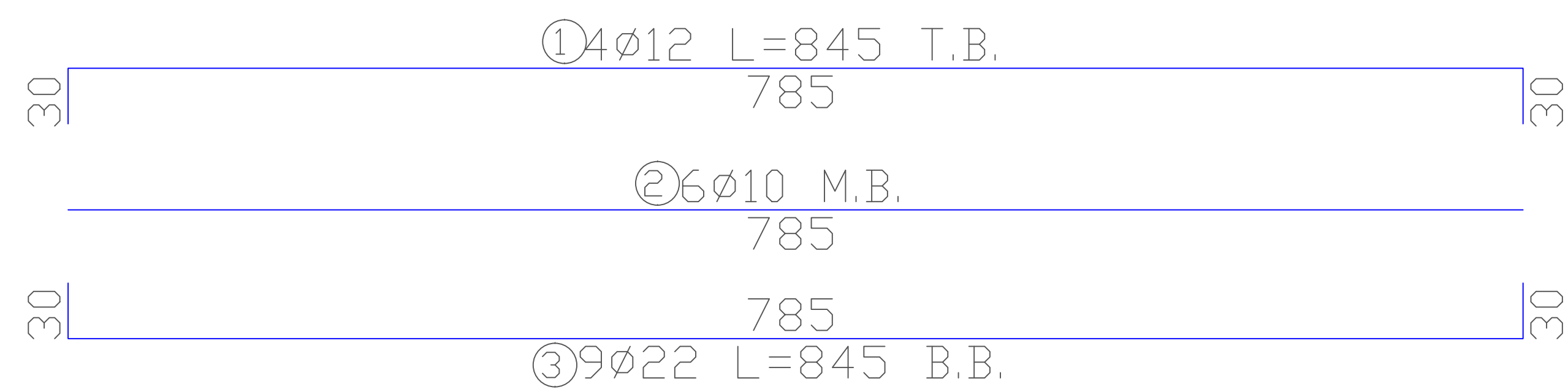
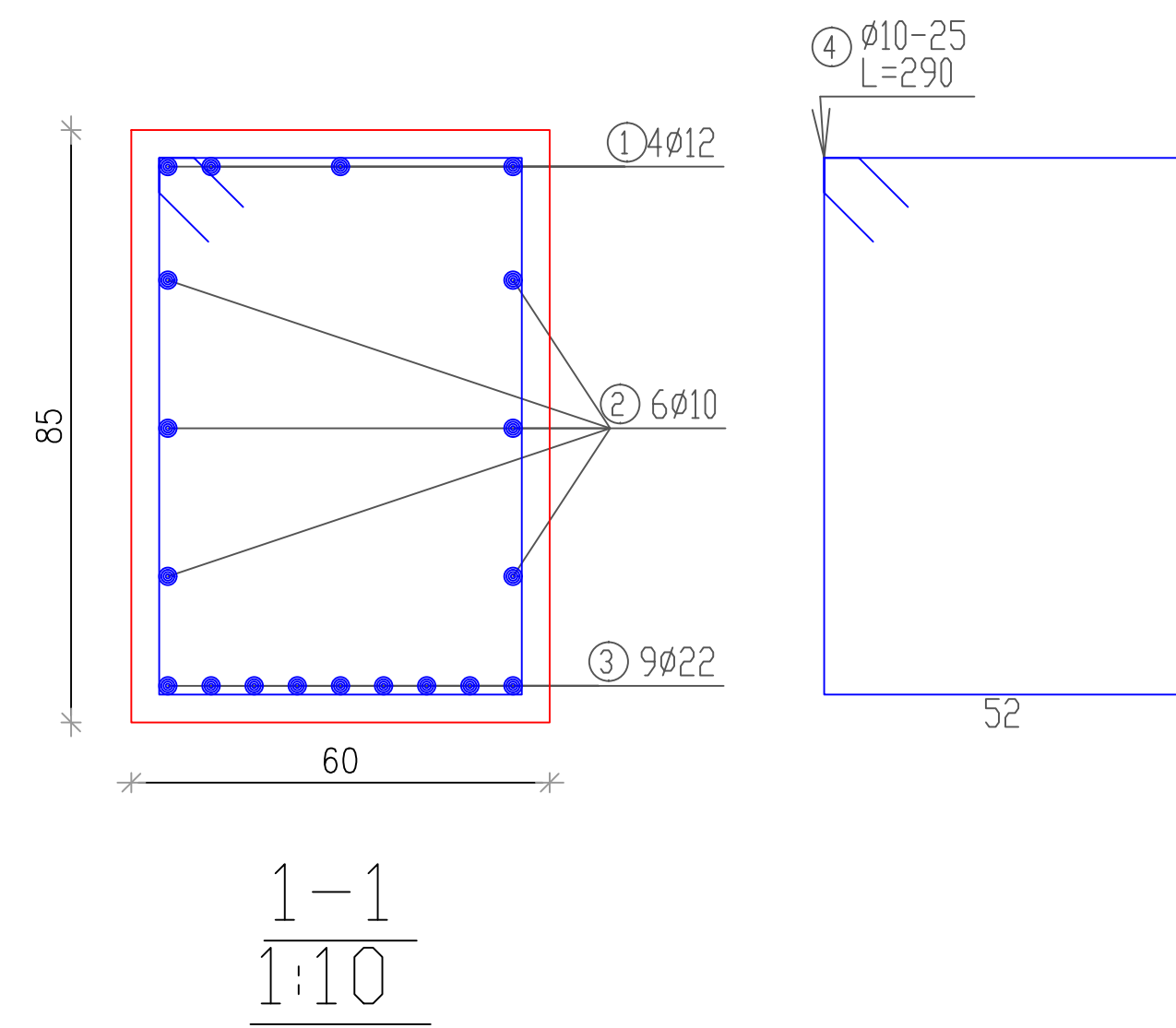
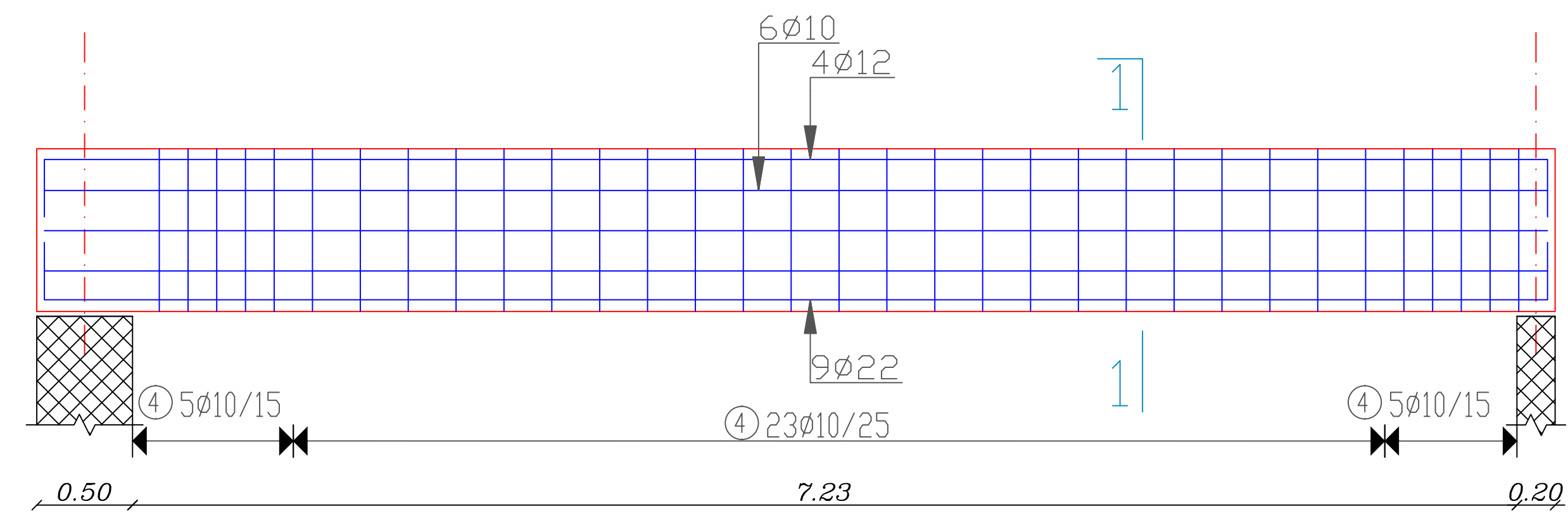
**BEAMS 11&13**

Supervisor  
Dr.Maher Amro.

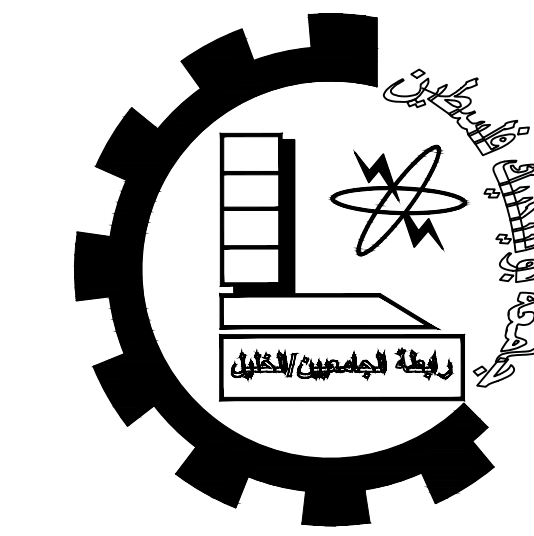
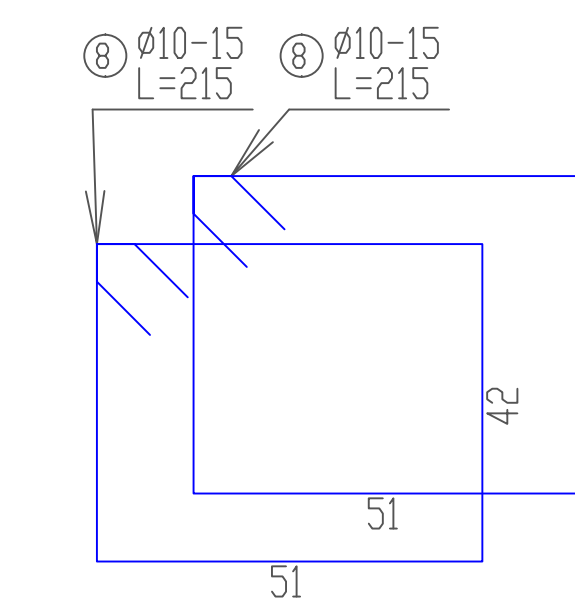
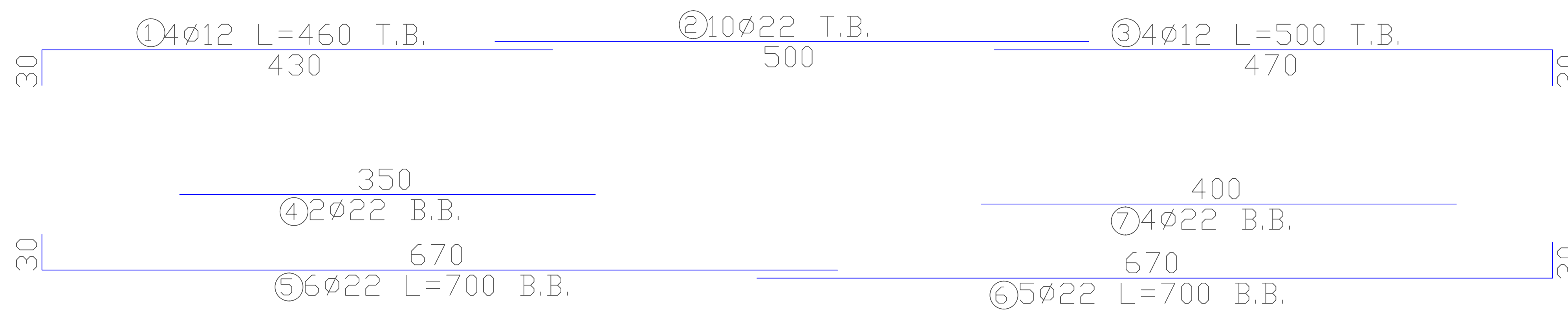
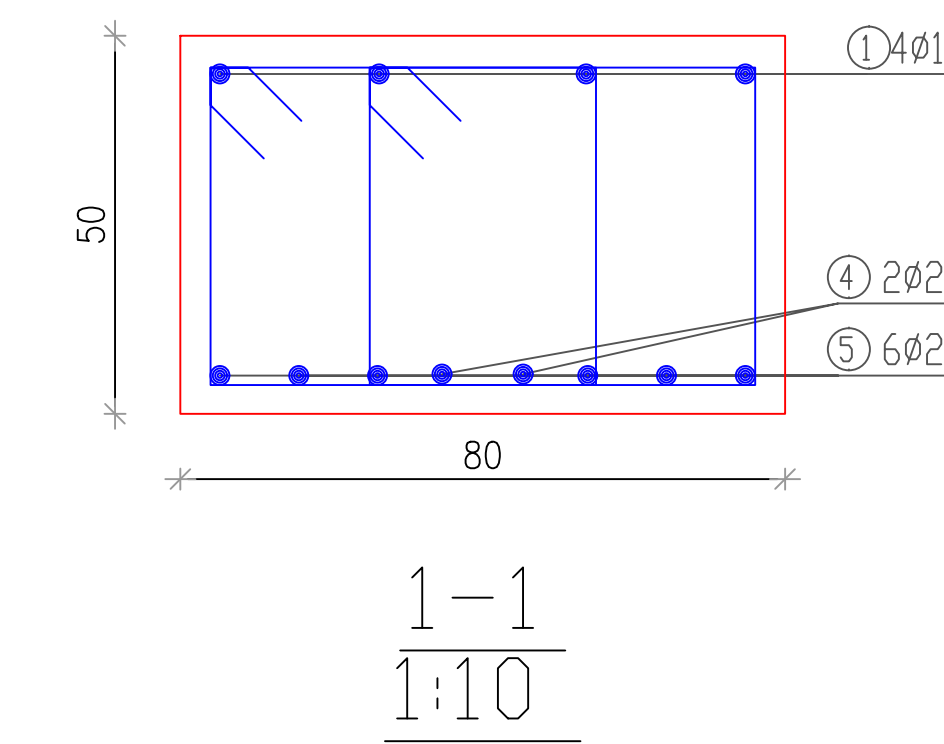
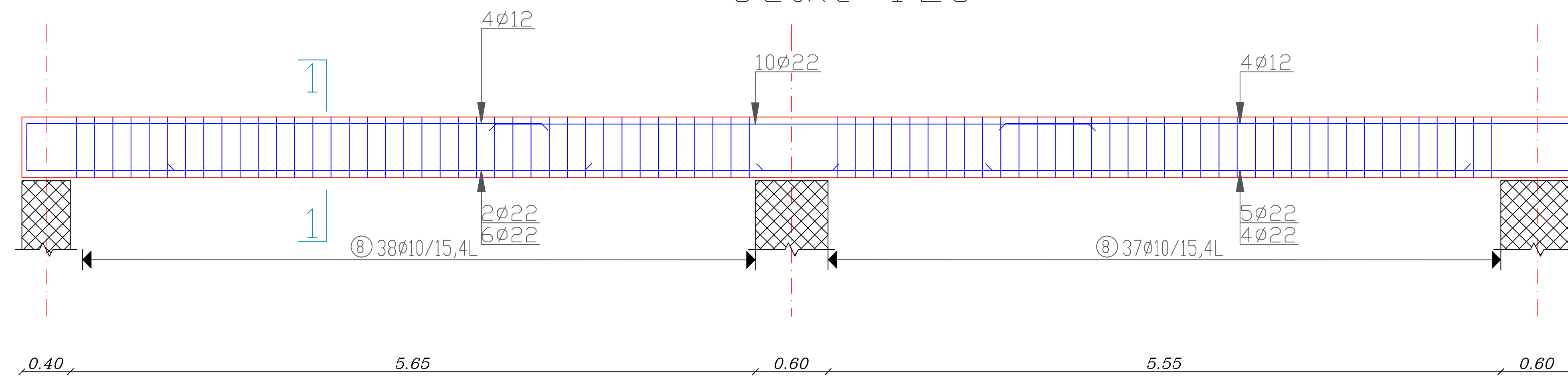
Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B05	21/8/2022

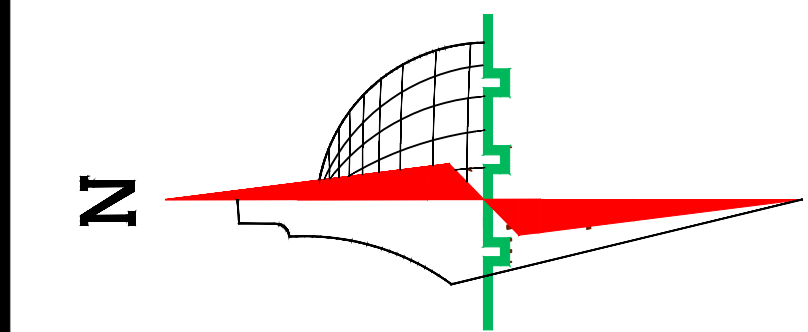
Beam : 14  
Scale 1:25



Beam : 15  
Scale 1:25



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



**Legend :**

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

**BEAMS 14&15**

Supervisor

Dr.Maher Amro.

Done by :

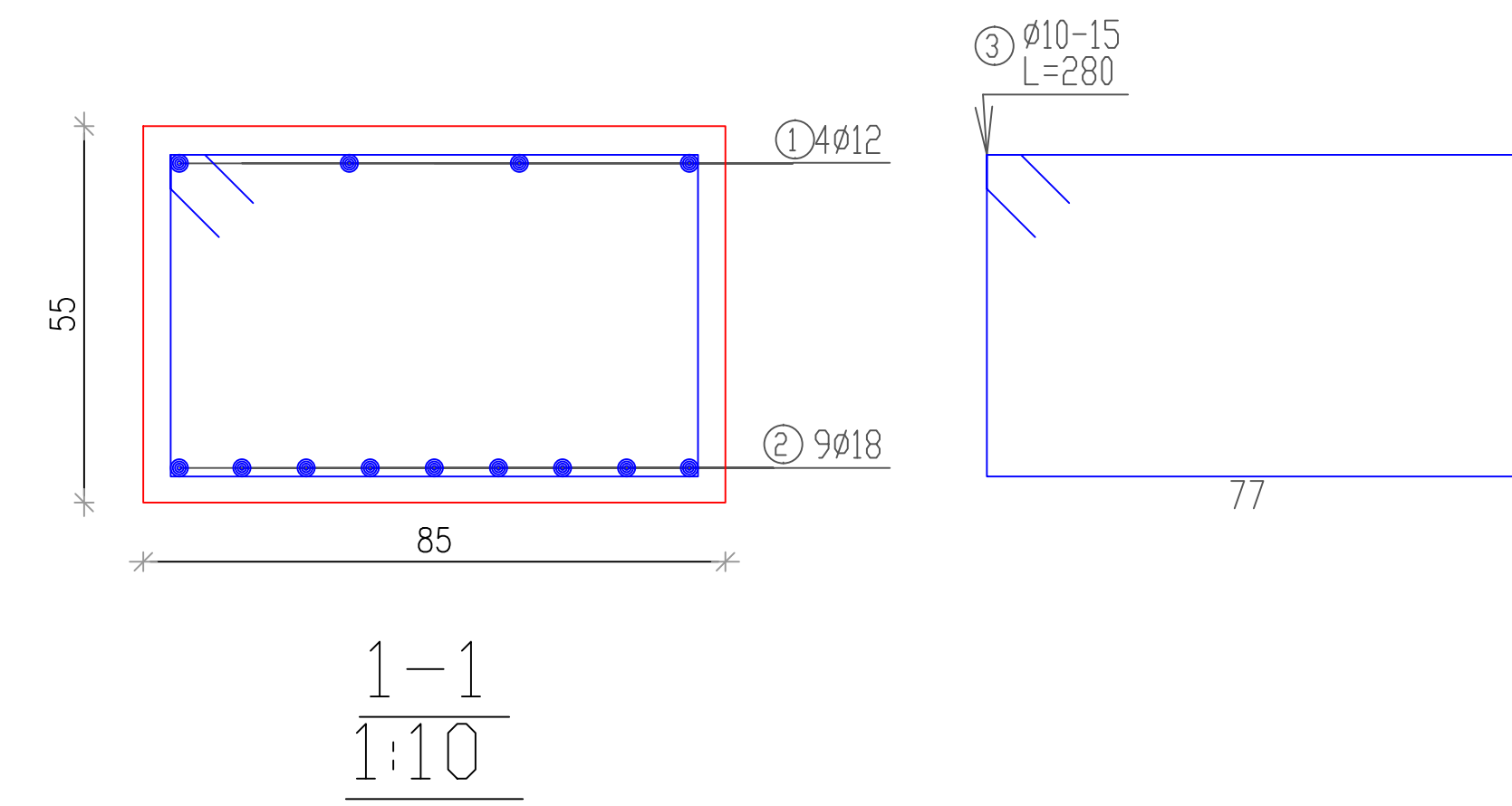
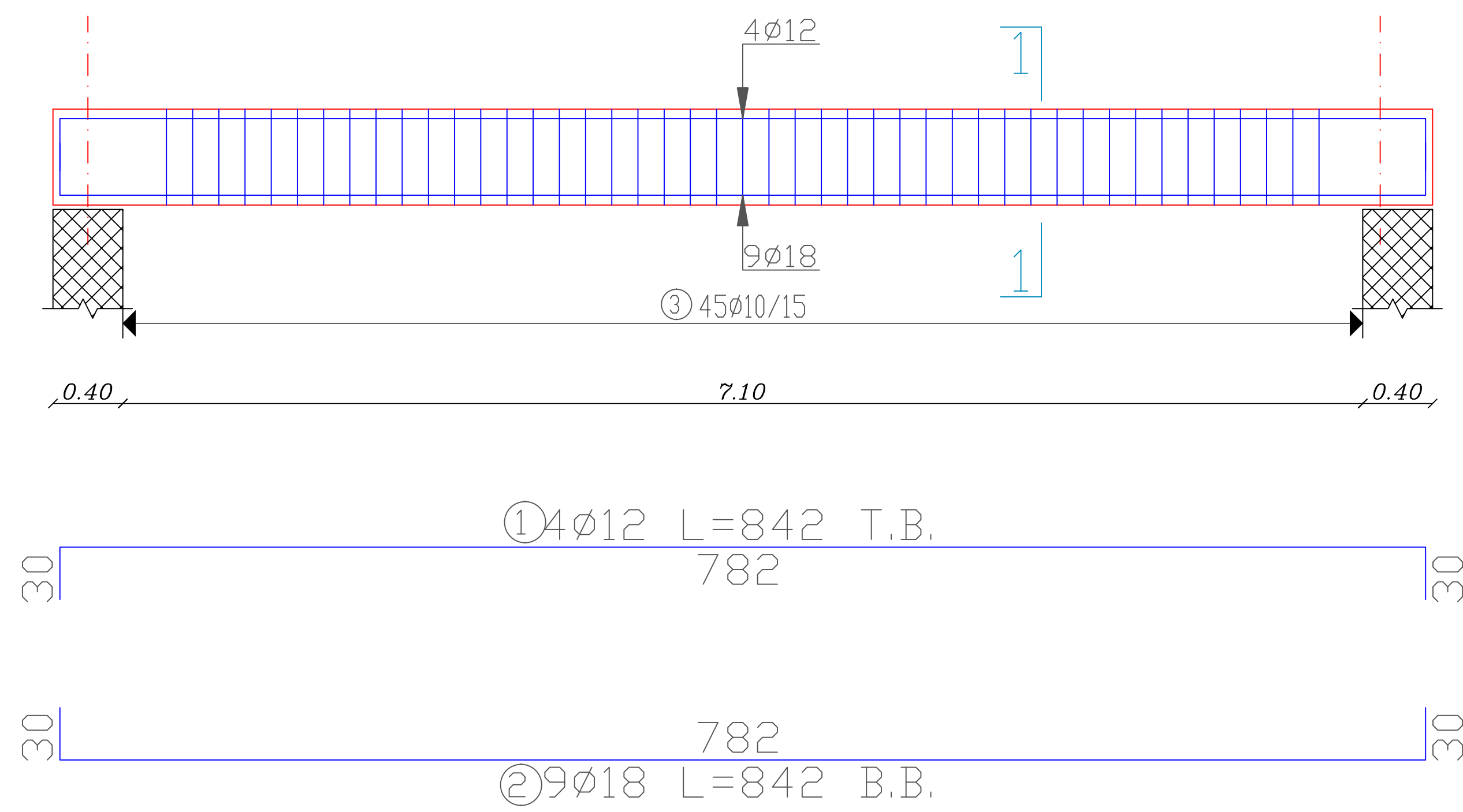
Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B06	21/8/2022

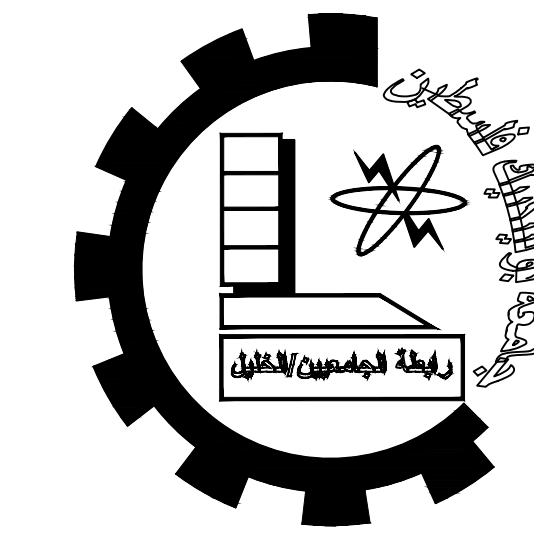
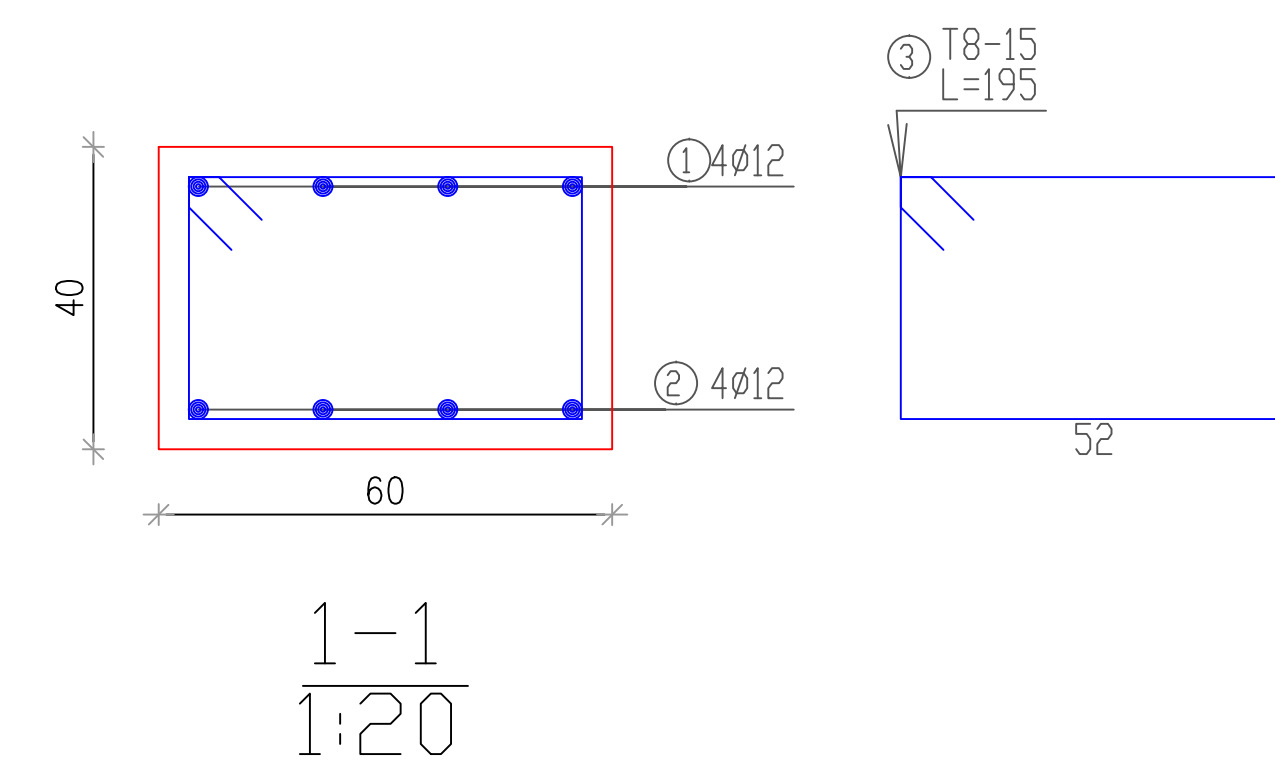
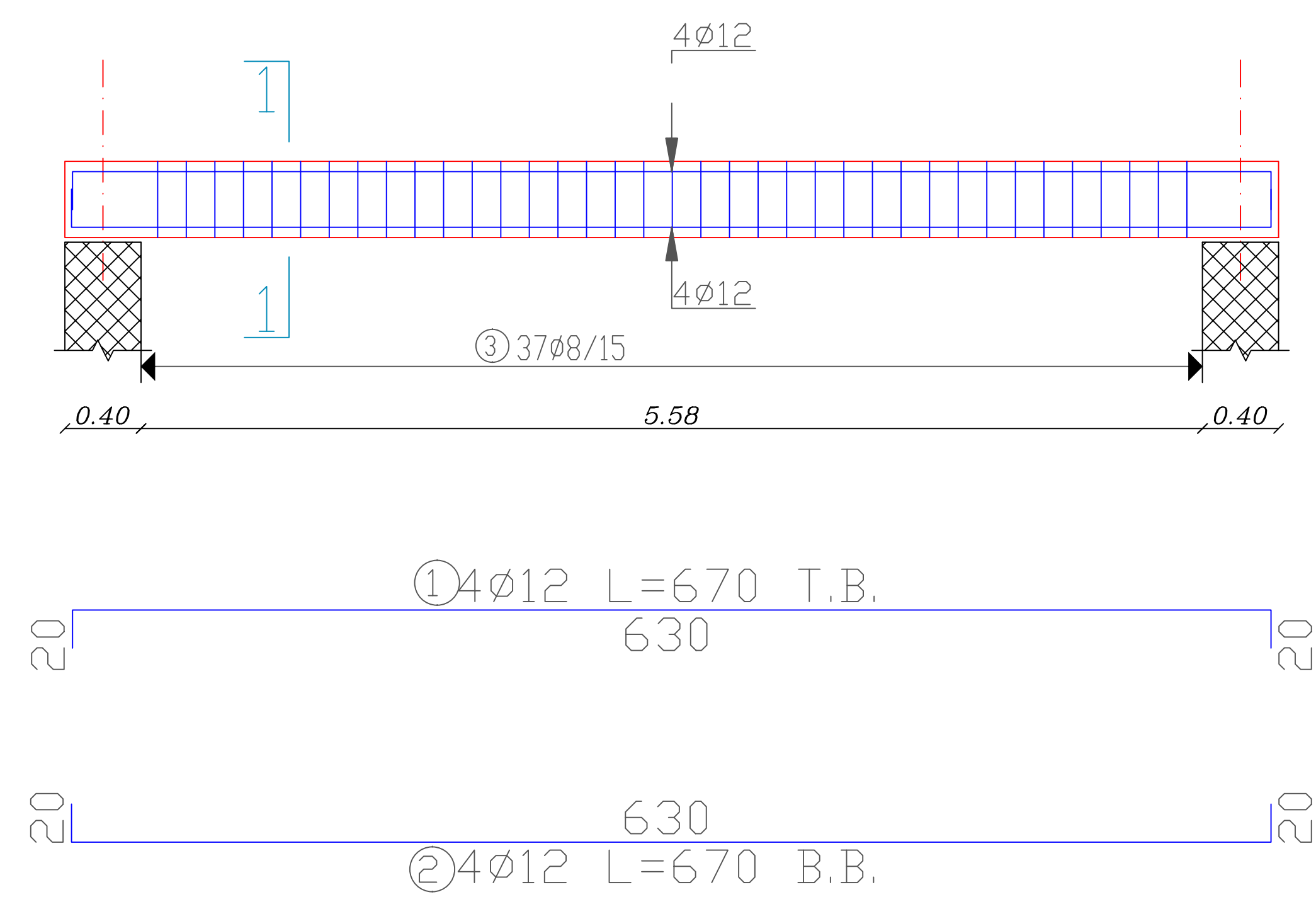
Beam : 17

Scale 1:25



Beam : 18

Scale 1:25



Palestine Polytechnic University

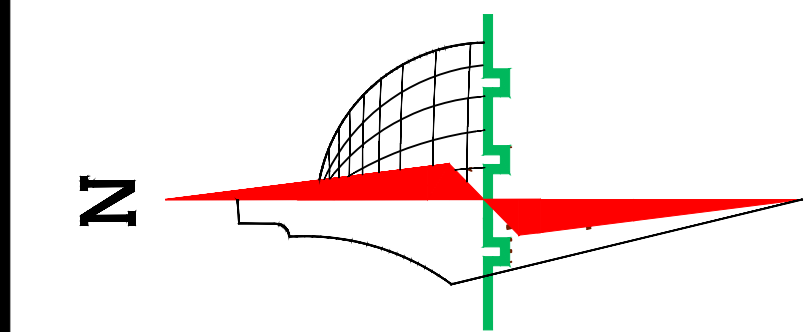
College of Engineering

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



**Legend :**

	Stone		Gravel
	R.Concrete		Wood
	Concrete		HEXAGONAL TILES
	Hollow Block		BAKLAVA TILES
	isolating materials		GRASS

DRAWING TITLE :

**BEAMS 17&18**

Supervisor

Dr.Maher Amro.

Done by :

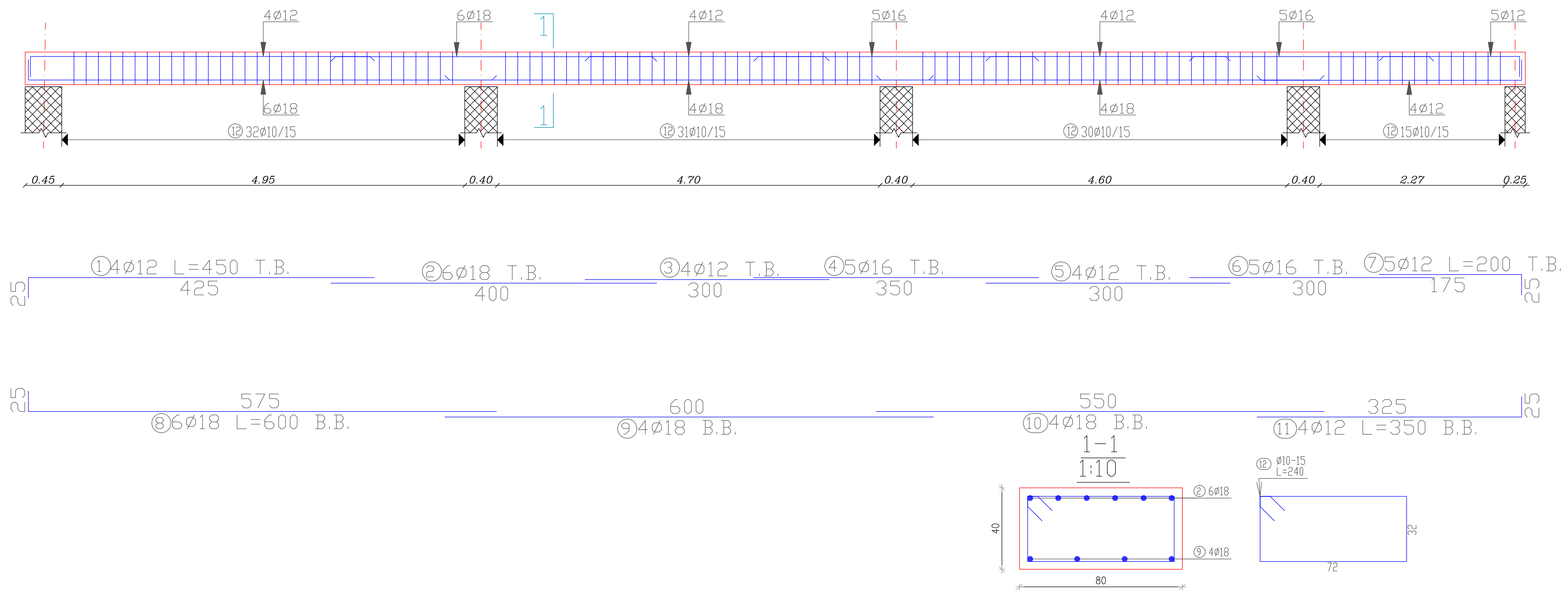
Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B07	21/8/2022

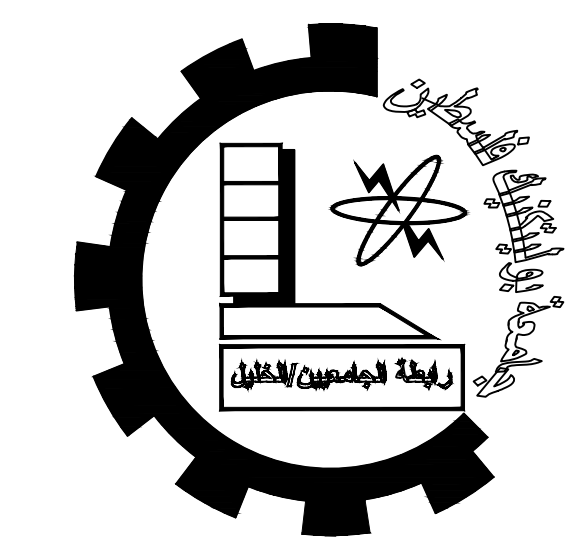
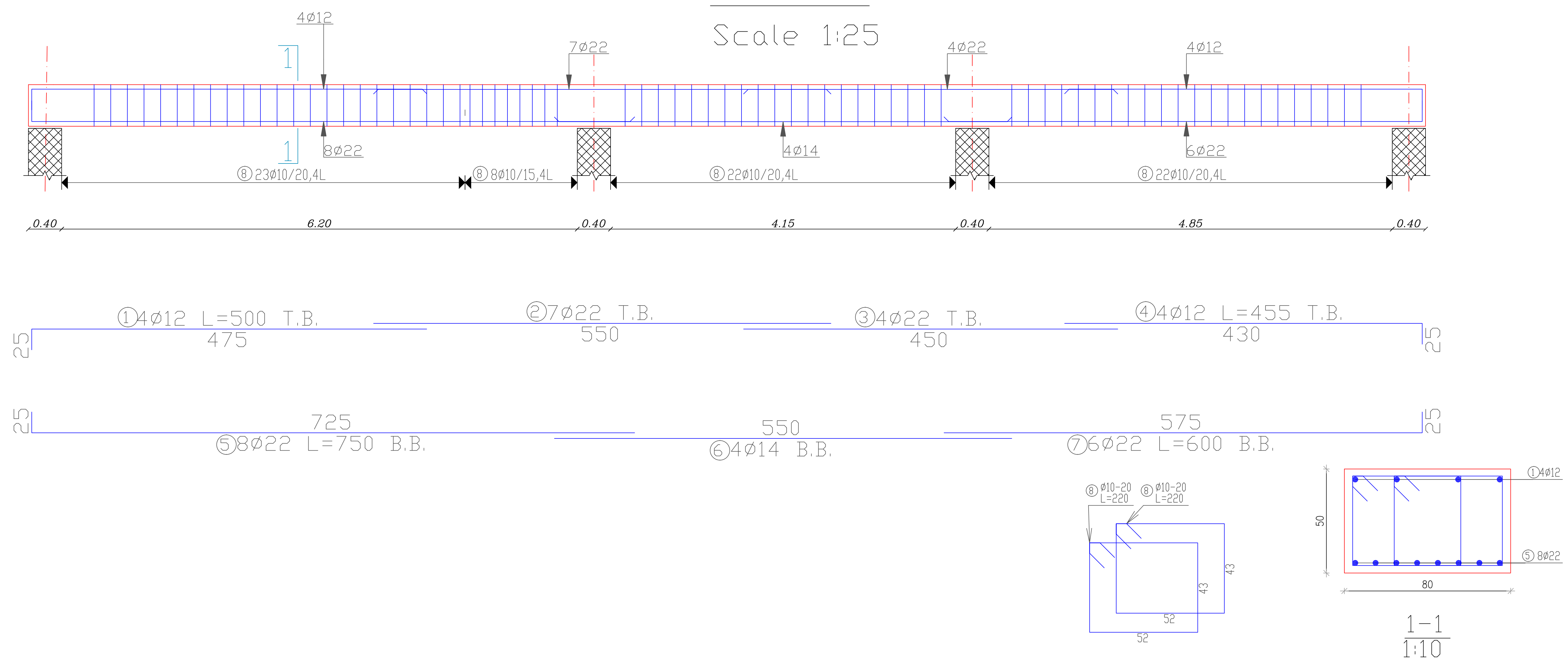
Beam : 19

Scale 1:25

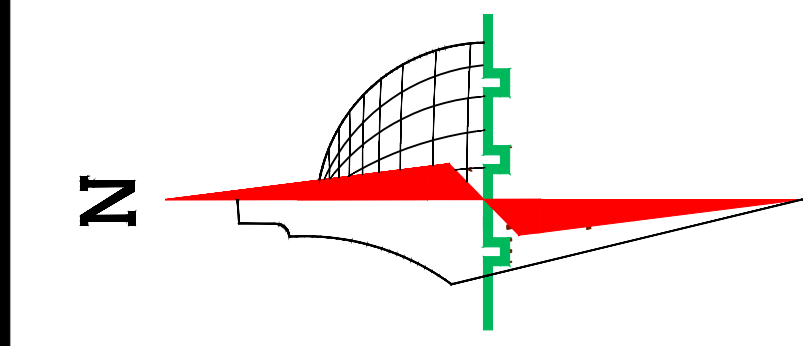


Beam : 20

Scale 1:25



Palestine Polytechnic University  
 College of Engineering  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

DRAWING TITLE :

**BEAMS 19&20**

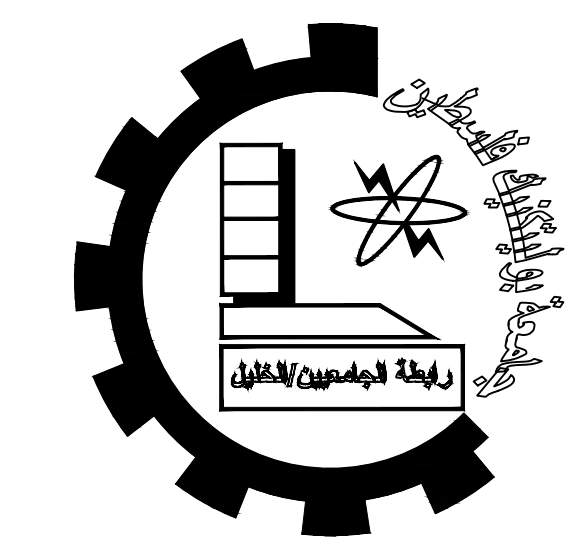
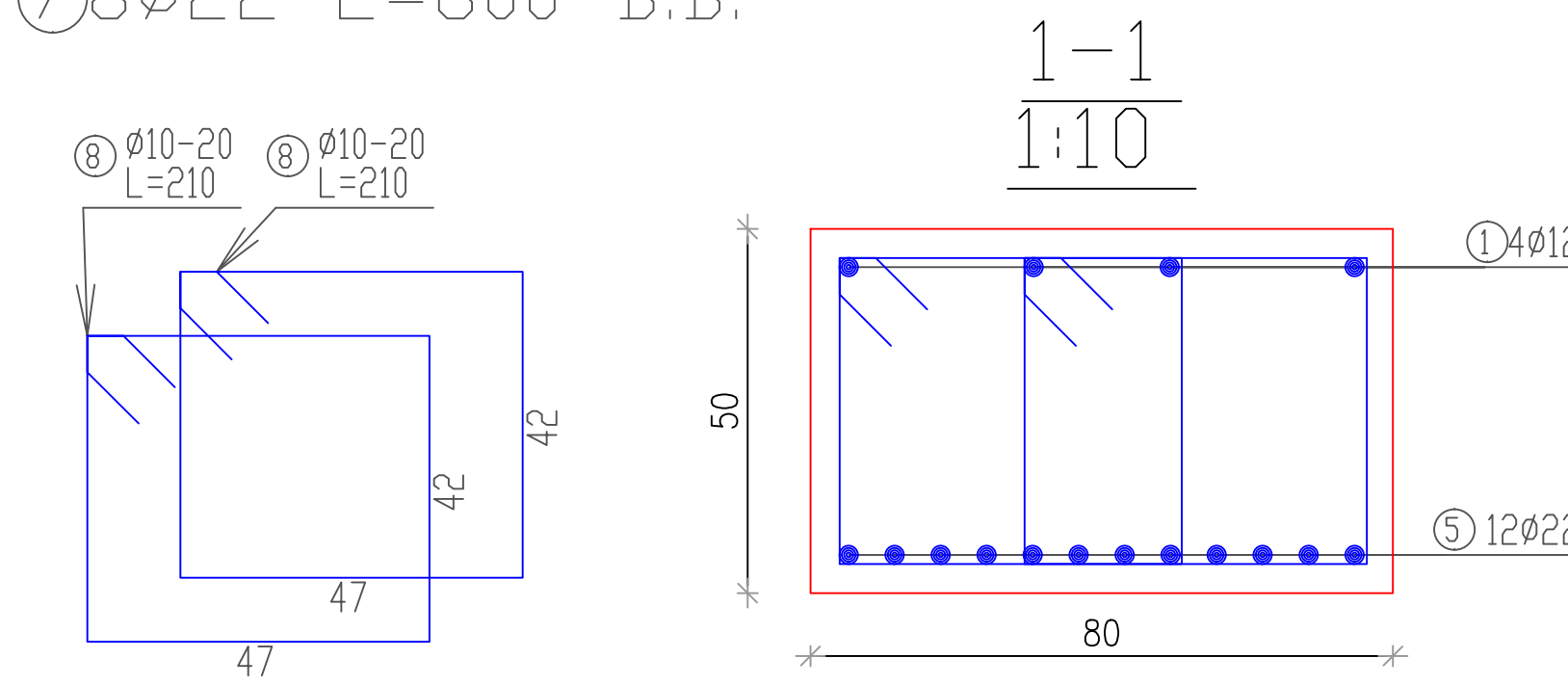
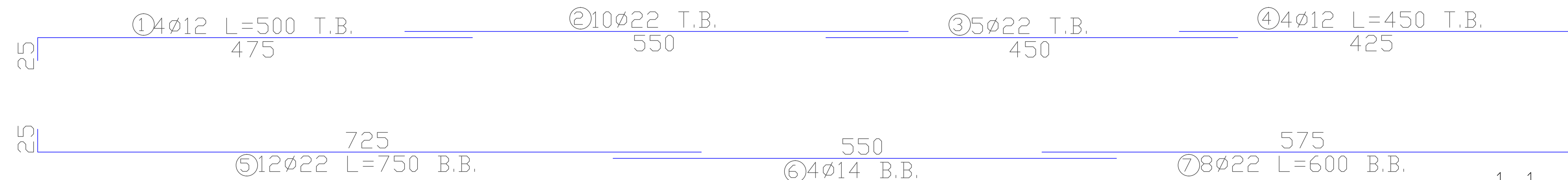
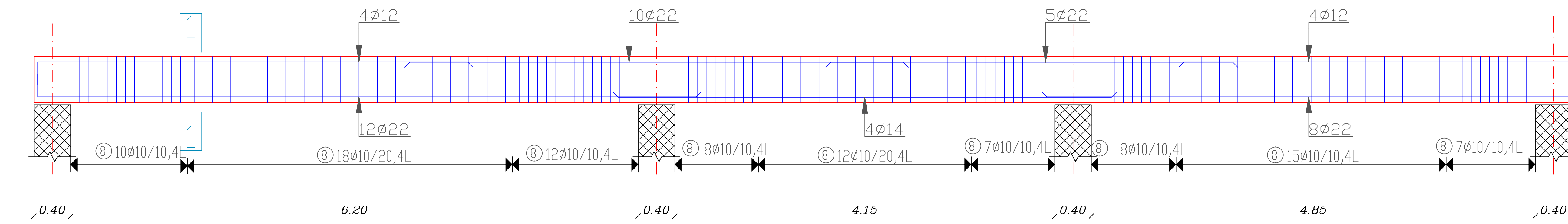
Supervisor  
 Dr.Maher Amro.

Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B08	21/8/2022

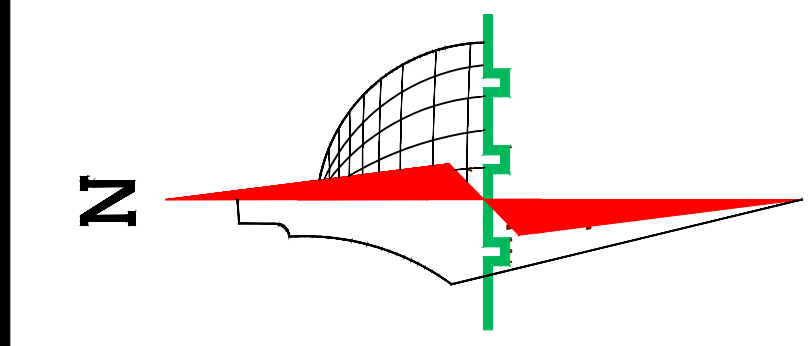
Beam : 21

Scale 1:25



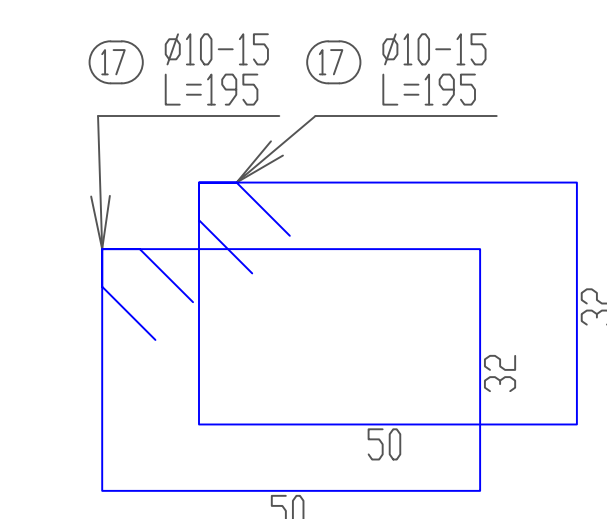
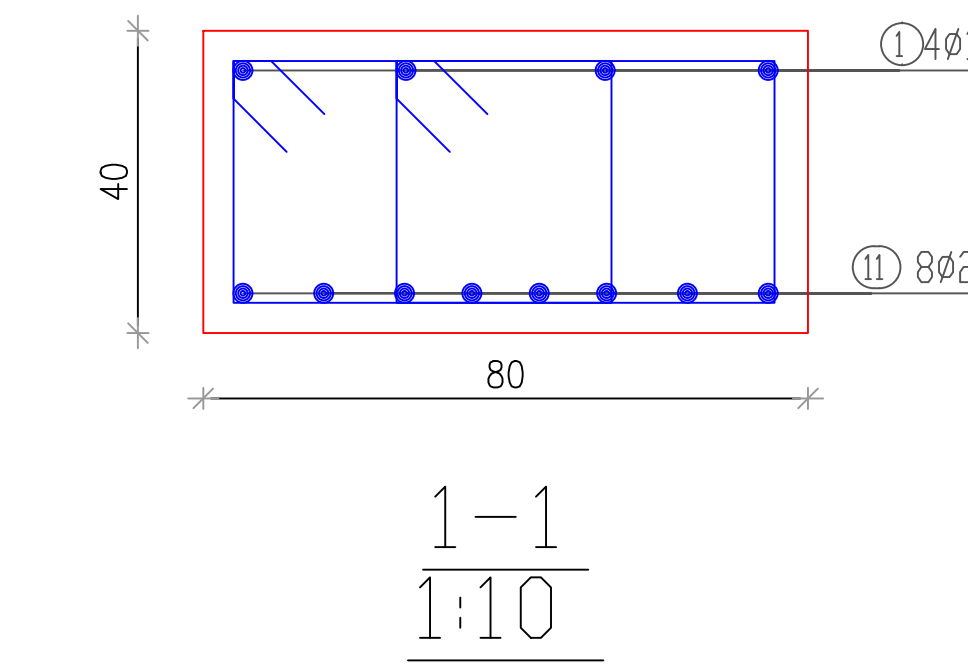
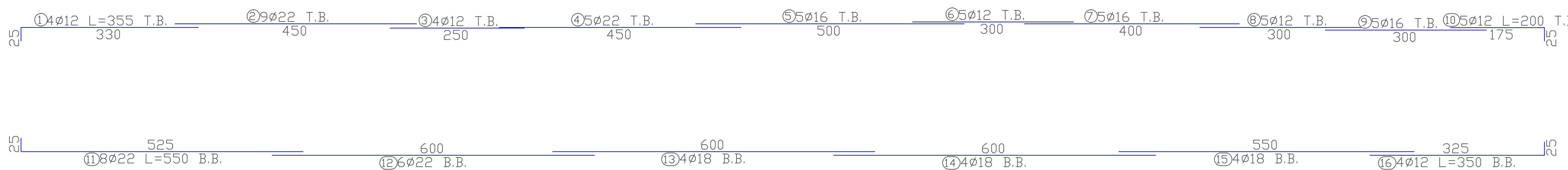
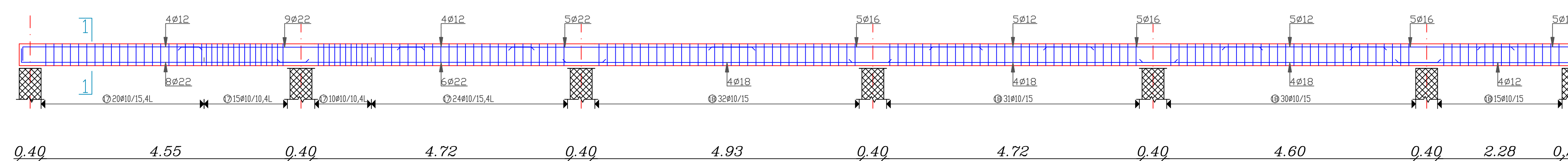
Palestine Polytechnic University  
 College of Engineering  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project

Al-Salam Ophthalmic Hospital



Beam : 23

Scale 1:50



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

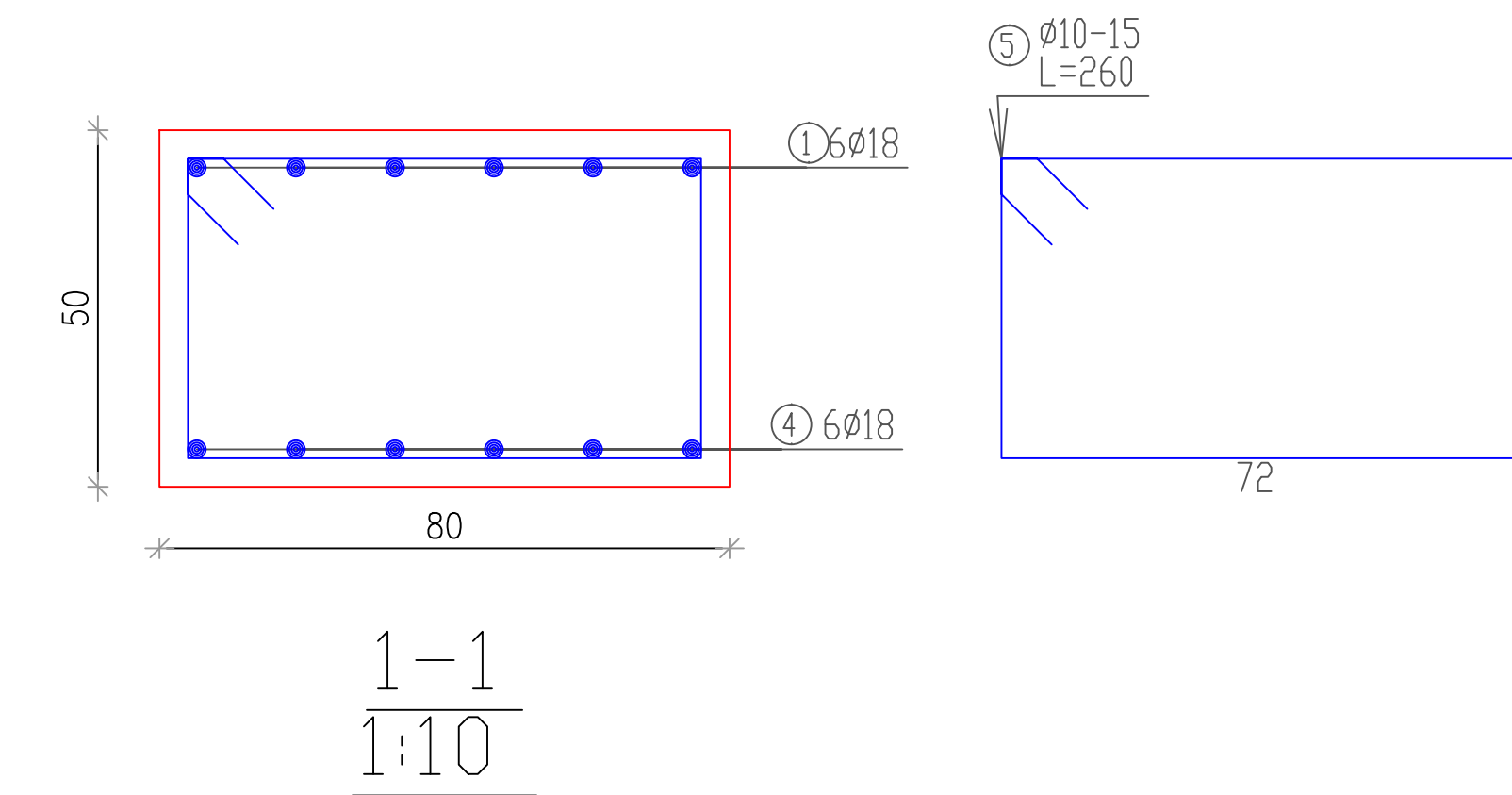
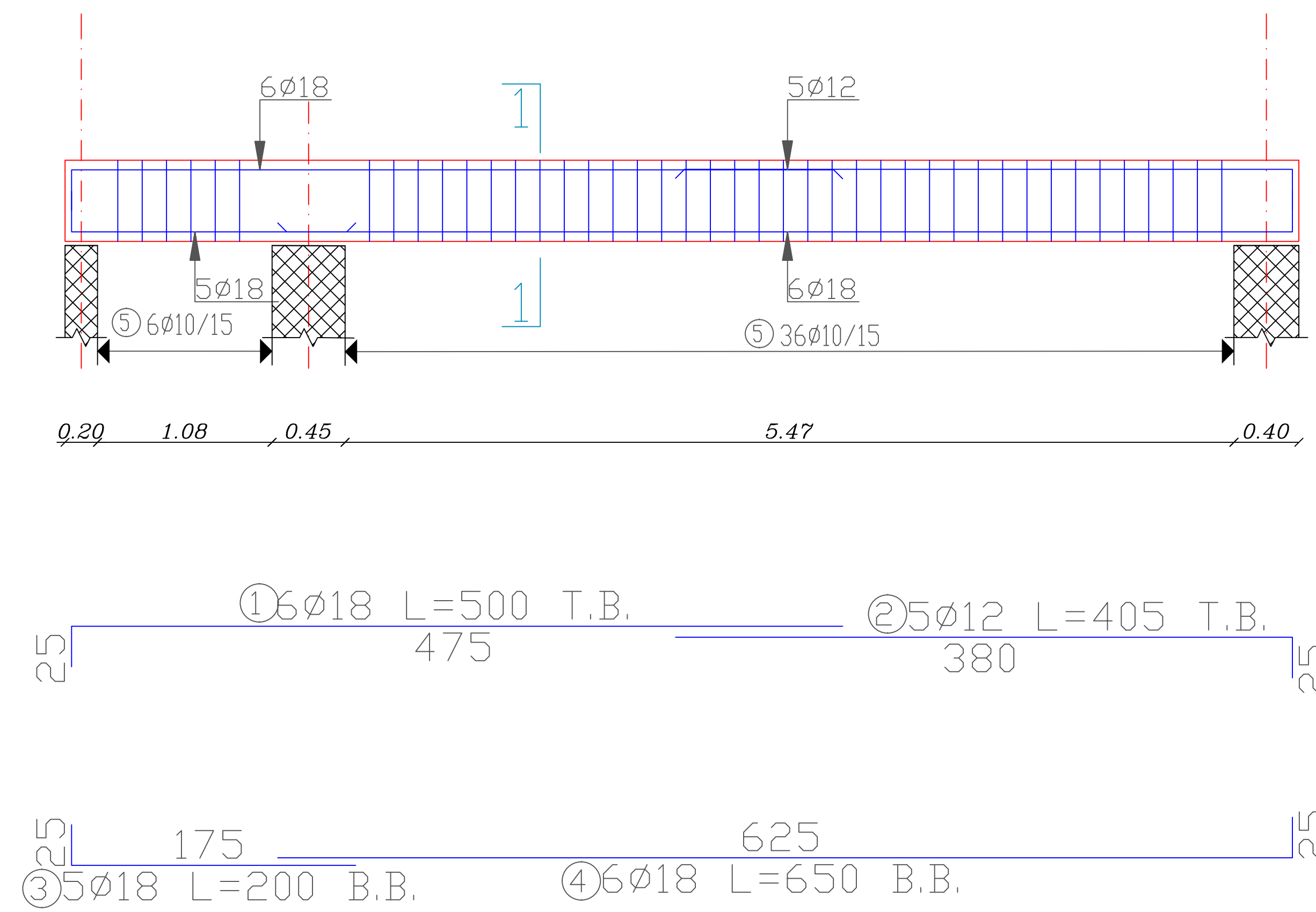
DRAWING TITLE :  
**BEAMS 21&23**

Supervisor  
 Dr.Maher Amro.

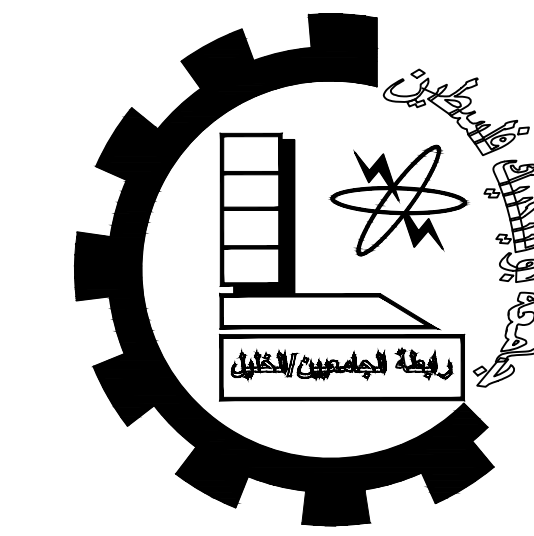
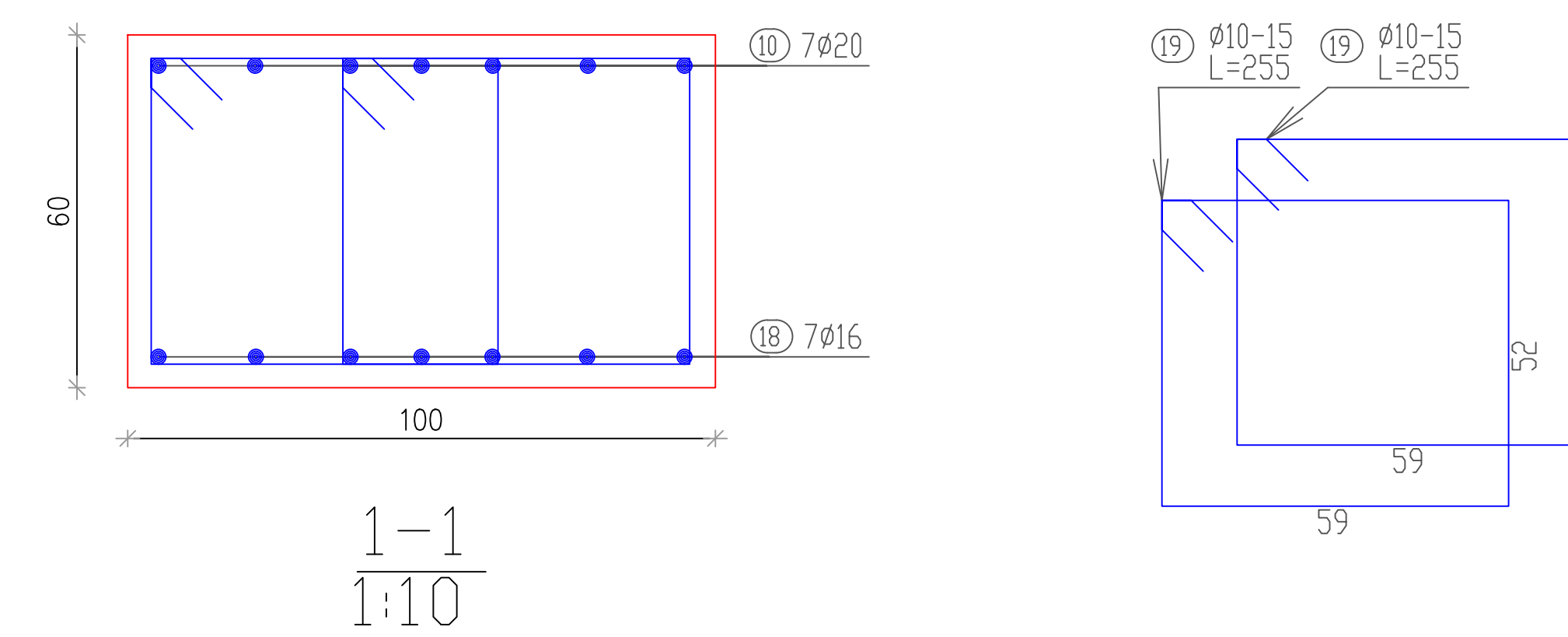
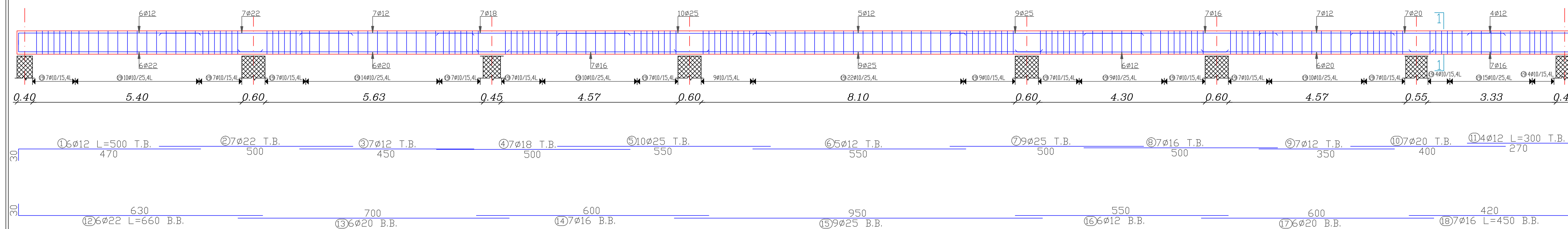
Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B09	21/8/2022

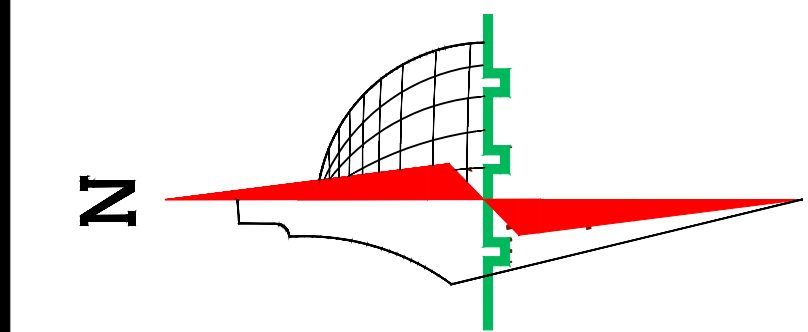
Beam : 25  
Scale 1:25



Beam : 26  
Scale 1:50



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

BEAMS 25&26

Supervisor

Dr.Maher Amro.

Done by :

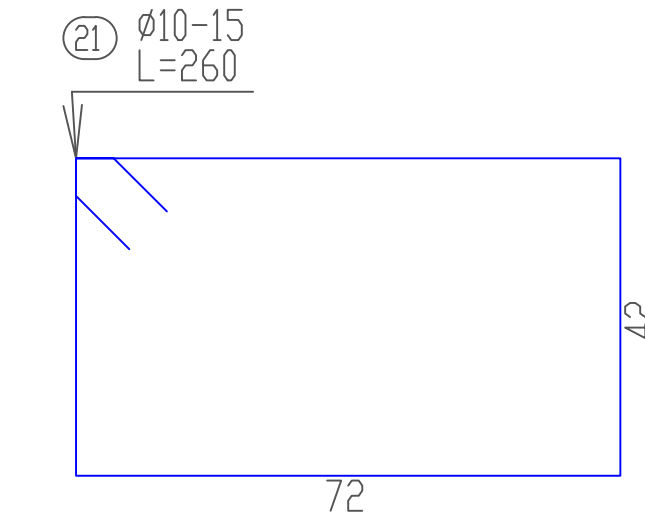
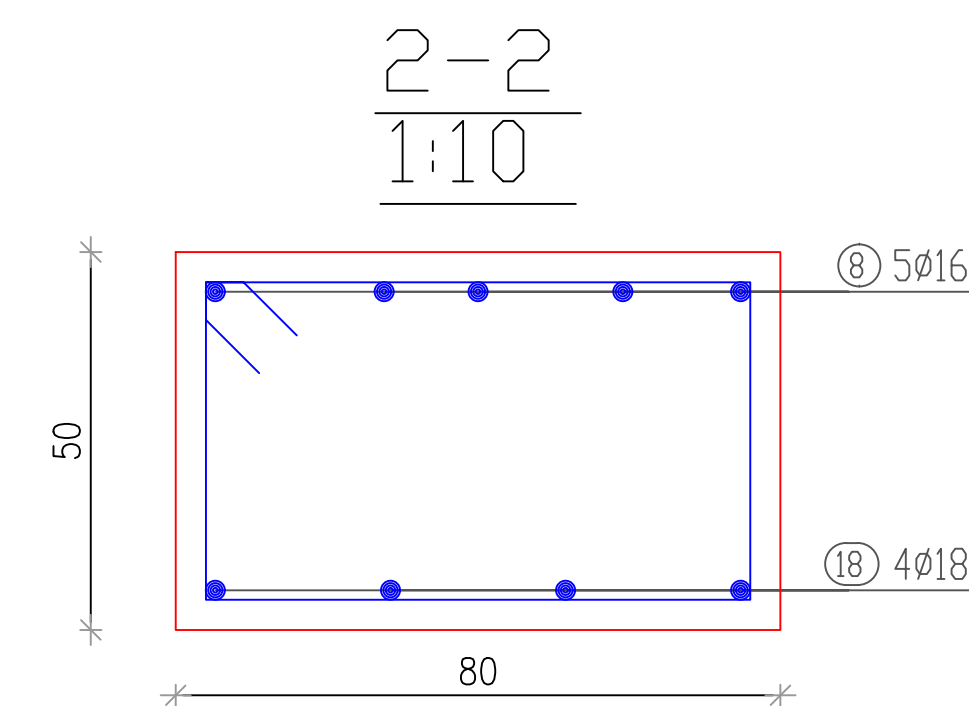
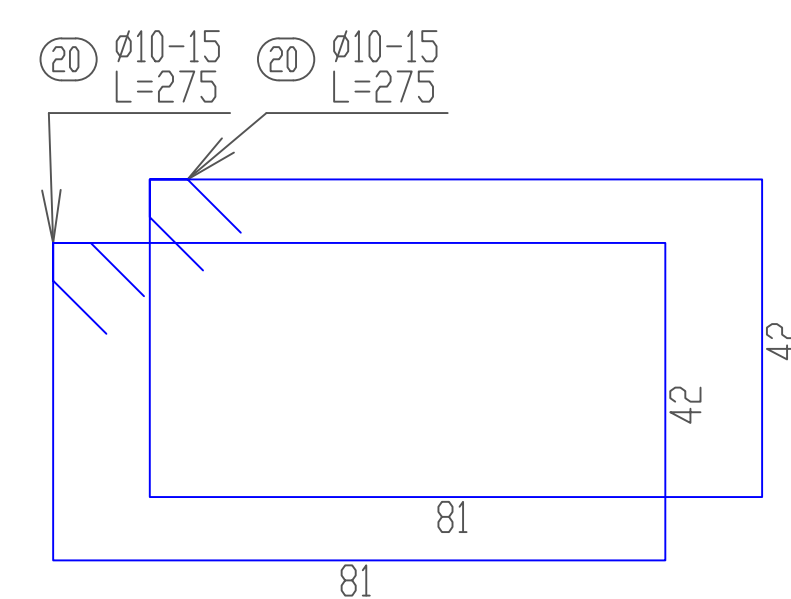
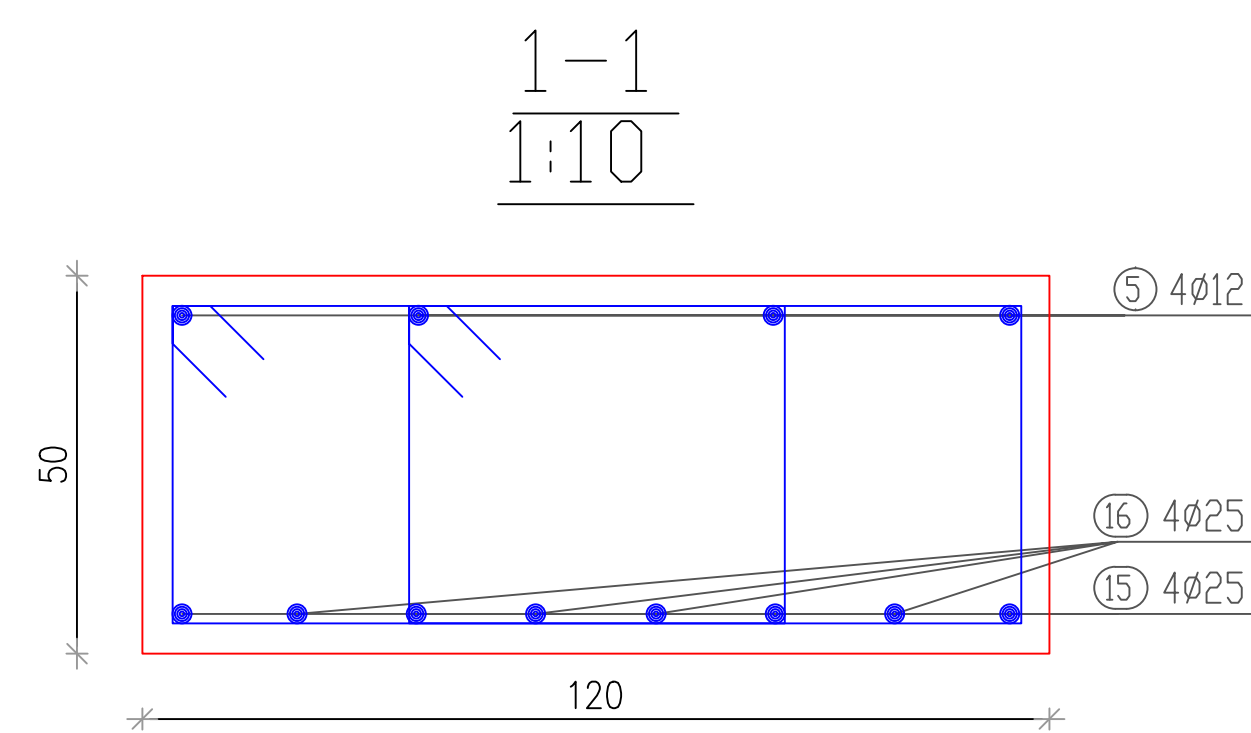
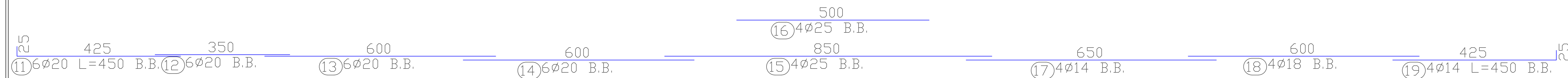
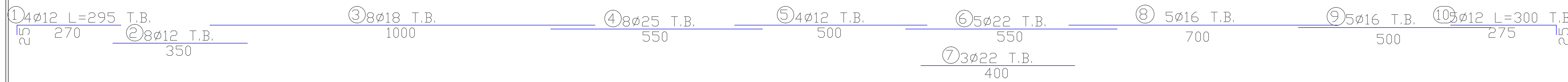
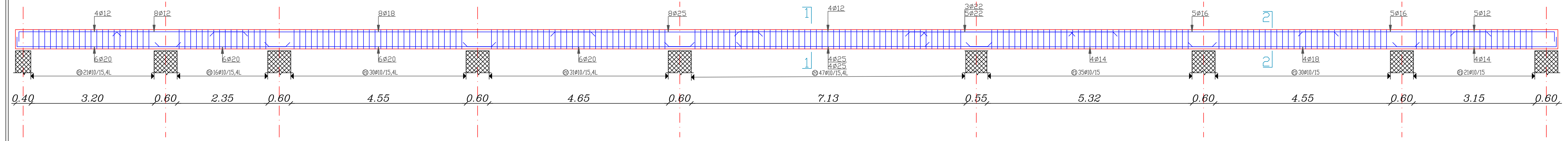
Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B10	21/8/2022

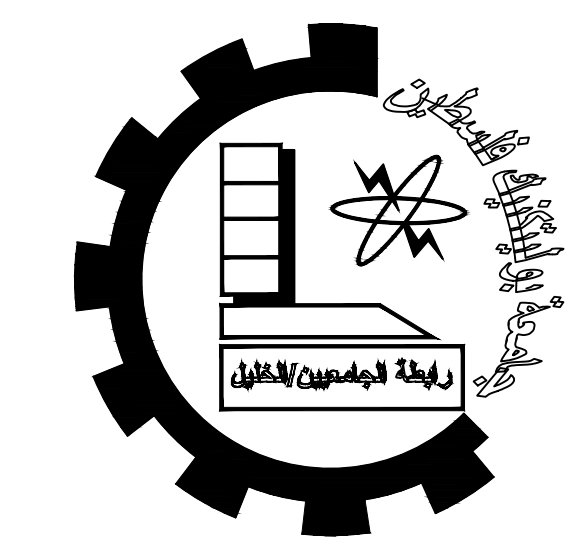
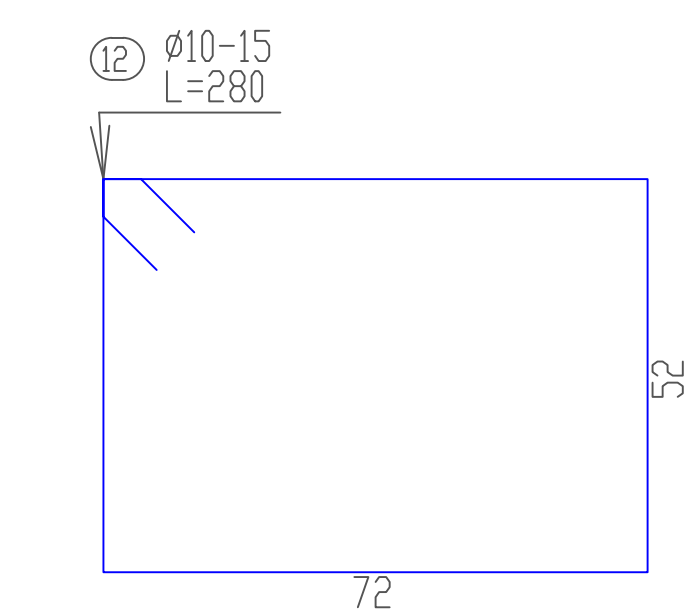
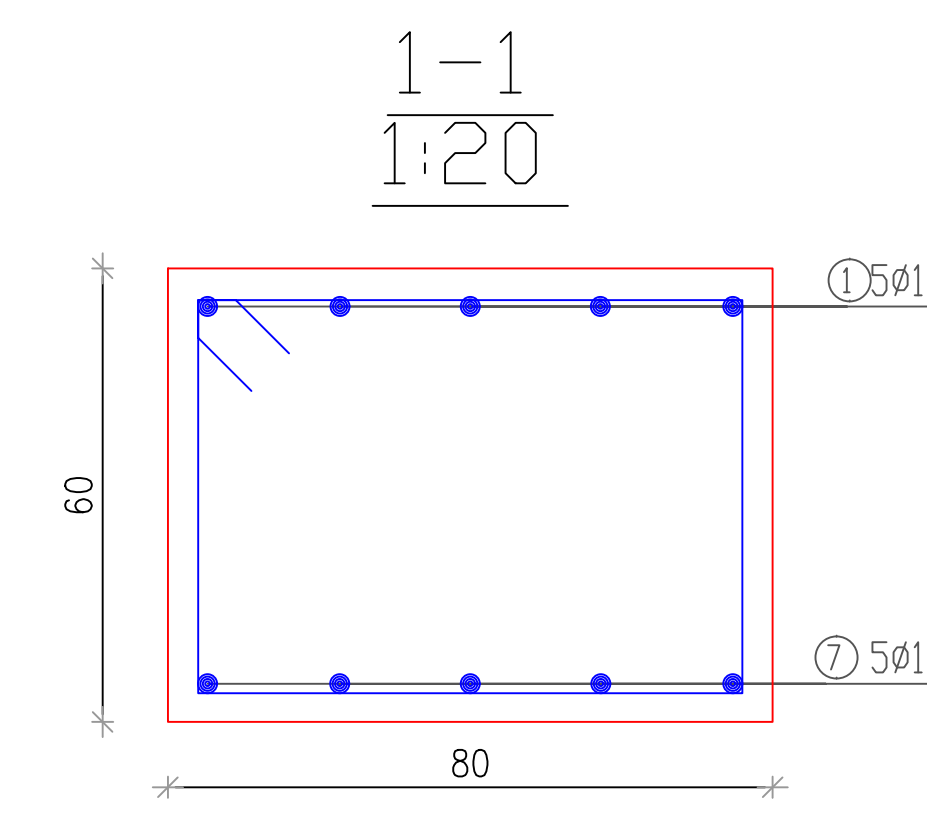
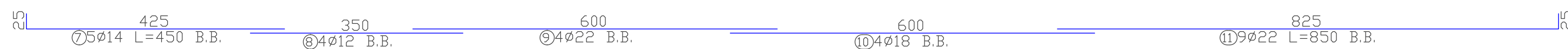
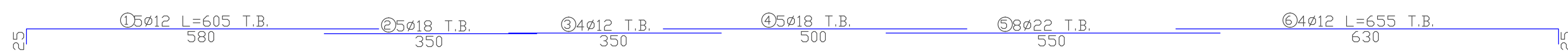
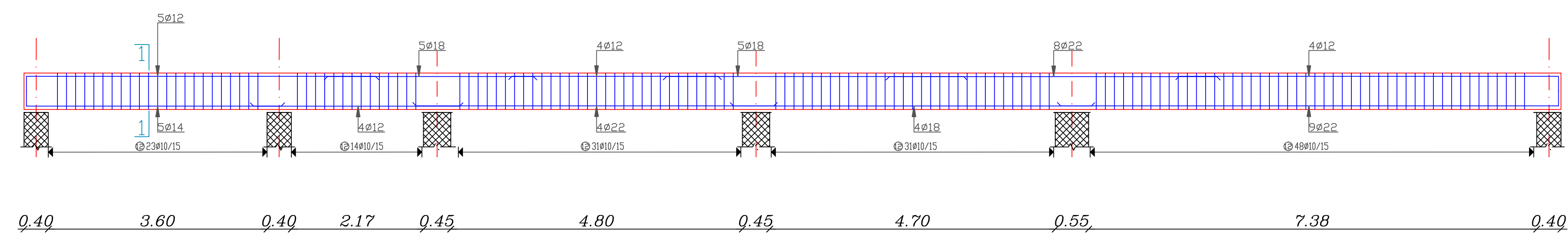
Beam : 27

Scale 1:50

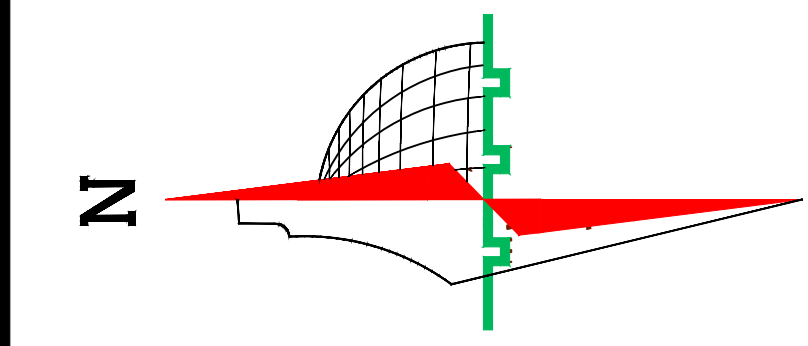


Beam : 28

Scale 1:50



Palestine Polytechnic University  
 College of Engineering  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

DRAWING TITLE :

**BEAMS 27&28**

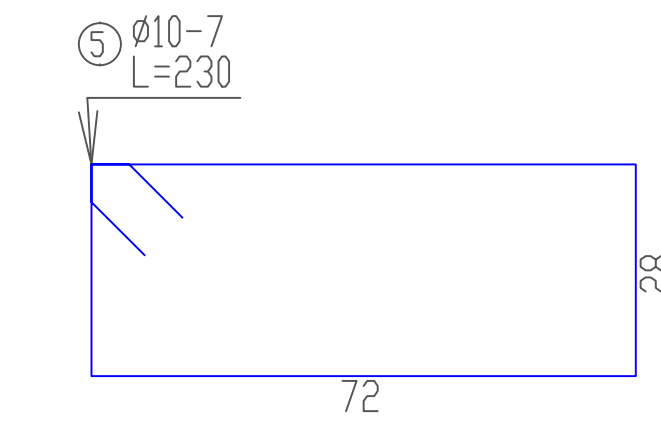
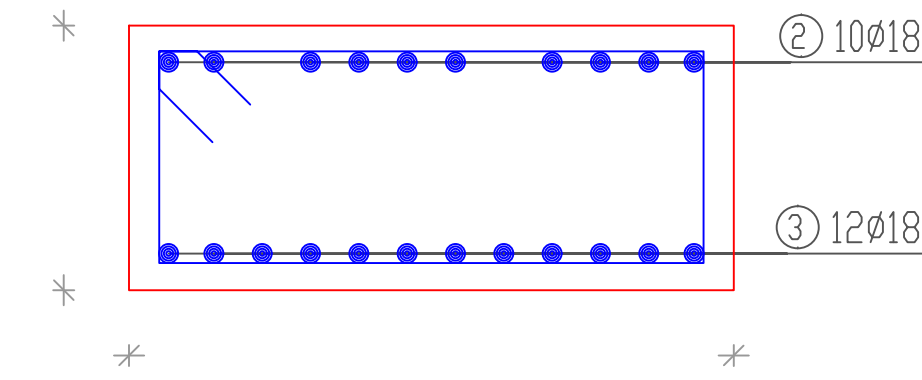
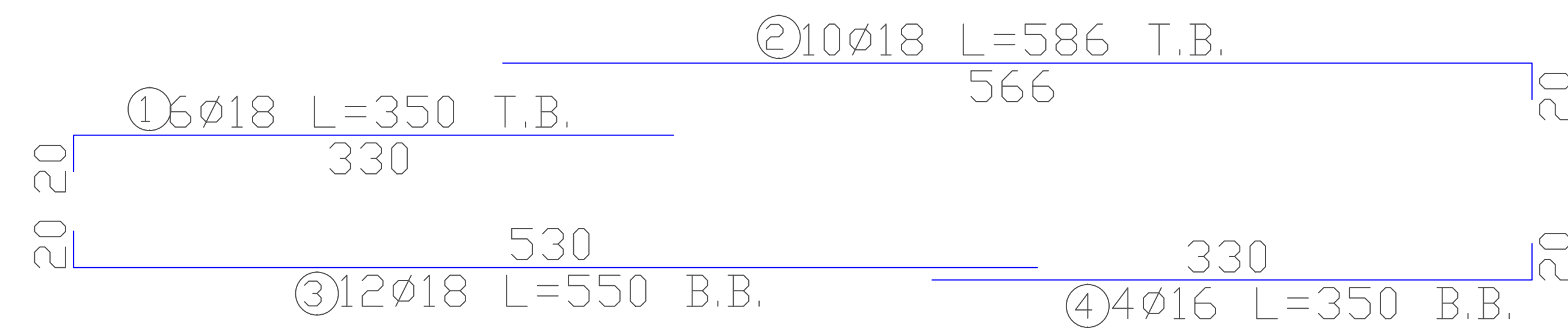
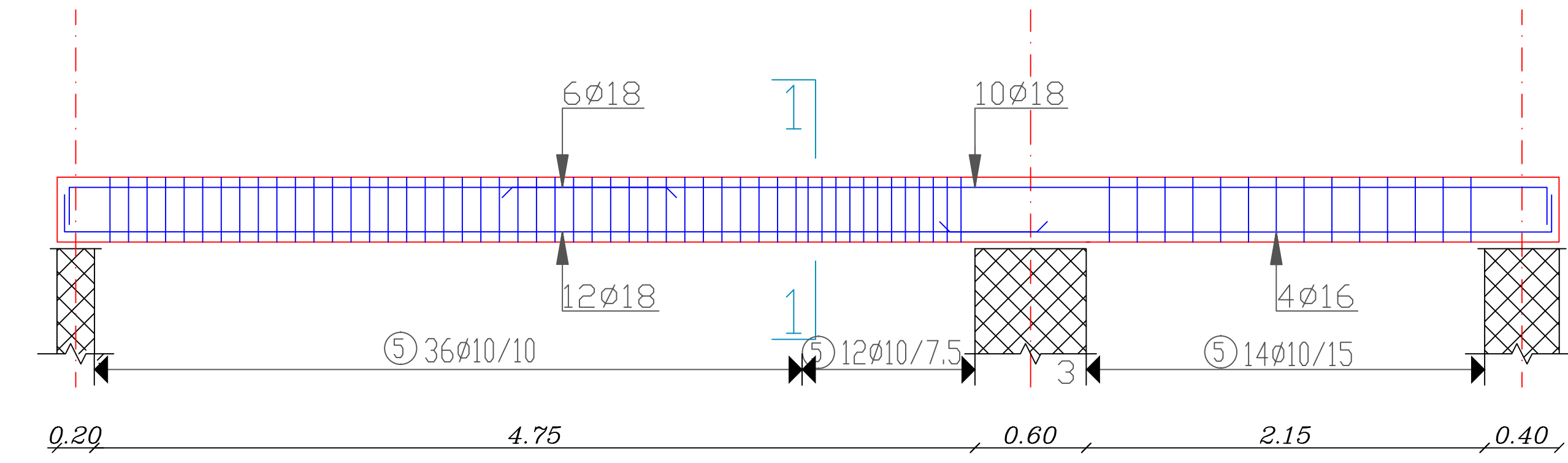
Supervisor  
 Dr.Maher Amro.

Done by :  
 Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B11	21/8/2022

Beam : 29

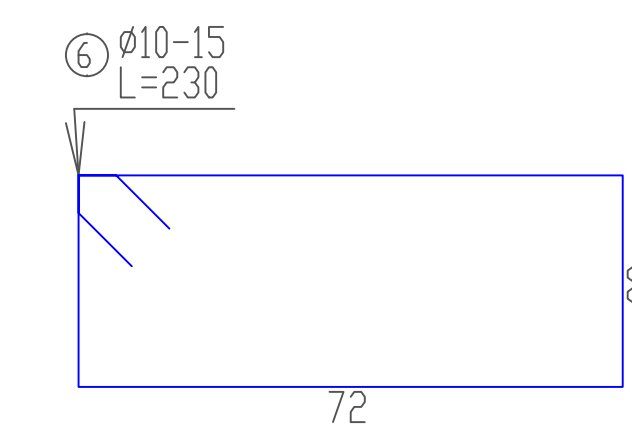
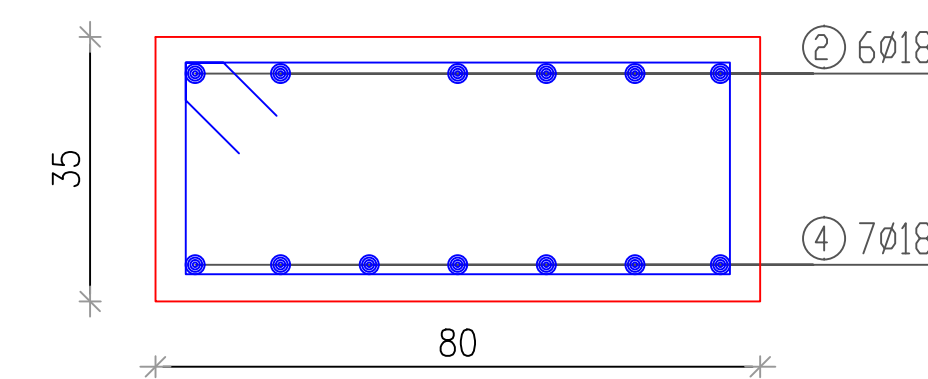
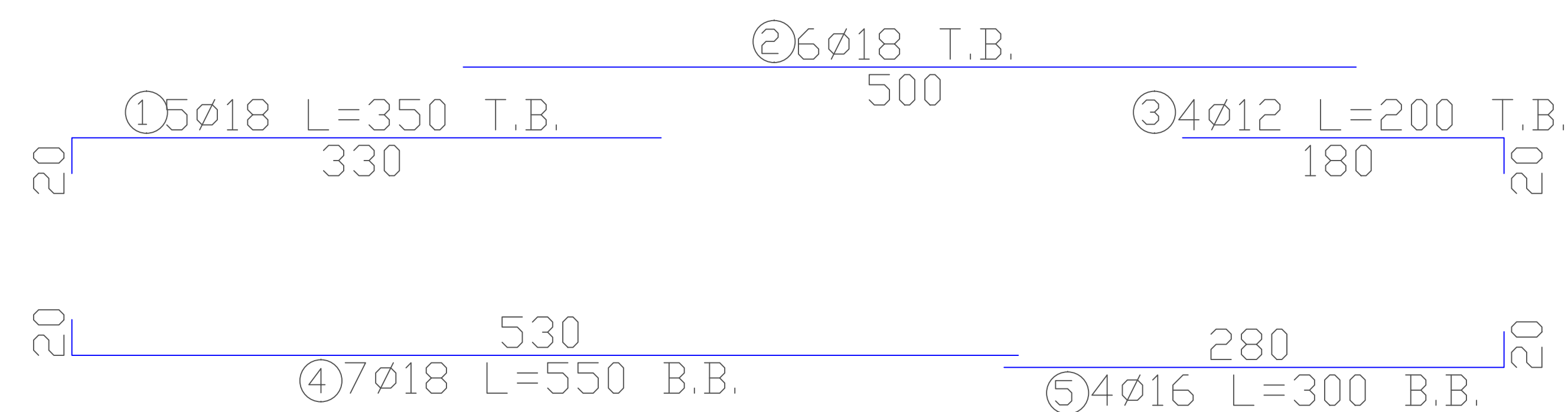
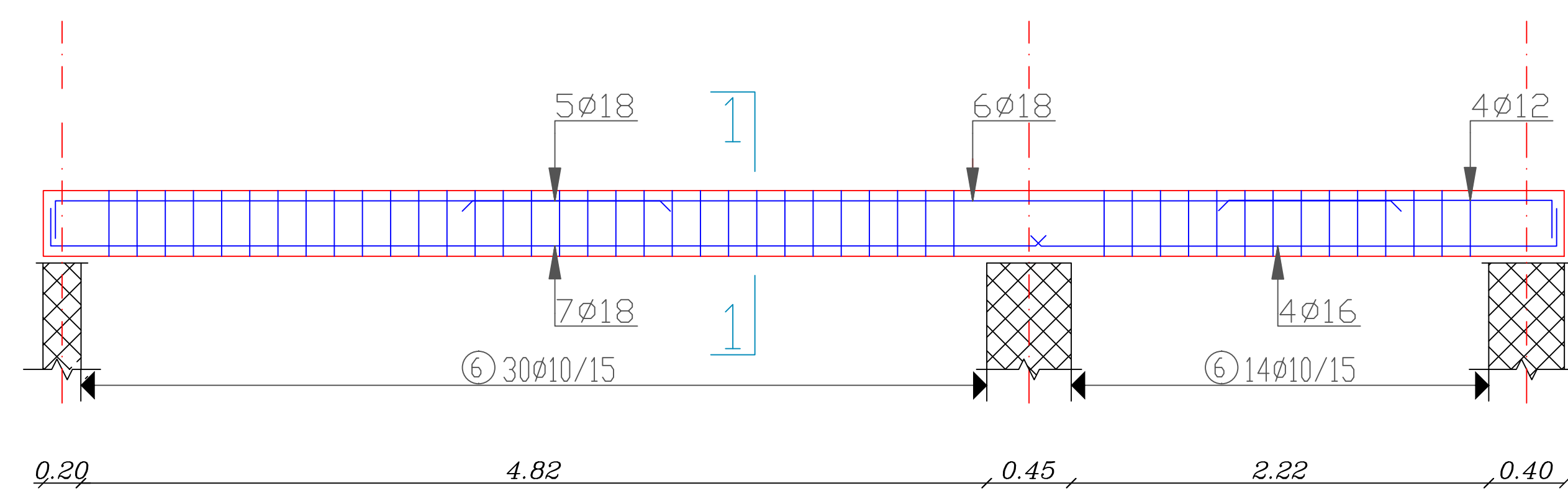
Scale 1:25



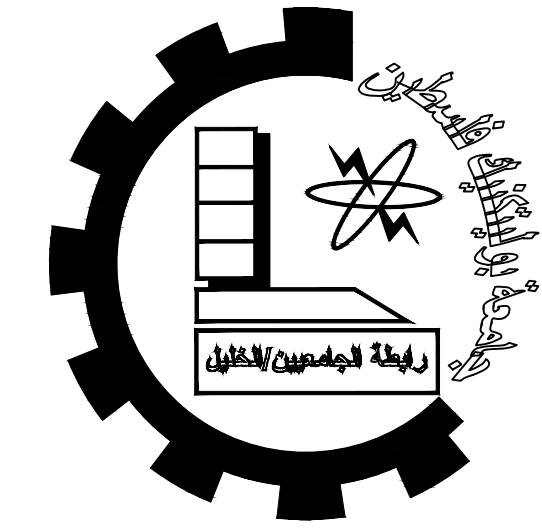
1-1  
1:10

Beam : 30

Scale 1:25



1-1  
1:10



Palestine Polytechnic University

College of Engineering

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital

**Legend :**

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materiales
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

**BEAMS 29&30**

Supervisor

Dr.Maher Amro.

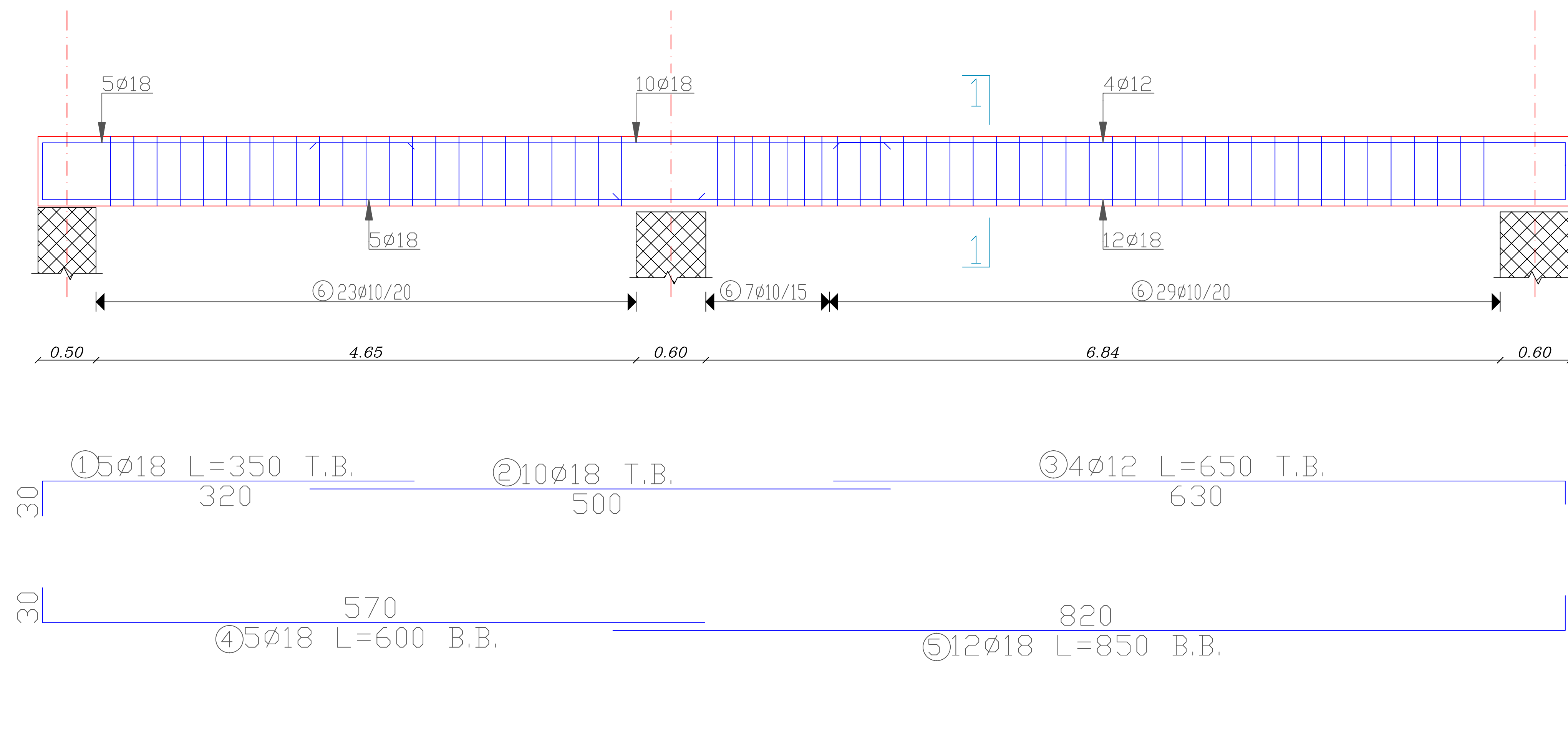
Done by :

Osama Abu E'ram

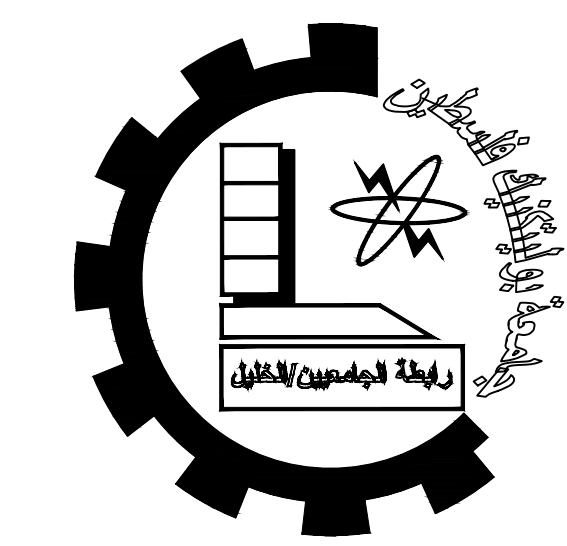
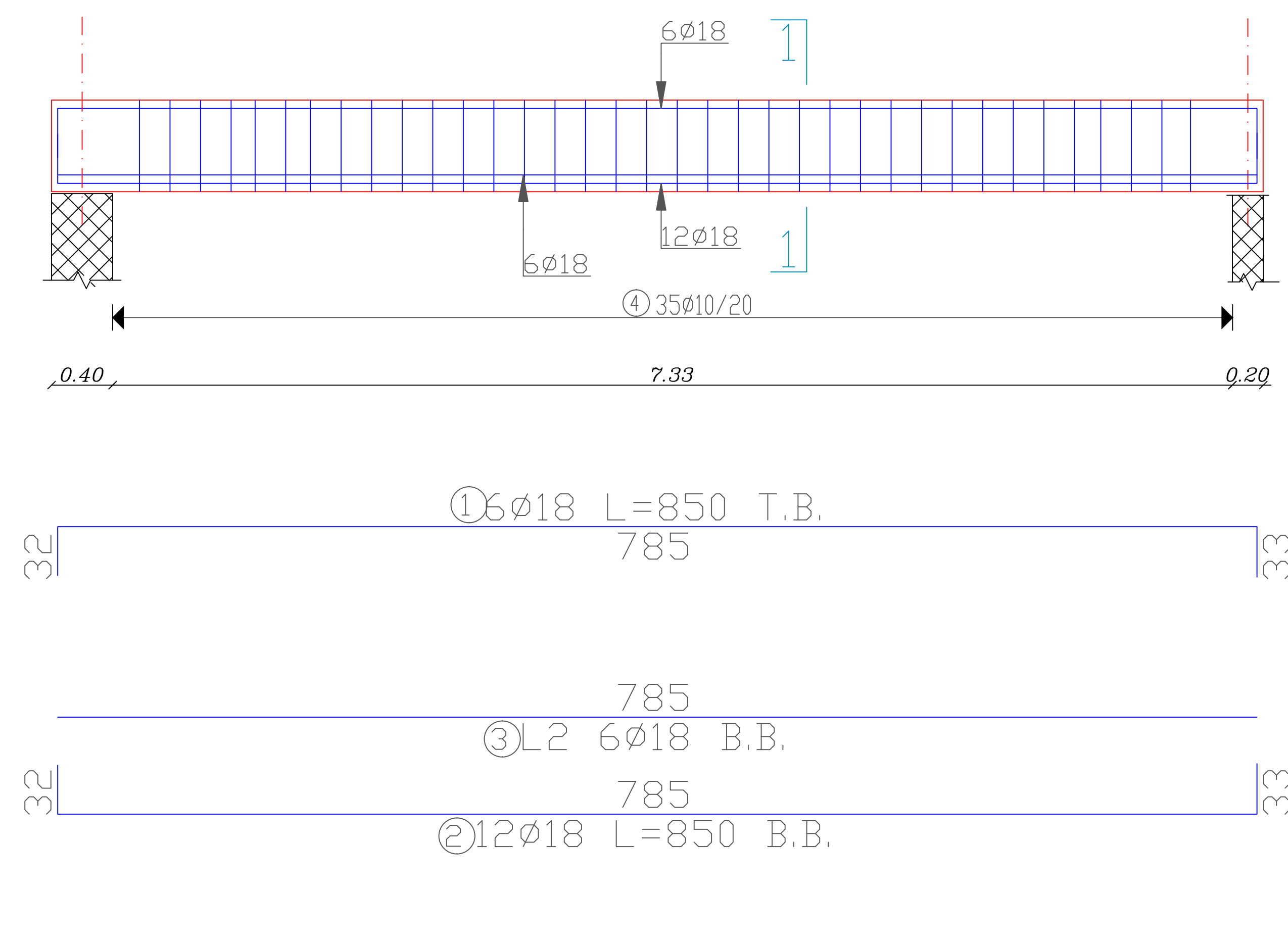
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B12	21/8/2022

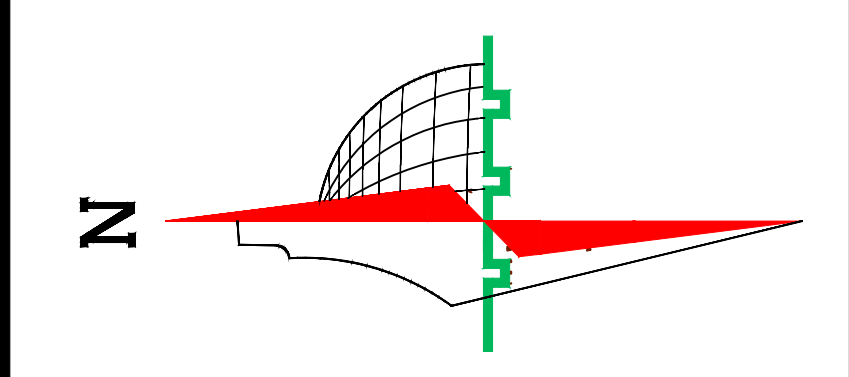
Beam : 31  
Scale 1:25



Beam : 32  
Scale 1:25



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

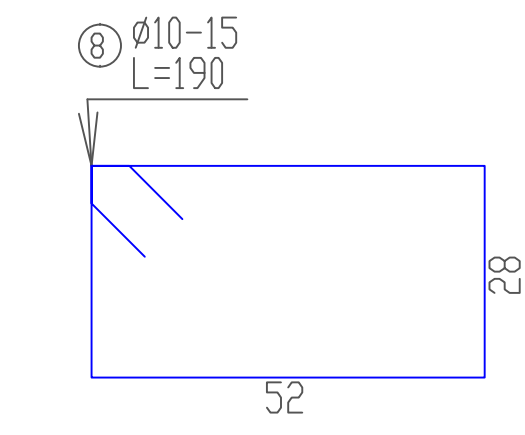
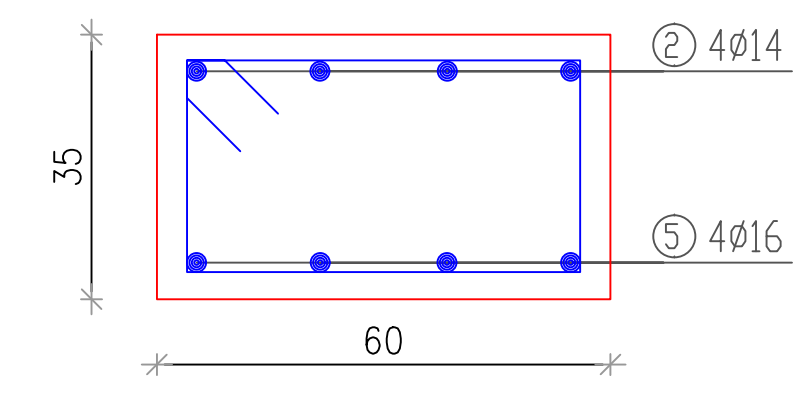
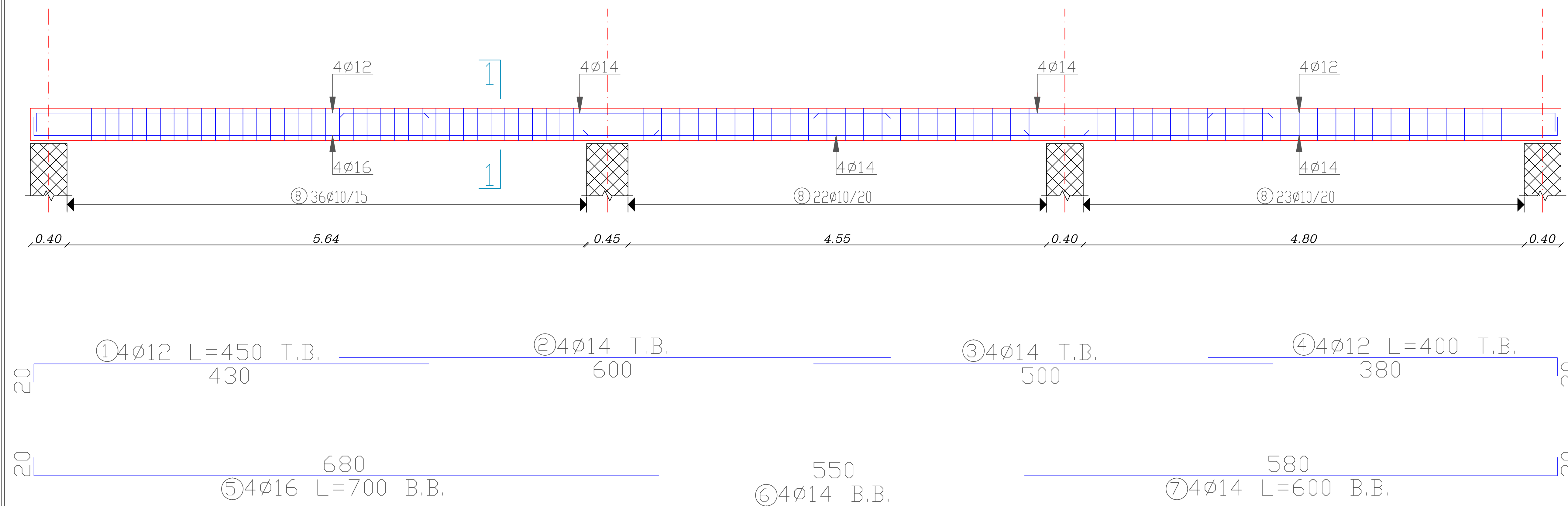
DRAWING TITLE :  
**BEAMS 31&32**

Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

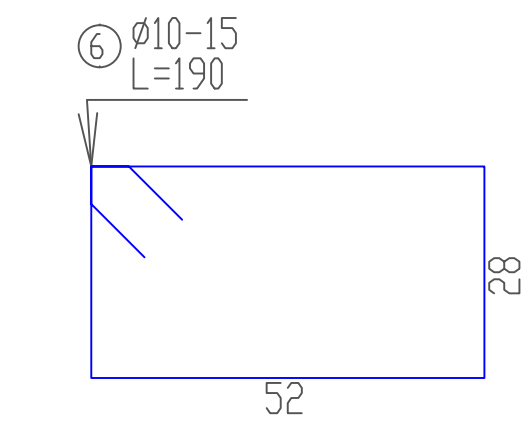
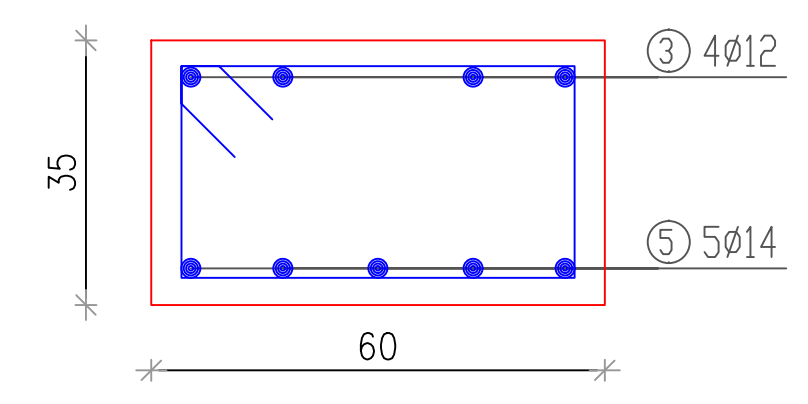
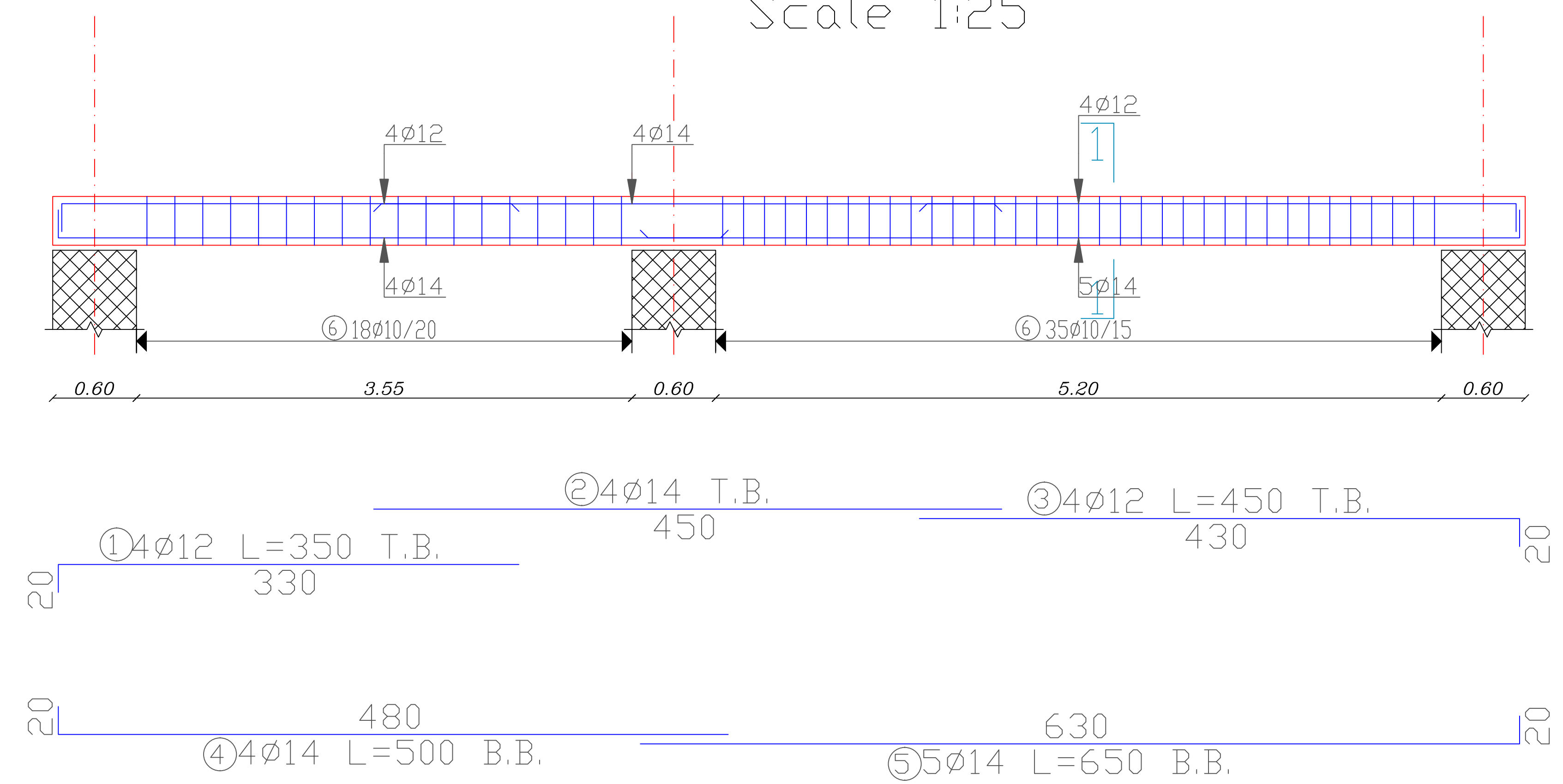
SCALE	No. of DRAW	DATE
1/100	B13	21/8/2022

Beam : 33  
Scale 1:25

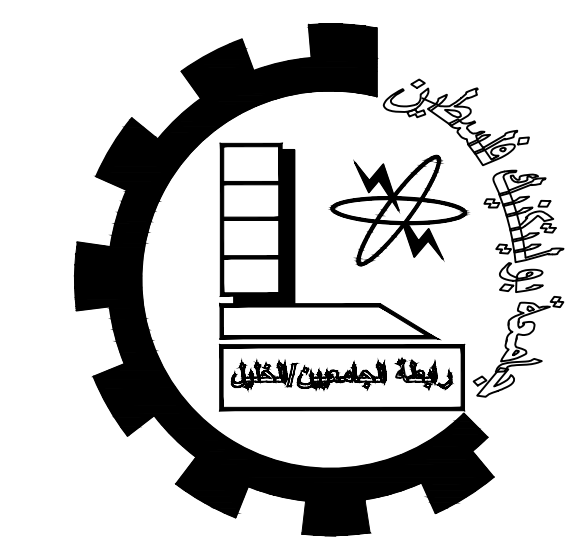


1-1  
1:10

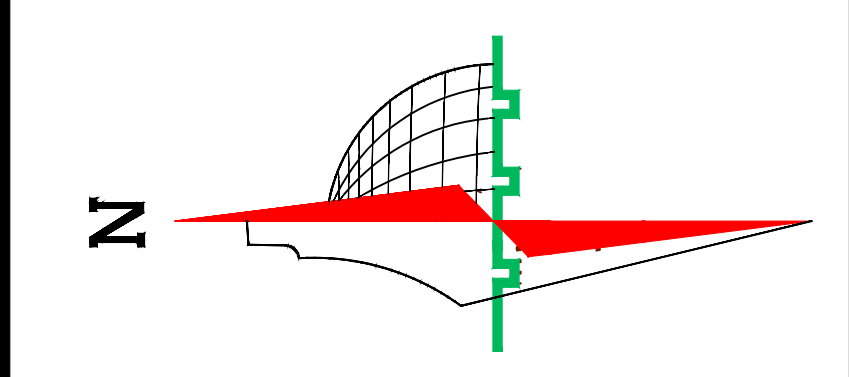
Beam : 34  
Scale 1:25



1-1  
1:10



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- Gravel
- R.Concrete
- Wood
- Concrete
- HEXAGONAL TILES
- Hollow Block
- BAKLAVA TILES
- isolating materials
- GRASS

DRAWING TITLE :

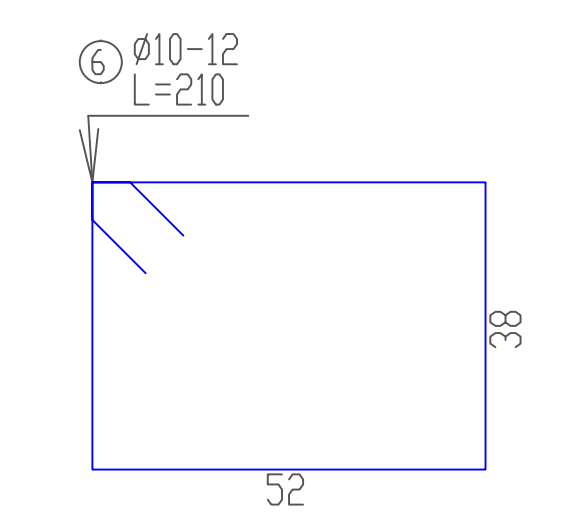
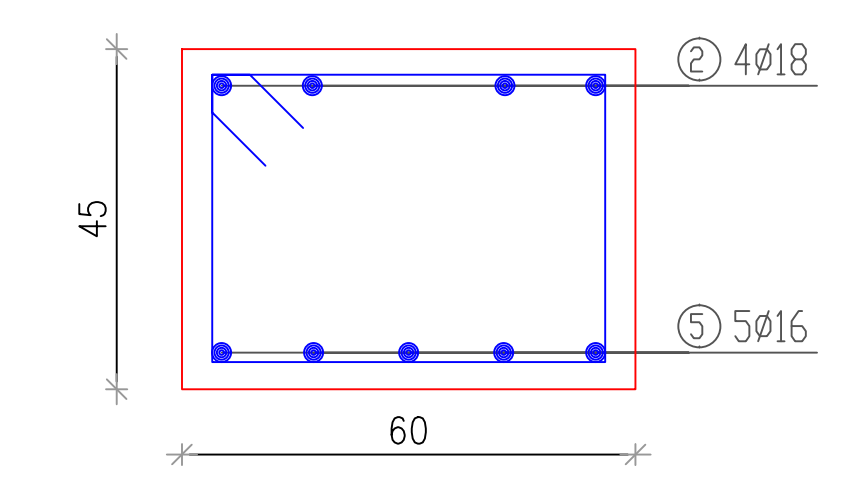
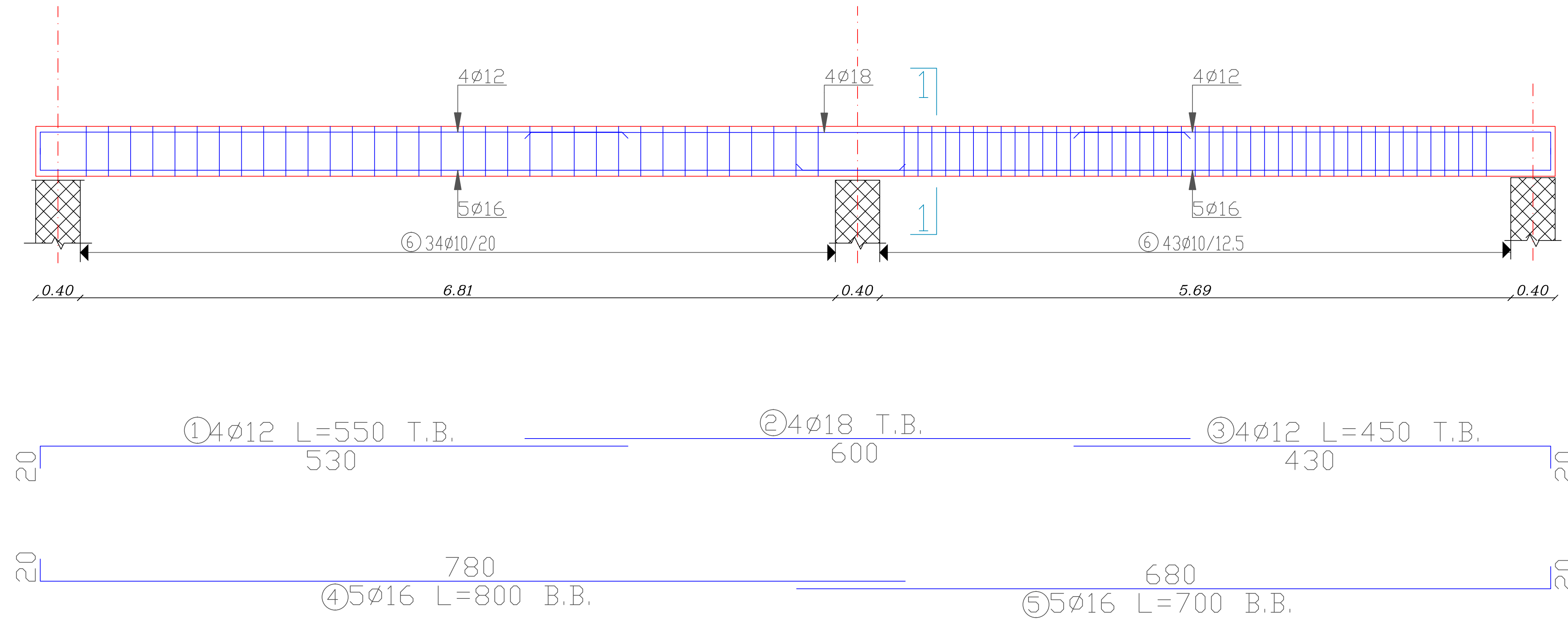
**BEAMS 33&34**

Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

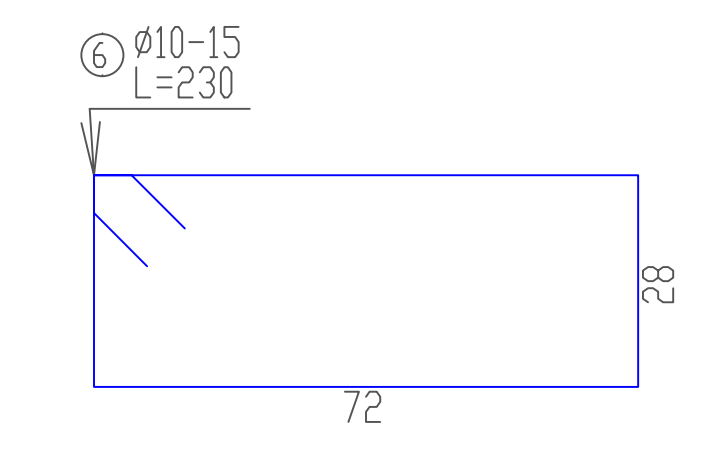
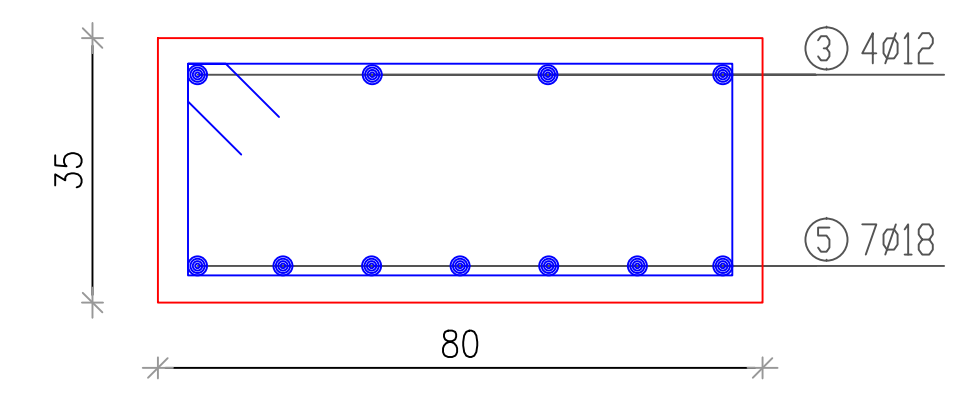
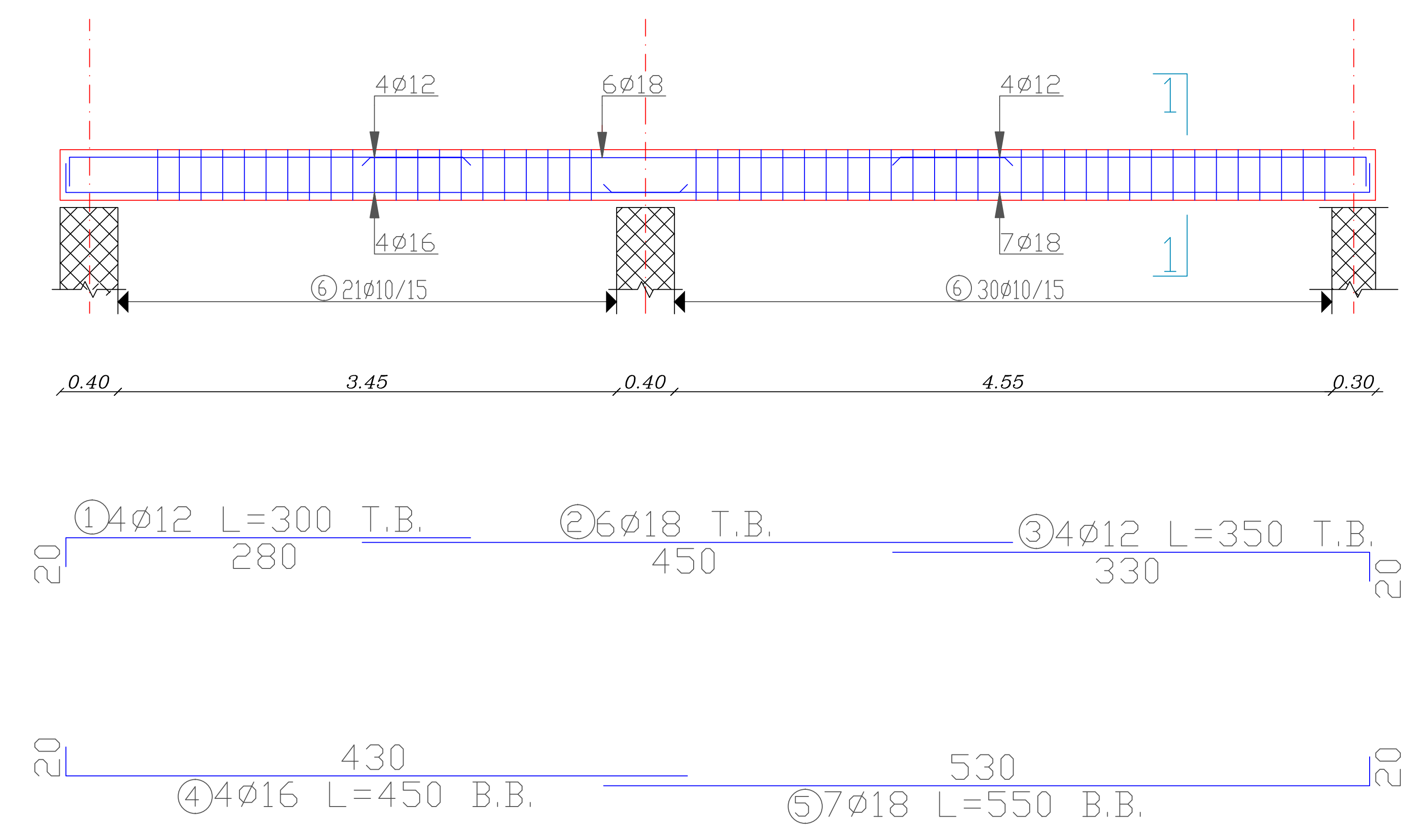
SCALE	No. of DRAW	DATE
1/100	B14	21/8/2022

Beam : 35  
Scale 1:25

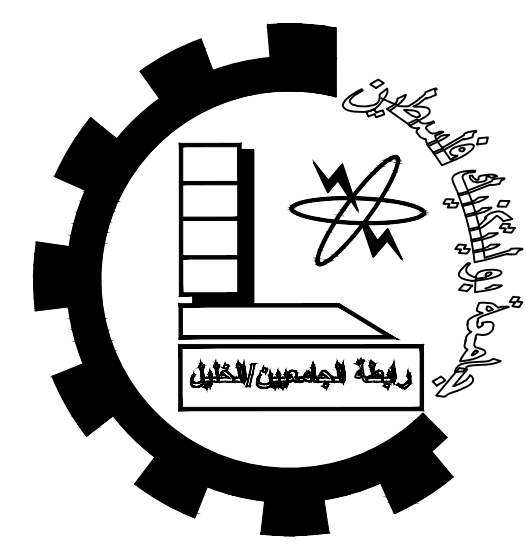


1-1  
1:10

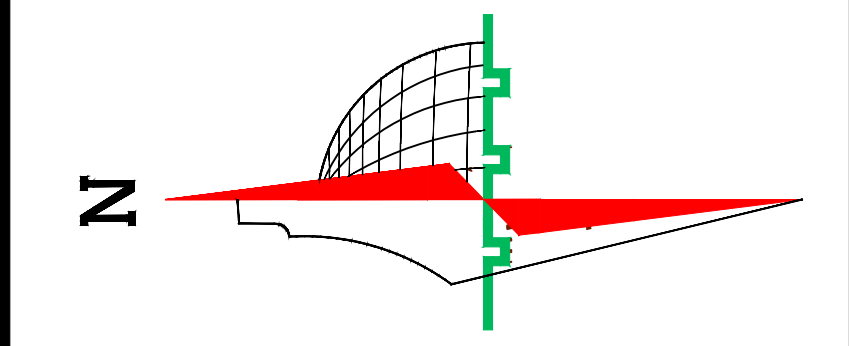
Beam : 36  
Scale 1:25



1-1  
1:10



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

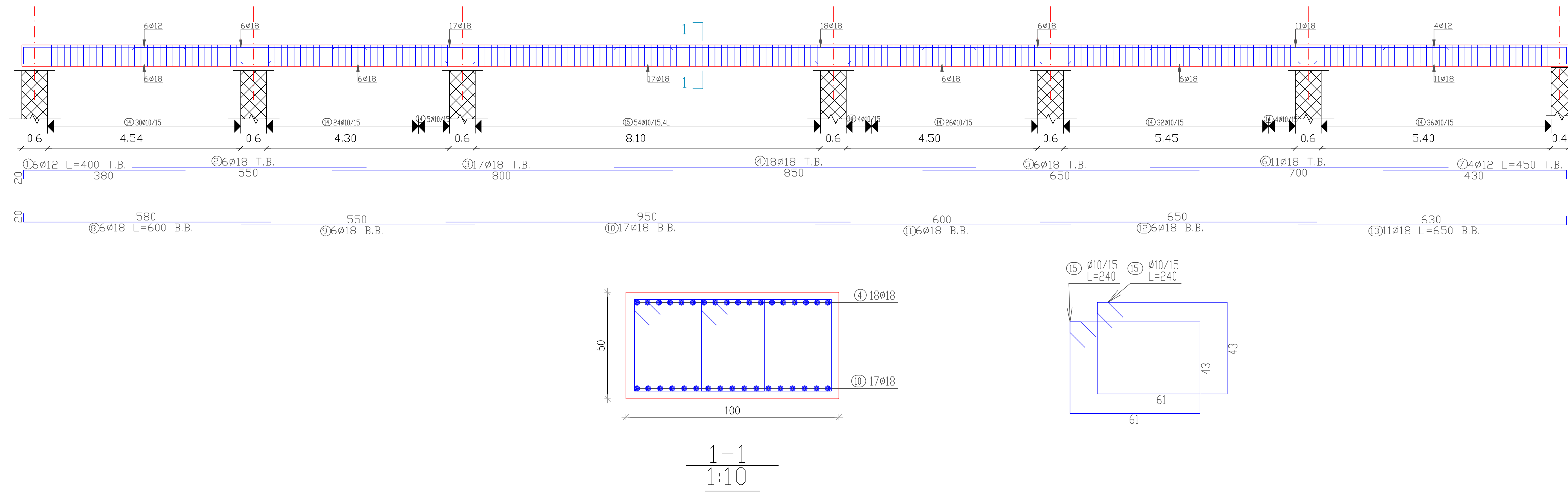
DRAWING TITLE :  
**BEAMS 35&36**

Supervisor  
Dr.Maher Amro.

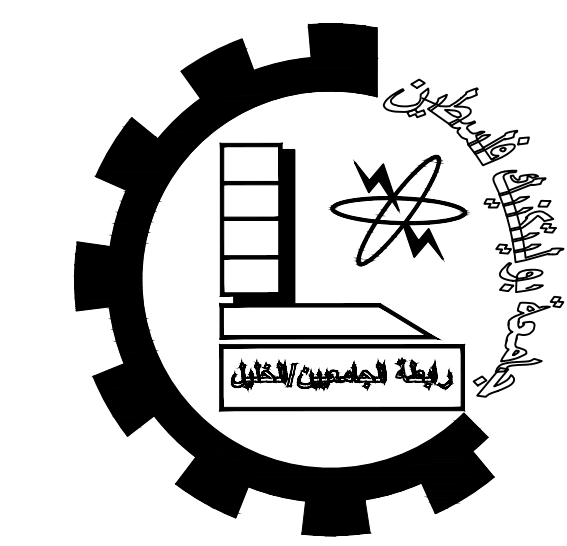
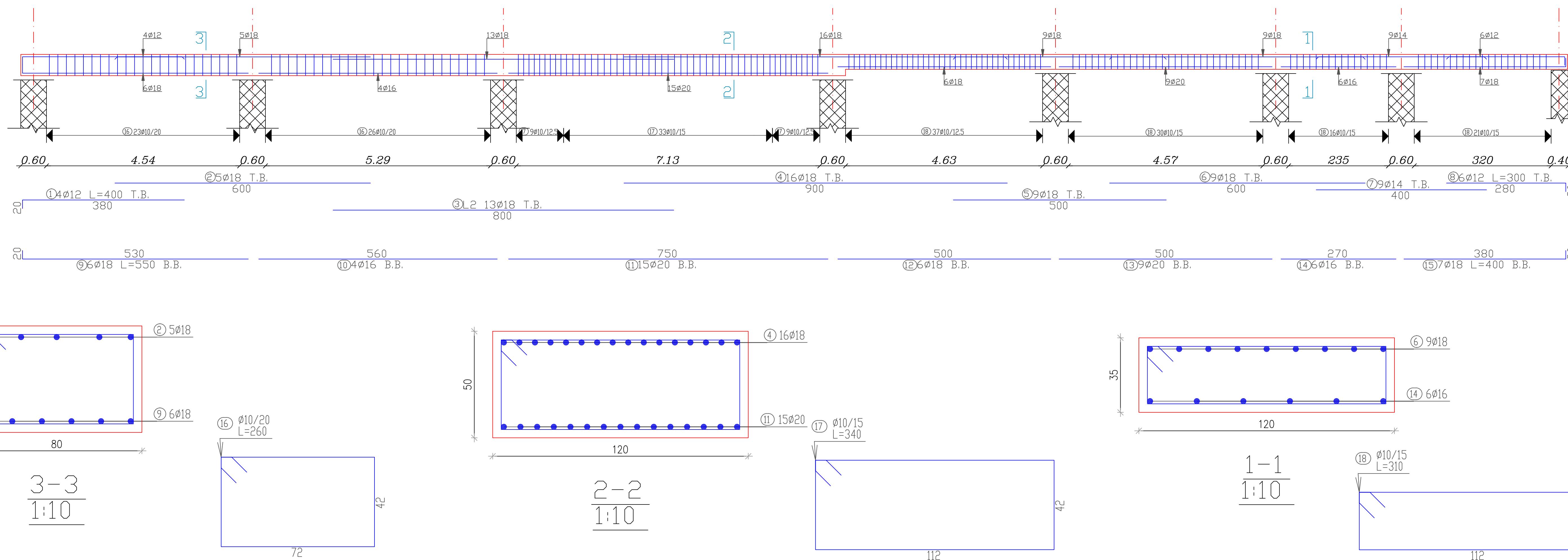
Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B15	21/8/2022

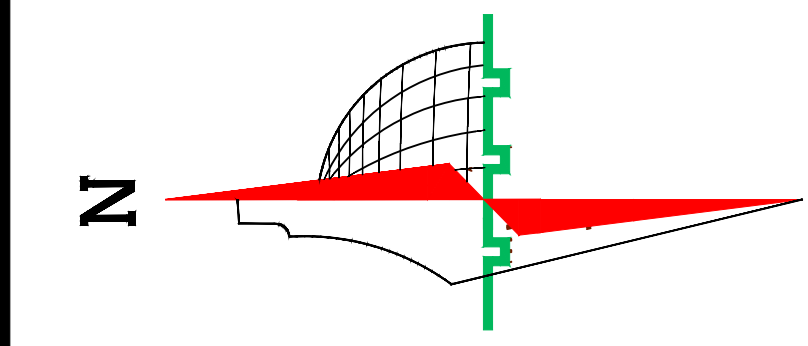
Beam : 37  
Scale 1:50



Beam : 38  
Scale 1:50



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



**Legend :**

Stone	Gravel
R.Concrete	Wood
Concrete	HEXAGONAL TILES
Hollow Block	BAKLAVA TILES
isolating materials	GRASS

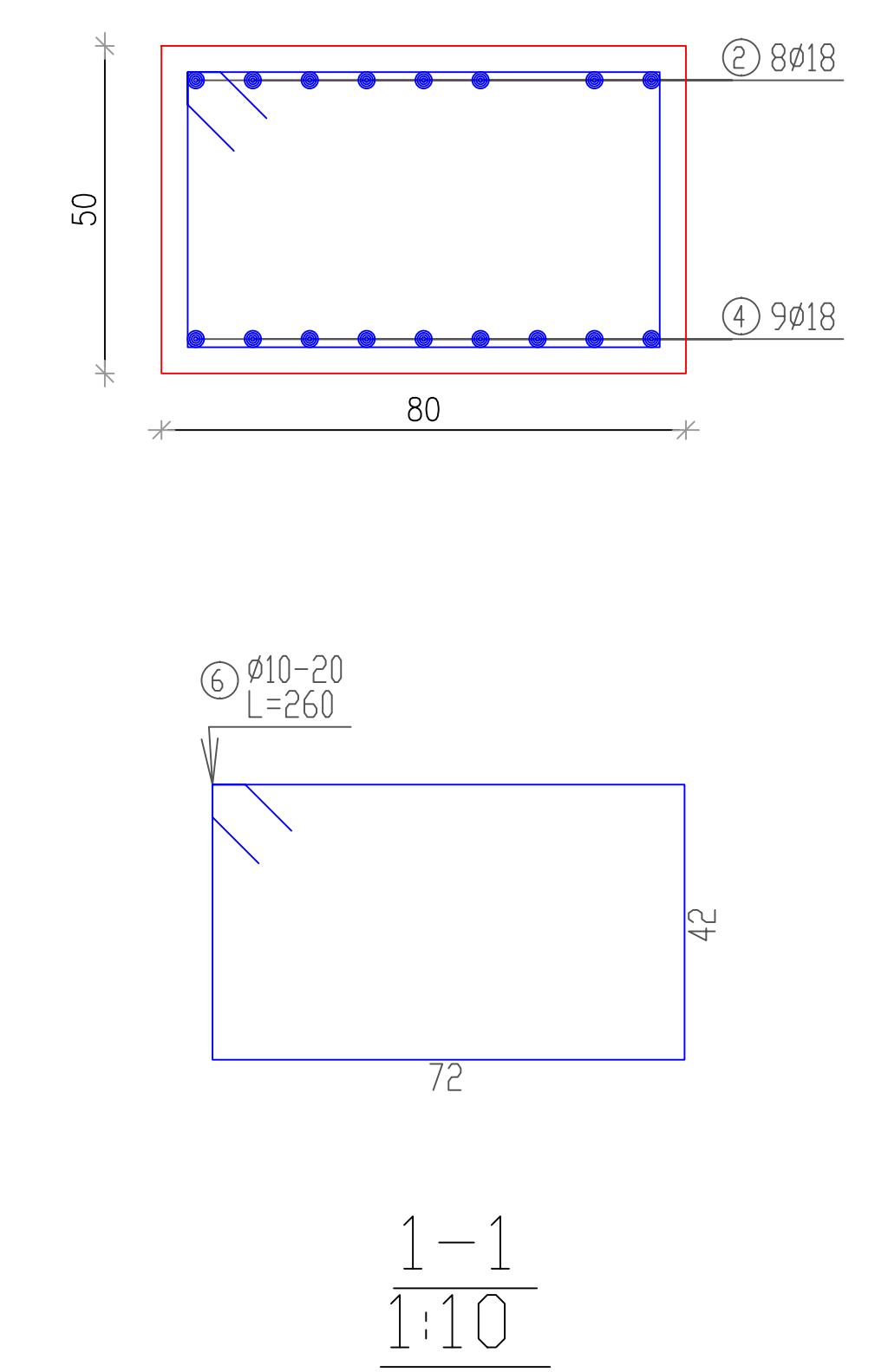
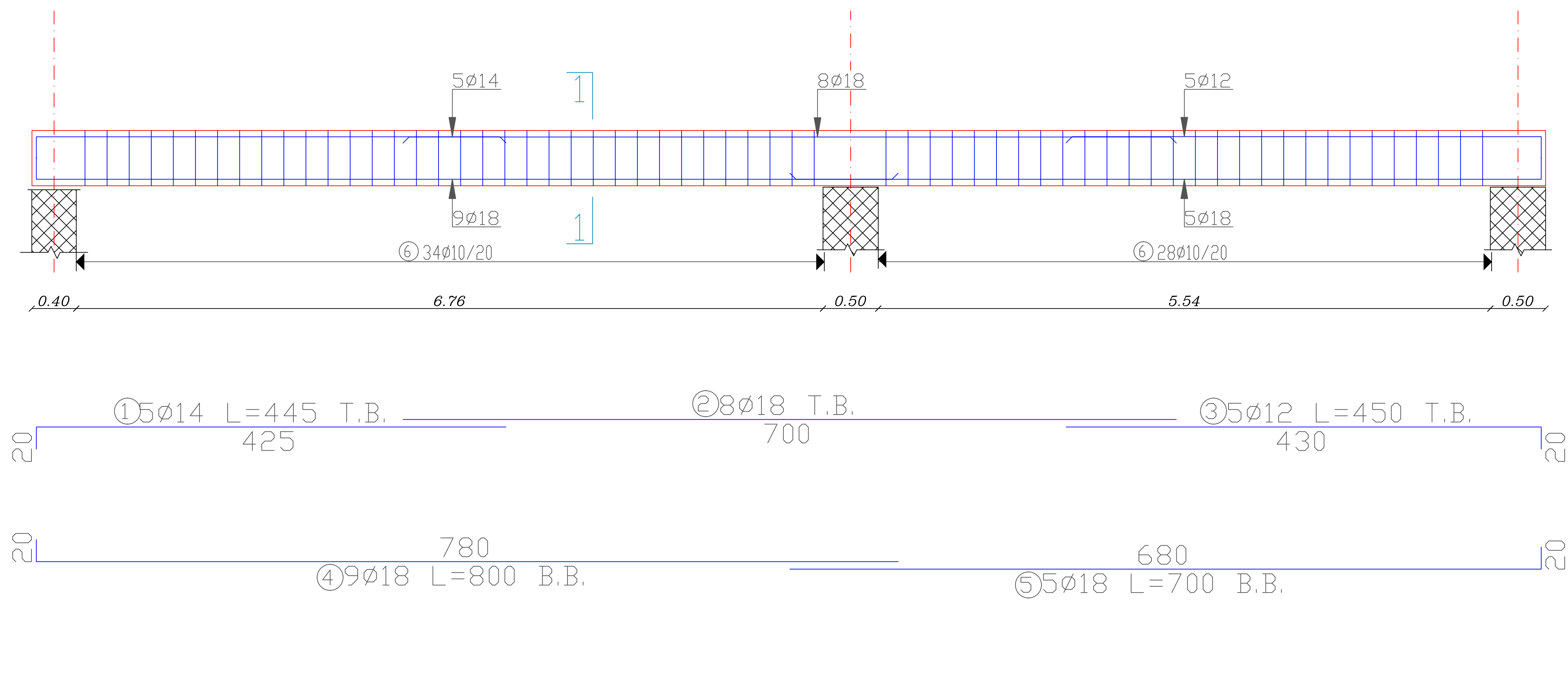
DRAWING TITLE :  
**BEAMS 37 & 38**

Supervisor  
Dr.Maher Amro.

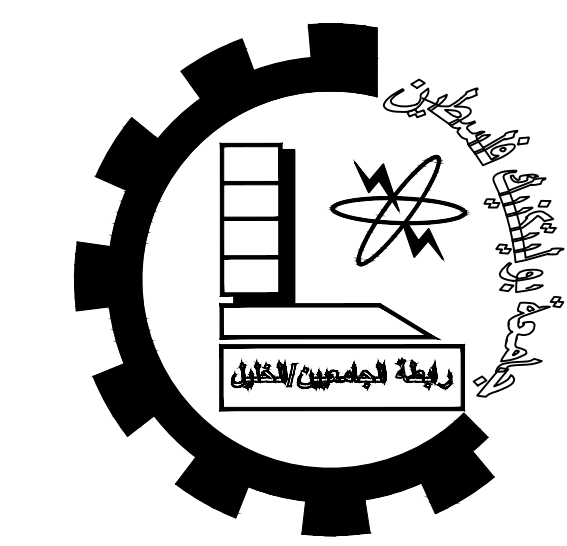
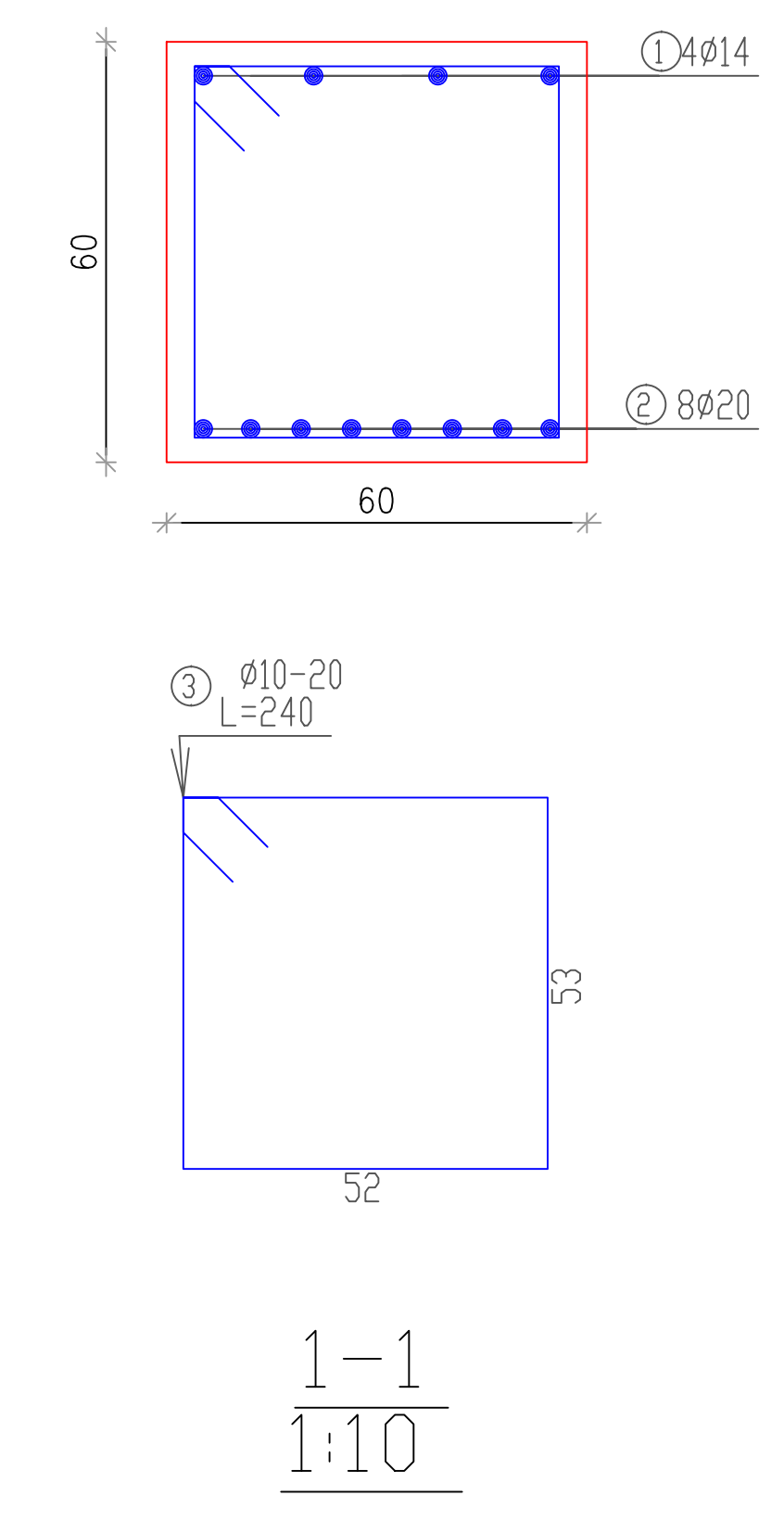
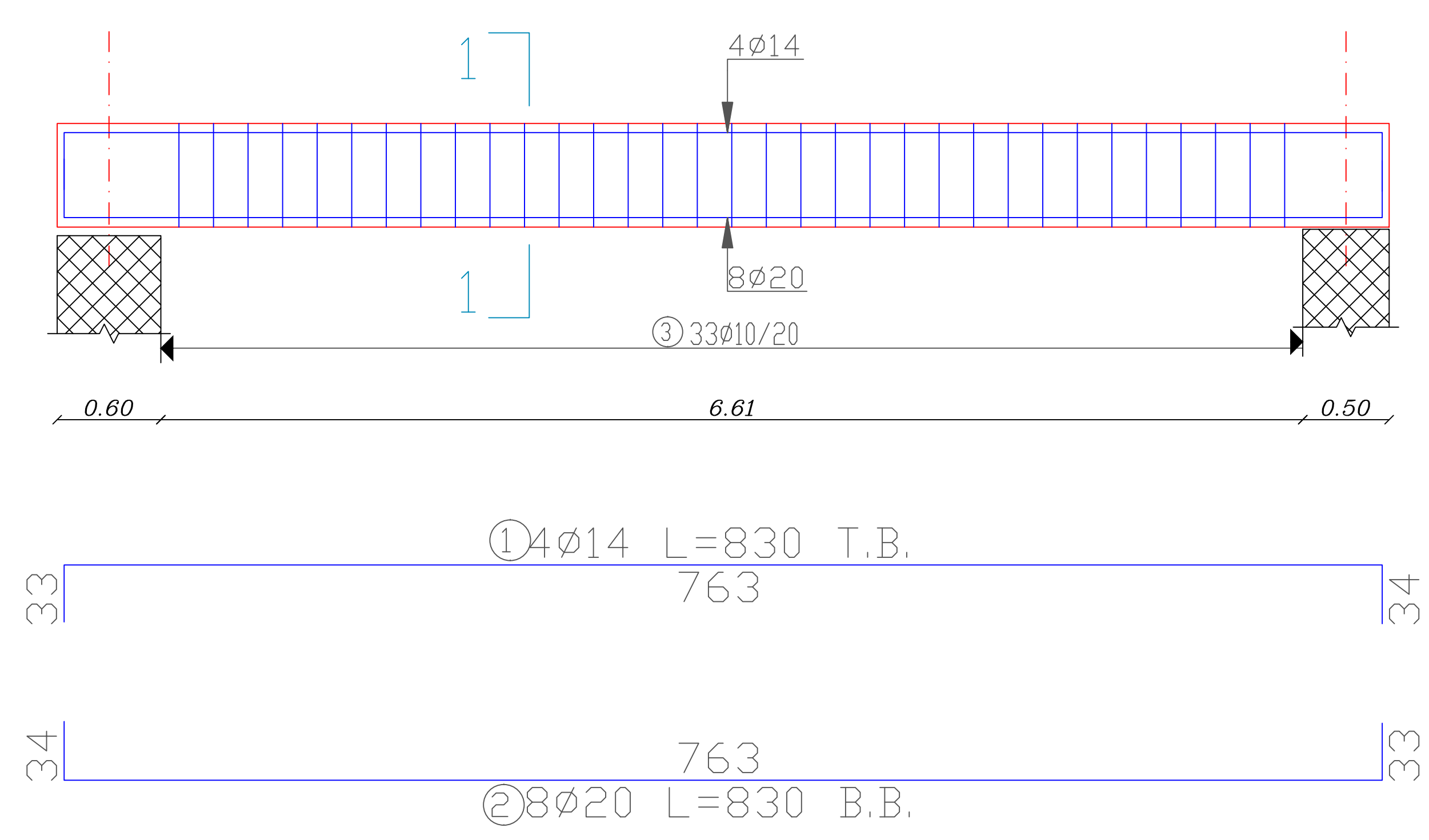
Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B16	21/8/2022

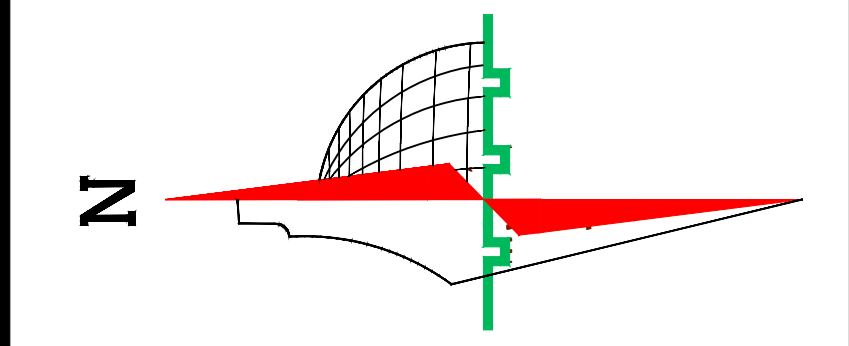
Beam : 39  
Scale 1:25



Beam : 40  
Scale 1:25



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

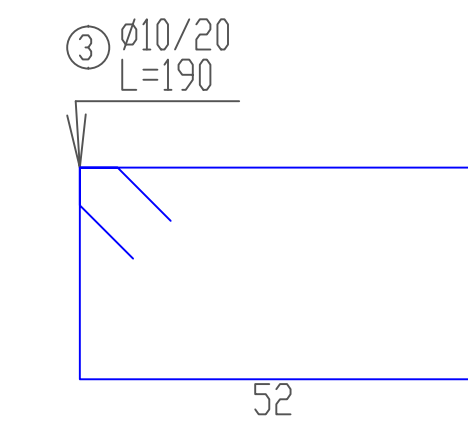
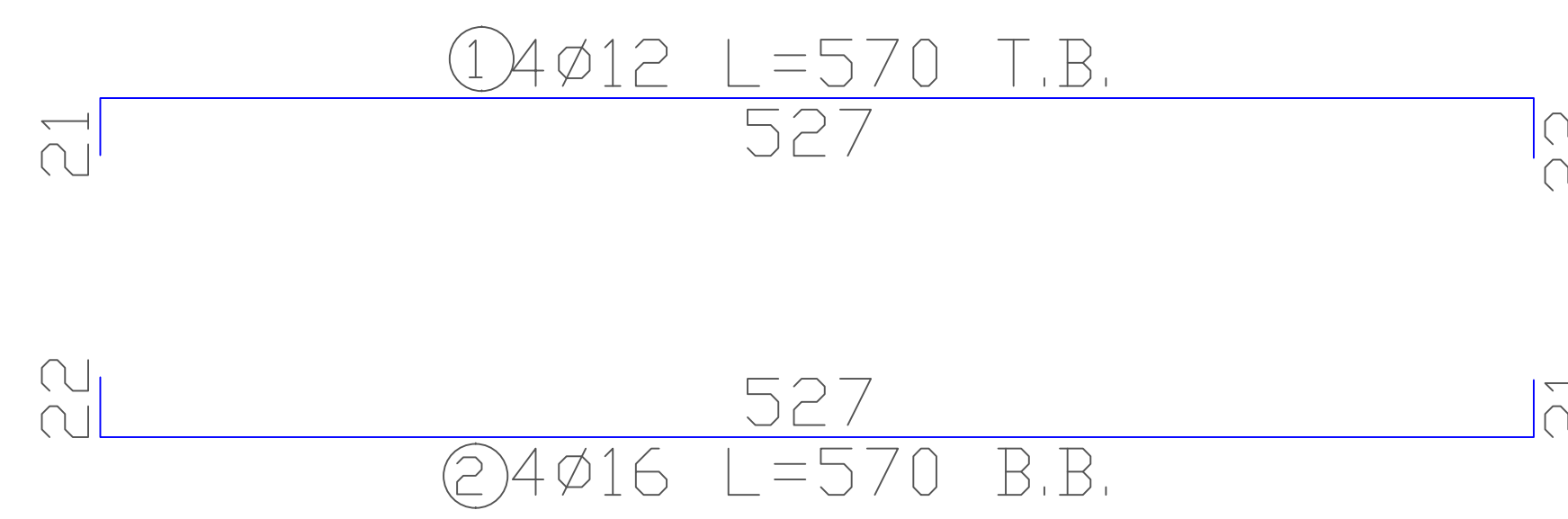
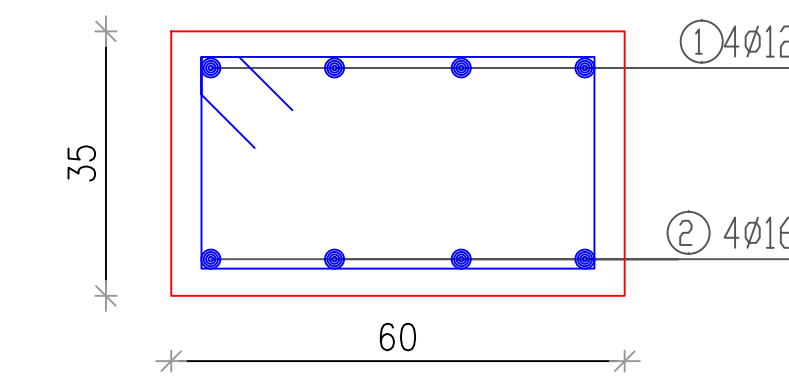
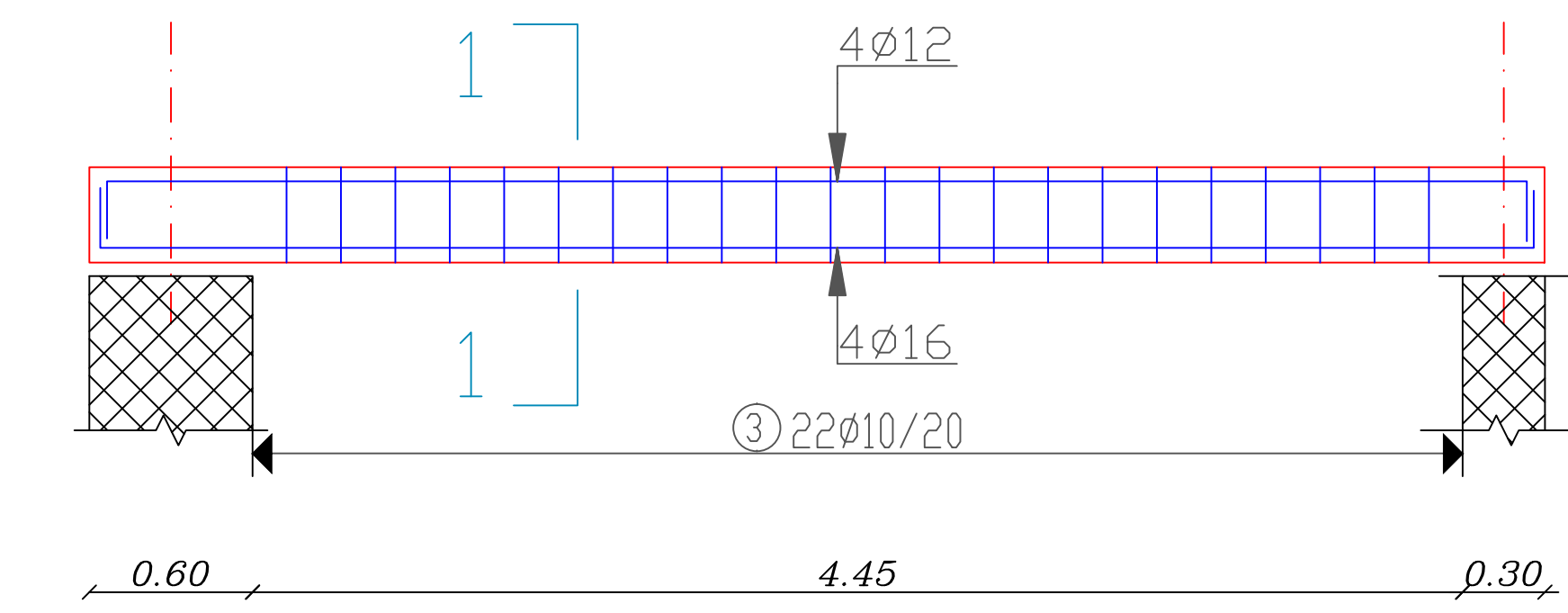
DRAWING TITLE :  
**BEAMS 39&40**

Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

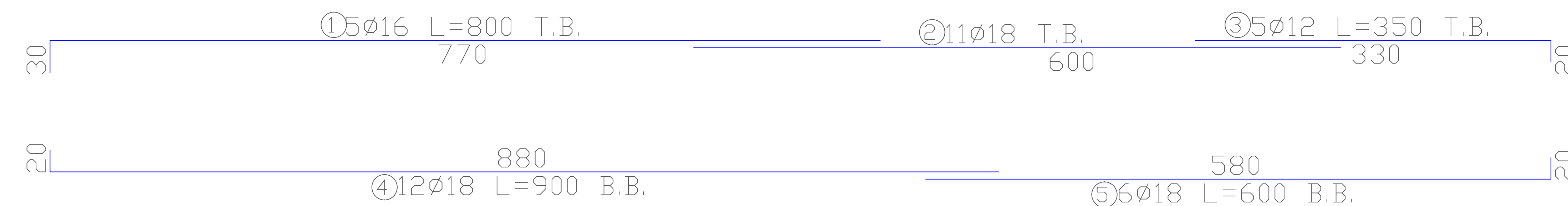
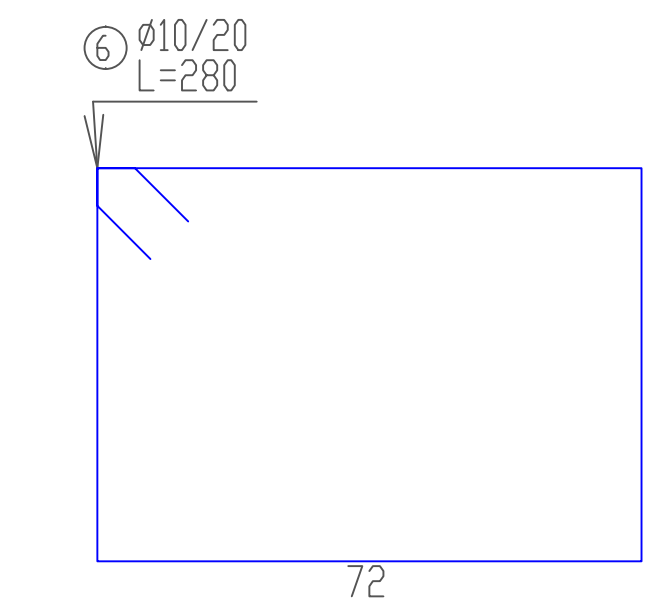
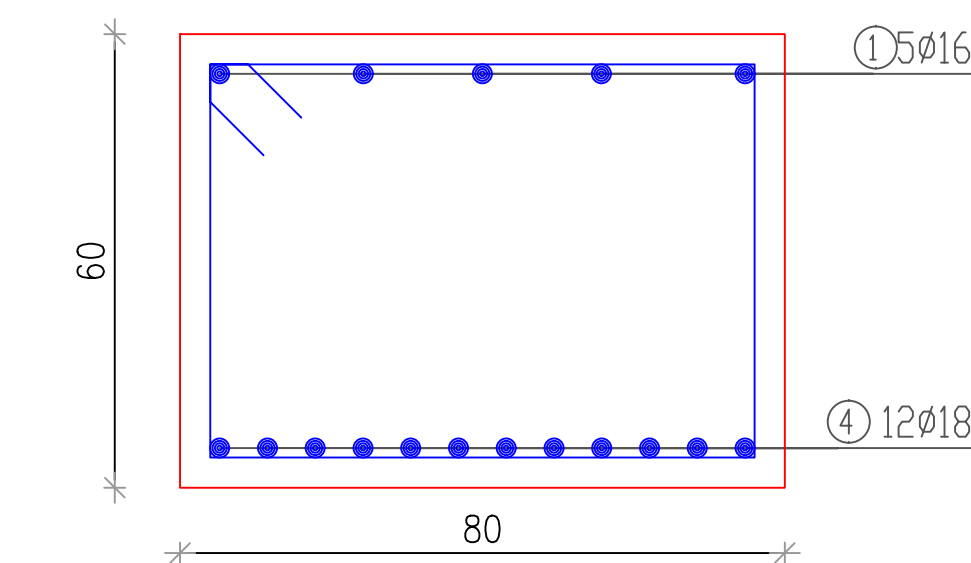
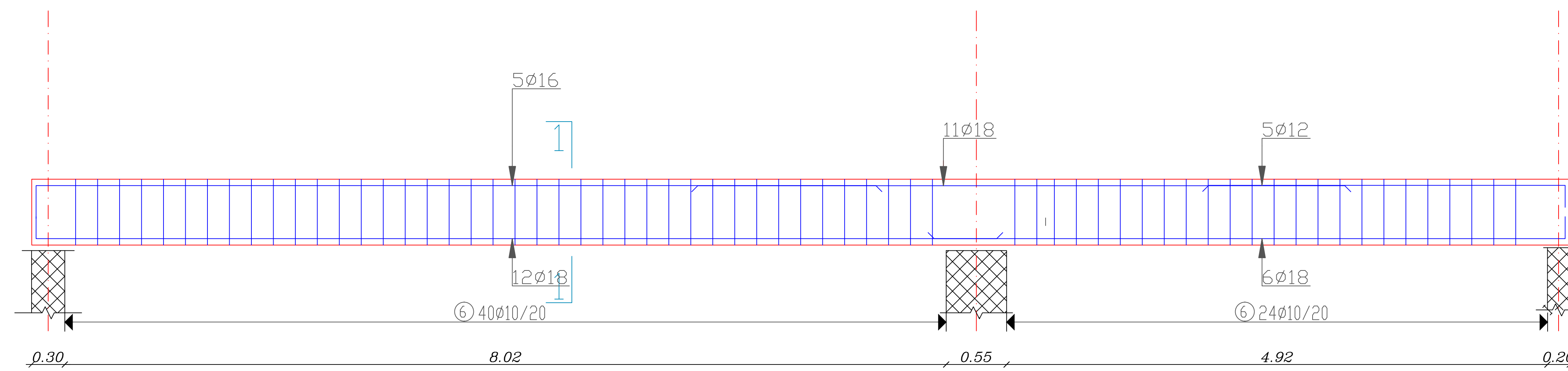
SCALE	No. of DRAW	DATE
1/100	B17	21/8/2022

Beam : 41  
Scale 1:25

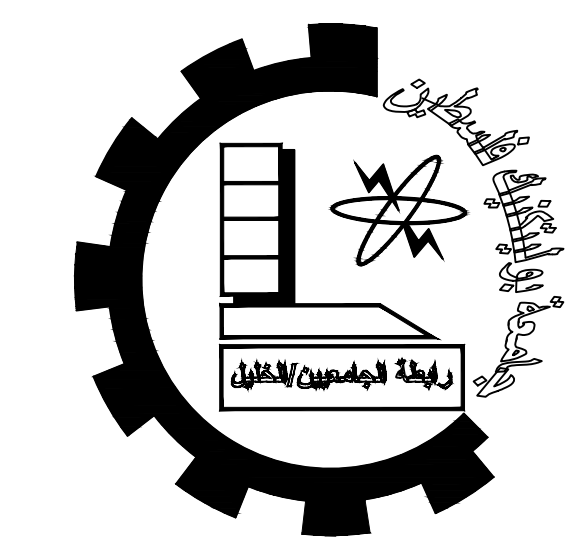


1-1  
1:10

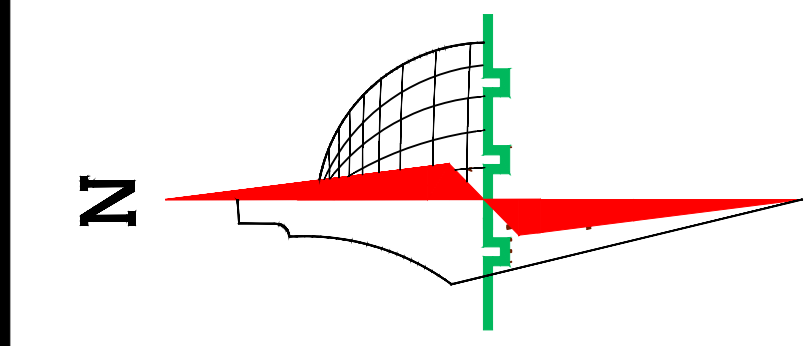
Beam : 42  
Scale 1:25



1-1  
1:10



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

**BEAMS 41&42**

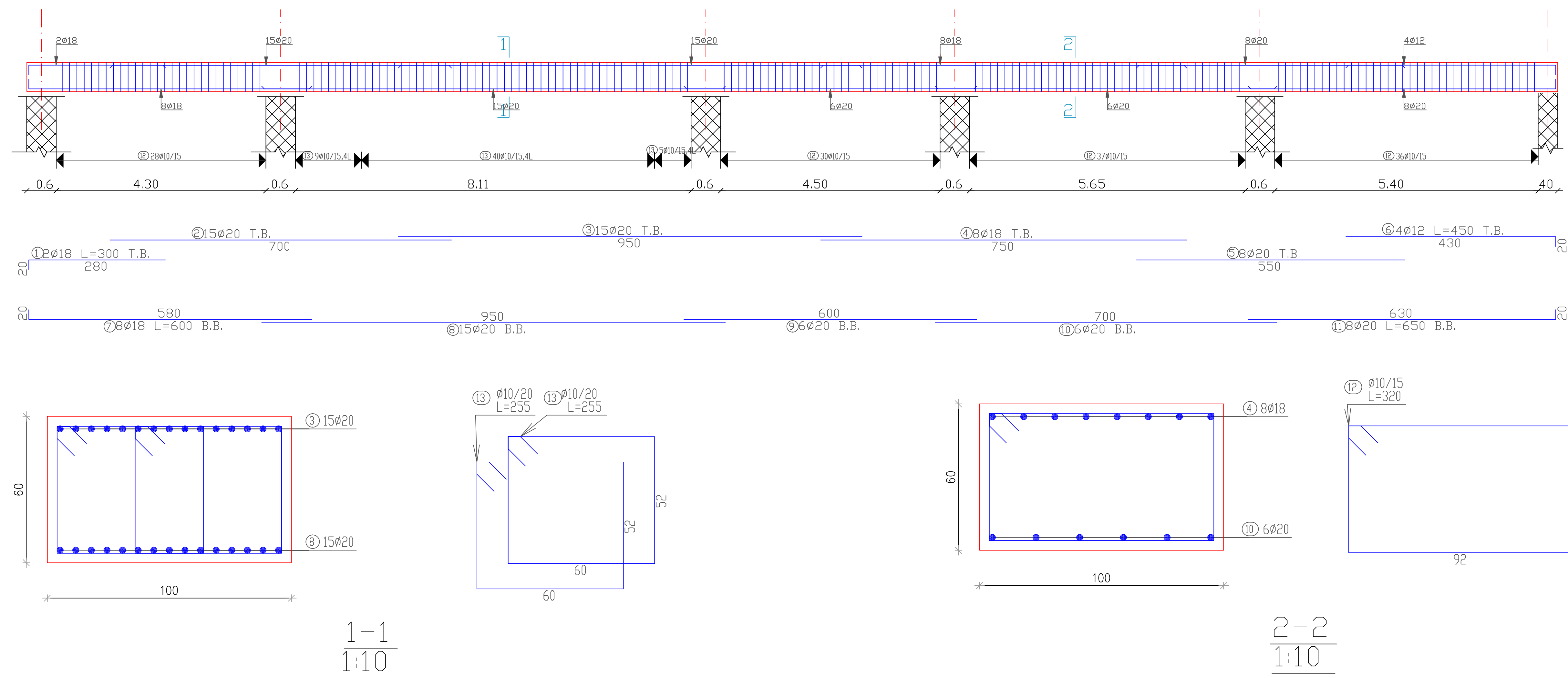
Supervisor  
Dr.Maher Amro.

Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B18	21/8/2022

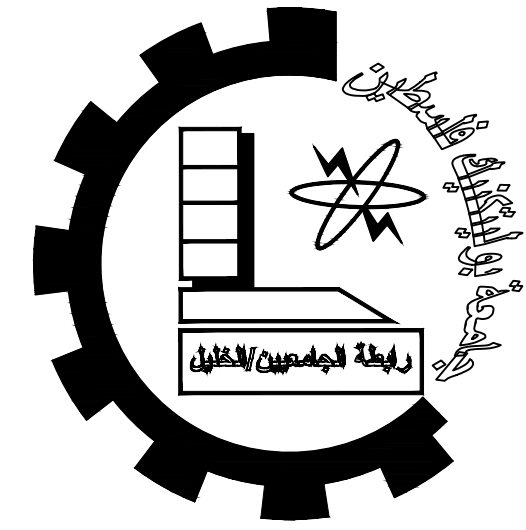
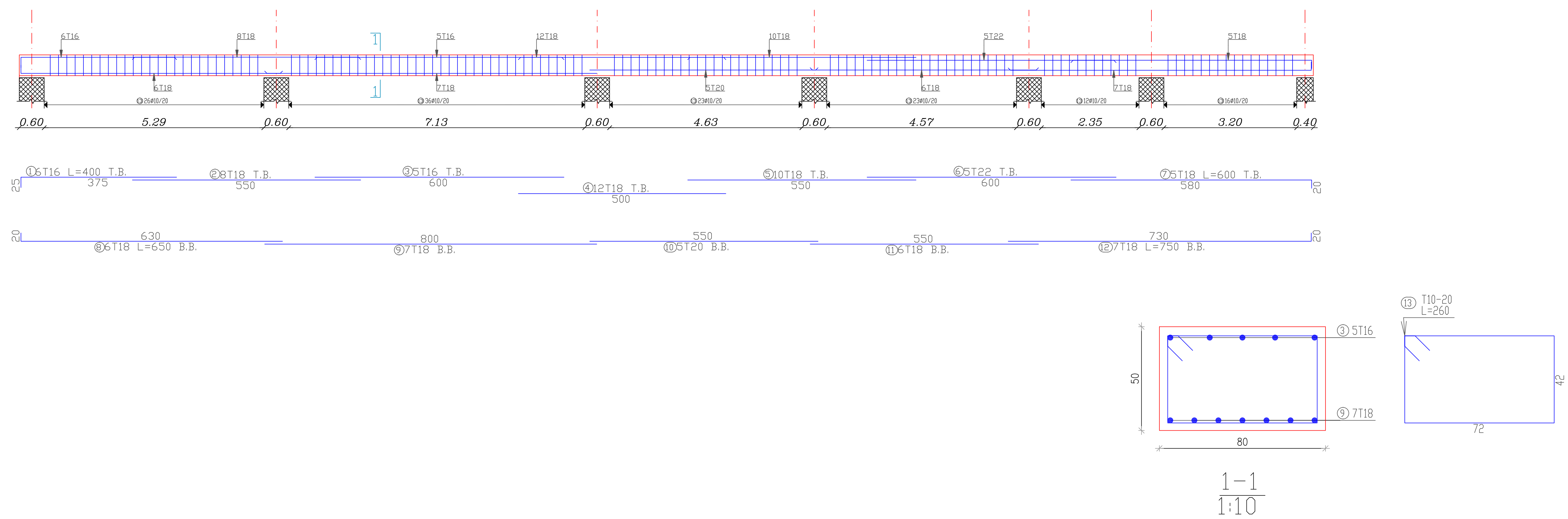
Beam :43

Scale 1:50

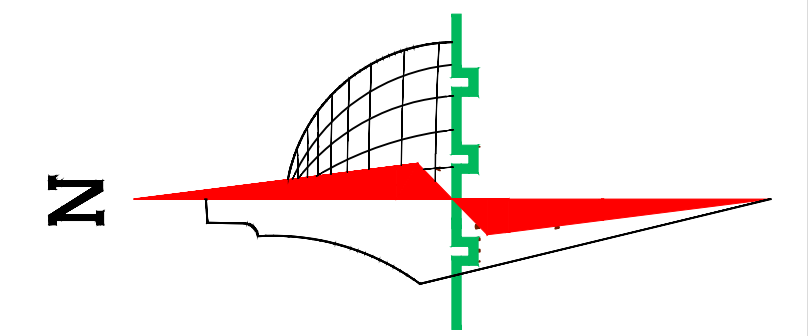


Beam :44

Scale 1:50



Palestine Polytechnic University  
 College of Engineering  
 Civil Engineering Department  
 Civil Engineering  
 Graduation Project  
 Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

BEAMS 43 & 44

Supervisor

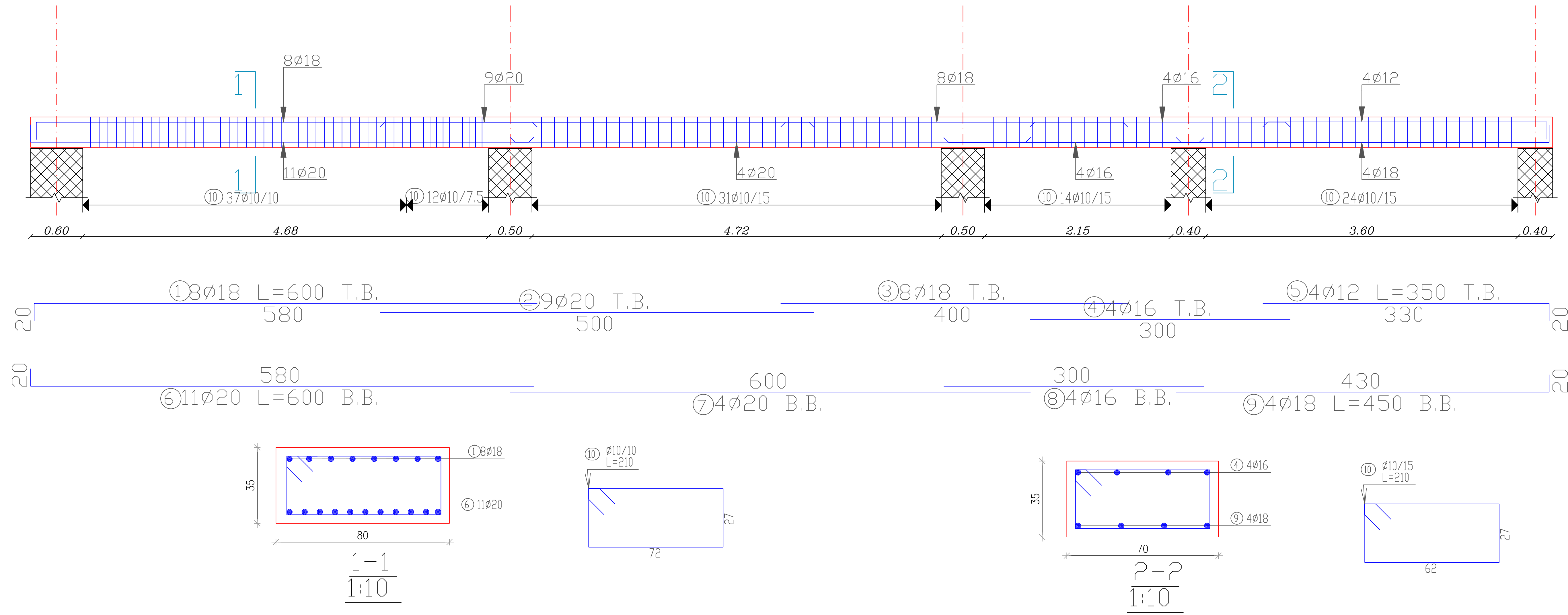
Dr.Maher Amro.

Done by :

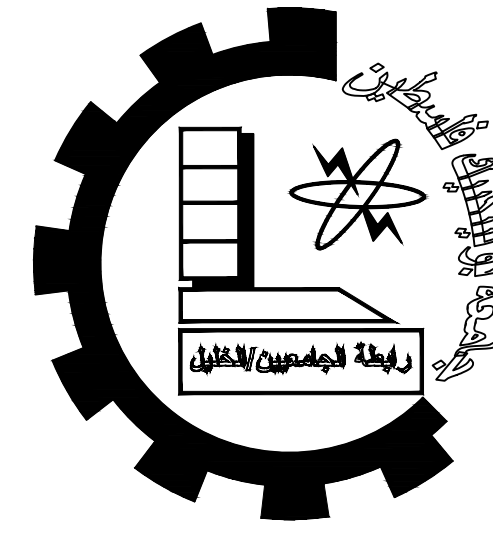
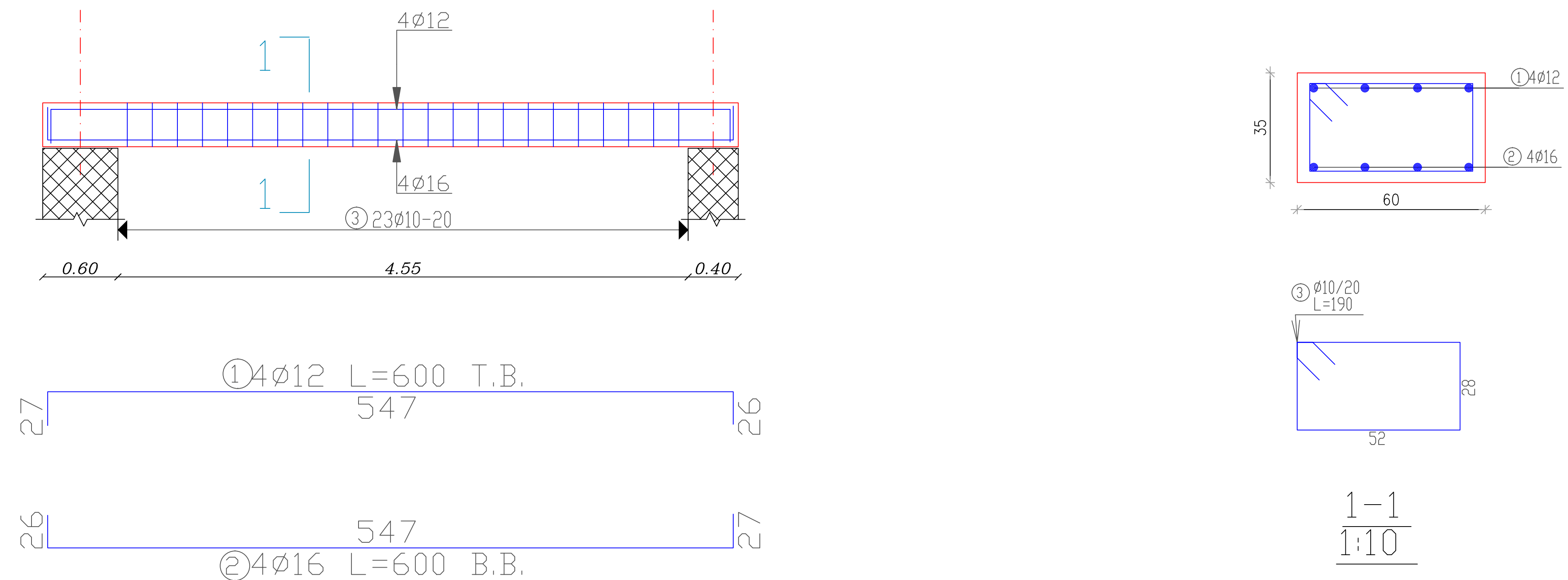
Osama Abu E'ram  
 Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B19	21/8/2022

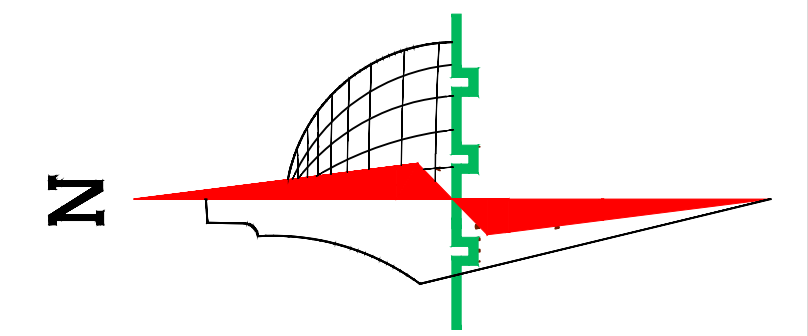
Beam :45  
Scale 1:25



Beam :46  
Scale 1:25



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

BEAMS 45&46

Supervisor

Dr.Maher Amro.

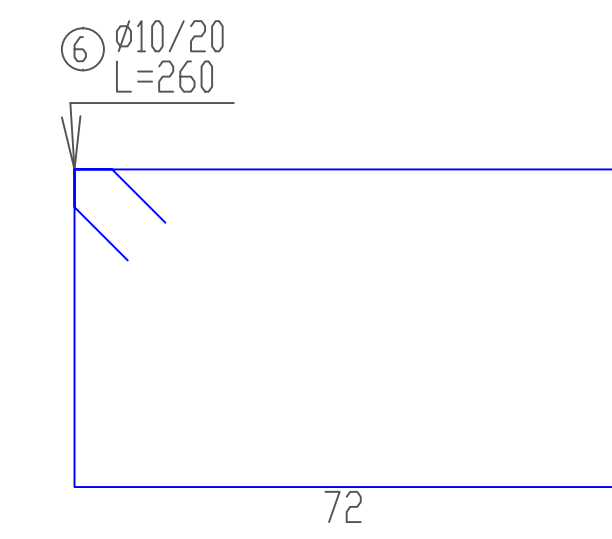
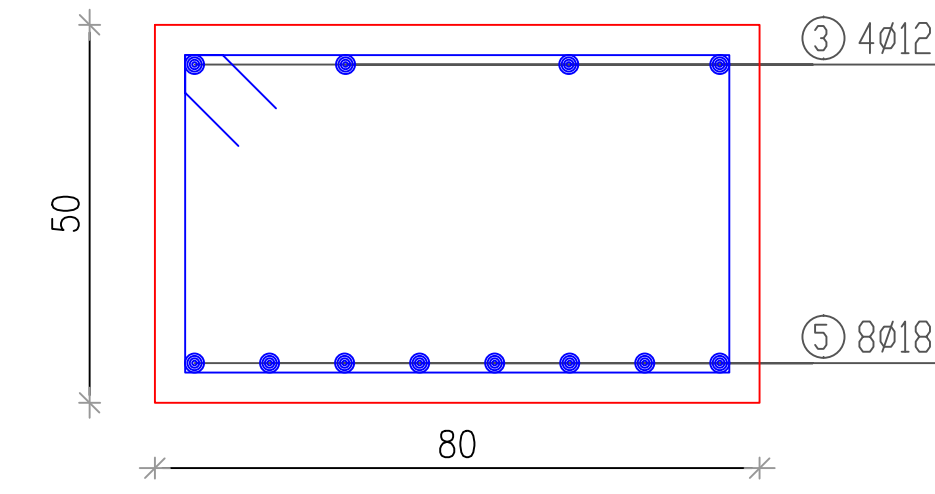
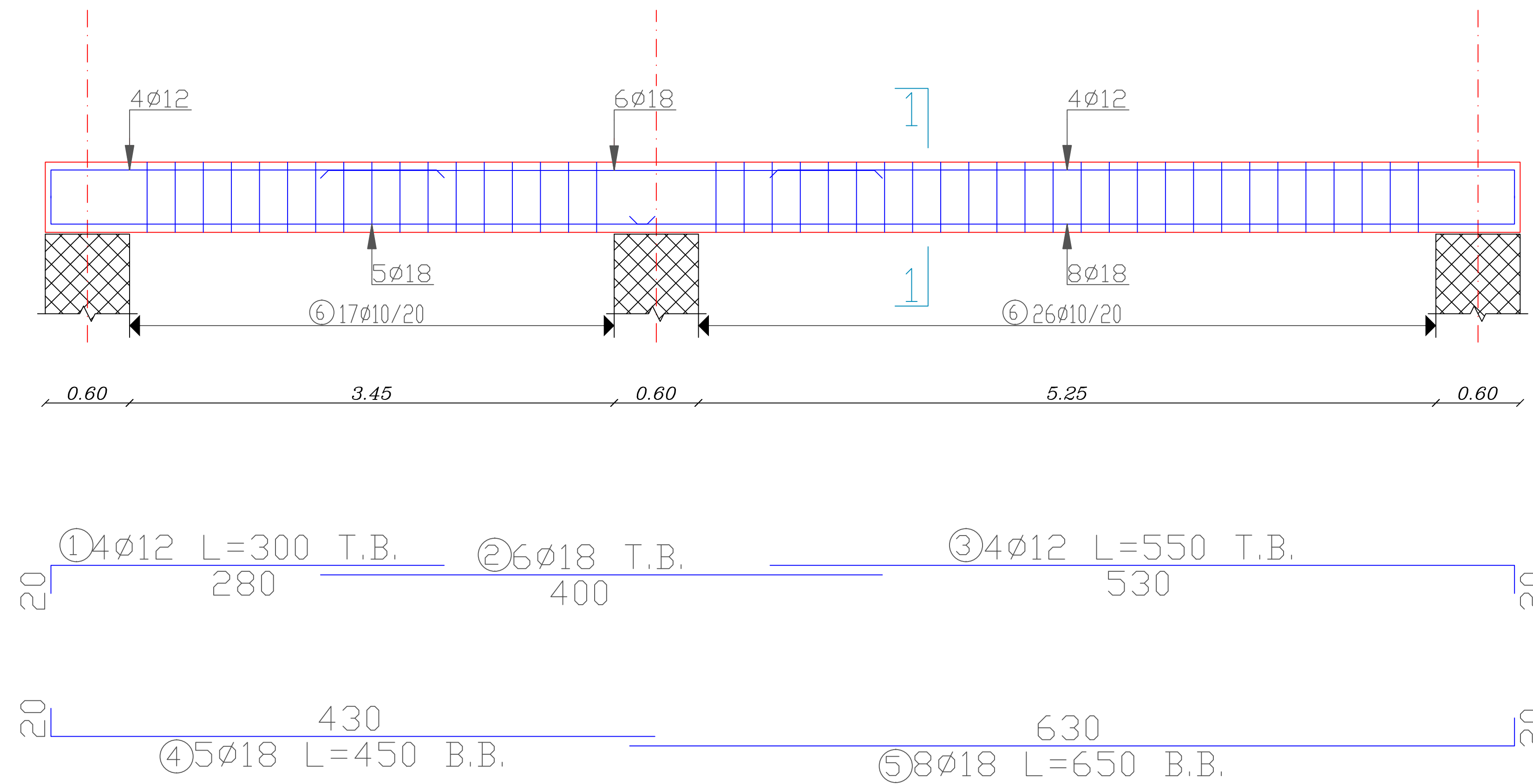
Done by :

Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B20	21/8/2022

Beam :47

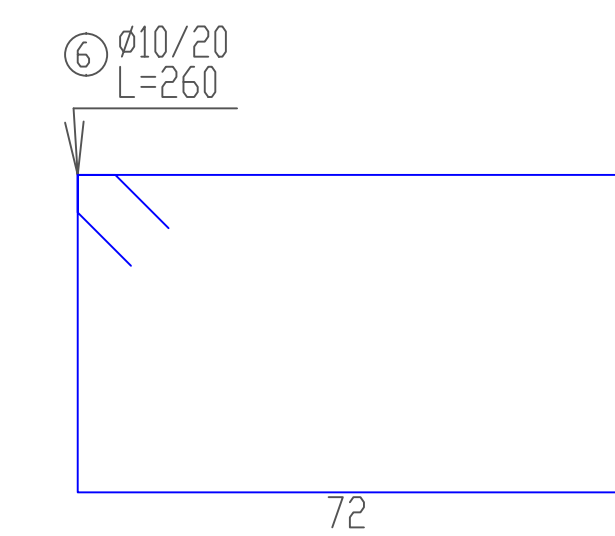
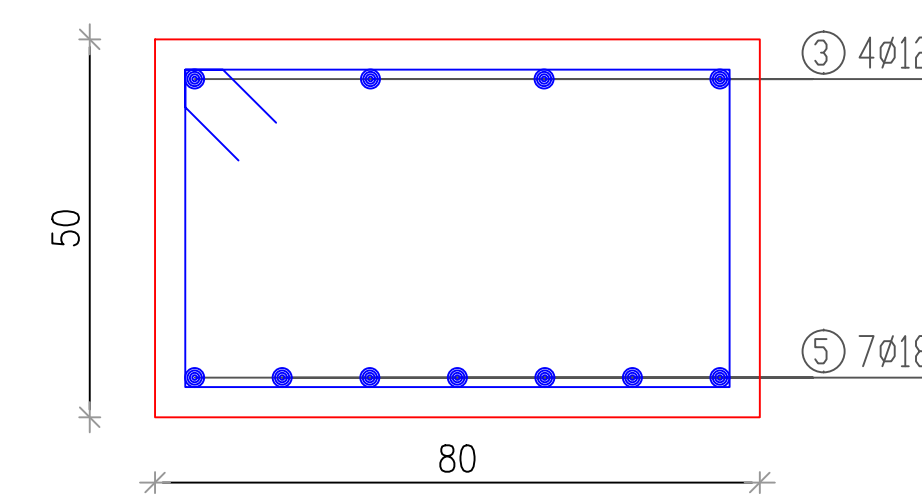
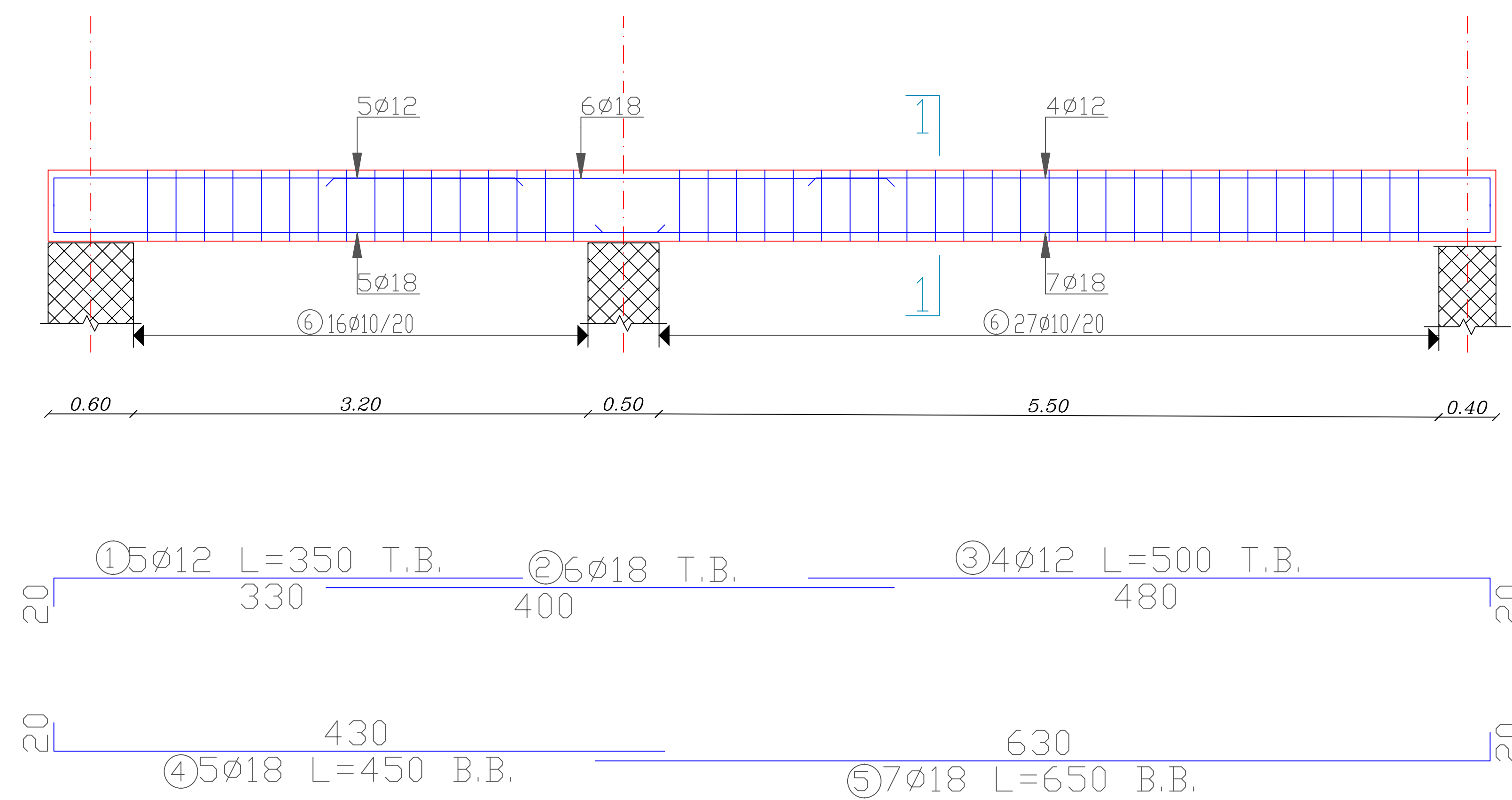
Scale 1:25



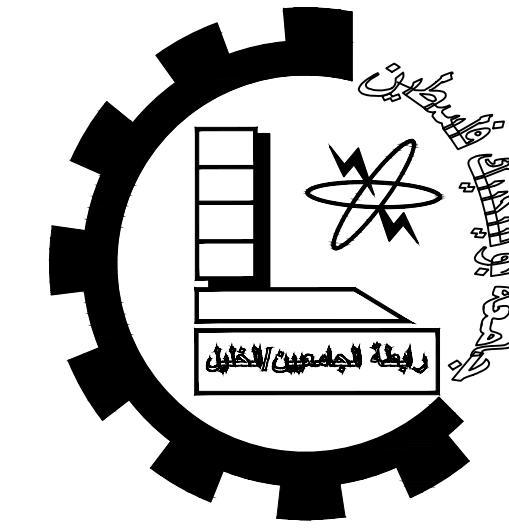
1-1  
1:10

Beam :48

Scale 1:25



1-1  
1:10



Palestine Polytechnic University

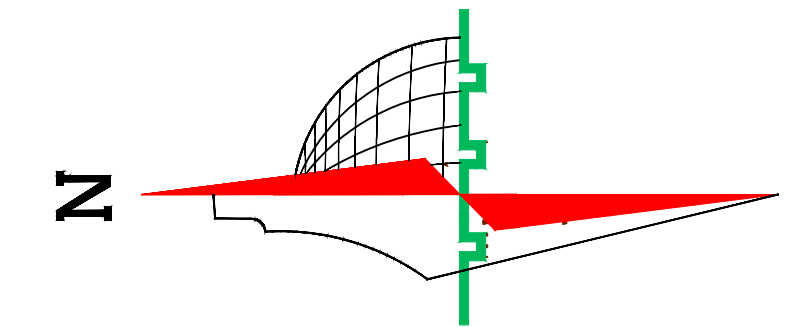
College of Engineering

Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

**BEAMS 47&48**

Supervisor

Dr.Maher Amro.

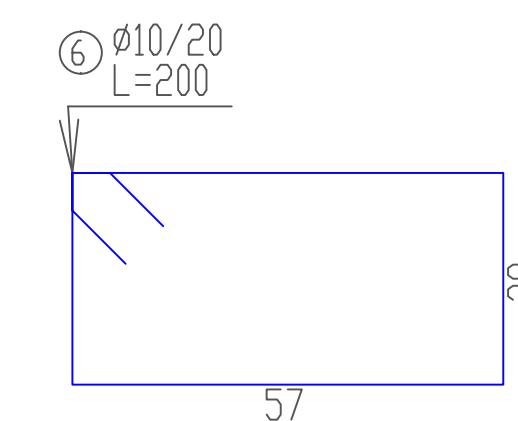
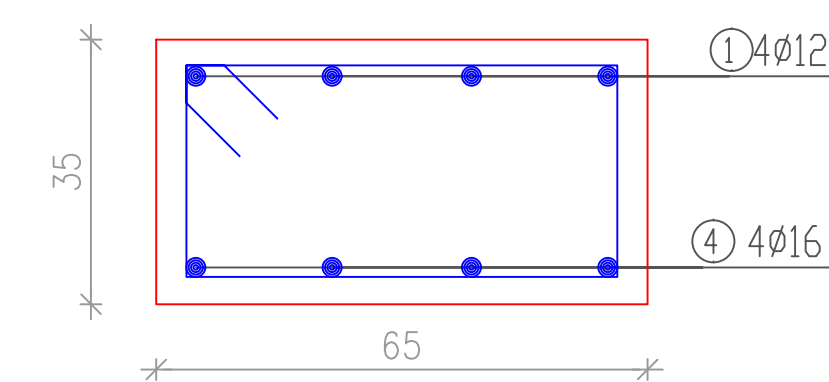
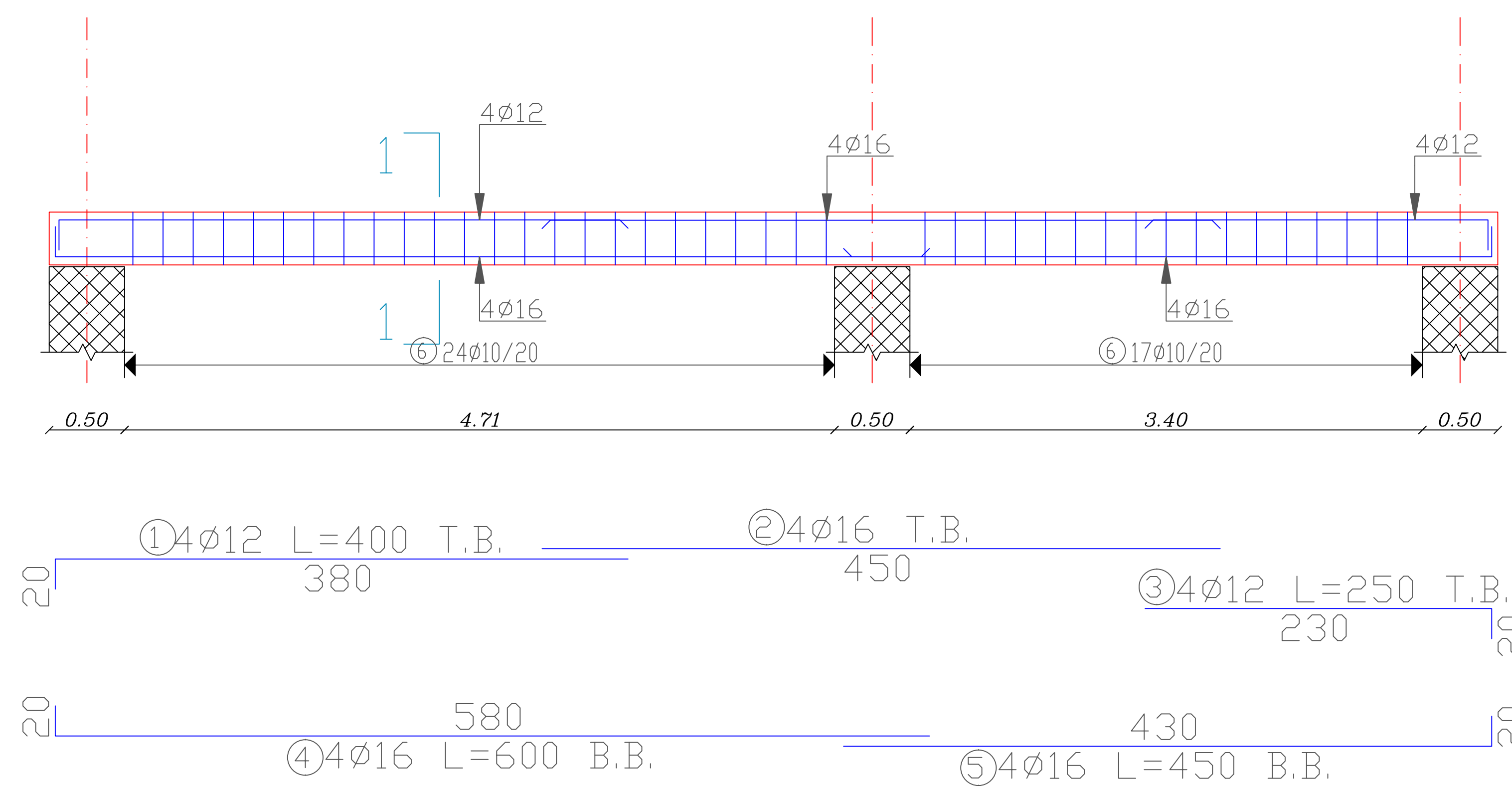
Done by :

Osama Abu E'ram

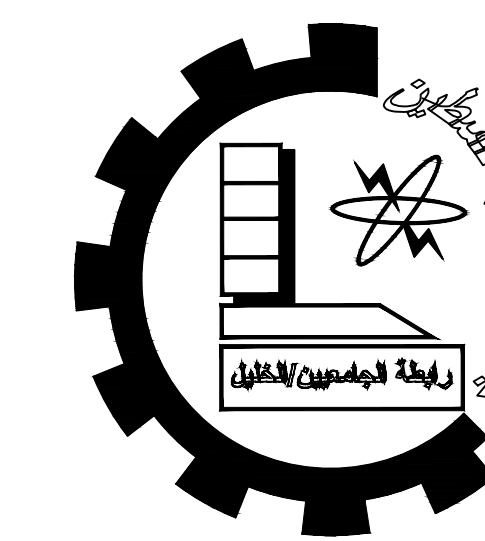
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B21	21/8/2022

Beam :49  
Scale 1:25

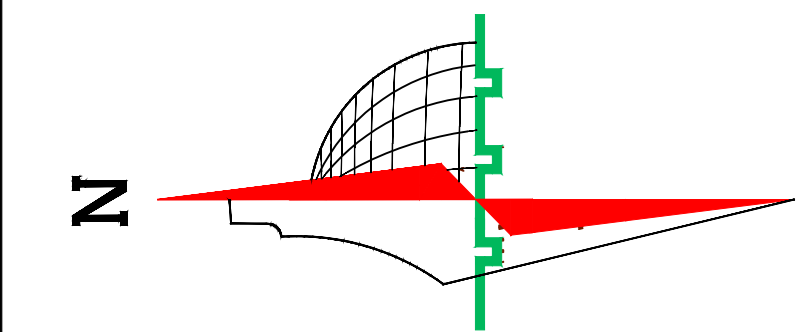


1-1  
1:10



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project

Al-Salam Ophthalmic Hospital



**Legend :**

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

**BEAMS 49&50**

Supervisor

Dr.Maher Amro.

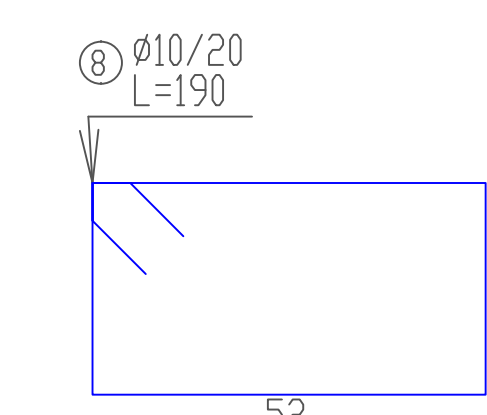
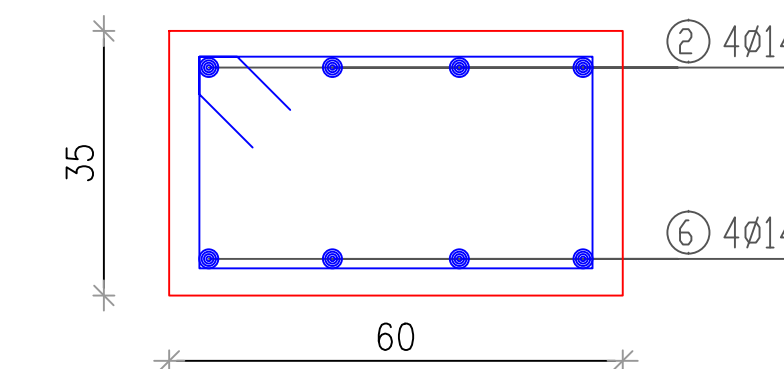
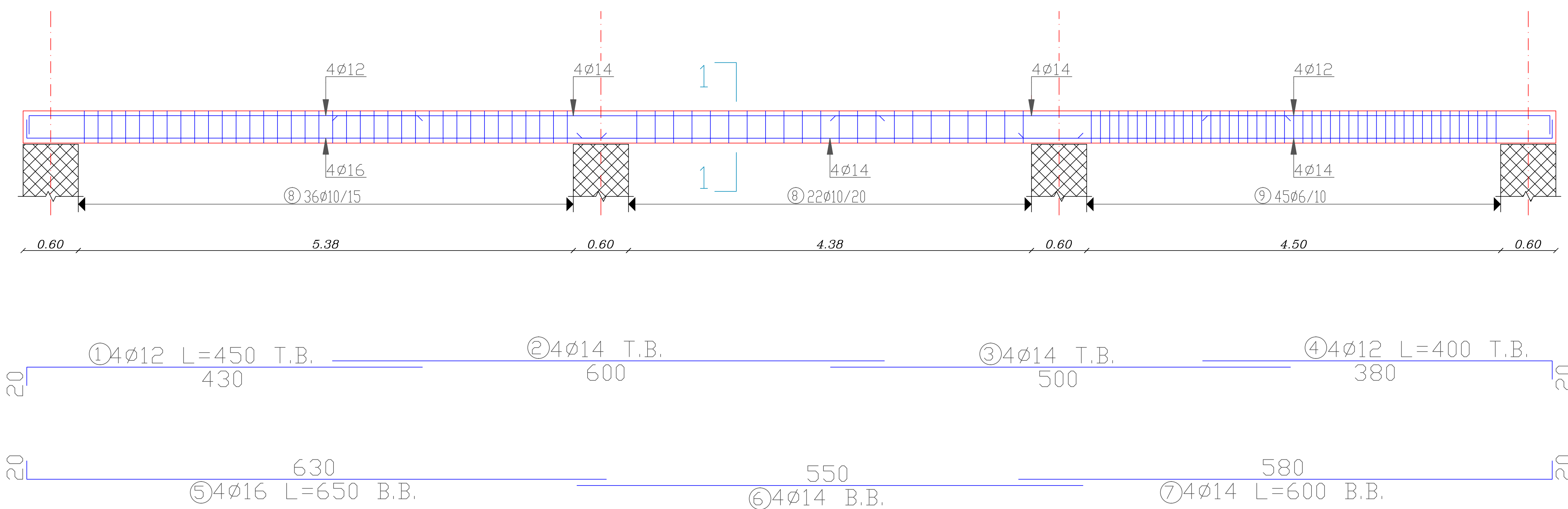
Done by :

Osama Abu E'ram

Ali Badawi

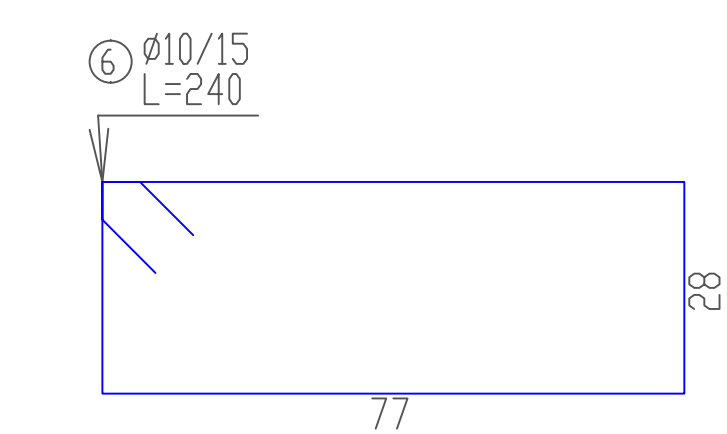
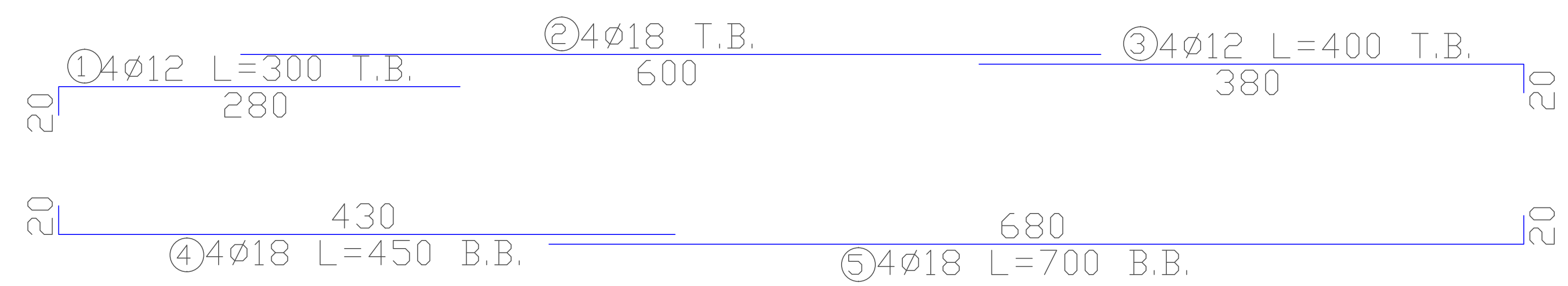
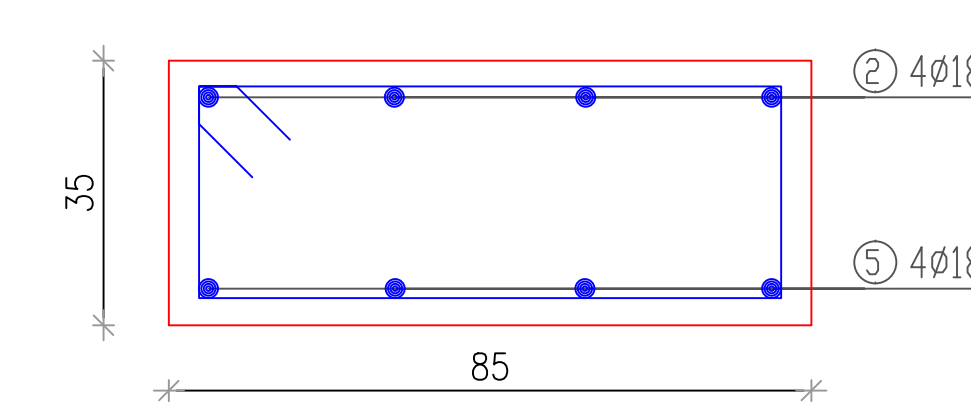
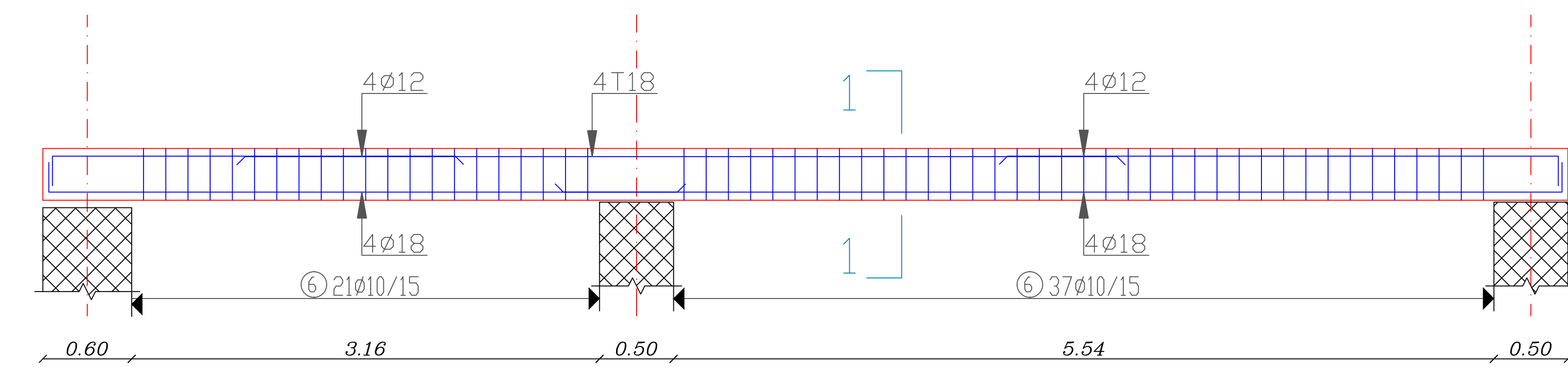
SCALE	No. of DRAW	DATE
1/100	B22	21/8/2022

Beam :50  
Scale 1:25



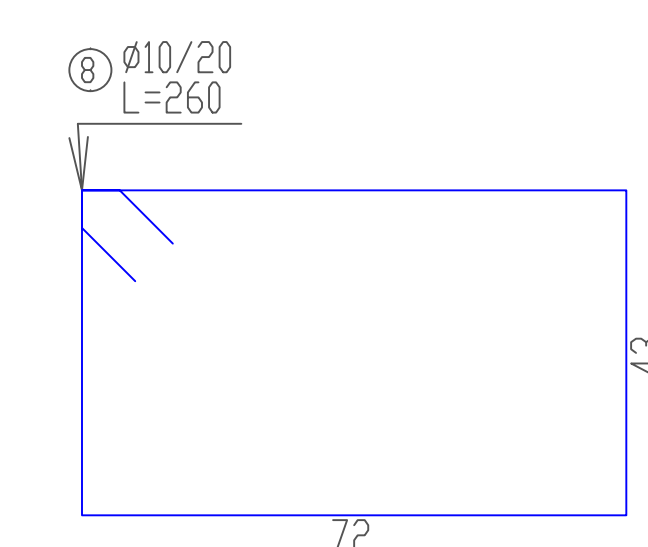
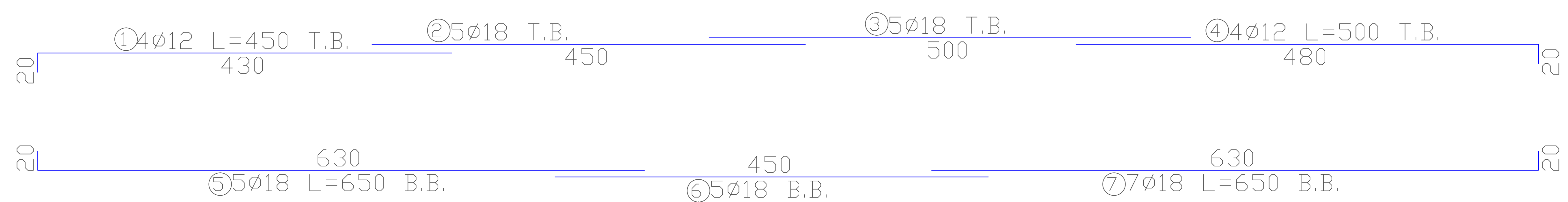
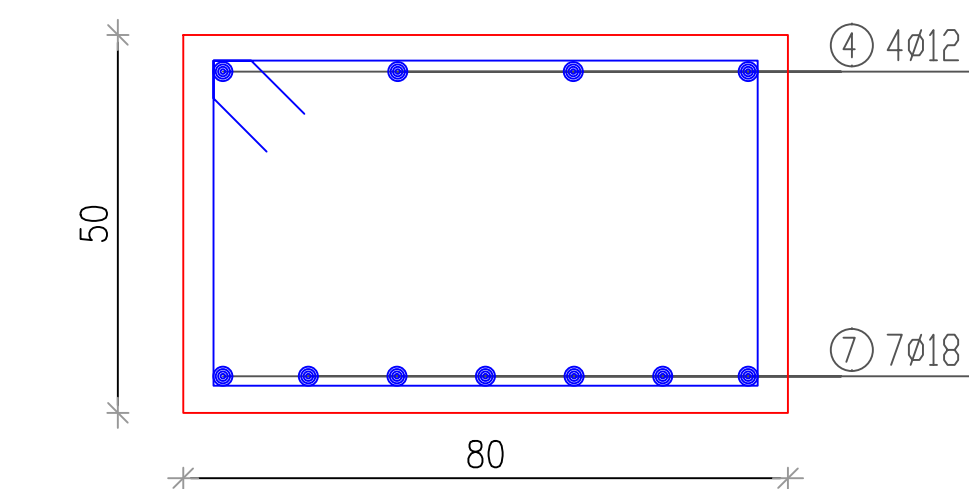
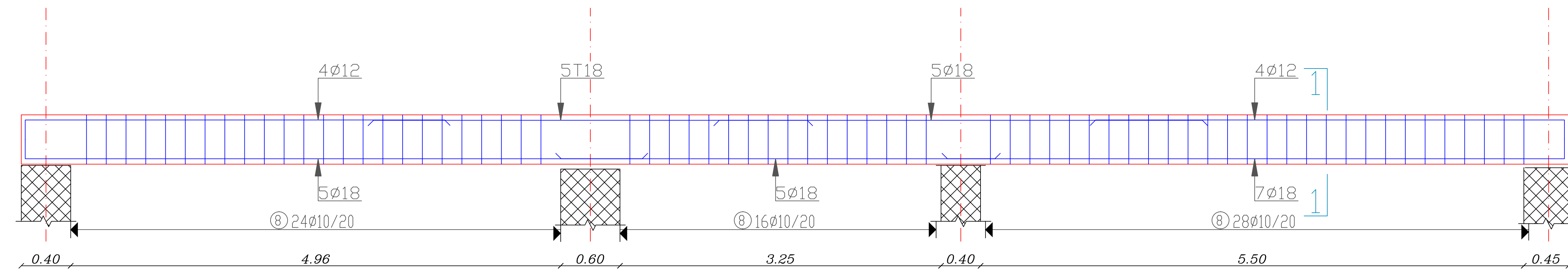
1-1  
1:10

Beam :51  
Scale 1:25

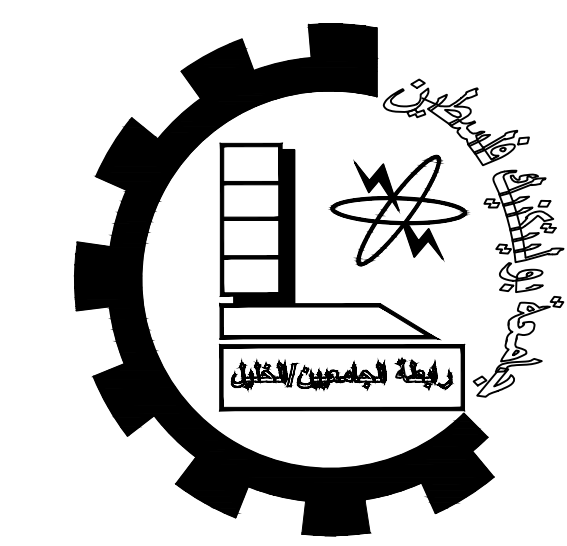


1-1  
1:10

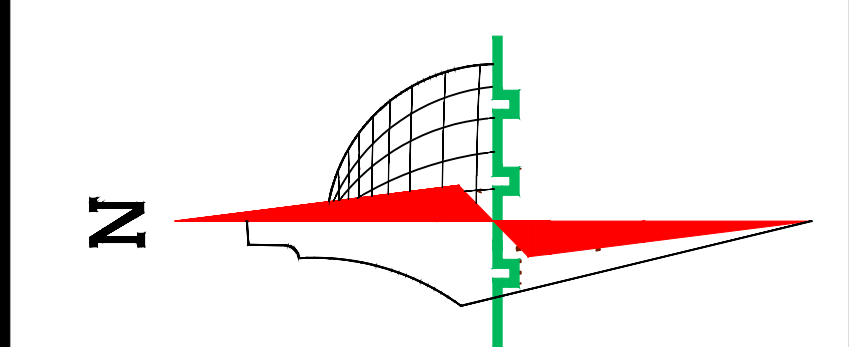
Beam :52  
Scale 1:25



1-1  
1:10



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

BEAMS 51&52

Supervisor

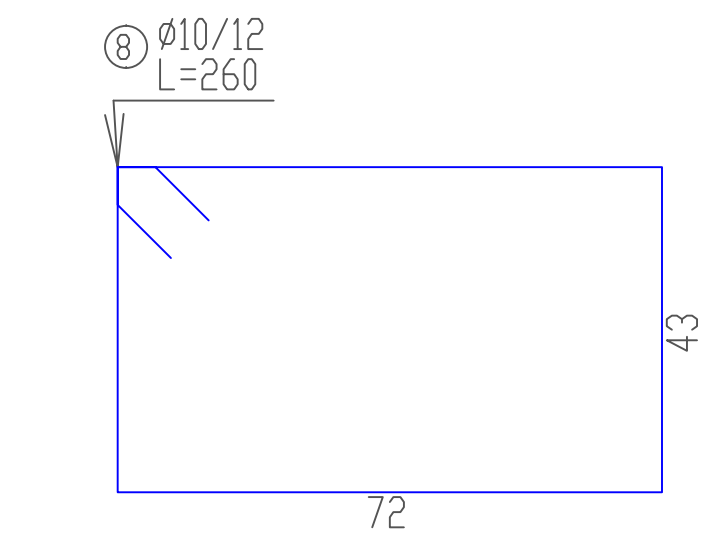
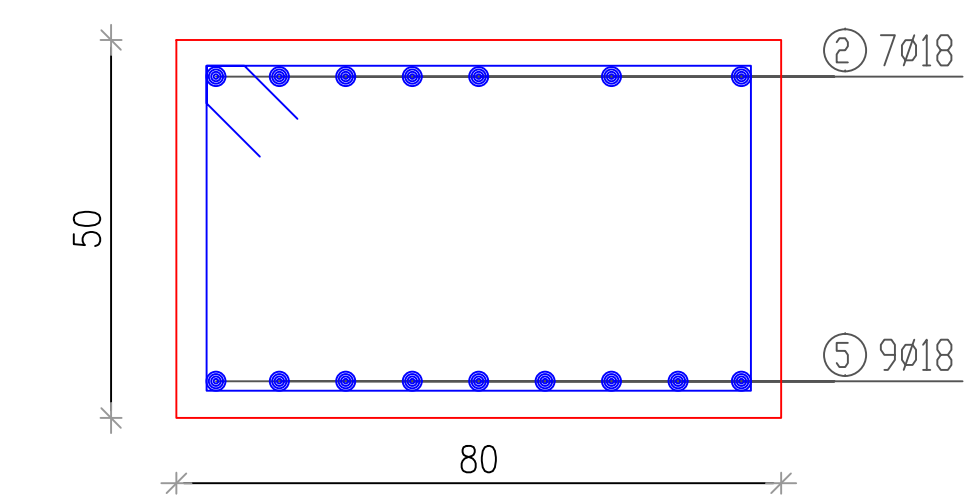
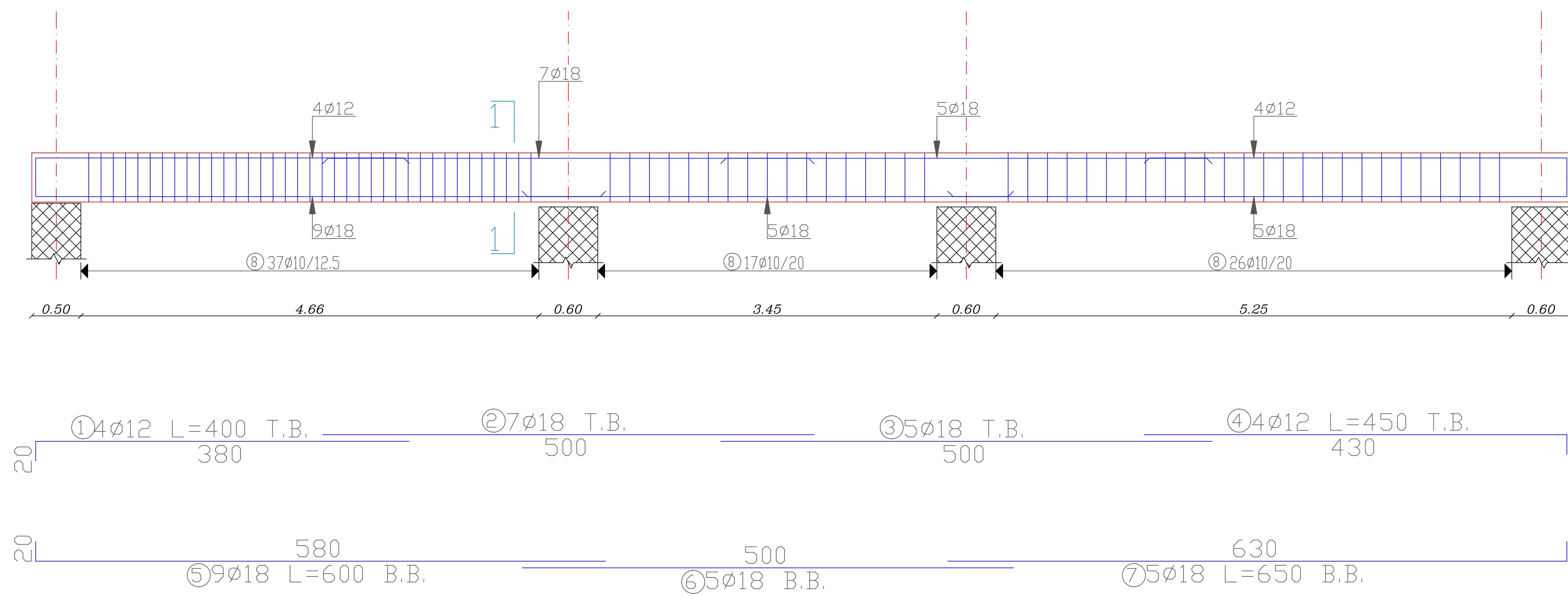
Dr.Maher Amro.

Done by :

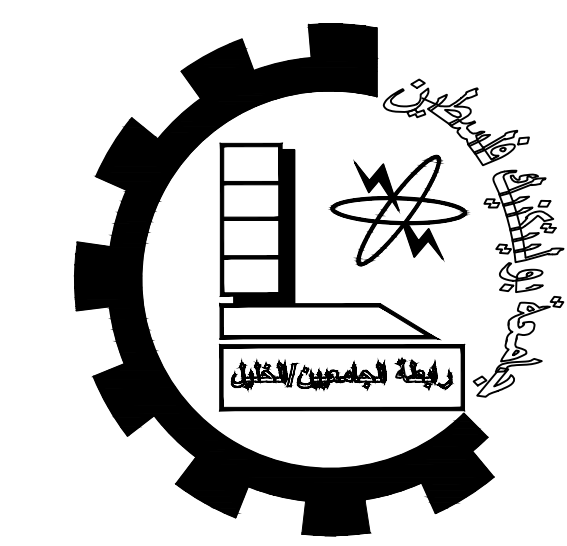
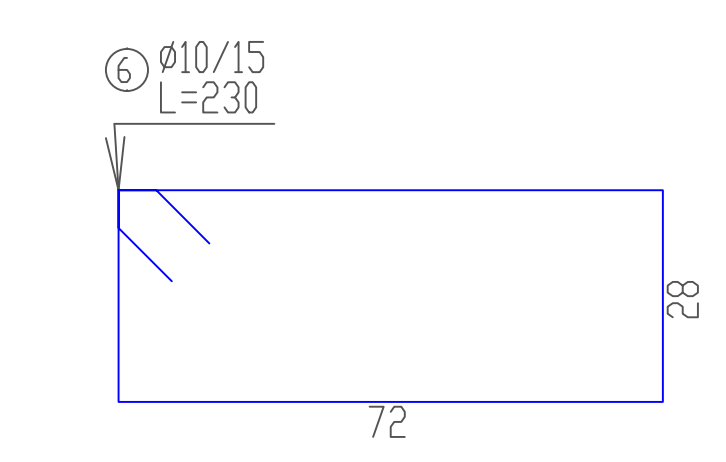
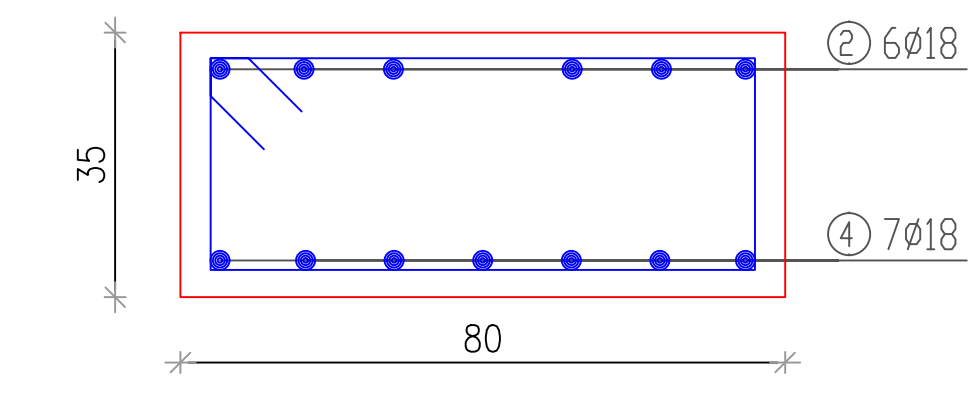
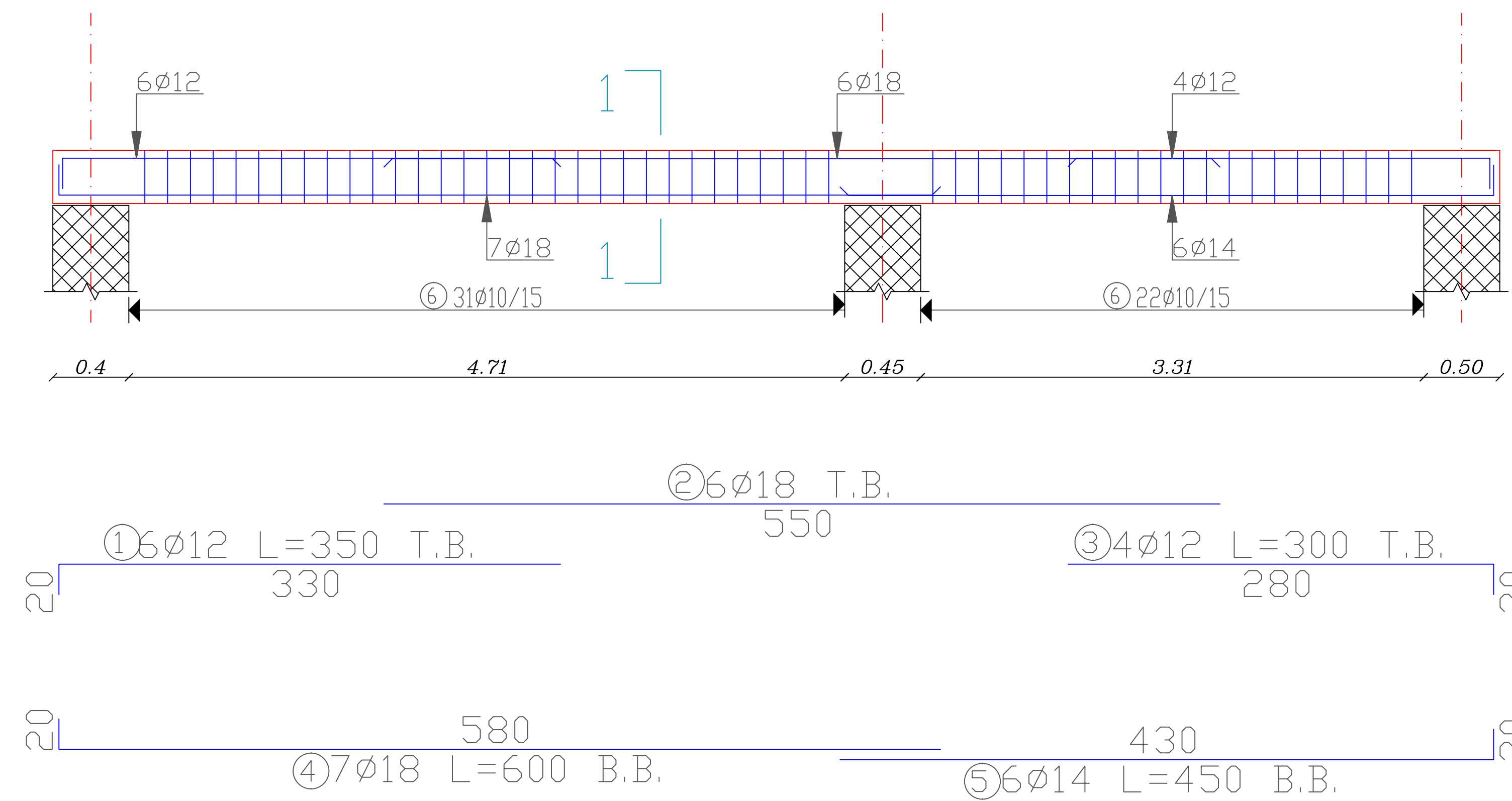
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B23	21/8/2022

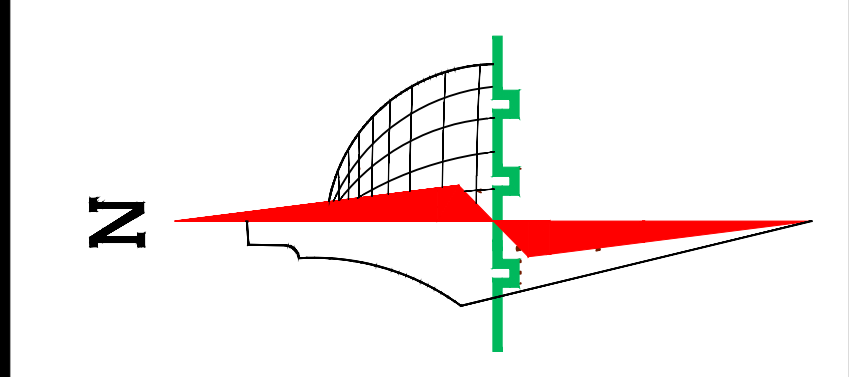
Beam :53  
Scale 1:25



Beam :54  
Scale 1:25



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project  
Al-Salam Ophthalmic Hospital



- Legend :**
- Stone
  - R.Concrete
  - Concrete
  - Hollow Block
  - isolating materials
  - Gravel
  - Wood
  - HEXAGONAL TILES
  - BAKLAVA TILES
  - GRASS

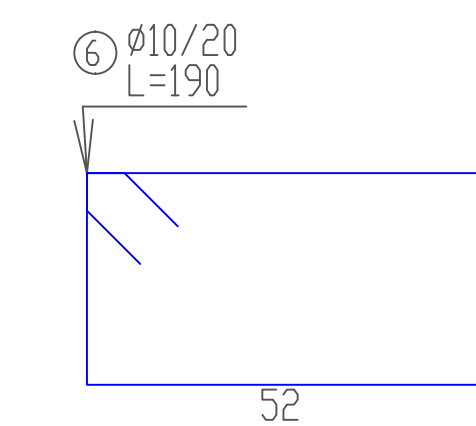
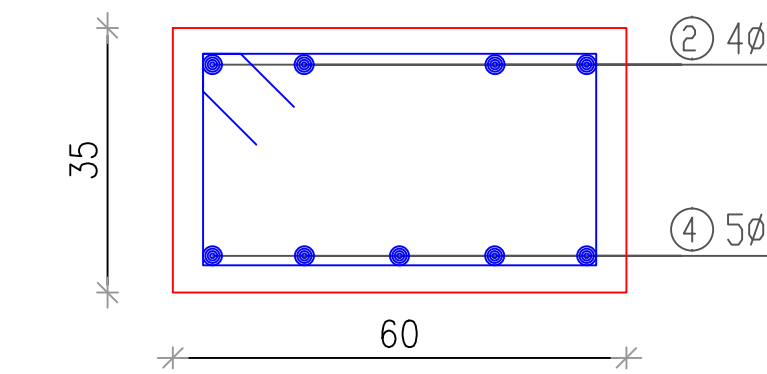
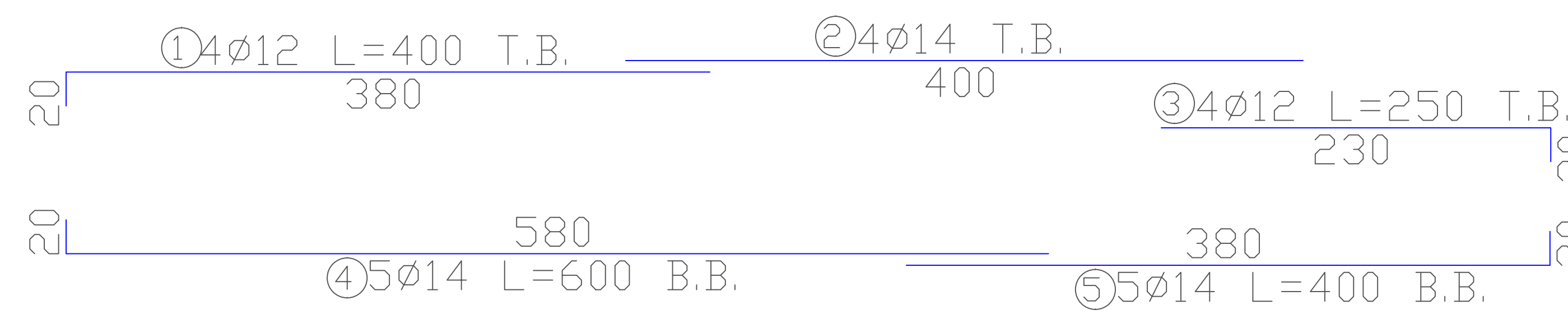
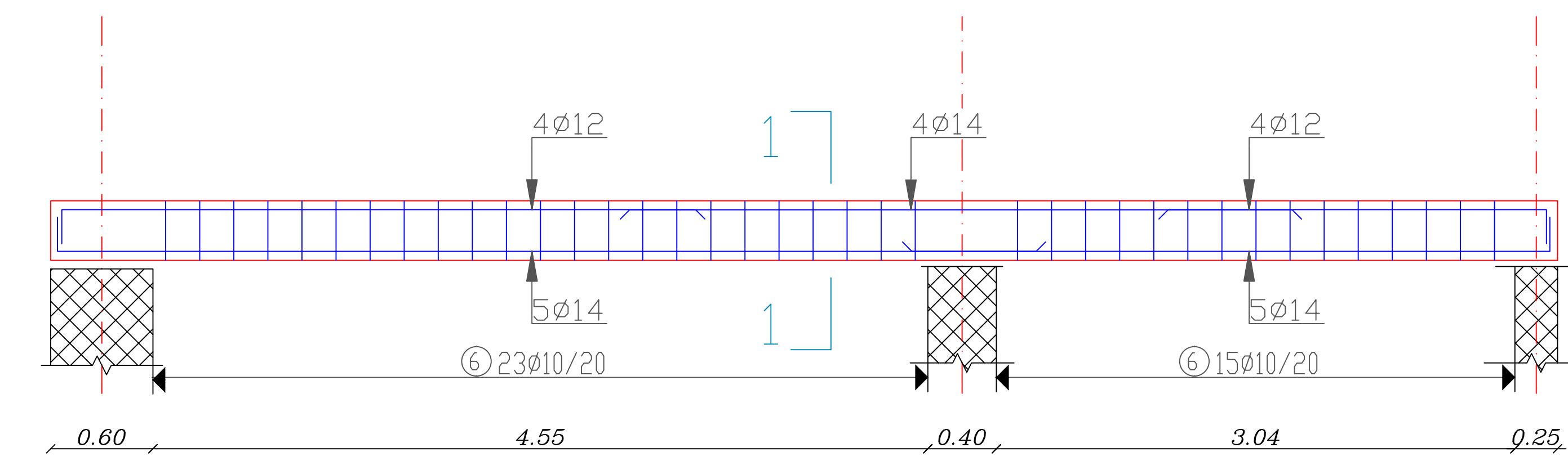
DRAWING TITLE :  
**BEAMS 53&54**

Supervisor  
Dr.Maher Amro.

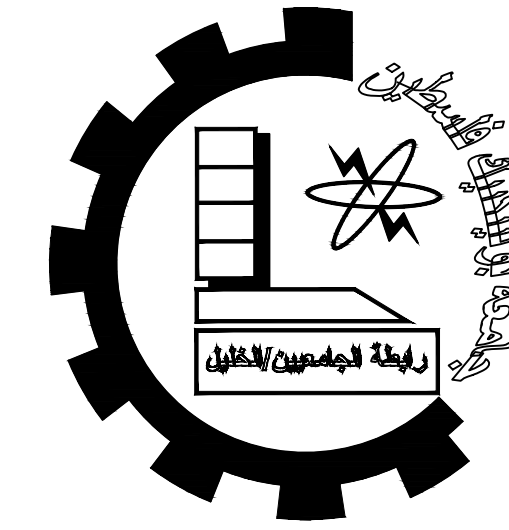
Done by :  
Osama Abu E'ram  
Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B24	21/8/2022

Beam :55  
Scale 1:25

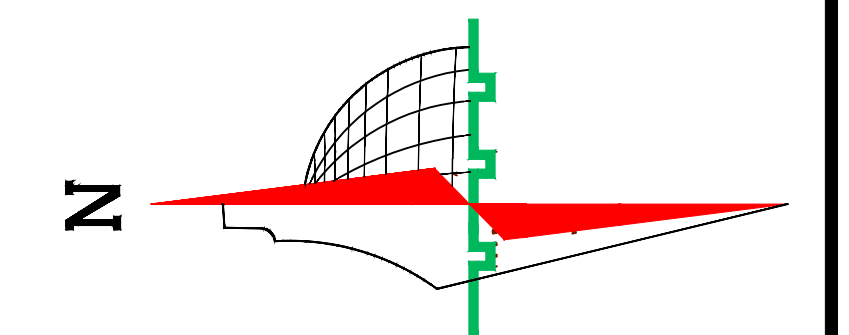


1-1  
1:10



Palestine Polytechnic University  
College of Engineering  
Civil Engineering Department  
Civil Engineering  
Graduation Project

Al-Salam Ophthalmic Hospital



Legend :

- Stone
- Gravel
- R.Concrete
- Wood
- Concrete
- HEXAGONAL TILES
- Hollow Block
- BAKLAVA TILES
- isolating materiales
- GRASS

DRAWING TITLE :

**BEAMS 55&56**

Supervisor

Dr.Maher Amro.

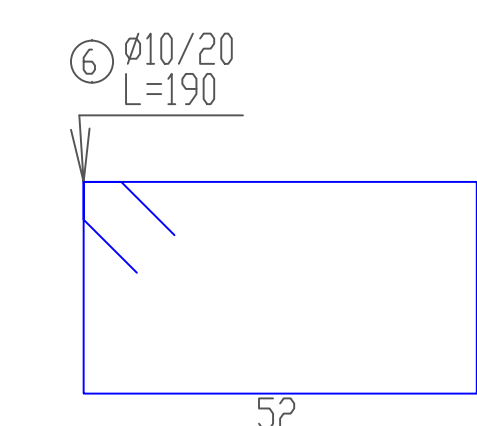
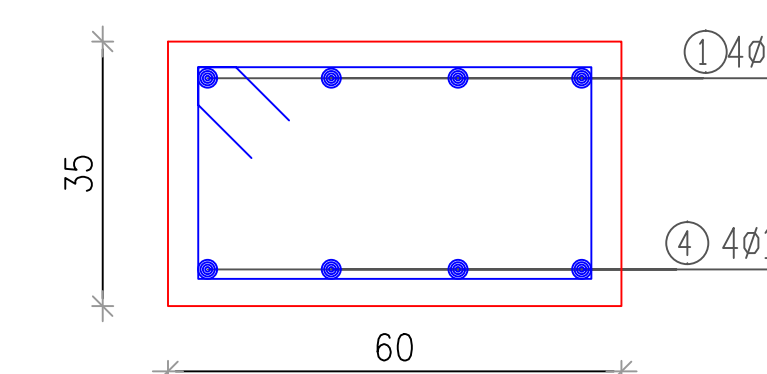
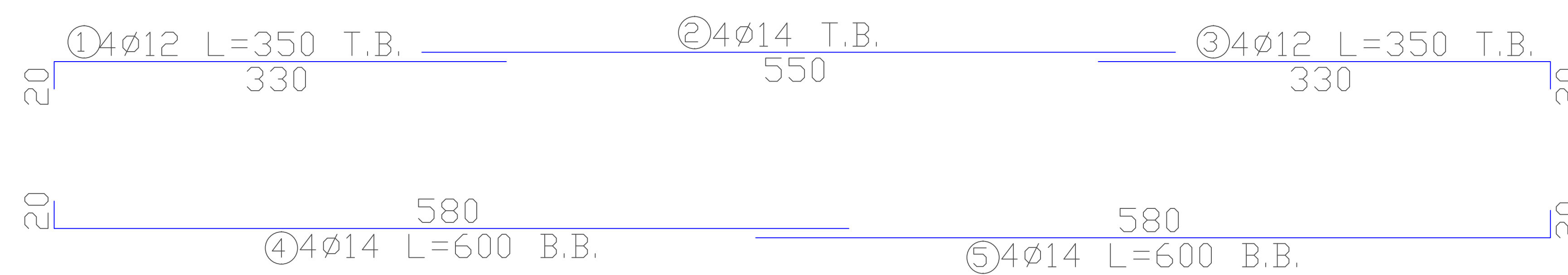
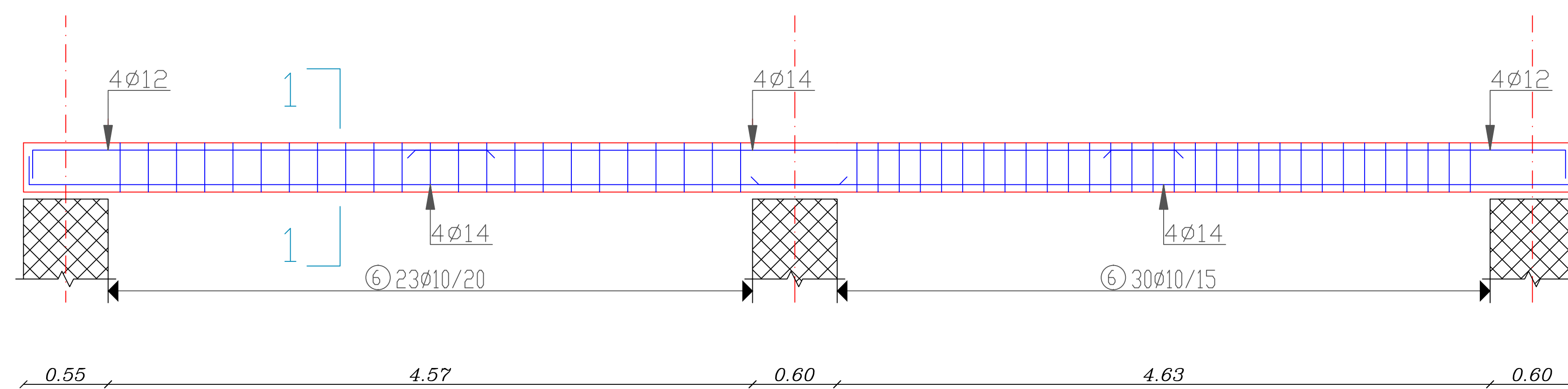
Done by :

Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/100	B25	21/8/2022

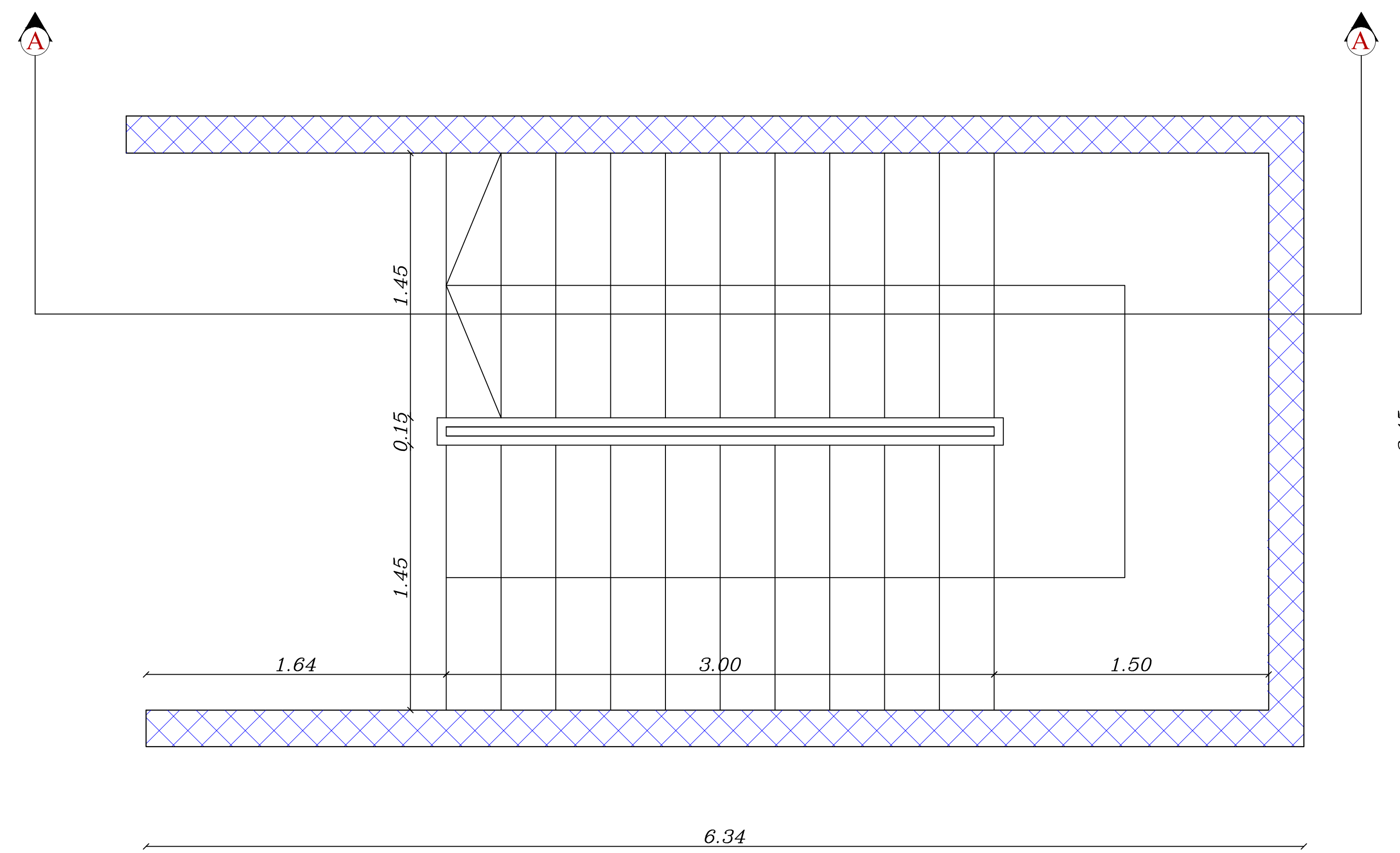
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Scale 1:25



1-1  
1:10

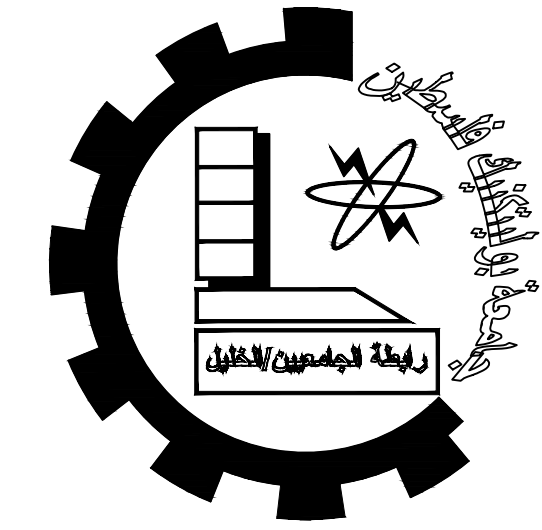
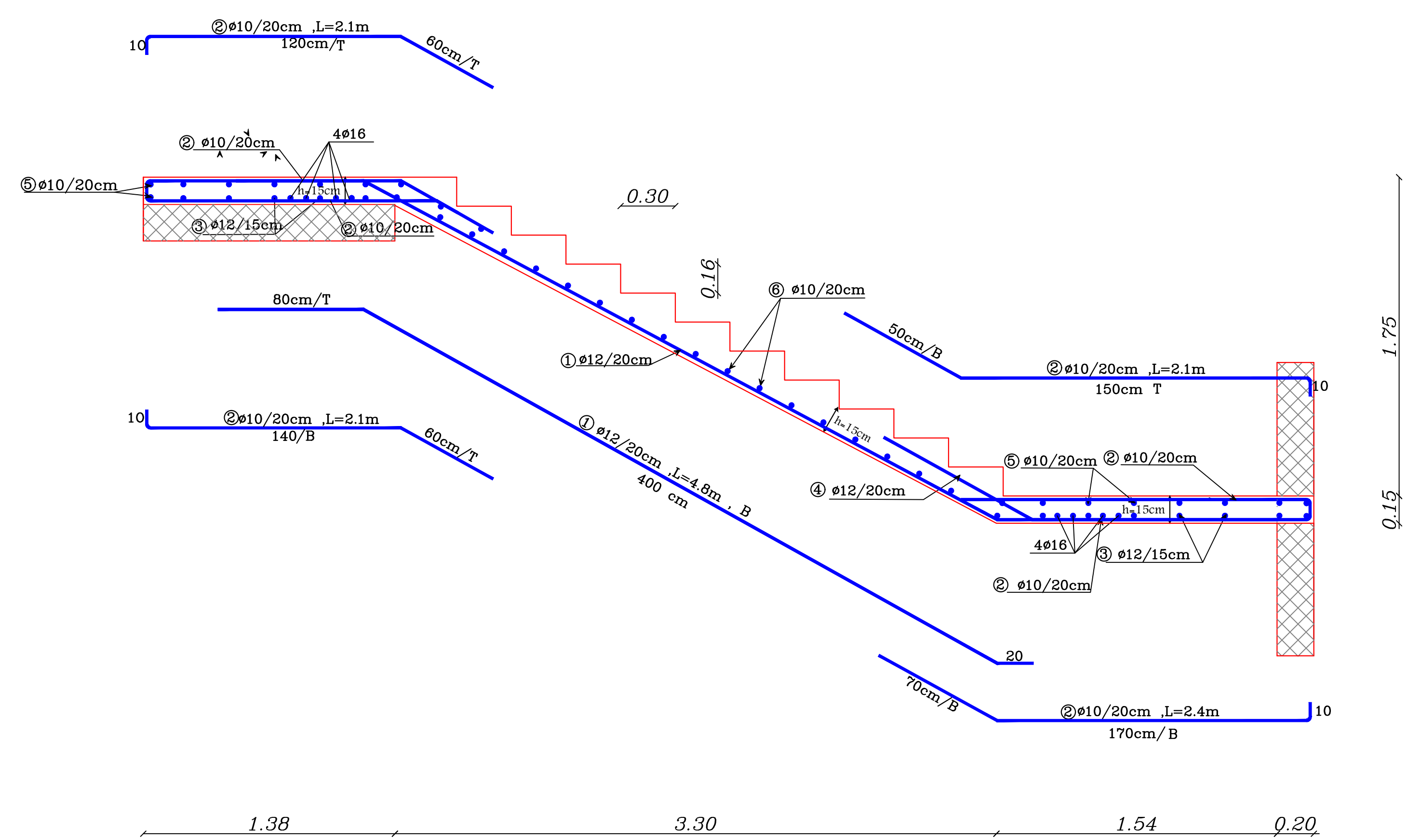
# Stair 1

SCALE 1:20



# Section A-A

SCALE 1:20



Palestine Polytechnic University

Engineering College

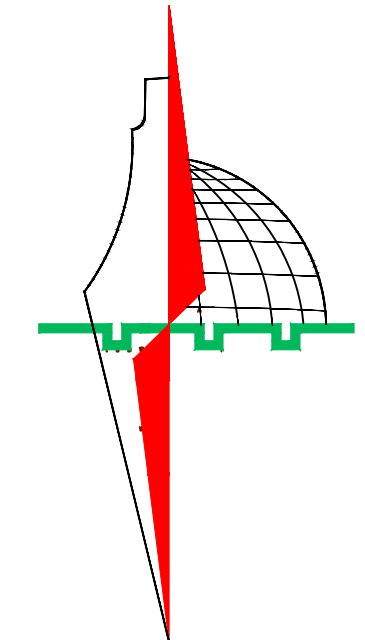
Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital

N



### Legend :

- Stone
- R.Concrete
- Concrete
- Hollow Block
- isolating materials
- Gravel
- Wood
- HEXAGONAL TILES
- BAKLAVA TILES
- GRASS

DRAWING TITLE :

Stair 1

Supervisor

Dr.Maher Amro.

Done by :

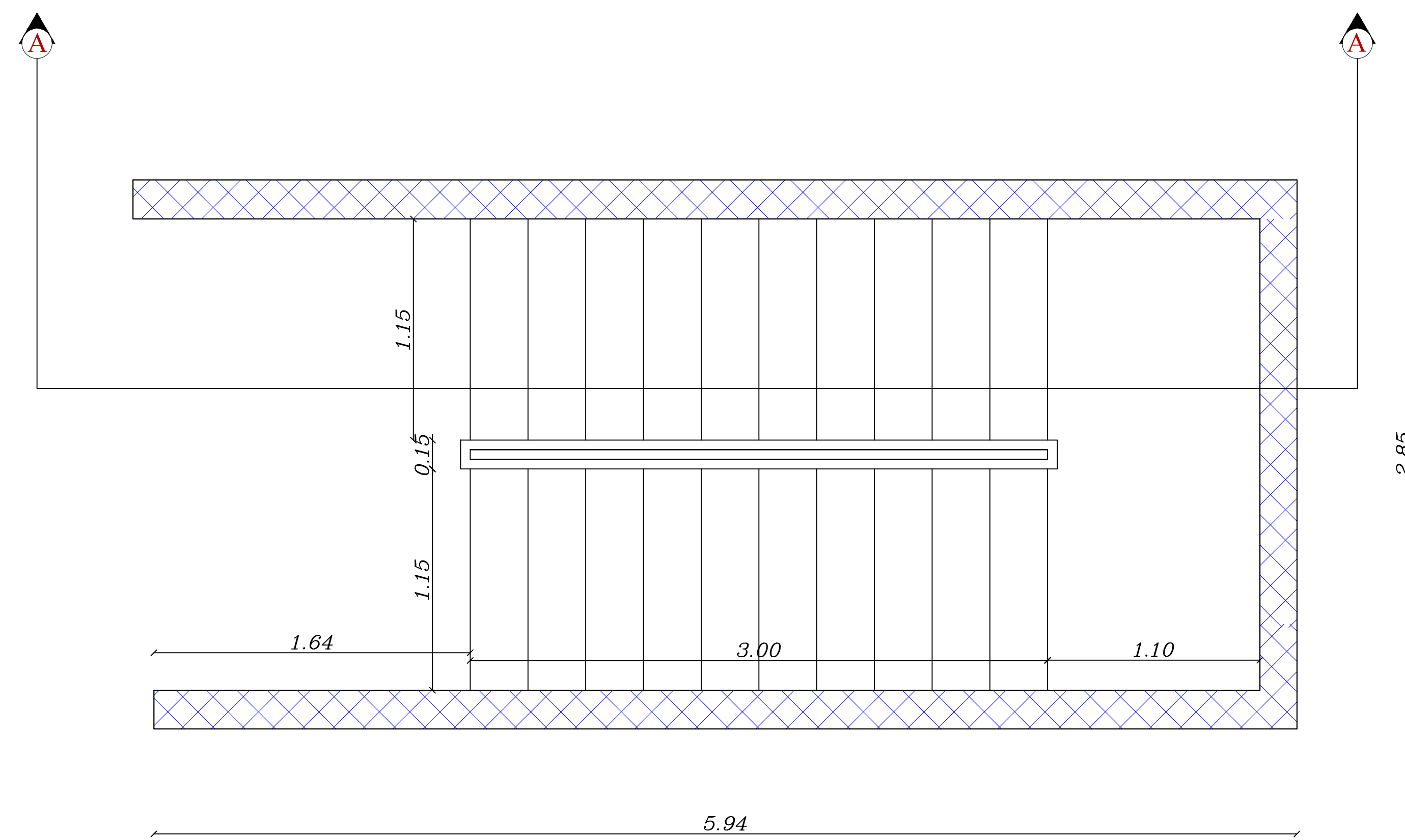
Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/20	S29	21/8/2022

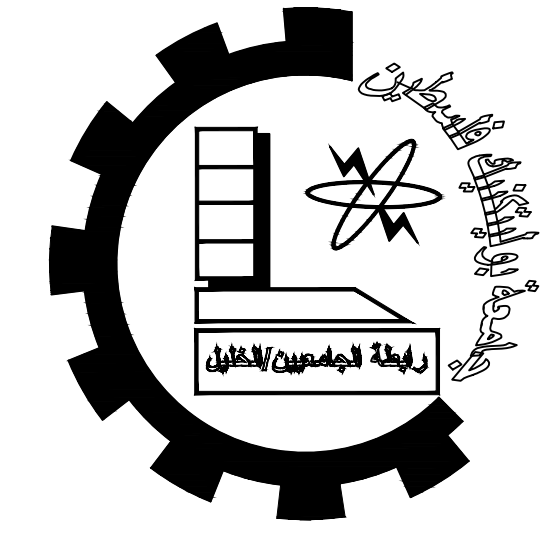
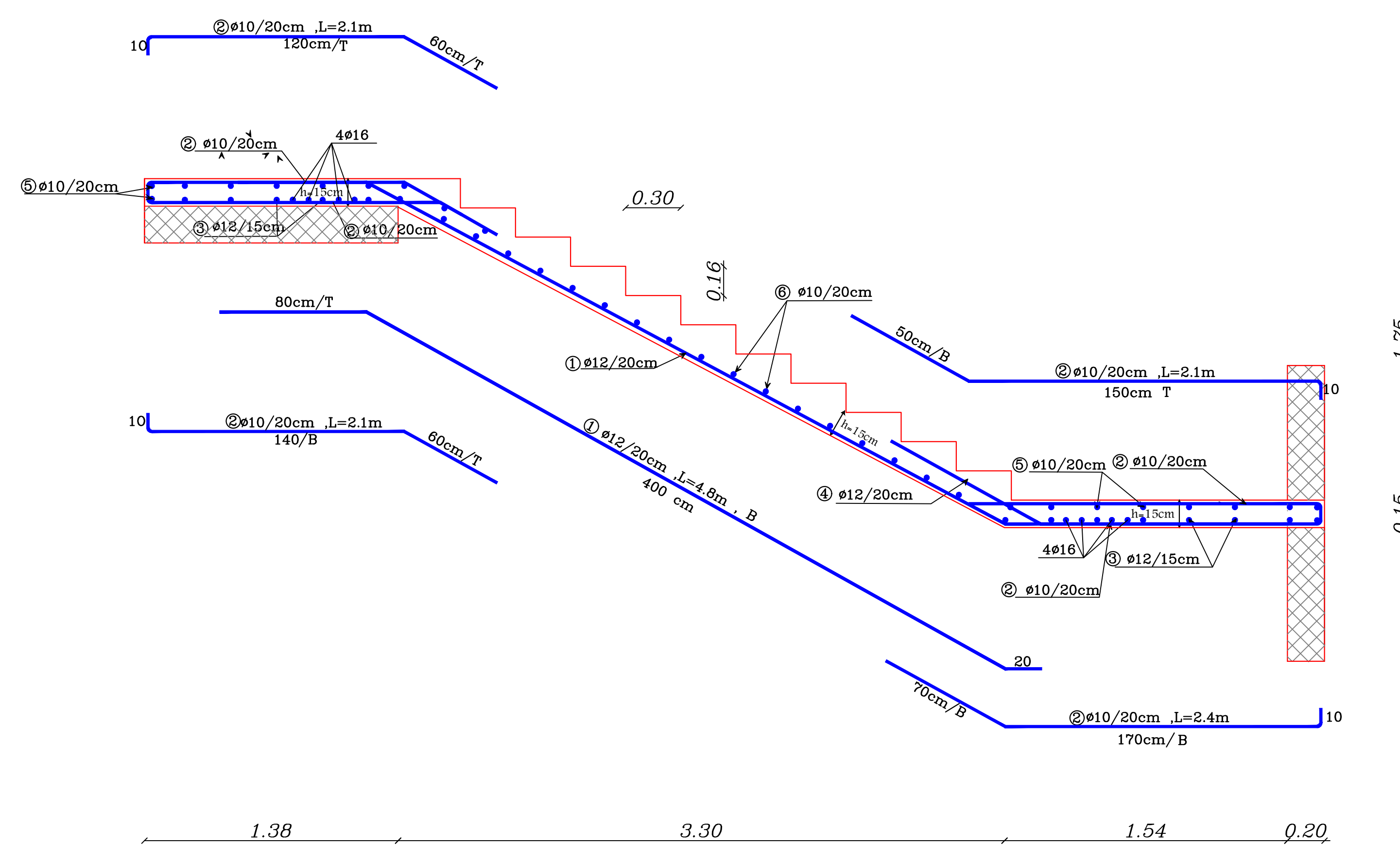
# Stair 2

SCALE 1:20



# Section A-A

SCALE 1:20



Palestine Polytechnic University

Engineering College

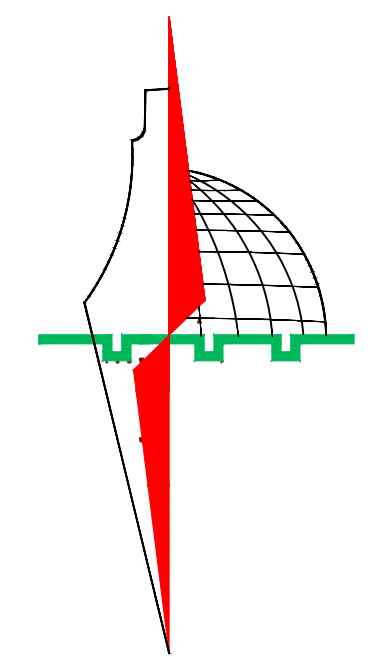
Civil Engineering Department

Civil Engineering

Graduation Project

Al-Salam Ophthalmic Hospital

N



### Legend :

	Stone		Gravel
	R.Concrete		Wood
	Concrete		HEXAGONAL TILES
	Hollow Block		BAKLAVA TILES
	isolating materiales		GRASS

DRAWING TITLE :

Stair 1

Supervisor

Dr.Maher Amro.

Done by :

Osama Abu E'ram

Ali Badawi

SCALE	No. of DRAW	DATE
1/20	S30	21/8/2022