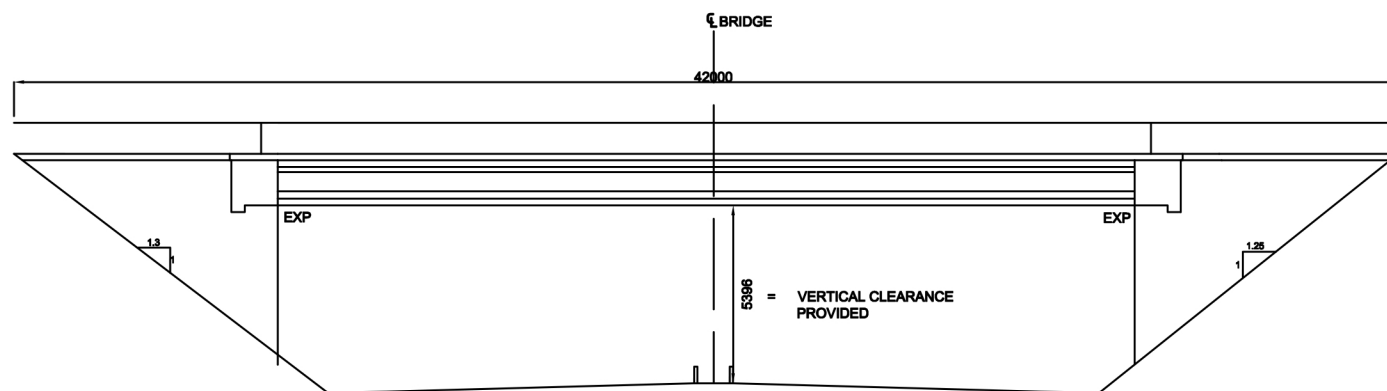
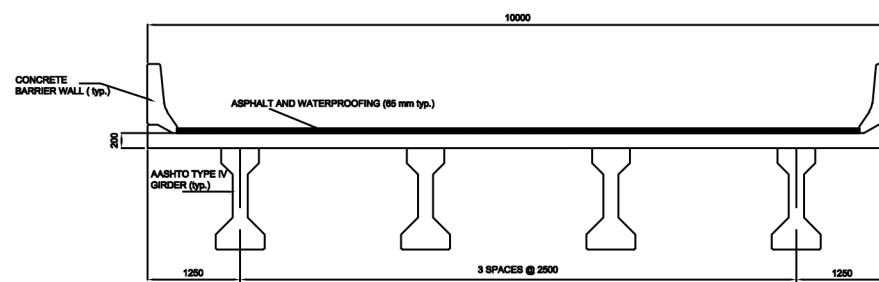


PLAN



ELEVATION



GENERAL NOTES

- DESIGN CRITERIA
 - BRIDGE IS DESIGNED ACCORDING TO CSA S6-14 rev. 17
 - BRIDGE IS DESIGNED ACCORDING TO AASHTO LRFD 2014-17
 - BRIDGE IS DESIGNED ACCORDING TO CSA S6-66
- CONCRETE STRENGTH AT 28 DAYS
 - PRECAST GIRDERS 40 MPa MIN
 - DECK 35 MPa MIN
 - REMAINDER REINFORCED CONCRETE 40 MPa MIN - 45 @ 56 DAYS
- CLEAR COVER TO REINFORCING STEEL
 - DECK TOP
 - 60 mm \pm 10 mm (CSA S6-14 rev. 17)
 - 65 mm \pm 10 mm (AASHTO LRFD 2014-17)
 - 50 mm \pm 10 mm (CSA S6-66)
 - DECK BOTTOM
 - 40 mm \pm 10 mm (CSA S6-14 rev. 17)
 - 30 mm \pm 10 mm (AASHTO LRFD 2014-17)
 - 25 mm \pm 10 mm (CSA S6-66)
- REINFORCING STEEL
 - REINFORCING STEEL MUST BE GRADE 400 UNLESS OTHERWISE SPECIFIED.
- PRESTRESSING STRANDS
 - PRESTRESSING STRANDS MUST BE 7 WIRE LOW-RELAXATION TYPE AND MUST HAVE AN ULTIMATE TENSILE STRENGTH OF 1860 MPa.
- DIMENSIONS
 - ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED.

Drawing title:
GENERAL ARRANGEMENT

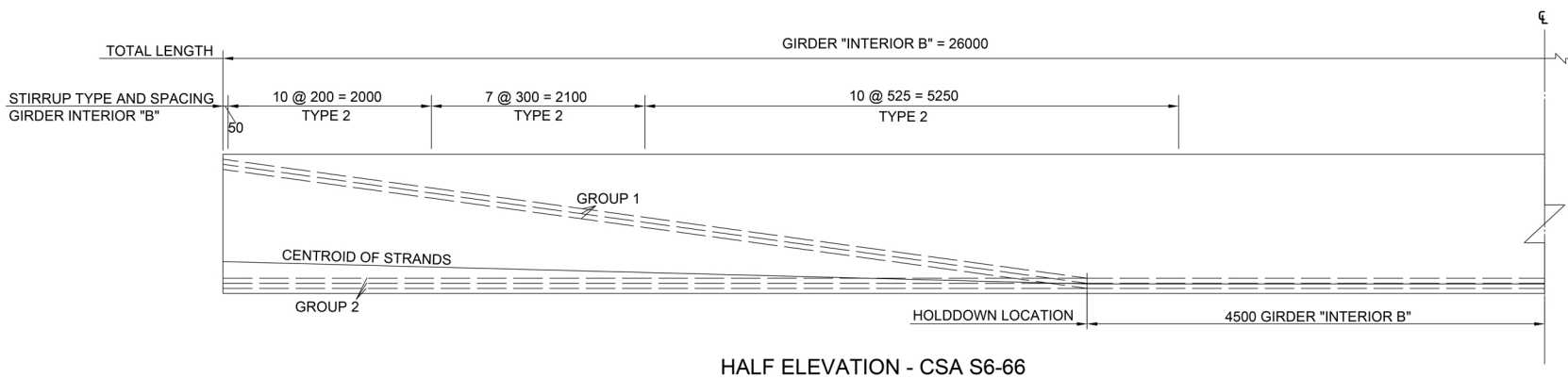
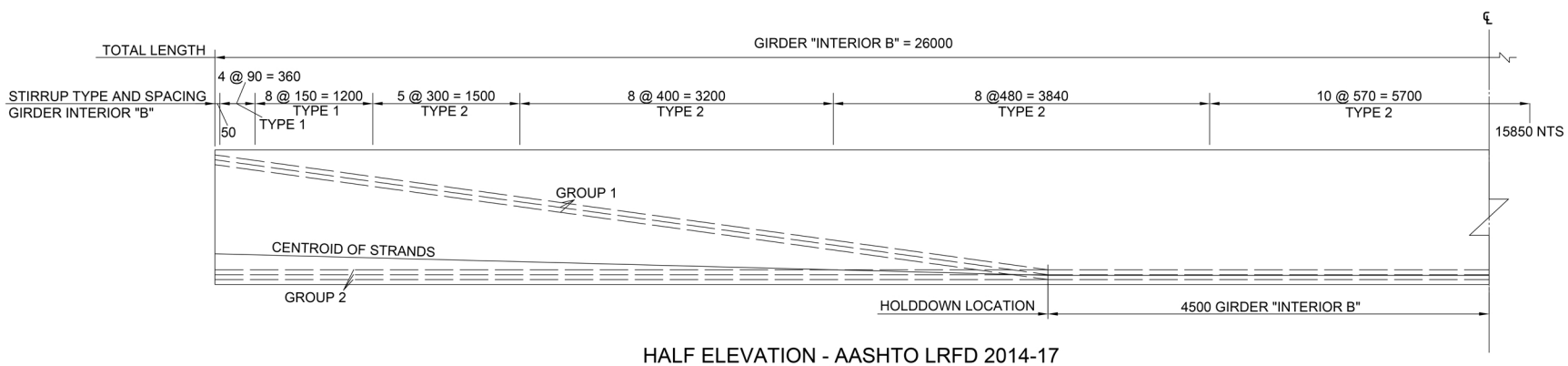
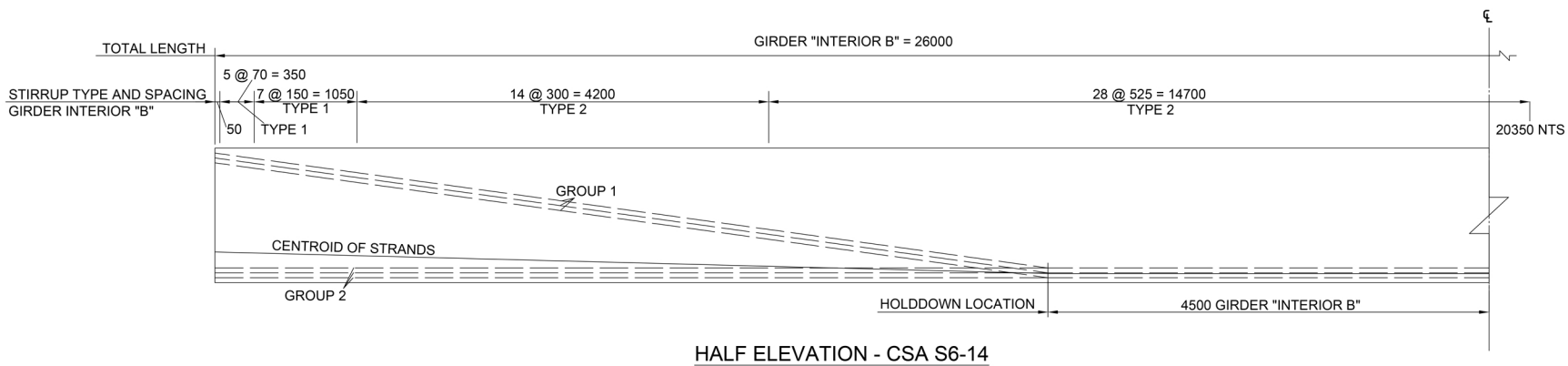
Drawn by:
Koral Eren

Date:
April 2020

Drawing Number:
1



Engineering



NOTES

1. PRESTRESSING STEEL MUST BE LOW-RELAXATION 12.7 mm 7-wire GRADE 1860
2. JACKING FORCE PER STRAND = 136 kN (CSA S6-14 design value taken)
3. FORCE PER STRAND AFTER ALL LOSSES 108.5 kN (CSA S6-14 design value taken)
4. AT LEAST 16 HOURS MUST PASS BETWEEN JACKING AND TRANSFER
5. CONCRETE STRENGTH AT 28 DAYS = 40 MPa
6. CONCRETE STRENGTH AT TRANSFER = MIN 35 MPa
7. REINFORCING STEEL MUST BE IN ACCORDANCE WITH CSA S - G30.18
8. UNSHORED CONSTRUCTION IS ASSUMED DURING DESIGN PROCESS.

Drawing title:
HALF ELEVATION - GIRDER

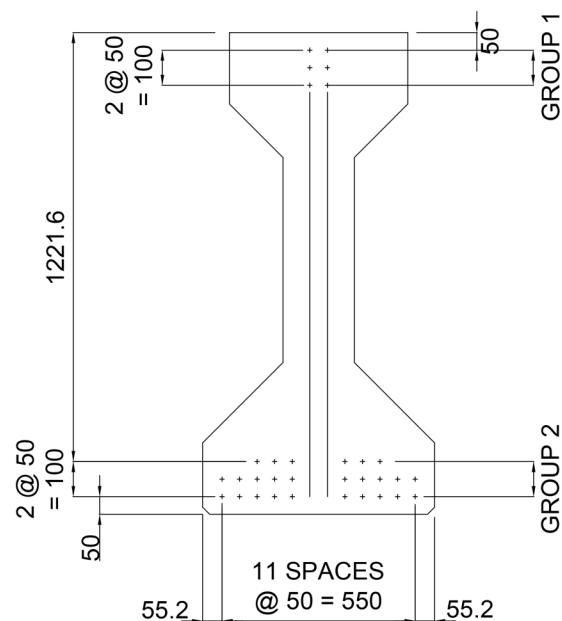
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Koral Eren

Date:
April 2020

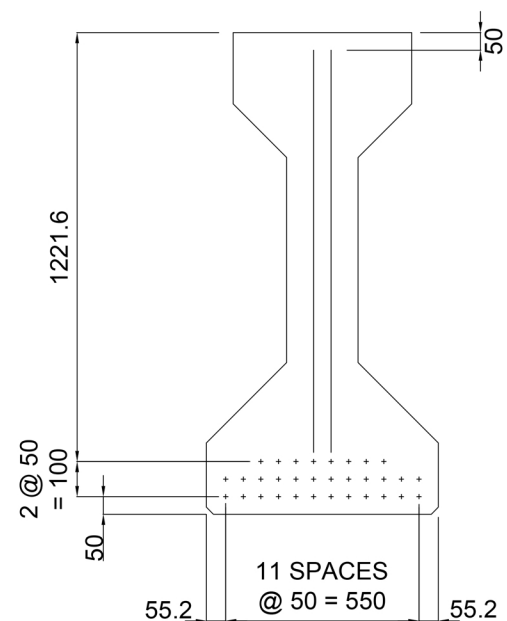
Drawing Number:
2



Engineering



32 STRANDS



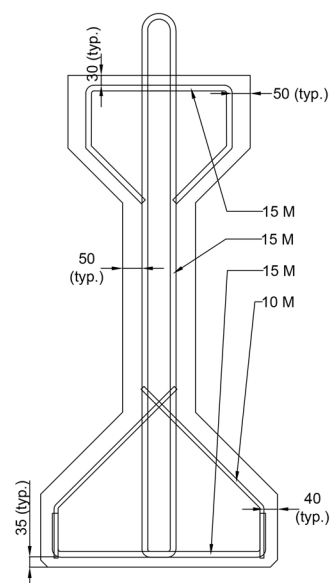
CENTER OF GIRDER

END OF GIRDER

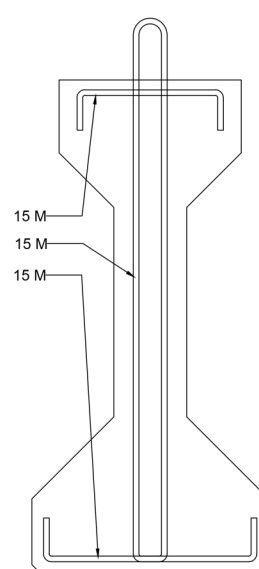
STRAND PATTERN

NOTES

1. PRESTRESSING STEEL MUST BE LOW-RELAXATION 12.7 mm 7-wire GRADE 1860
2. JACKING FORCE PER STRAND = 136 kN (CSA S6-14 design value taken)
3. FORCE PER STRAND AFTER ALL LOSSES 108.5 kN (CSA S6-14 design value taken)
4. AT LEAST 16 HOURS MUST PASS BETWEEN JACKING AND TRANSFER
5. CONCRETE STRENGTH AT 28 DAYS = 40 MPa
6. CONCRETE STRENGTH AT TRANSFER = MIN 35 MPa
7. REINFORCING STEEL MUST BE IN ACCORDANCE WITH CSA S - G30.18
8. UNSHORED CONSTRUCTION IS ASSUMED DURING DESIGN PROCESS.



TYPE 1



TYPE 2

STIRRUP DETAILS

Drawing title:
STRAND PATTERN
AND STIRRUP DETAILS

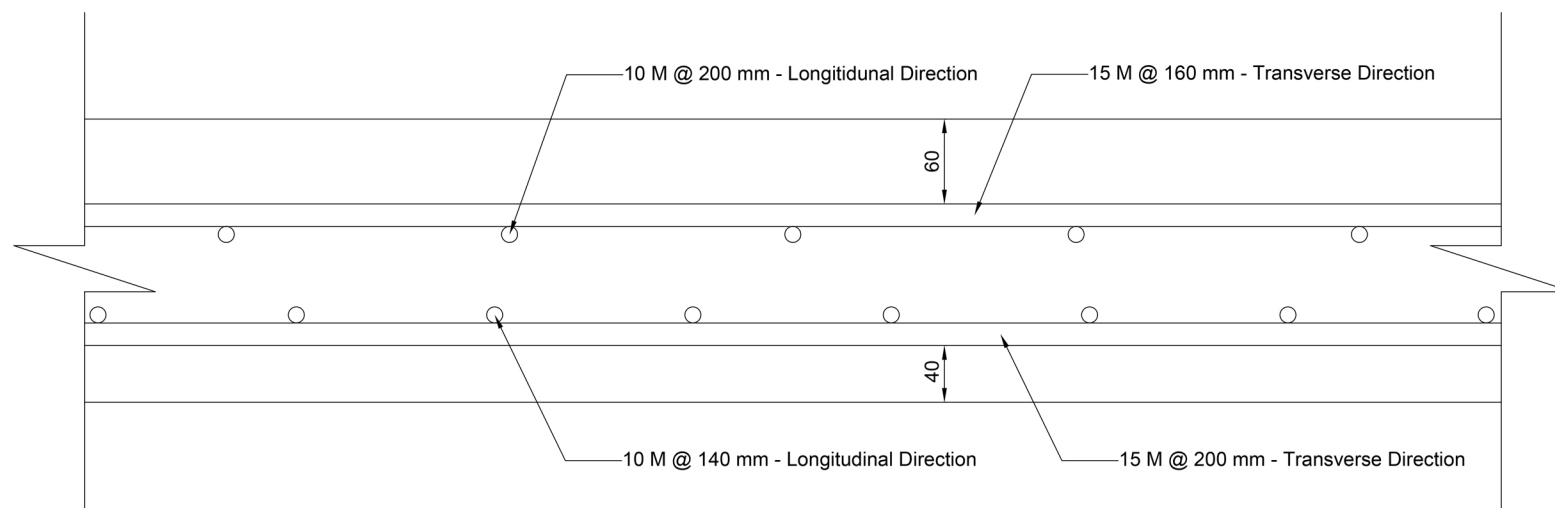
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Koral Eren

Date:
April 2020

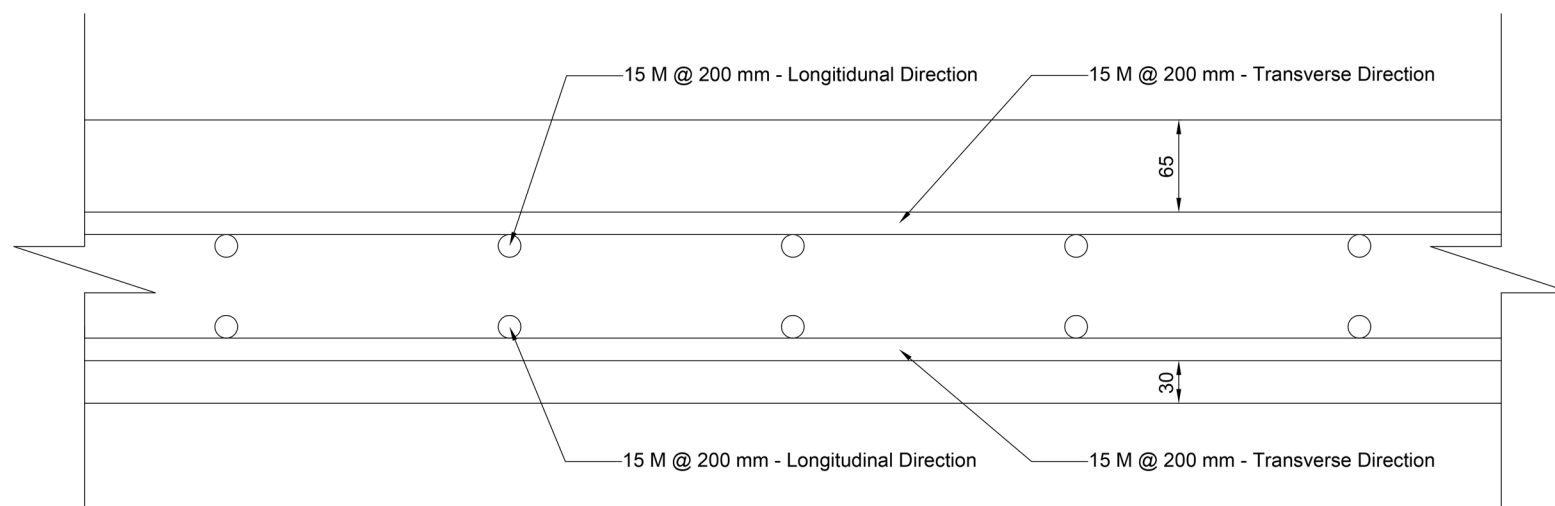
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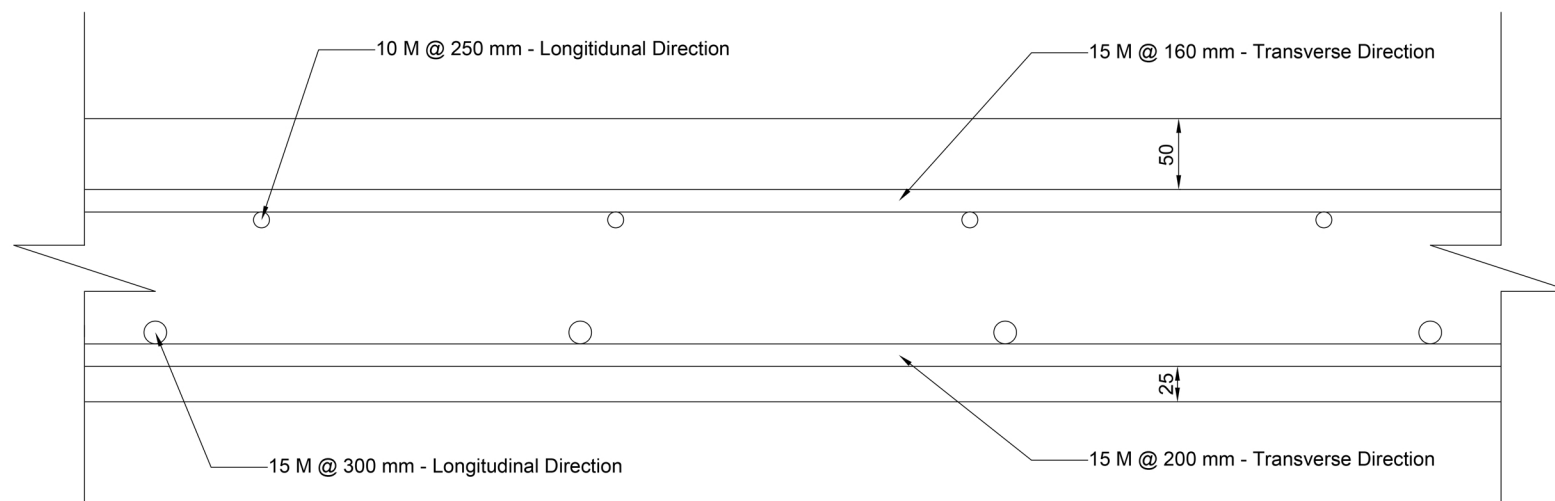
Engineering



BRIDGE DECK CROSS-SECTION - CSA S6-14 rev.17



BRIDGE DECK CROSS-SECTION - AASHTO LRFD 2014-17



BRIDGE DECK CROSS-SECTION - CSA S6-66

Drawing title:
DECK REINFORCEMENT
DETAIL

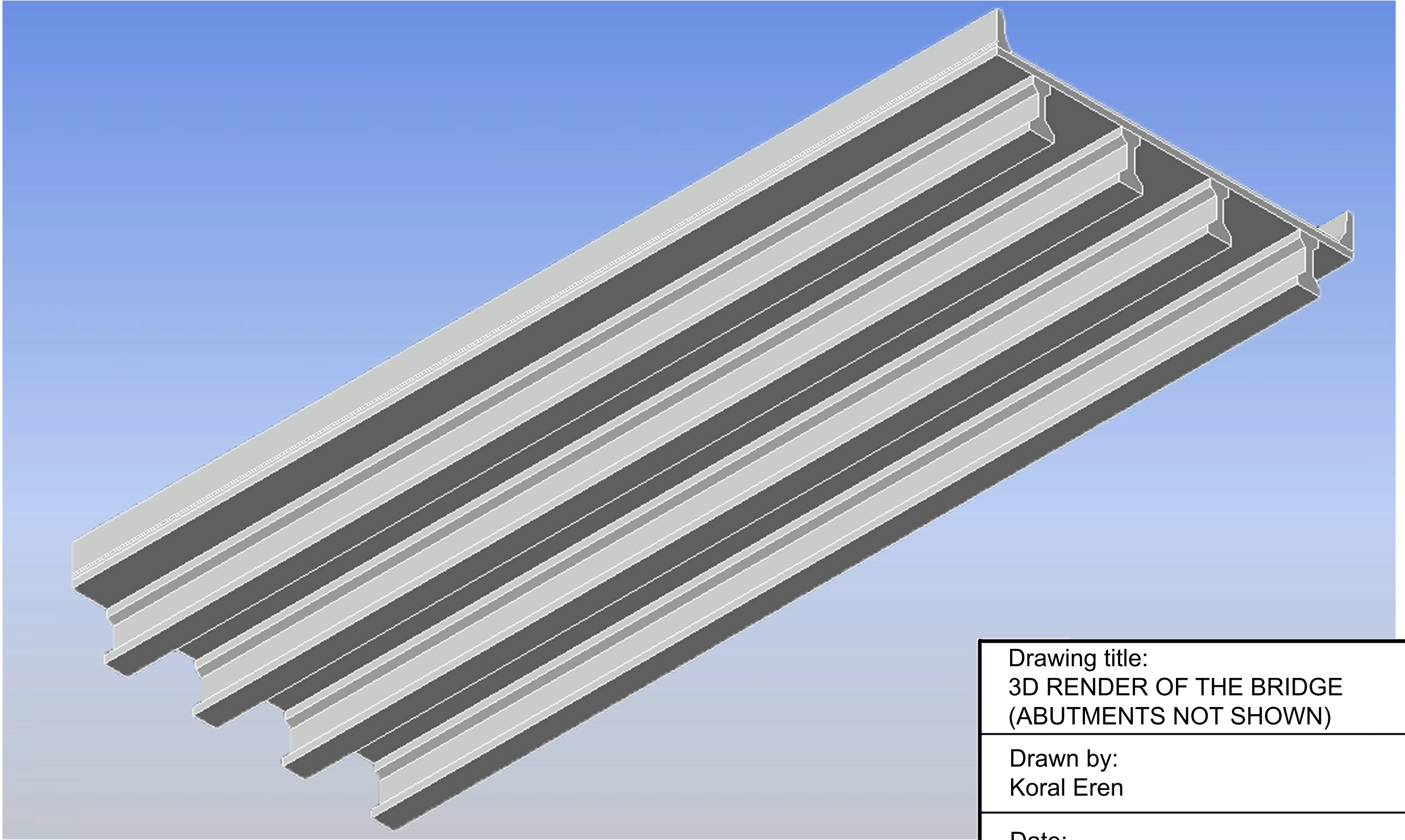
Drawn by:
Koral Eren

Date:
April 2020

Drawing Number:
4



Engineering



Drawing title:
3D RENDER OF THE BRIDGE
(ABUTMENTS NOT SHOWN)

Drawn by:
Koral Eren

Date:
April 2020

Drawing Number:
5



Engineering