

⊕ **Plane of High Speed Railways Trace**

FINAL ASSIGNMENT



**DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF ENGINEERING
SULTAN AGUNG ISLAMIC UNIVERSITY
SEMARANG**

Desk Engineering Design

**DESIGN OF BOX GIRDER AT
ELEVATED OF JAKARTA -
BANDUNG HIGH SPEED TRAIN**

Supervisor

Dr. Abdul Rochman, ST, MT

Co-Supervisor

I. Ganes Ramadewanto, M.Ts, Eng, Sc., Ph.D

Drawed by:

**VYOTY ANGGORINI
5220714009423**

**WINDYTA NYU AGUSTIN
5220714009423**

Title of Drawing

**Plane of
High Speed Railways Trace**

Number of Drawing	Total Drawing
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01

08



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 SEMARANG

Final Engineering Design

**DESIGN OF BOX GIRDER AT
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Supervisor

Dr. Abdul Rochid, ST, MT

Co-Supervisor

I. Gusti Ramadani, M. Eng, Sc, Ph.D

Designed by:

VYVY ANGGRENI
 50207465943

WINDYA AYU AGUSTIN
 50207465943

Title of Drawing

Diagram of Tendon Position
 &
 Table of Tendon Position

Number of Drawing Total Drawing

07

08

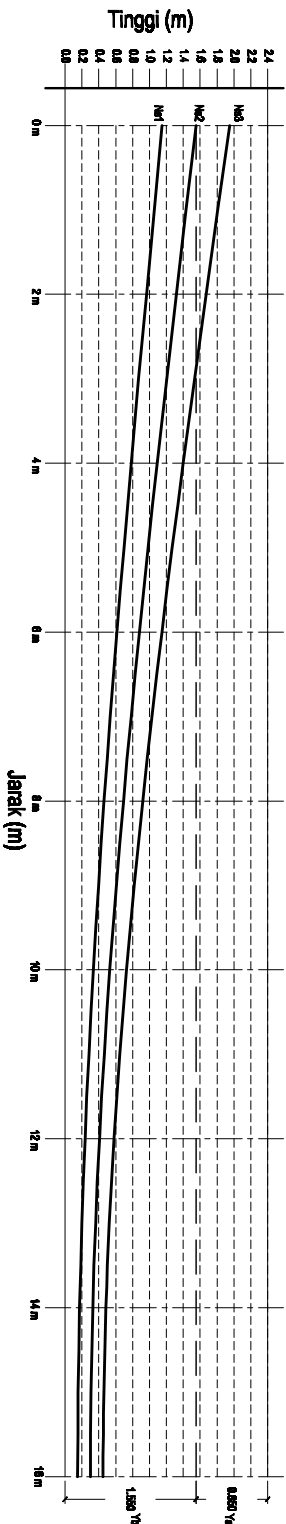


Diagram of Tendon Position
 Scale 1:75

Jarak X (m)	Trace z ₀ (m)	Posisi baris tendon		
		z ₁ (Ns1) (m)	z ₂ (Ns2) (m)	z ₃ (Ns3) (m)
0	1.349	1.950	1.350	1.150
1	1.397	1.768	1.399	1.029
2	1.256	1.598	1.257	0.916
3	1.124	1.440	1.125	0.810
4	1.002	1.294	1.003	0.713
5	0.890	1.159	0.891	0.623
6	0.787	1.036	0.788	0.541
7	0.694	0.925	0.696	0.466
8	0.611	0.825	0.613	0.400
9	0.538	0.737	0.539	0.341
10	0.475	0.661	0.476	0.291
11	0.421	0.596	0.422	0.248
12	0.377	0.544	0.378	0.213
13	0.343	0.503	0.344	0.185
14	0.318	0.473	0.320	0.166
15	0.304	0.456	0.305	0.154
16	0.299	0.450	0.300	0.150

Table of Tendon Position
 Scale 1:75

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Detail Engineering Design

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Supervisor

Dr. Abdul Rachid, ST, MT

Co-Supervisor

I. Gede Rusdiansyah, I.R. Eng.Sc., Ph.D

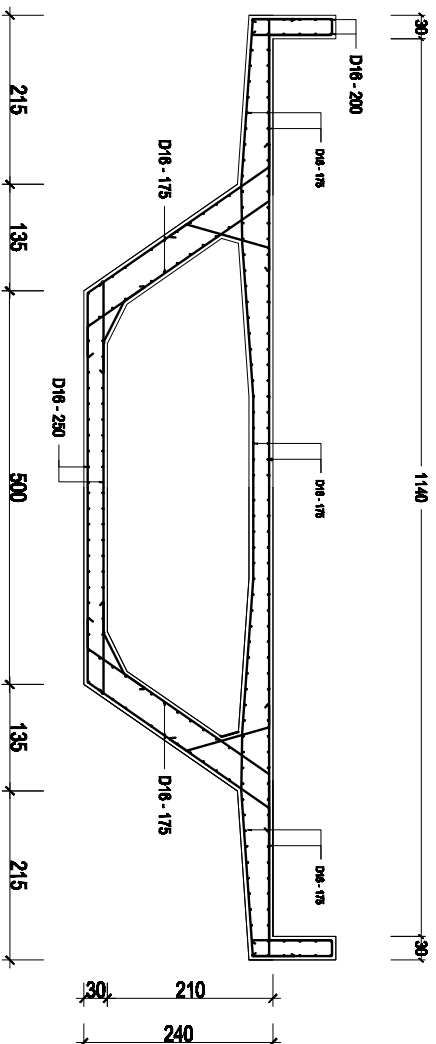
Drawn by:

VYVY ANGGRENI
 38201402043
 WINDYA ANU AGUSTIN
 38201402043

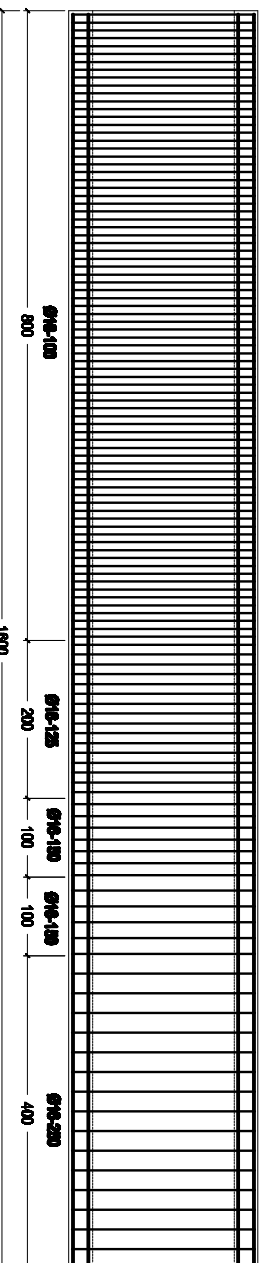
Title of Drawing

Box Girder Reinforcement

Number of Drawing	Total Drawing
08	08



Longitudinal Reinforcement Bar of Box Girder
 Scale 1:75



Transverse Reinforcement Bar of Box Girder
 Scale 1:75



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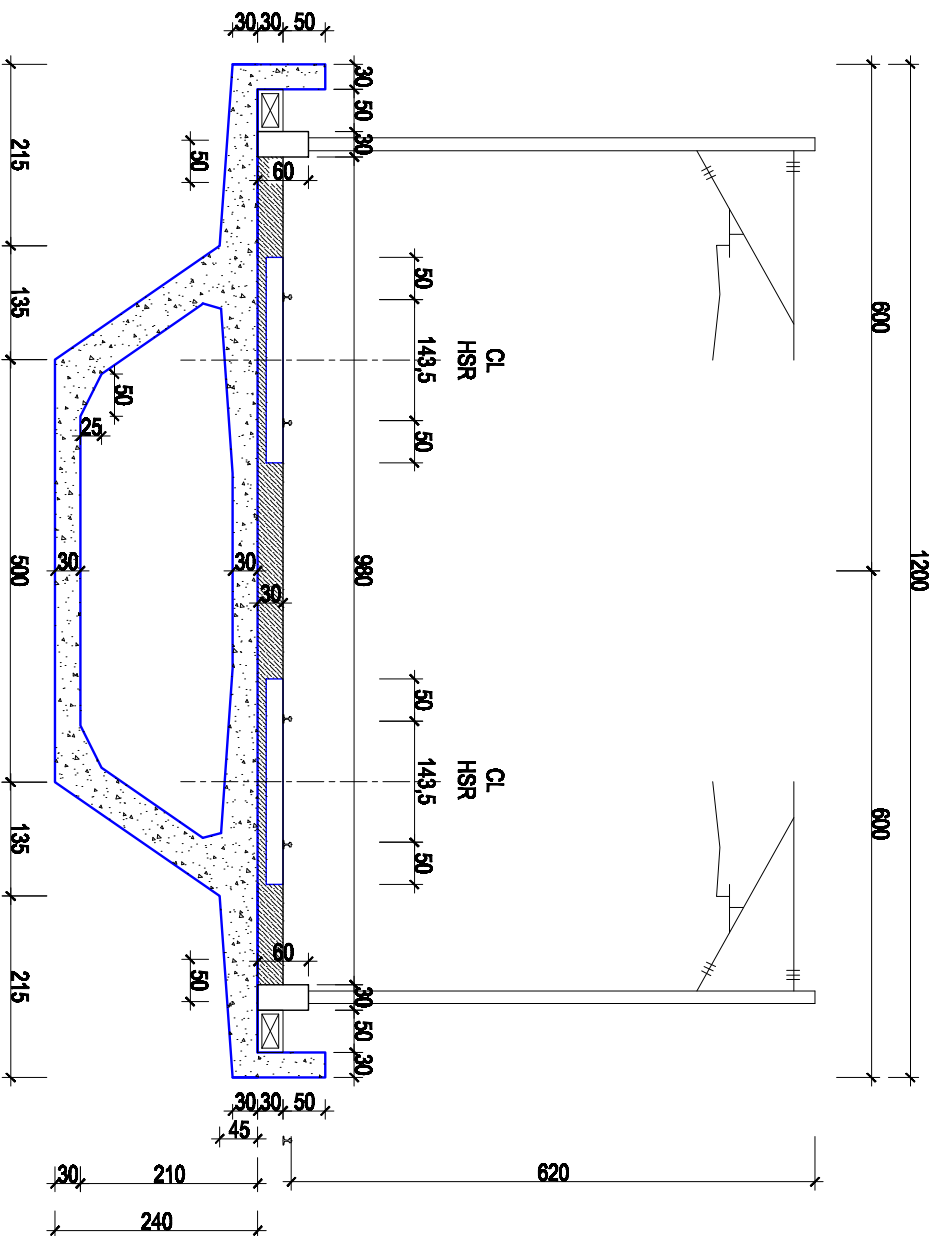
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Title of Drawing

Detail of Box Girder Section

Number of Drawing	Total Drawing
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05 08



Detail of Box Girder Section
 Scale 1:25



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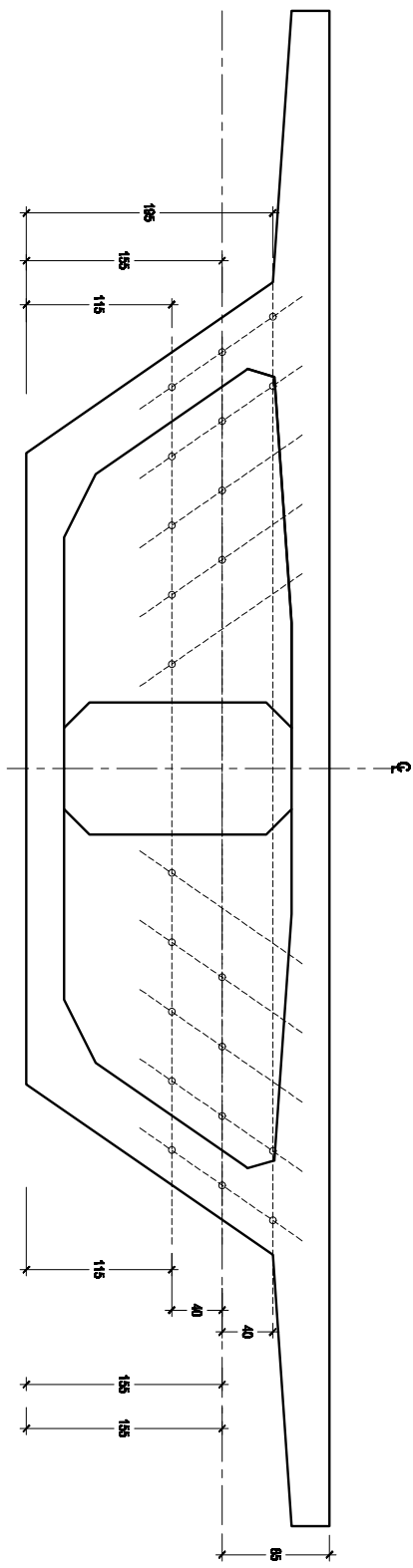
Title of Drawing

Detail of Tendon Position

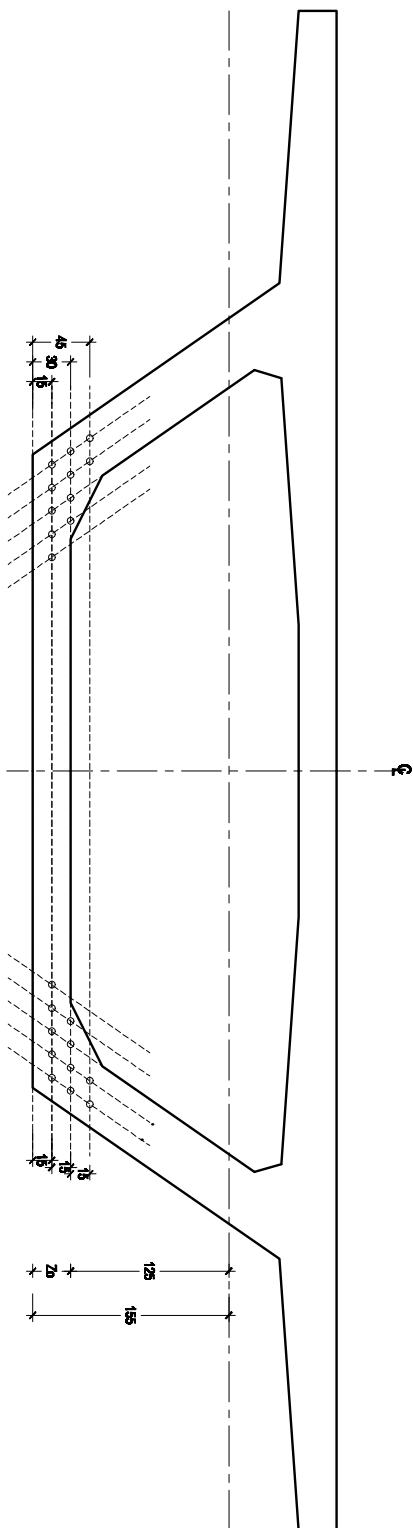
Number of Drawing Total Drawing

06

08



Tendon position of half span



Tendon position of side span

Detail of Tendon Position
 Scale 1 : 30



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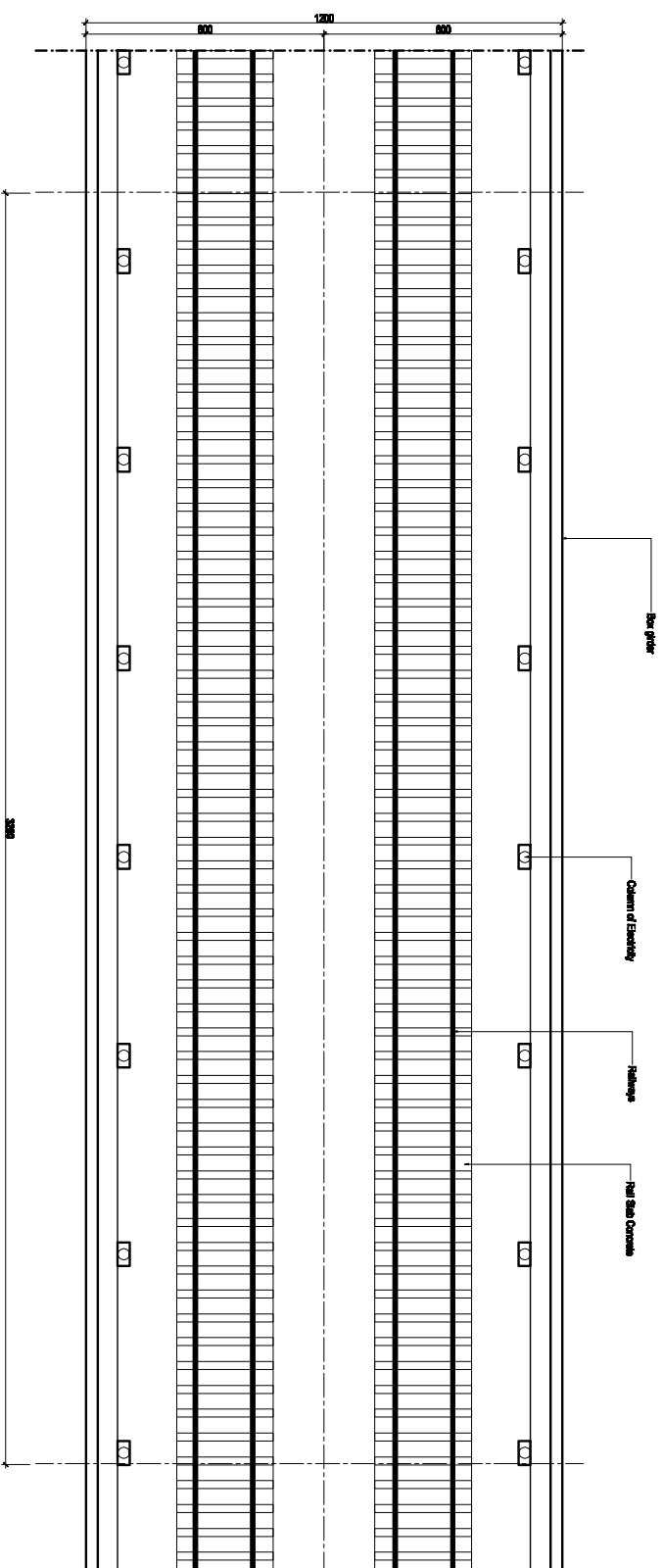
Title of Drawing

Plan Of Box Girder Bridge

Number of Drawing	Total Drawing
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02

08



Plan Of Box Girder Bridge
 Scale 1:125



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I. Ganiq Ruzaimawati, M.Eng.Sc., Ph.D

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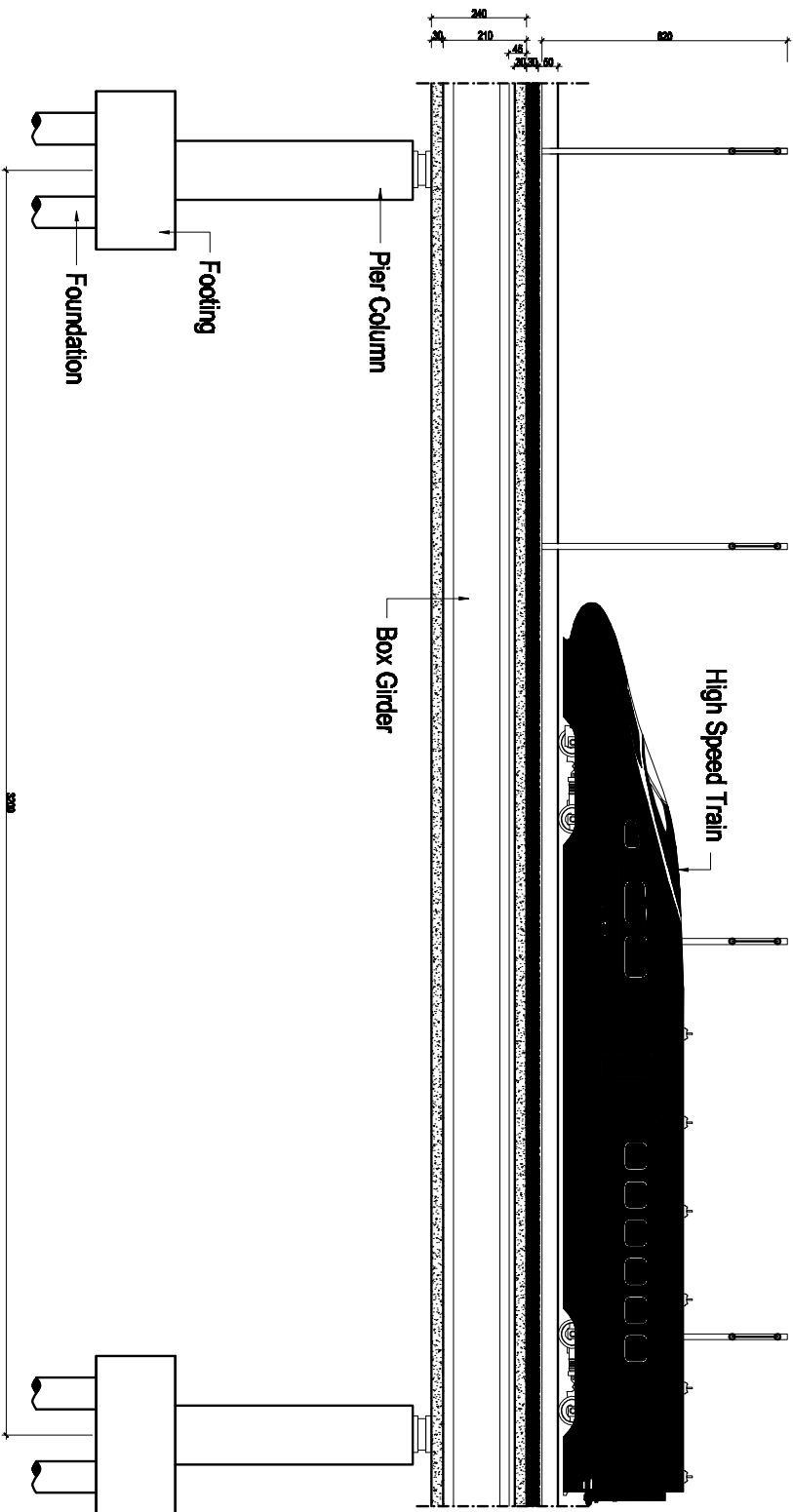
Title of Drawing

Longitudinal Section Of
 Box Girder Bridge

Number of Drawing Total Drawing

03

08



Longitudinal Section Of Box Girder Bridge
 Sheet 1 of 125