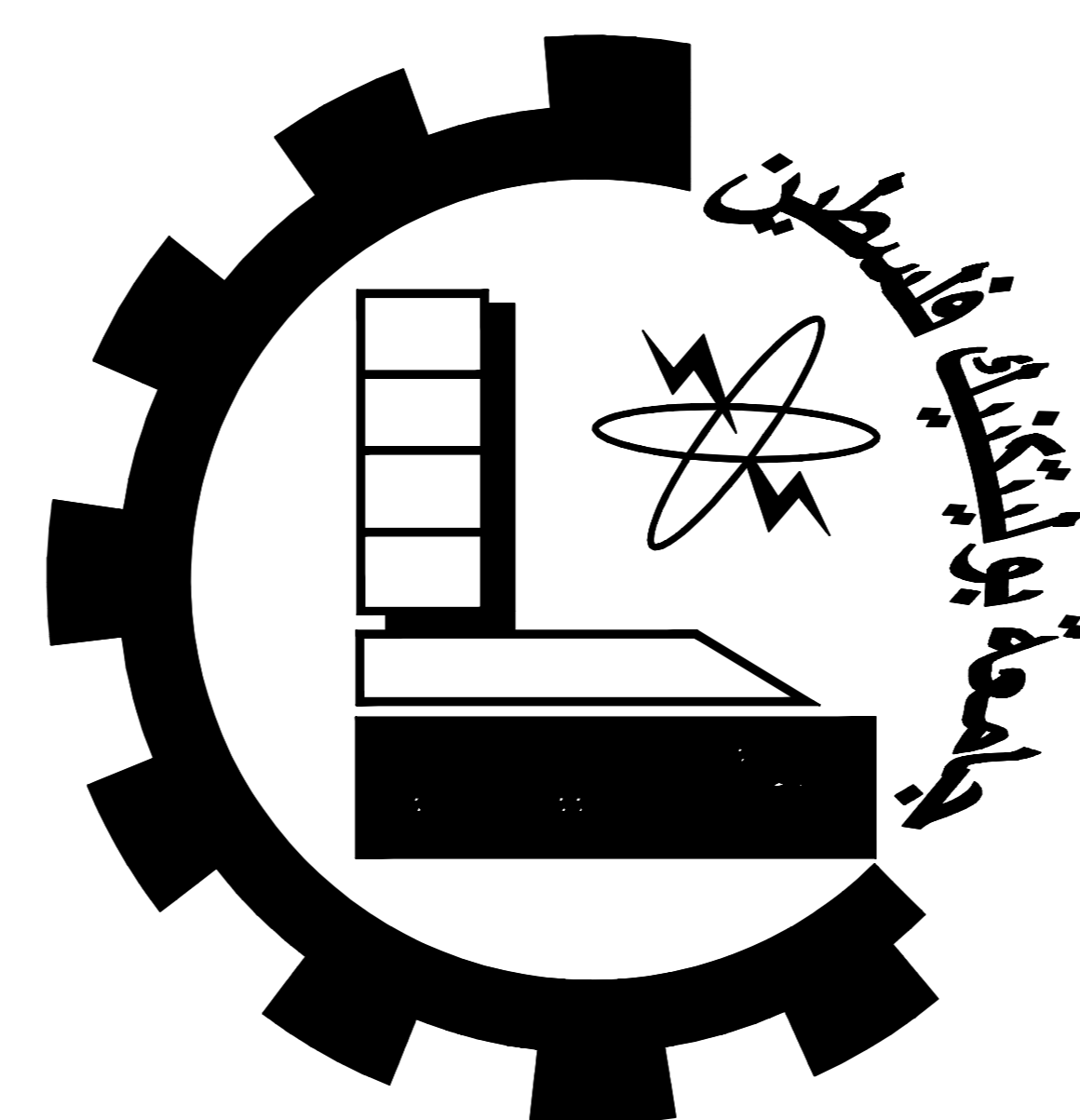


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GRADUATION PROJECT

Done by:

Ahmad Thweib

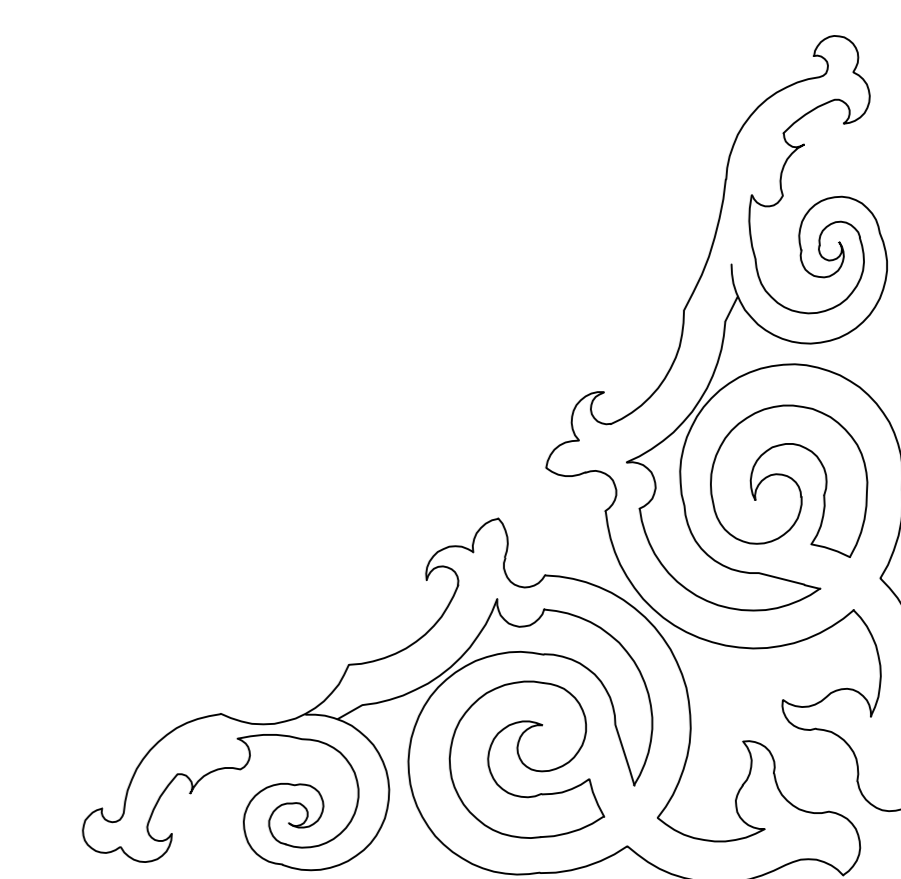
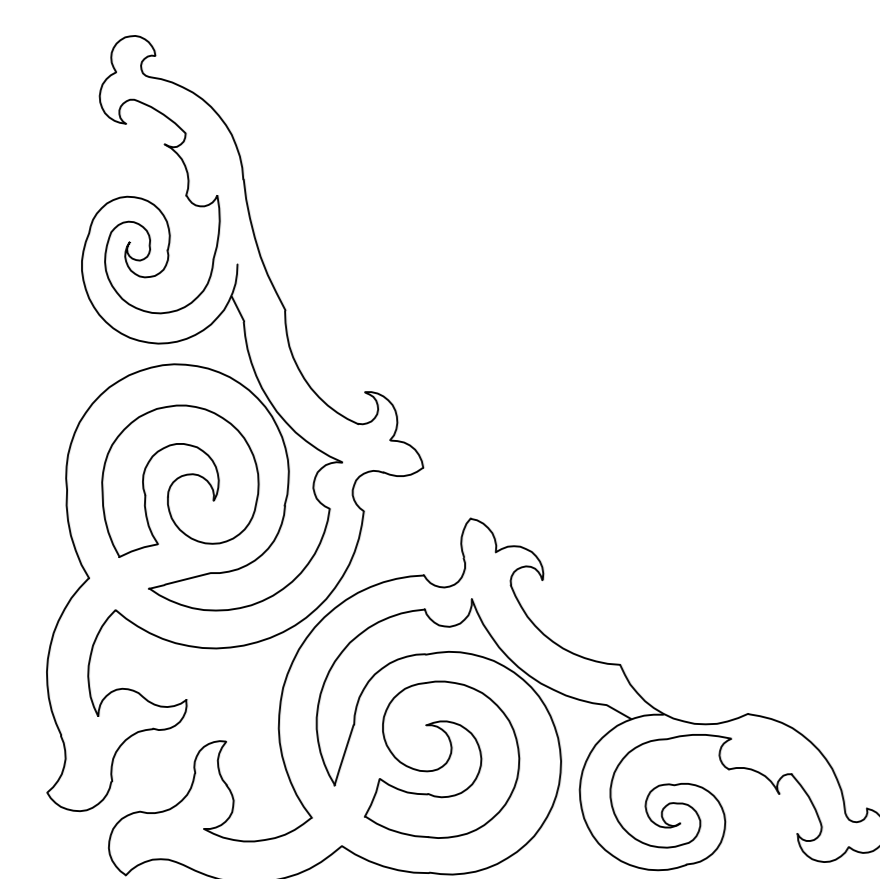
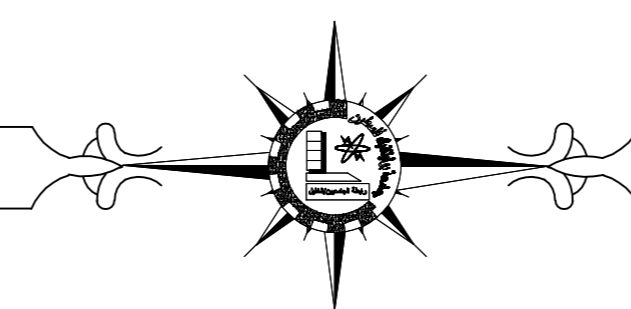
Hamza Thweib

Mohammad ALZeer

Supervisor:

DR . Maher Amro

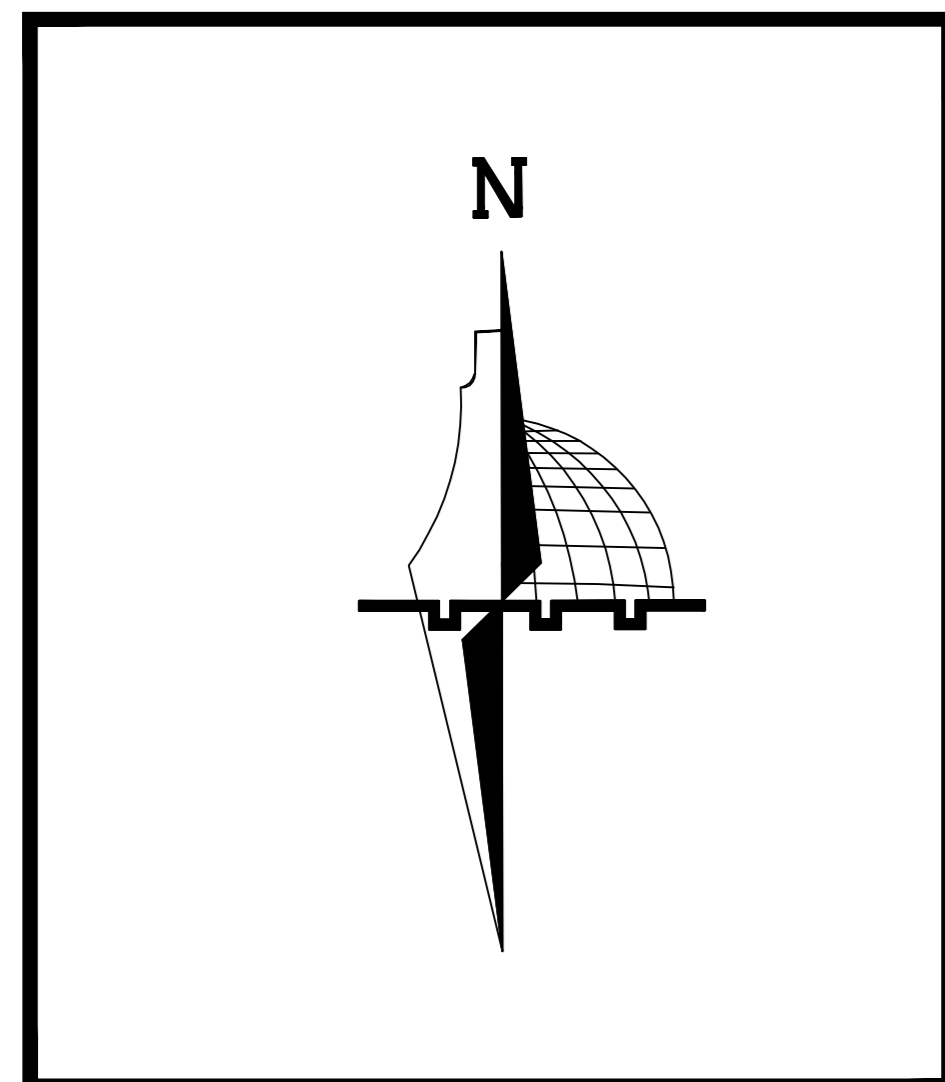
2019_2020



Basement Floor Plan (Dimensions) Scale 1:100



Dura Municipality Building



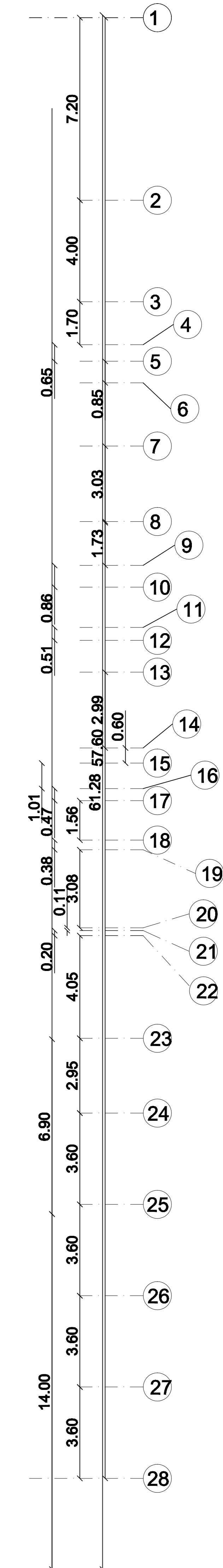
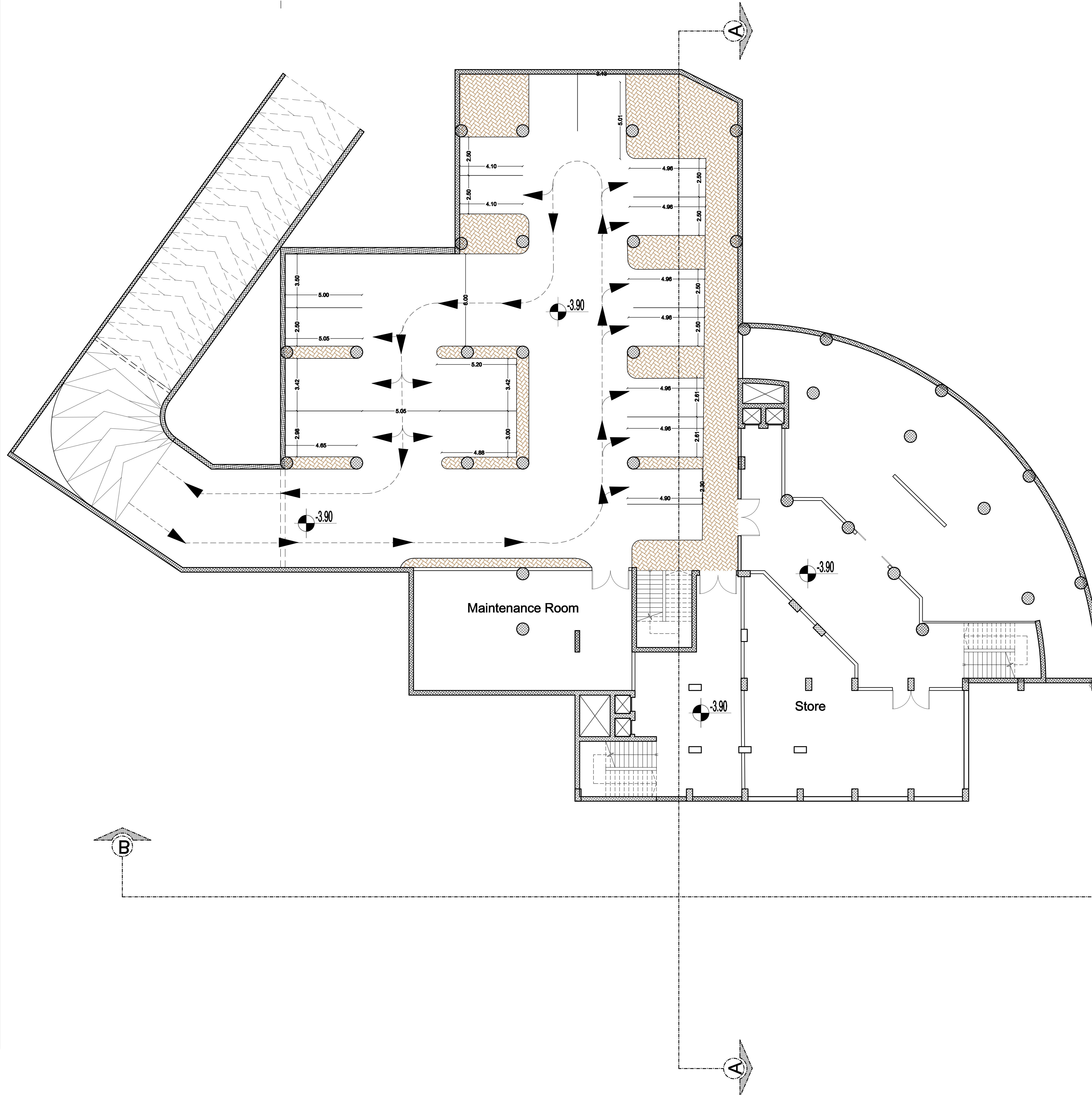
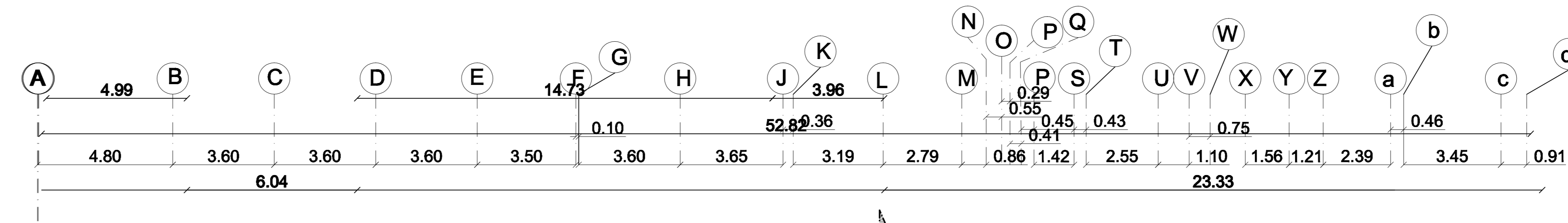
College of Engineering
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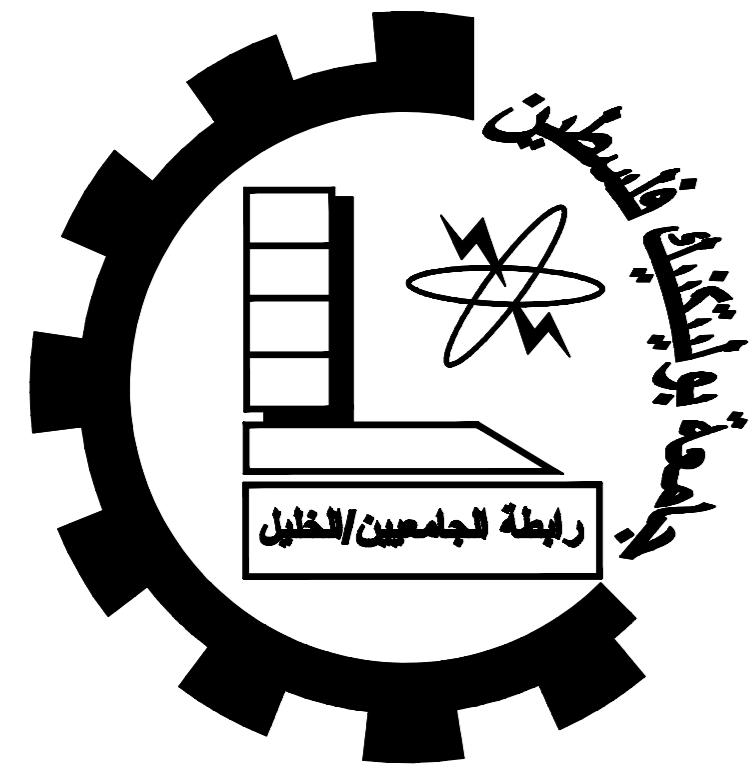
Project Name :
Dura Municipality Building

Supervisor :
Dr.Maher Amro

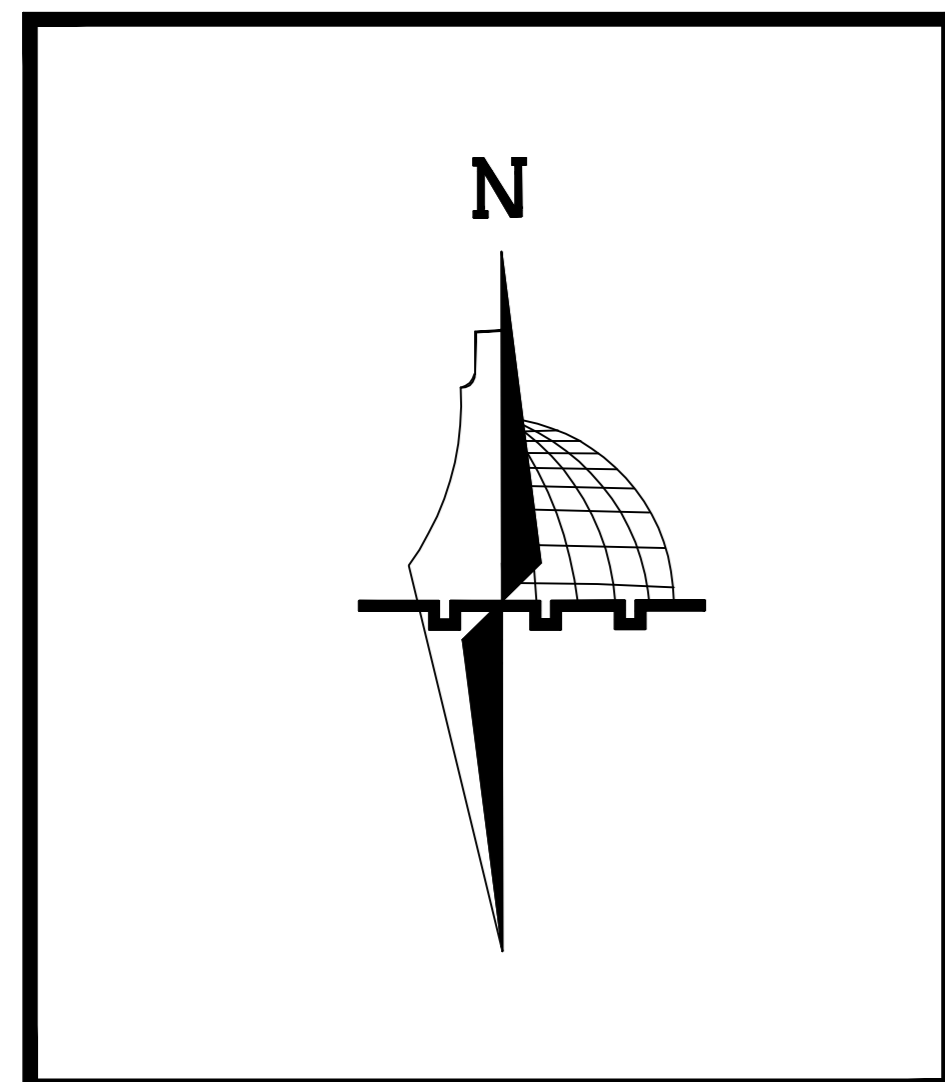
Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer

No. : A2





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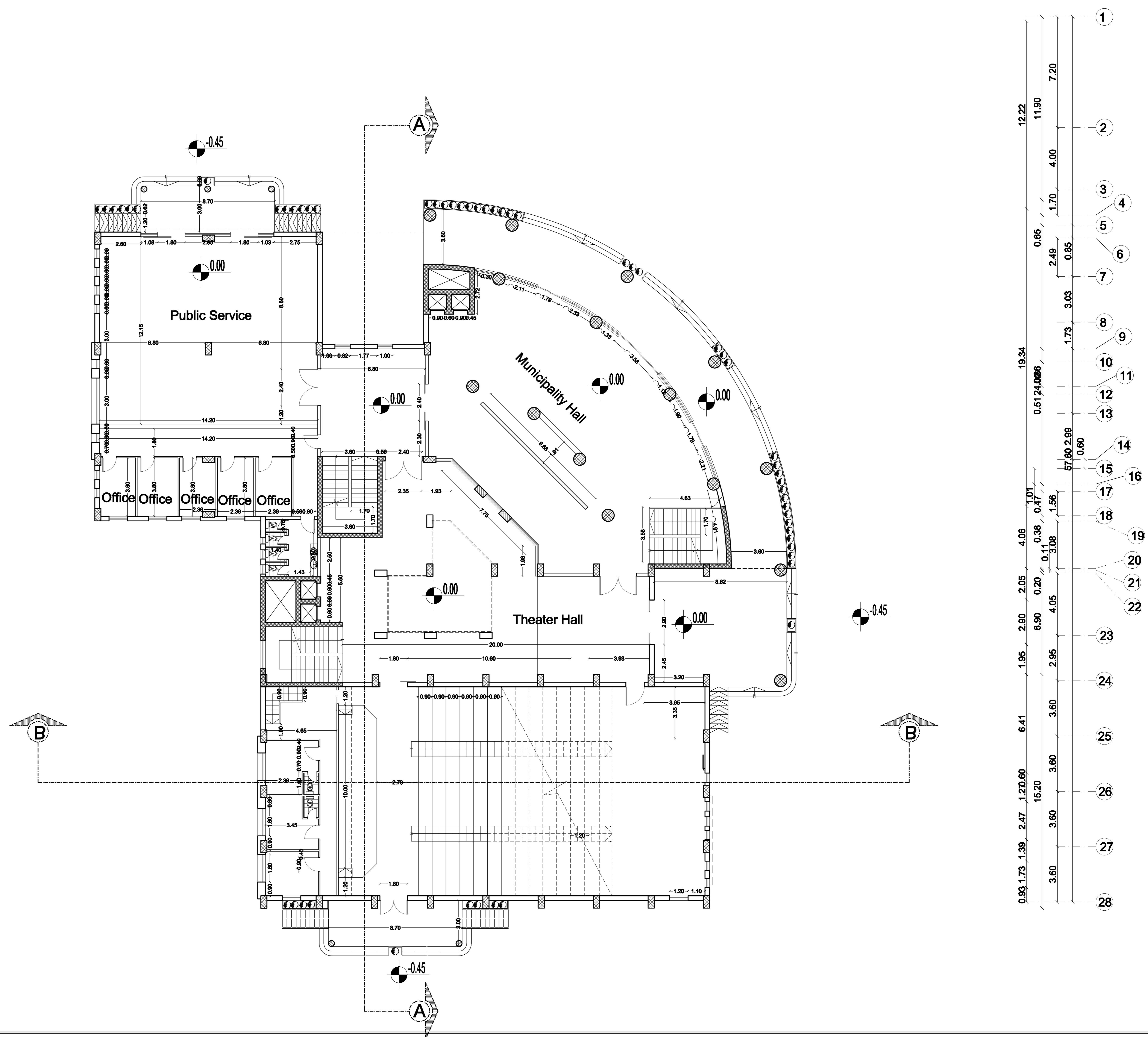
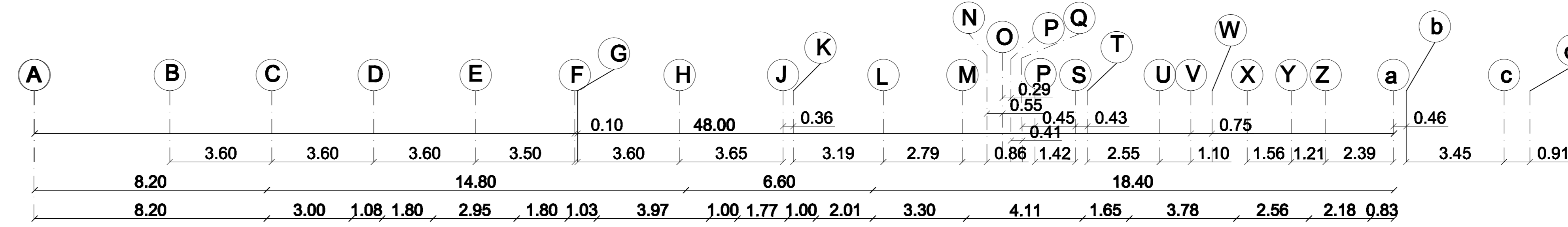
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Dura Municipality Building

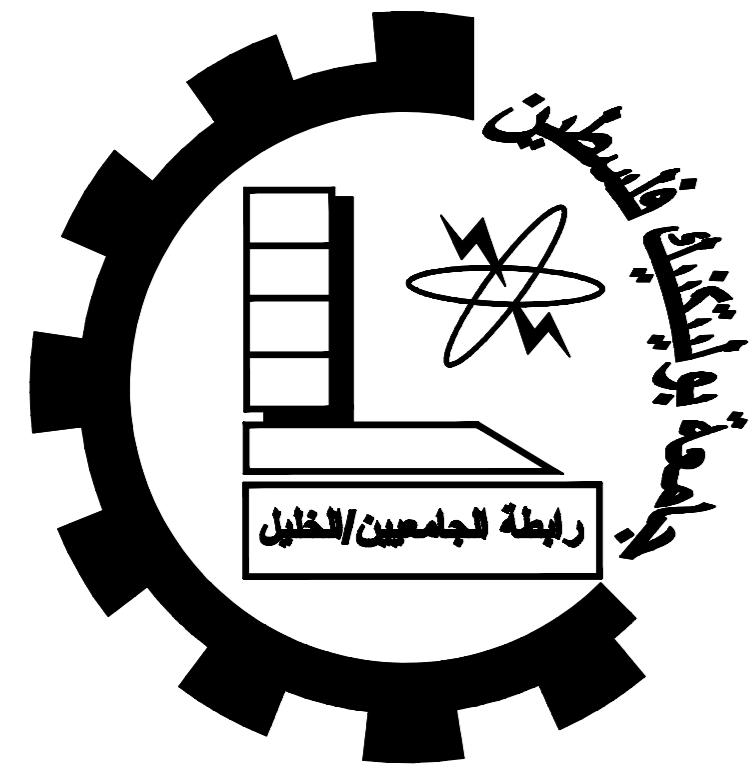
Supervisor :
Dr.Maher Amro

Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer

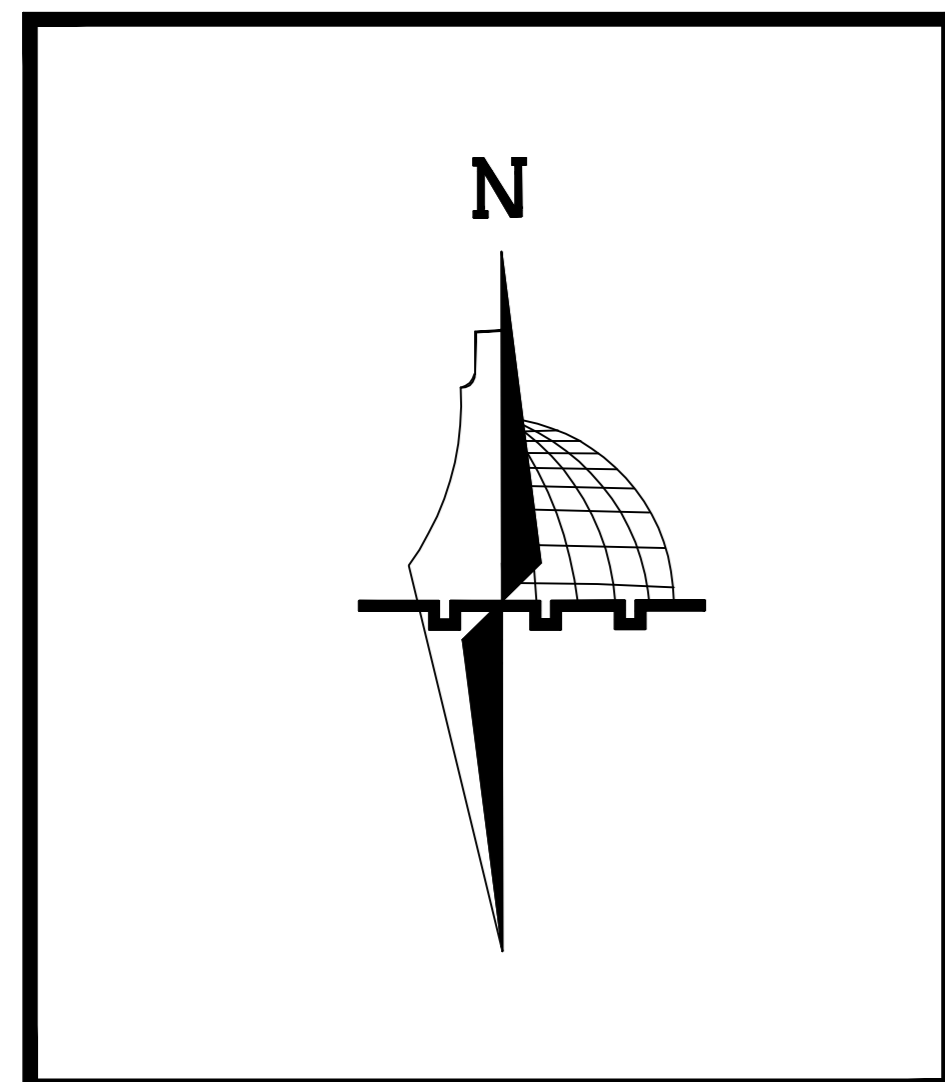
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**Ground Floor Plan (Dimensions)
Scale 1:100**





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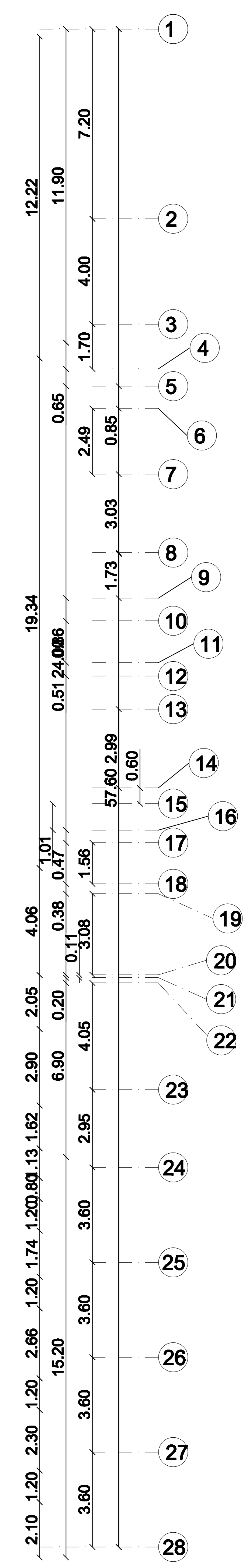
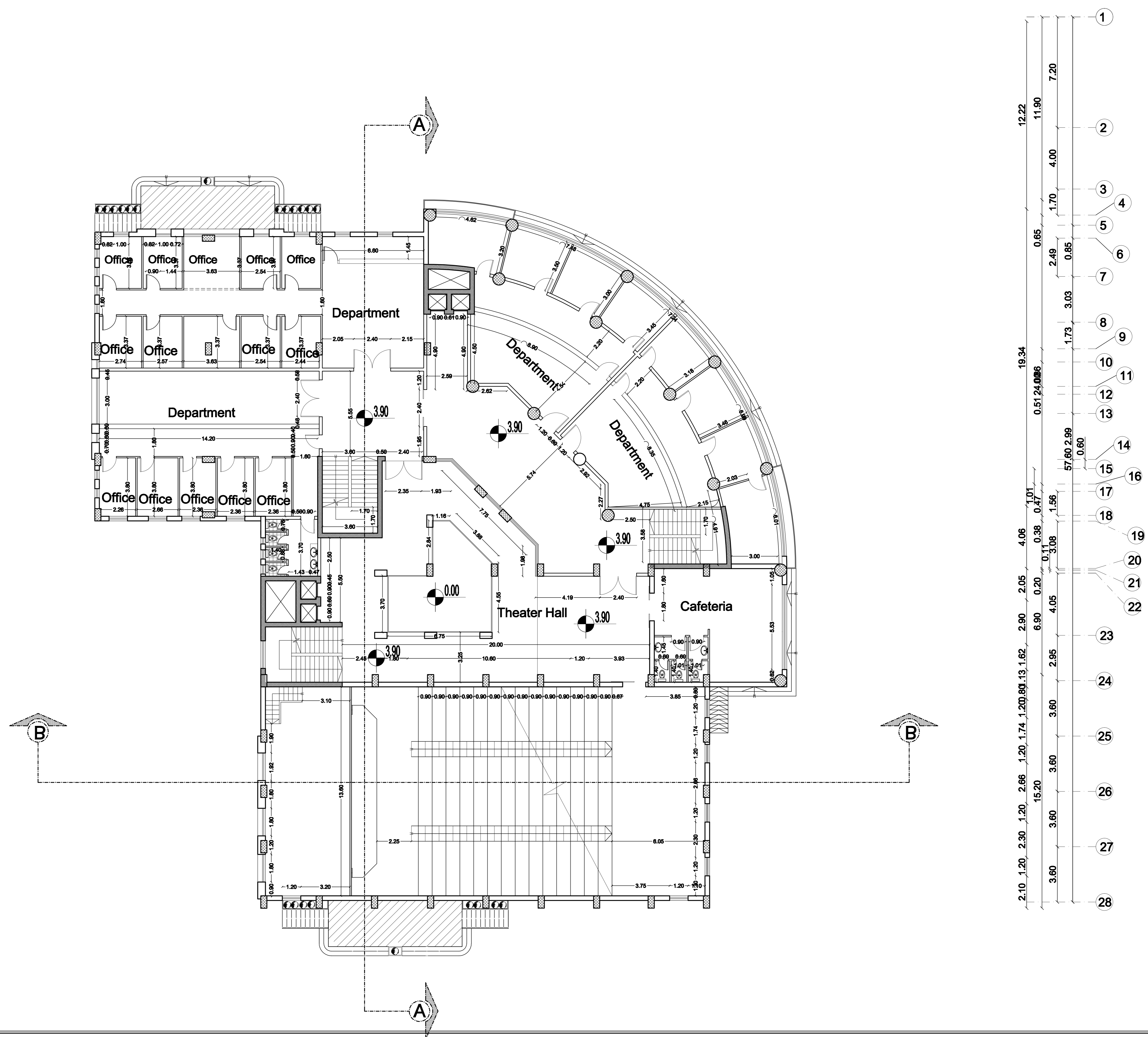
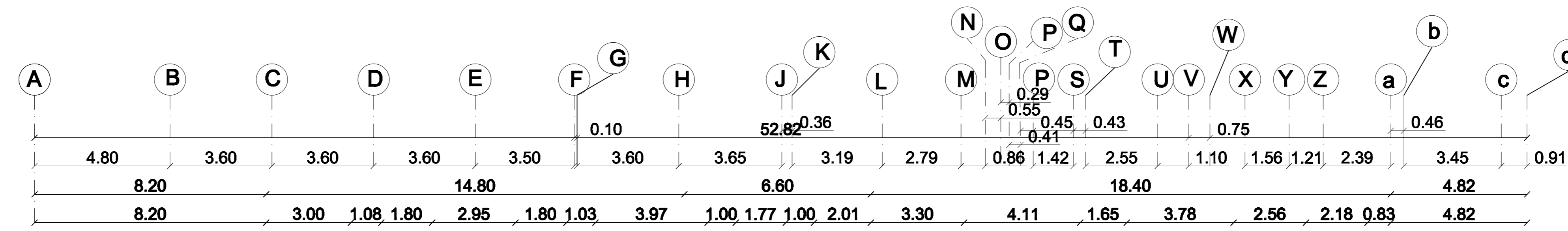
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 Dura Municipality Building

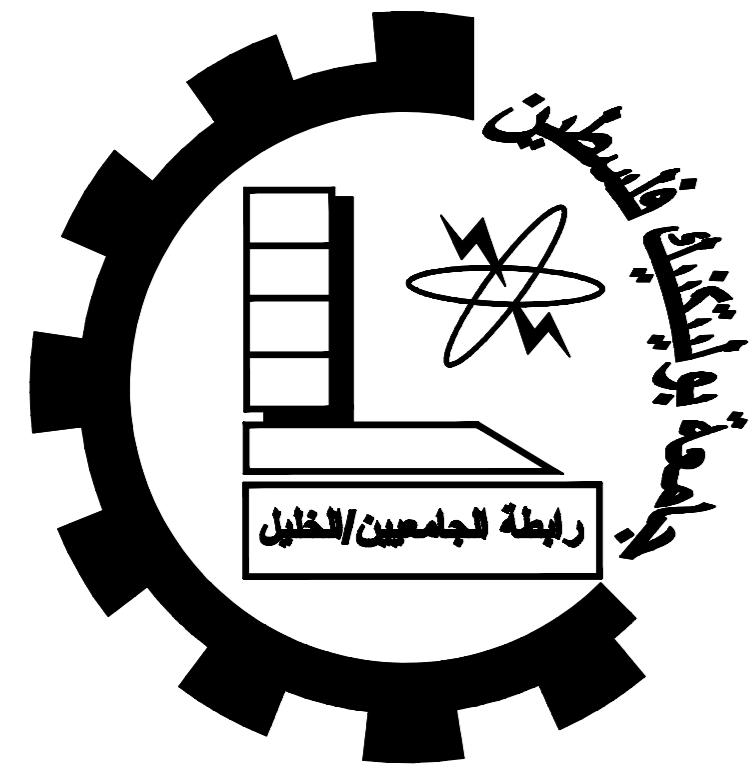
Supervisor :
 Dr.Maher Amro

Done By :Ahmad Thweib
 Hamza Thweib
 Mohammad Alzeer

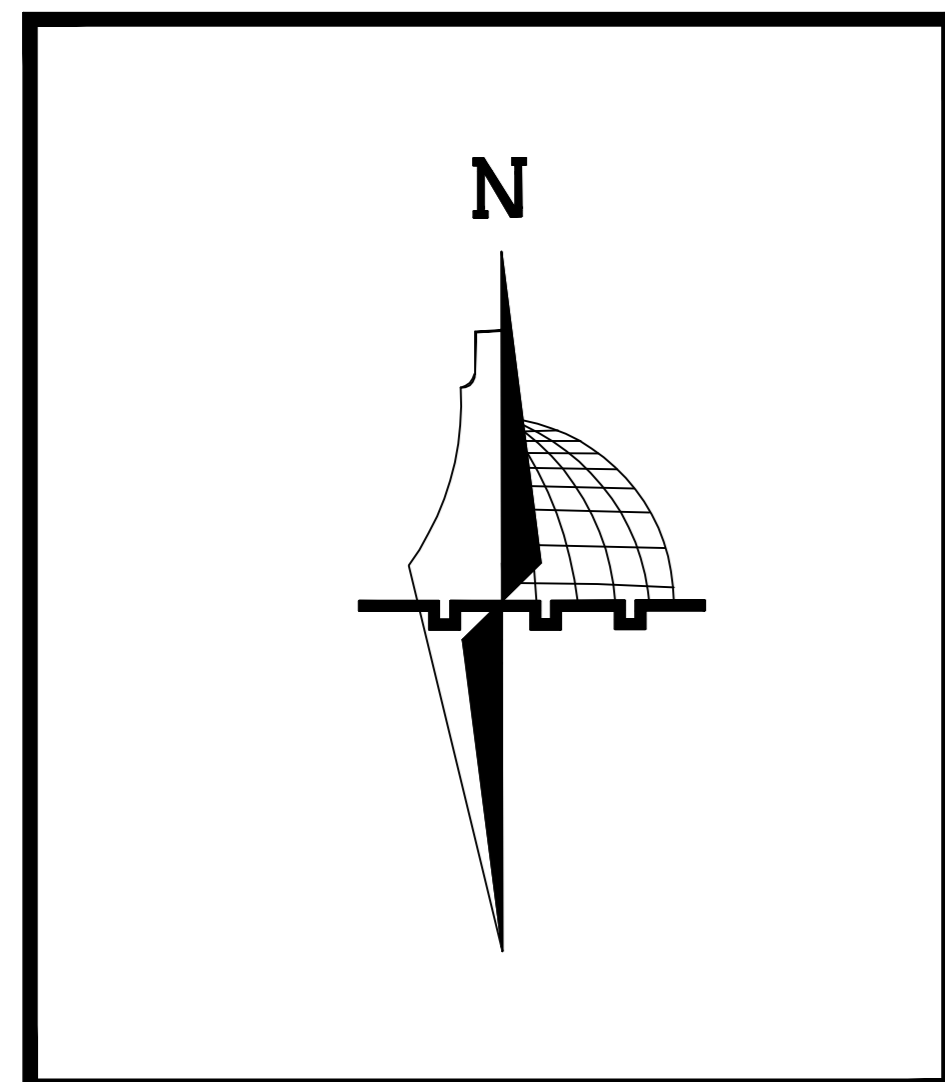
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**First Floor Plan (Dimensions)
 Scale 1:100**





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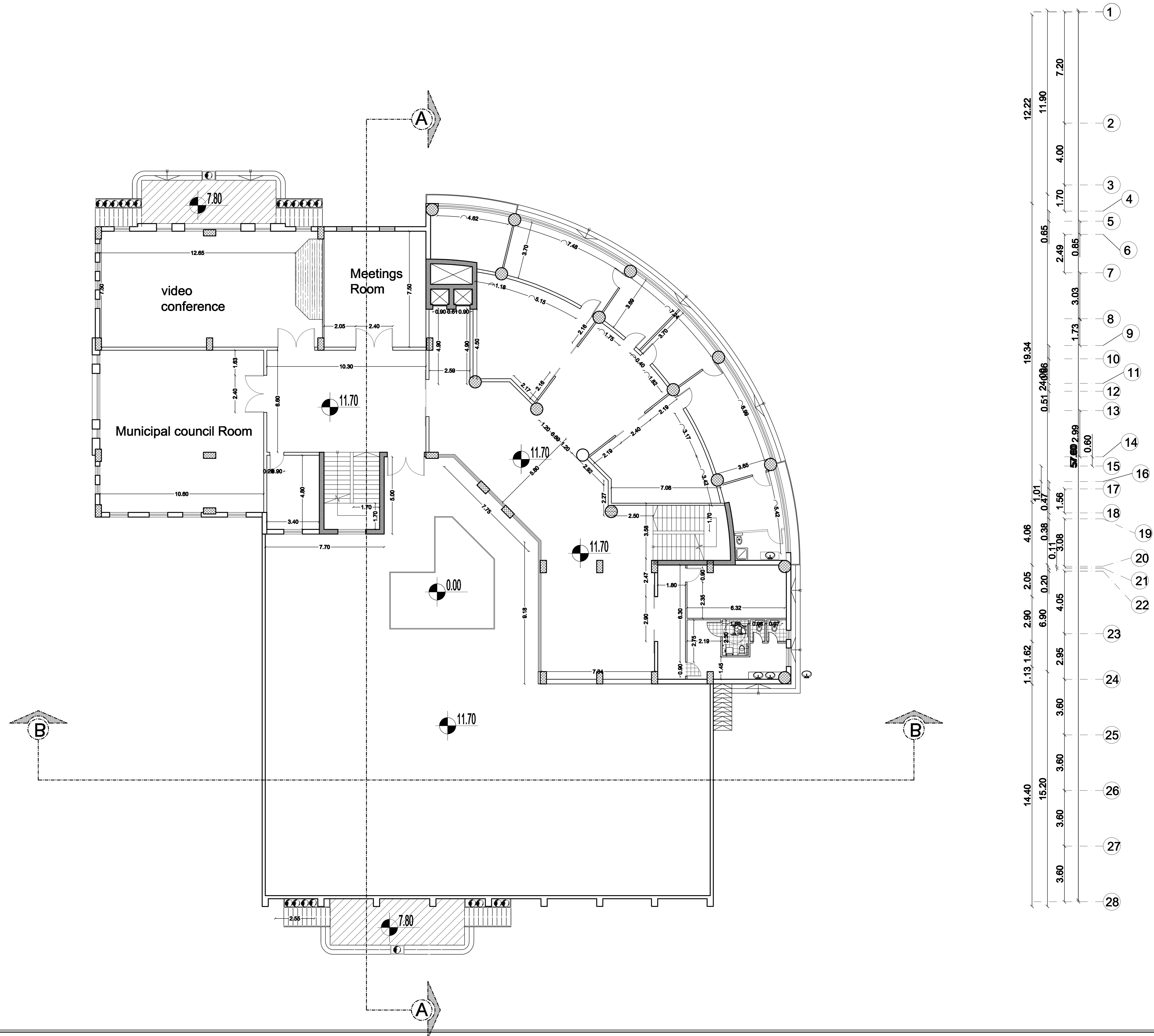
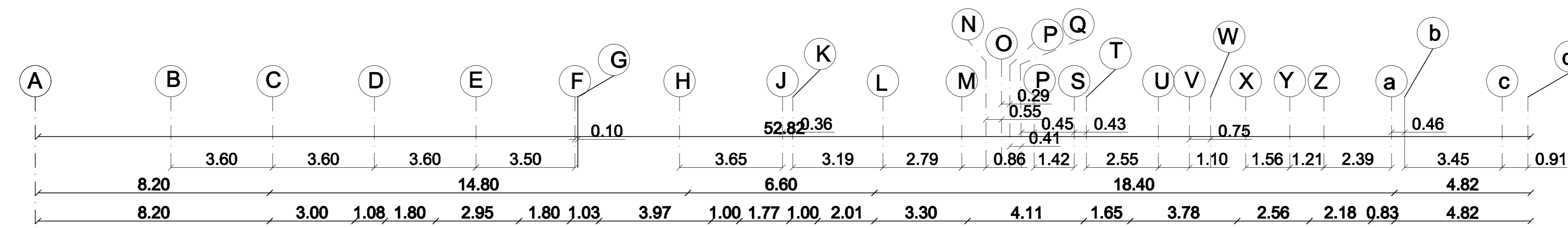
Project Name :
 Dura Municipality Building

Supervisor :
 Dr.Maher Amro

Done By :Ahmad Thweib
 Hamza Thweib
 Mohammad Alzeer

No. : A6

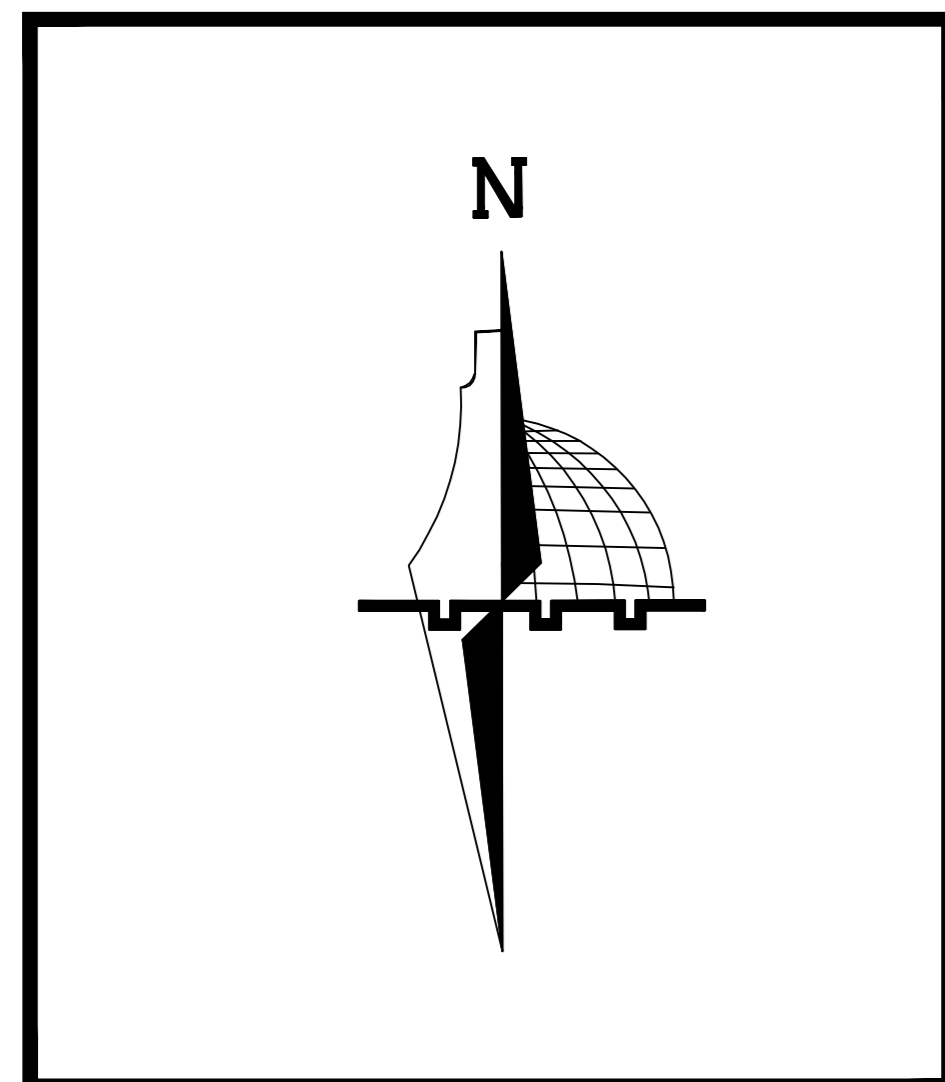
**Third Floor Plan (Dimensions)
 Scale 1:100**



Basement Floor Plan (Furniture)
Scale 1:100



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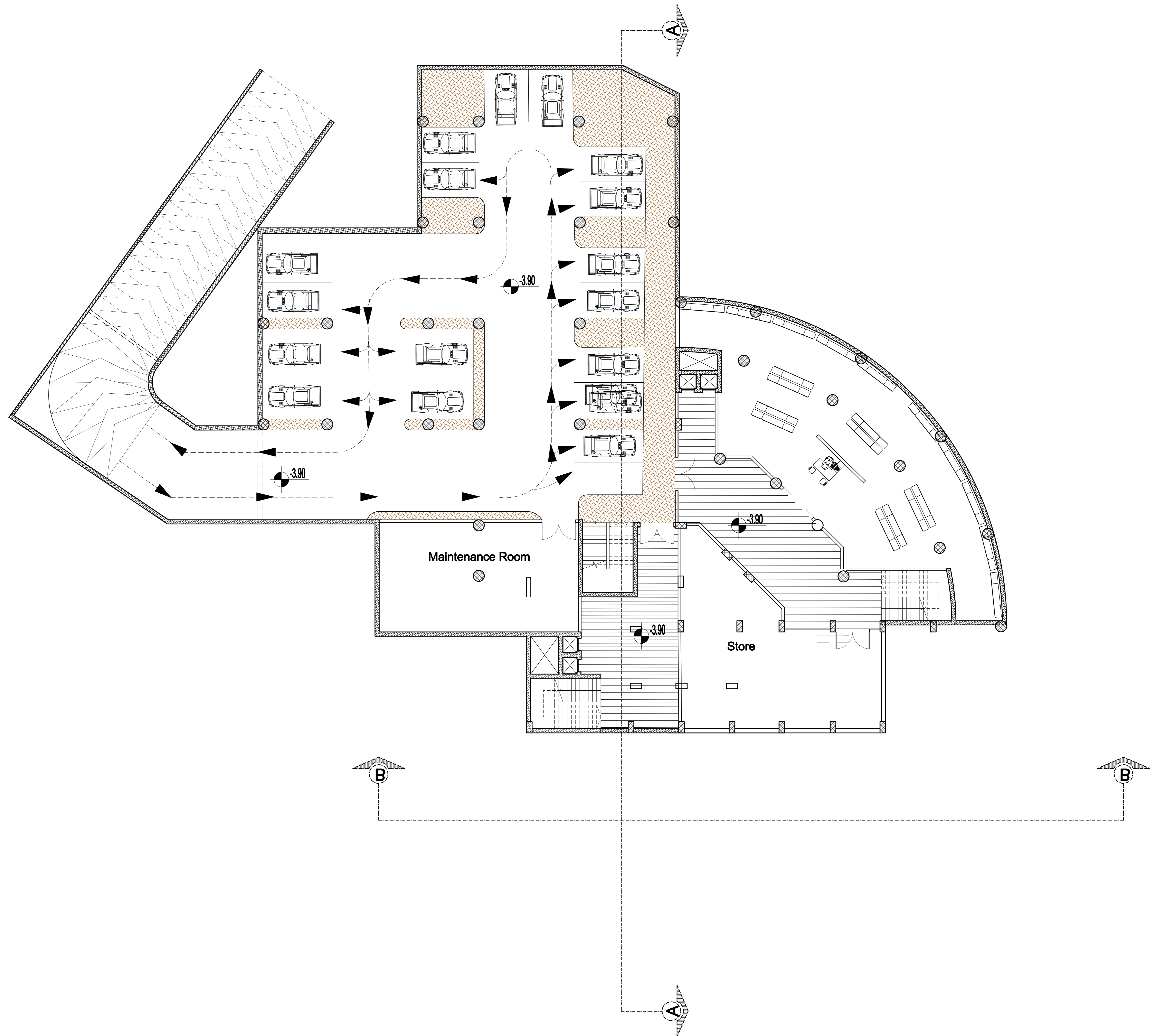
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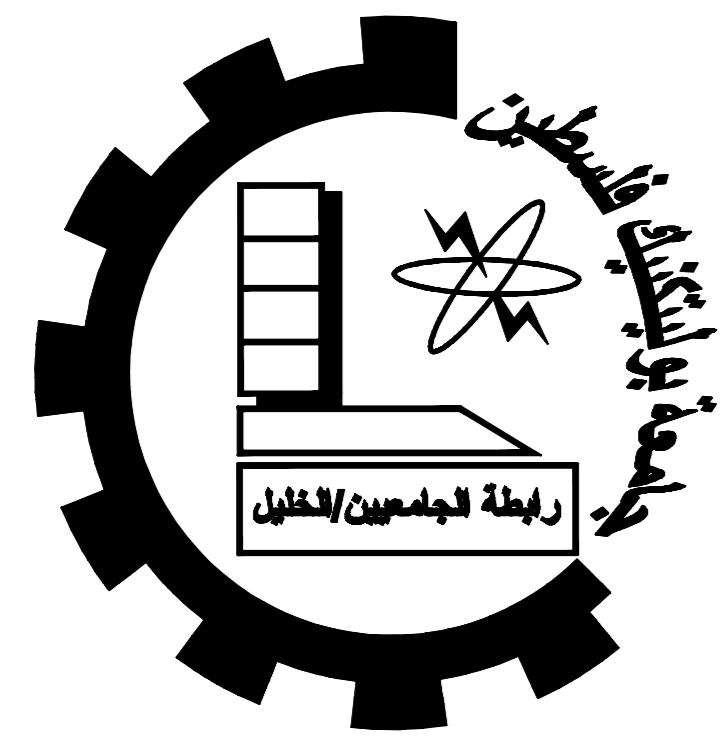
Project Name :
Dura Municipality Building

Supervisor :
Dr.Maher Amro

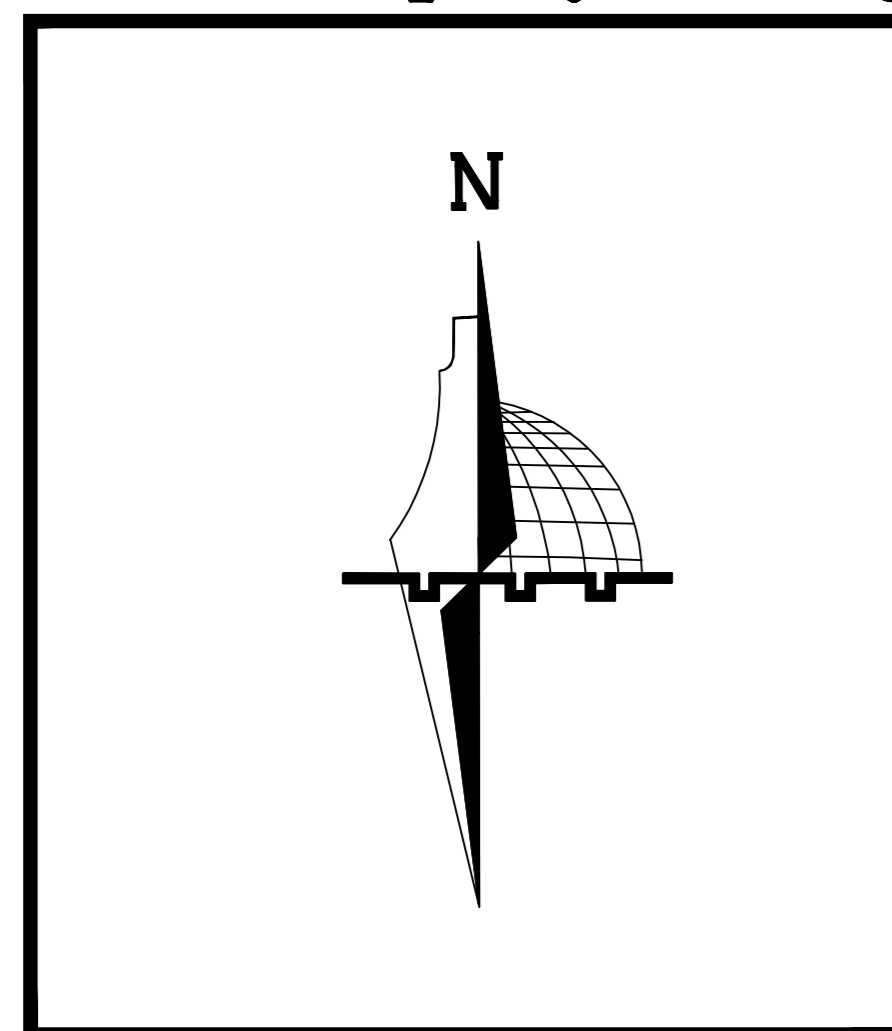
Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer

No. : A7





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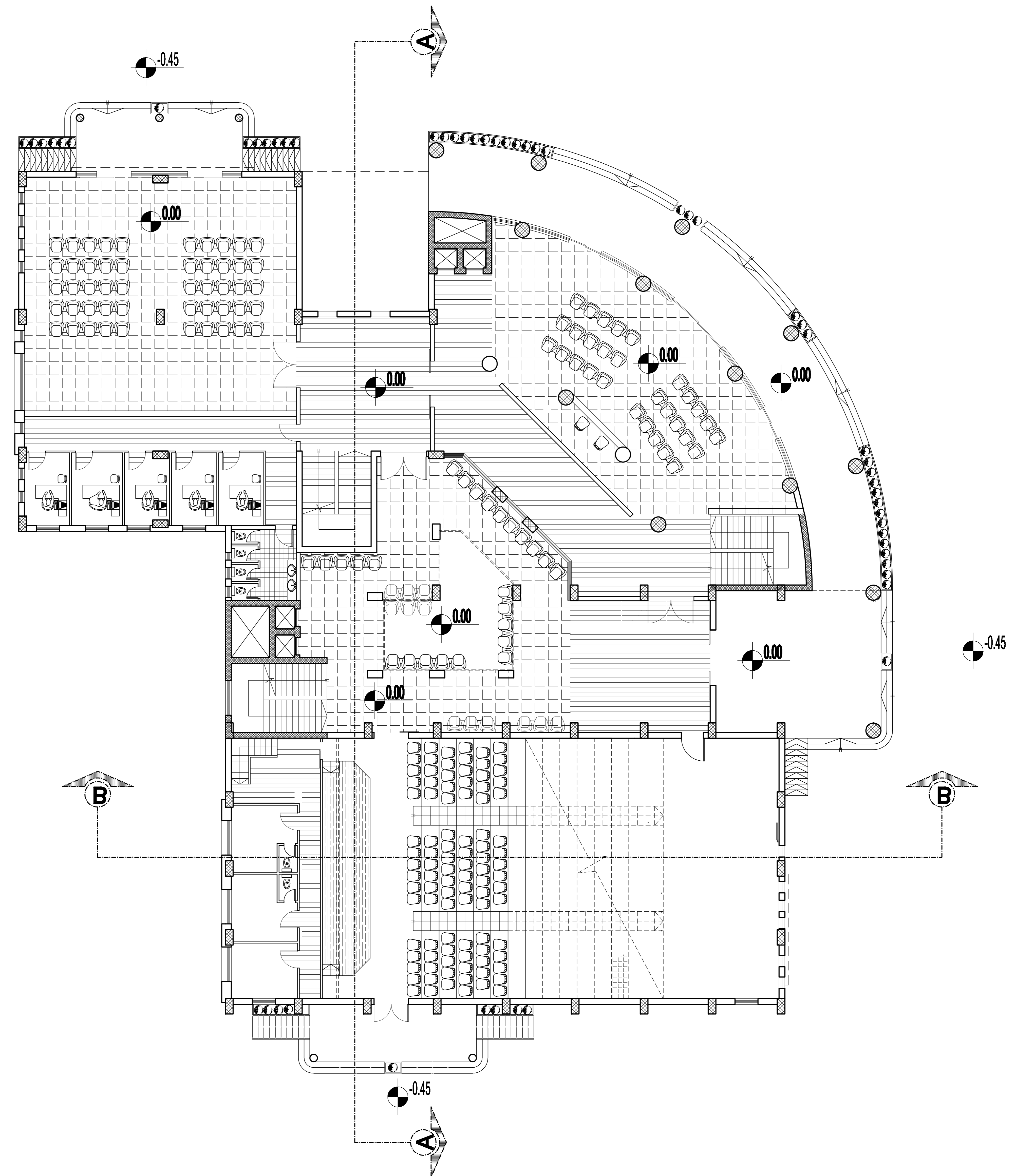
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Dura Municipality Building

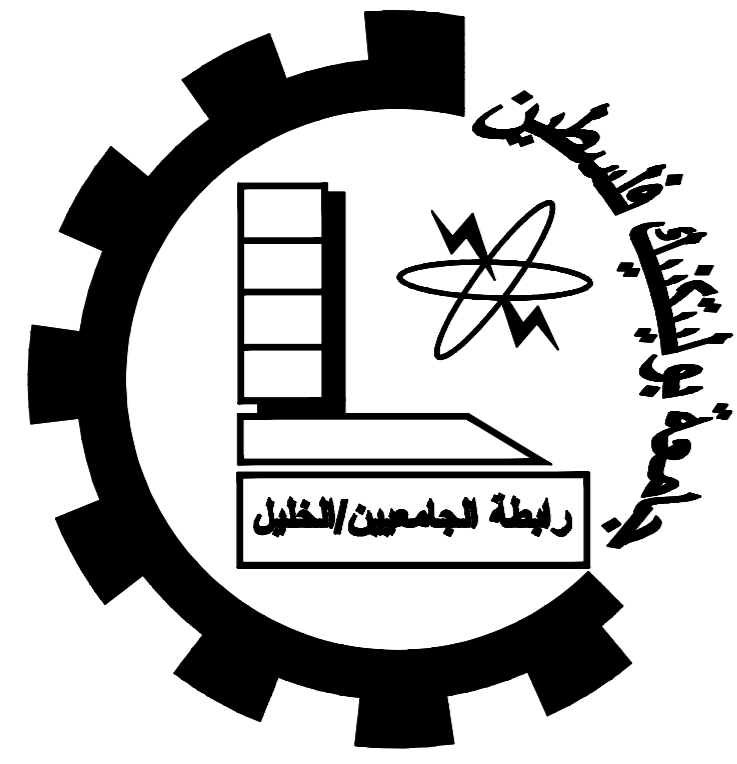
Supervisor :
Dr.Maher Amro

Done By :Ahmad Thwelb
Hamza Thwelb
Mohammad Alzeer

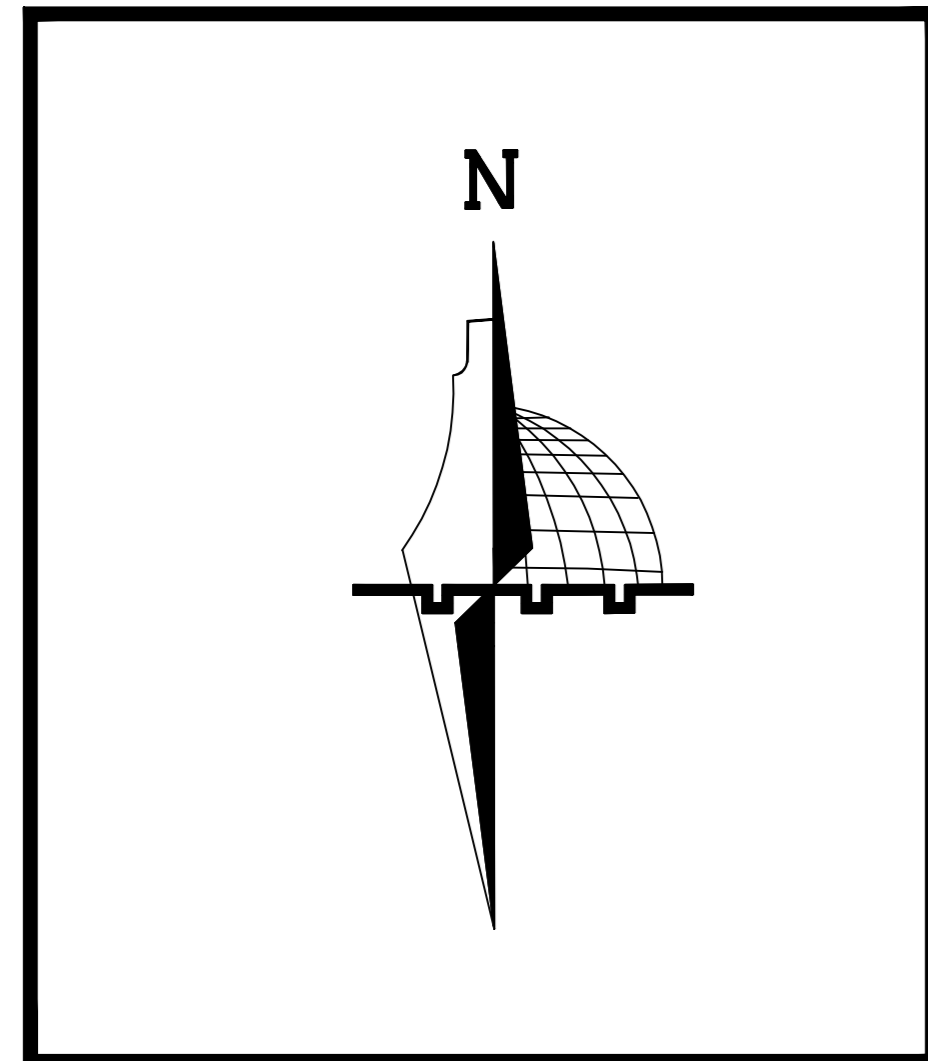
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Ground Floor Plan (Furniture)
Scale 1:100





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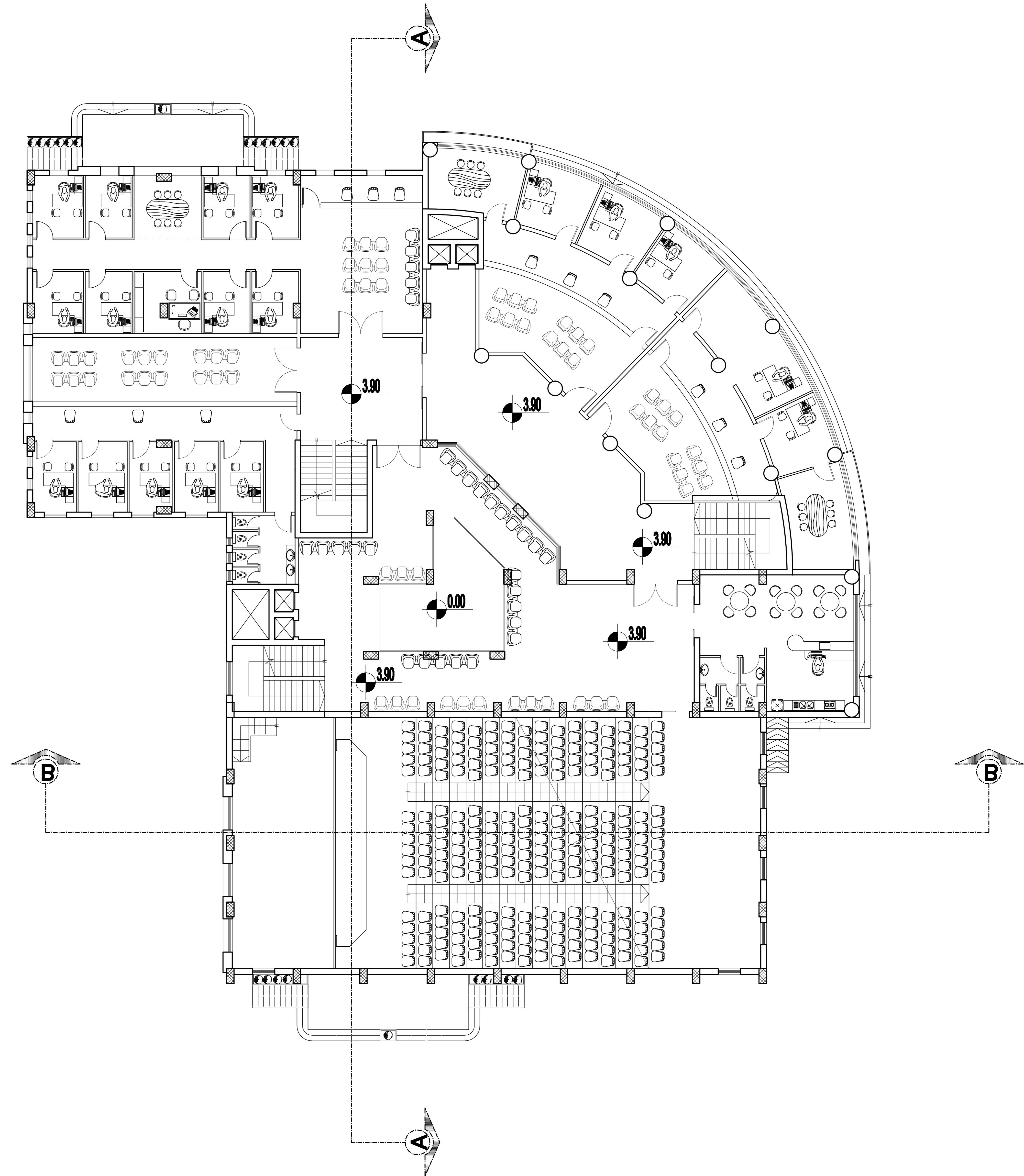
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Dura Municipality Building**

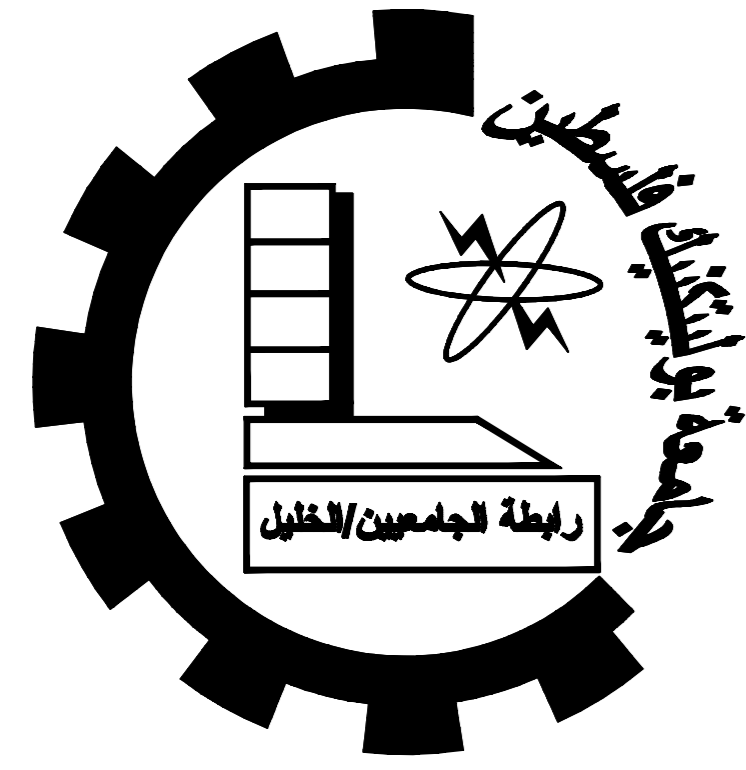
**Supervisor :
Dr.Maher Amro**

**Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer**

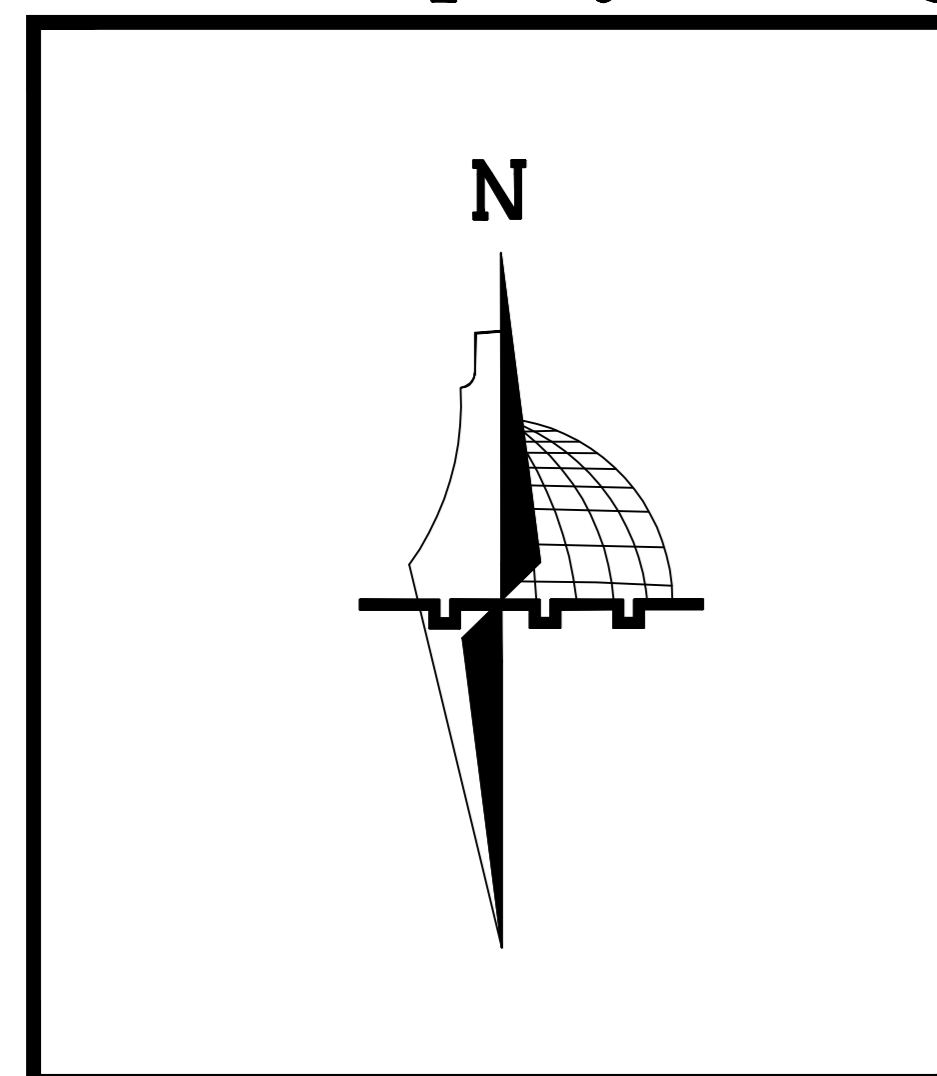
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**First Floor Plan (Furniture)
Scale 1:100**





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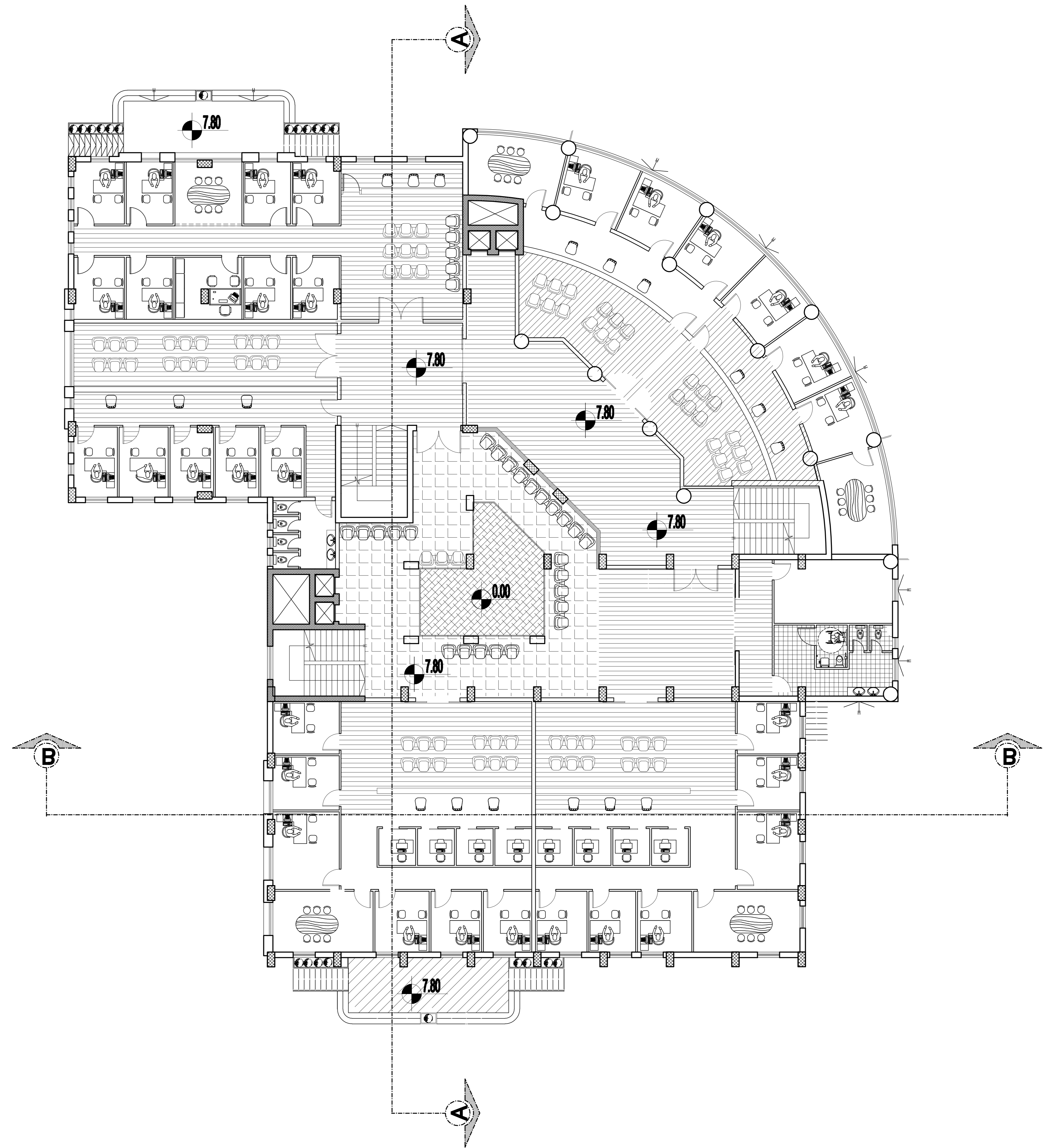
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Dura Municipality Building

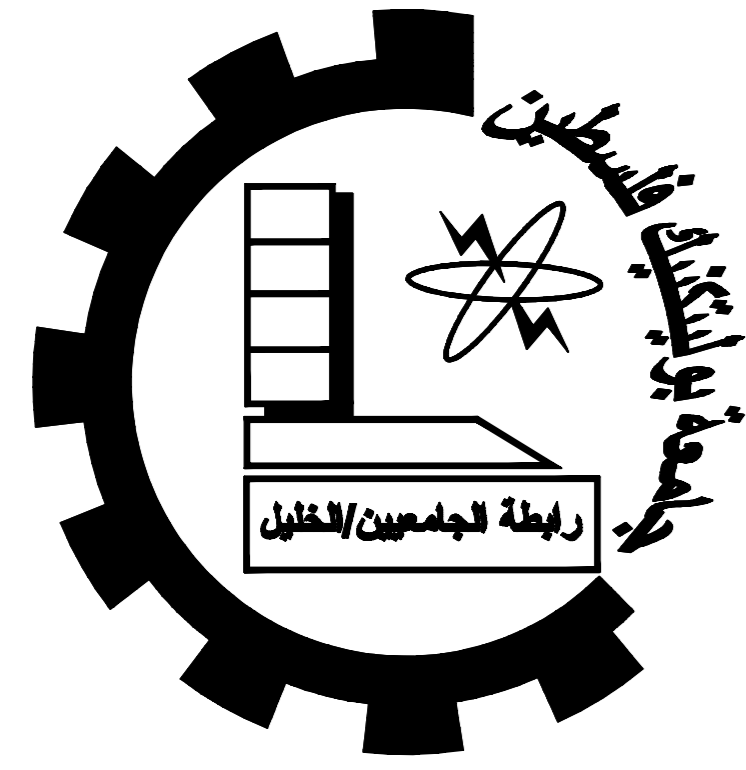
Supervisor :
Dr.Maher Amro

Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer

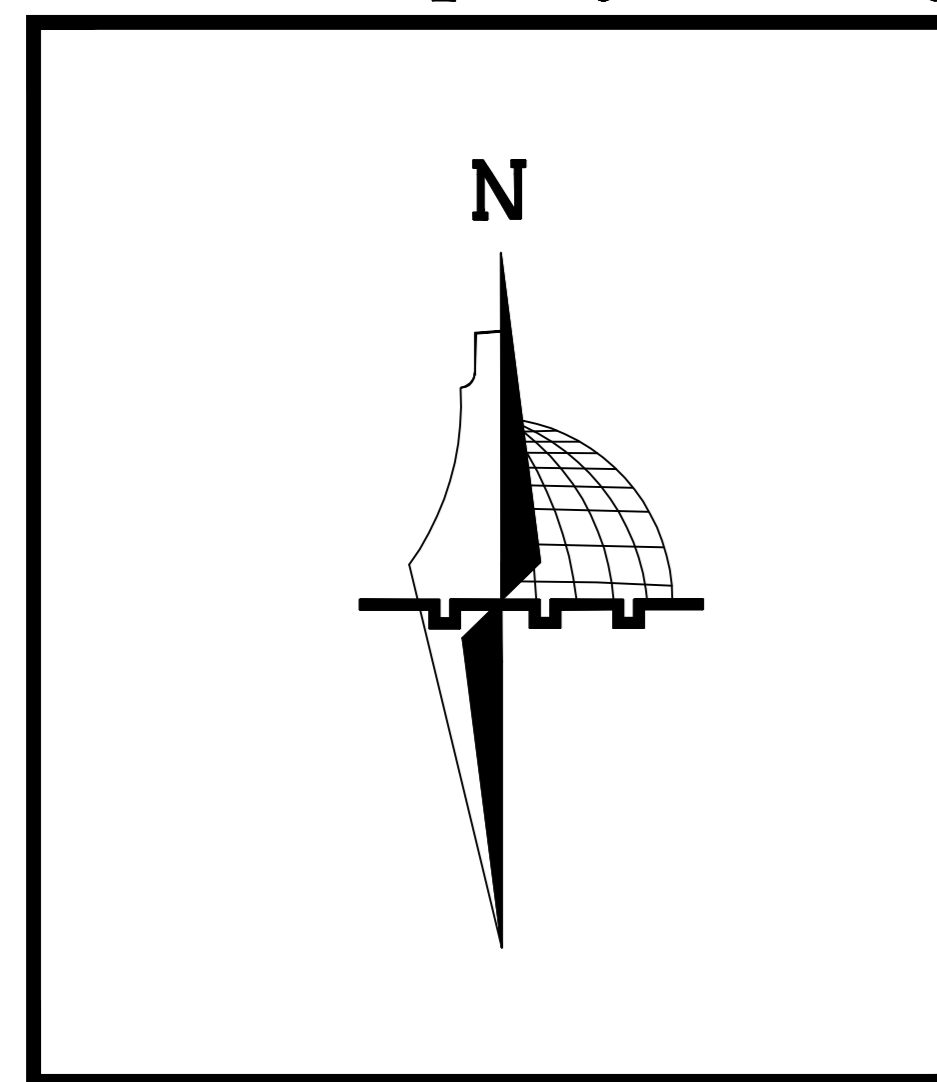
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Second Floor Plan (Furniture)
Scale 1:100





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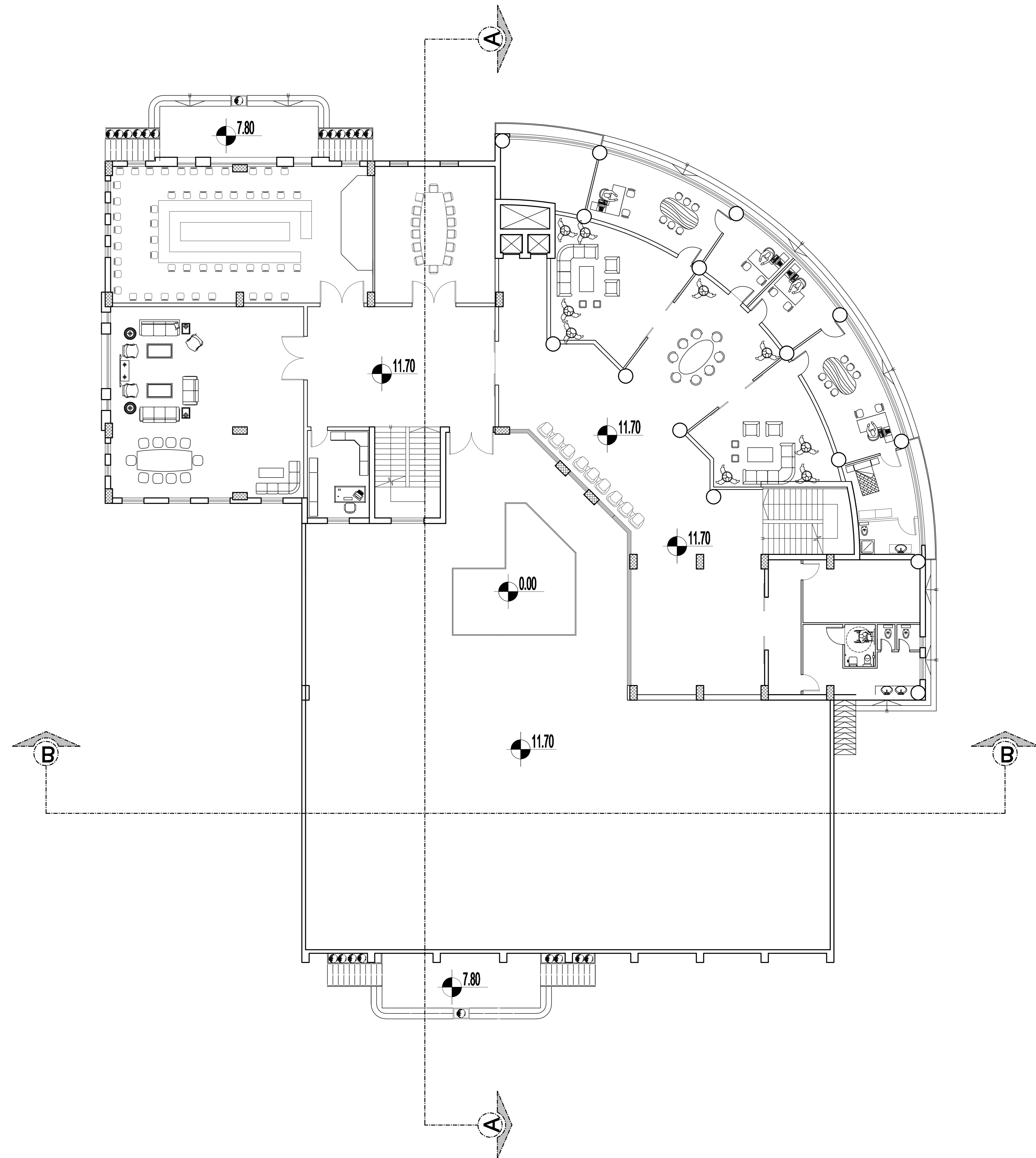
**Project Name :
Dura Municipality Building**

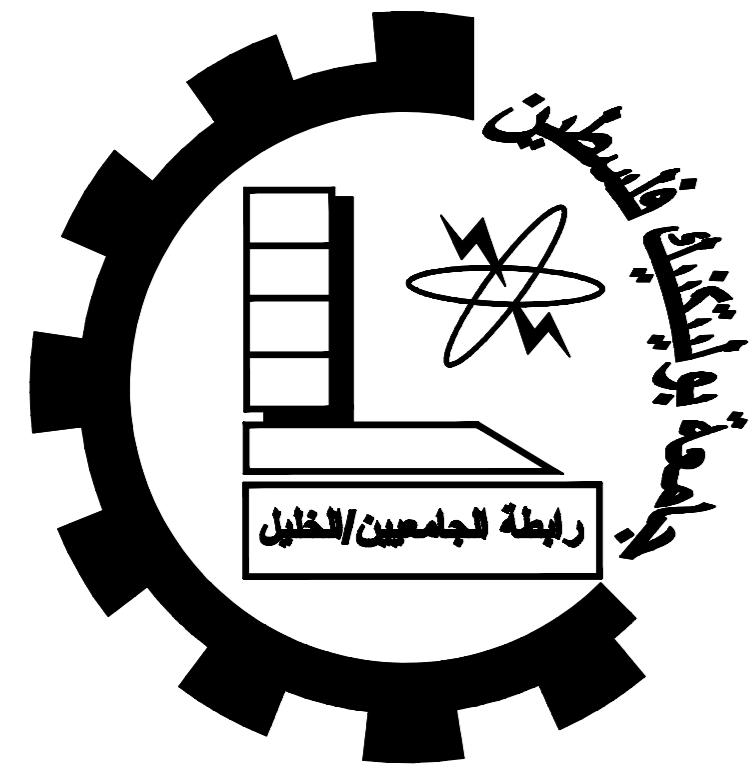
**Supervisor :
Dr.Maher Amro**

**Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer**

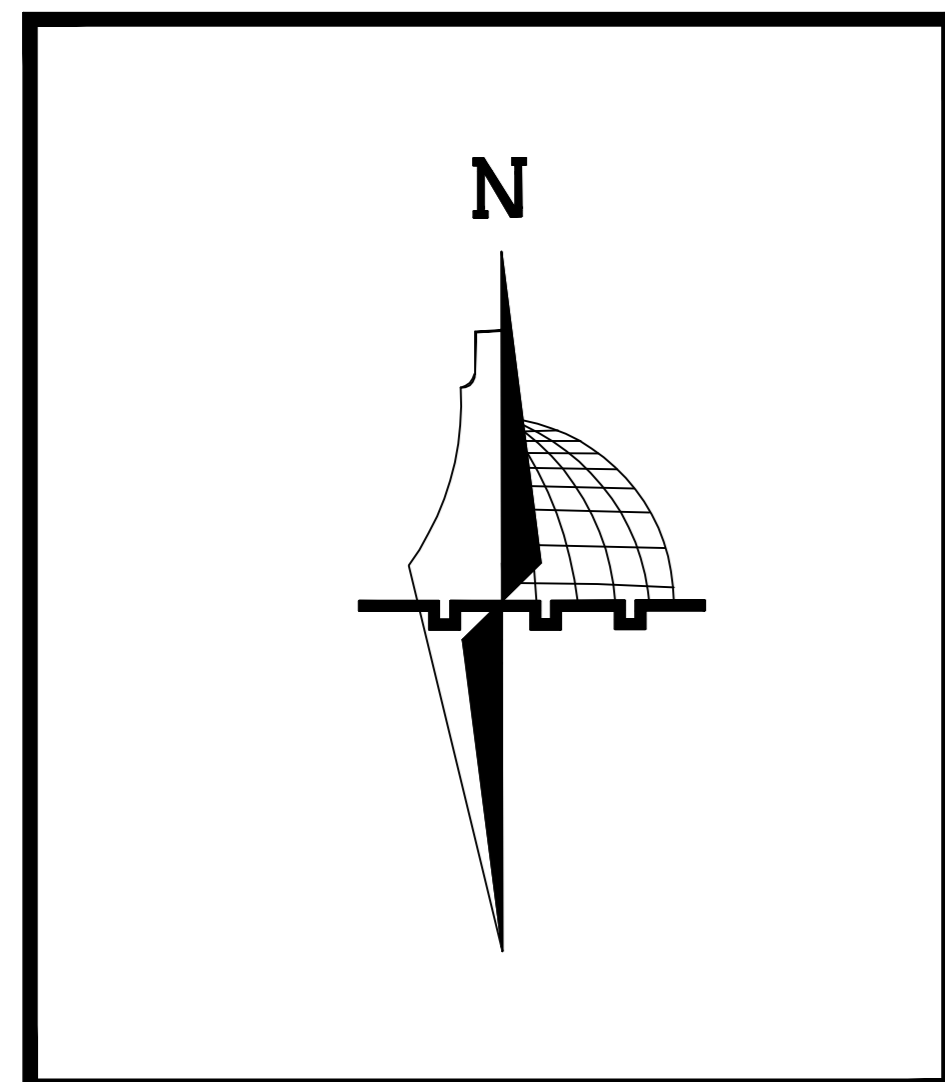
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**Third Floor Plan (Furniture)
Scale 1:100**





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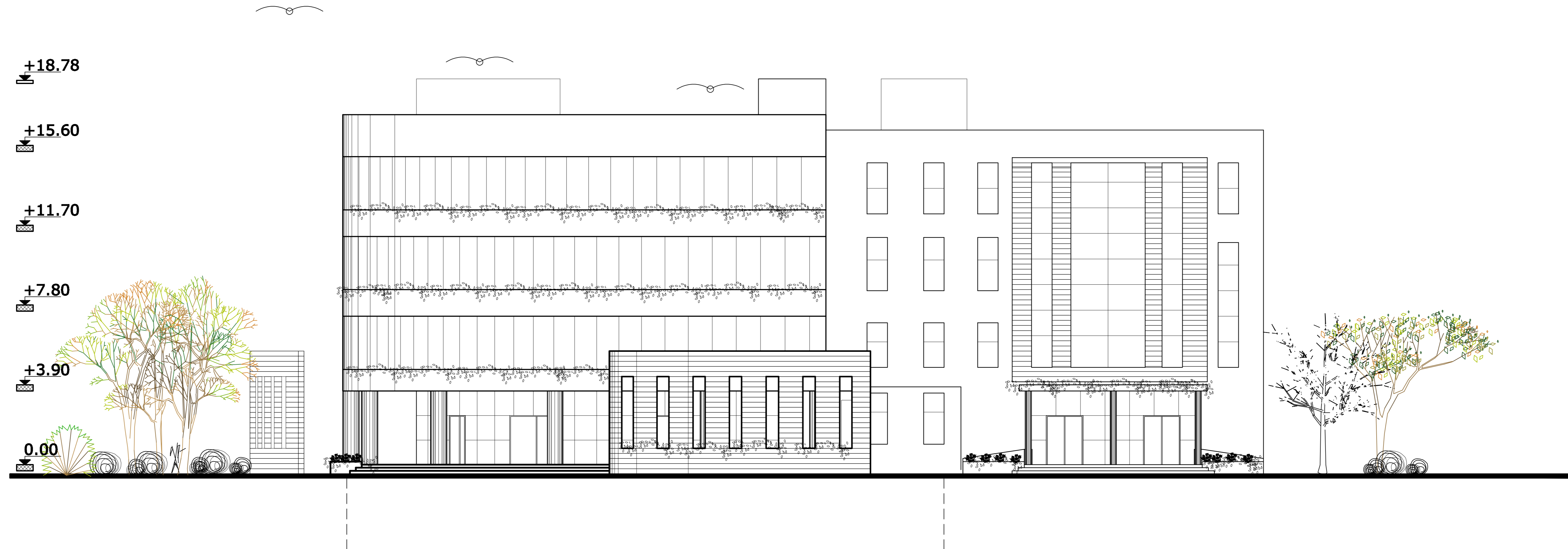
Project Name :
Dura Municipality Building

Supervisor :
Dr.Maher Amro

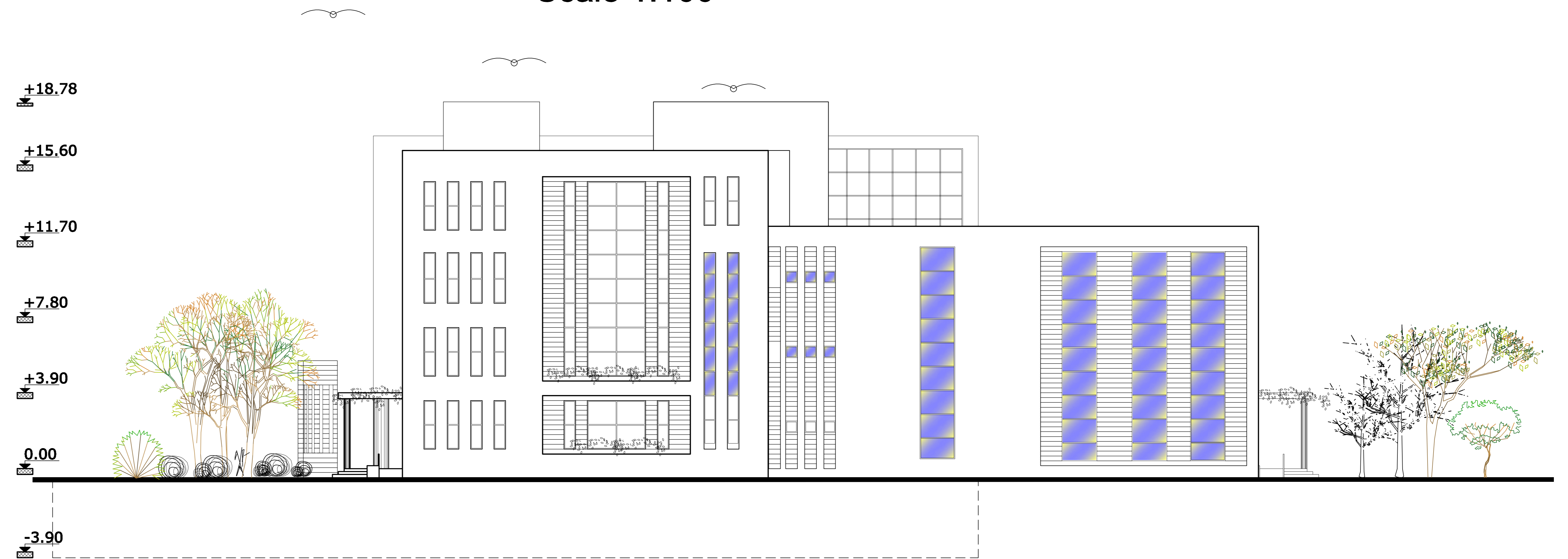
Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer

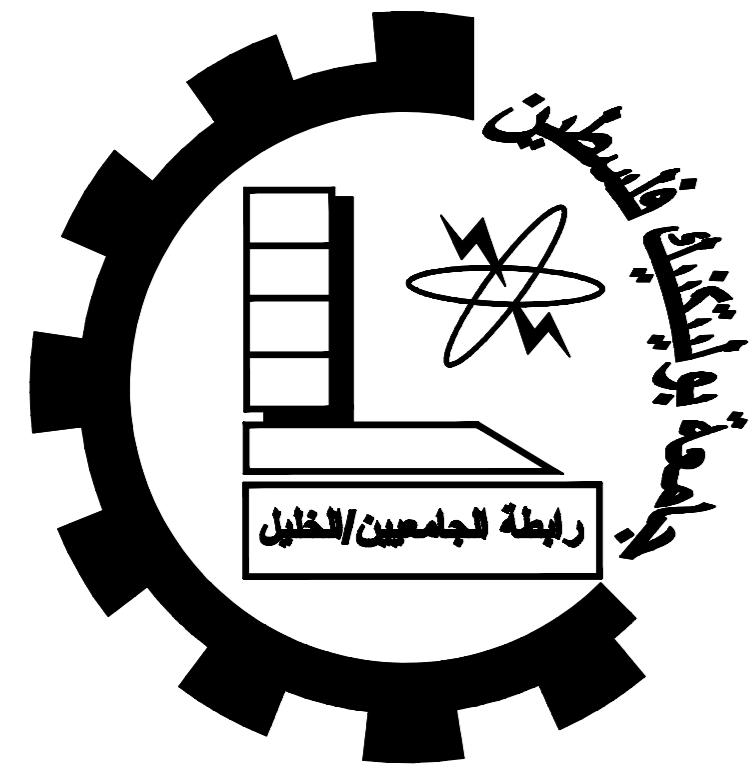
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**North Elevation
Scale 1:100**

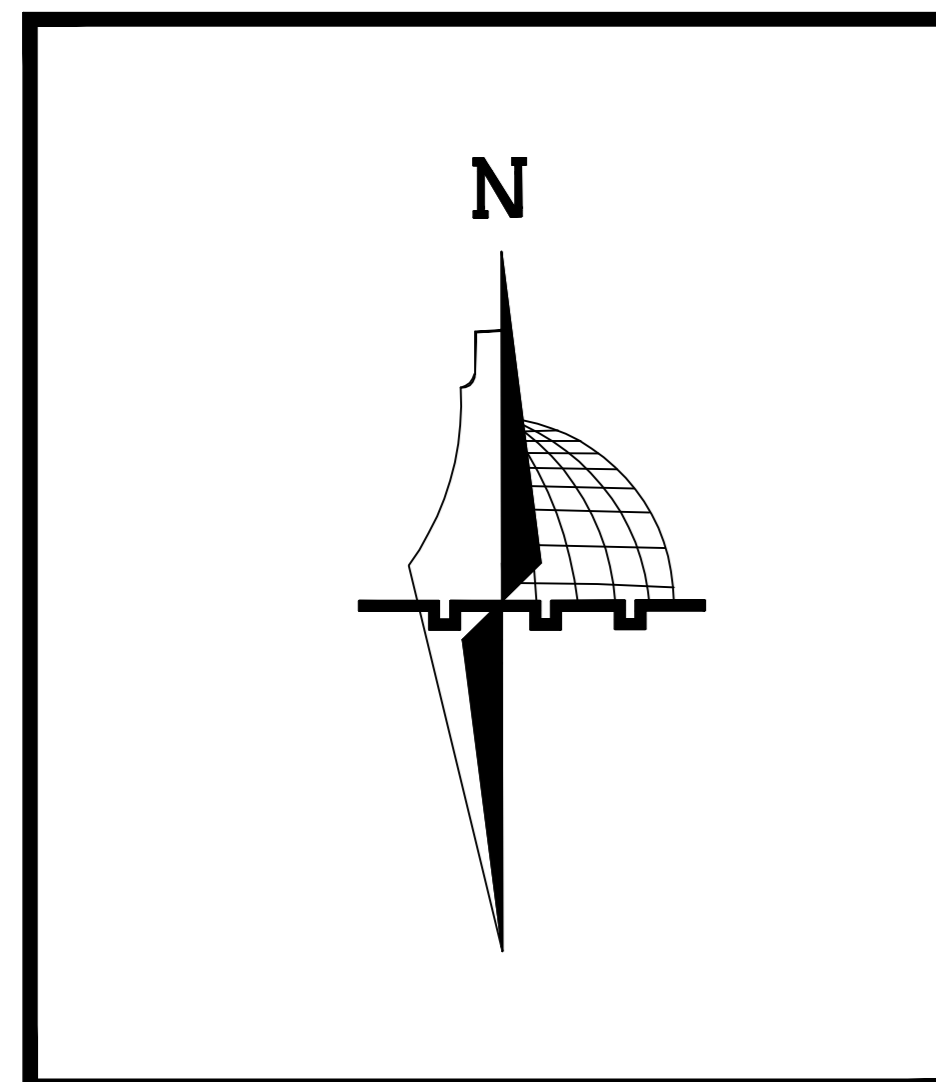


**West Elevation
Scale 1:100**





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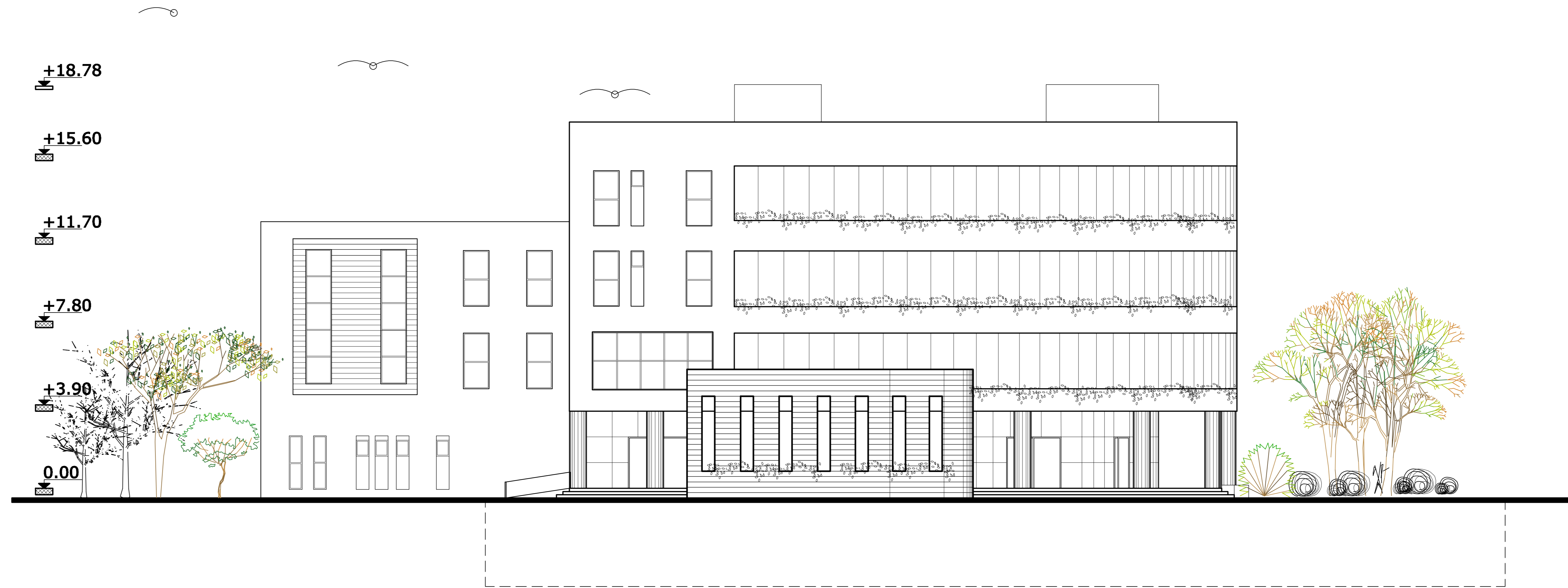
**Project Name :
Dura Municipality Building**

**Supervisor :
Dr.Maher Amro**

**Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer**

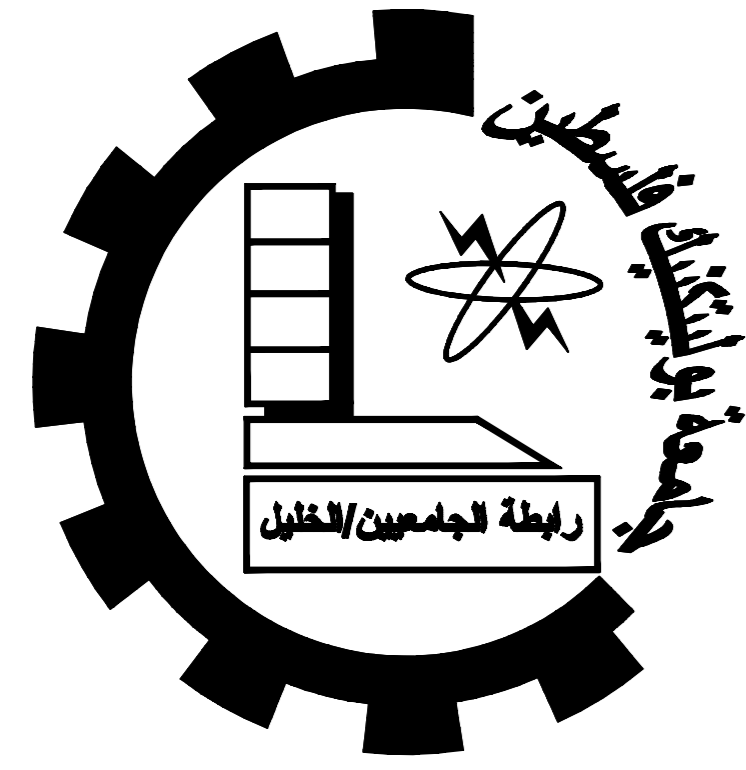
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**East Elevation
Scale 1:100**

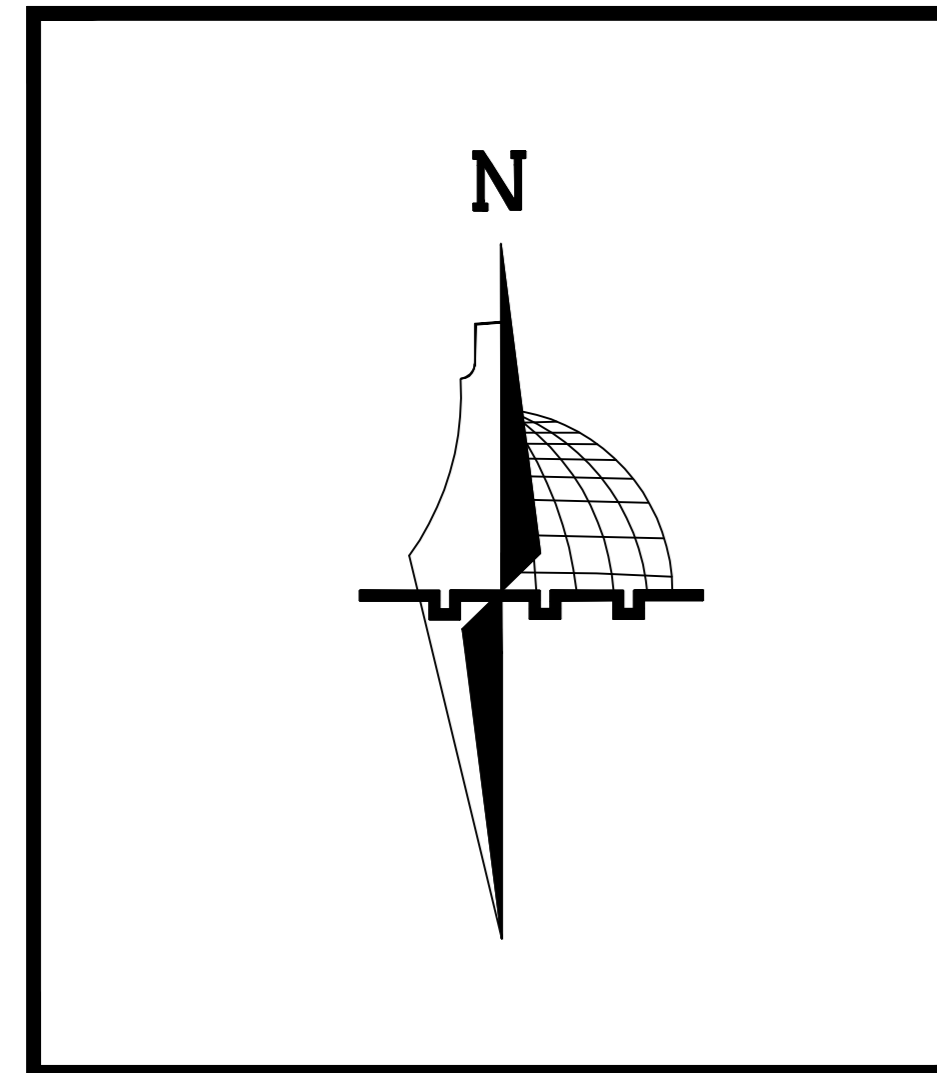


**South Elevation
Scale 1:100**





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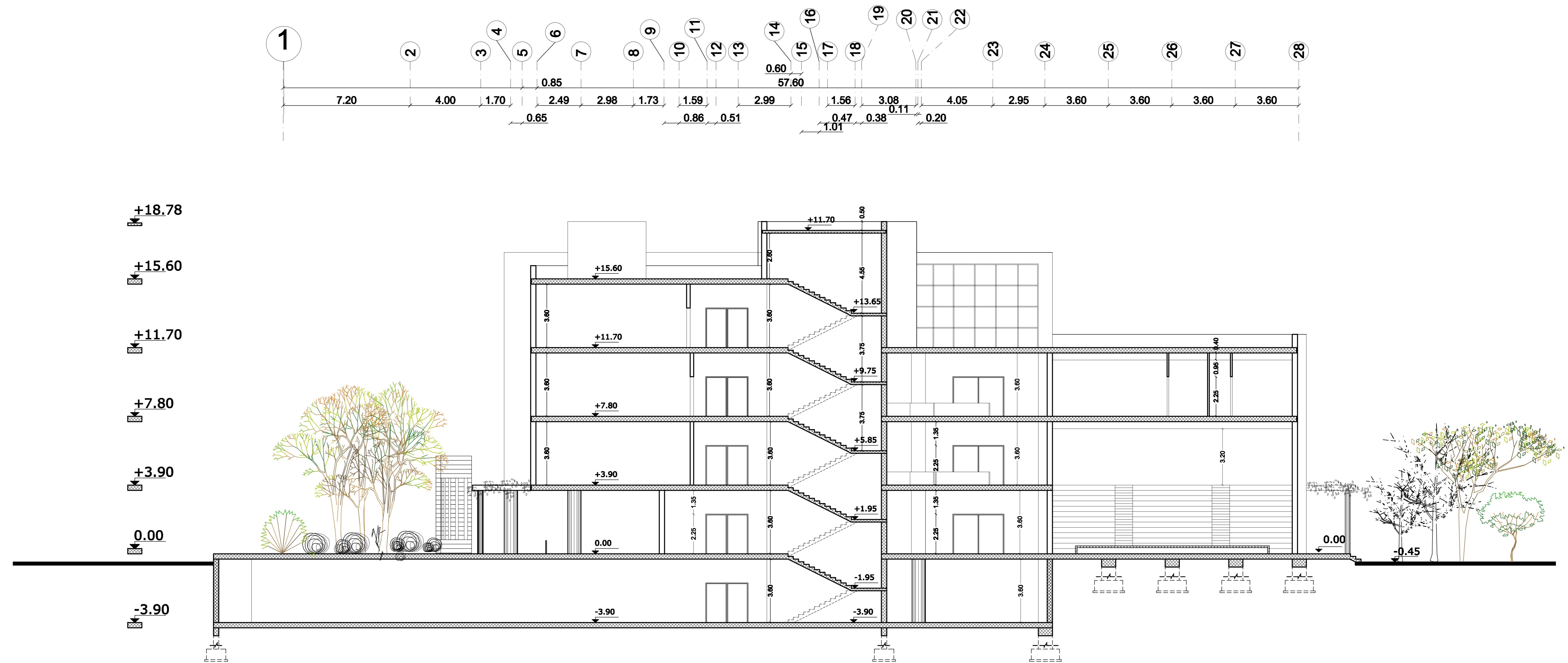
Project Name :
Dura Municipality Building

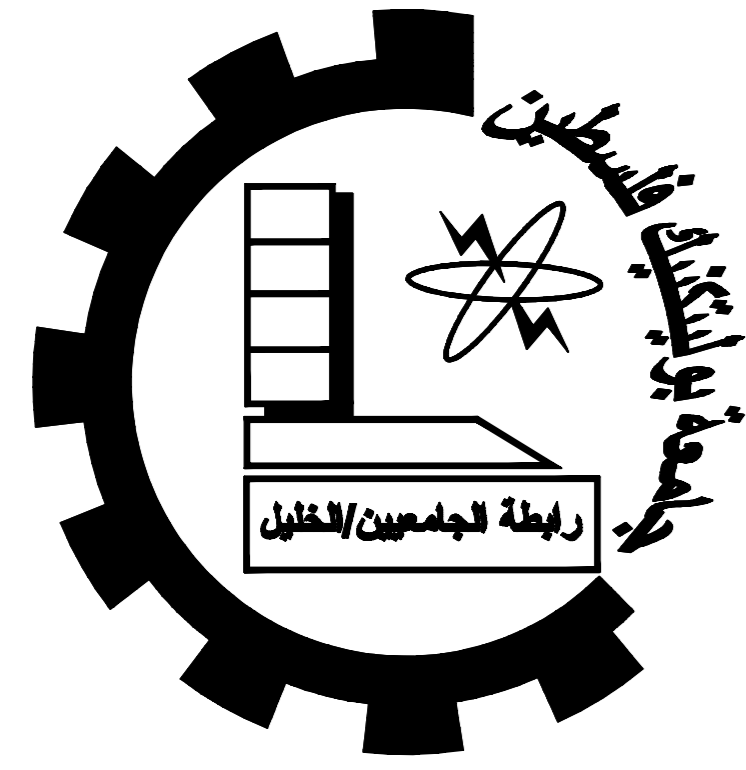
Supervisor :
Dr.Maher Amro

Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer

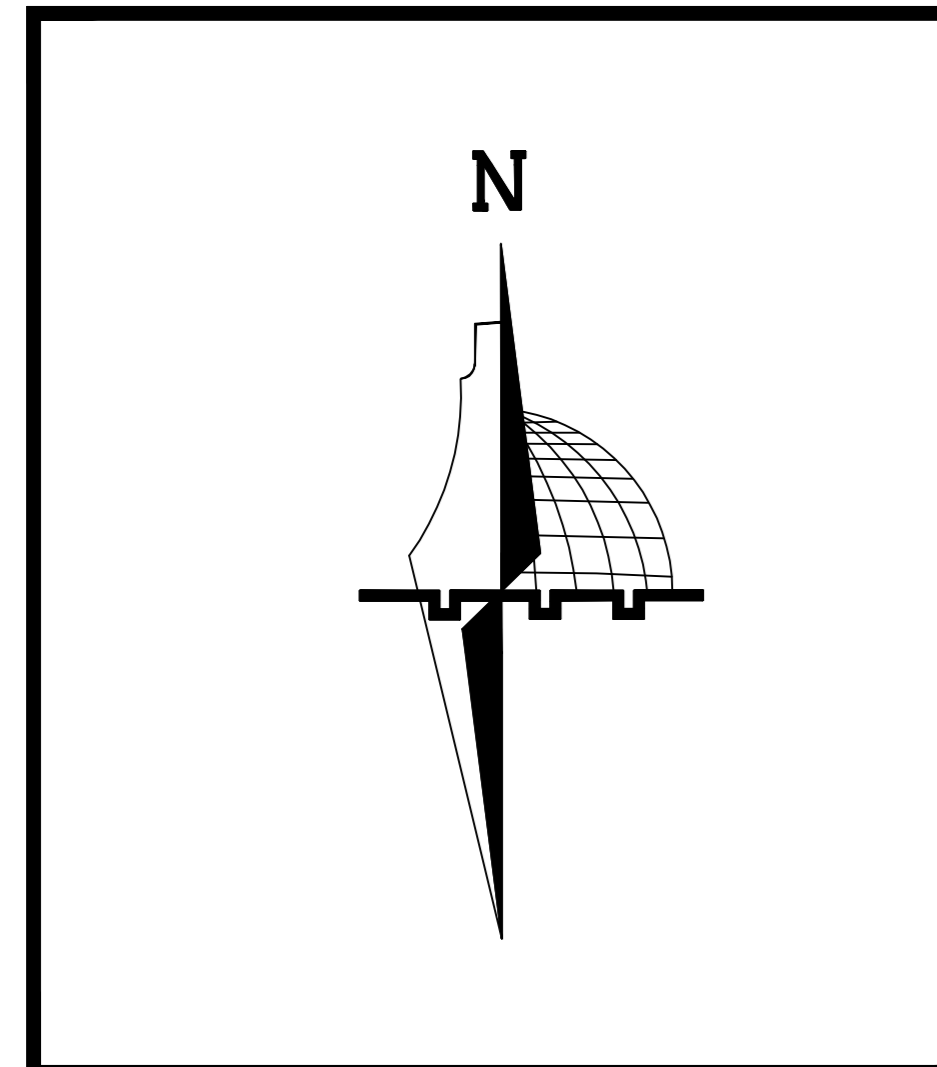
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Section A-A
Scale 1:100





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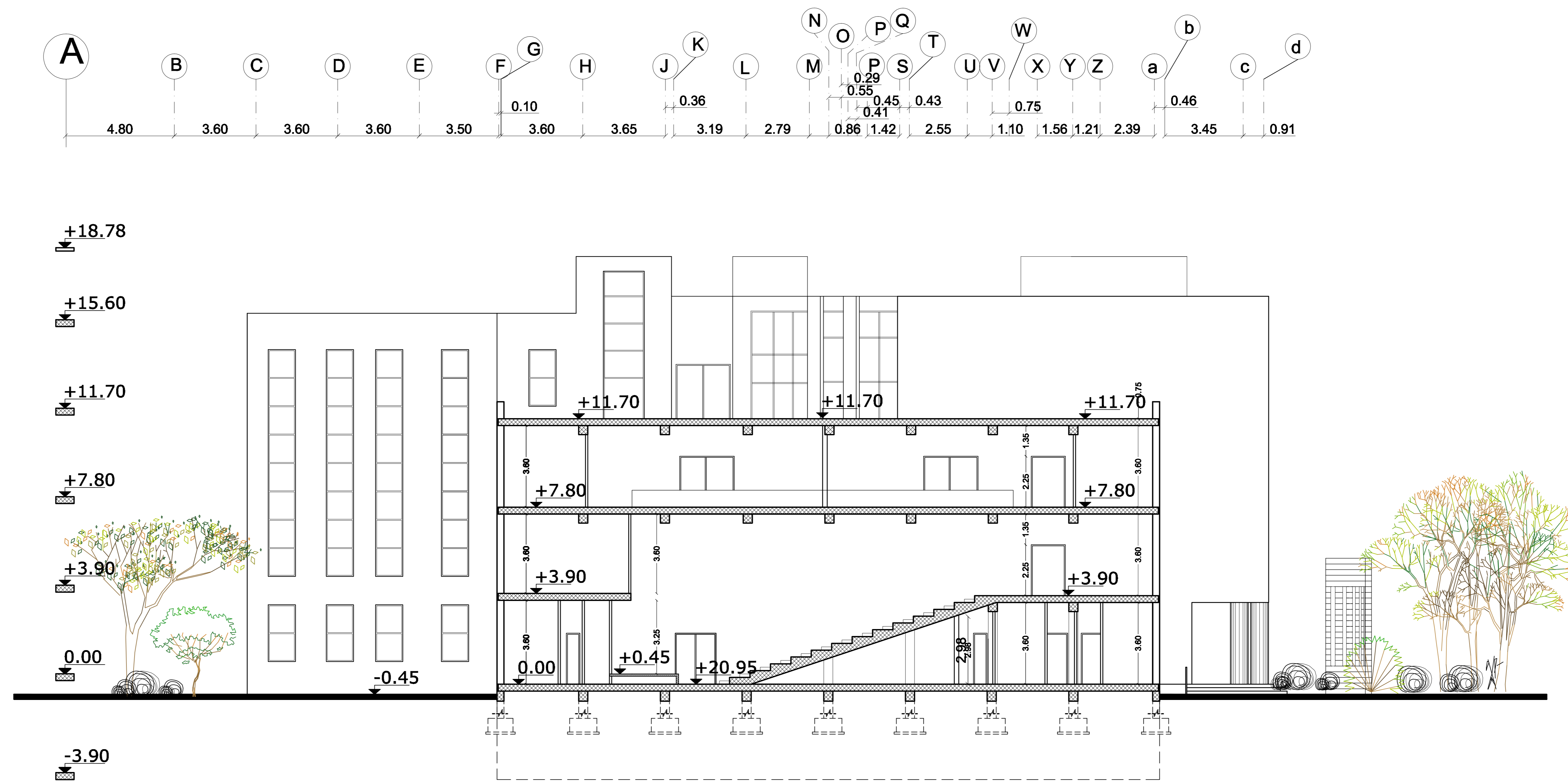
Project Name :
Dura Municipality Building

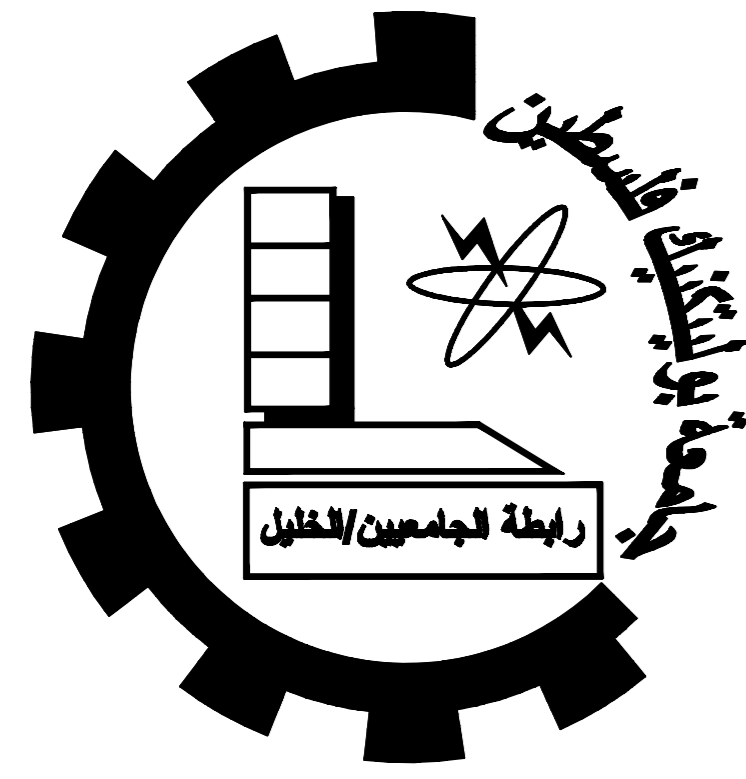
Supervisor :
Dr.Maher Amro

Done By :Ahmad Thweib
Hamza Thweib
Mohammad Alzeer

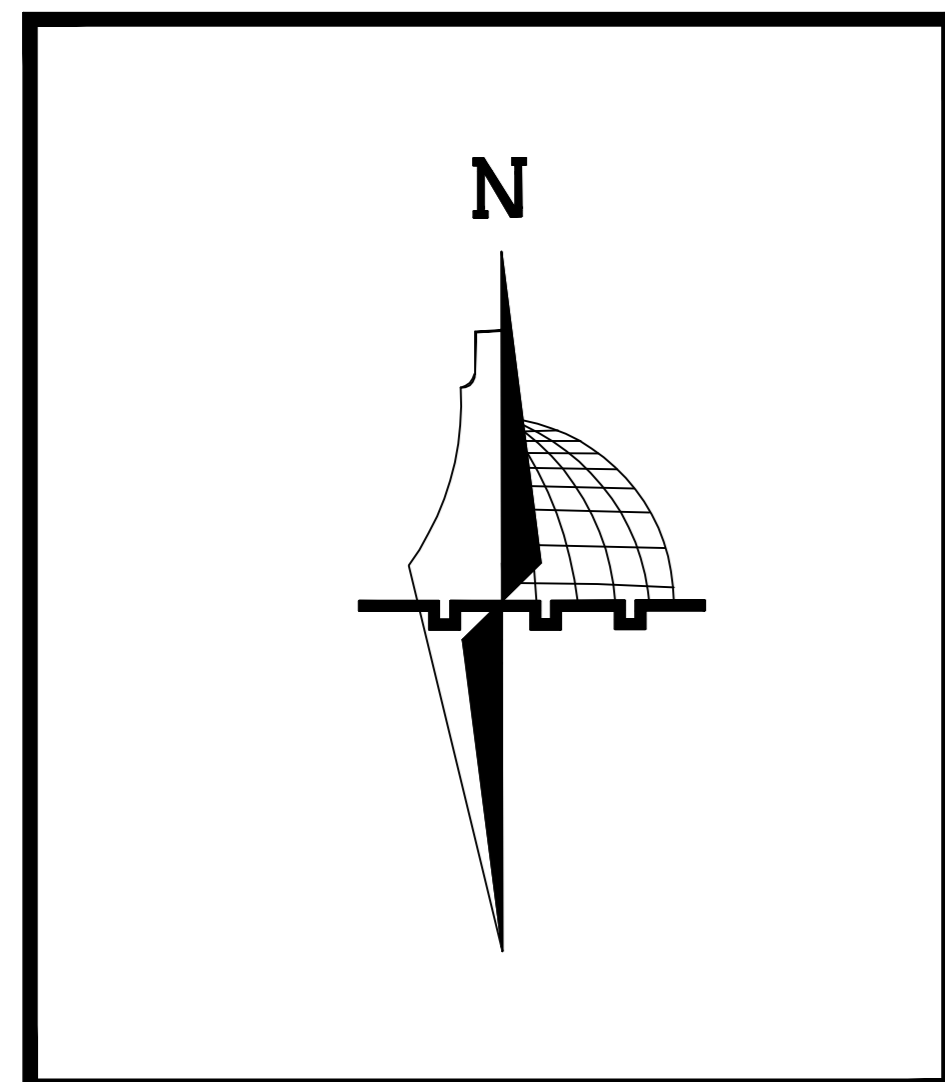
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**Section A-A
Scale 1:100**





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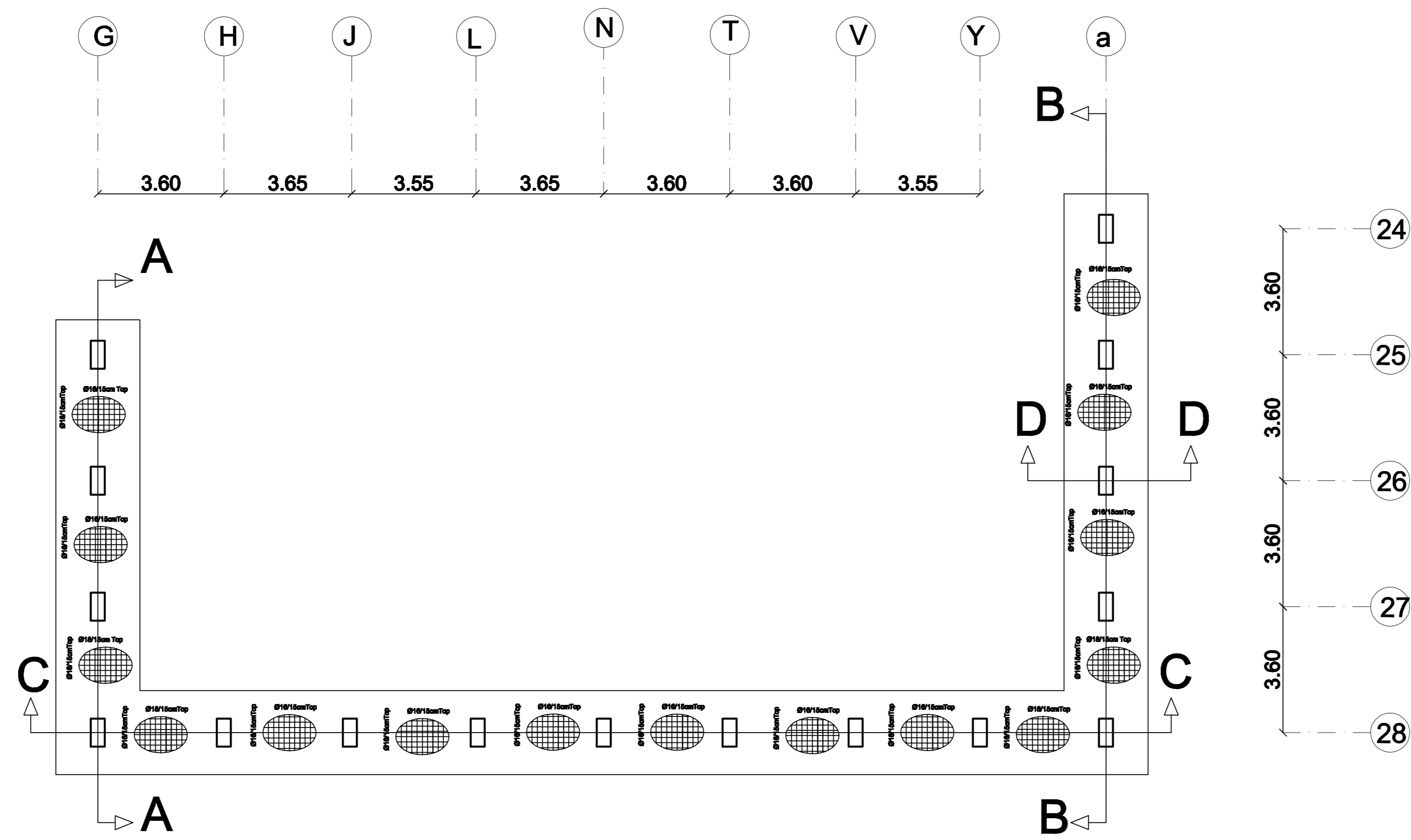
Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

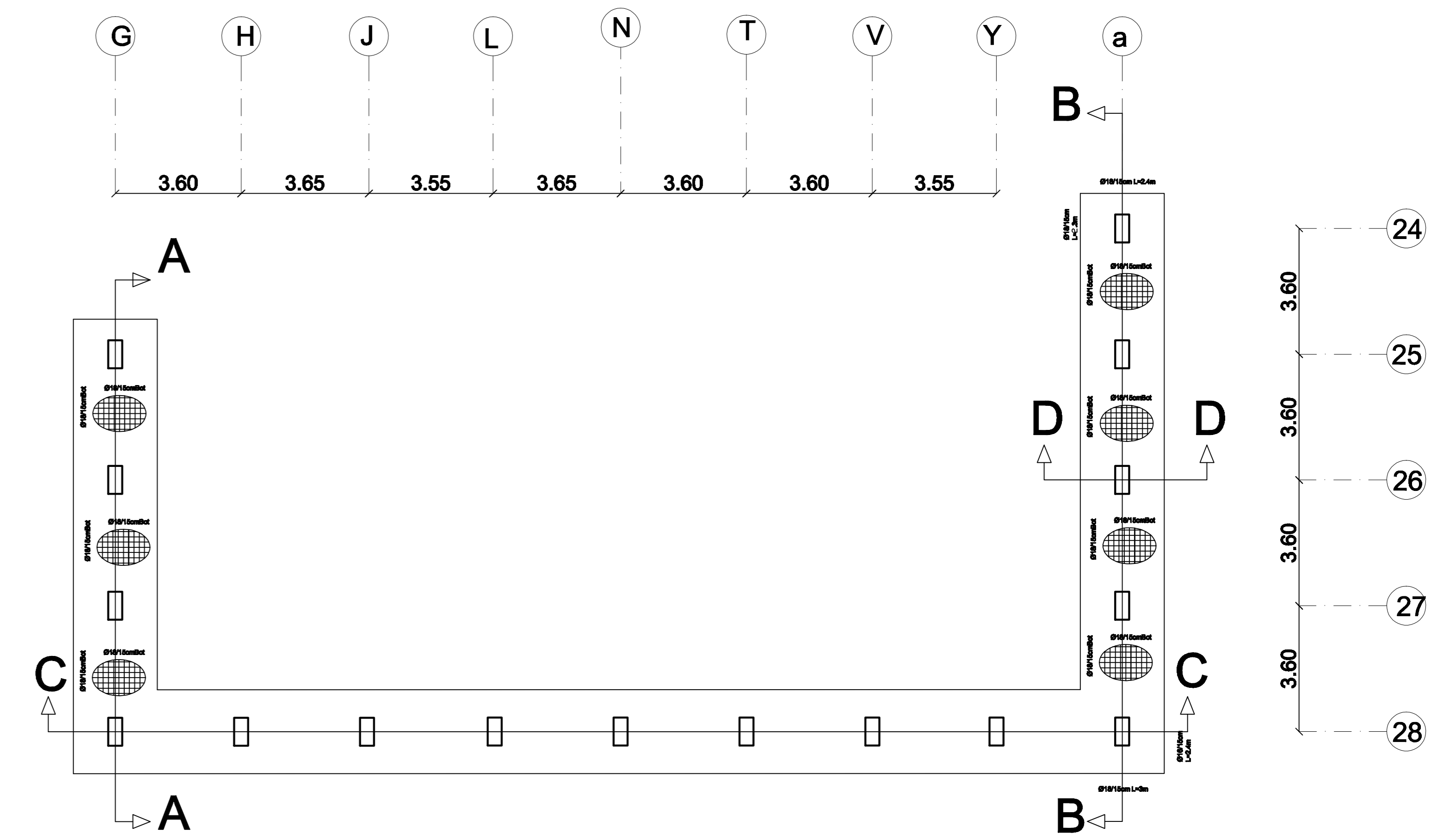
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Reinforcement of Ground Beam $h=70\text{cm}$ and Foundation F1 Scale:1/100

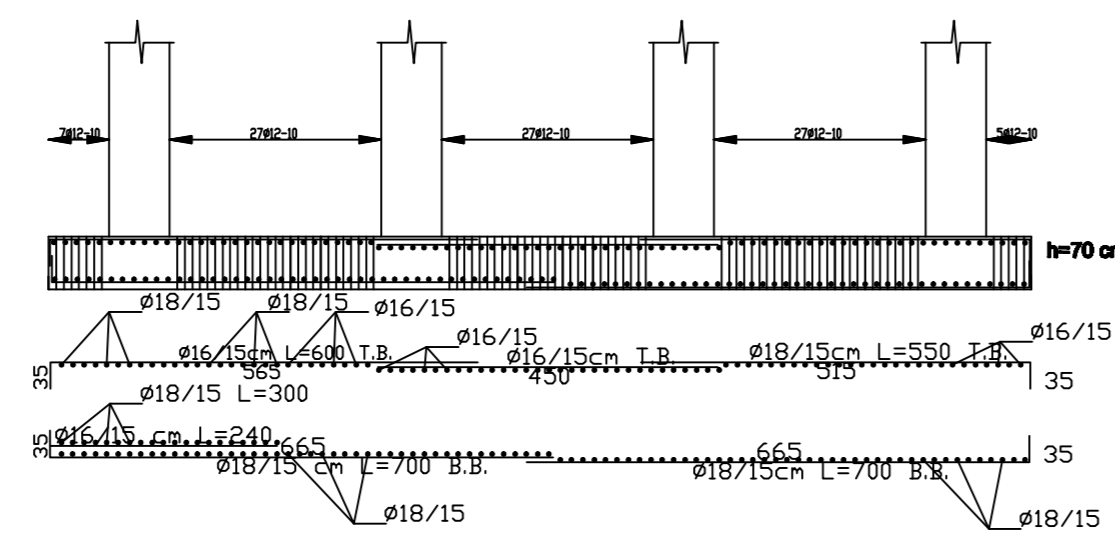
Top reinforcement



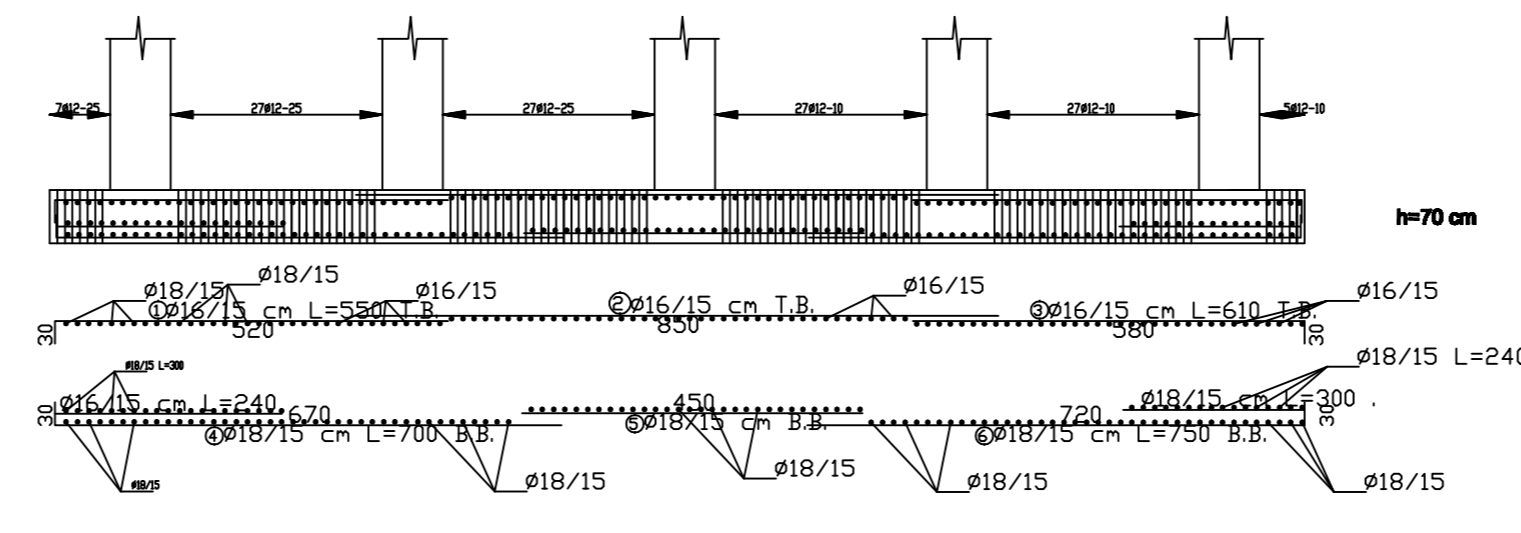
Bottom and Additional reinforcement



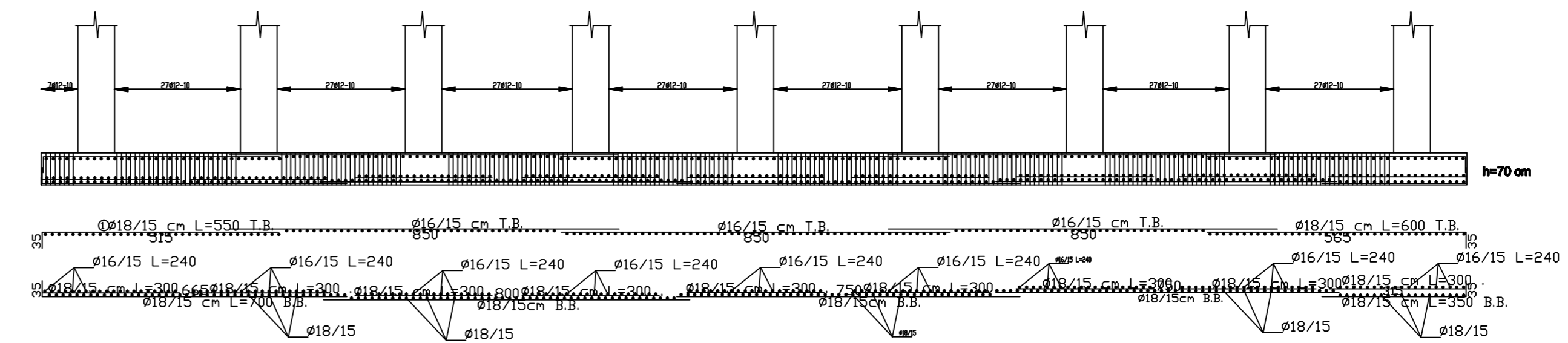
Sec A-A



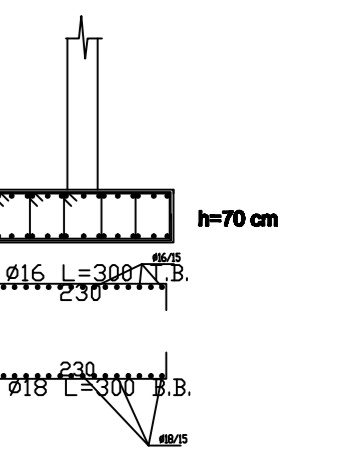
Sec B-B



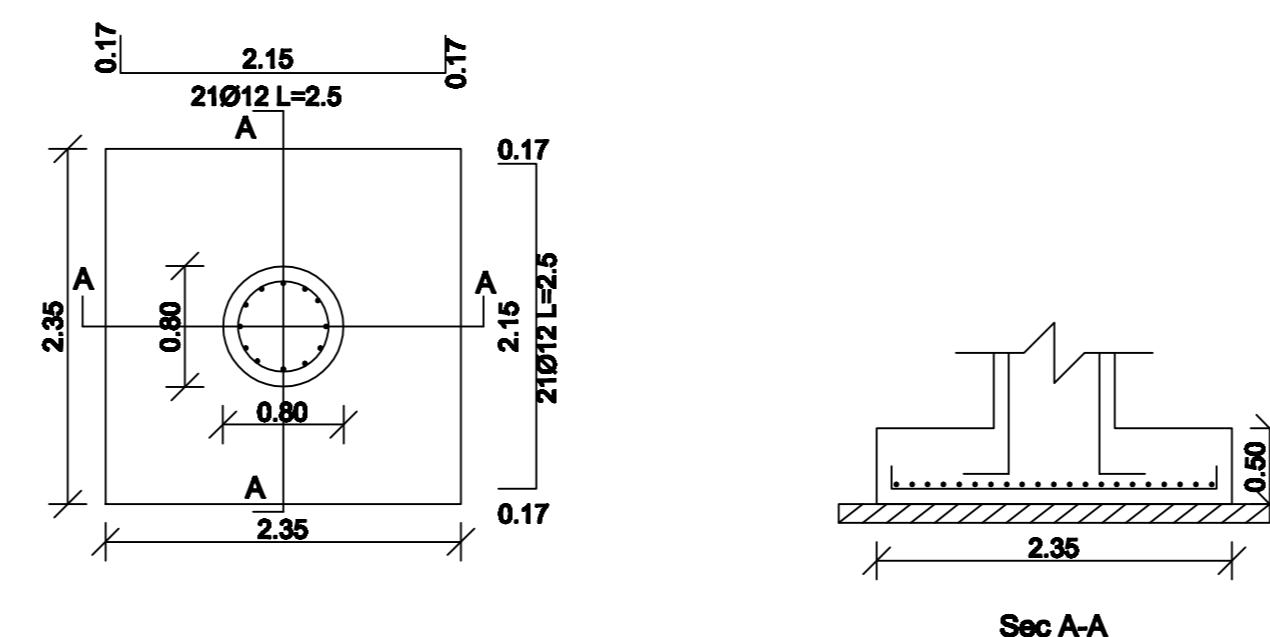
Sec C-C

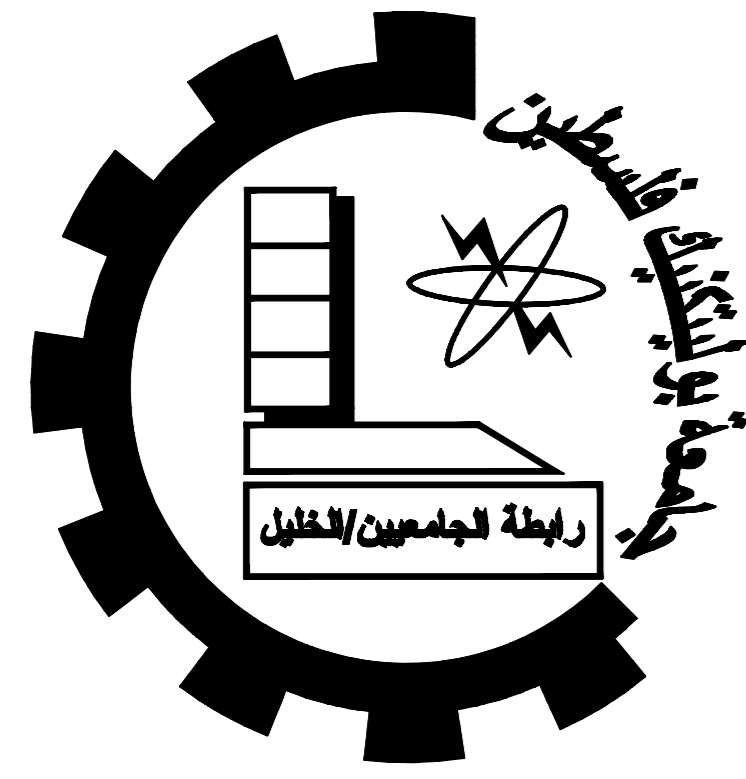


Sec D-D

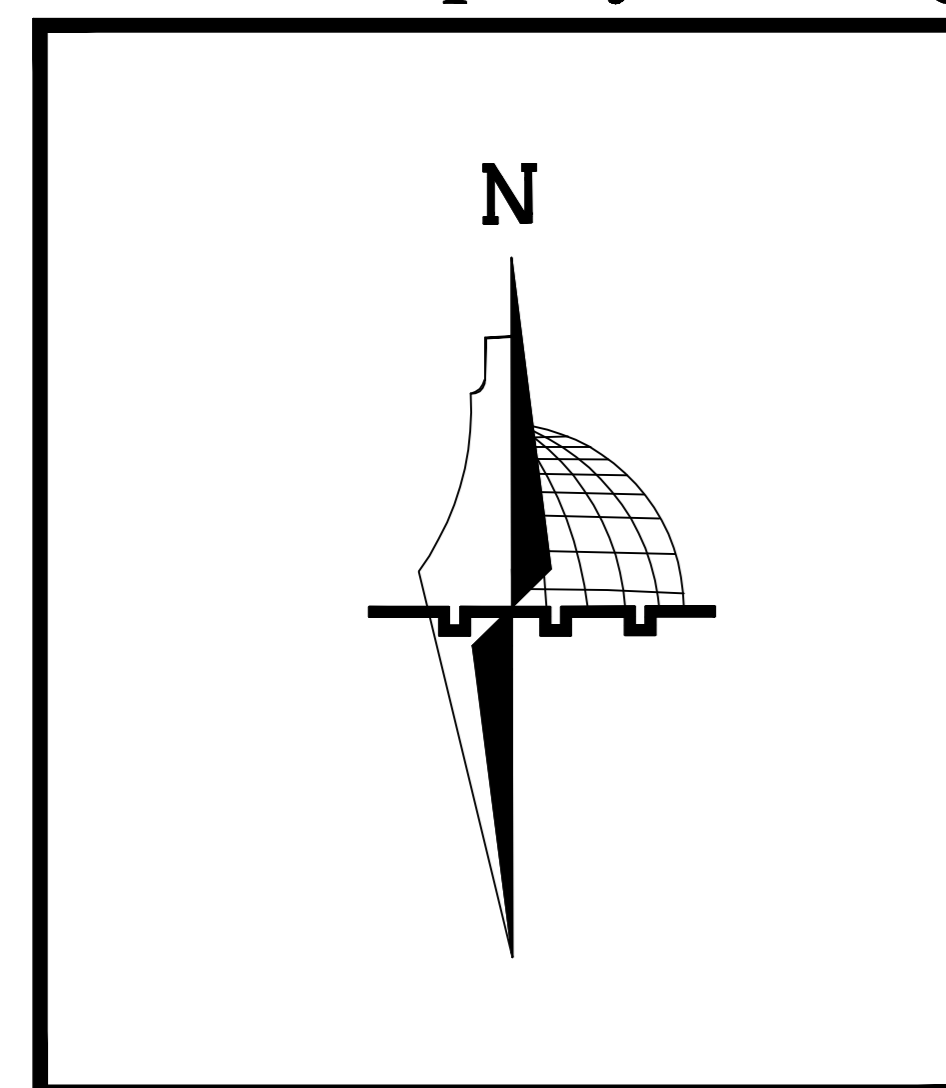


Foundation F1





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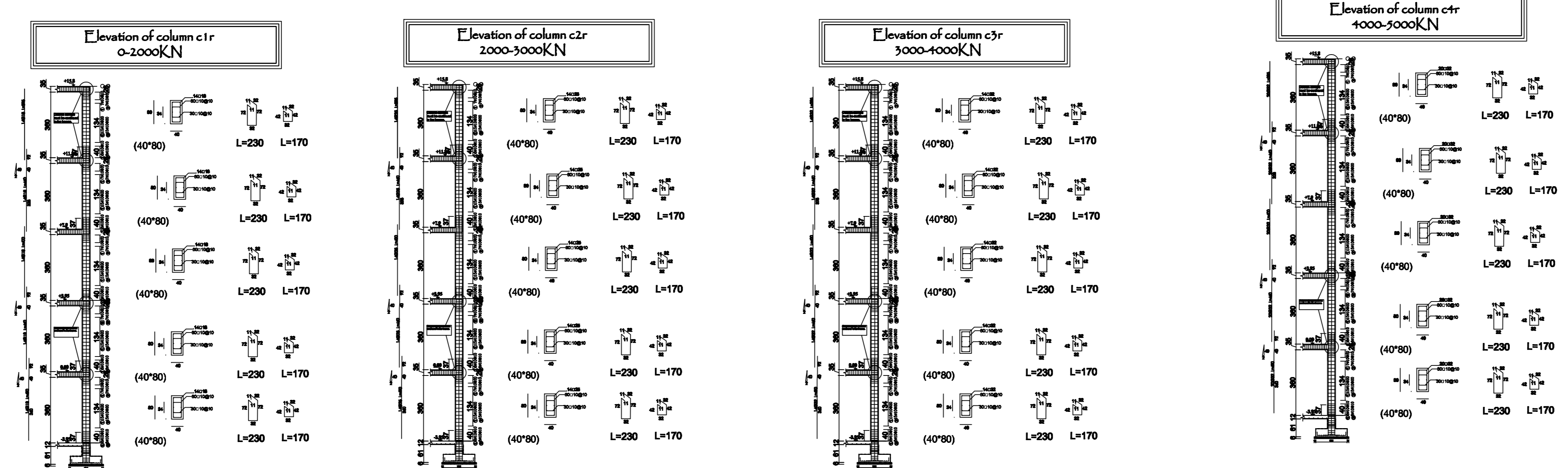
Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S4

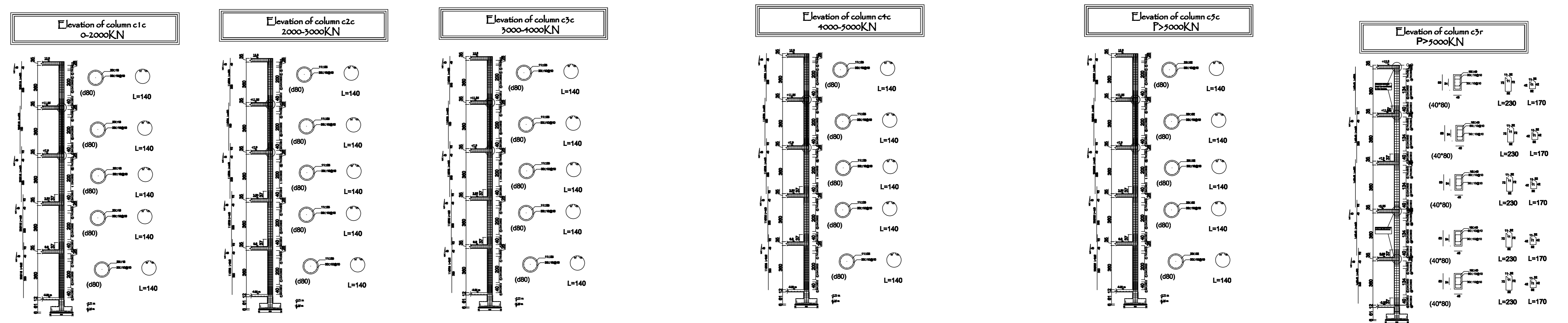
Reinforcement of Columns

Scale: 1/100



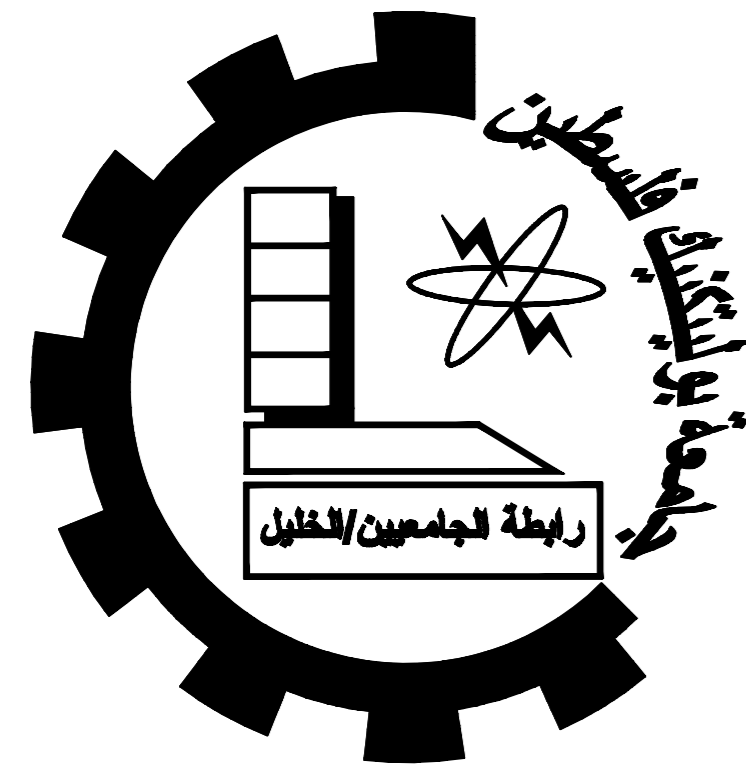
Column Sections

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column.section					
Strups & Tie Hooks					
column.name	col(1)c (0-2000KN)	col(2)c (2000-3000KN)	col(3)c (3000-4000KN)	col(4)c (4000-5000KN)	col(5)c (5000-∞ KN)
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Strups & Tie Hooks					

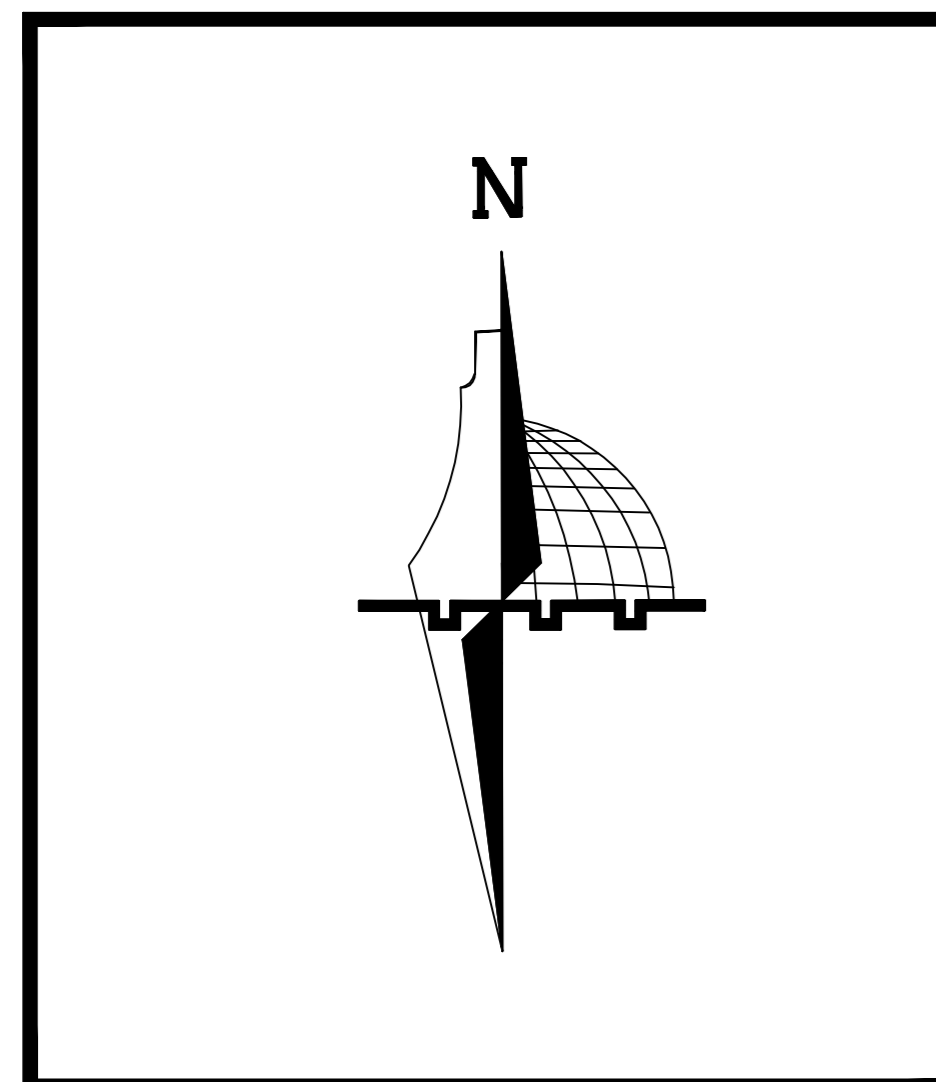


Reinforcement of Shear Wall

Scale:1/100



Dura Municipality Building



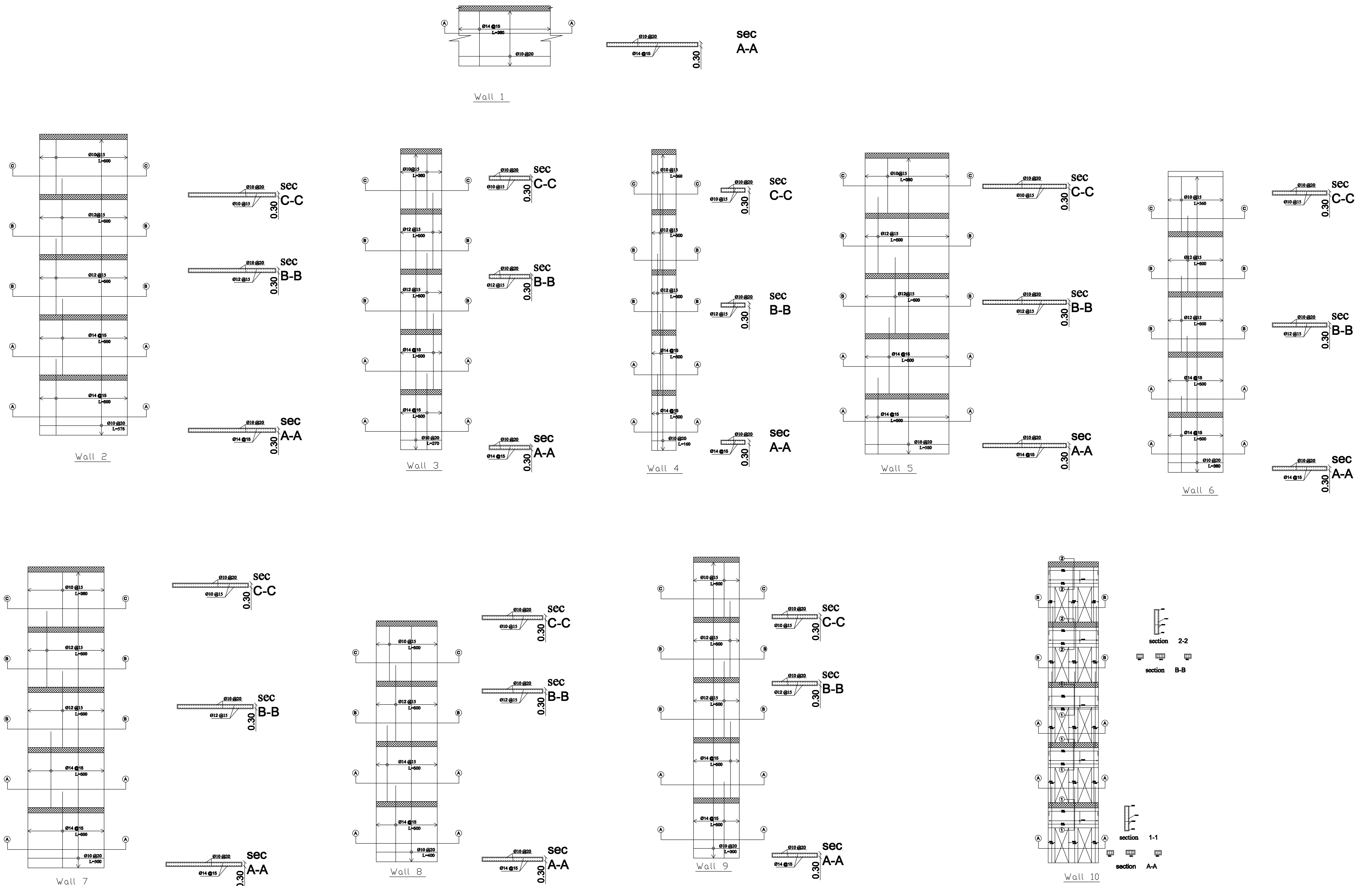
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Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

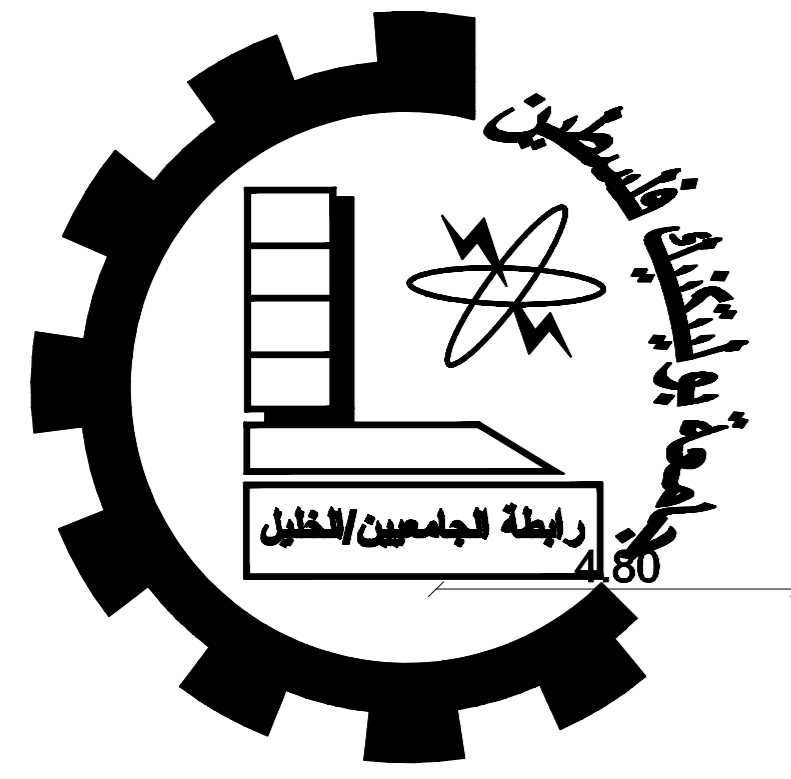
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S5

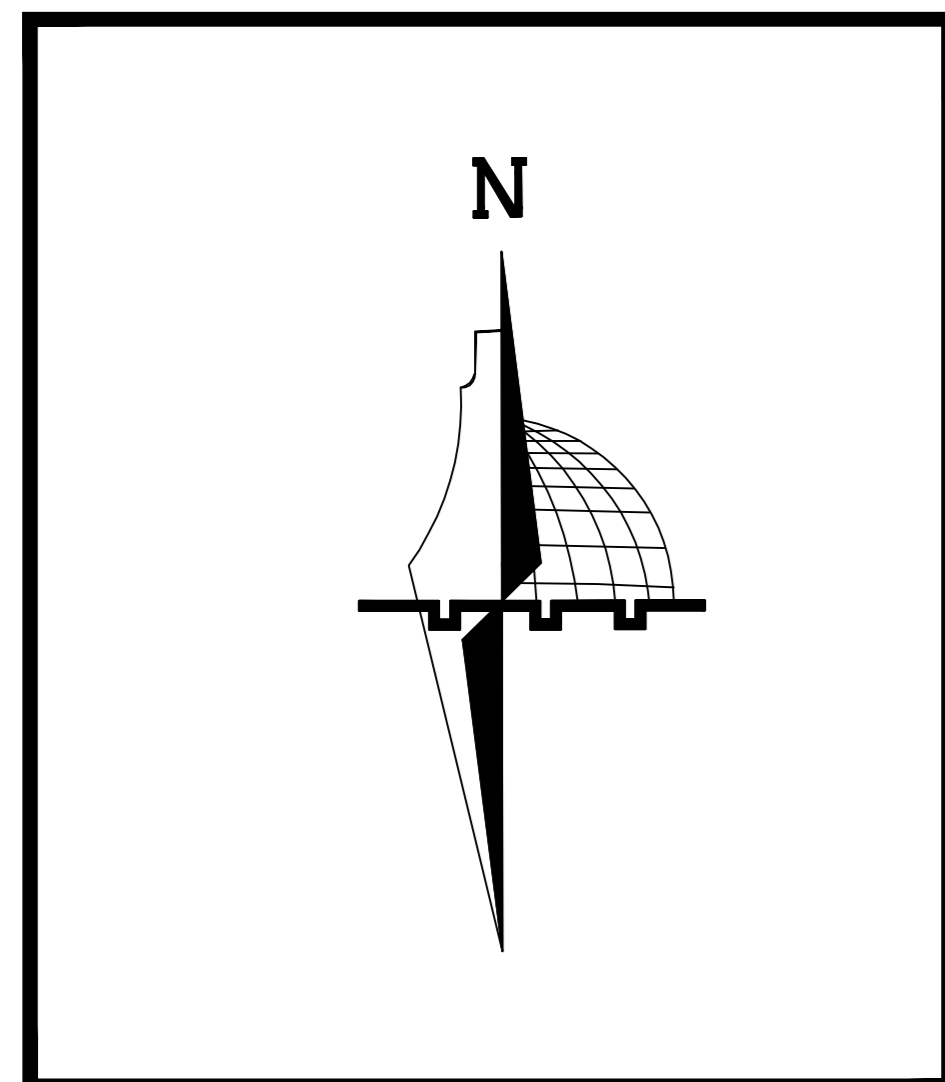


Distribution of Ribs of Basement Floor Slab

Scale:1/100



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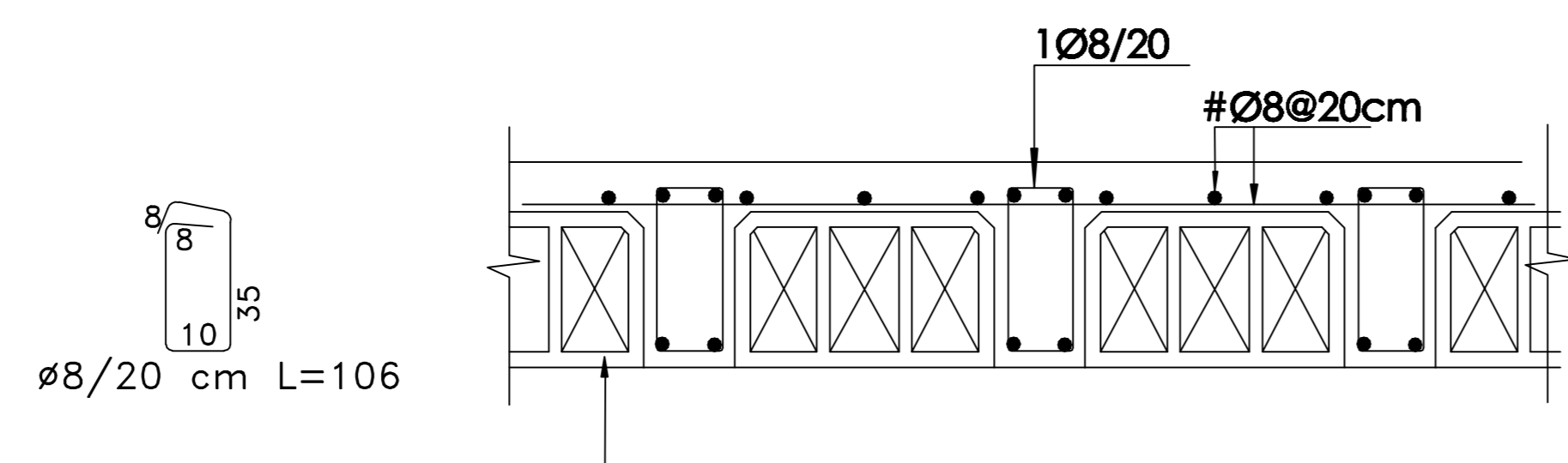
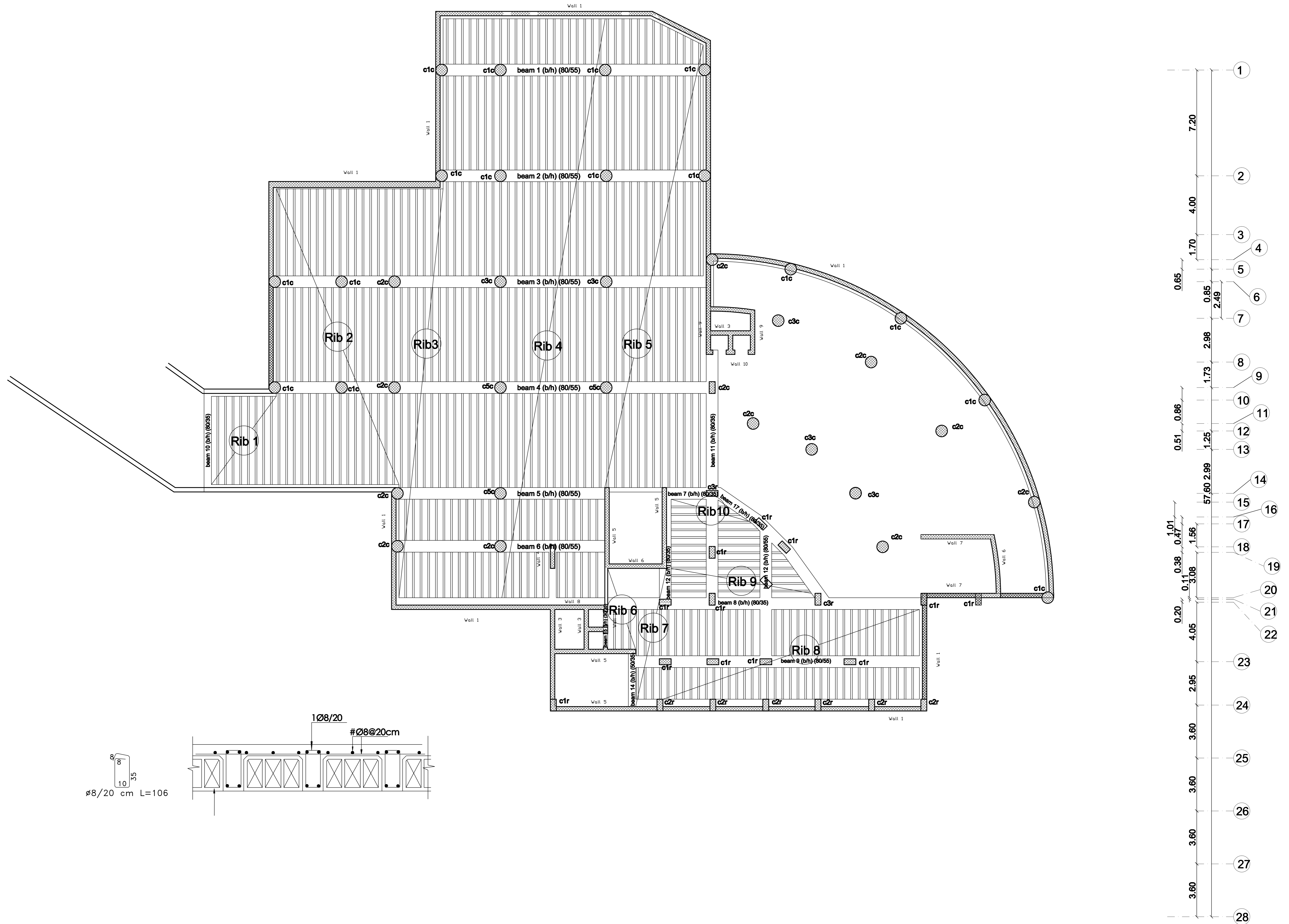
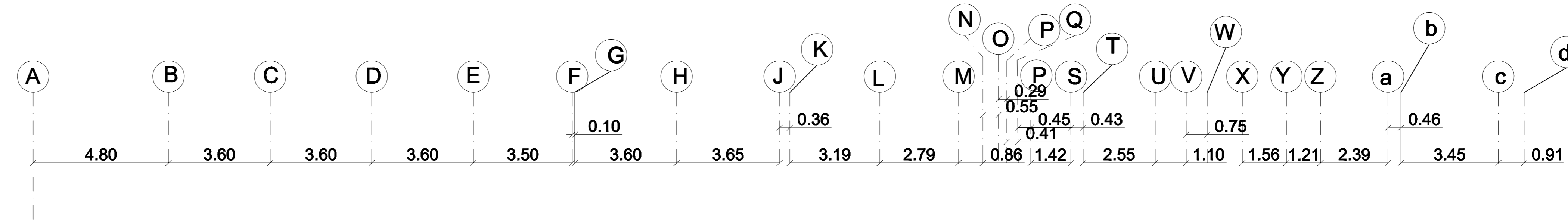
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Civil Engineering

Project Name :
Dura Municipality Building

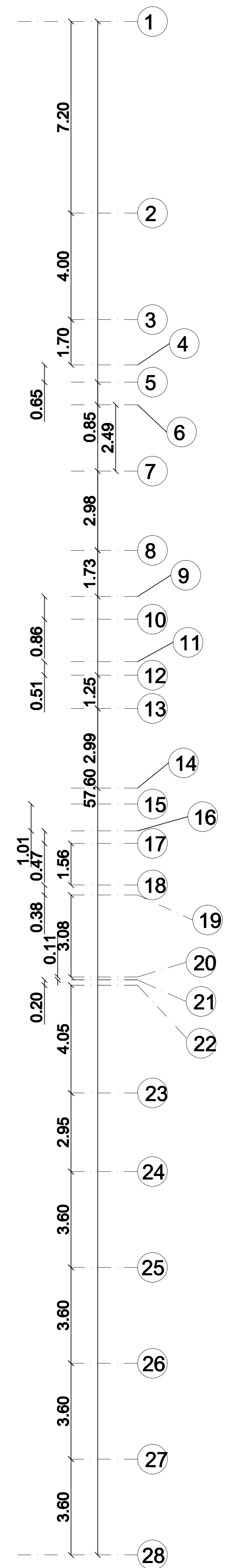
Supervisor :Dr . Maher Amro

Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S6

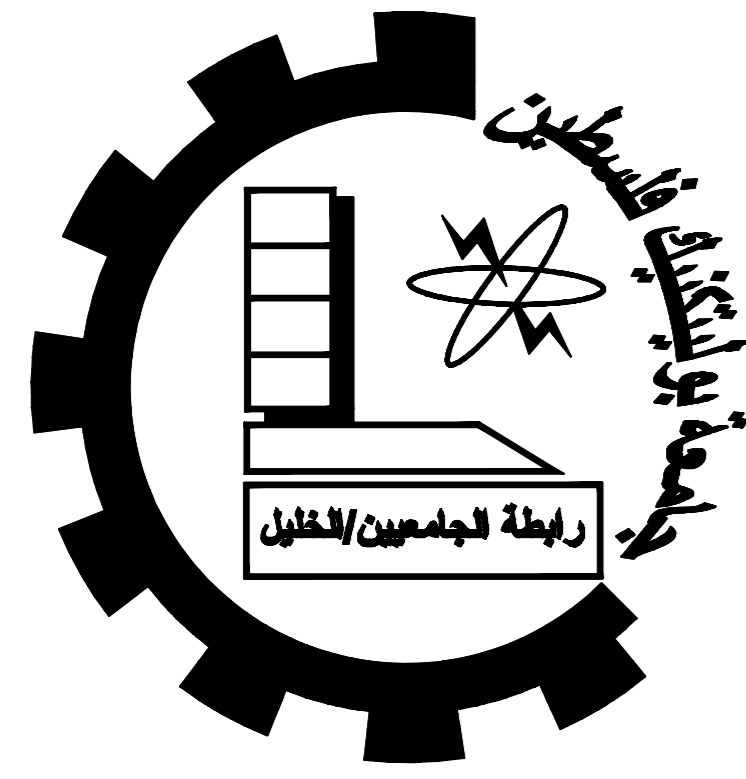


Ø8/20 cm L=106

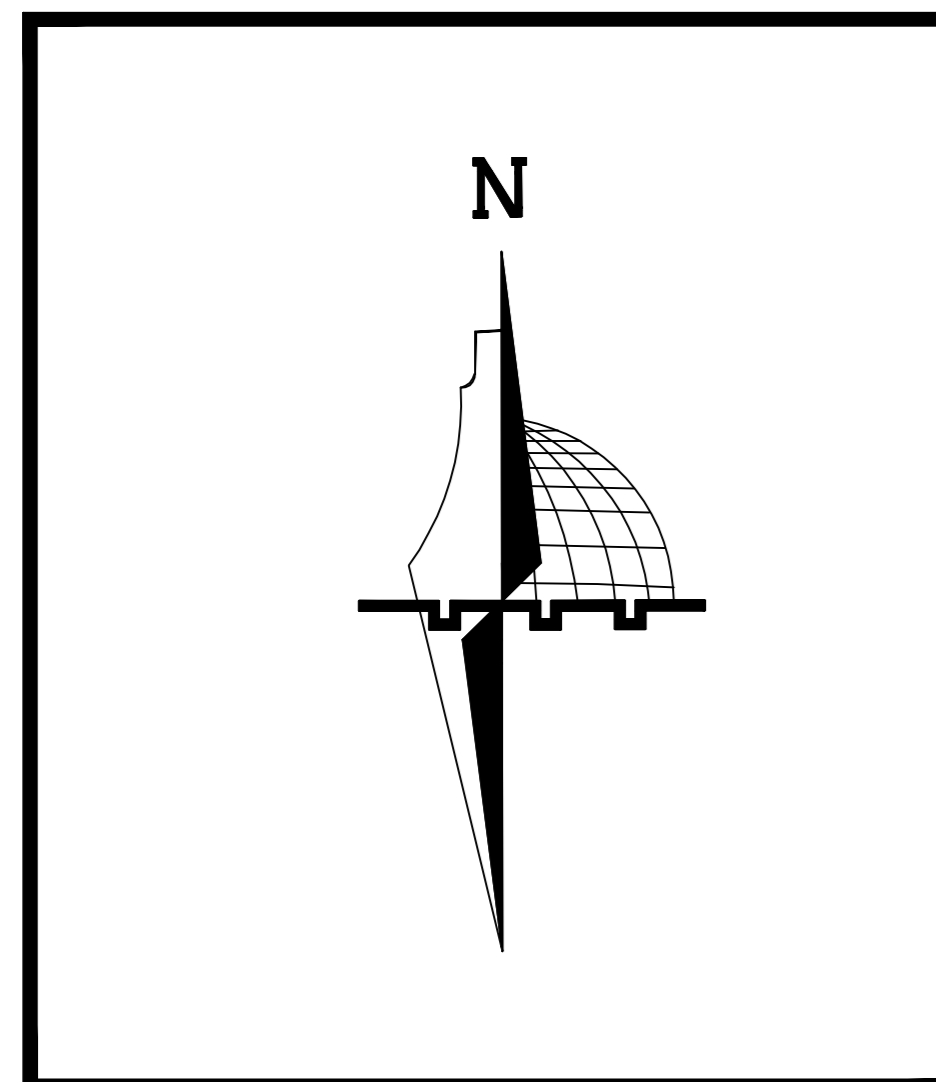


Distribution of Reinforcement of Basement Floor Slab

Scale: 1/100



Dura Municipality Building



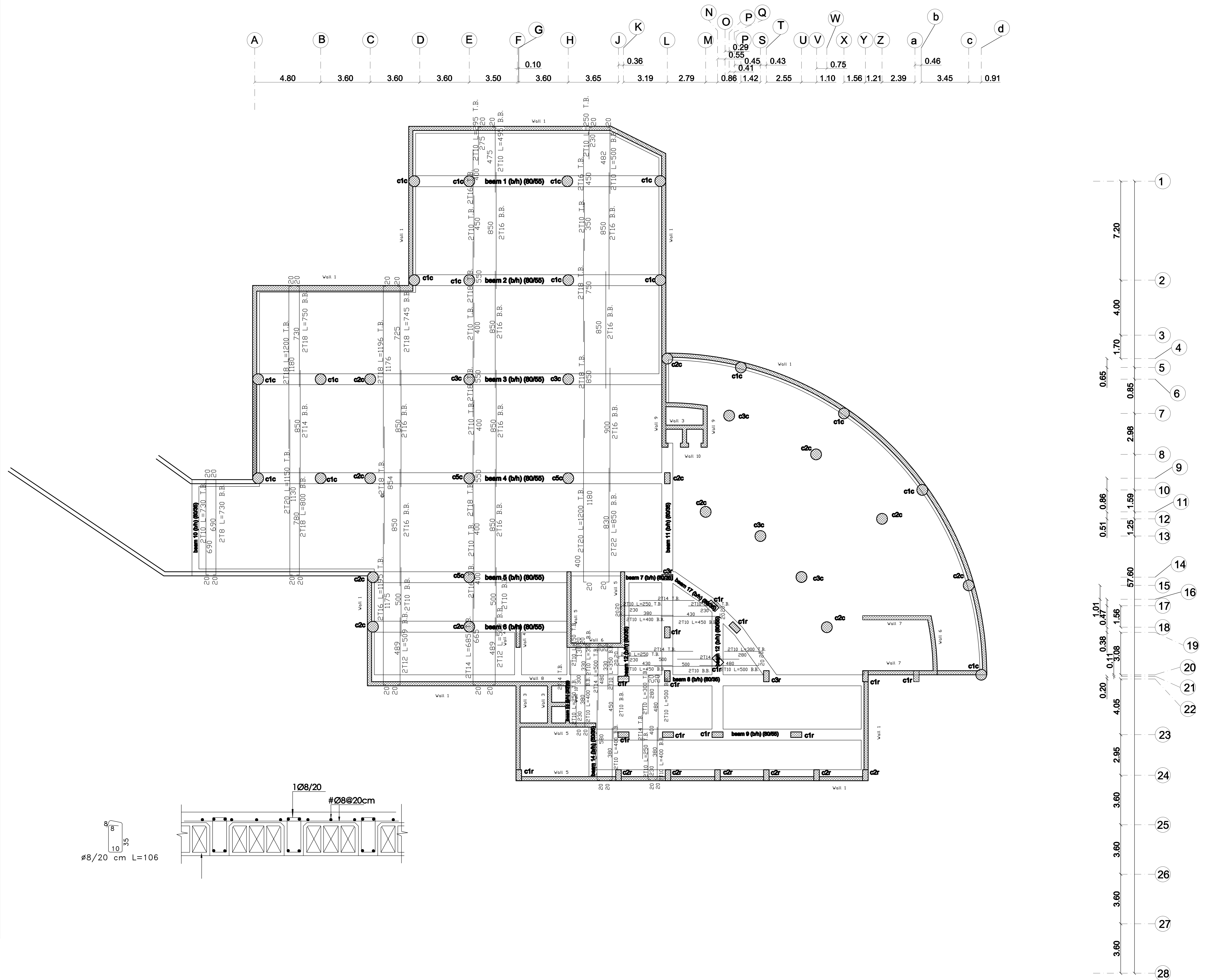
Palestine Polytechnic University
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Civil Engineering

Project Name :
Dura Municipality Building

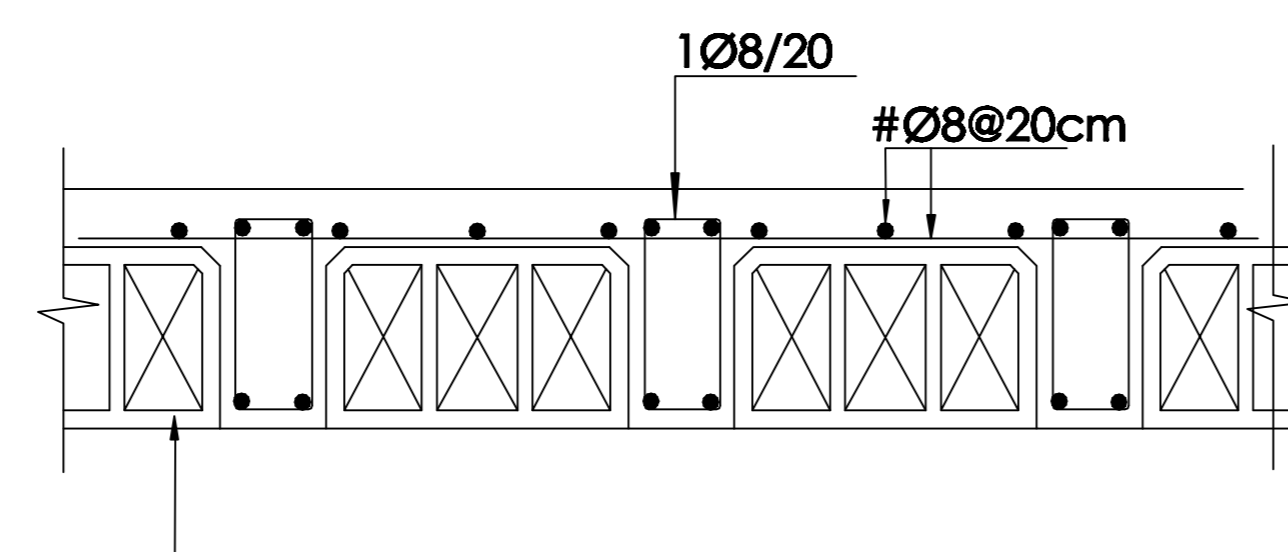
Supervisor :Dr . Maher Amro

Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S7

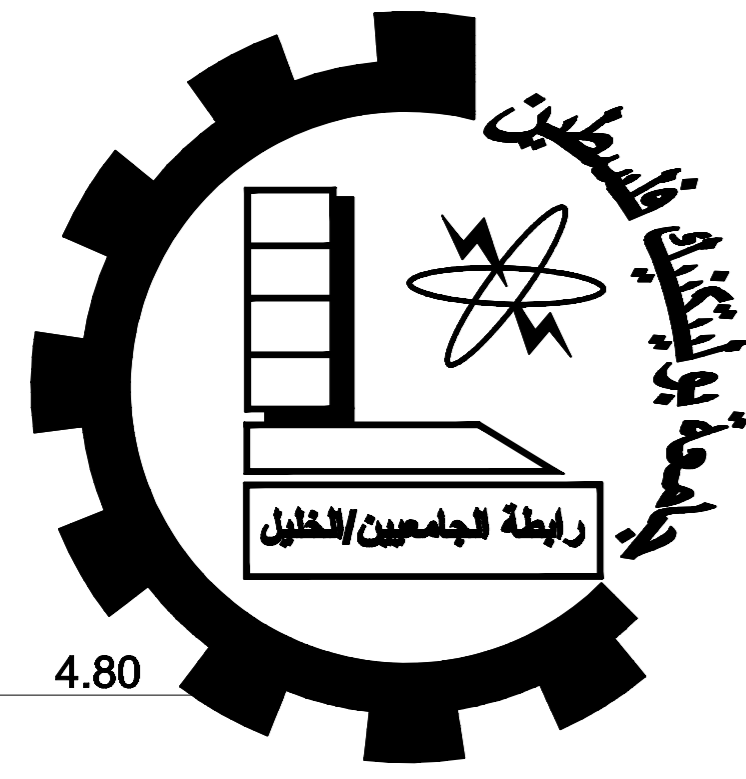


Ø8/20 cm L=106



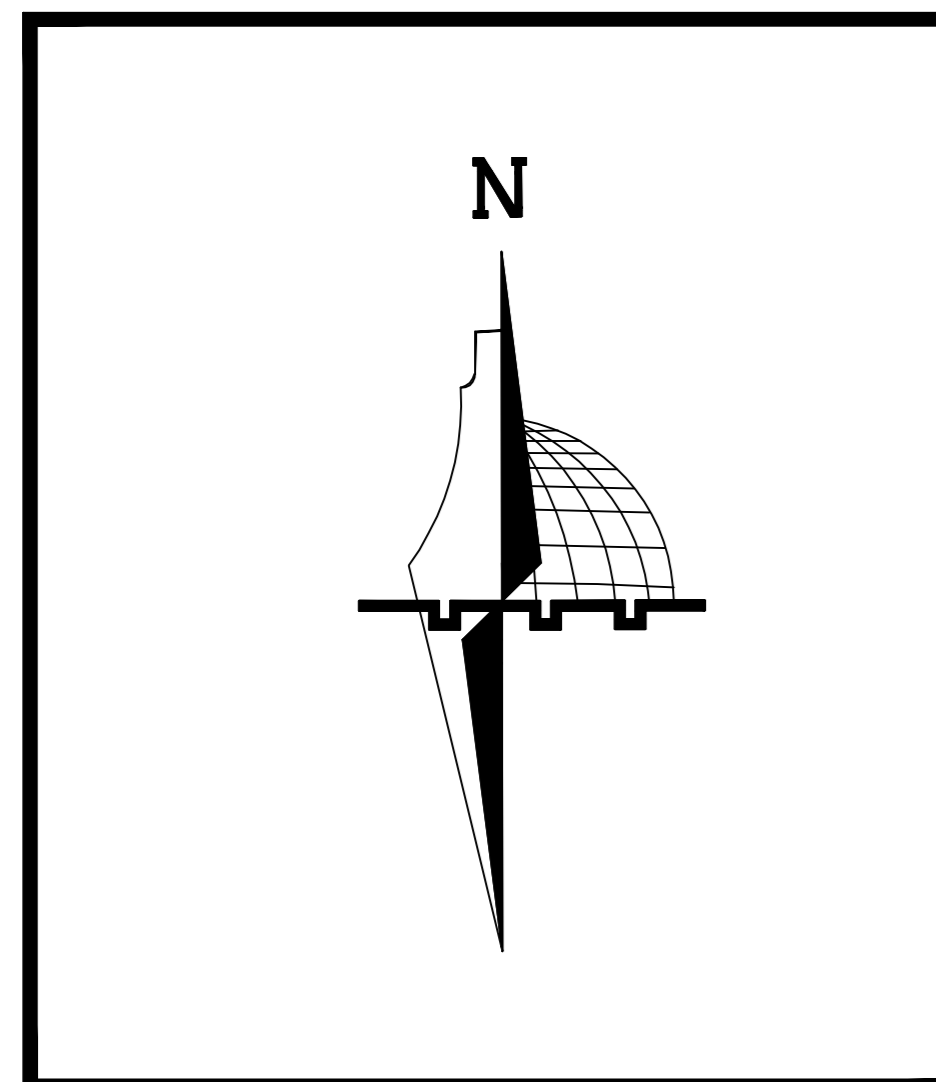
Distribution of Ribs of Ground Floor Slab

Scale:1/100



4.80

Dura Municipality Building



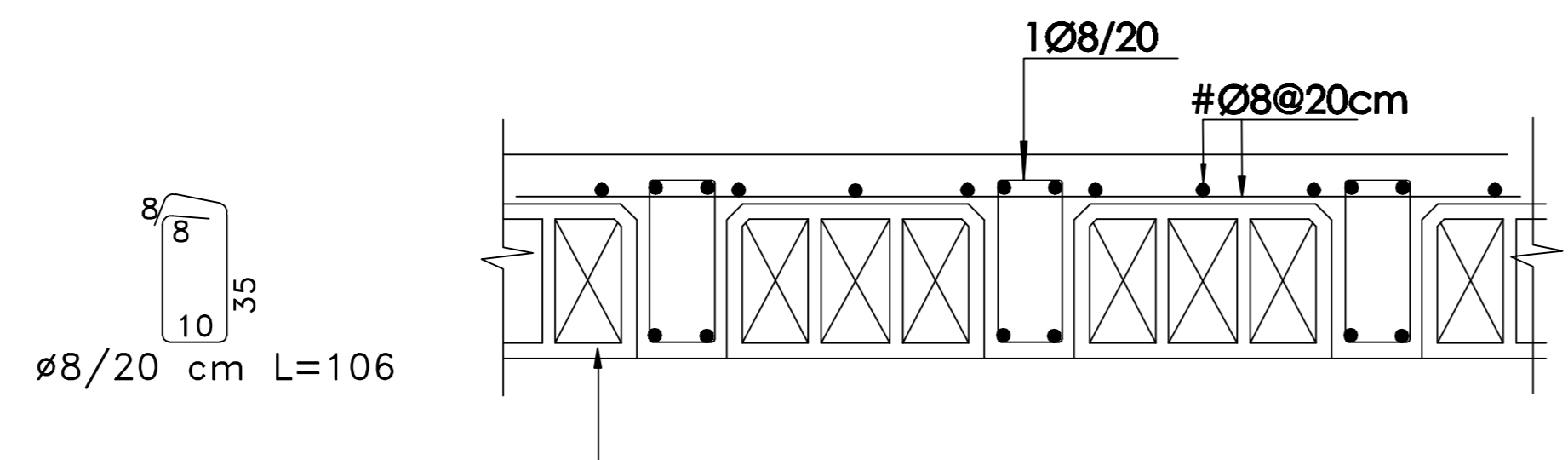
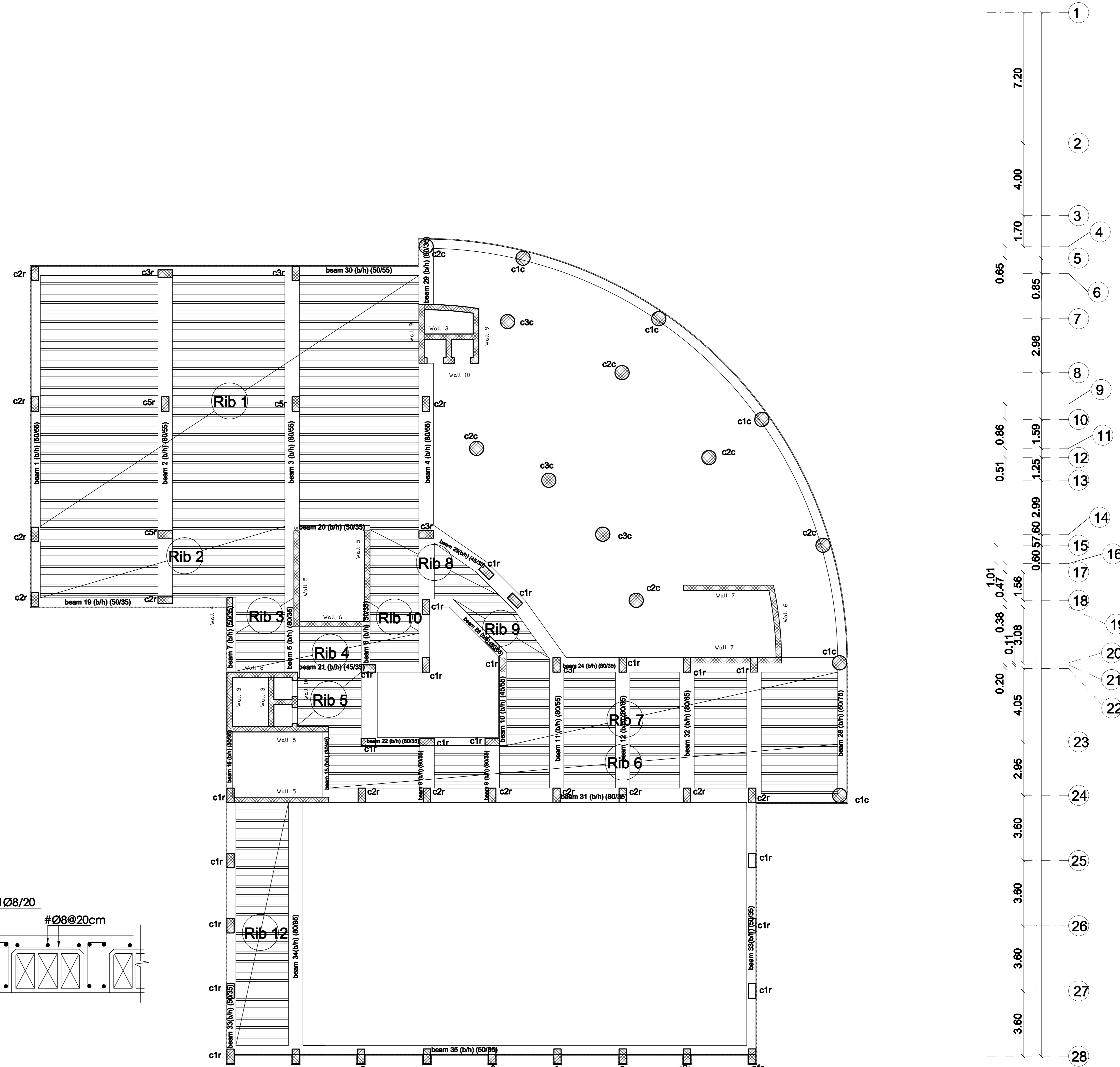
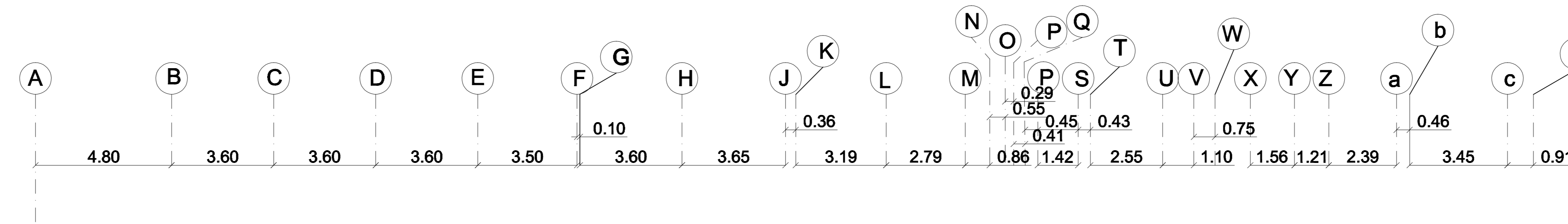
Palestine Polytechnic University
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Civil & Architecture Department
Civil Engineering

Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

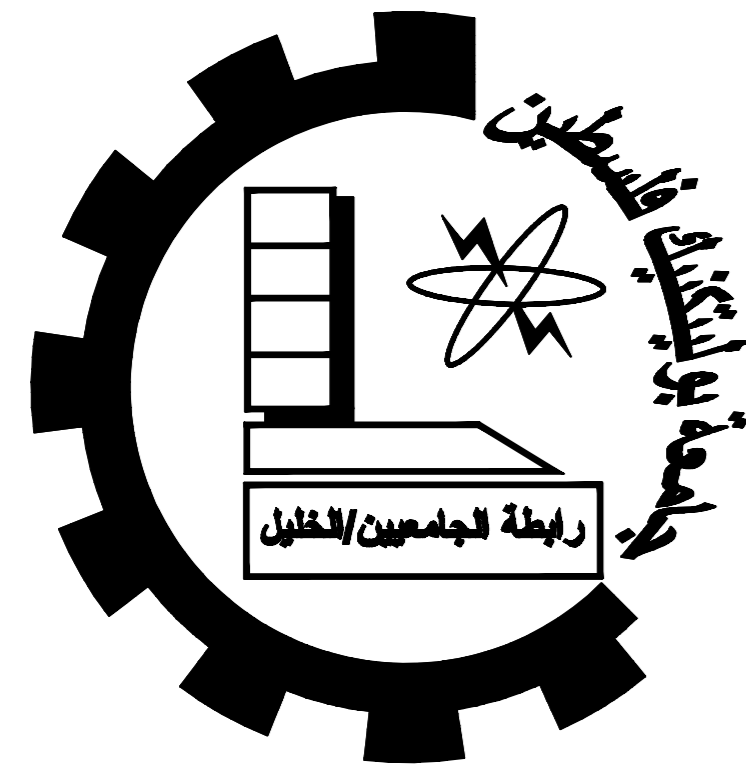
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S8

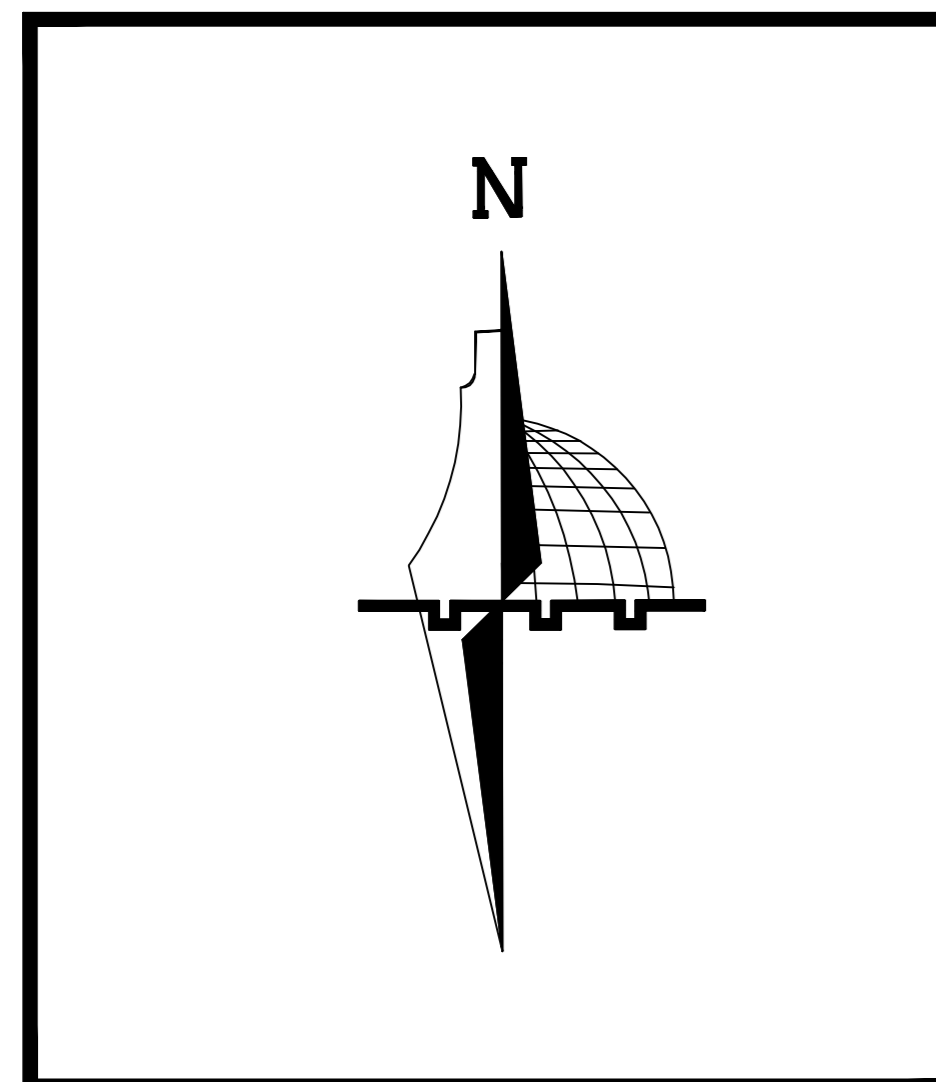


Distribution of Reinforcement of Ground Floor Slab

Scale:1/100



Dura Municipality Building



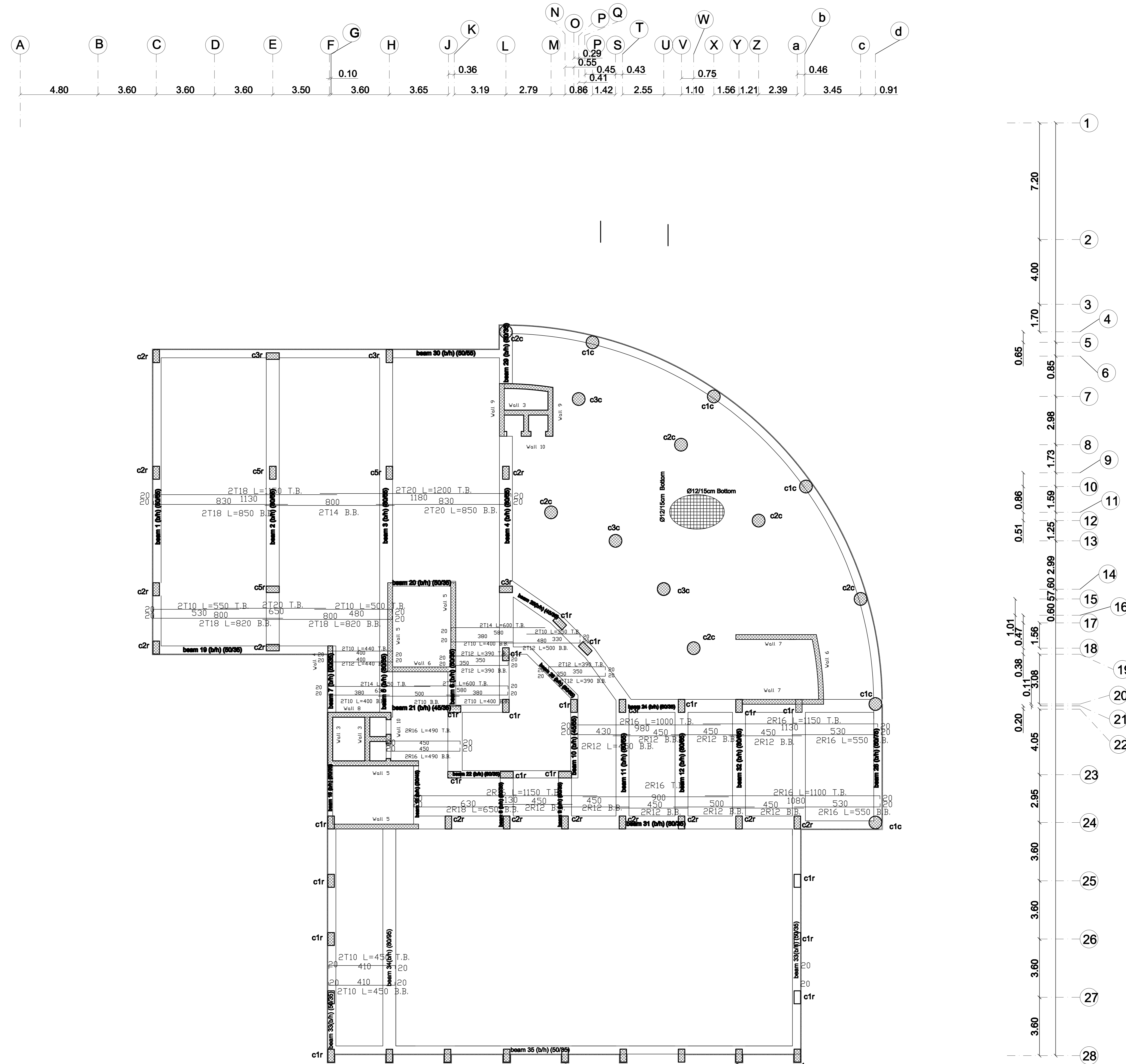
Palestine Polytechnic University
College of Engineering
Civil & Architecture Department
Civil Engineering

Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

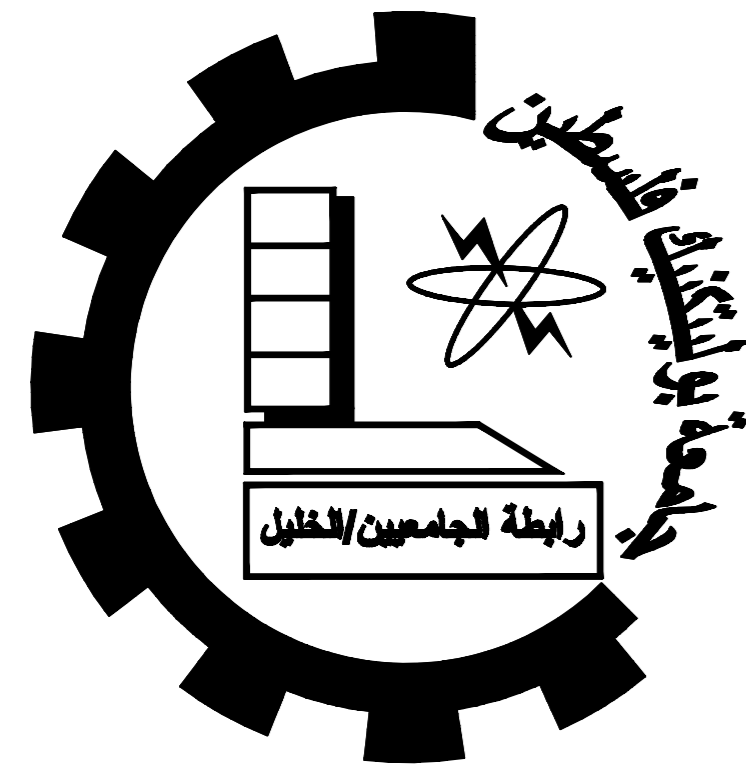
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S9

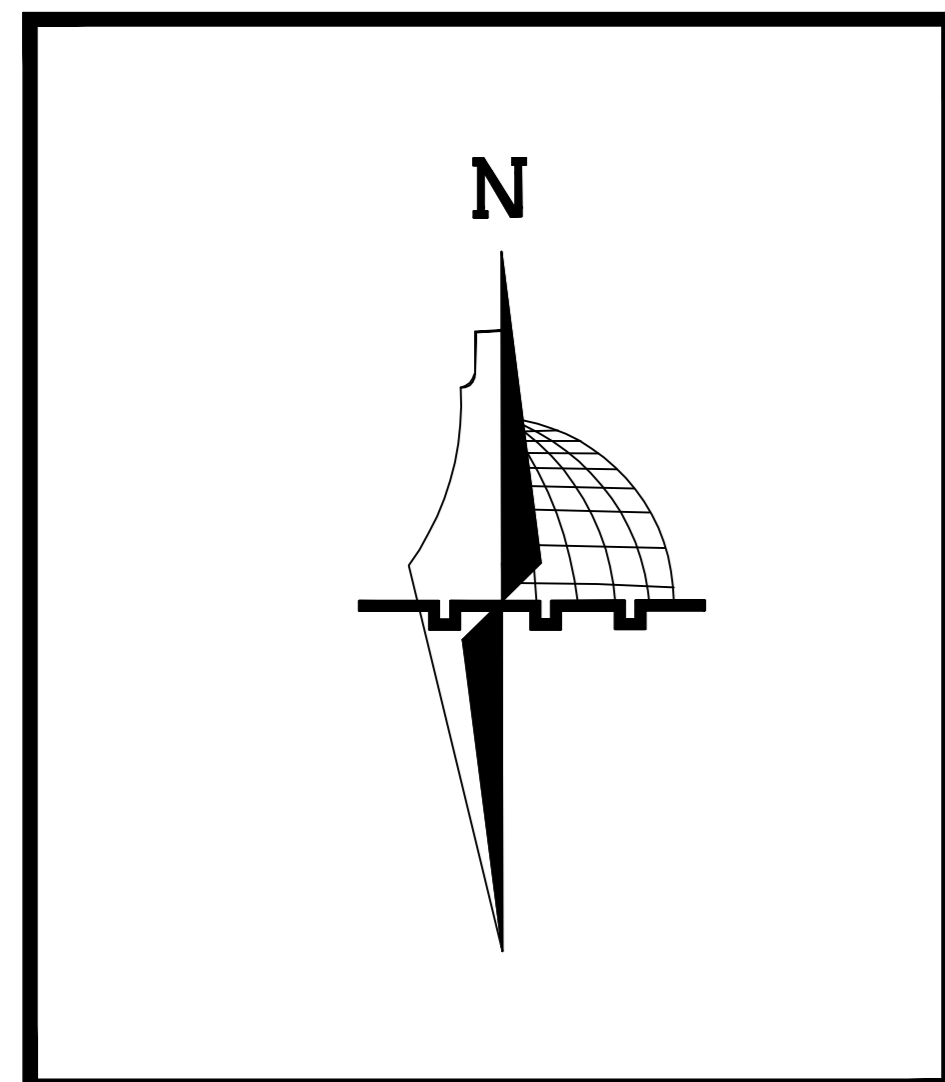


Distribution of Reinforcement of First and Second Floor Slab

Scale:1/100



Dura Municipality Building



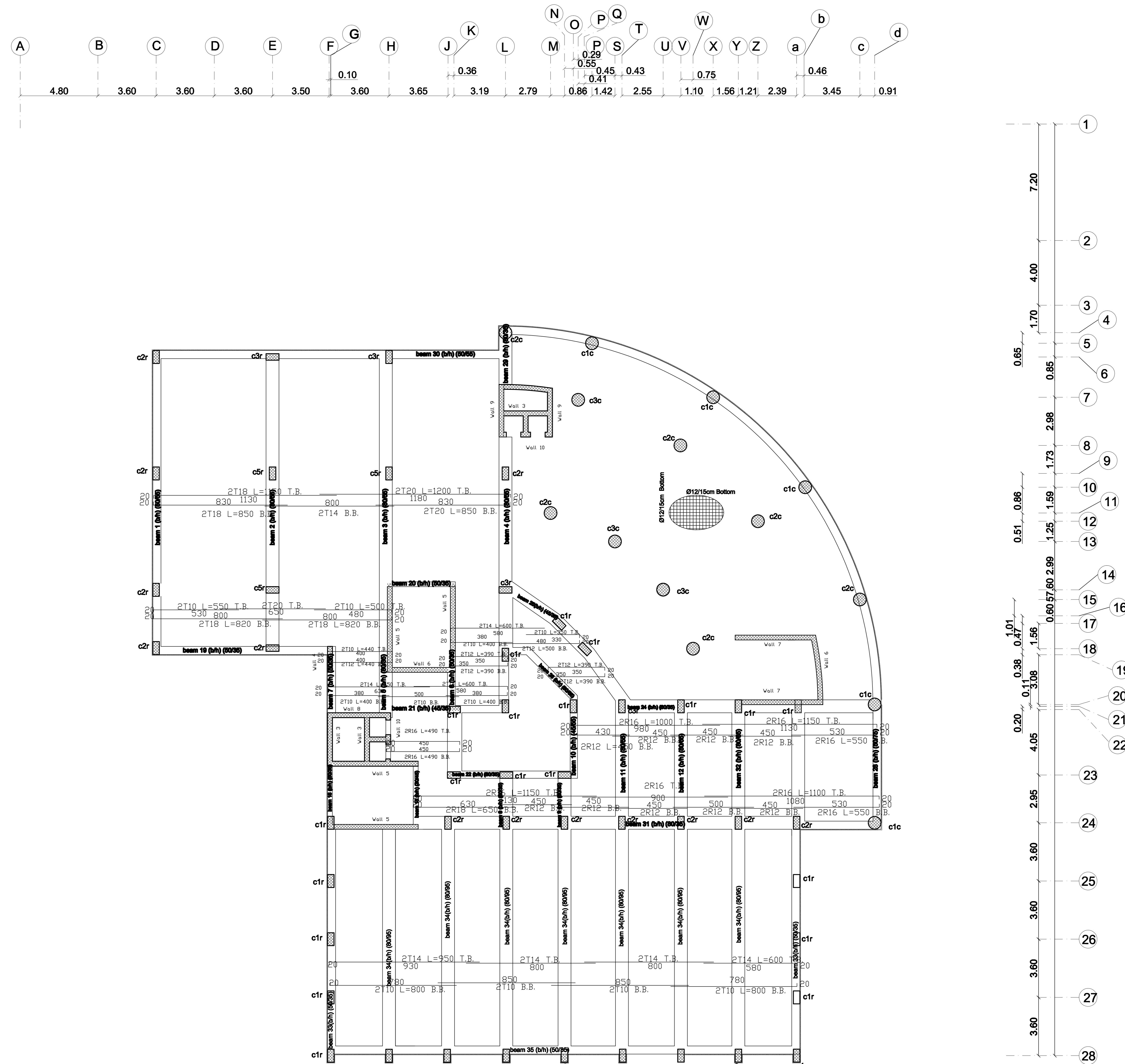
Palestine Polytechnic University
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Civil & Architecture Department
Civil Engineering

Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

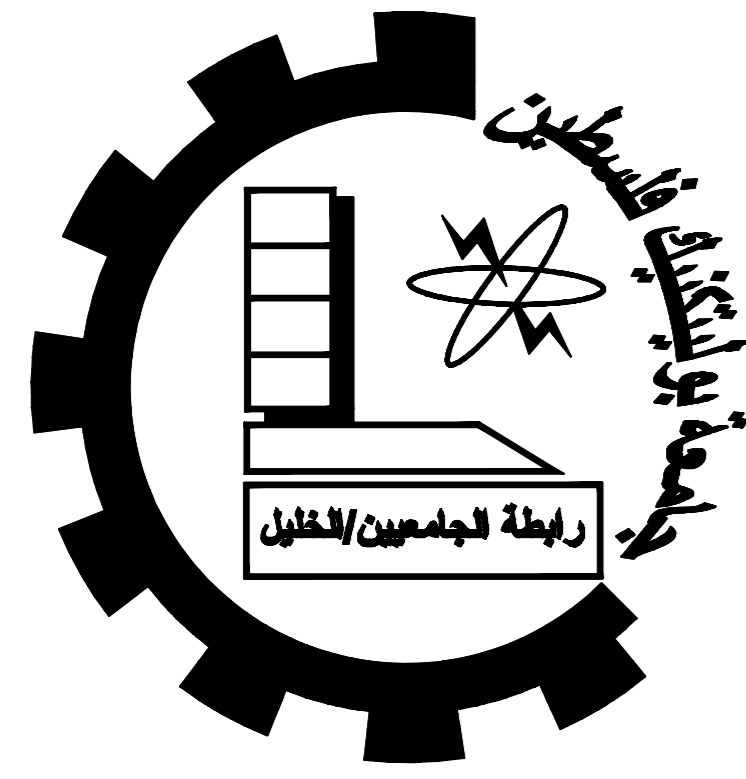
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S11

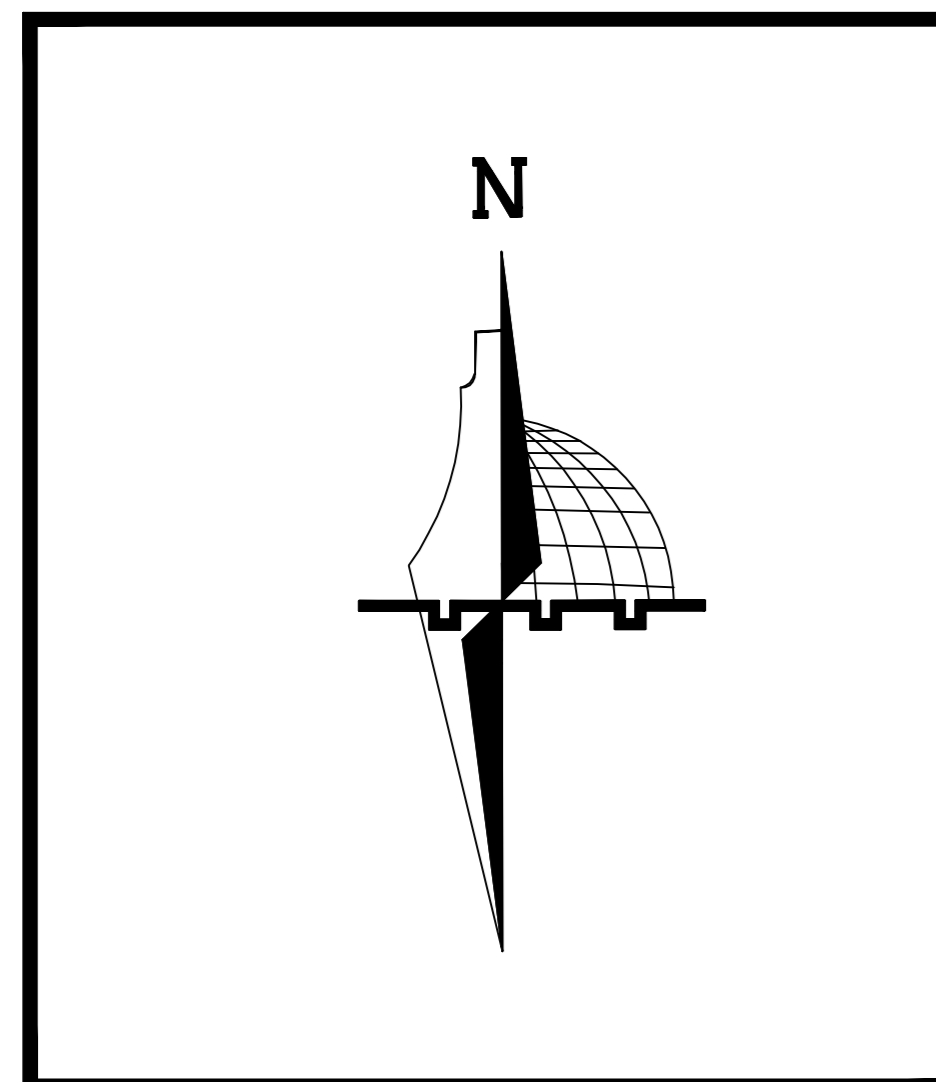


Distribution of Reinforcement of First and Second Floor Slab

Scale:1/100



Dura Municipality Building



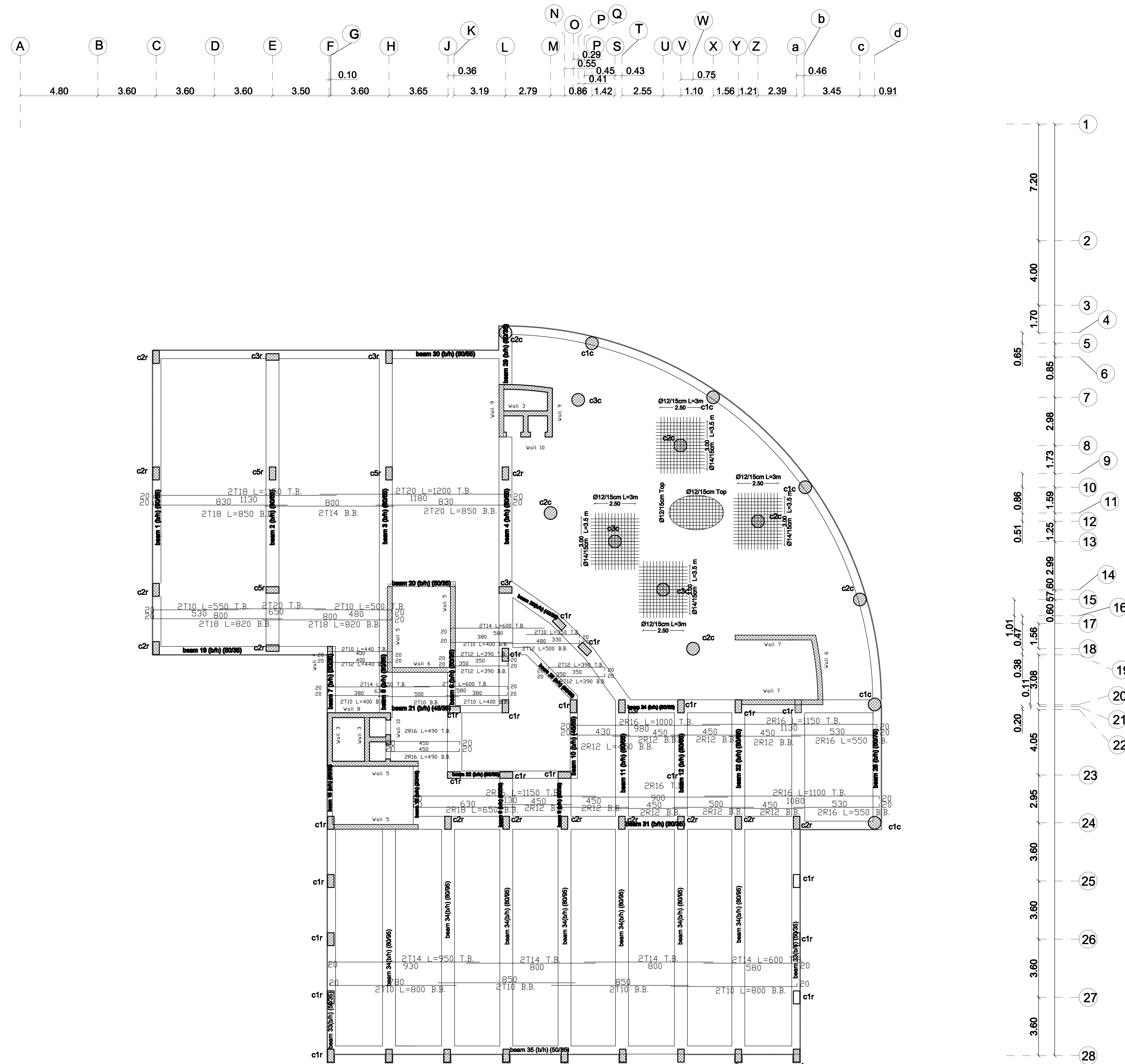
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Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

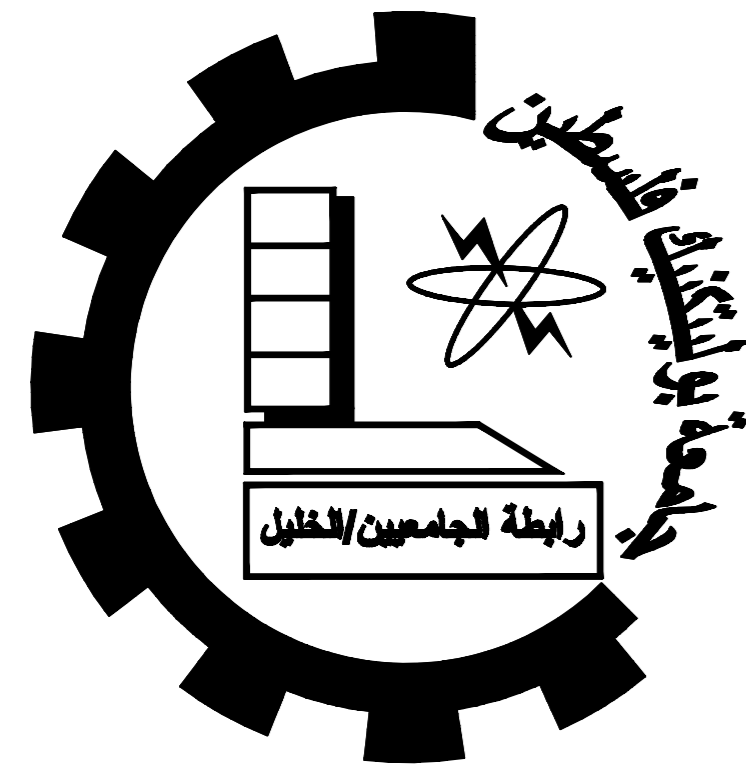
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S12

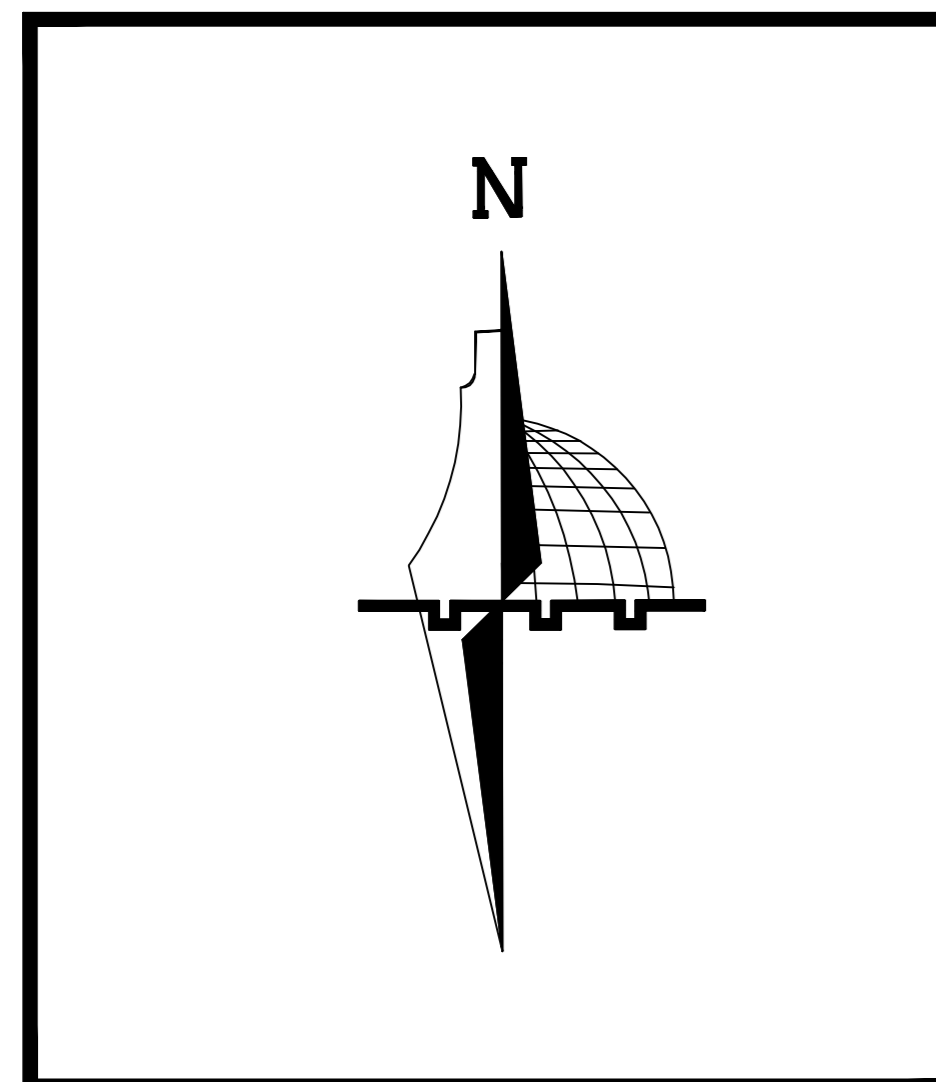


Distribution of Ribs of Third Floor Slab

Scale:1/100



Dura Municipality Building



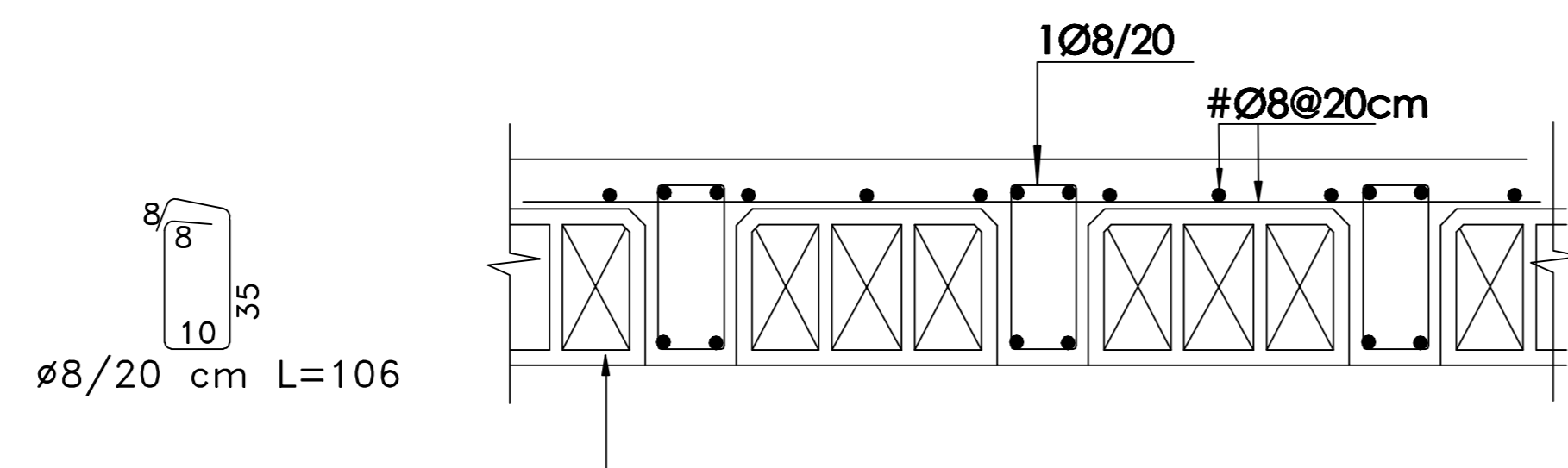
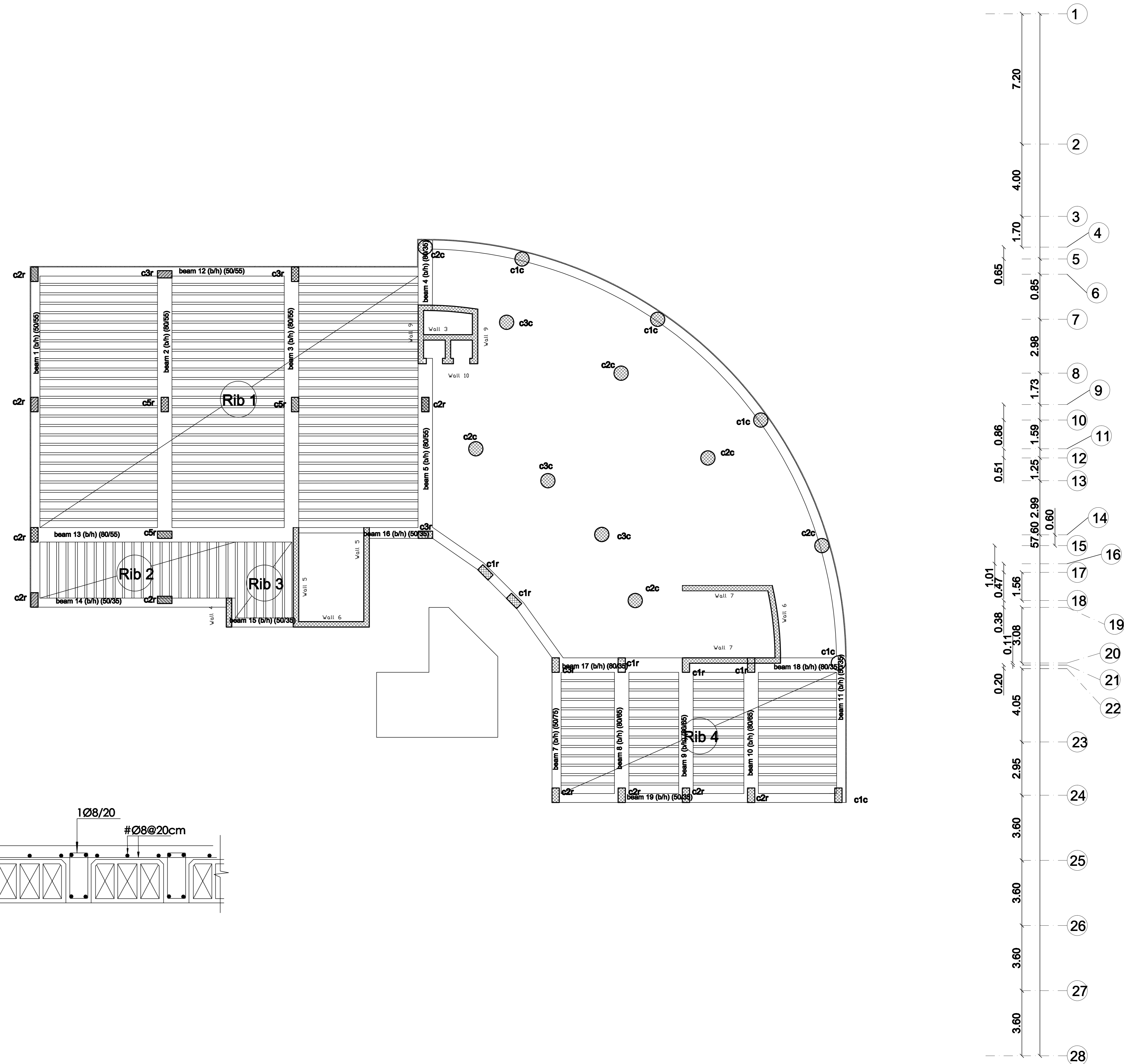
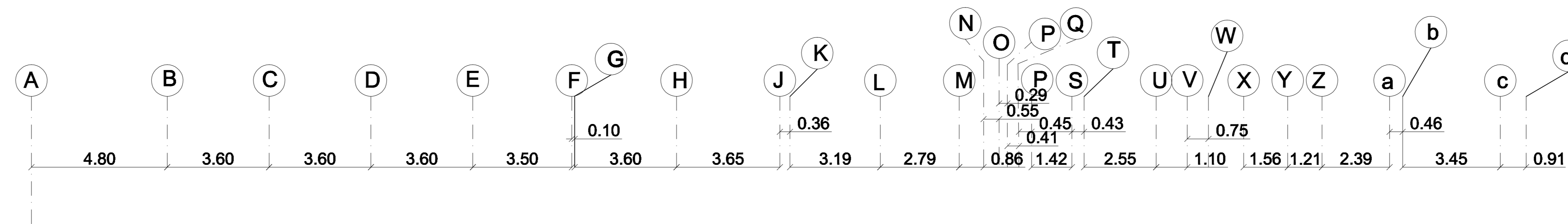
Palestine Polytechnic University
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Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

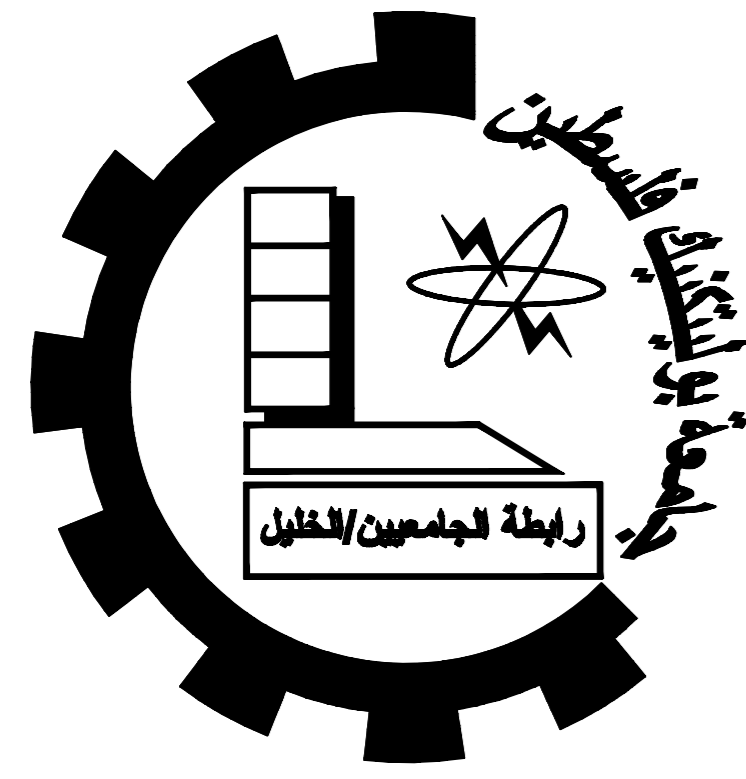
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S13

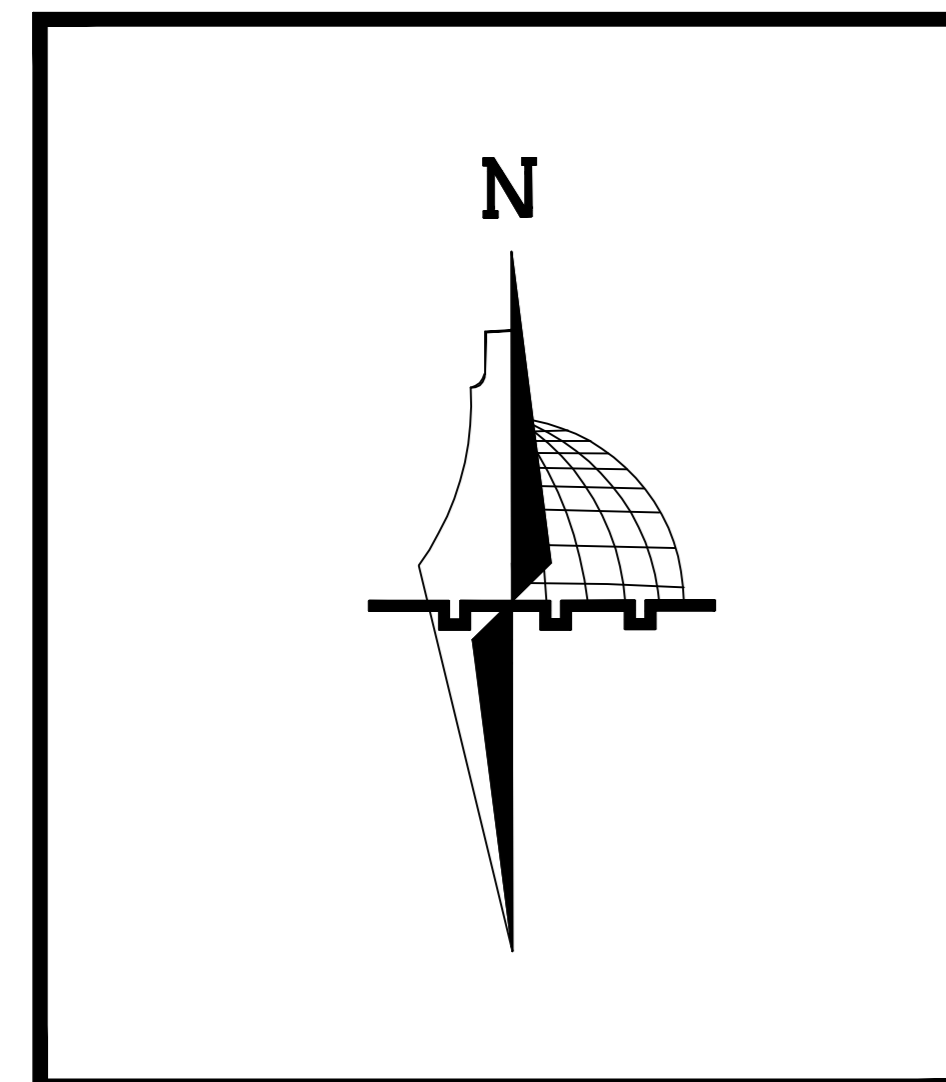


Distribution of Reinforcement of Third Floor Slab

Scale:1/100



Dura Municipality Building



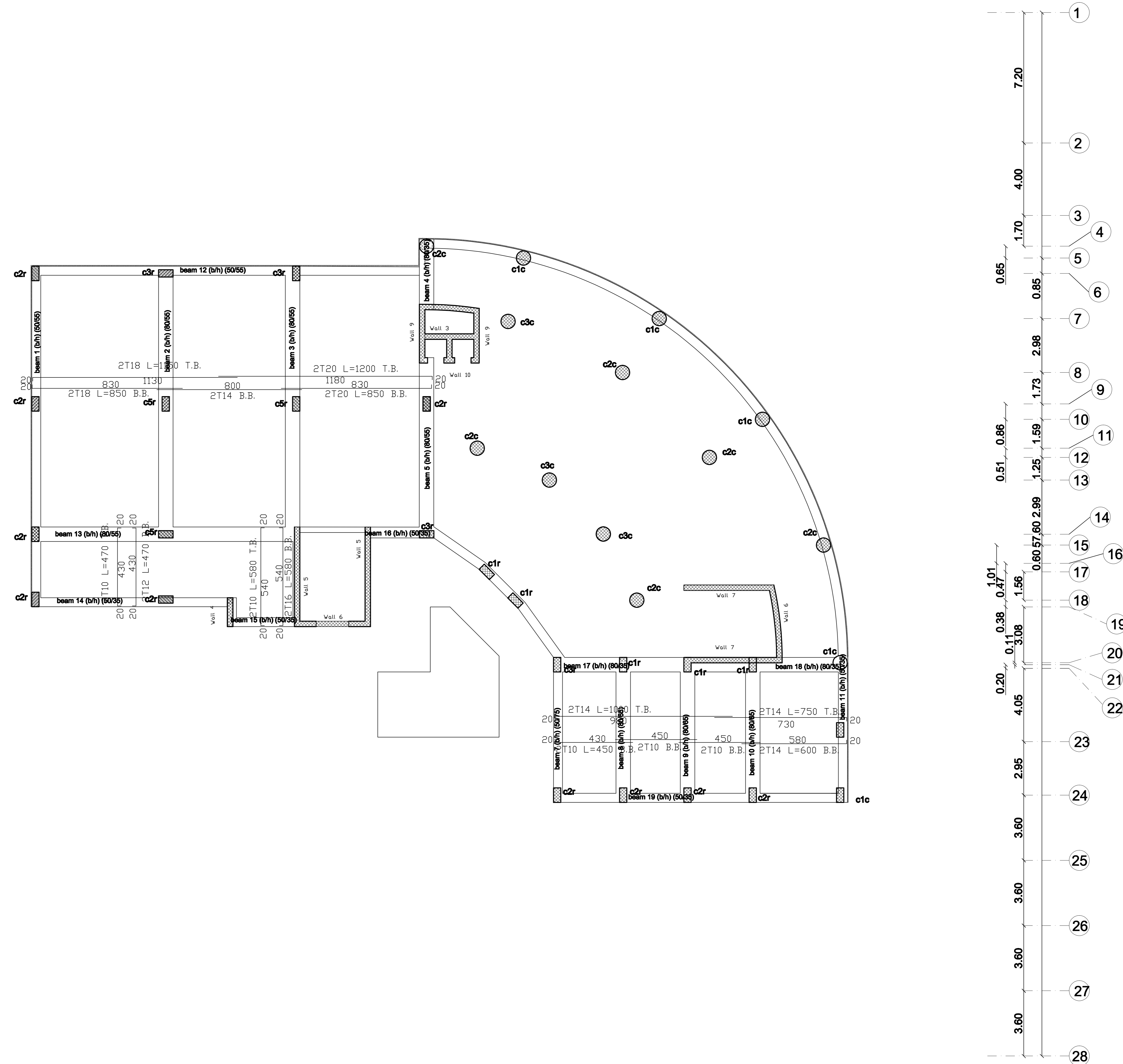
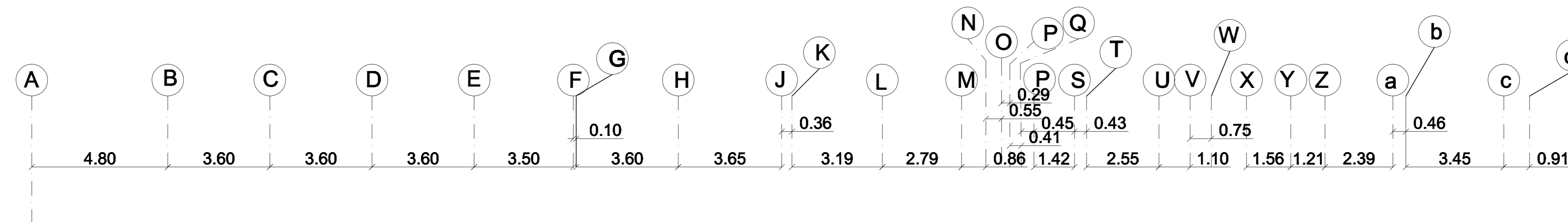
Palestine Polytechnic University
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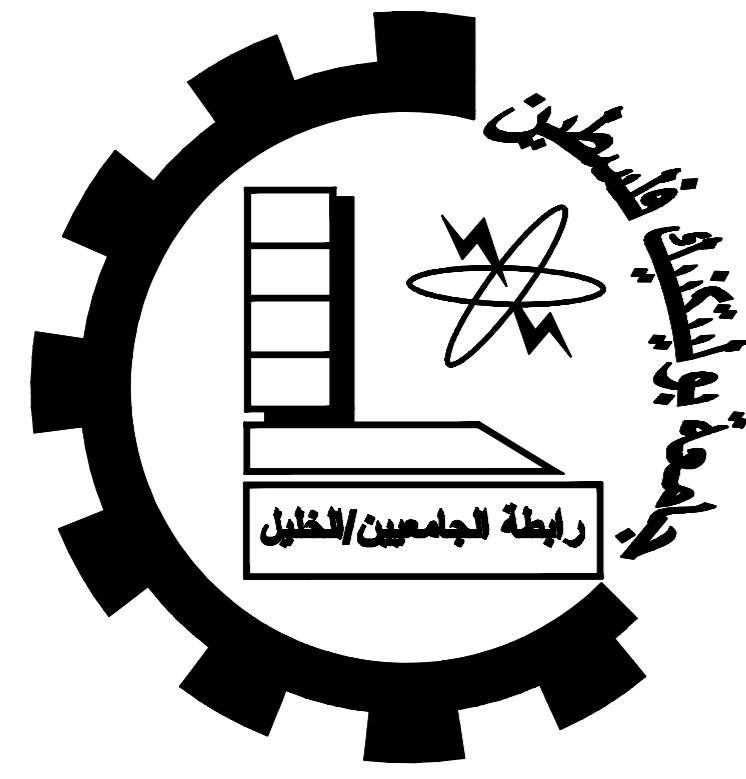
Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

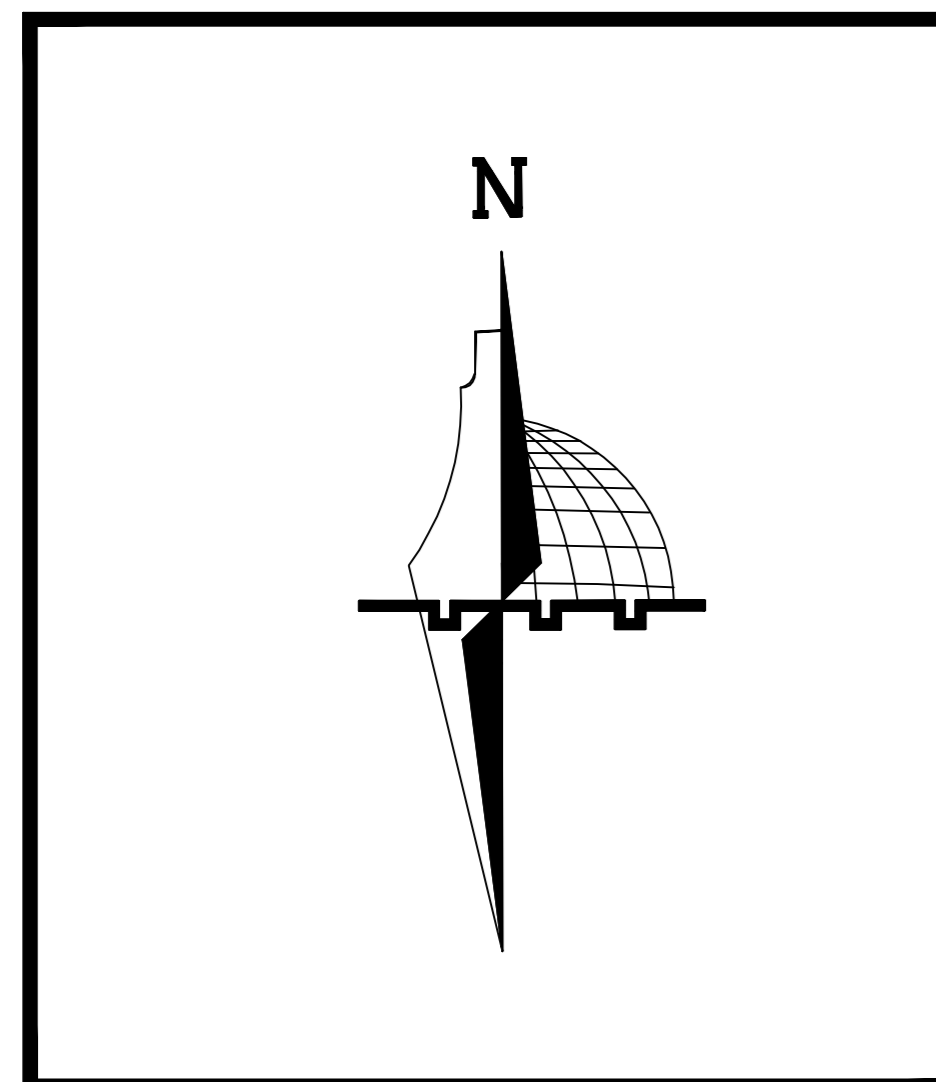
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S14





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Project Name :

Dura Municipality Building

Supervisor :Dr . Maher Amro

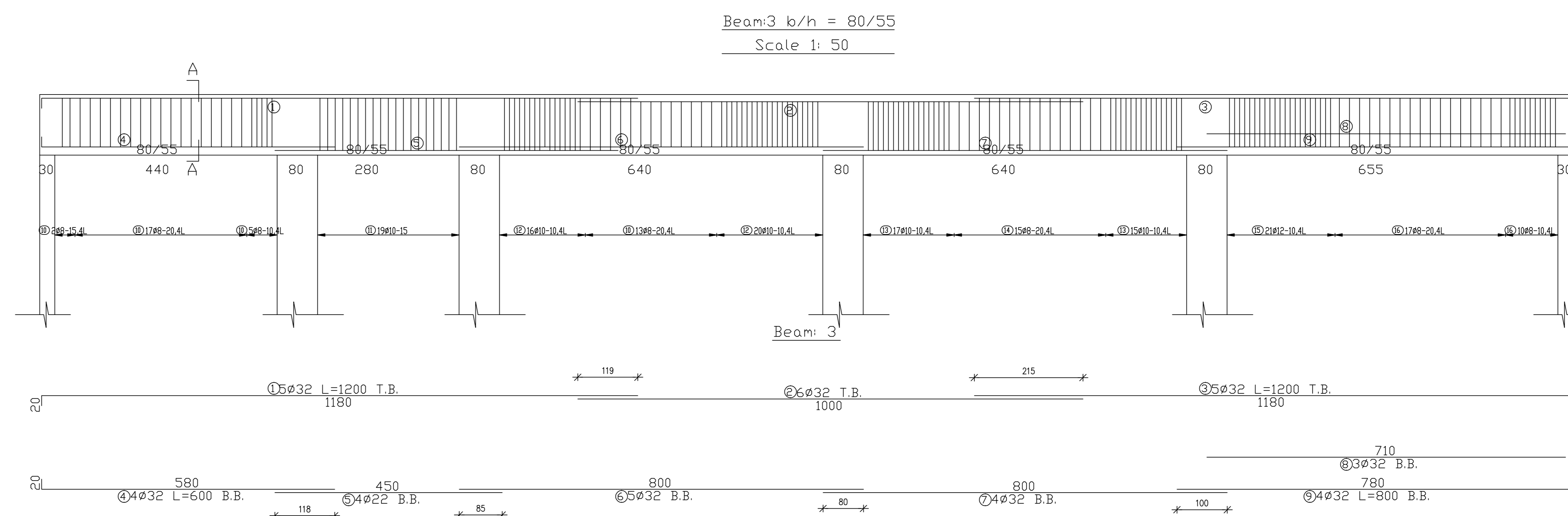
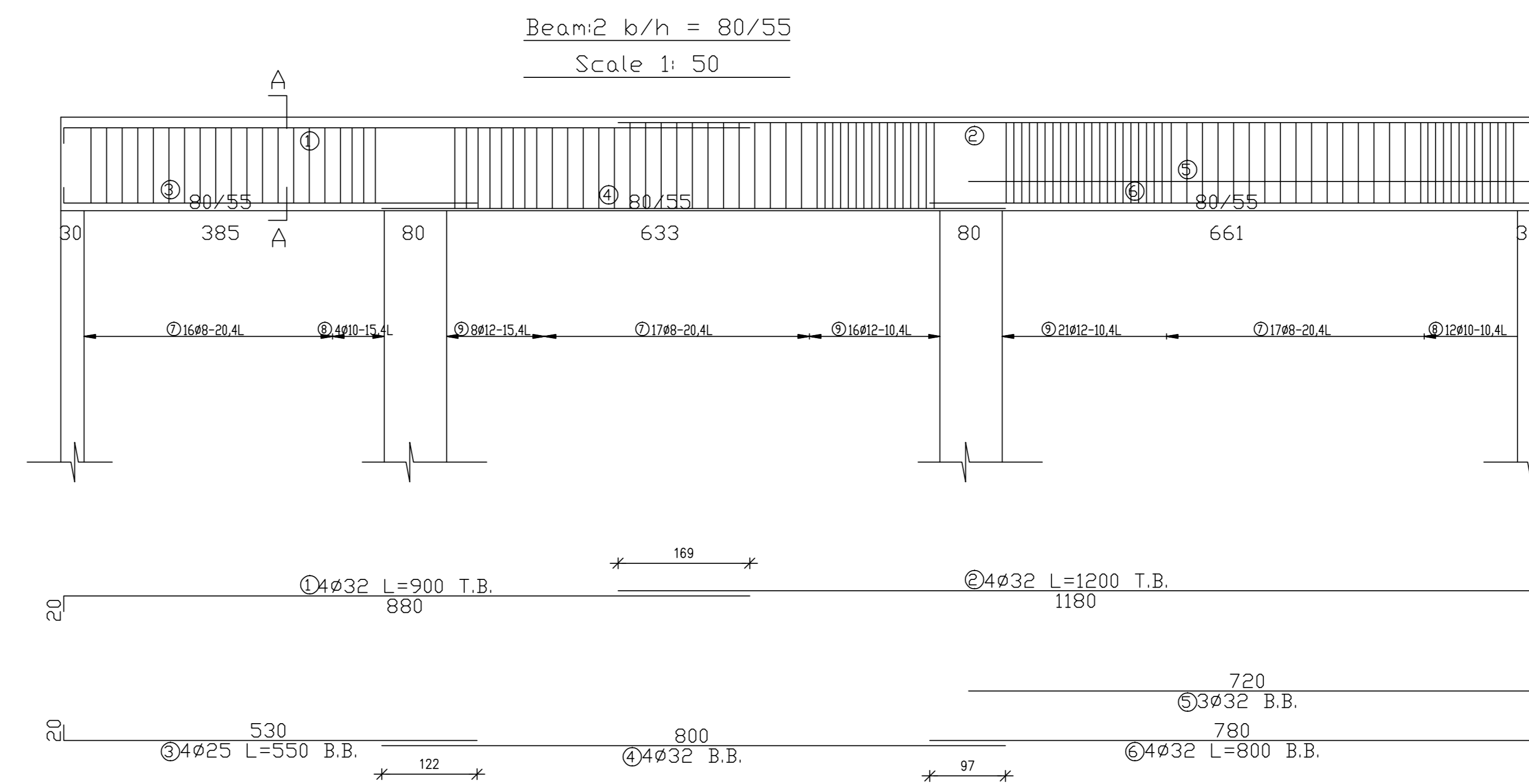
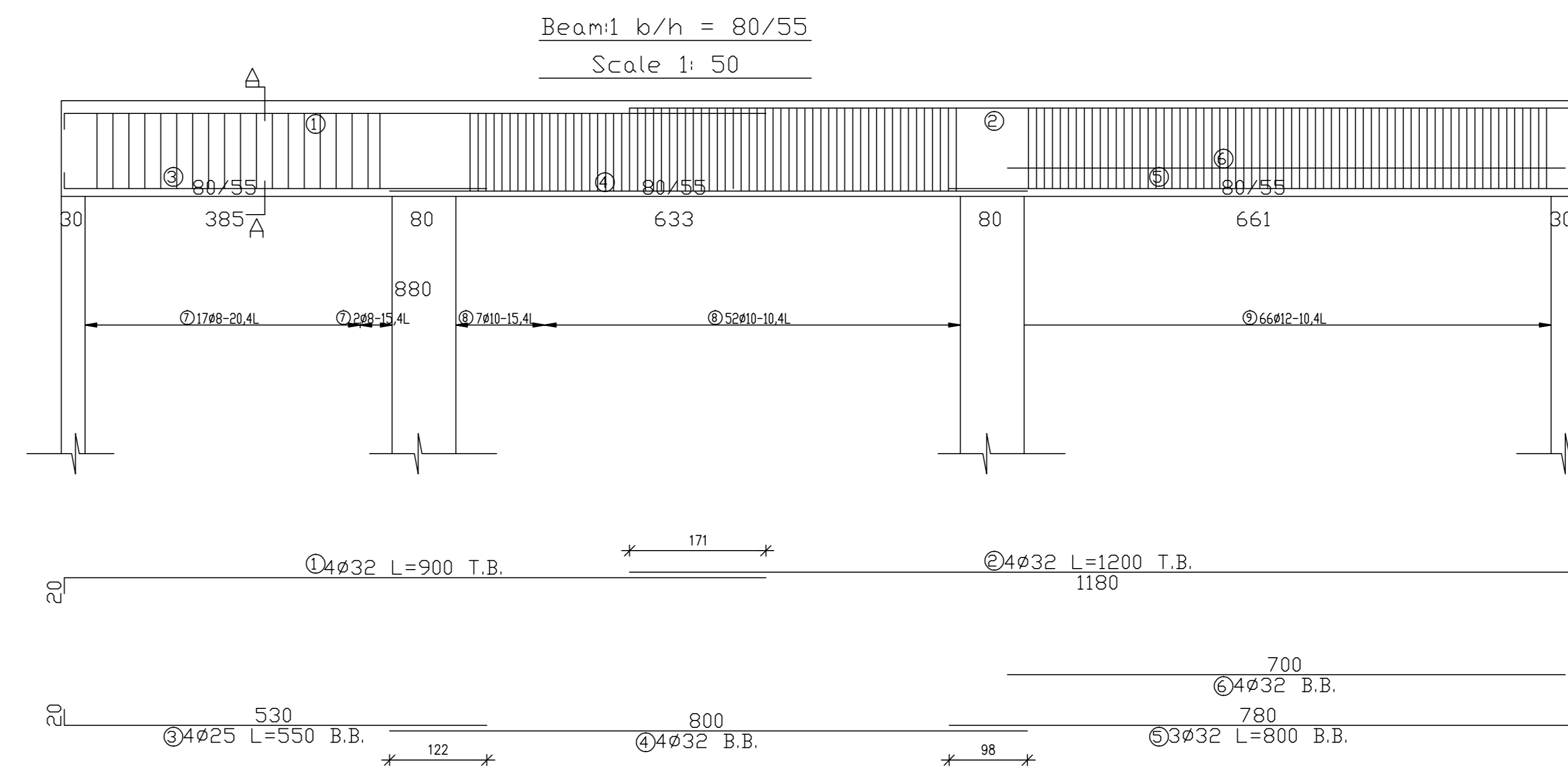
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

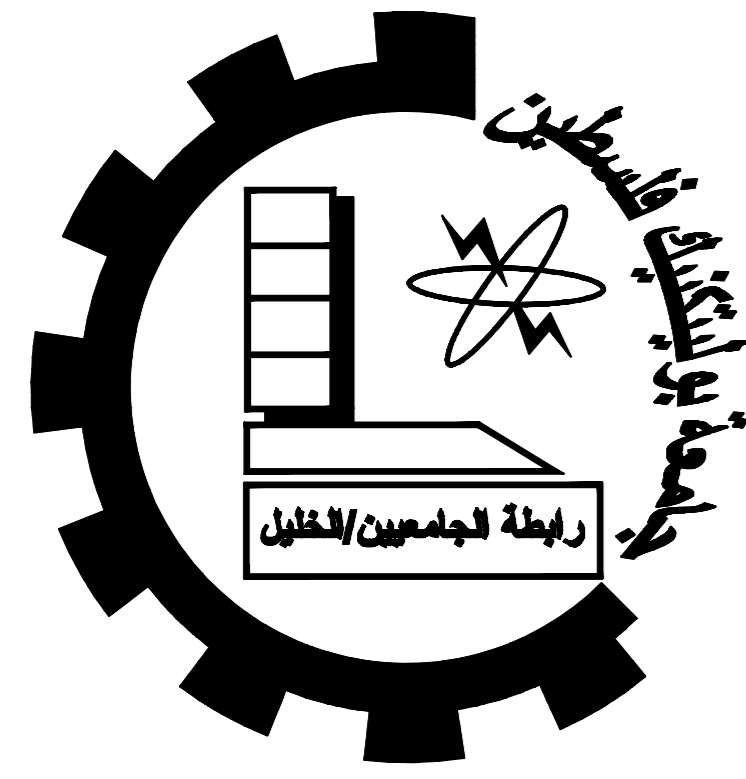
No. : S15

Reinforcement of Beams

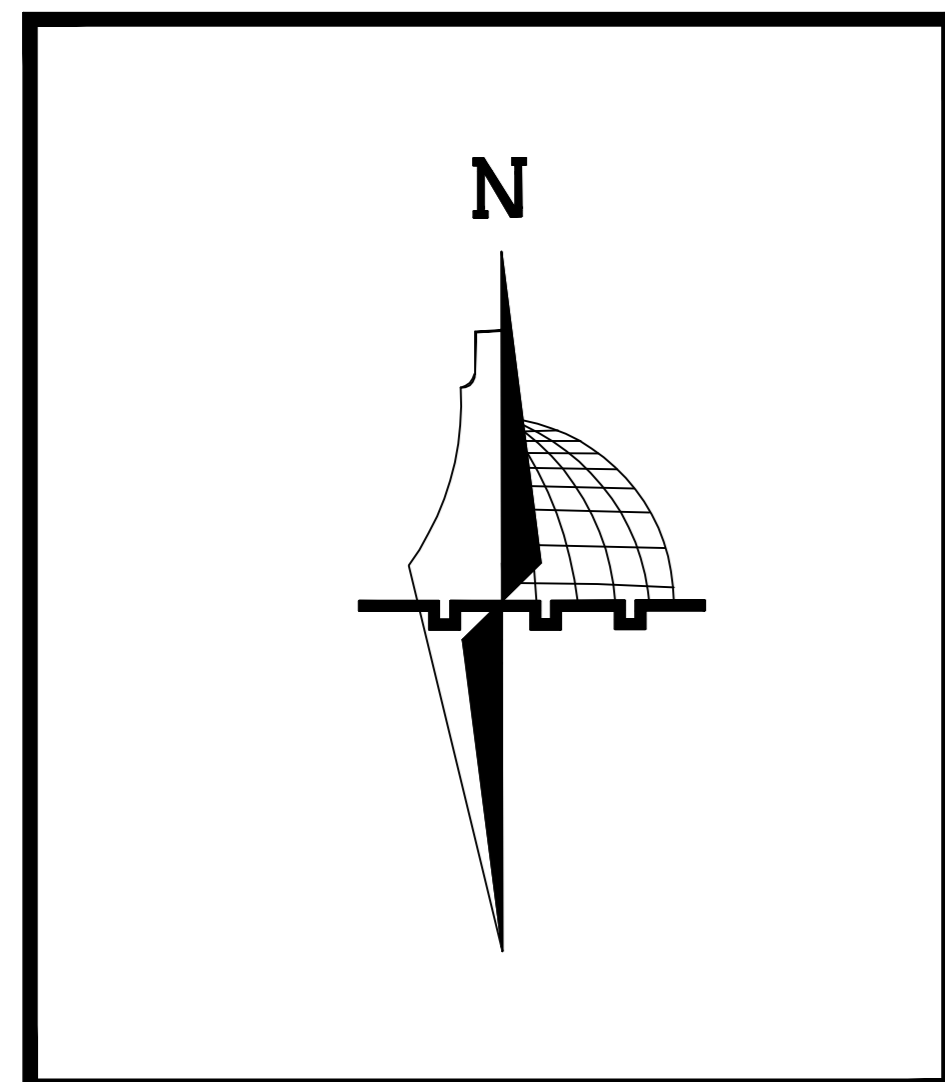
Beams of Basement Floor Slab (1,2,3)

Scale:1/100





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Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

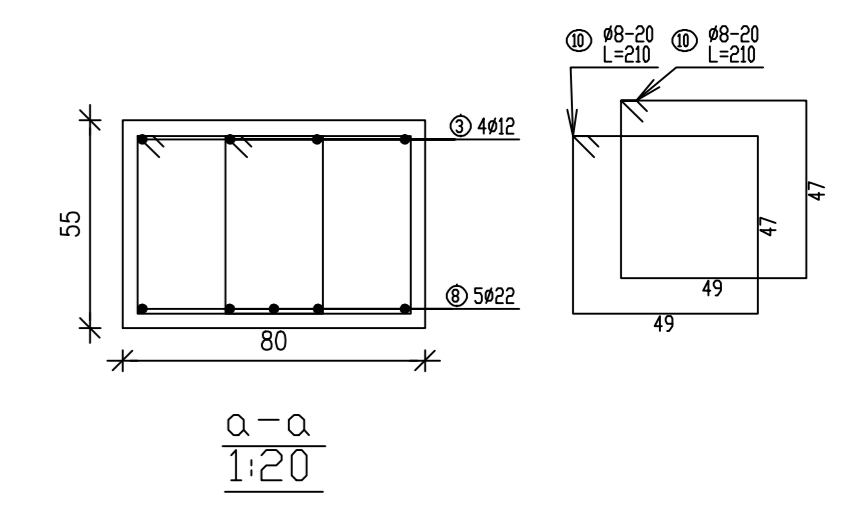
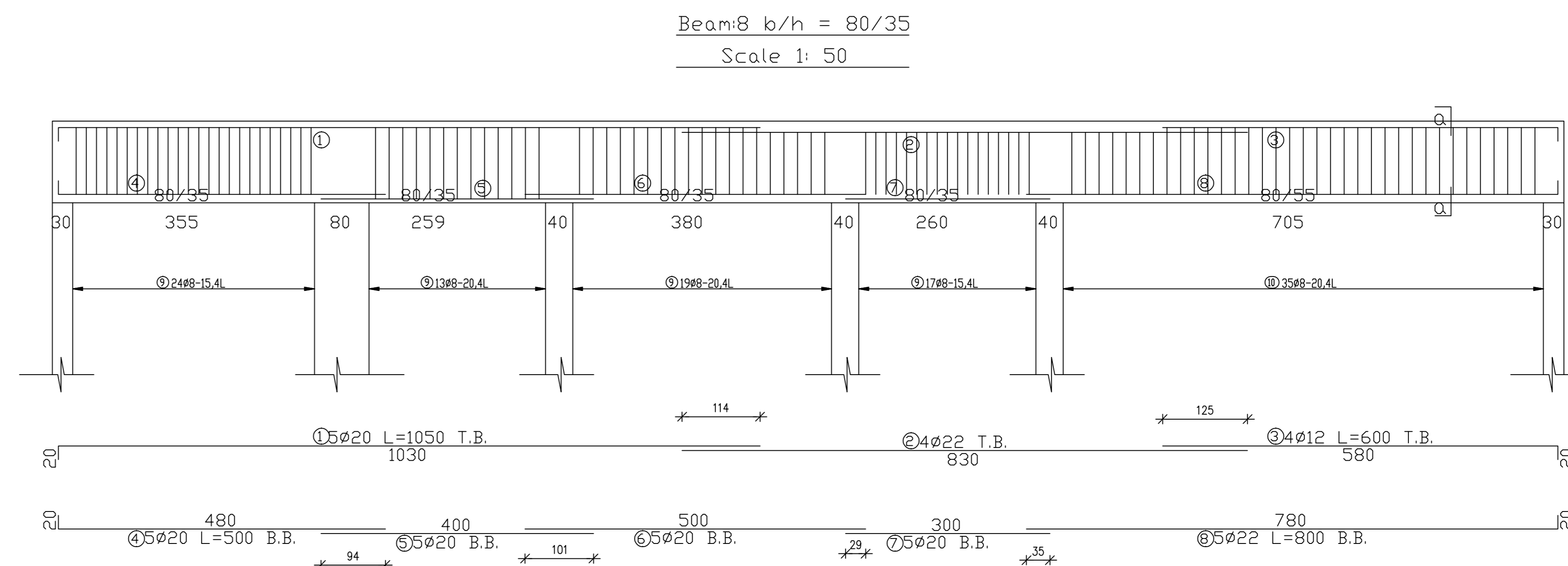
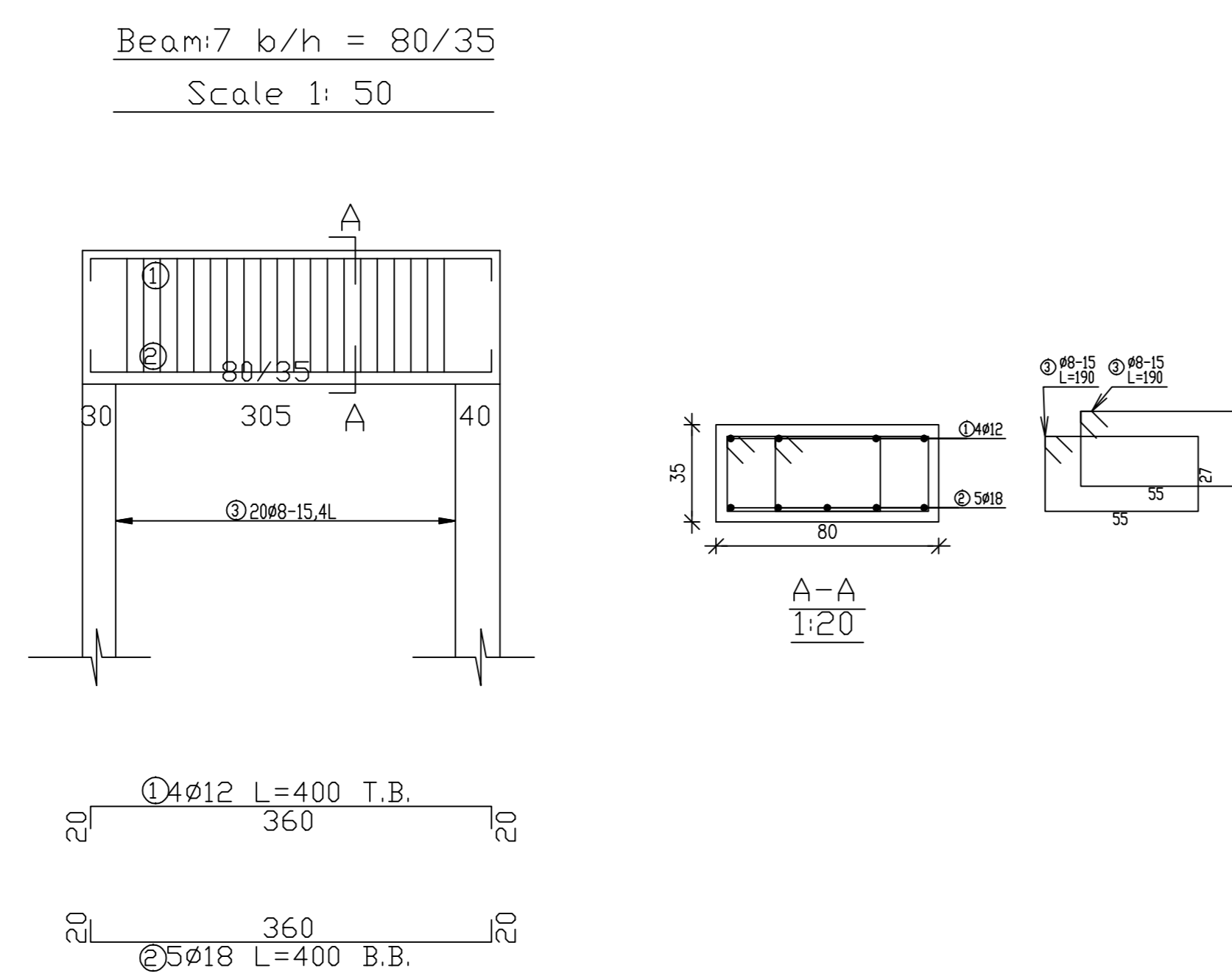
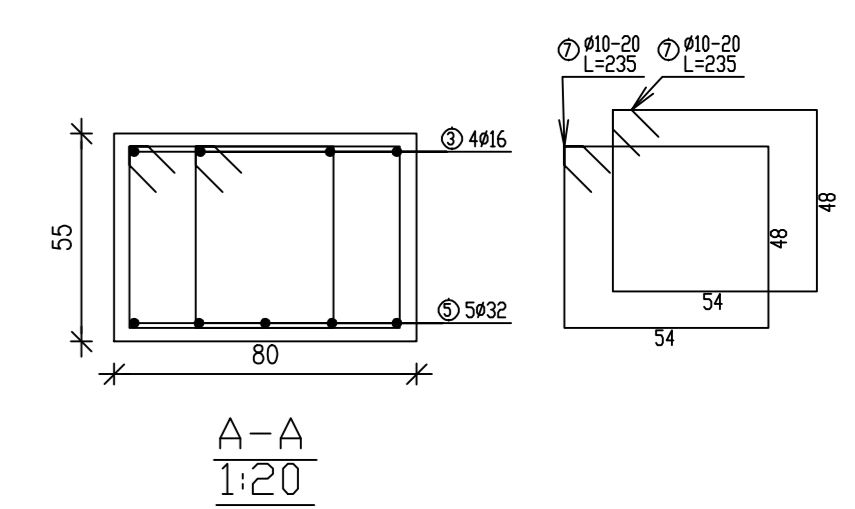
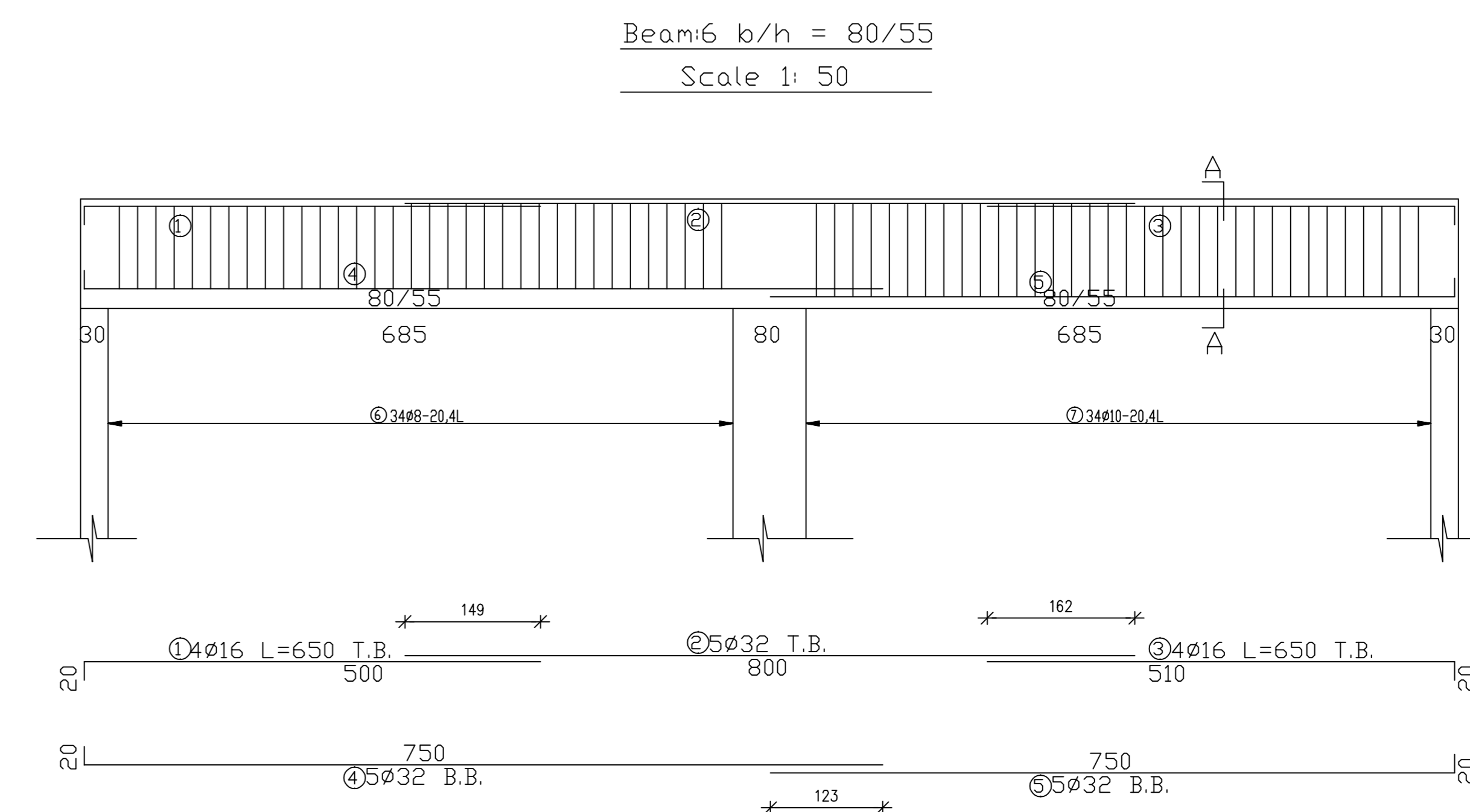
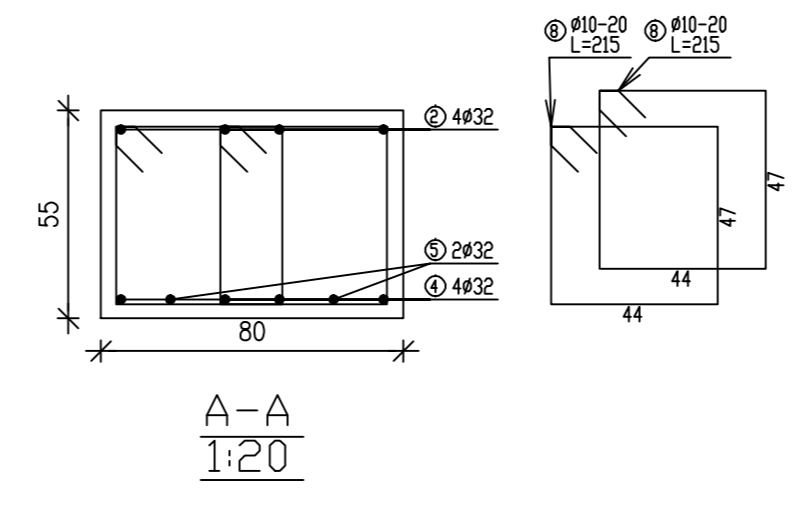
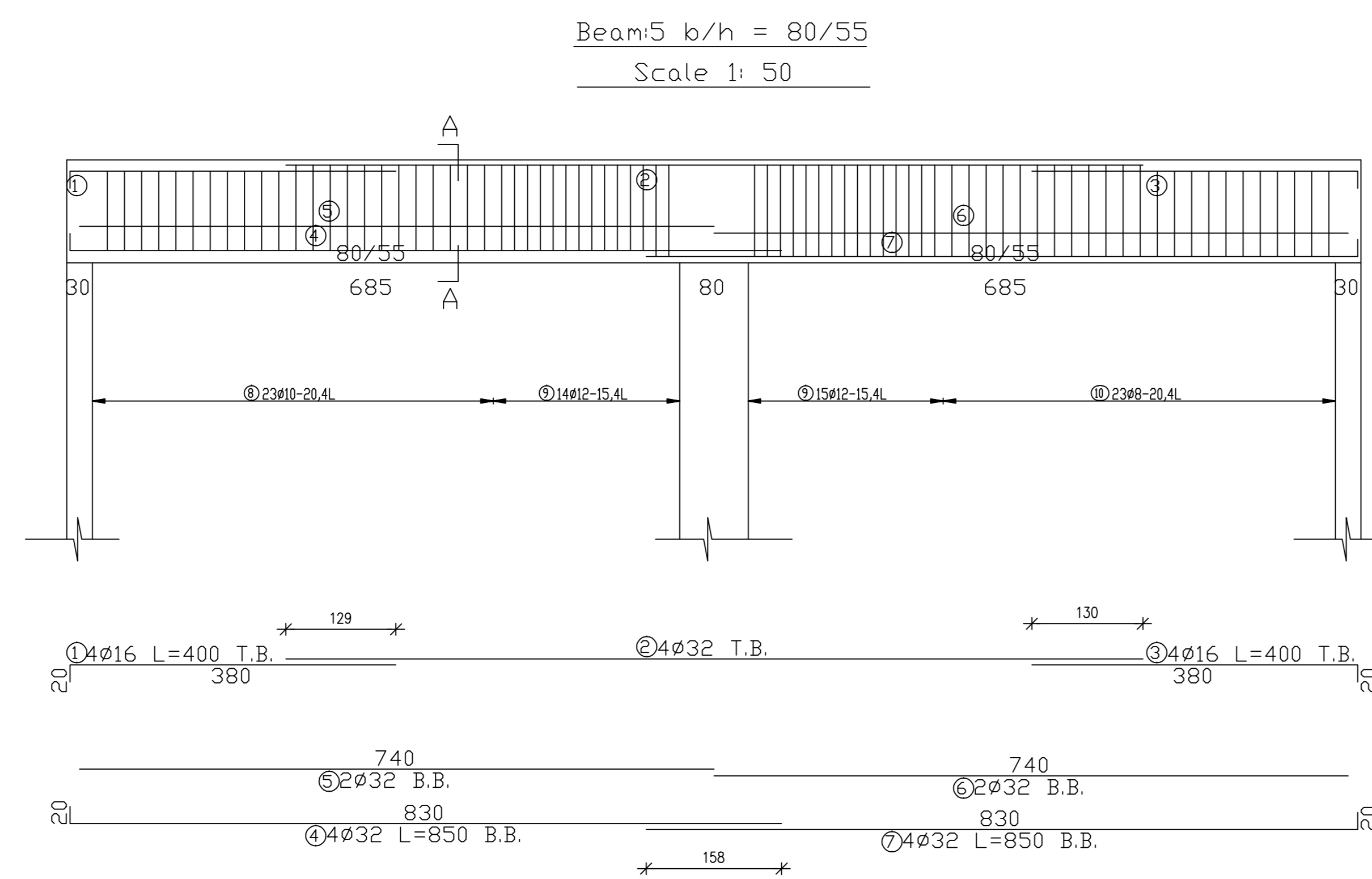
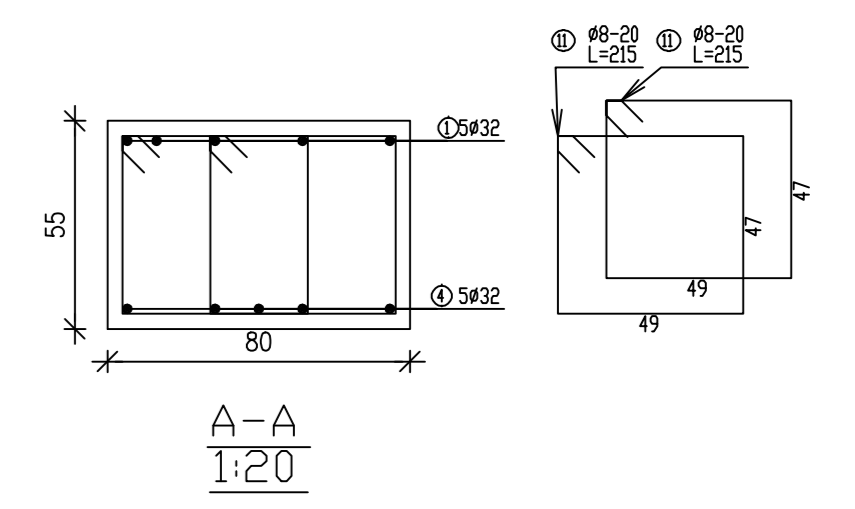
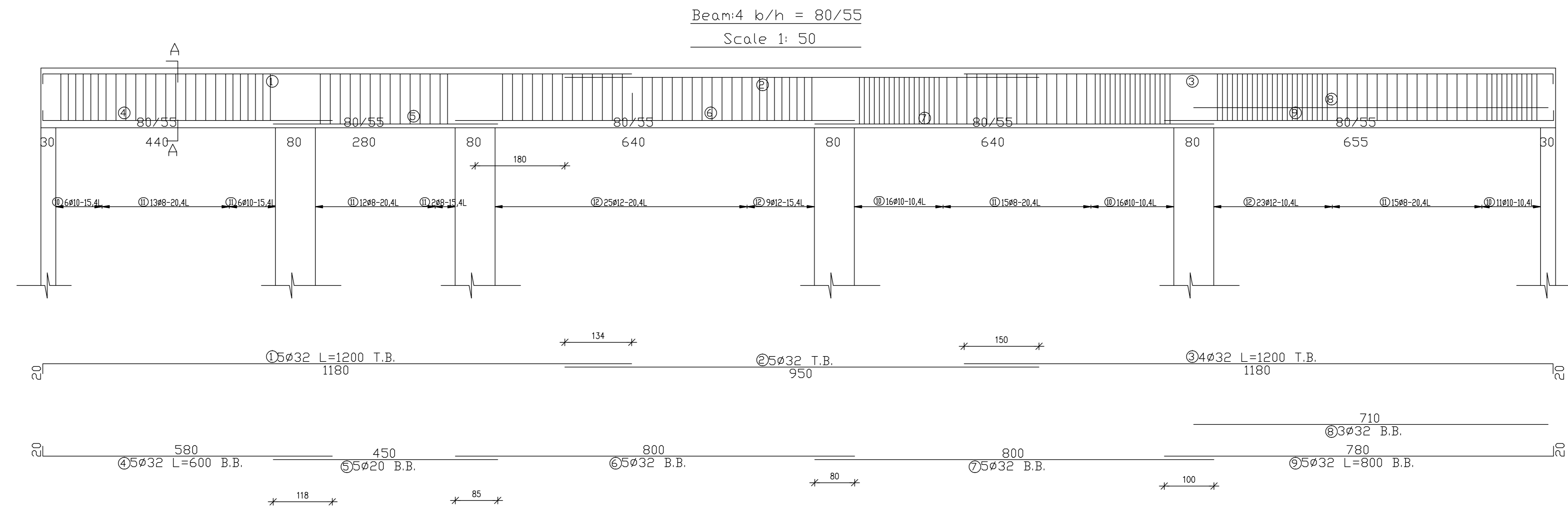
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S16

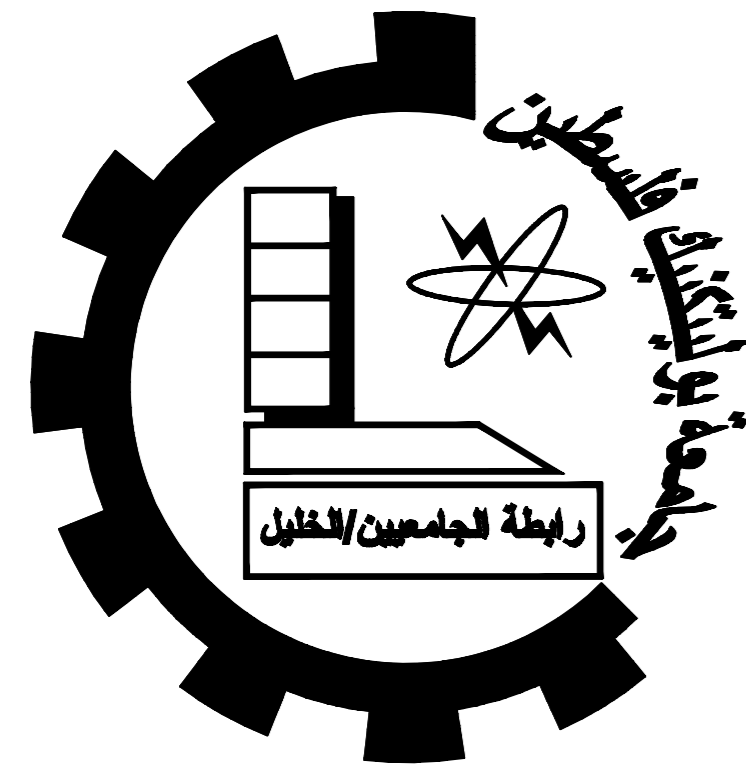
Reinforcement of Beams

Beams of Basement Floor Slab (4,5,6,7,8)

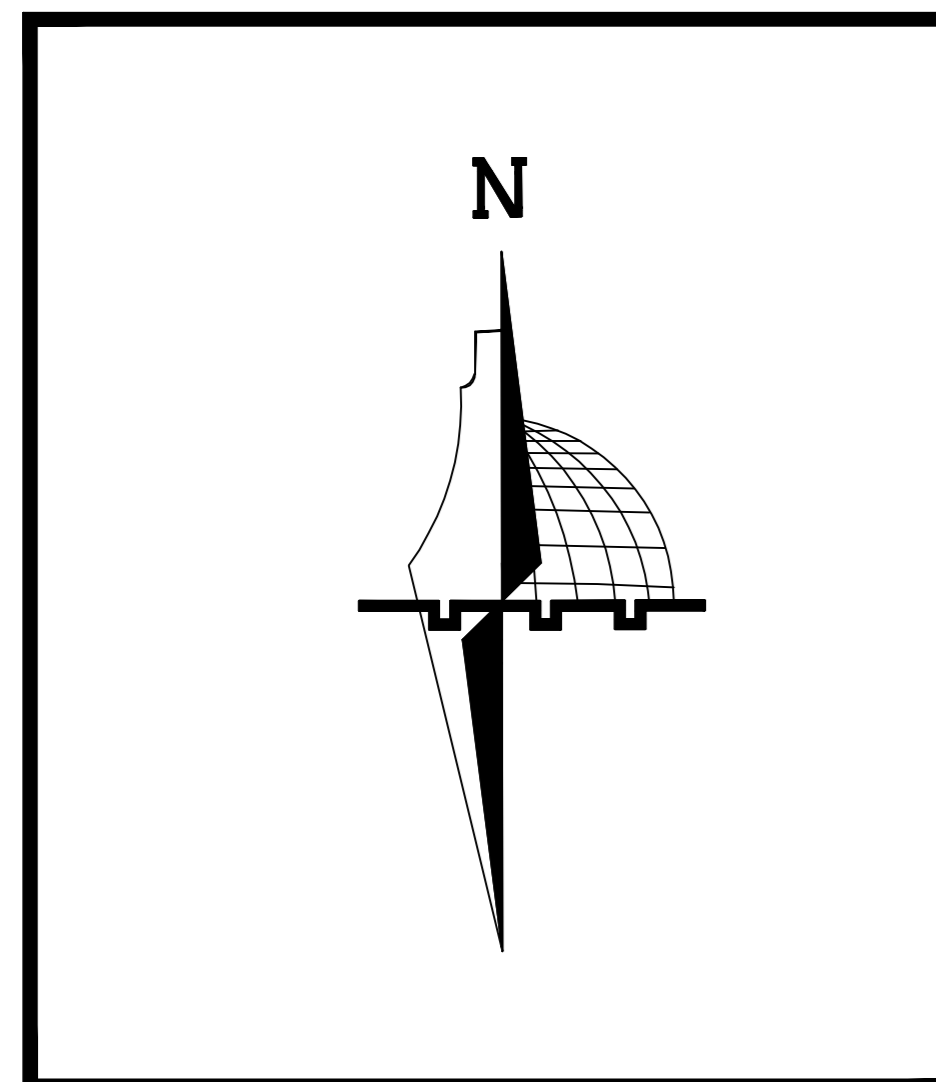
Scale:1/100



Reinforcement of Beams Beams of Basement Floor Slab (9,10,11,12,13,14,15,16) Scale:1/100



Dura Municipality Building



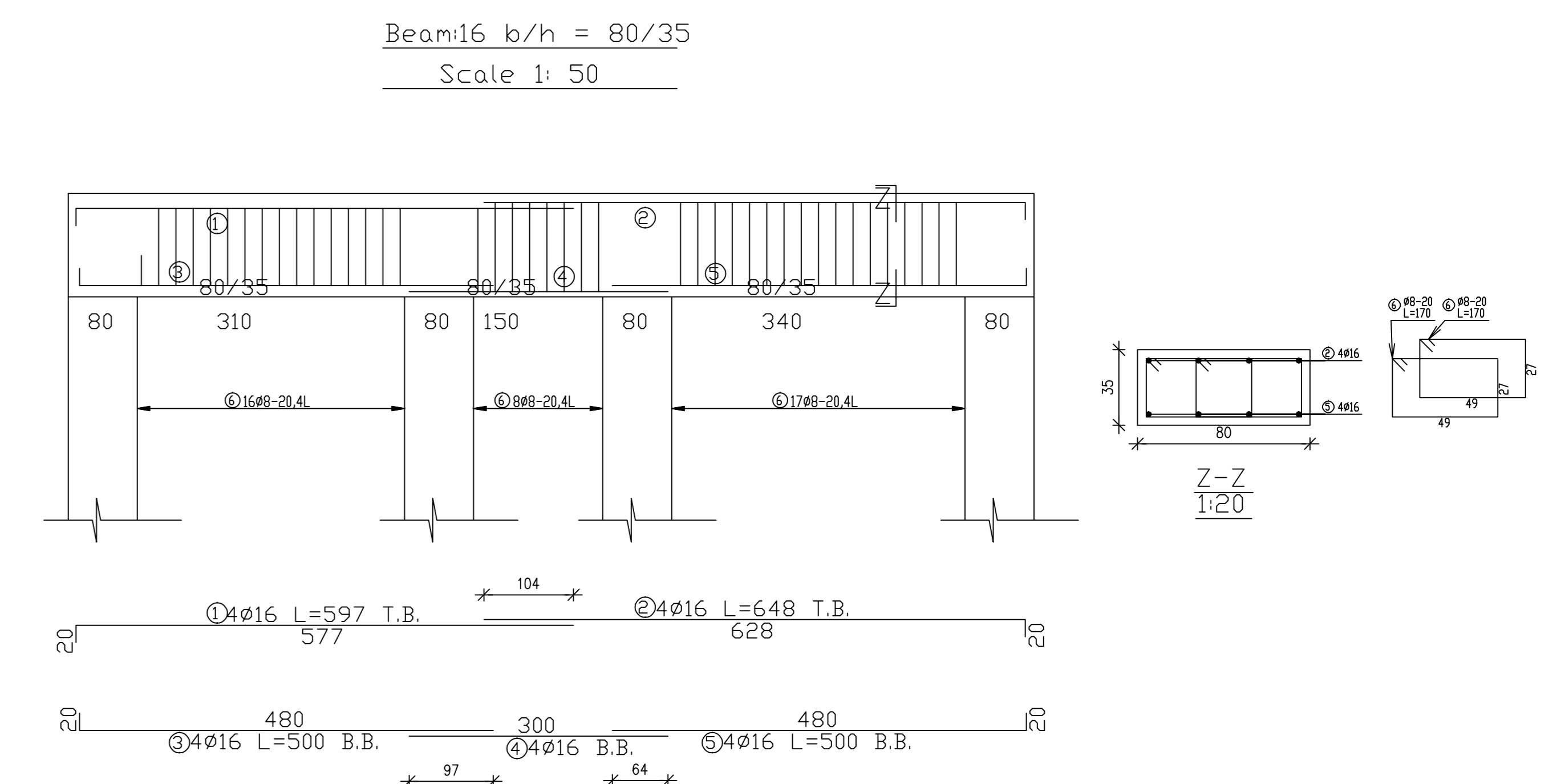
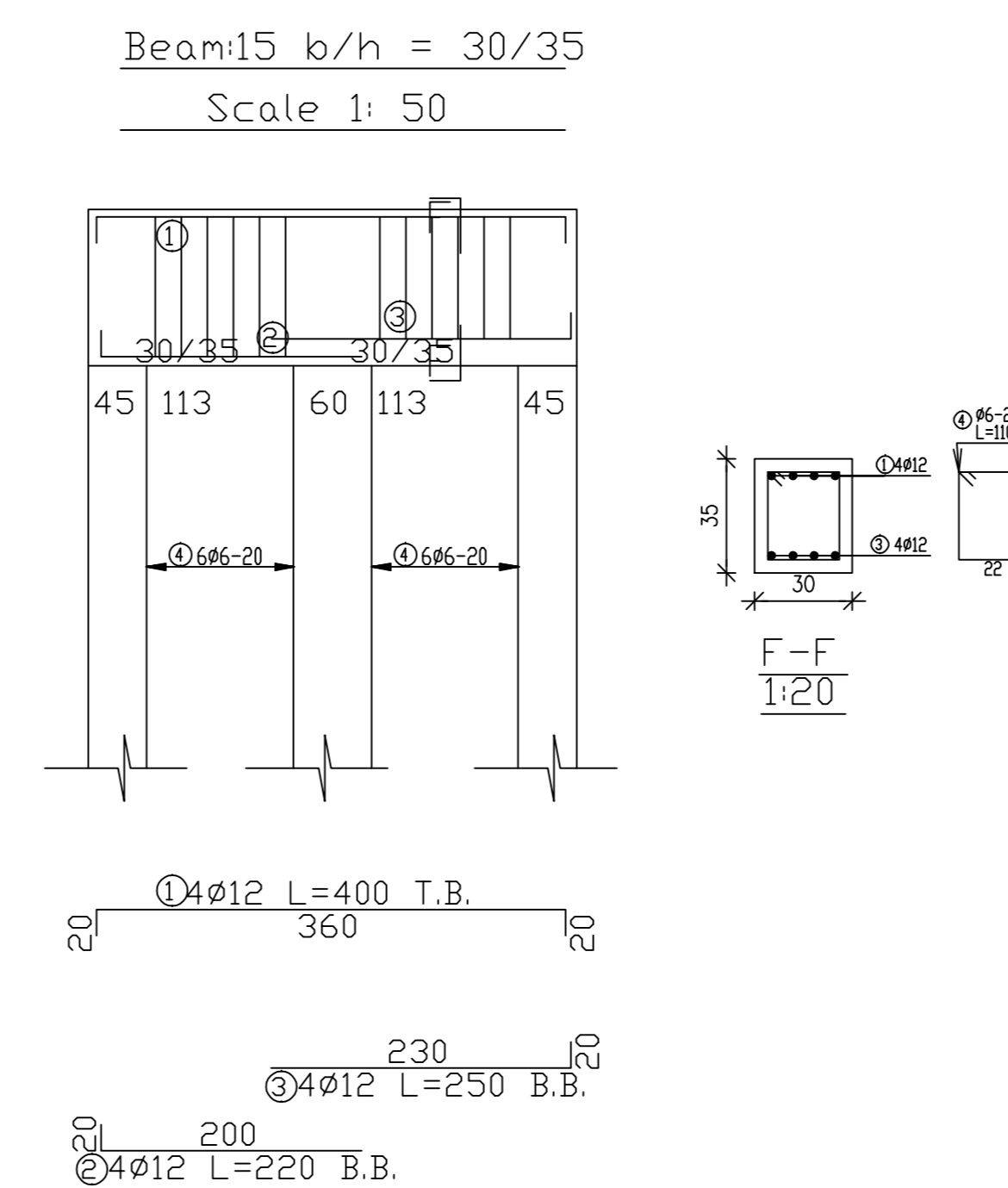
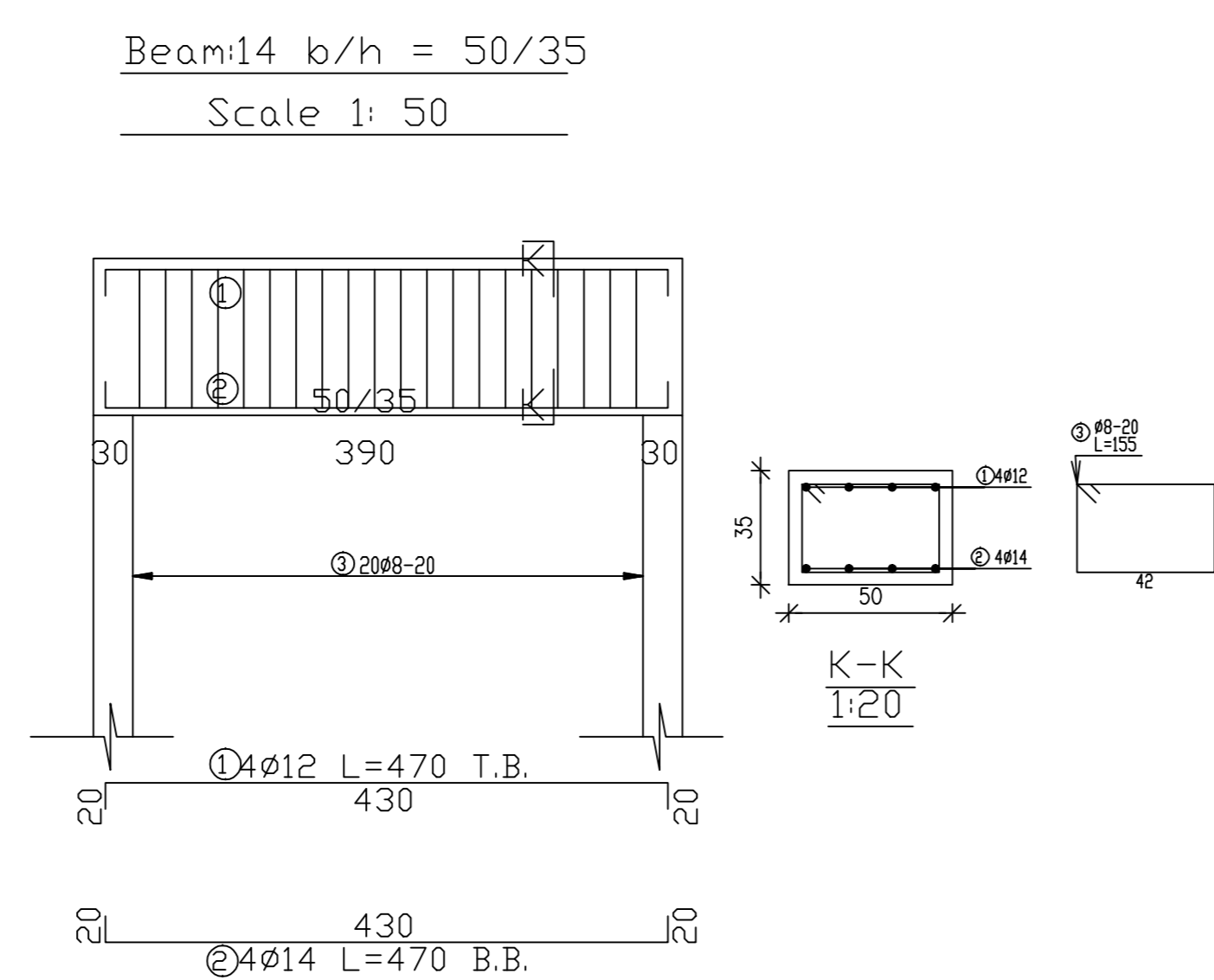
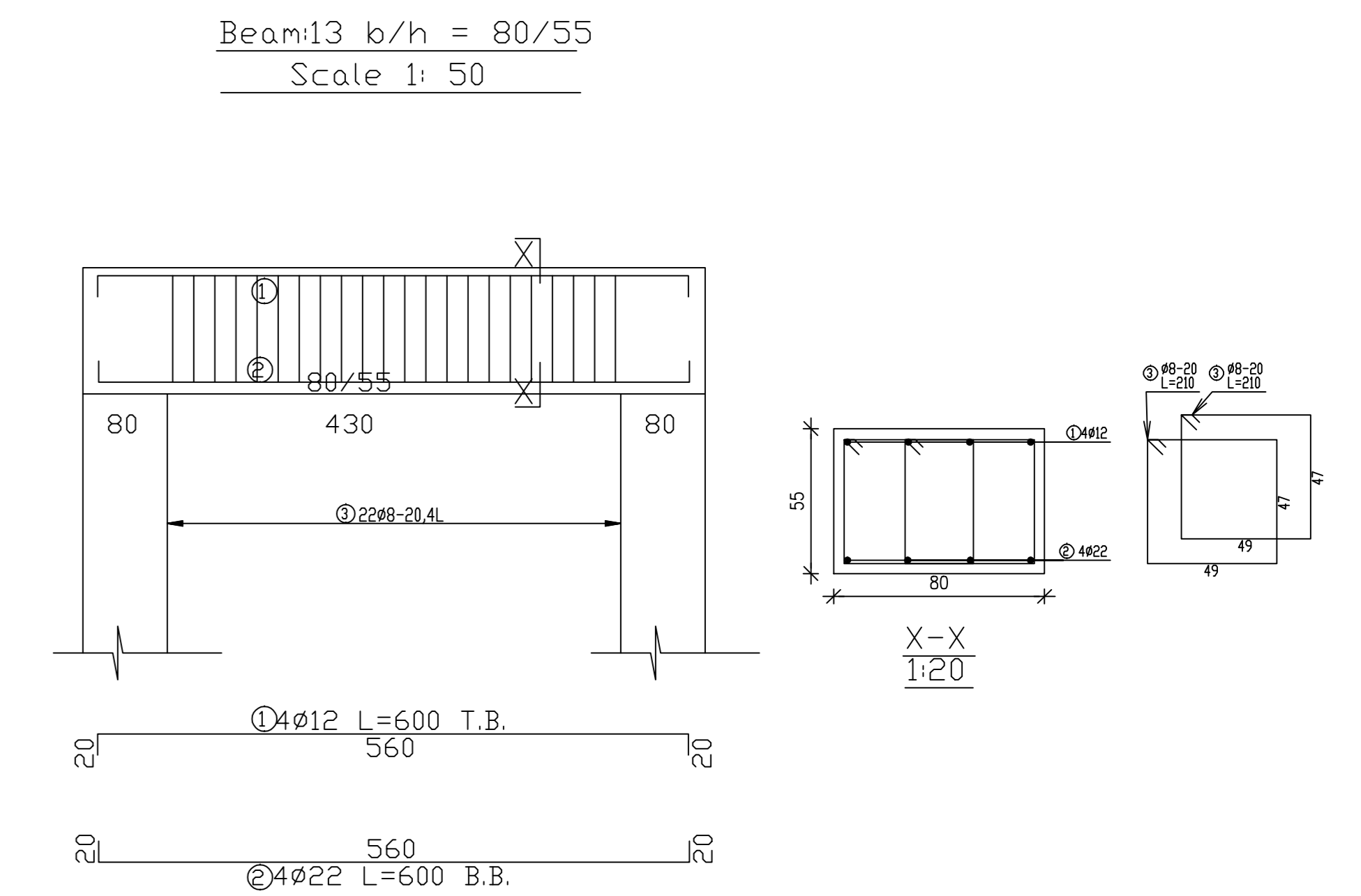
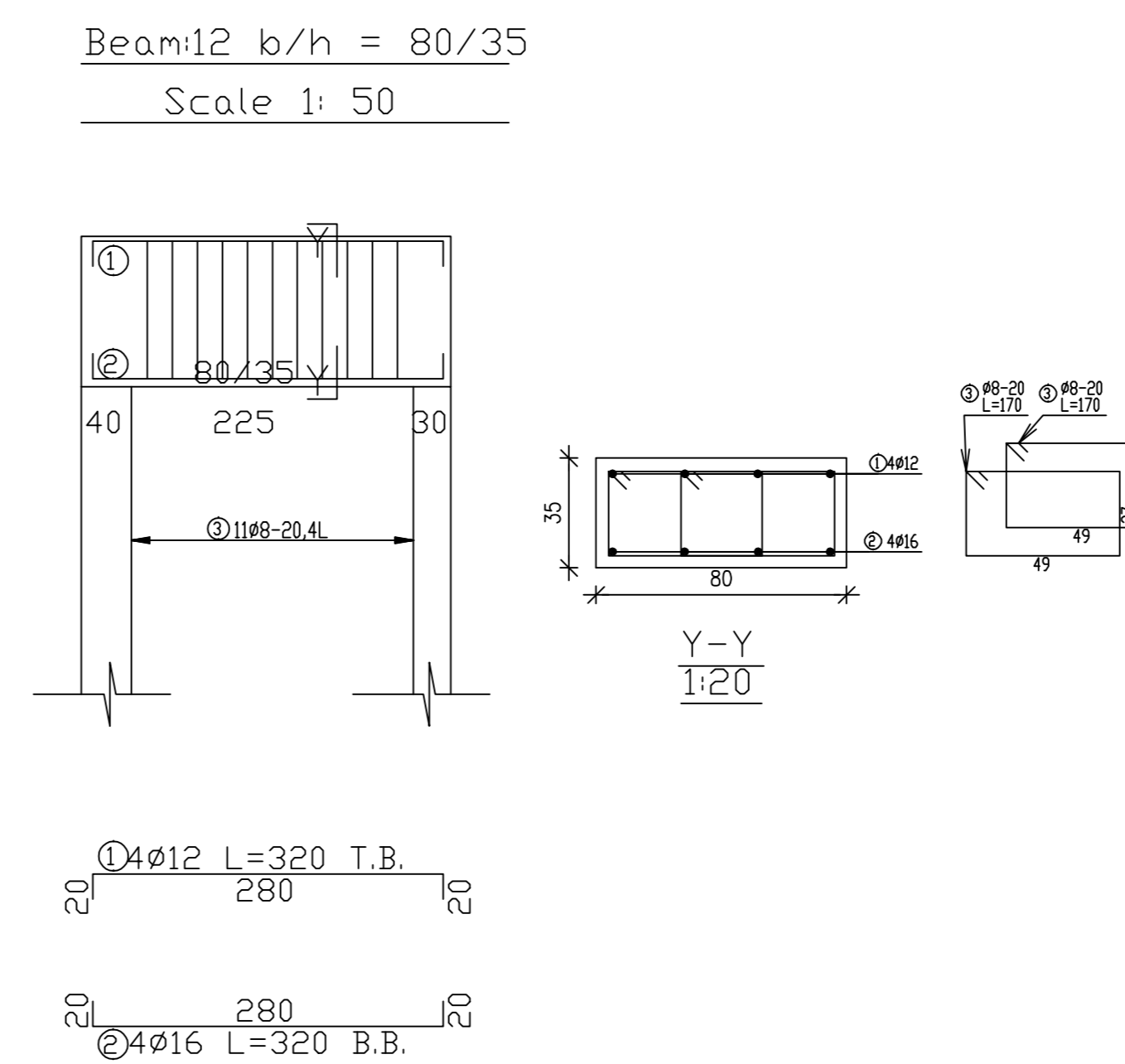
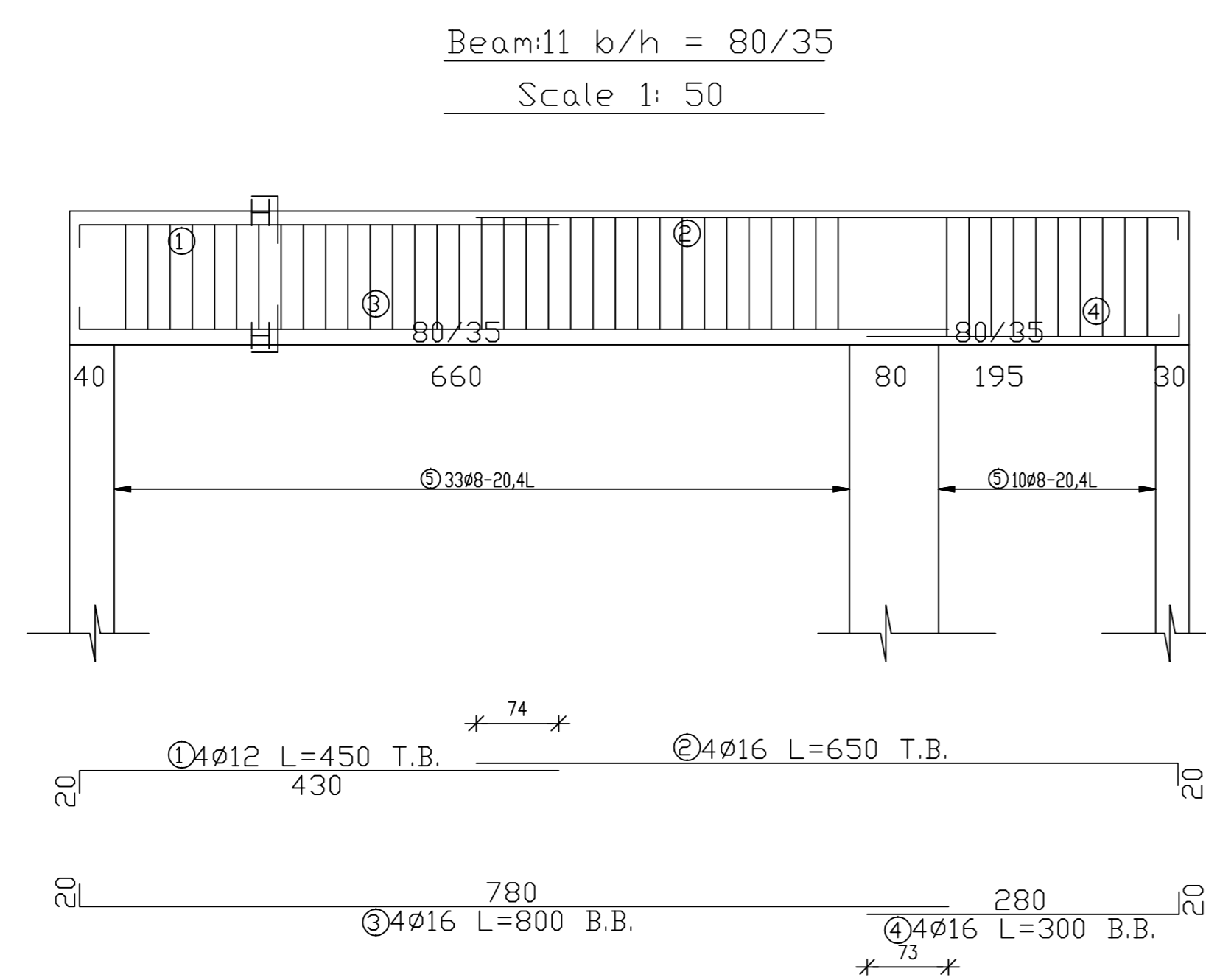
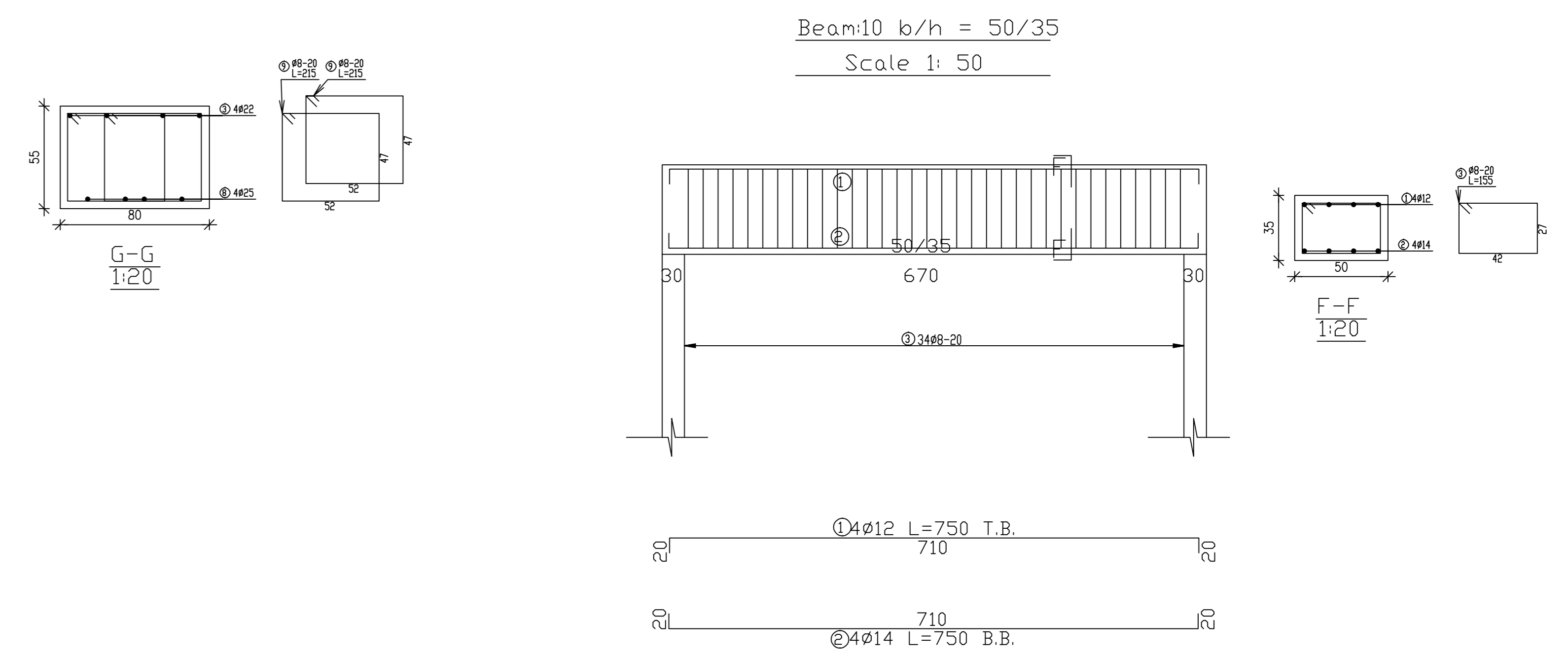
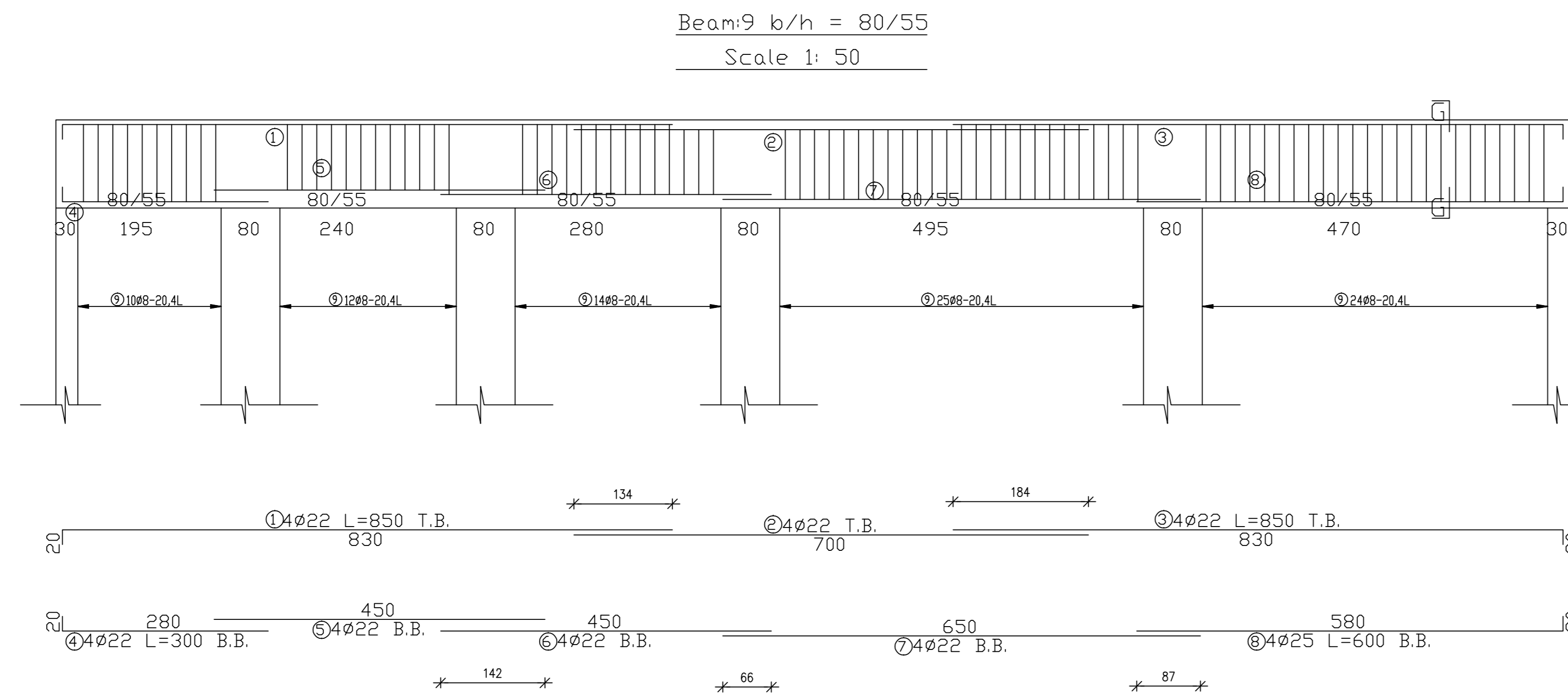
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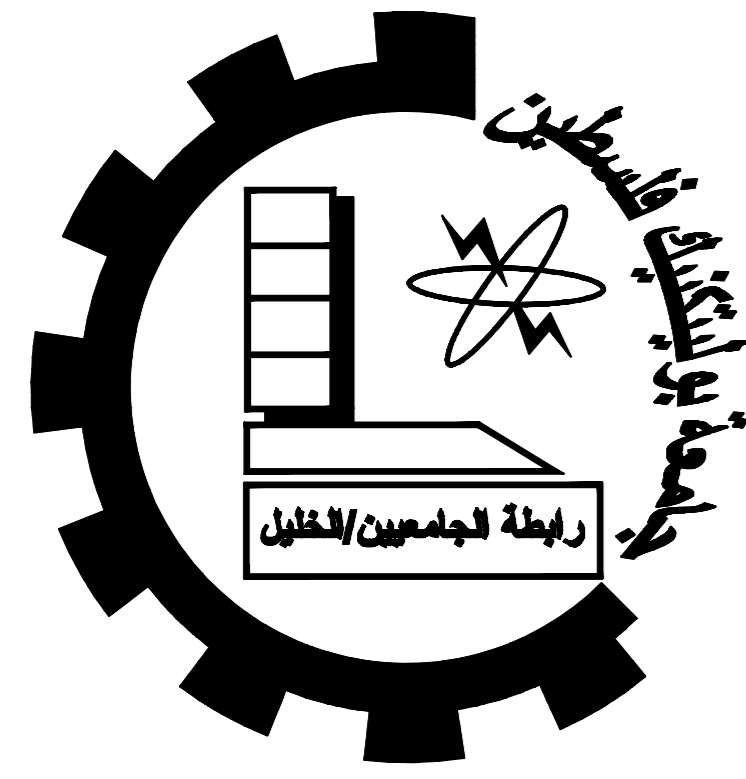
**Project Name :
Dura Municipality Building**

Supervisor :Dr . Maher Amro

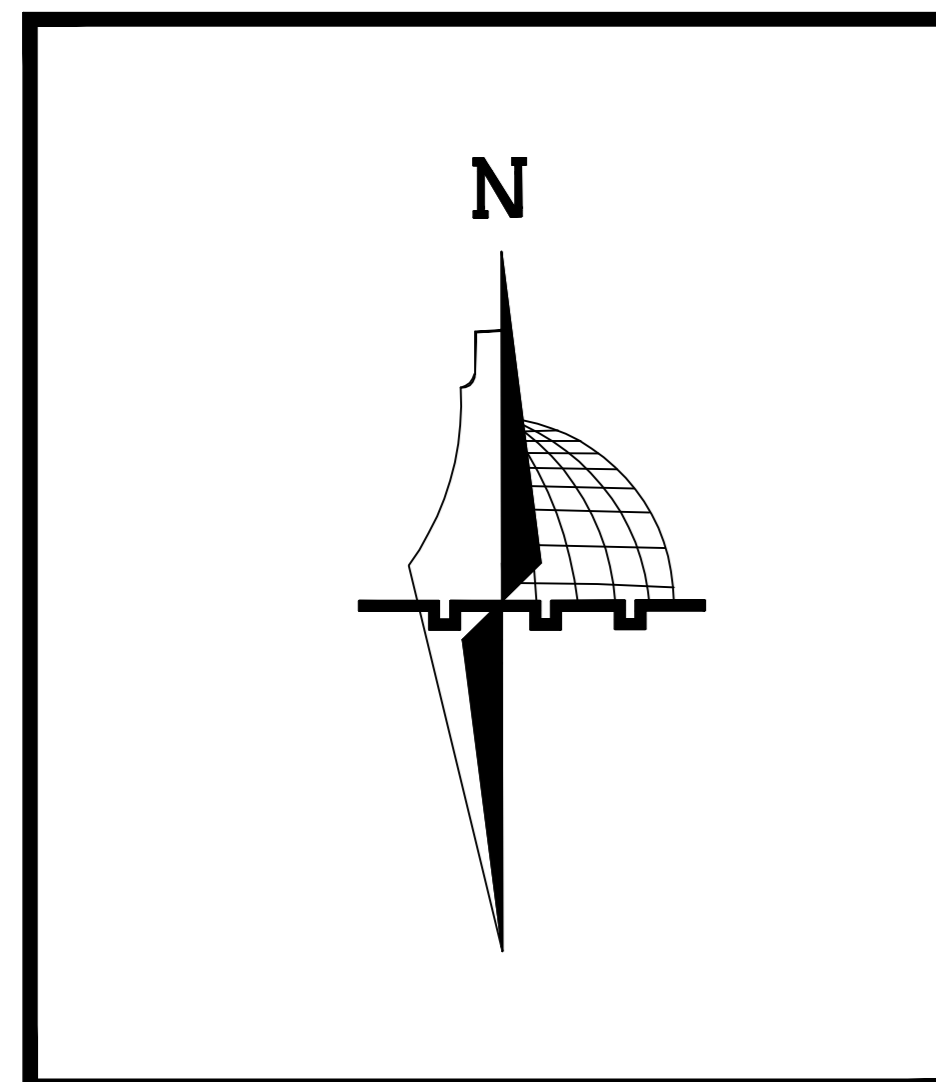
**Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer**

No. : S17





Dura Municipality Building



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Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

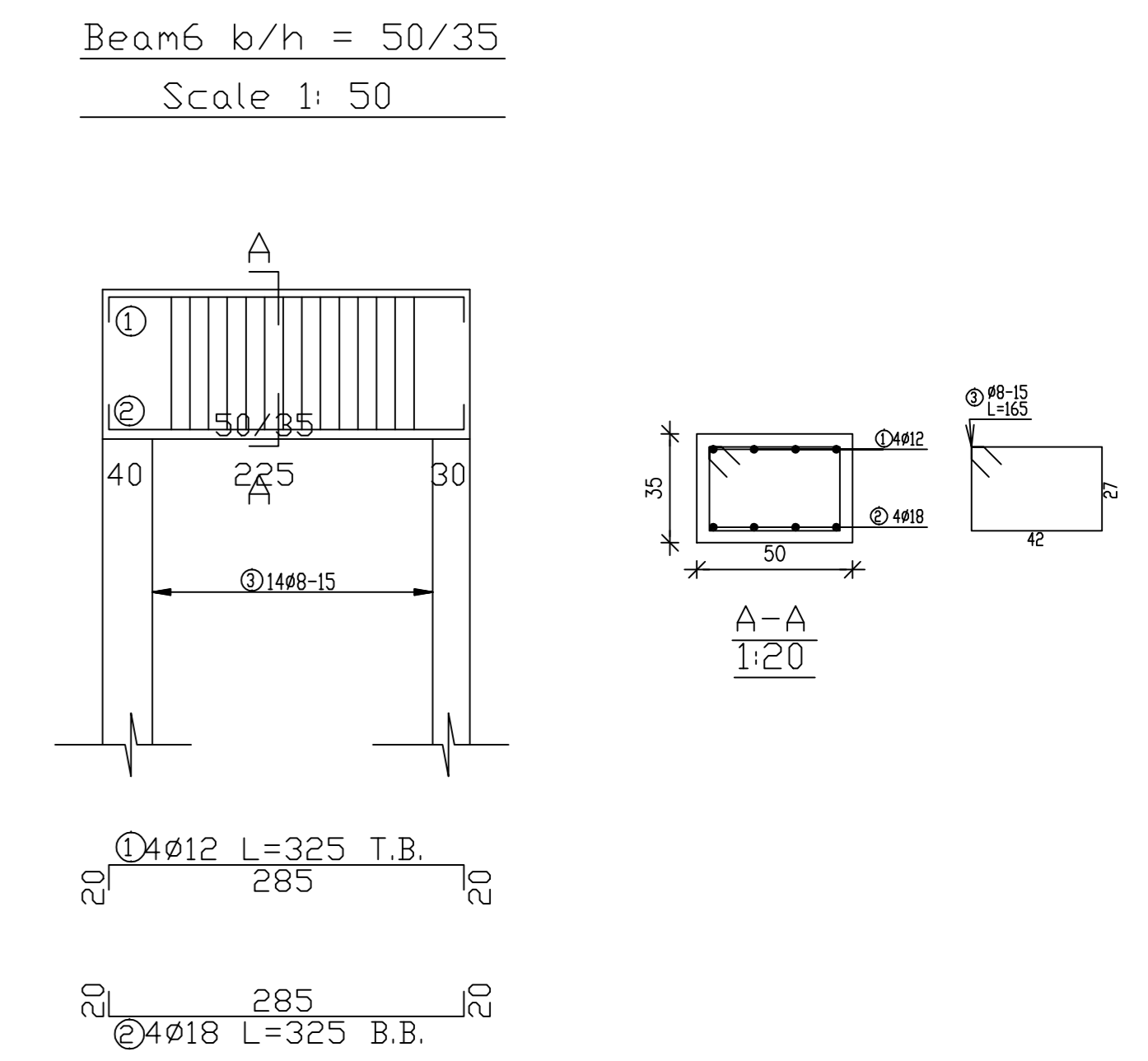
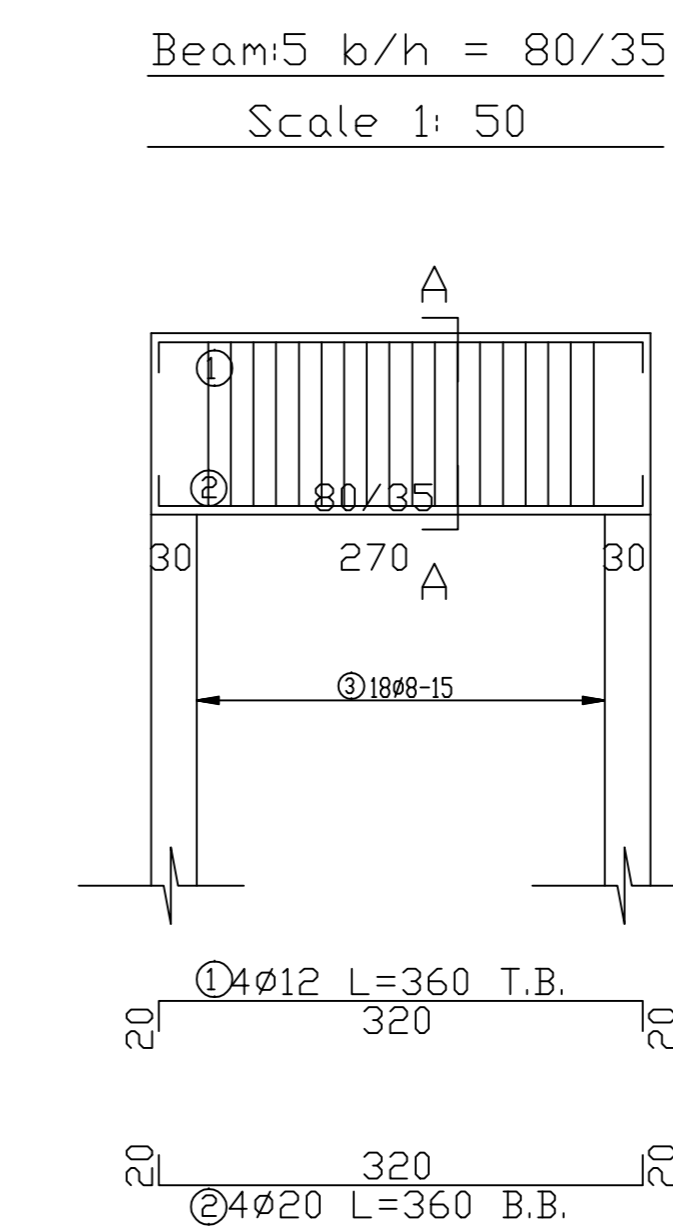
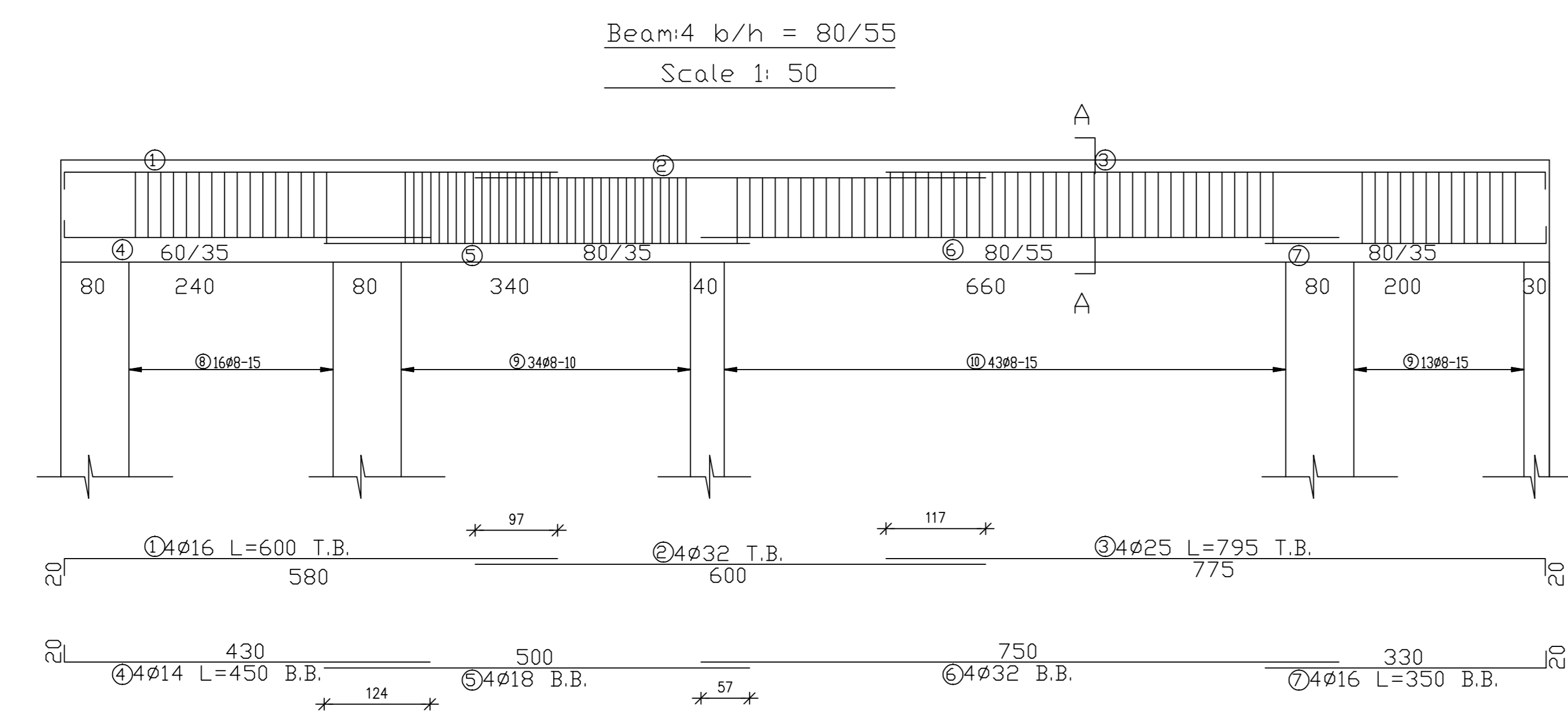
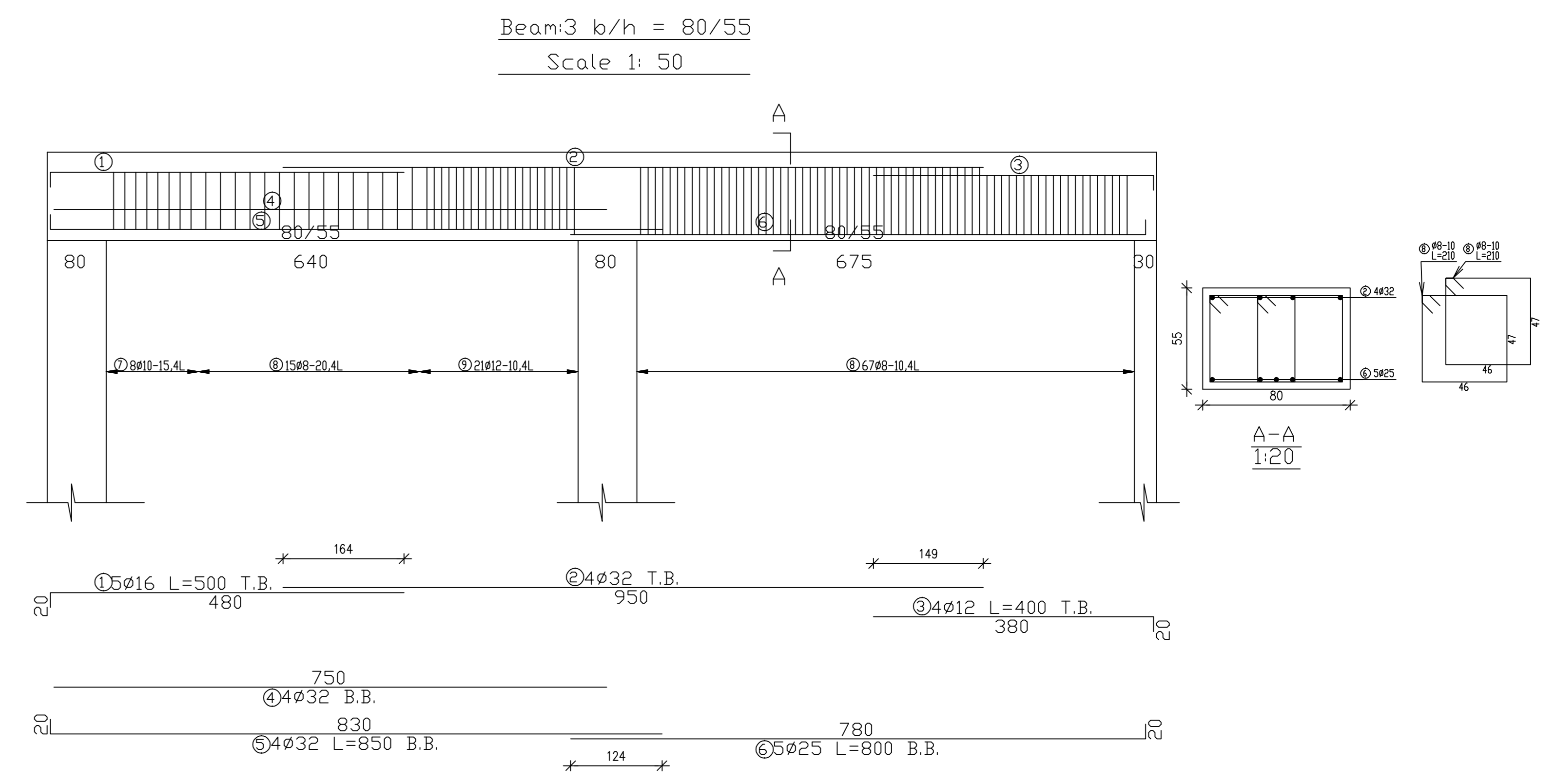
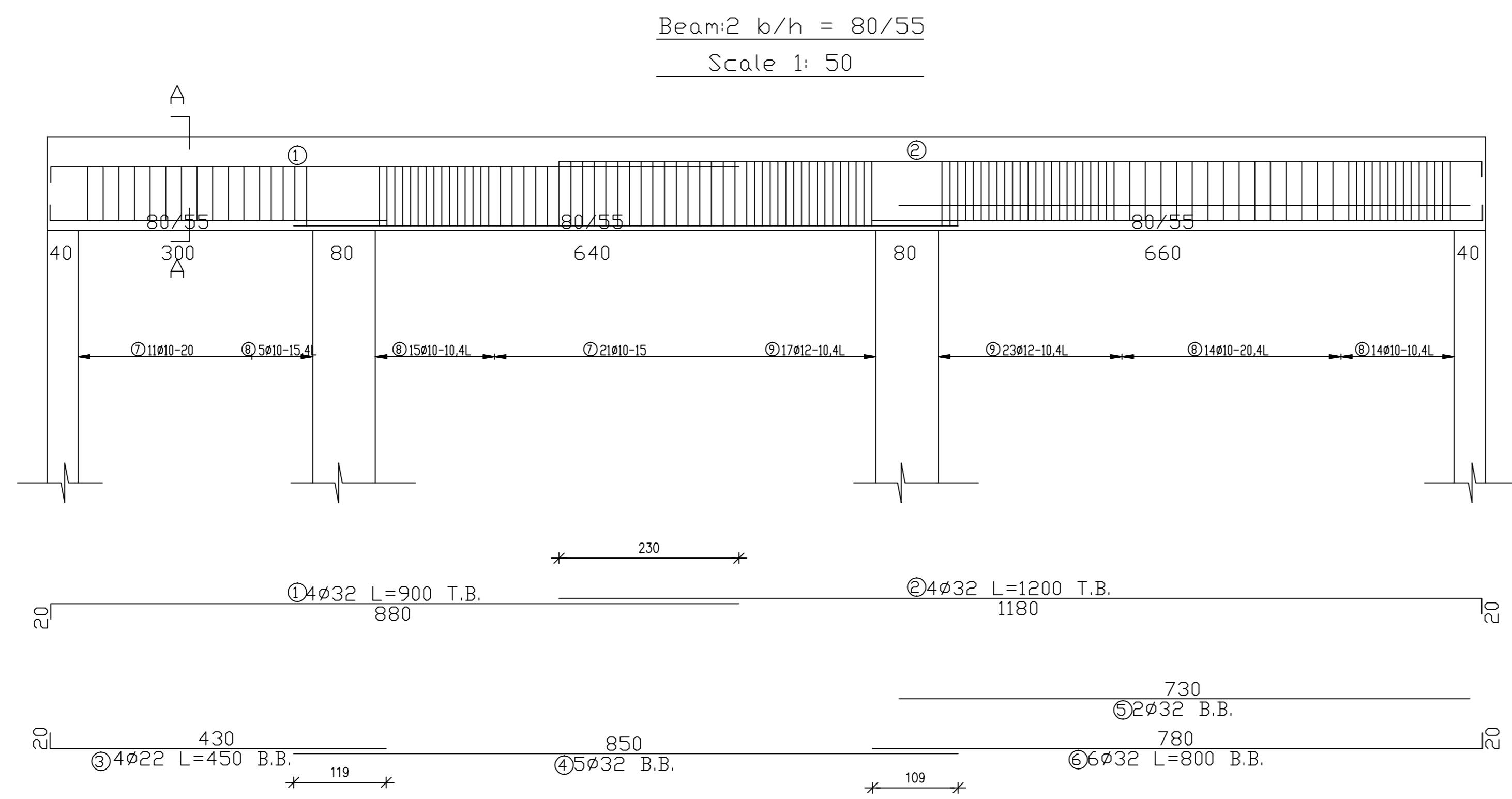
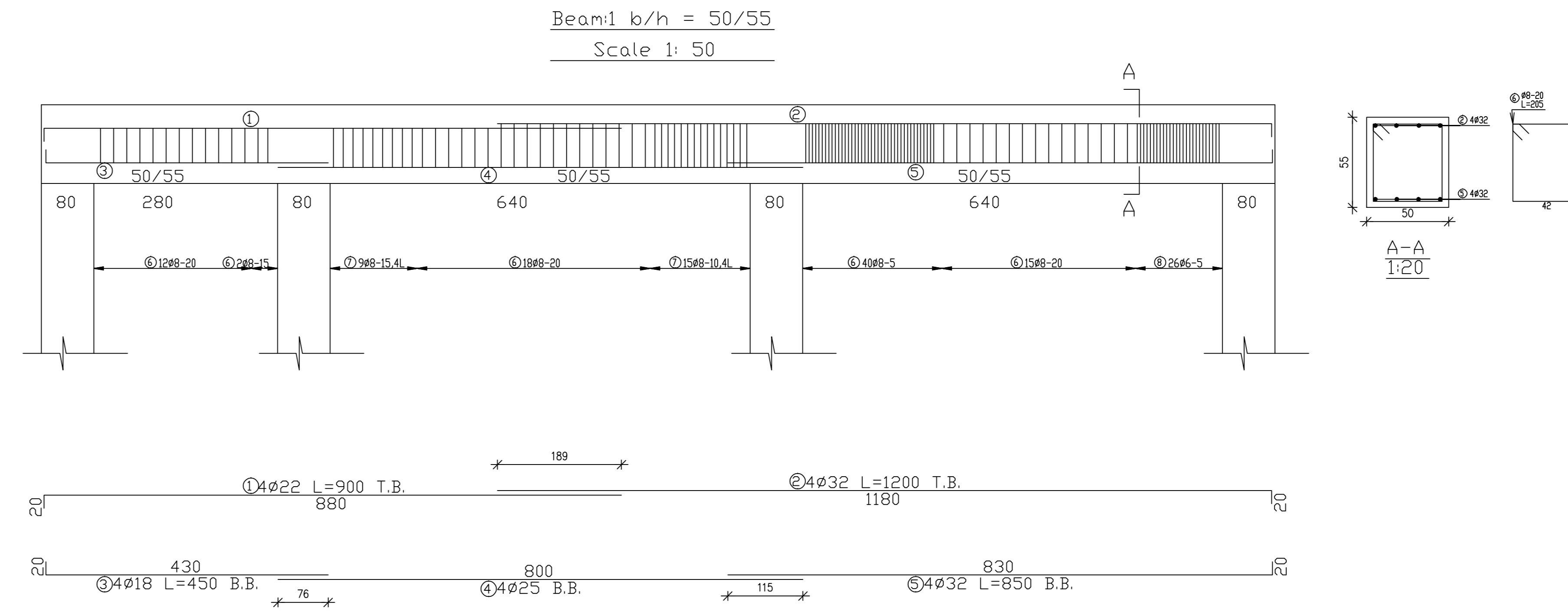
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

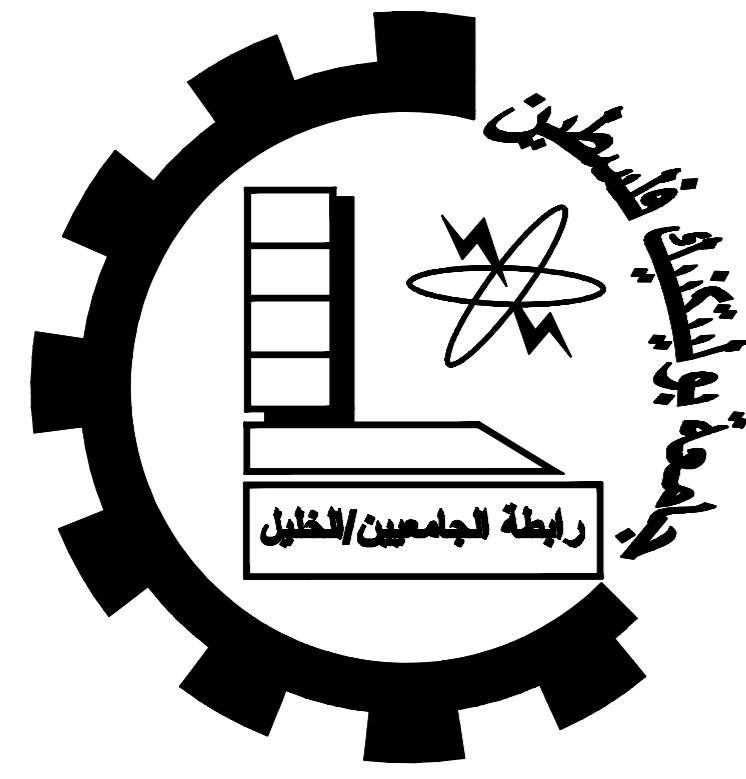
No. : S18

Reinforcement of Beams

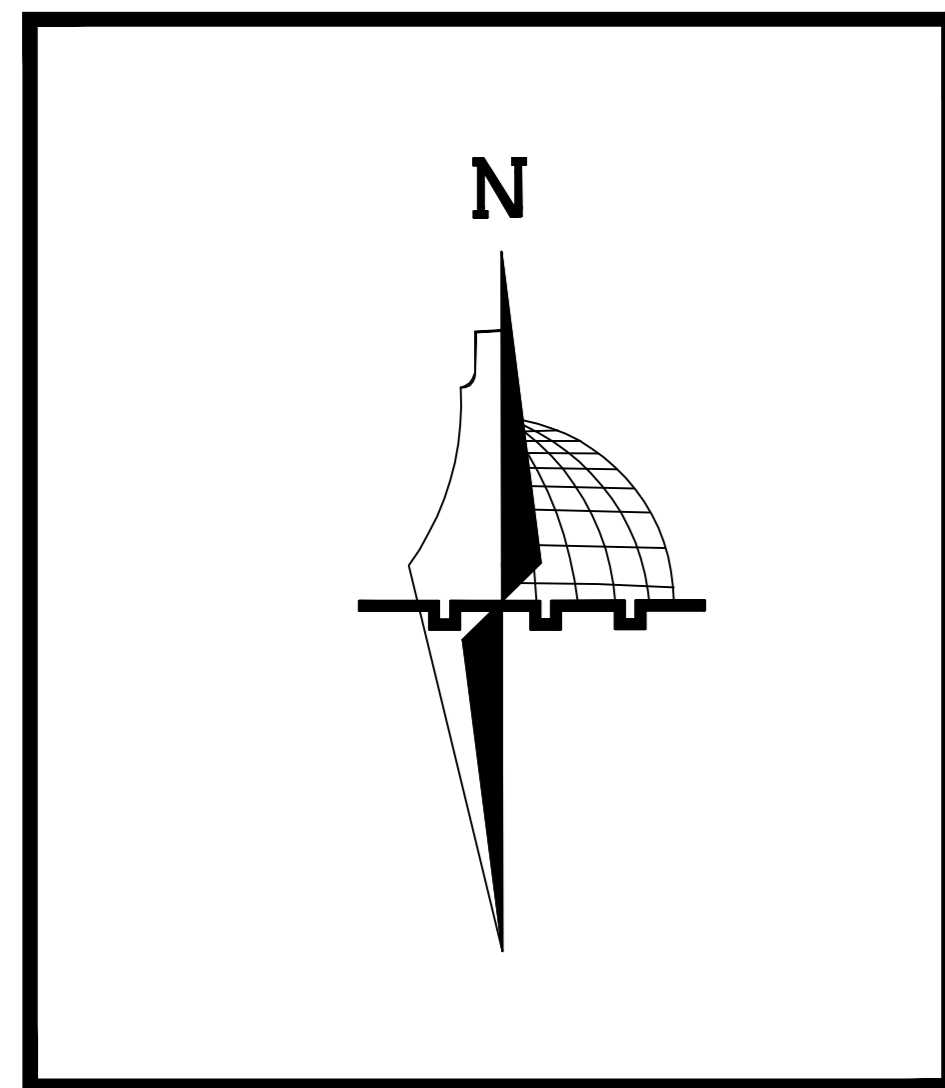
Beams of Ground,First,Second Floor Slab

(1,2,3,4,5,6) Scale:1/100





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Civil Engineering

Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

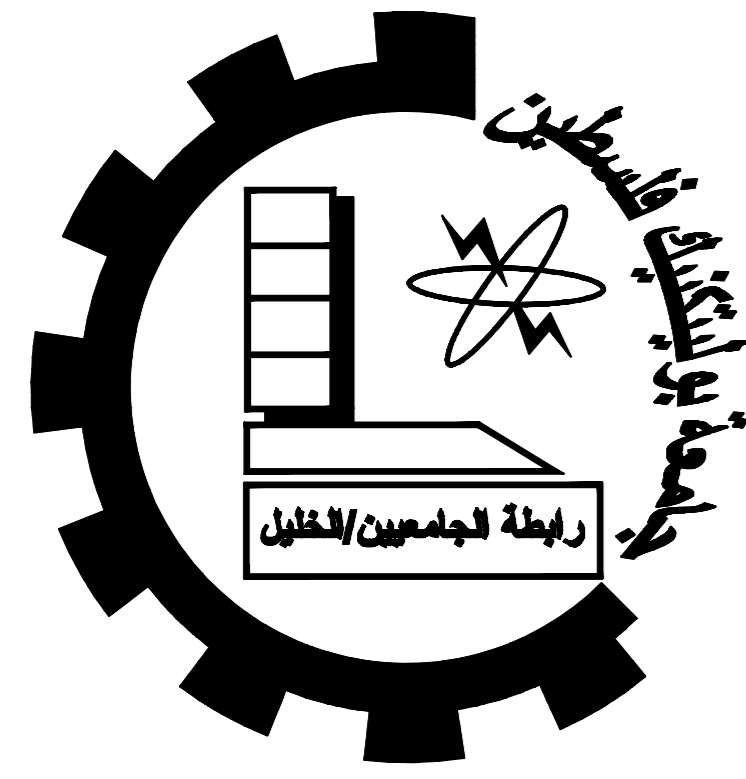
No. : S19

Reinforcement of Beams

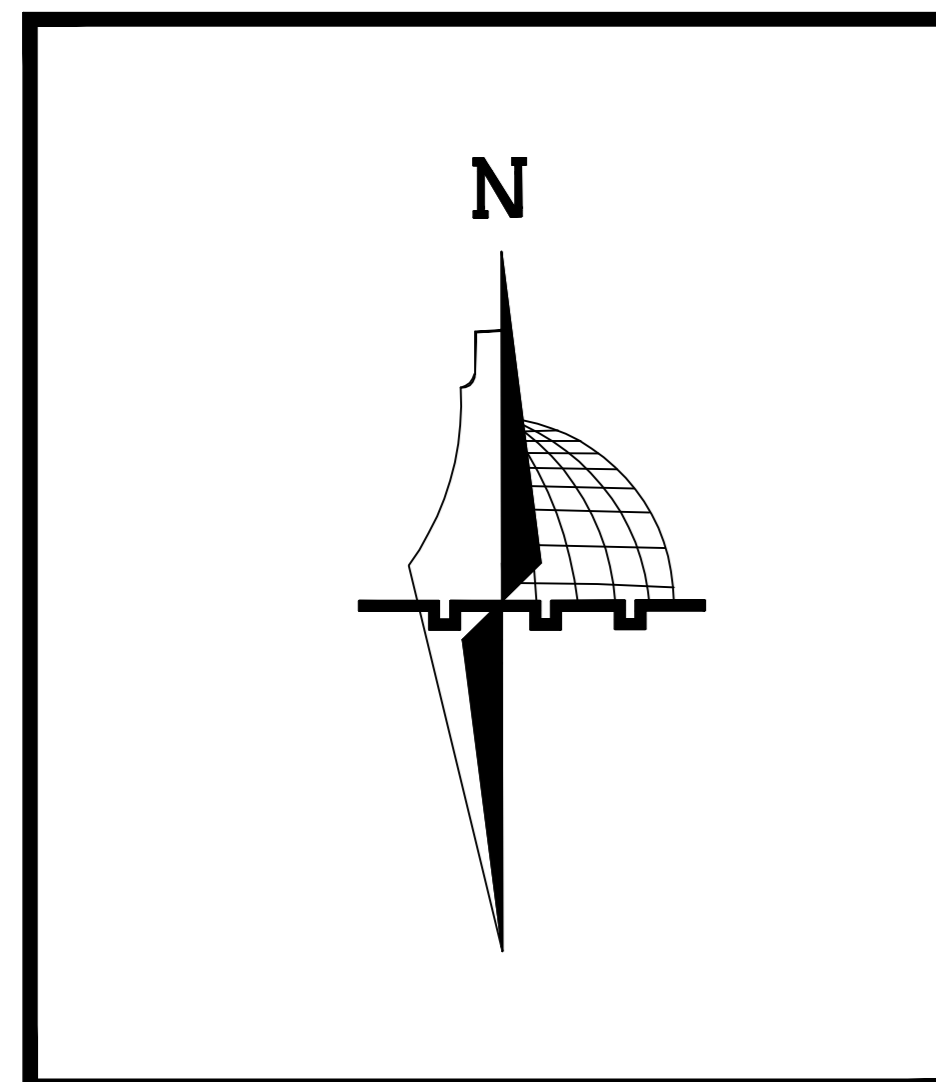
Beams of Ground,First,Second Floor Slab

(7,8,9,10,11,12,15,16,19,20) Scale:1/100





Dura Municipality Building



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Civil & Architecture Department
Civil Engineering

Project Name :

Dura Municipality Building

Supervisor :Dr . Maher Amro

Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

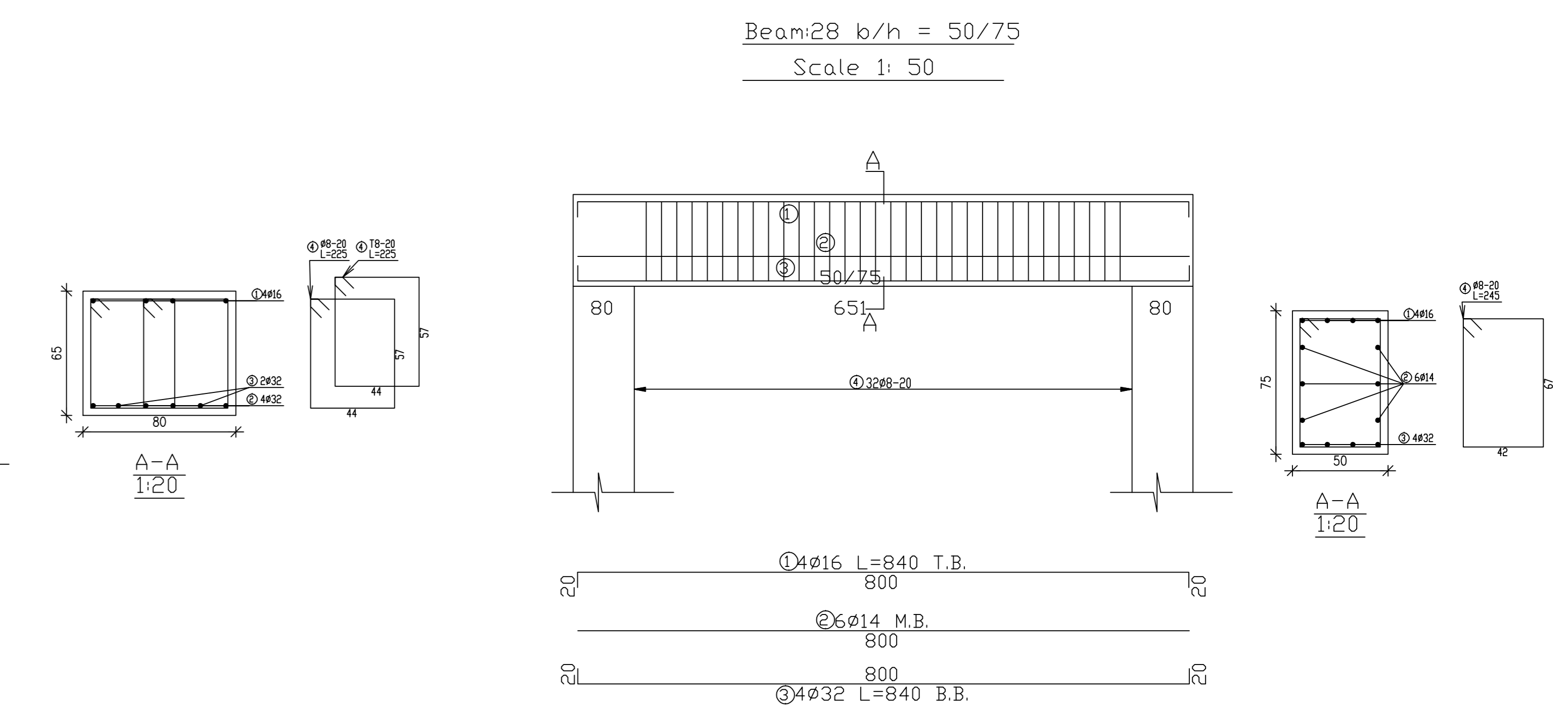
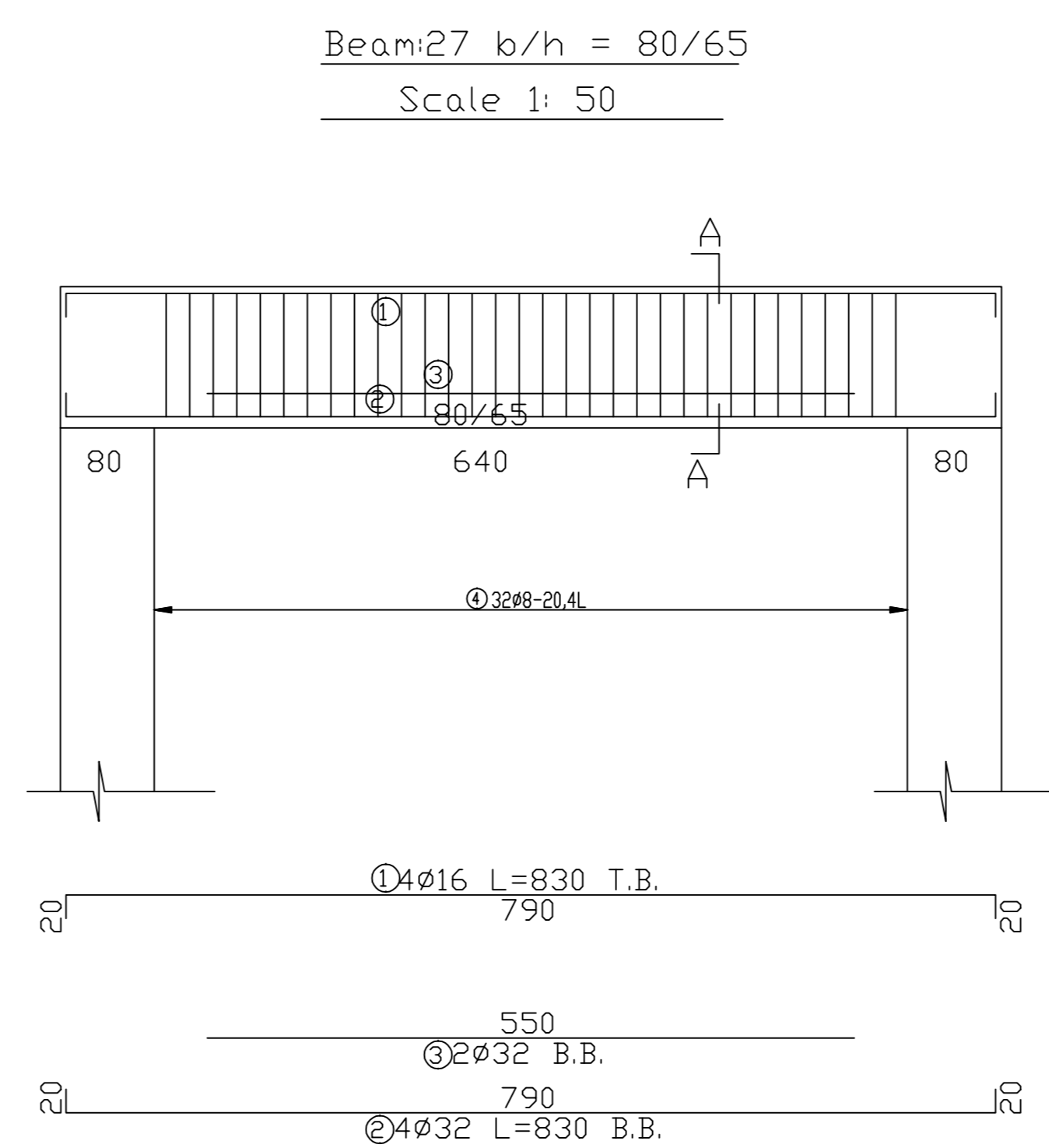
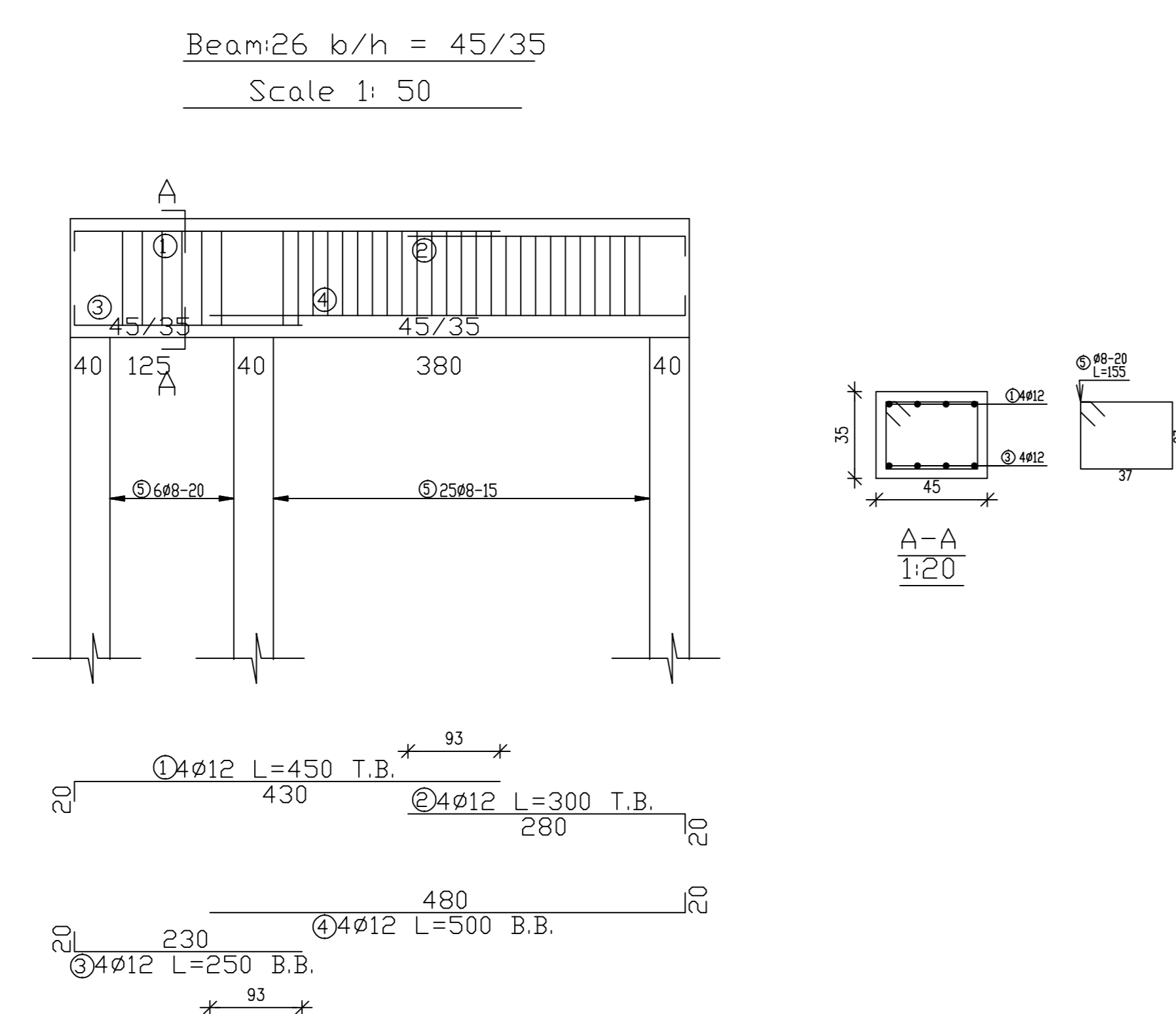
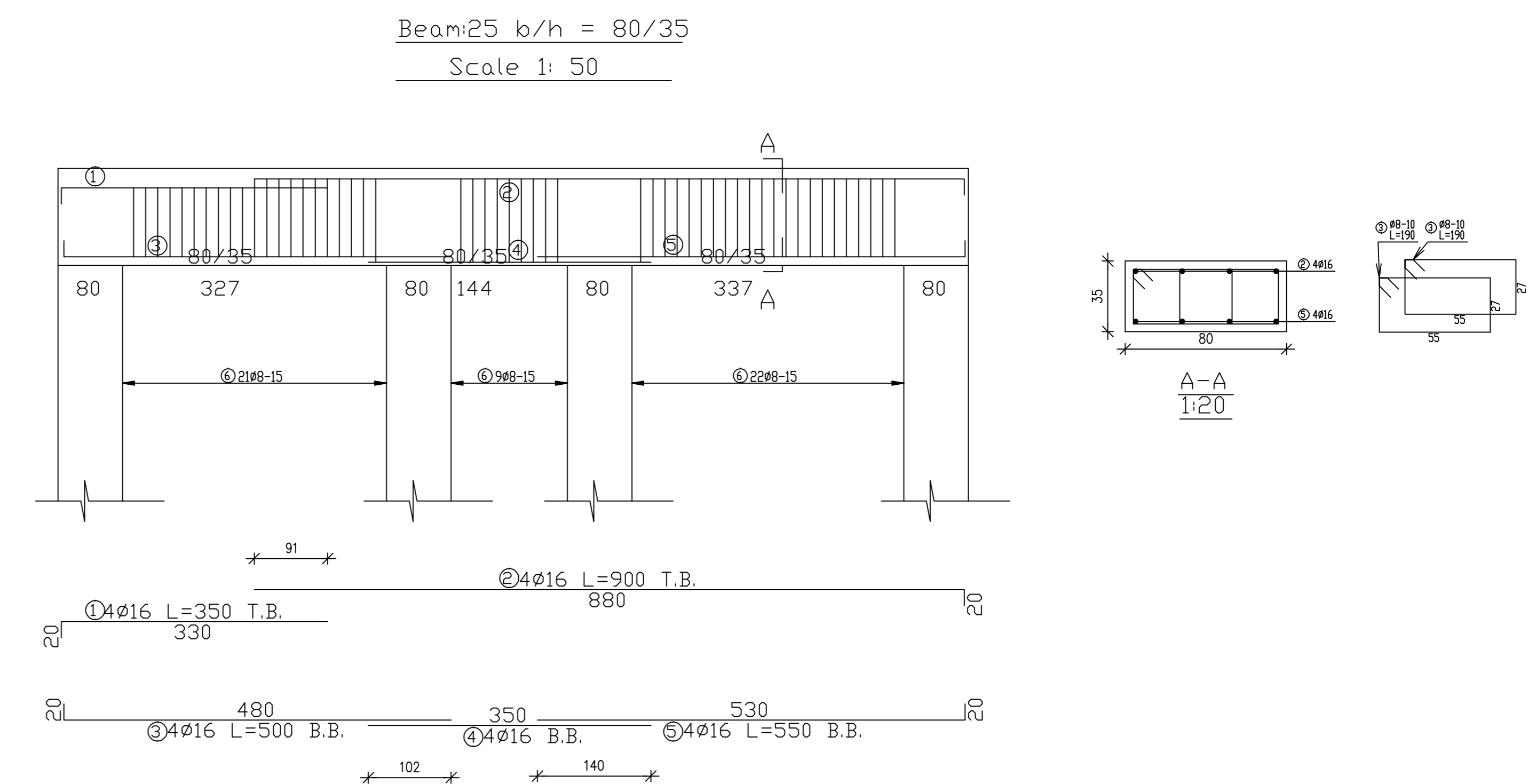
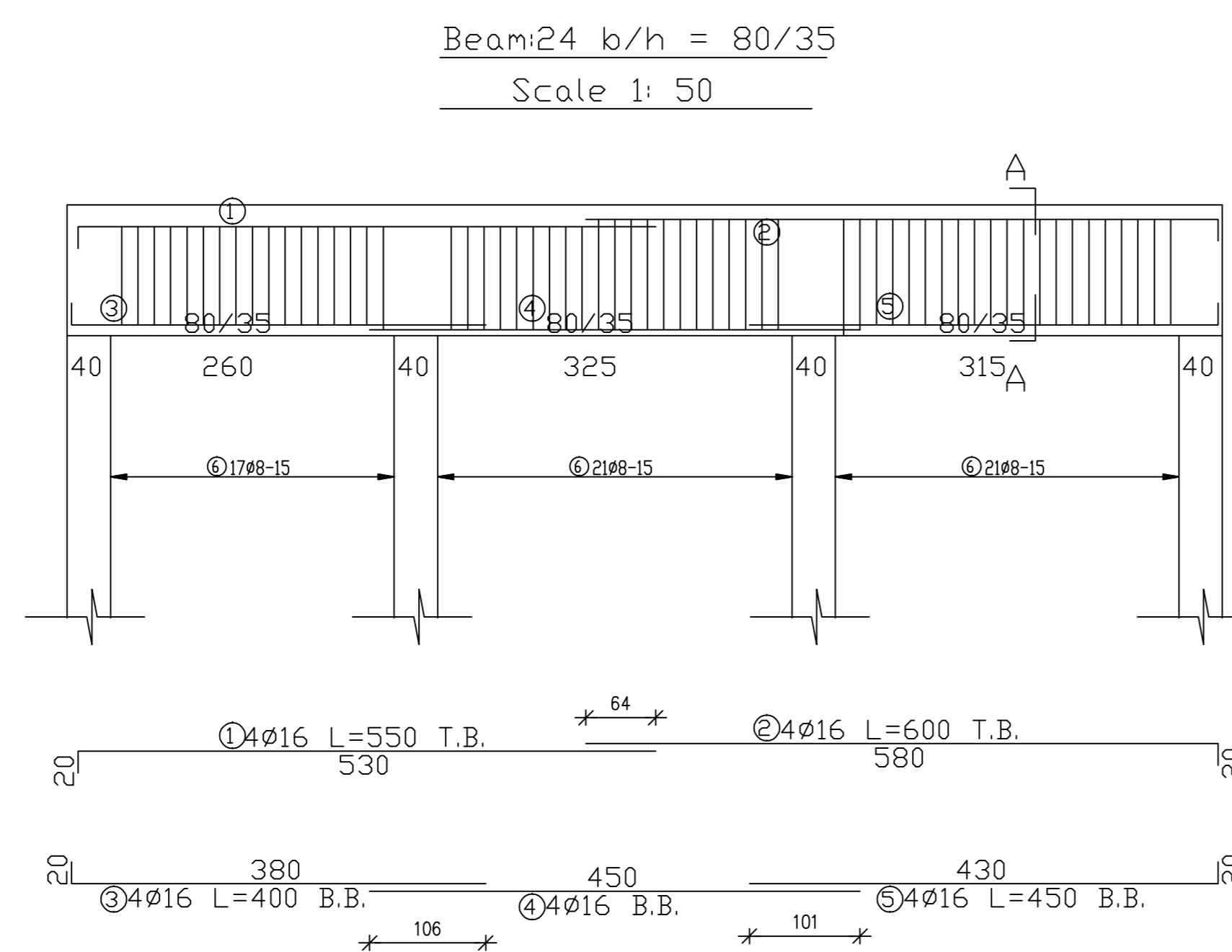
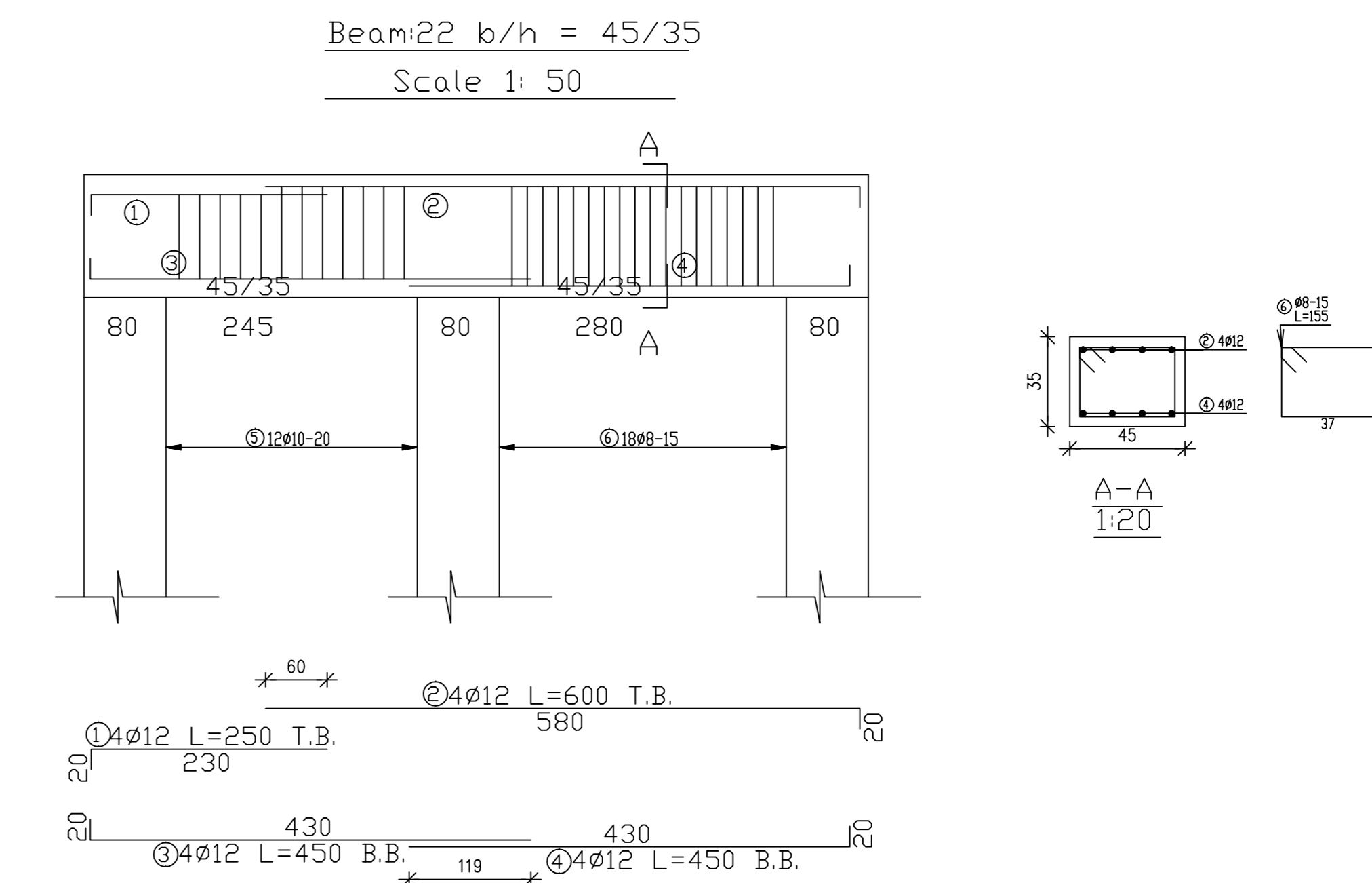
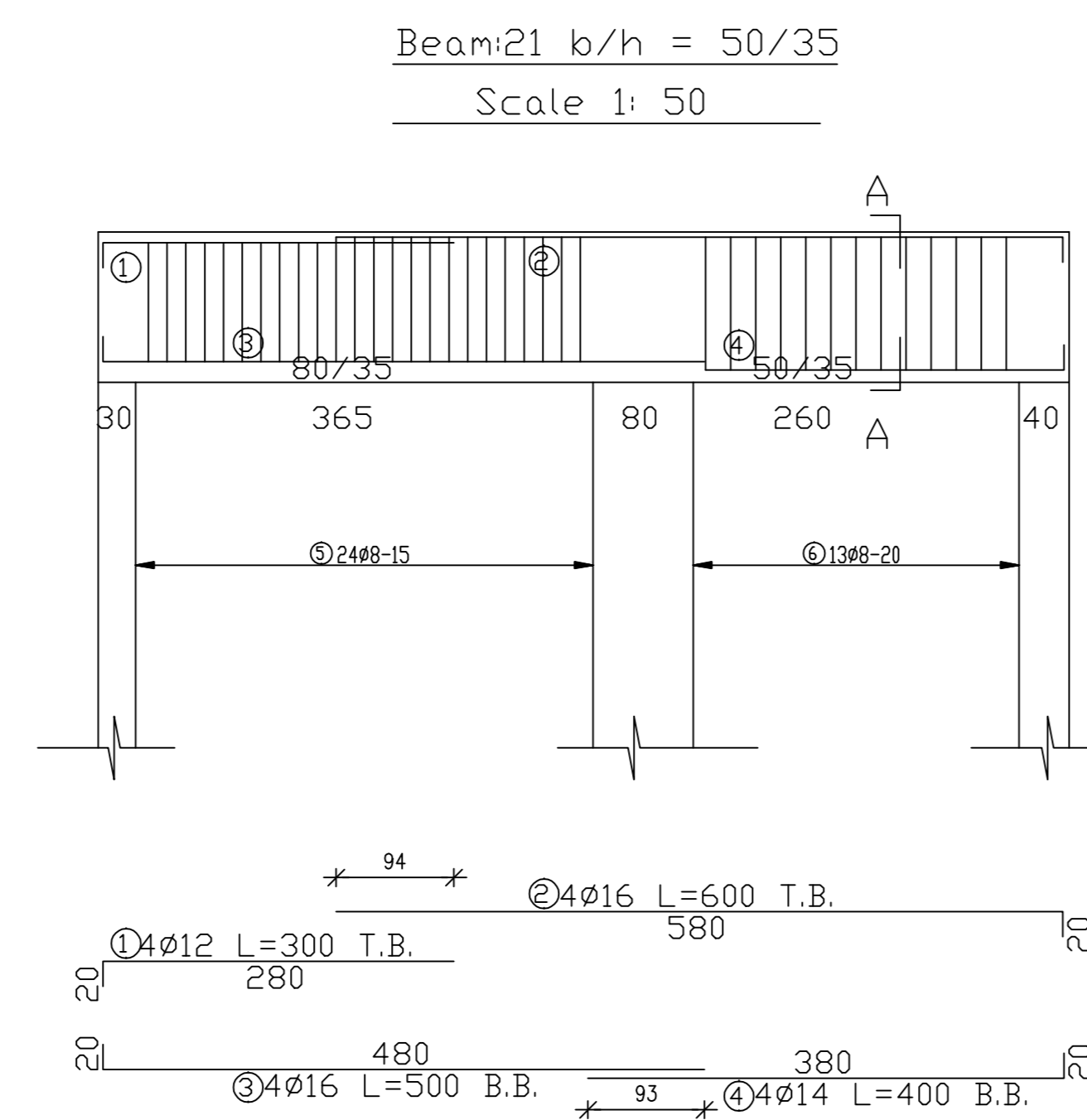
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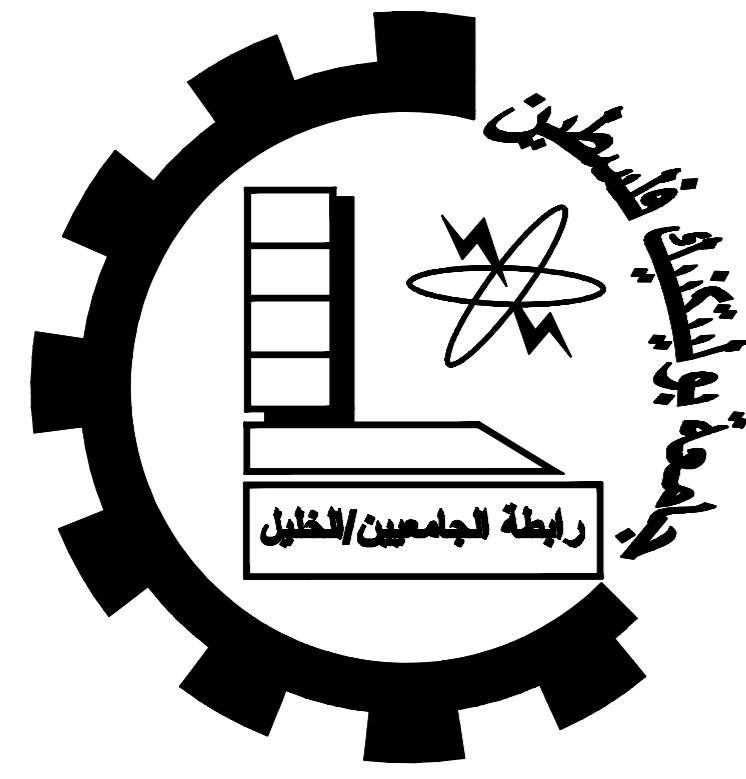
Reinforcement of Beams

Beams of Ground,First,Second Floor Slab

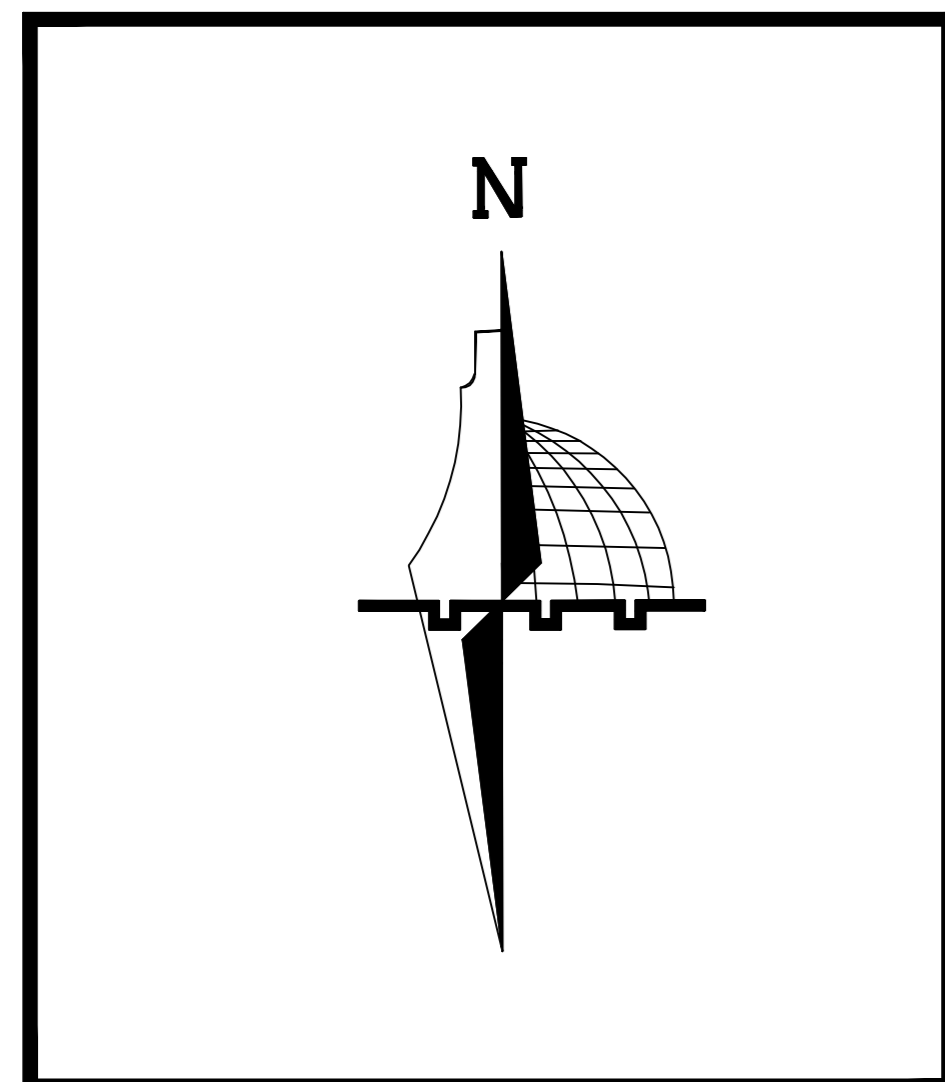
(21,22,24,25,26,27,28)

Scale:1/100





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Civil Engineering

Project Name :
Dura Municipality Building

Supervisor :Dr . Maher Amro

Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S21

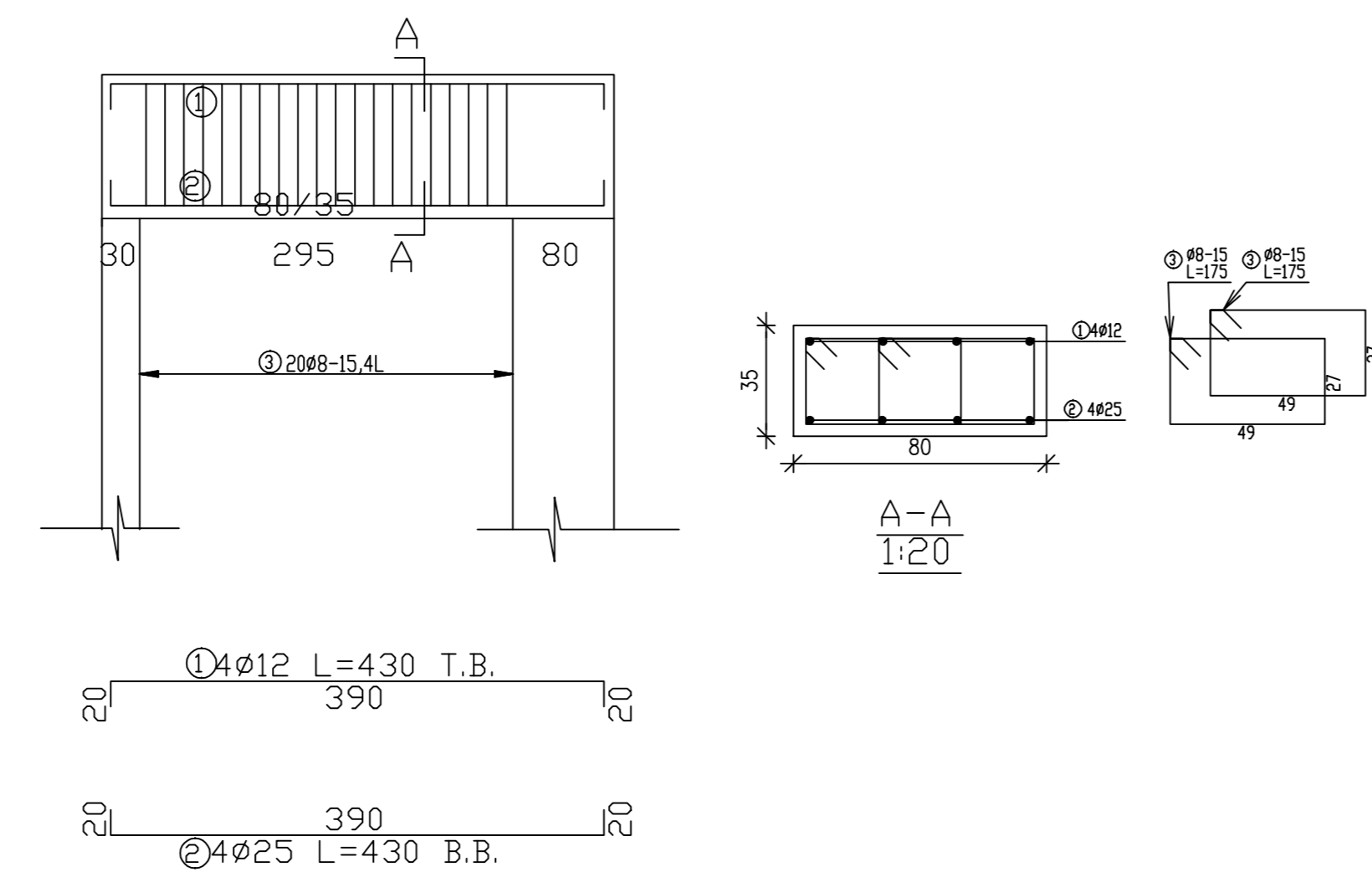
Reinforcement of Beams

Beams of Ground, First, Second Floor Slab

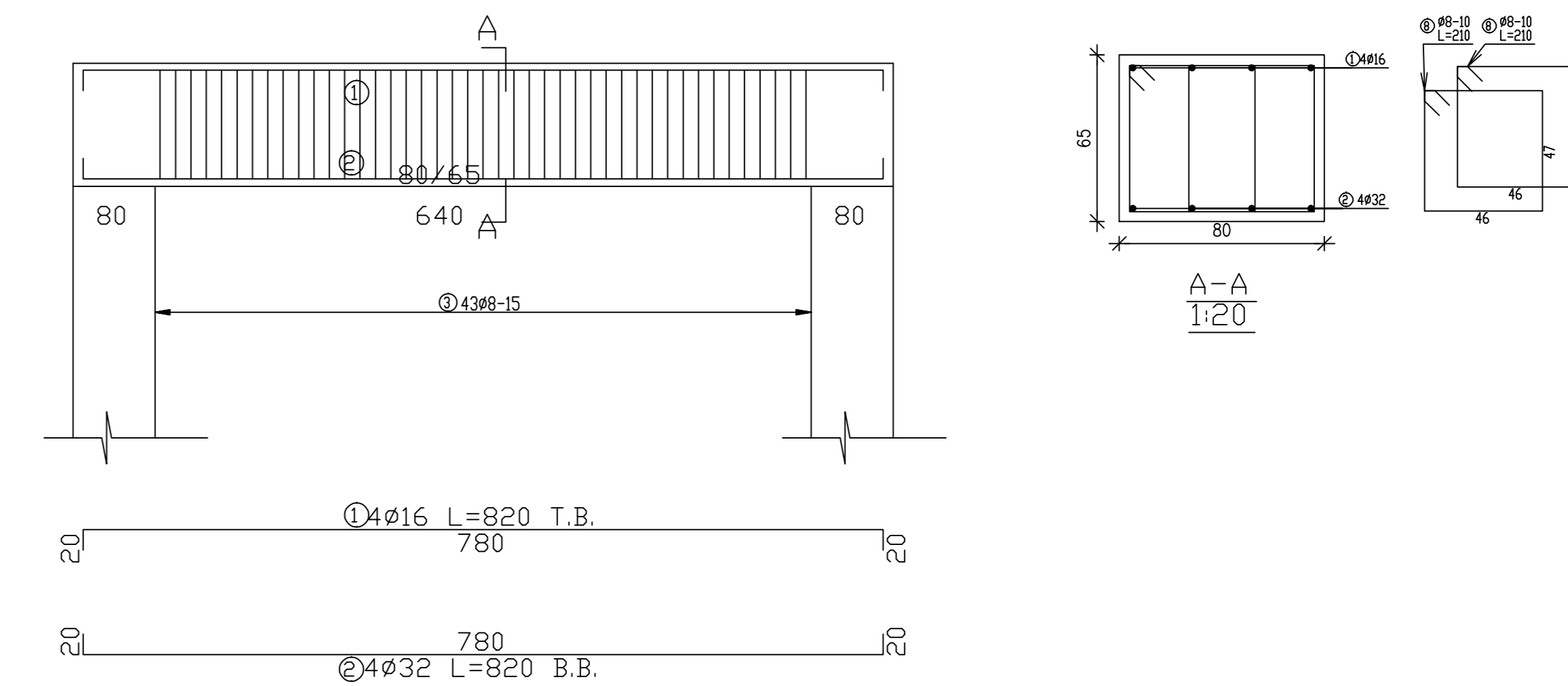
(29,30,32,31)

Scale:1/100

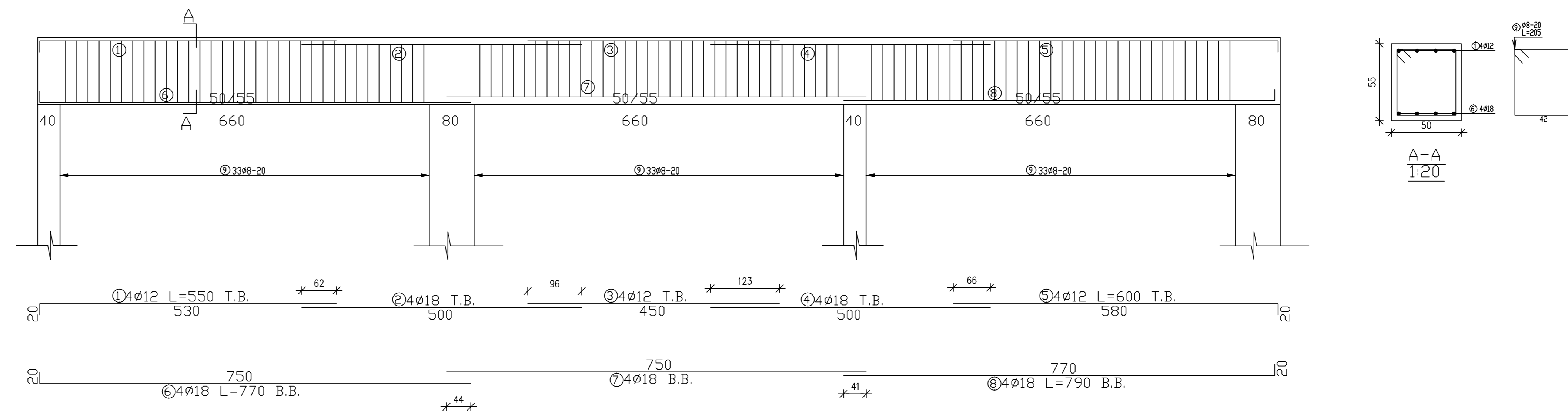
Beam:29 b/h = 80/35
 Scale 1: 50



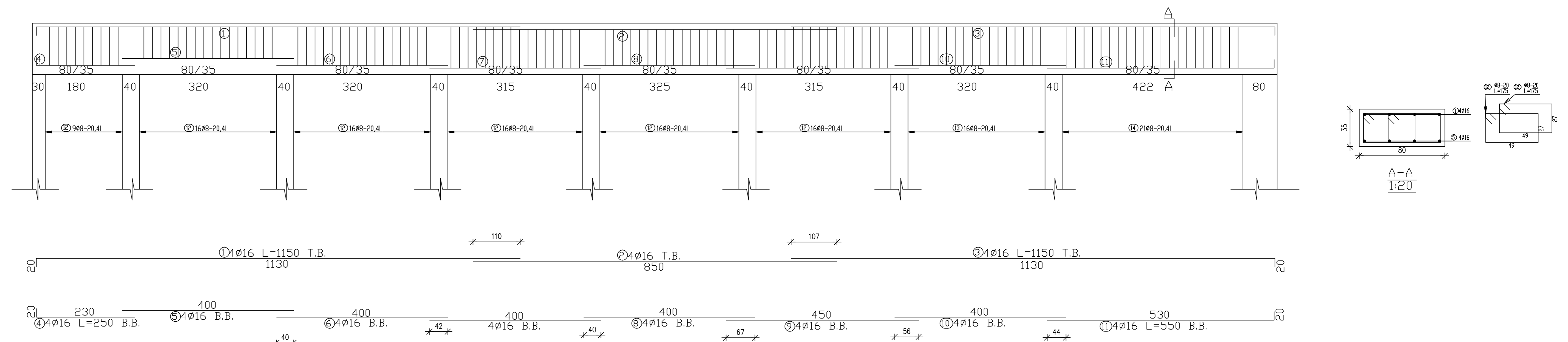
Beam:32 b/h = 80/65
 Scale 1: 50

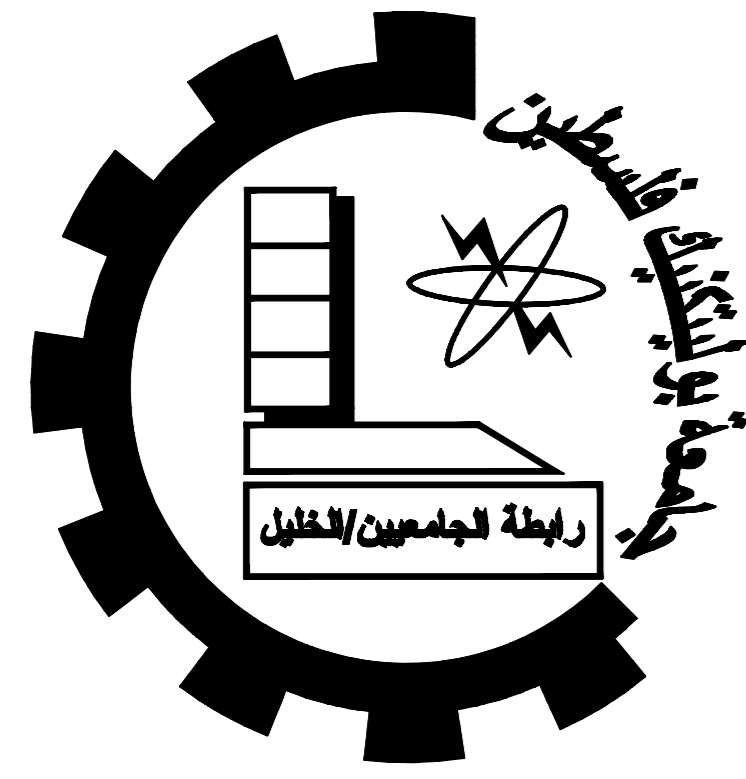


Beam:30 b/h = 50/55
 Scale 1: 50

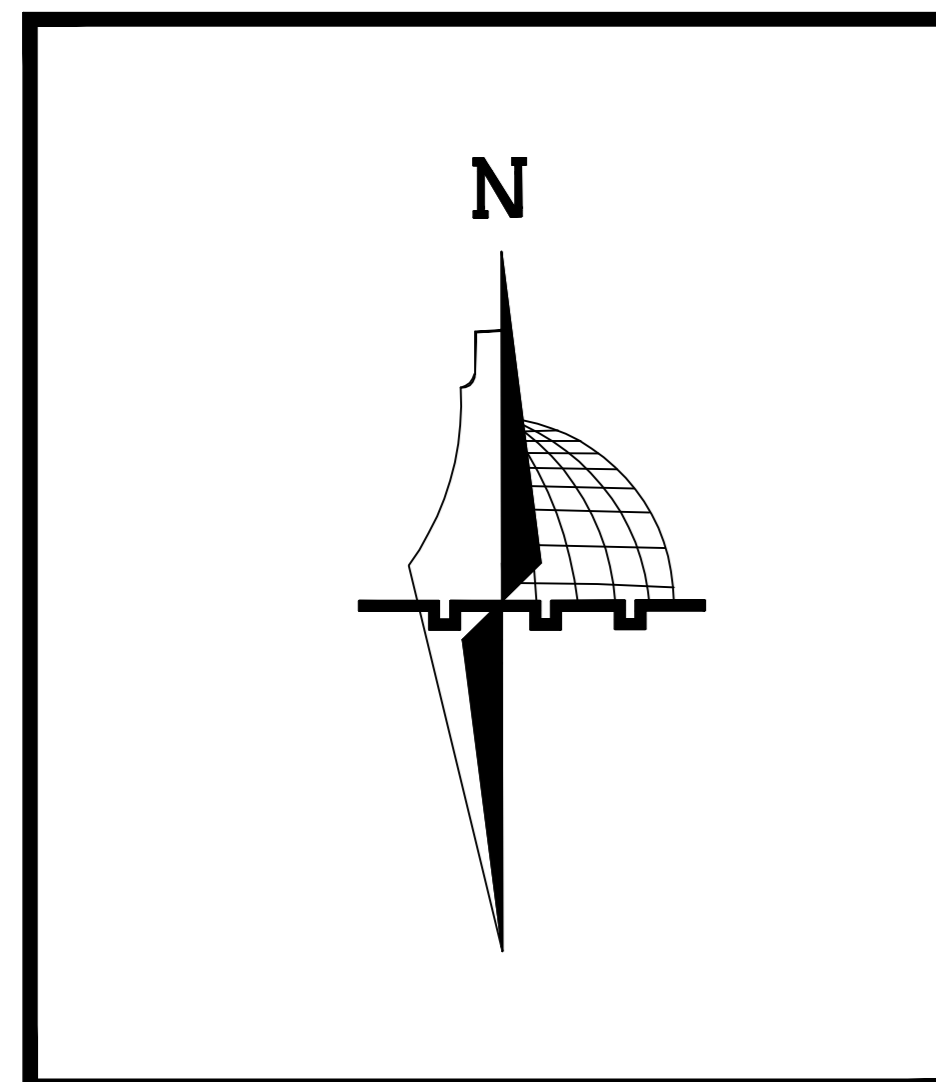


Beam:31 b/h = 80/35
 Scale 1: 50





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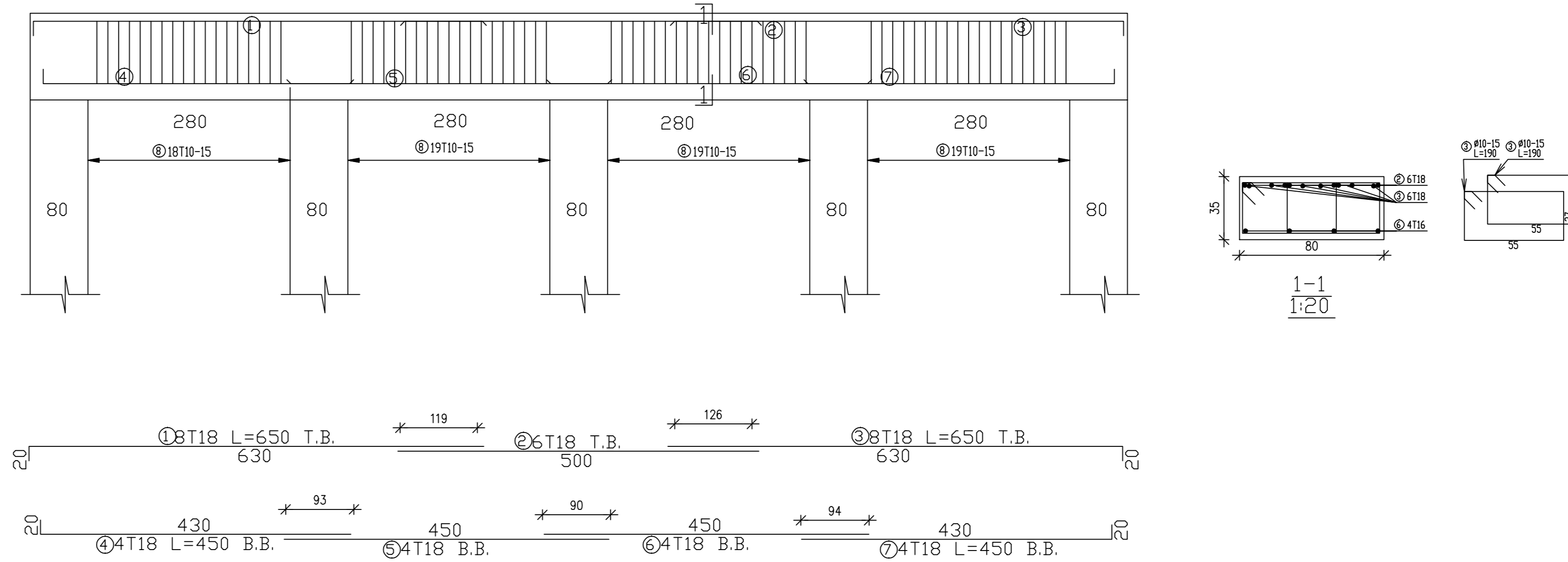
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S22

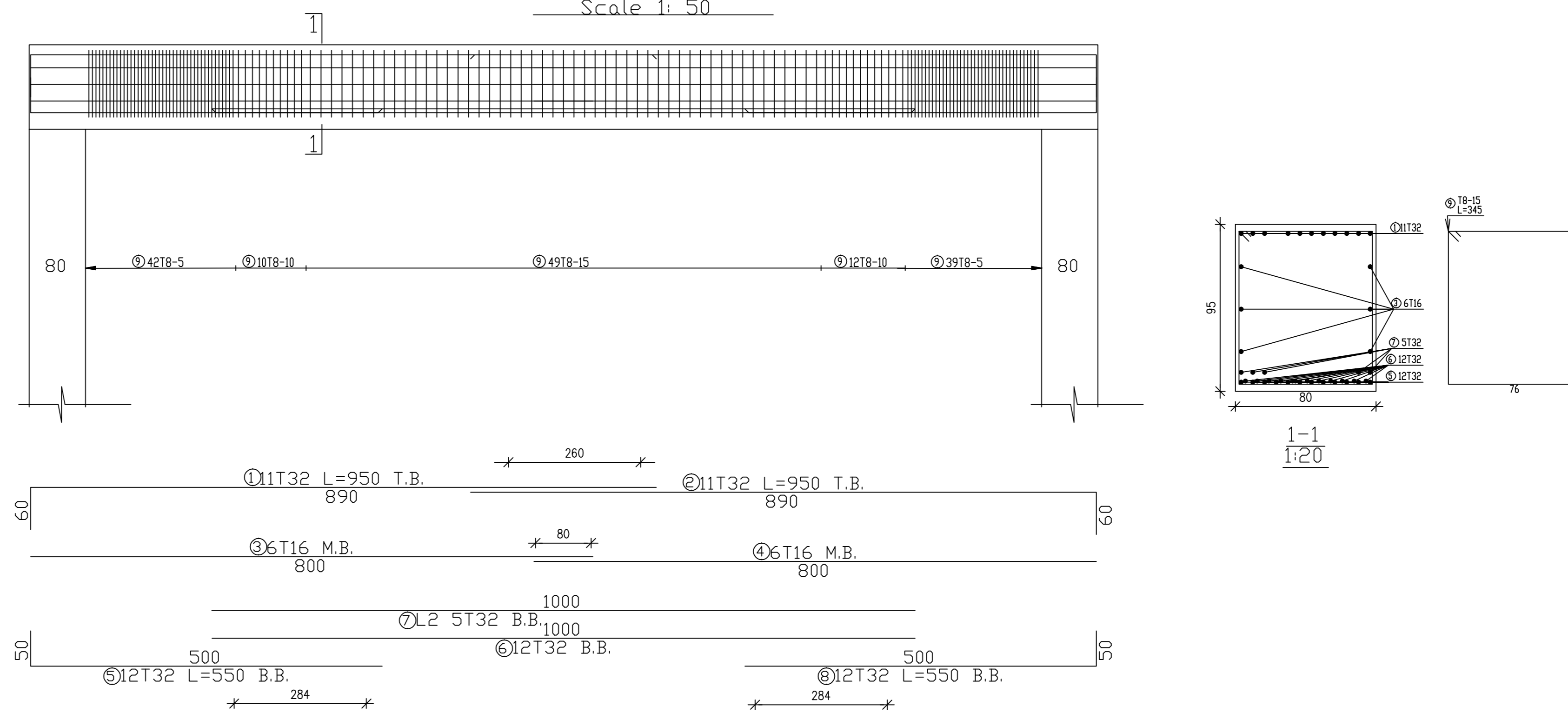
Reinforcement of Beams

Beams of Ground, First, Second Floor Slab (33,34,35) Scale:1/100

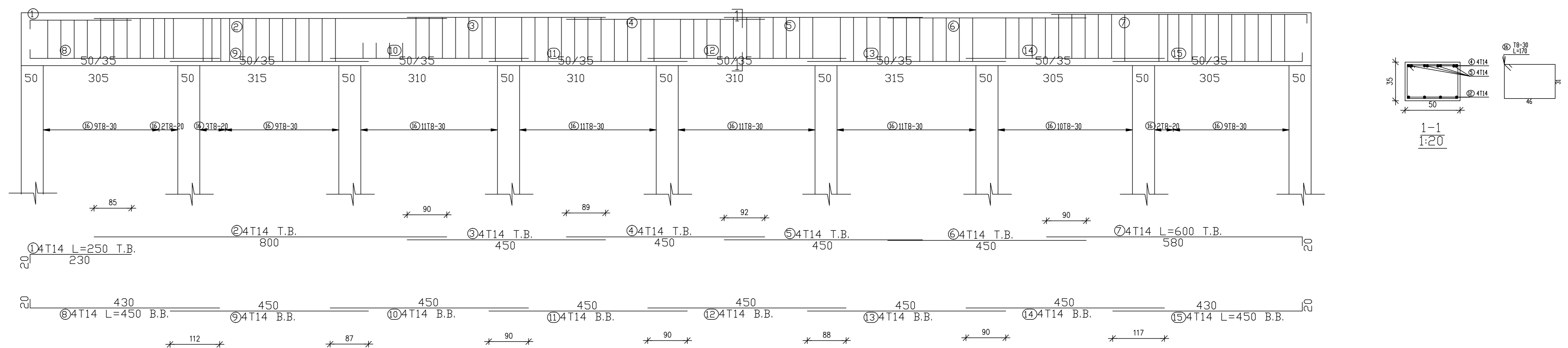
Beam:33 b/h = 80/35
 Scale 1: 50

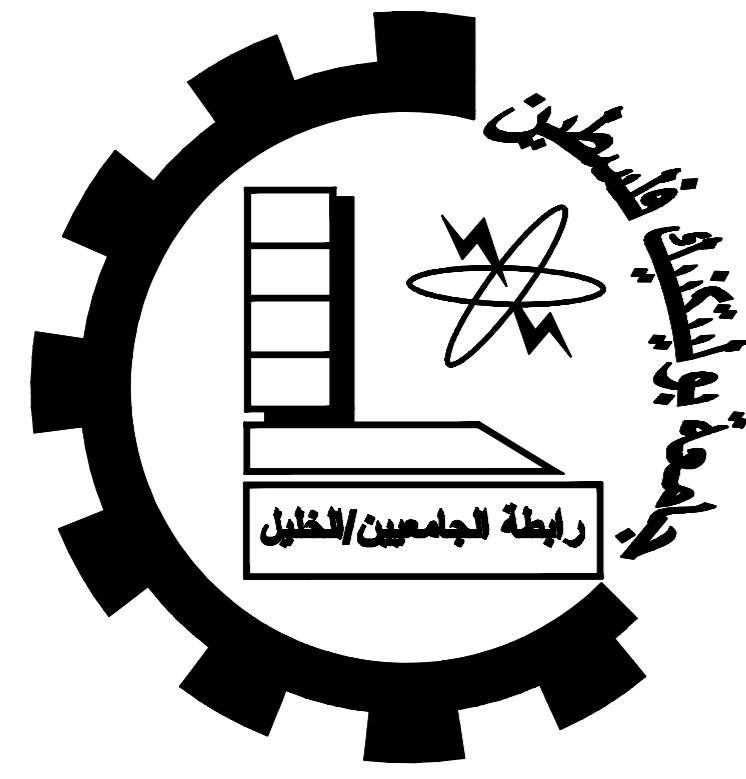


Beam 34 b/h = 80/95
 Scale 1: 50

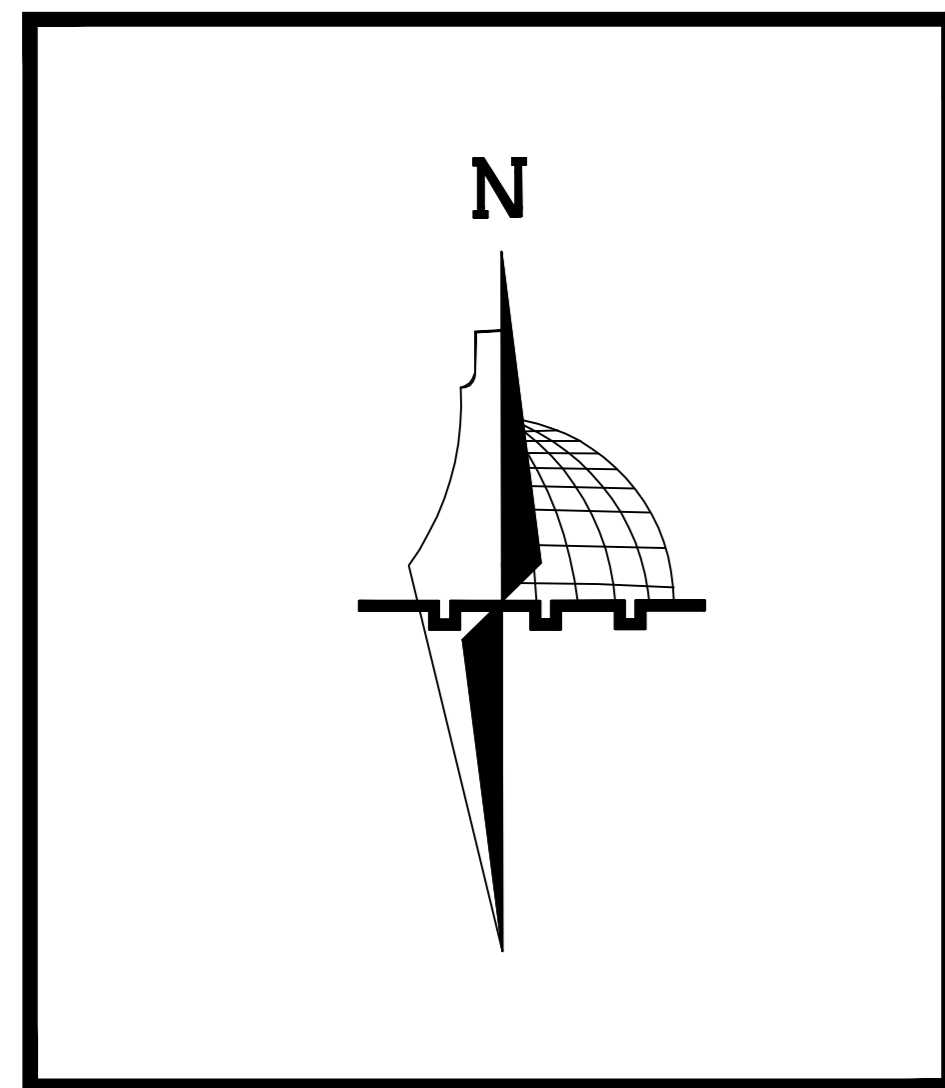


Beam:35 b/h = 50/35
 Scale 1: 50





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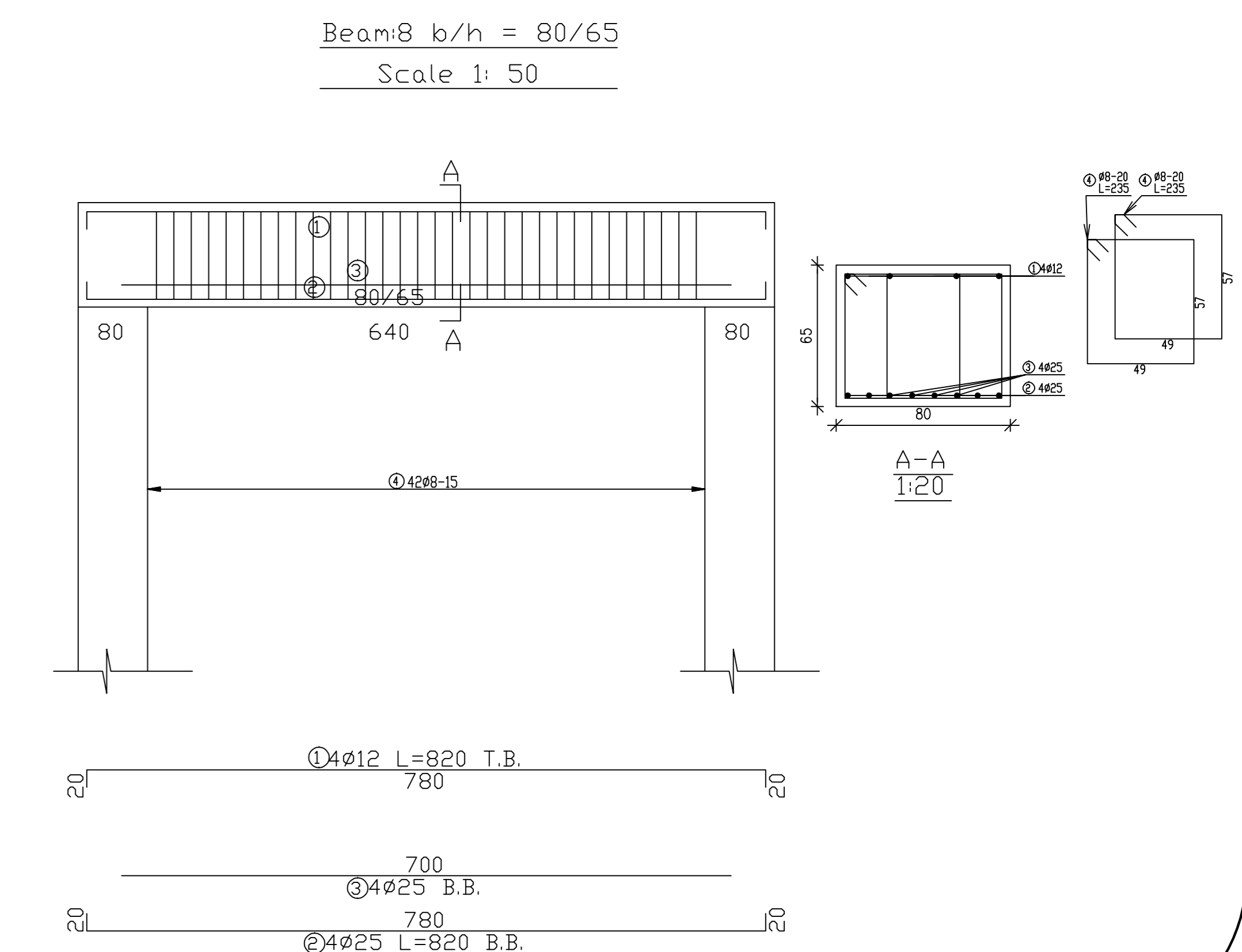
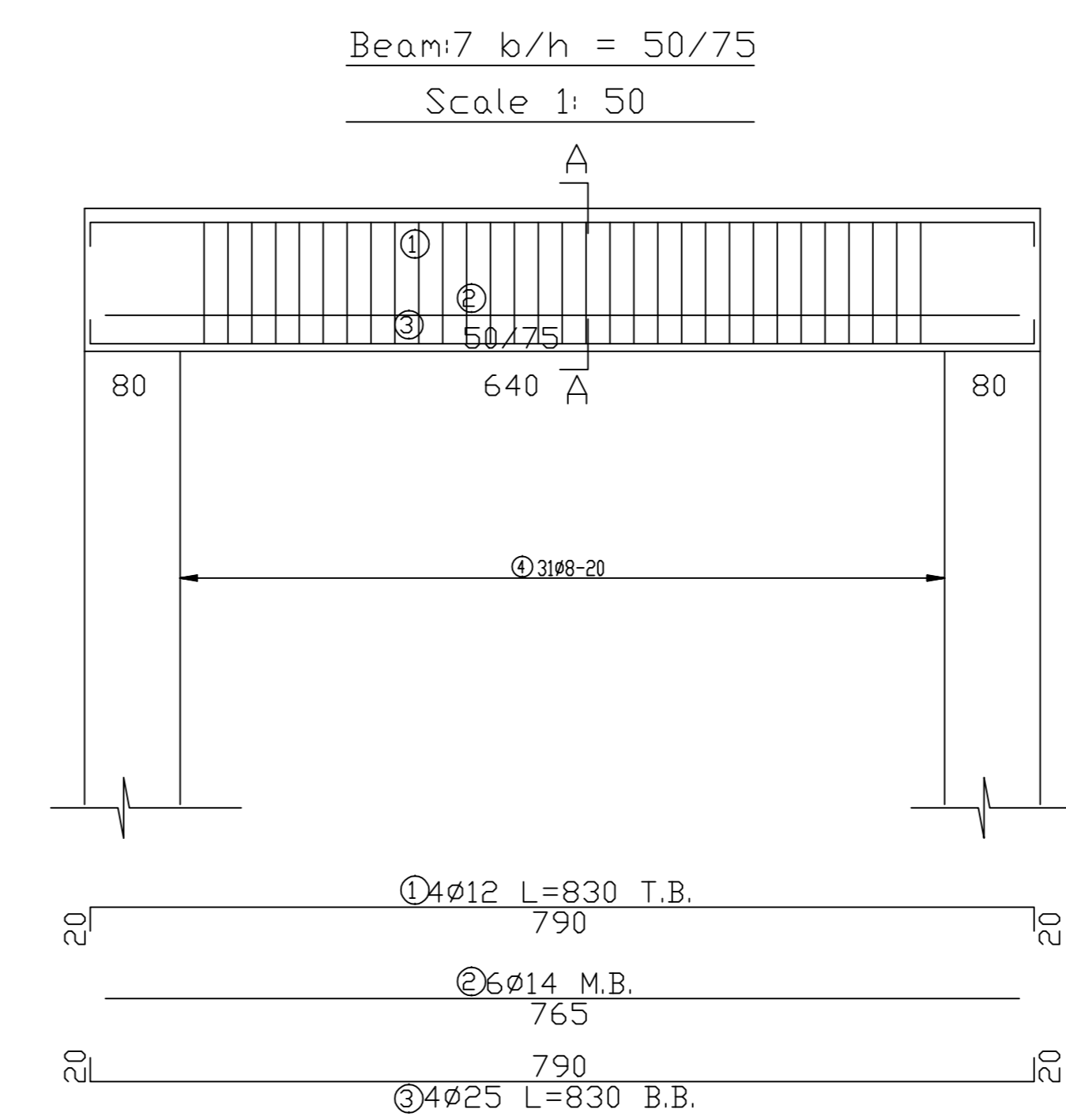
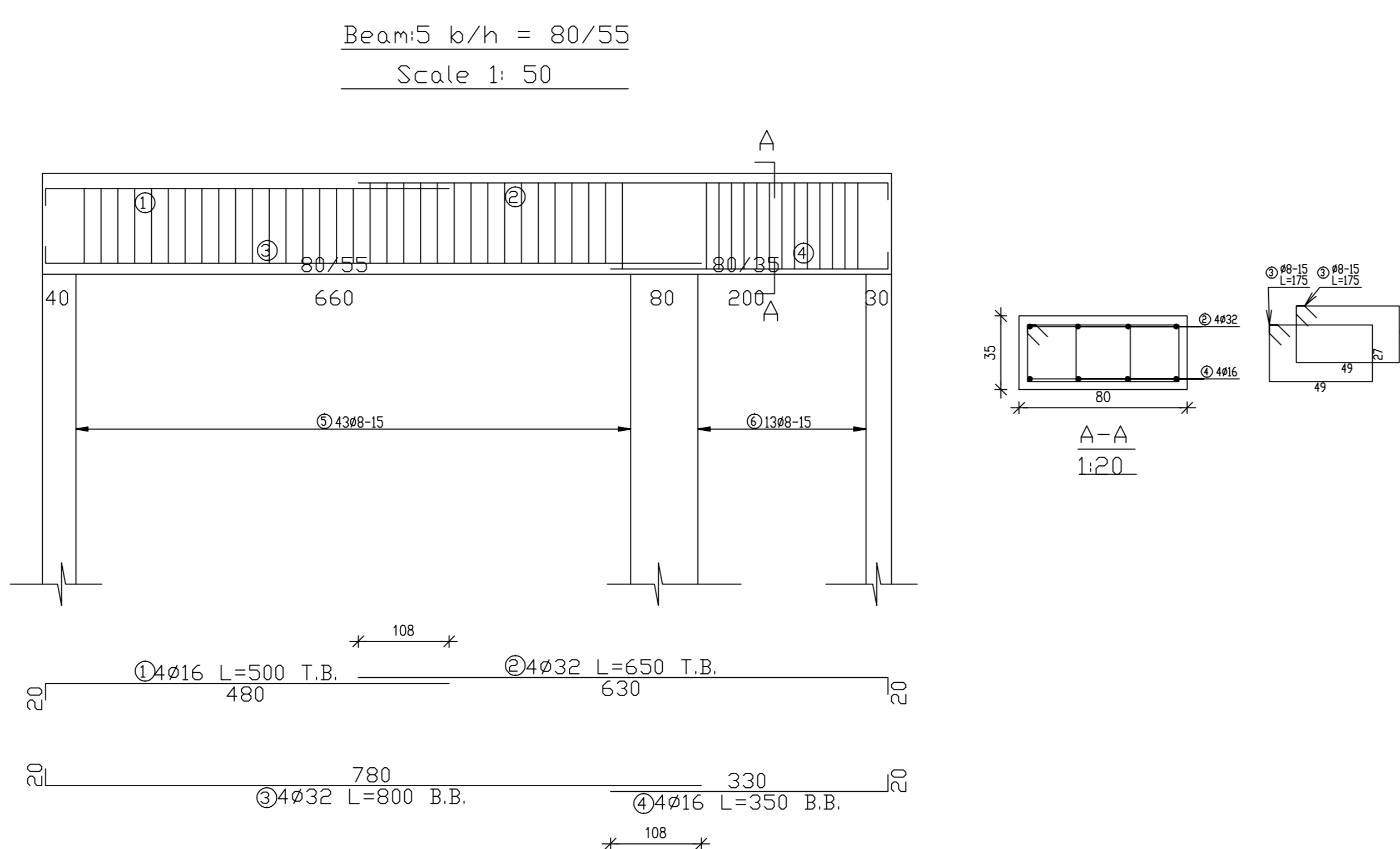
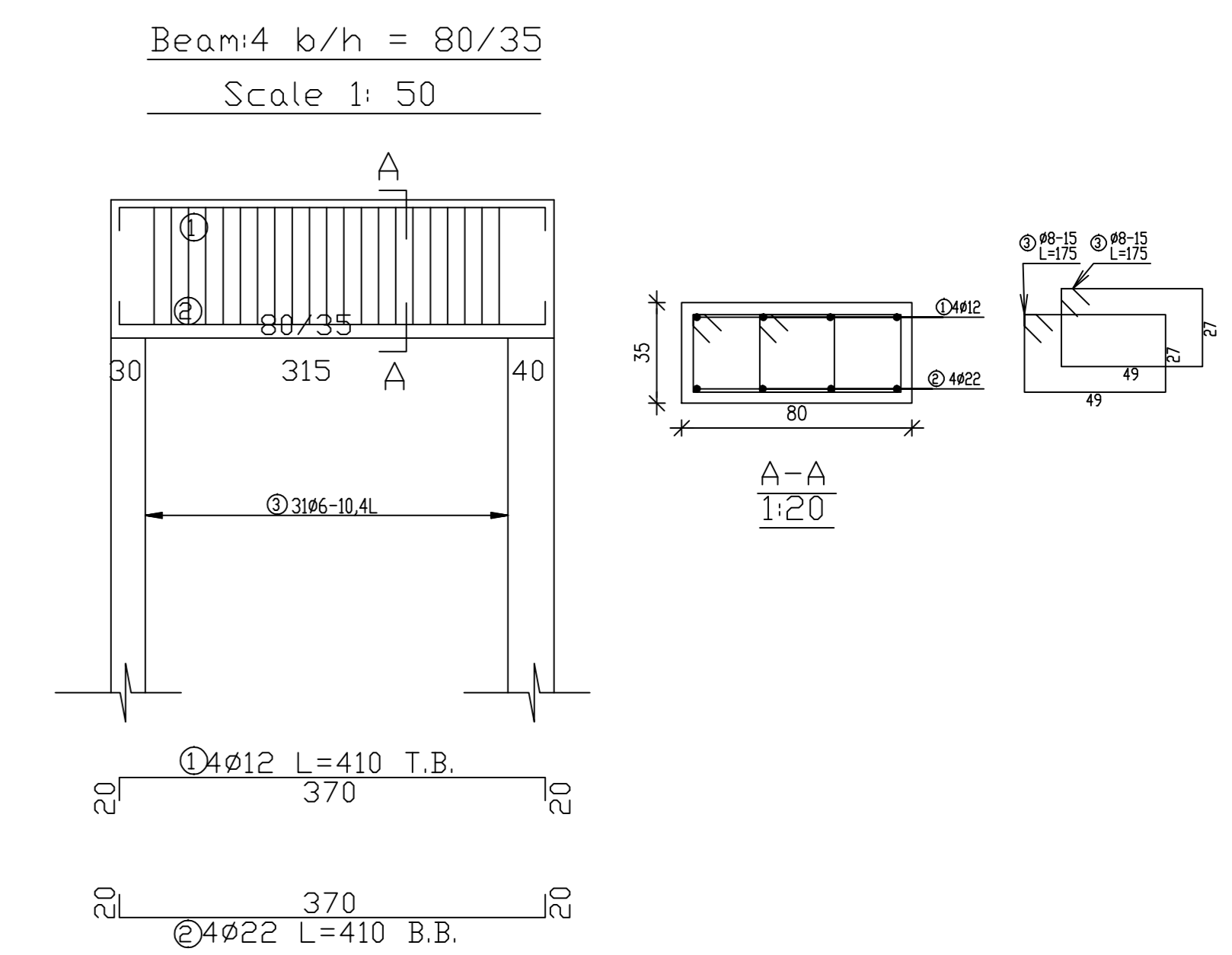
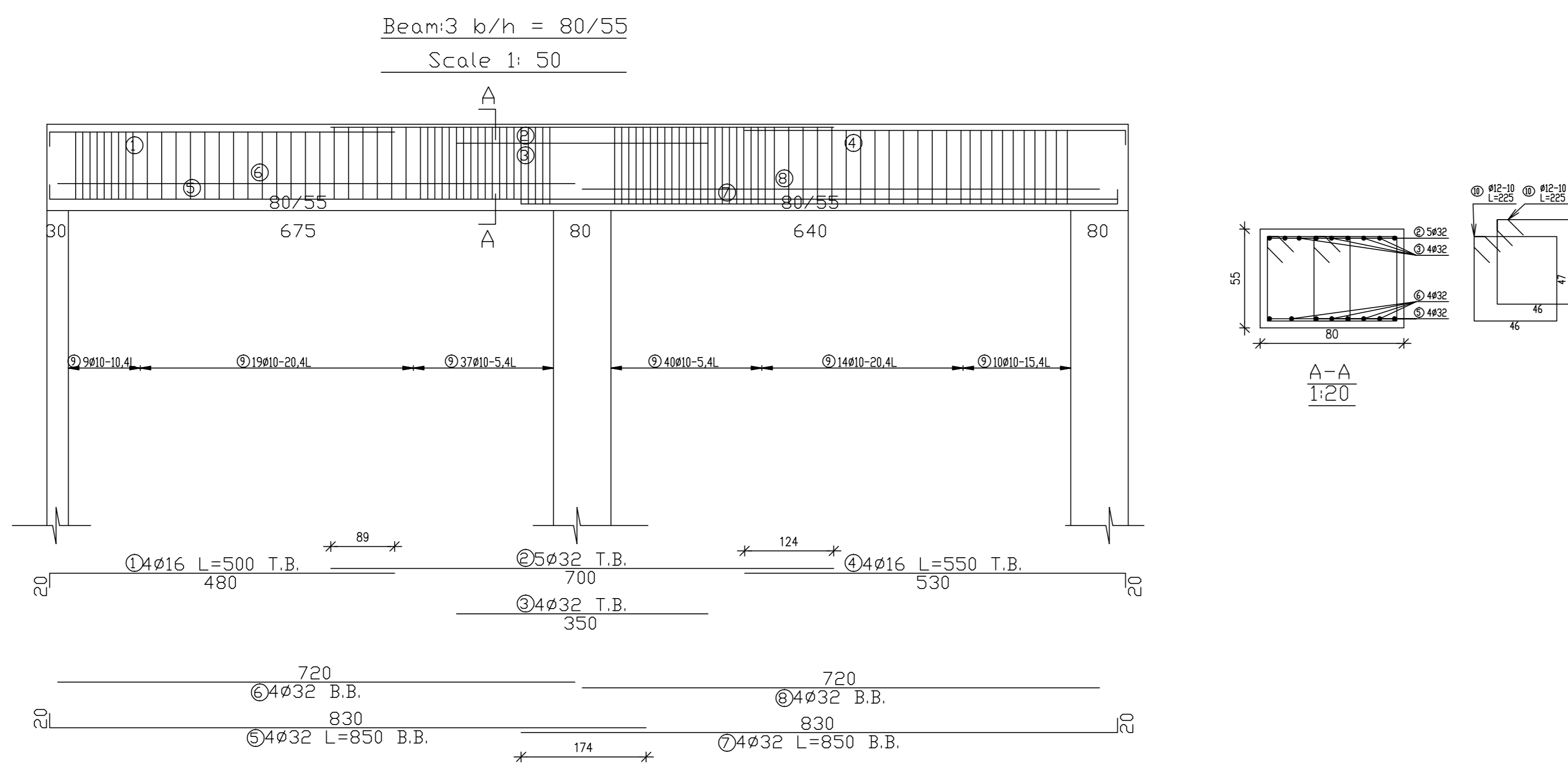
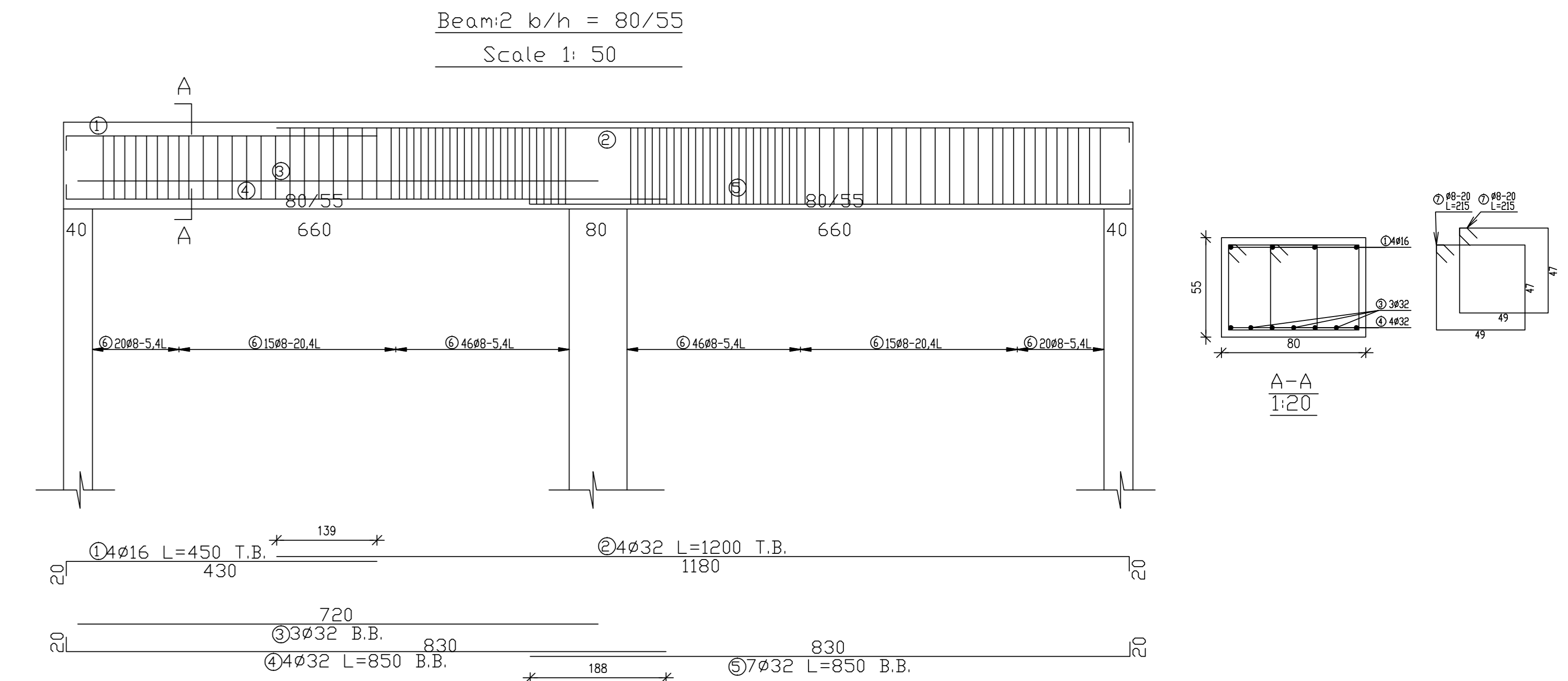
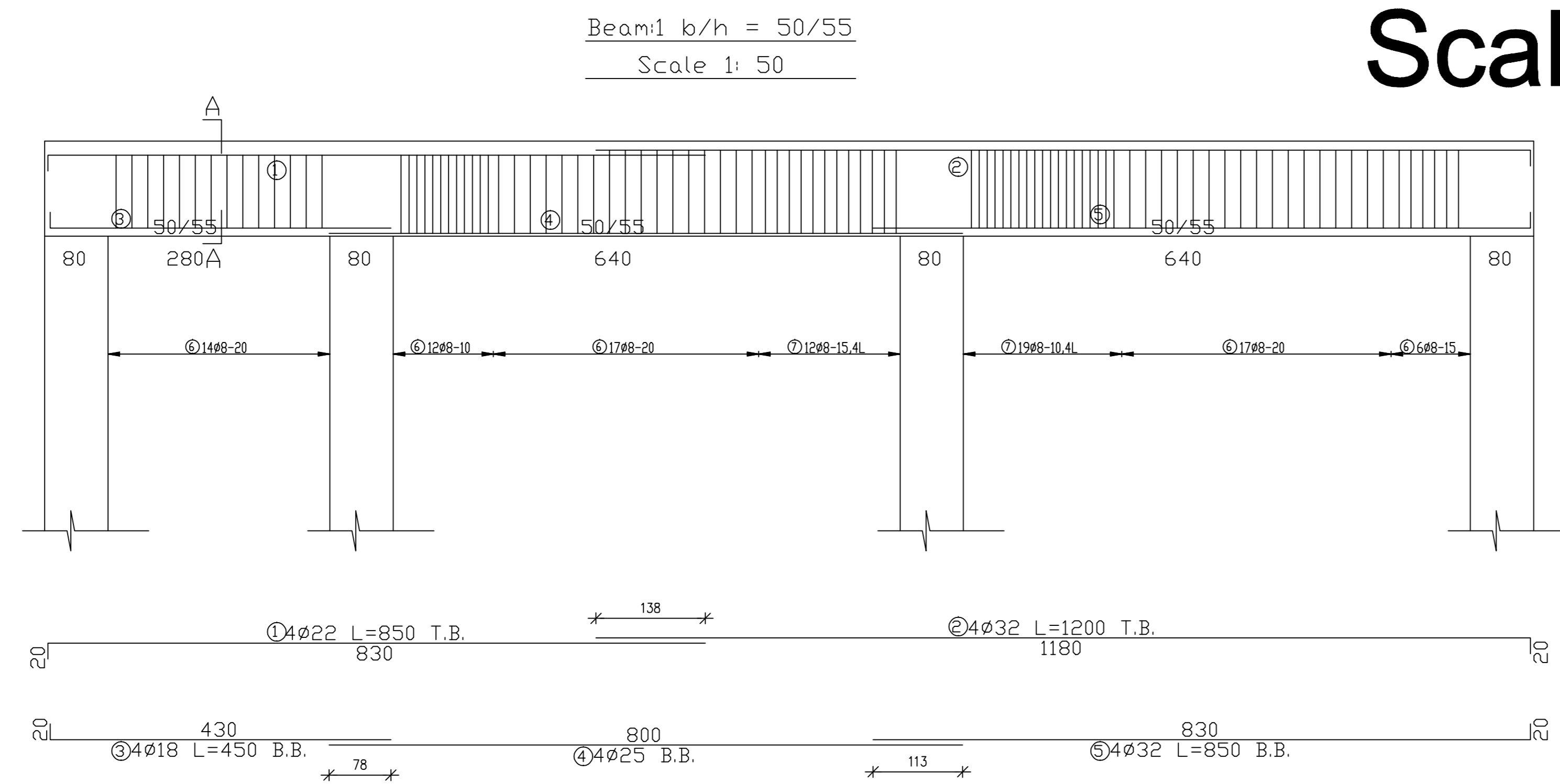
Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

No. : S23

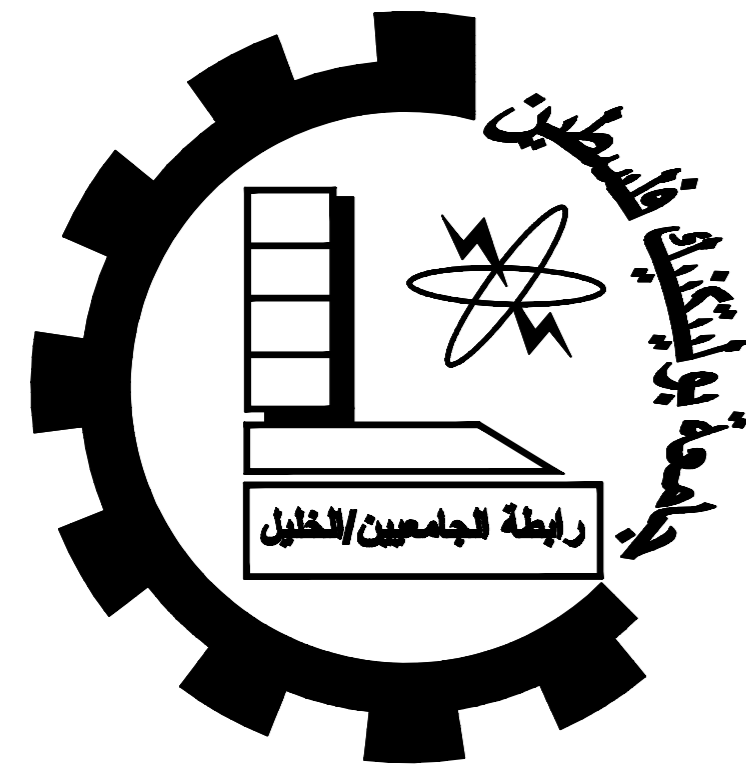
Reinforcement of Beams

Beams of Third Floor Slab (1,2,3,4,5,7,8)

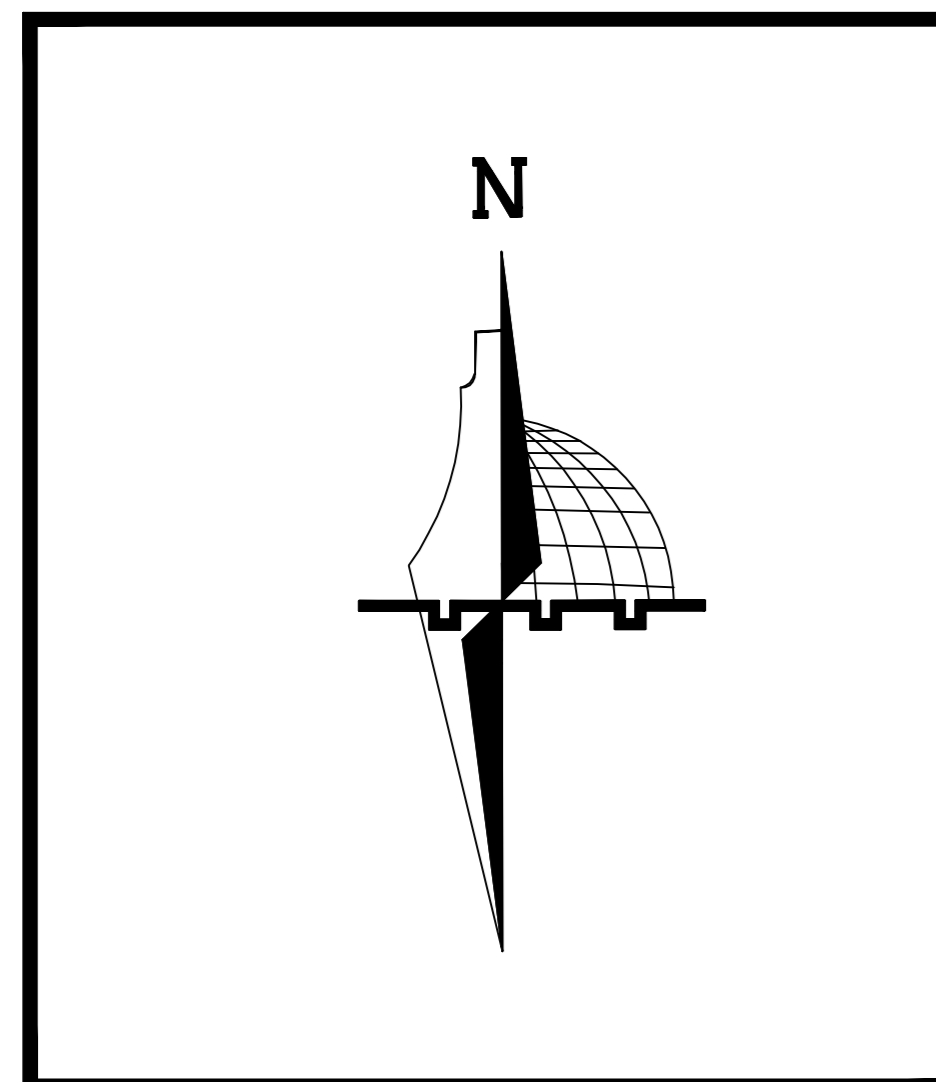
Scale:1/100



Reinforcement of Beams Beams of Third Floor Slab (9,10,11,12,13,14) Scale:1/100



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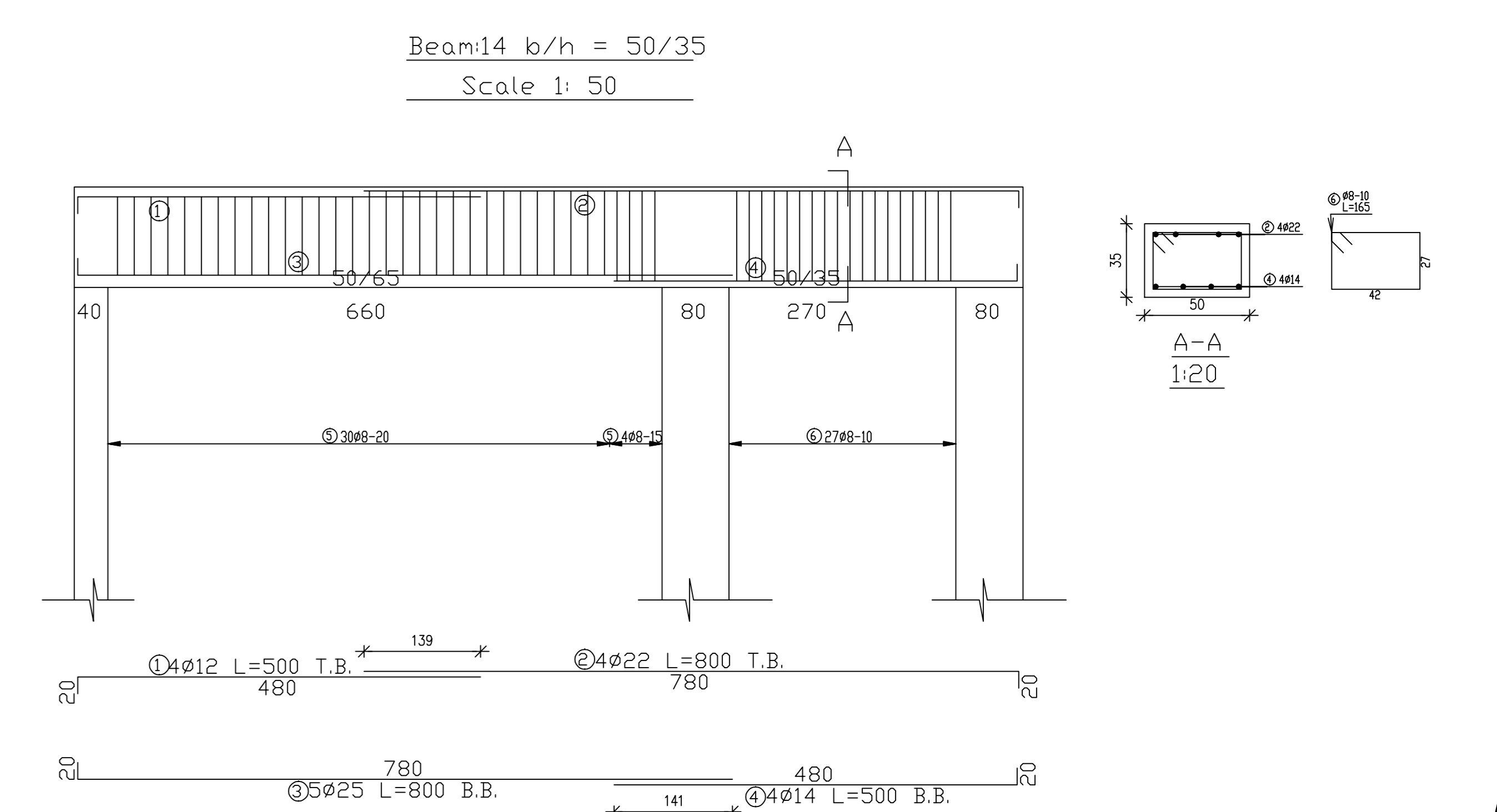
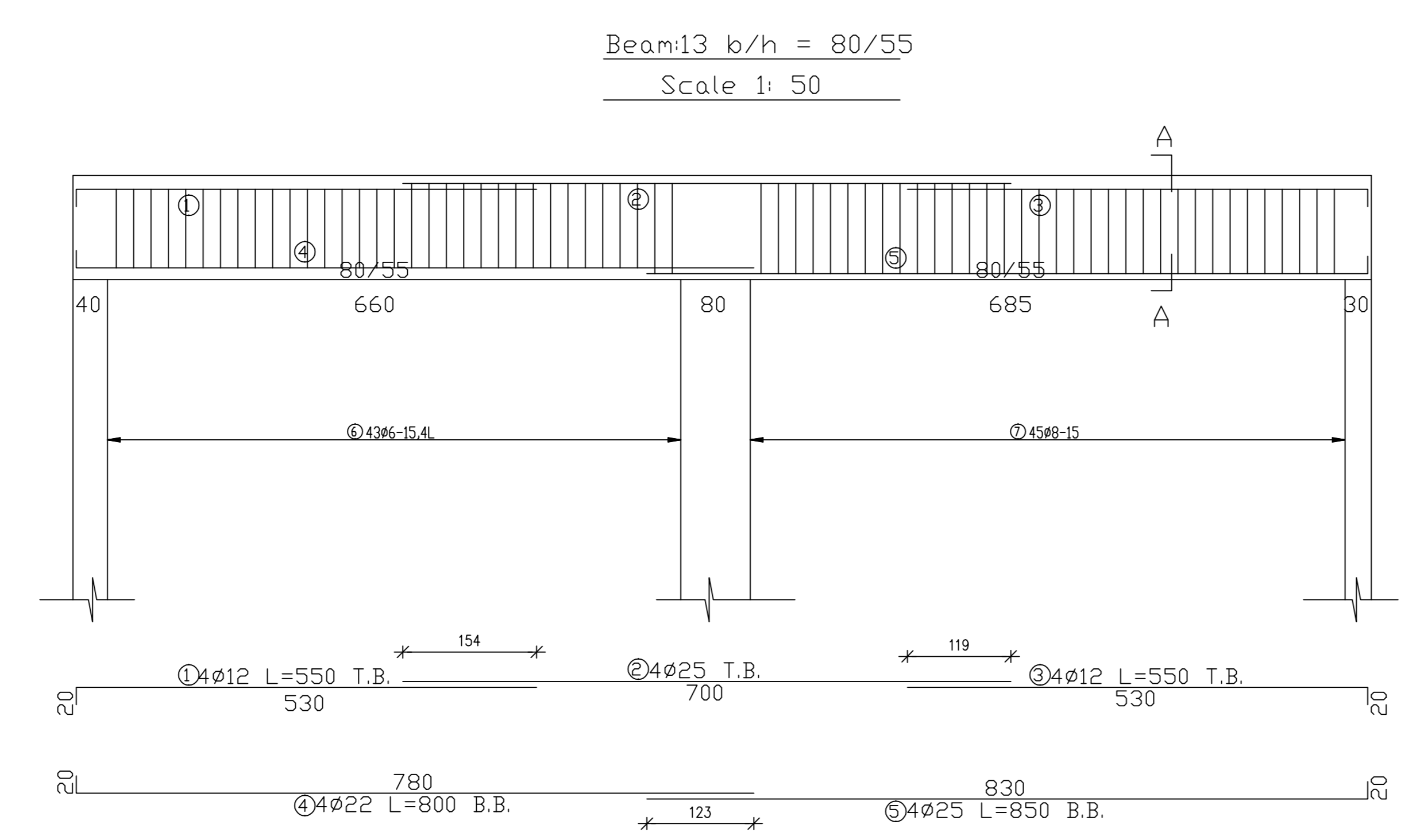
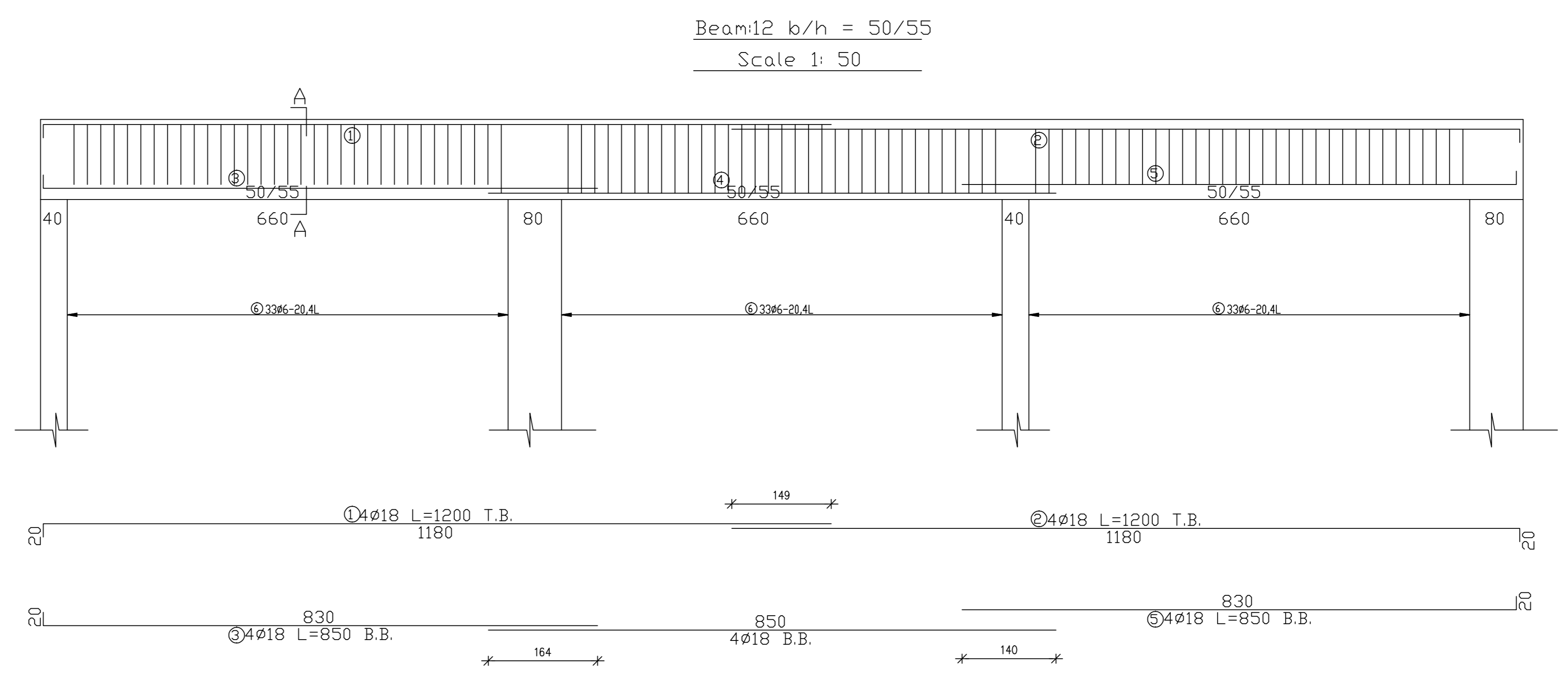
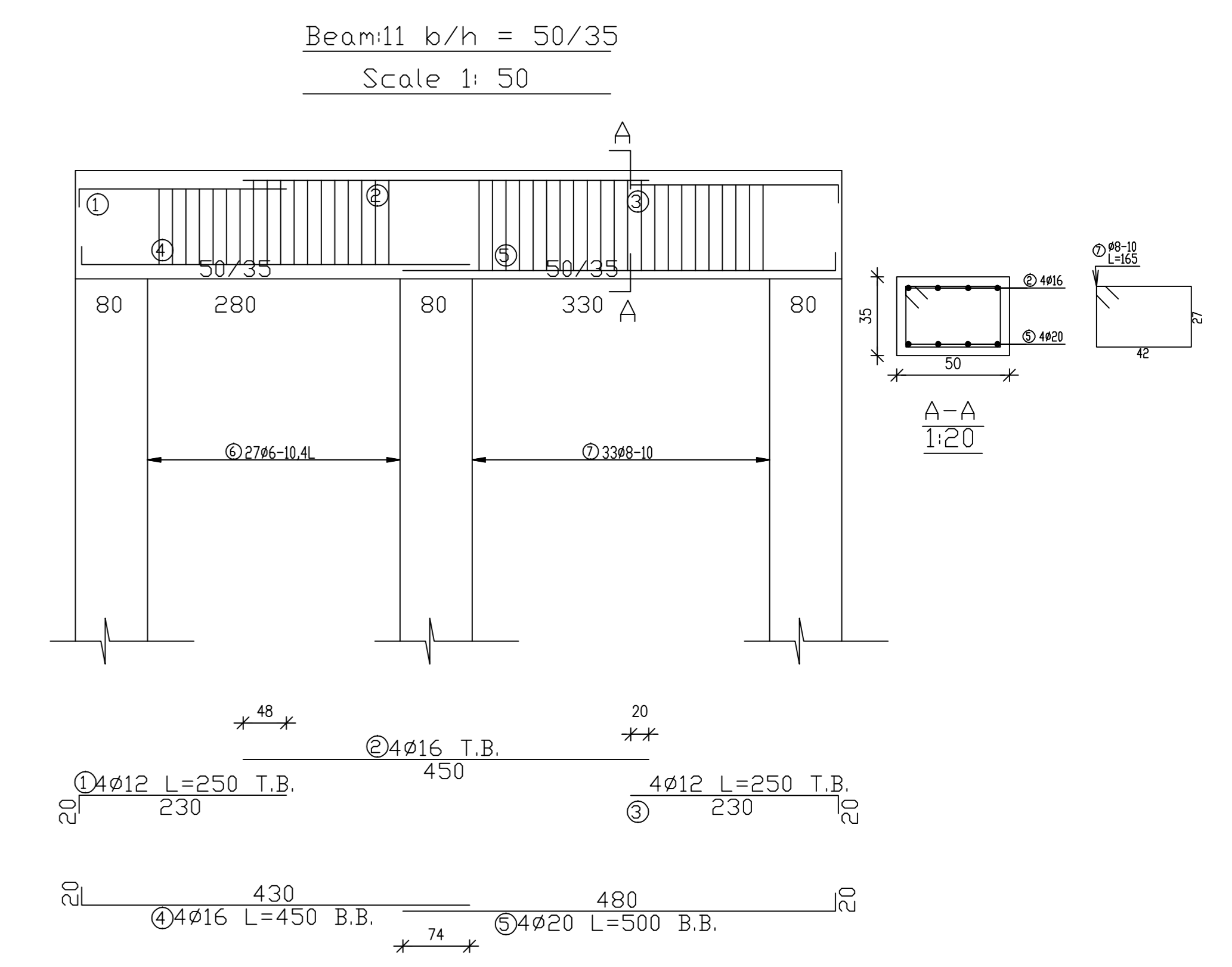
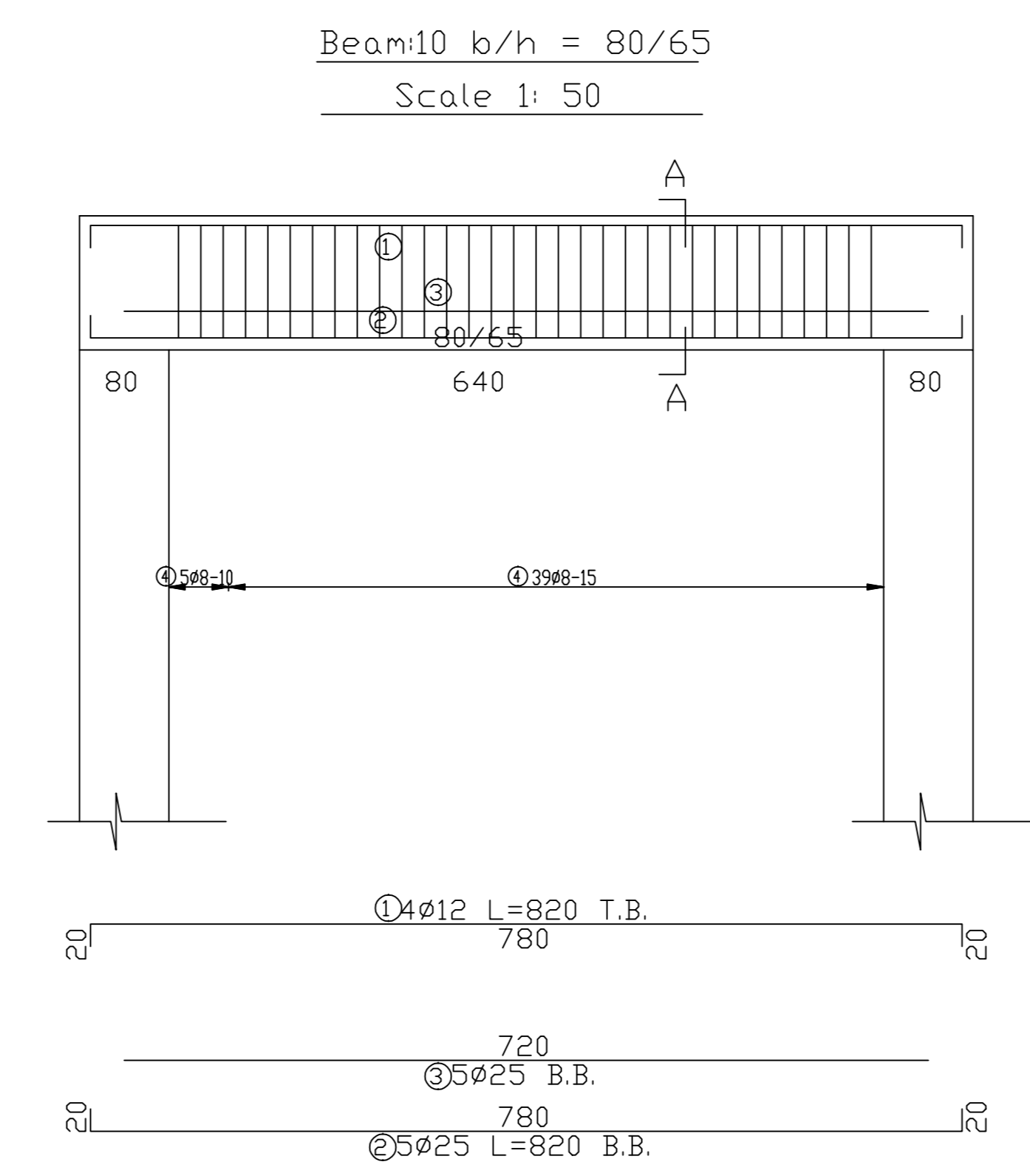
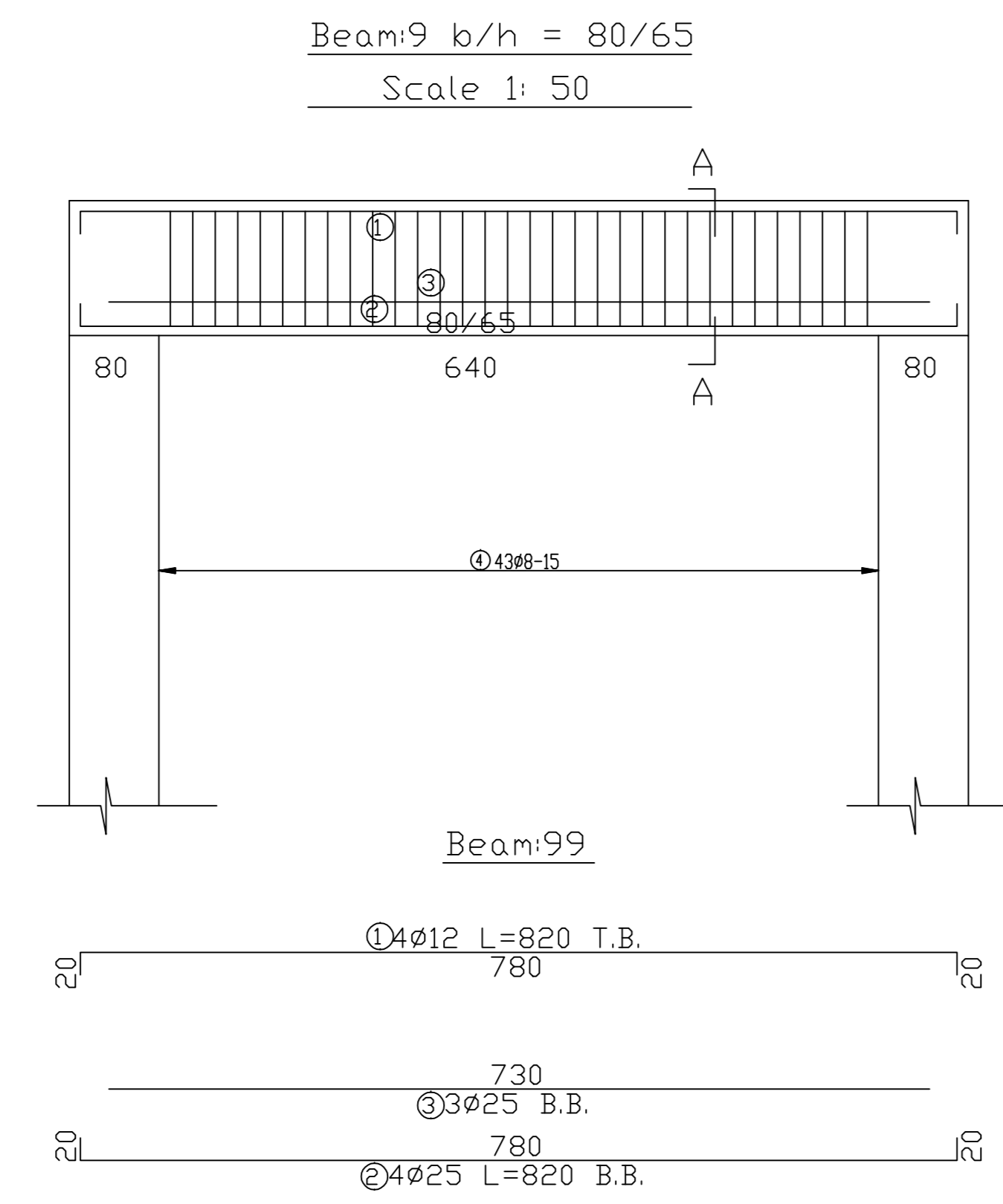
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Supervisor :Dr . Maher Amro

**Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer**

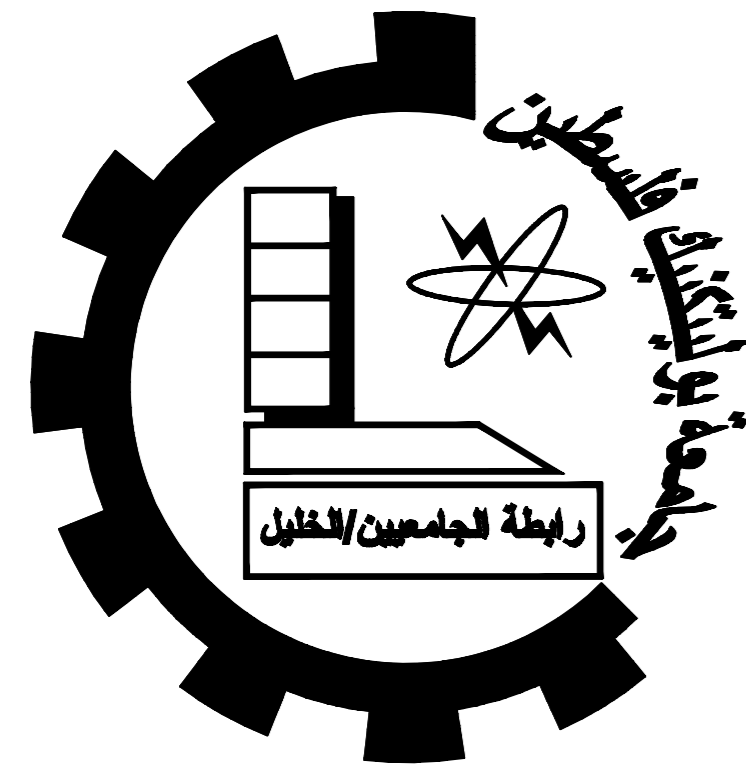
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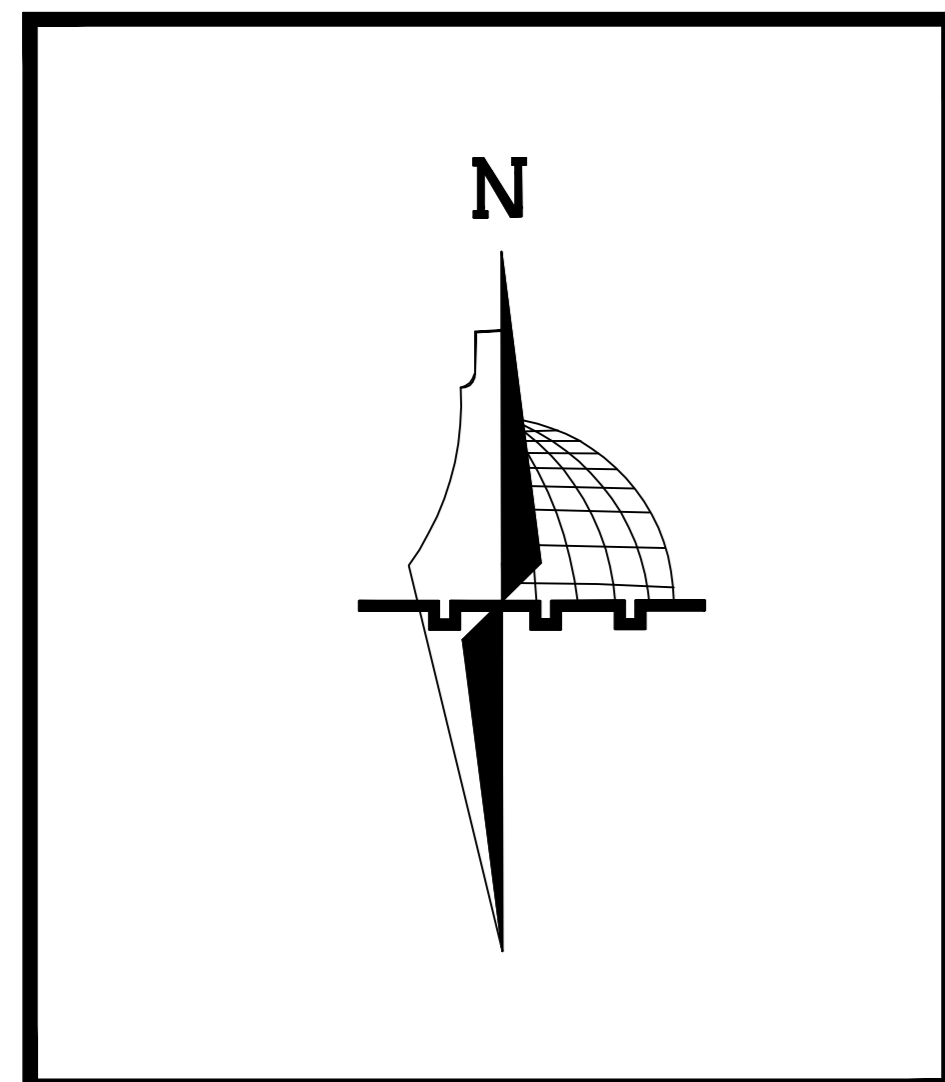
Reinforcement of Beams

Beams of Third Floor Slab (15,16,17,18,19)

Scale: 1/100



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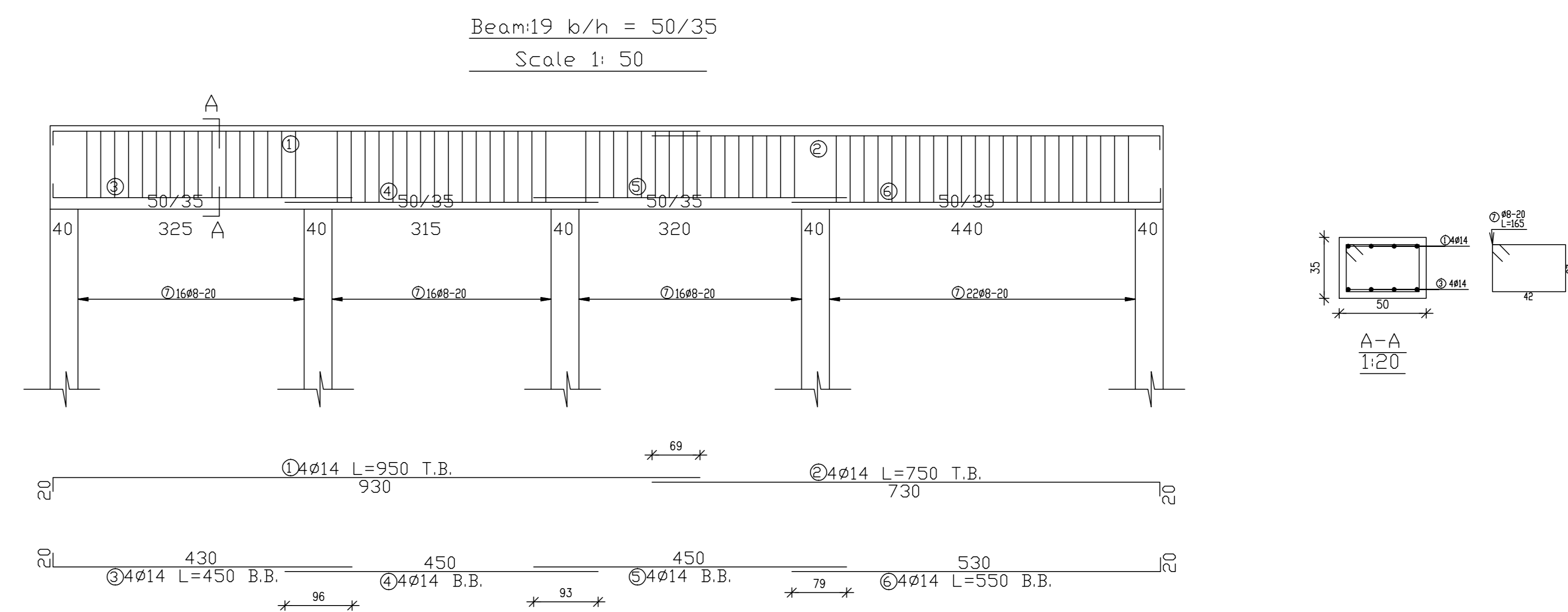
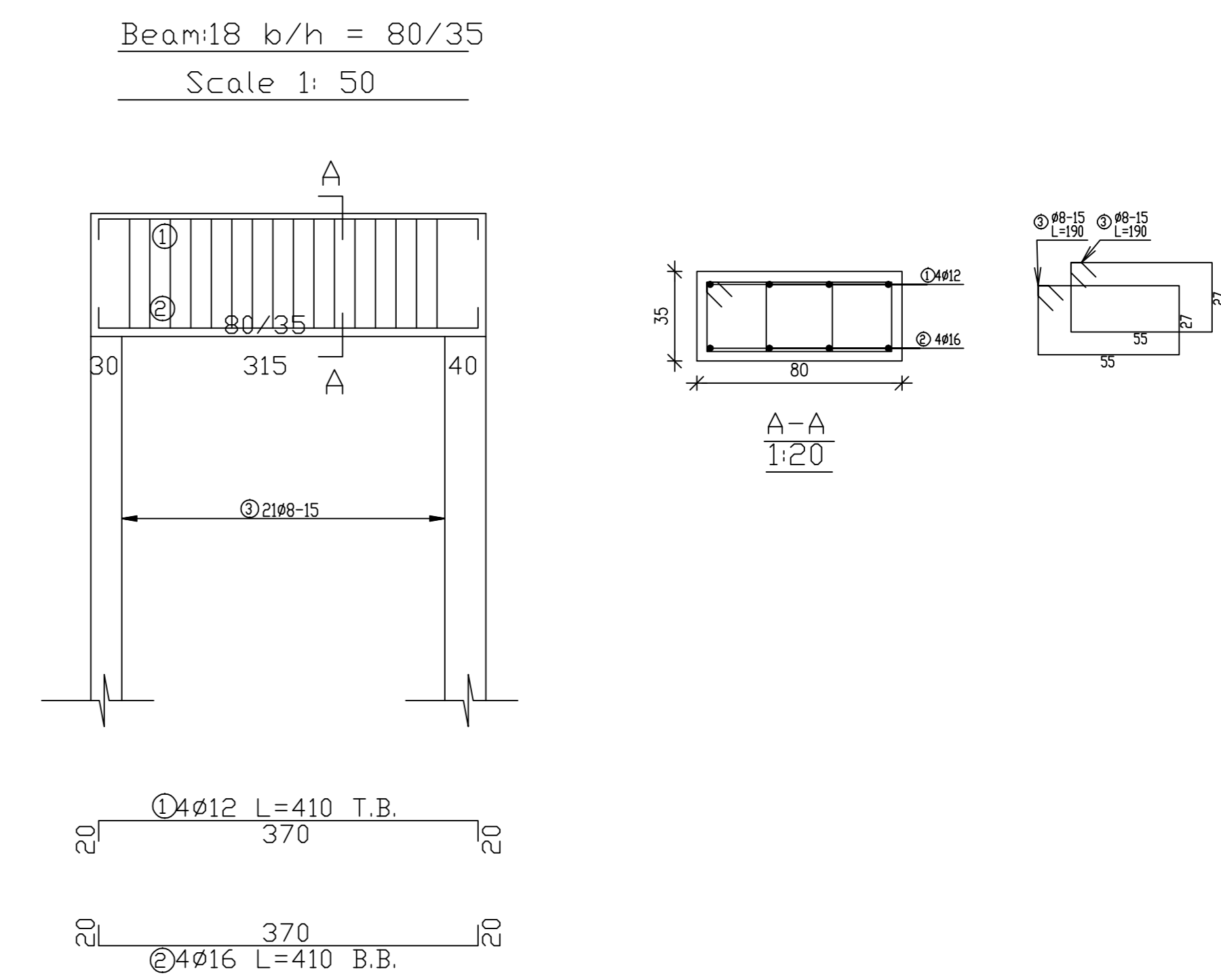
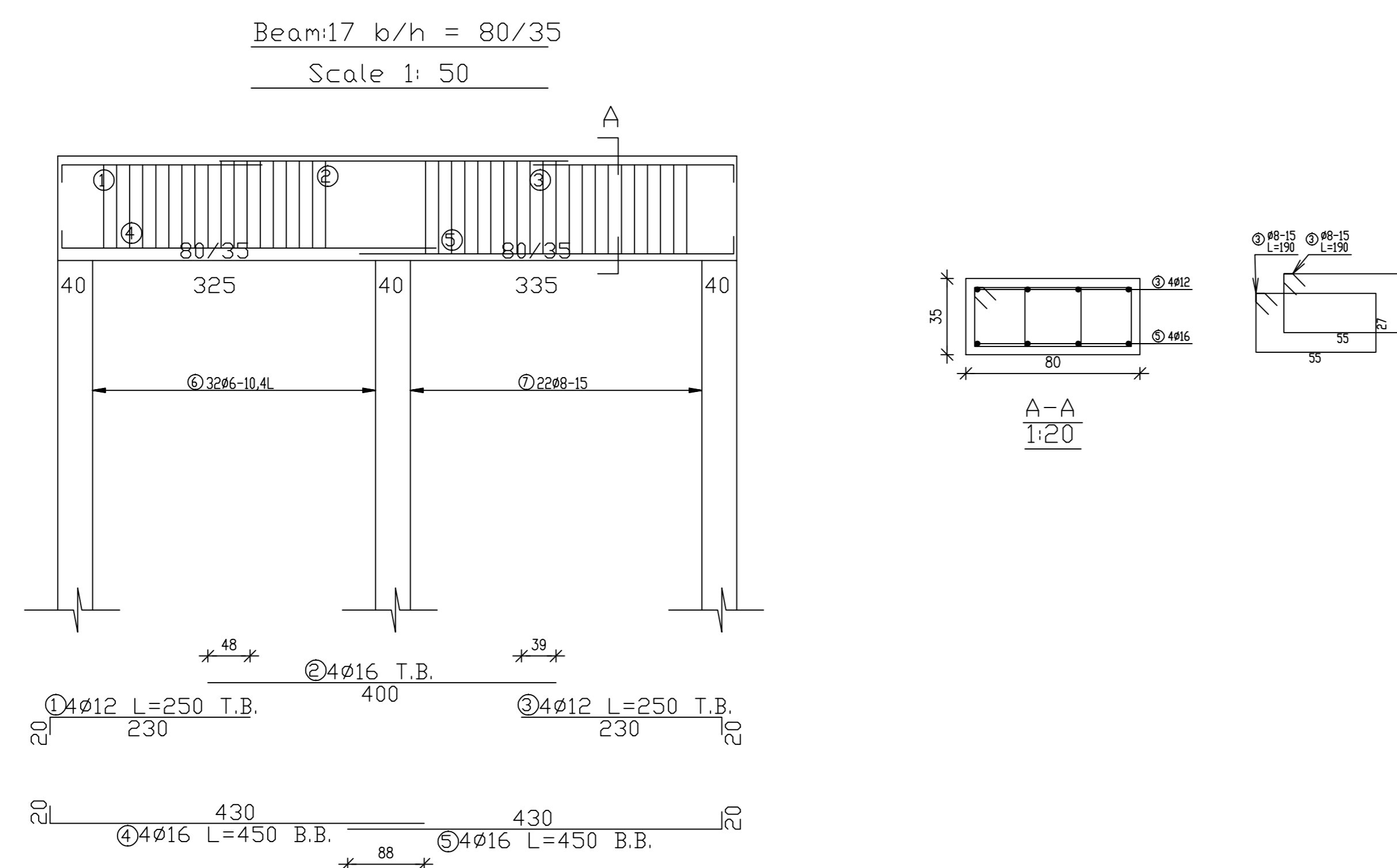
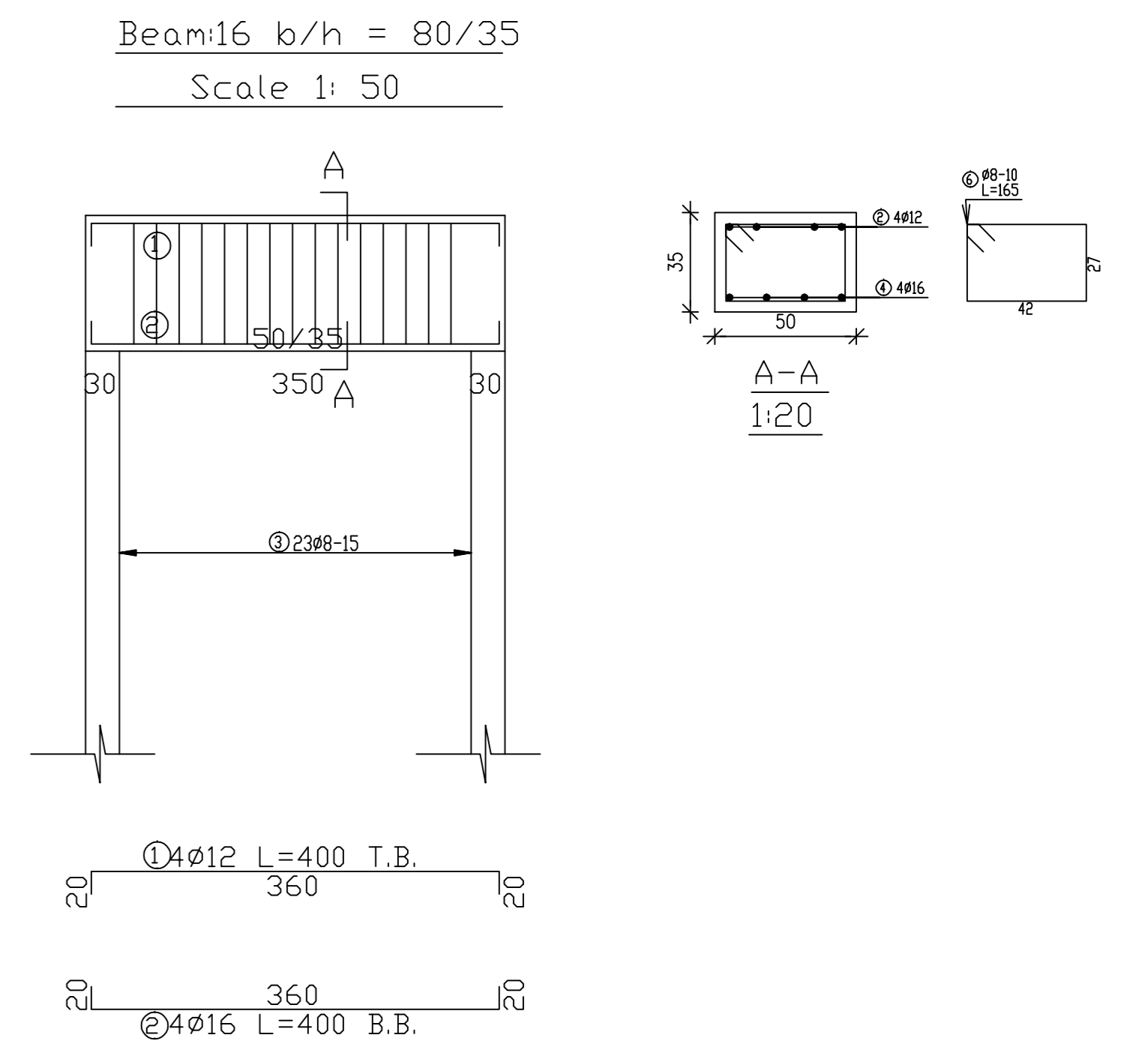
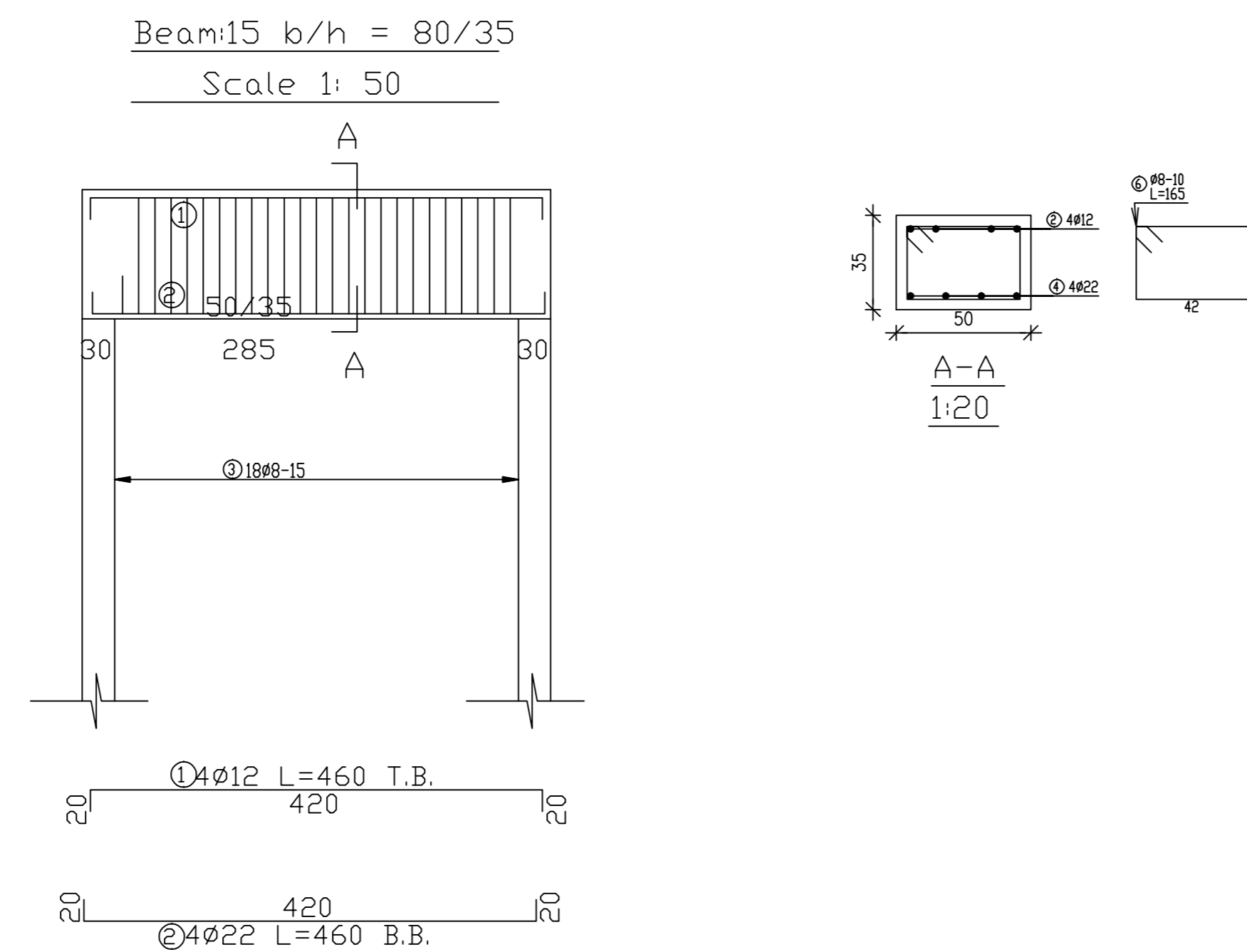
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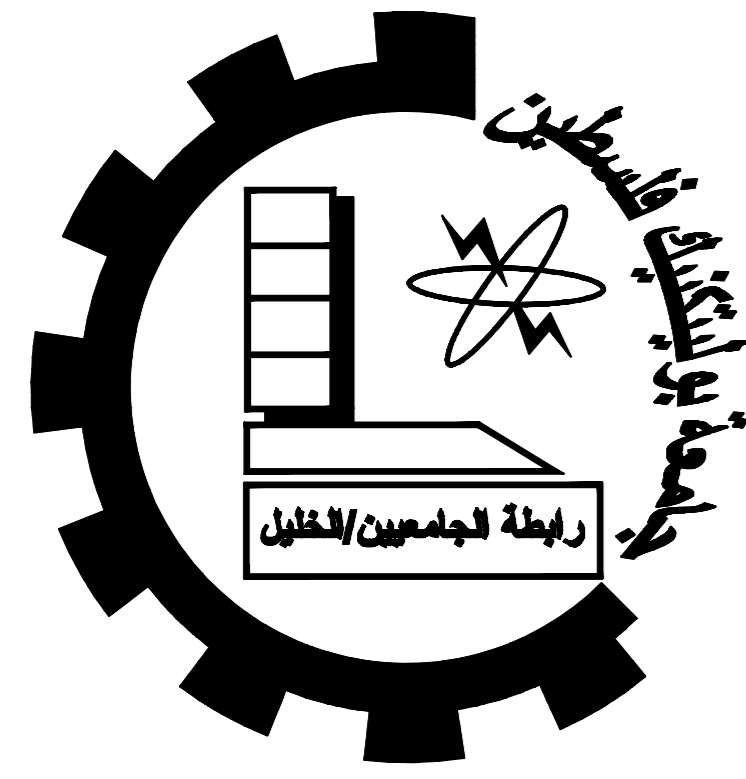
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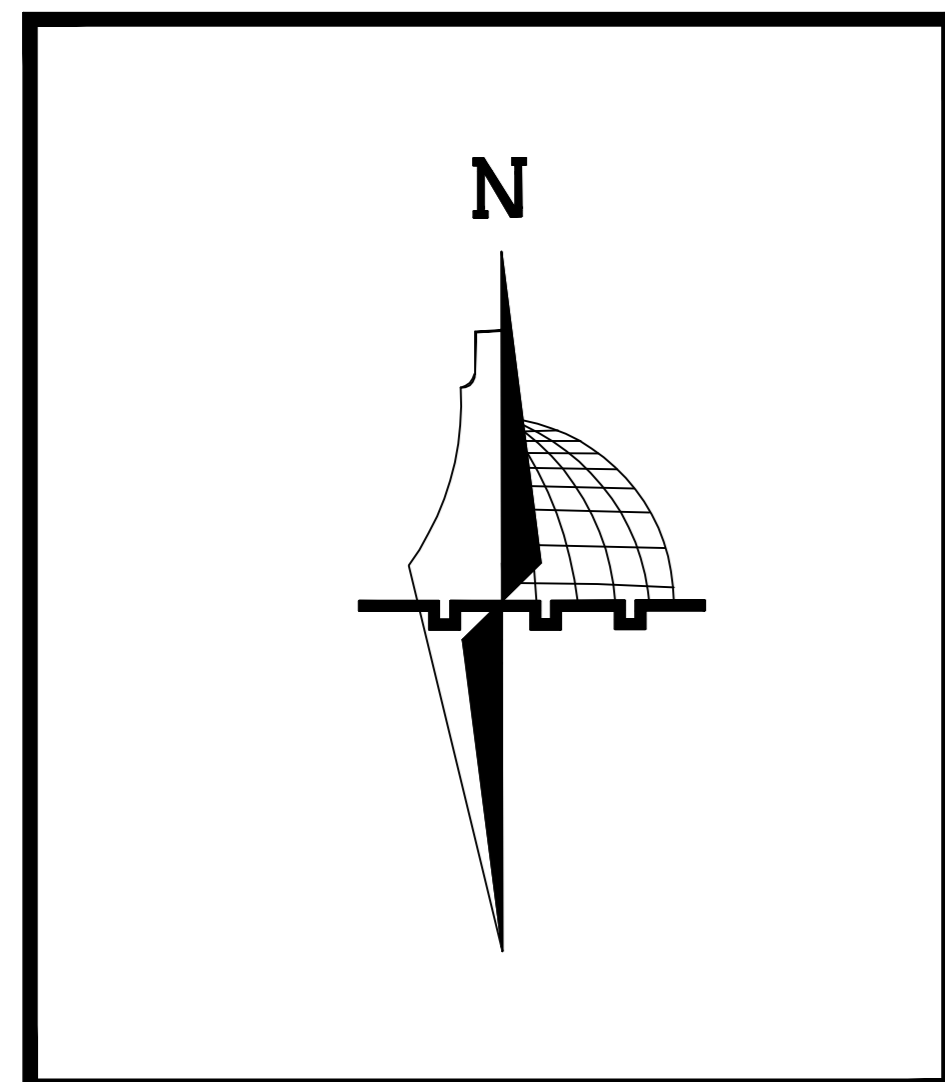
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No. : S25





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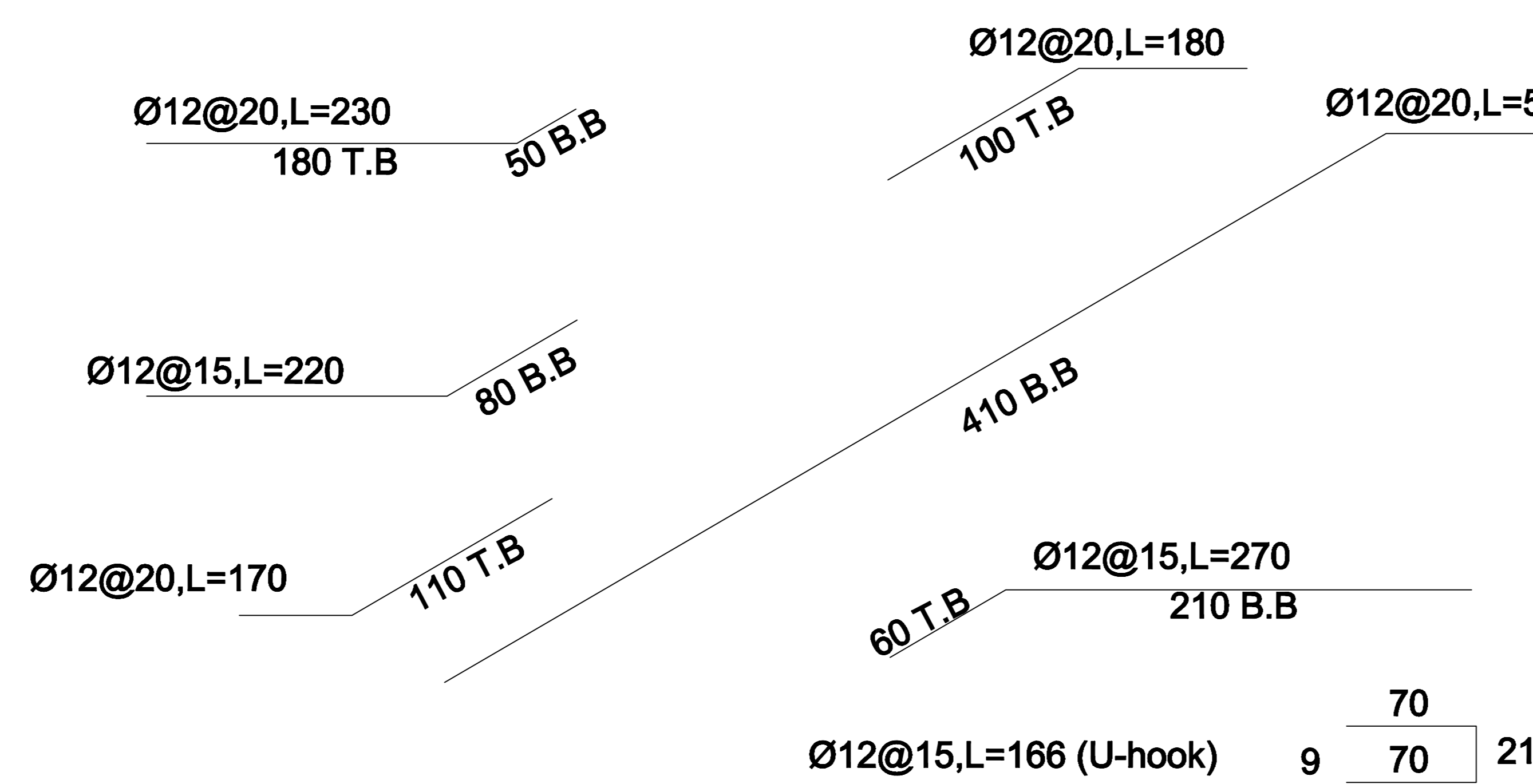
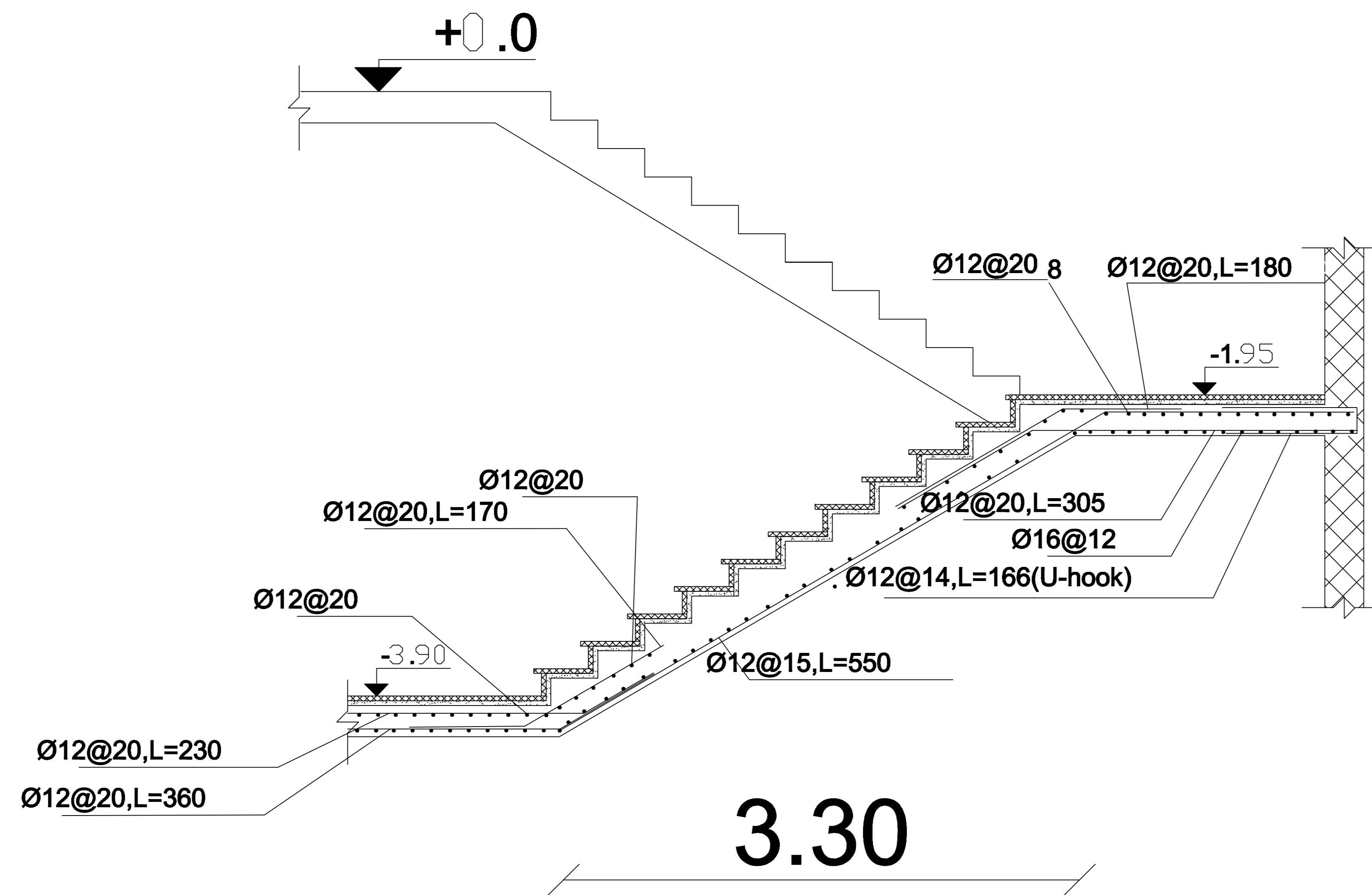
Supervisor :Dr . Maher Amro

Done By : Ahmad Thweib
Hamza Thweib
Mohammad Al Zeer

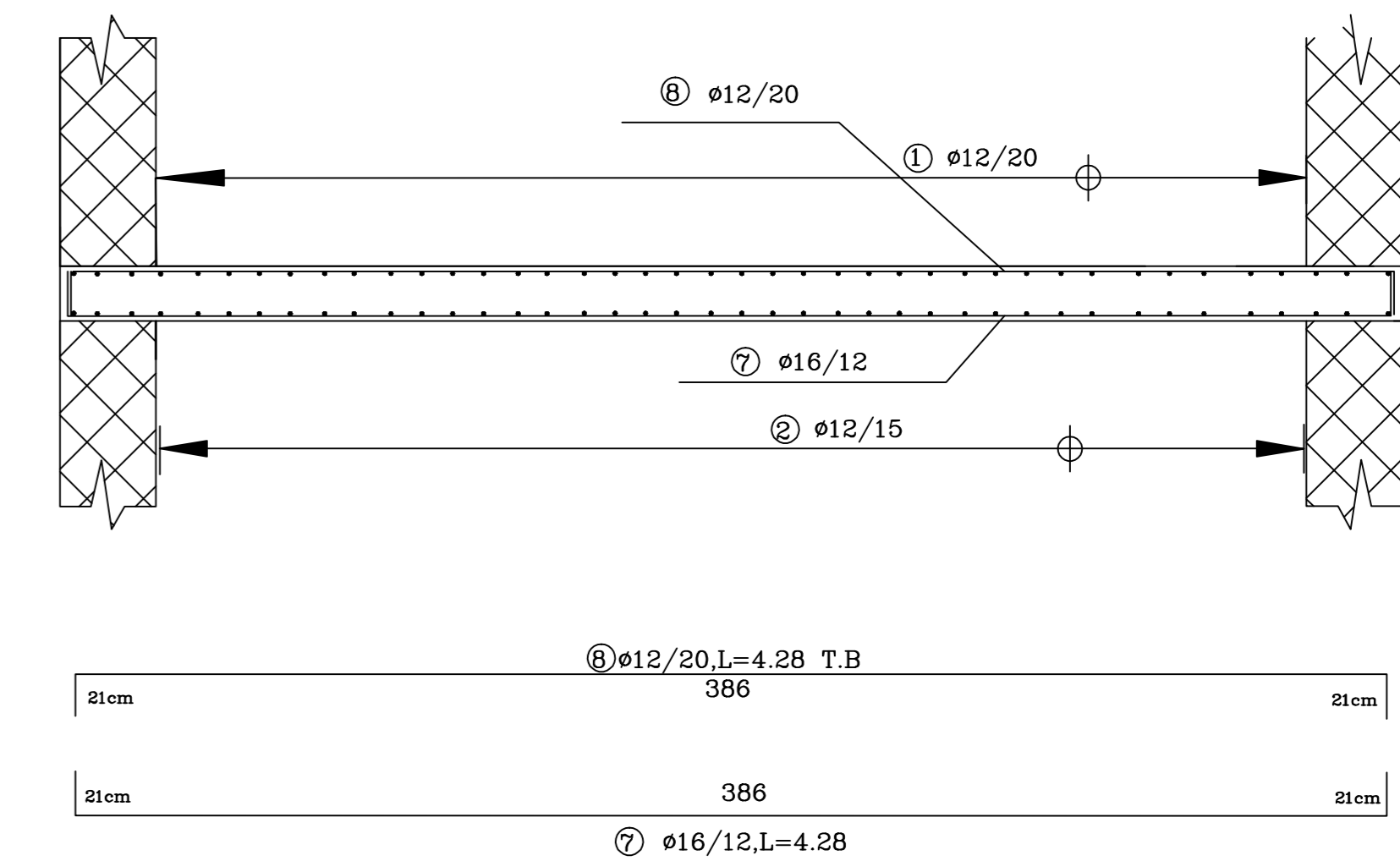
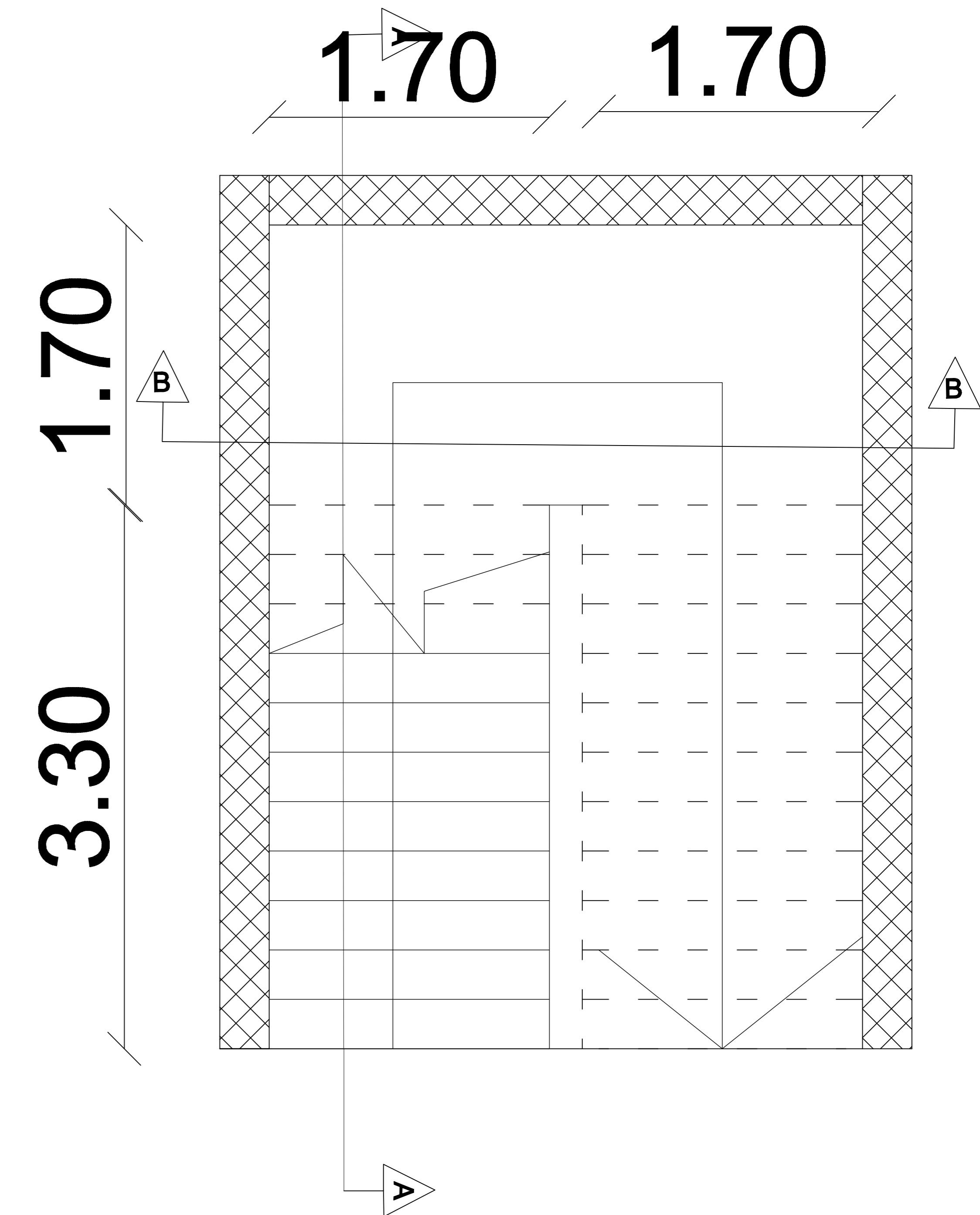
No. : S26

Reinforcement of Stair

Scale:1/20



Section (A-A)



Section (B-B)