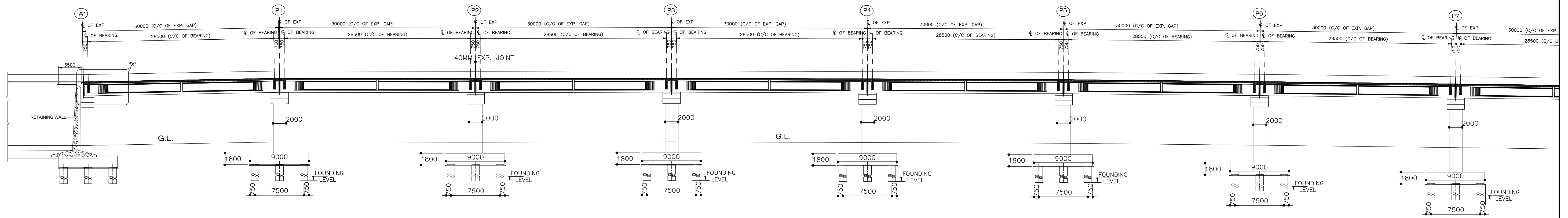
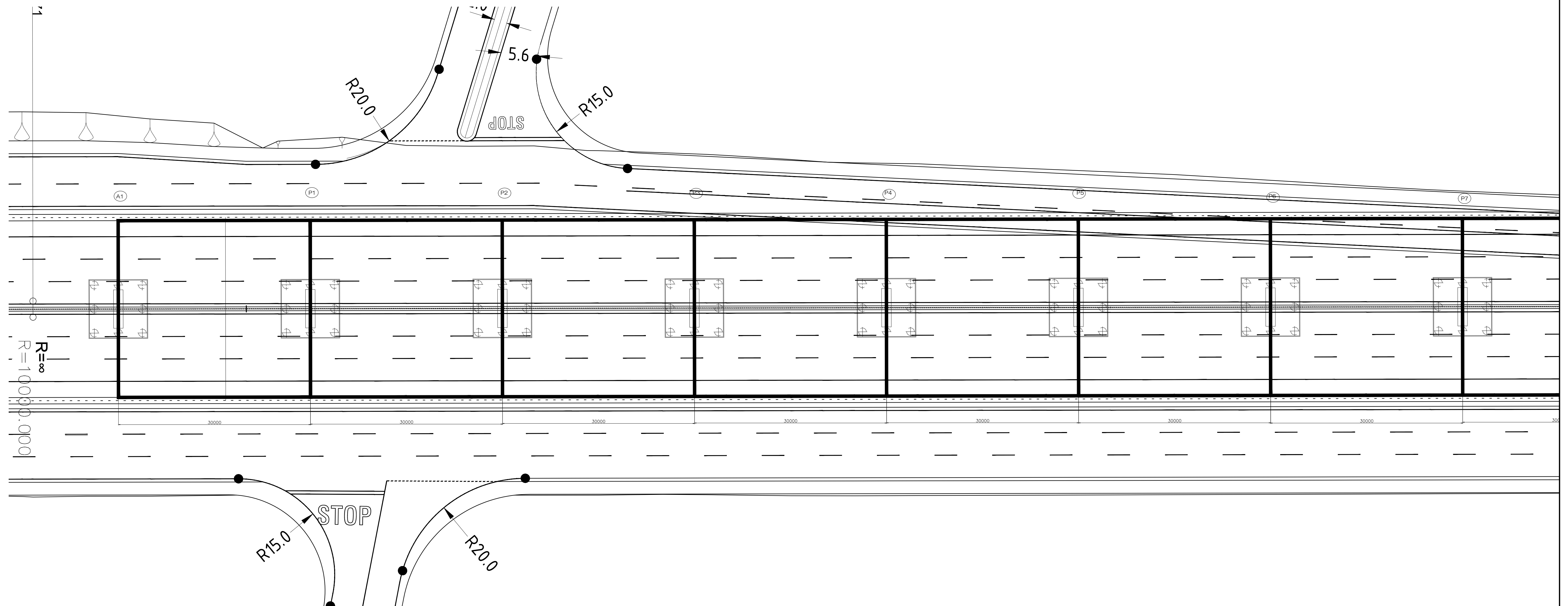


TO VARANASI ➡



FRL	27.109	27.167	27.563	27.534	27.320	27.032	26.693	26.259
GL	17.339	17.397	17.793	17.764	17.550	17.262	16.923	16.489
FDNL	-3.50	-3.50	-3.50	-3.50	-3.50	-3.50	-4.50	-4.50
CHAINAGE	366+160	366+190	366+220	366+250	366+280	366+310	366+340	366+370

[illegible]

(Ministry of Shipping Road Transport & Highways)
(Government of India)



In Association with
MSPARK Futuristics &
Associates



CONSULTANCY SERVICES FOR PREPARATION
OF DETAILED PROJECT REPORT (DPR) FOR
DEVELOPMENT OF VARIOUS PORT
CONNECTIVITY STRETCHES UNDER PORT
CONNECTIVITY MASTER PLAN OF KIOCL
FLYOVER IN THE STATE OF KARNATAKA

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DESIGNED		
CHECKED		
APPROVED		

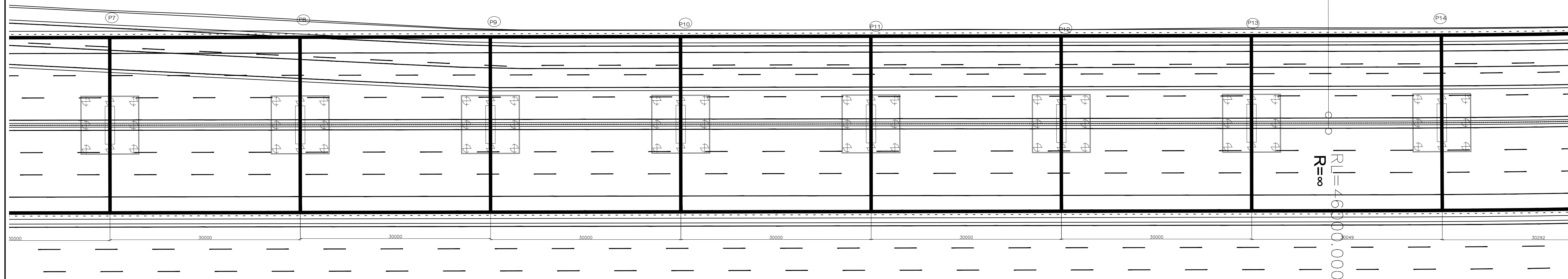
GENERAL ARRANGEMENT DRAWING
OF FLYOVER AT CH-366+155 TO CH.367+675
(17X30.0M+1X40.0M+15X30.0M+1X40.0M+16X30.0M)

AS SHOWN

CP/MSPARK/KIOCAL/FLY/CH 366+155

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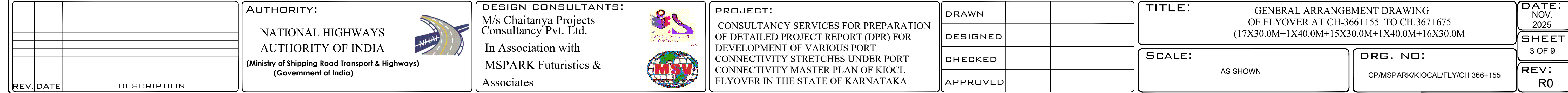
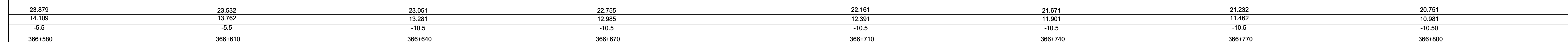
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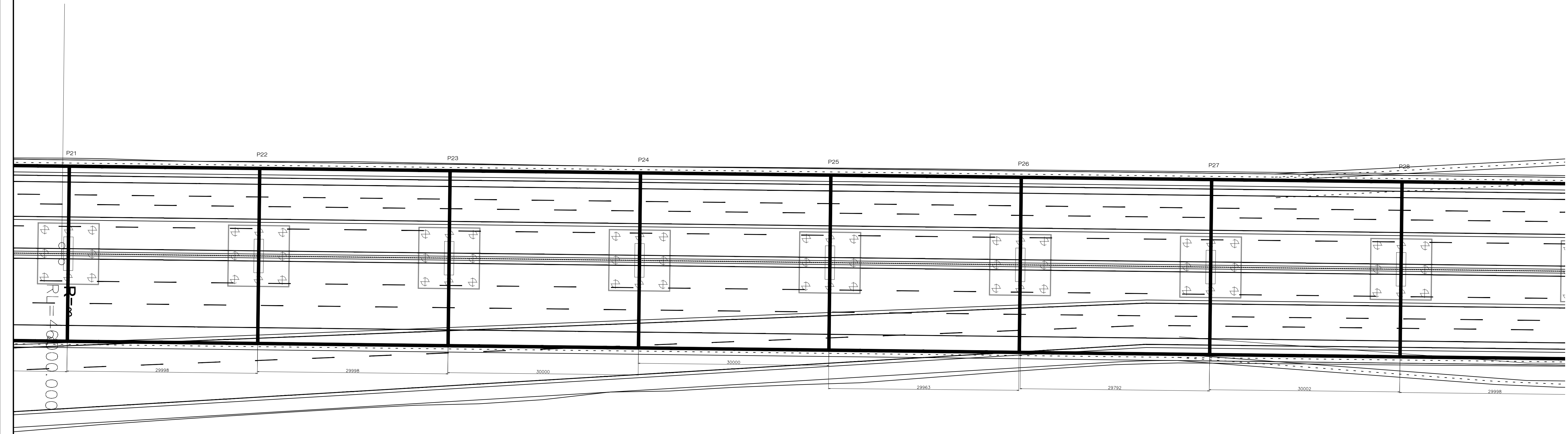
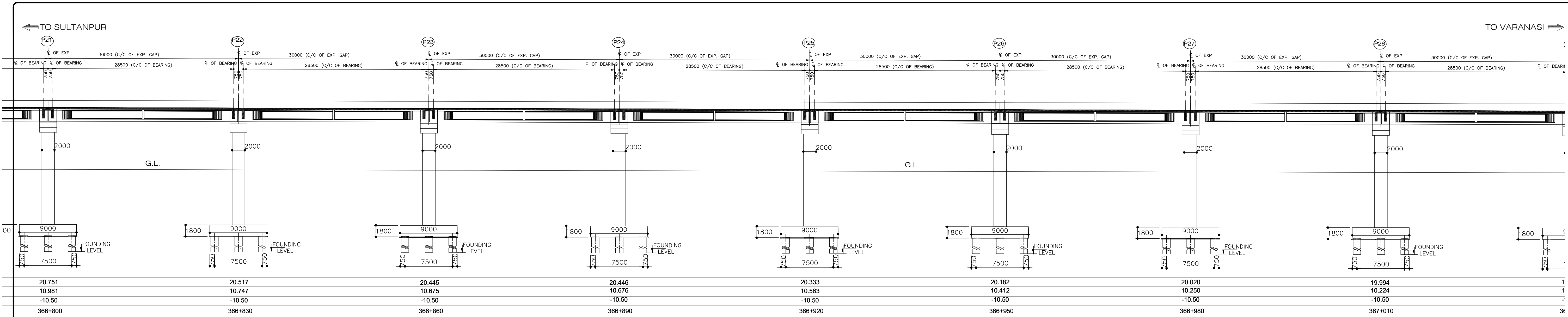
AS SHOWN

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REV:
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REV.	DATE	DESCRIPTION

AUTHORITY:

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DESIGN CONSULTANTS:

M/s Chaitanya Projects
Consultancy Pvt. Ltd.

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SCALE:

AS SHOWN

DRG. NO.:

CP/MSPARK/KIOCAL/FLY/CH 366+155

DATE:

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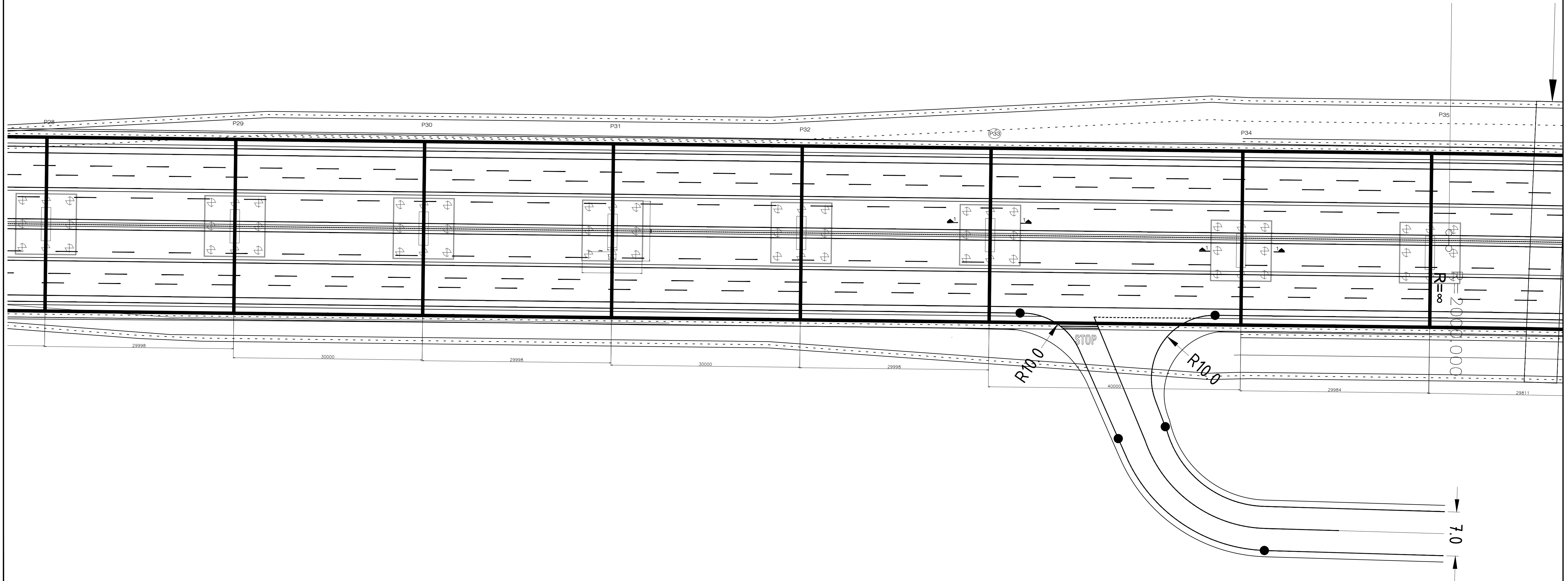
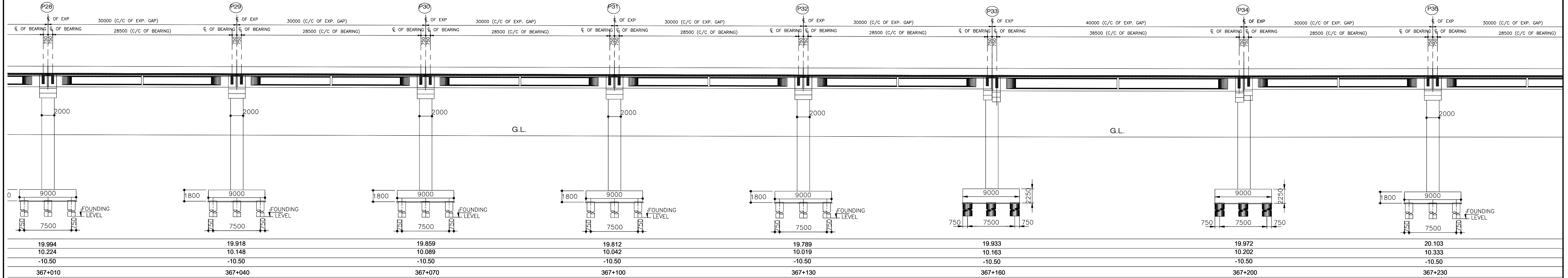
4 OF 9

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SCALE:

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2025

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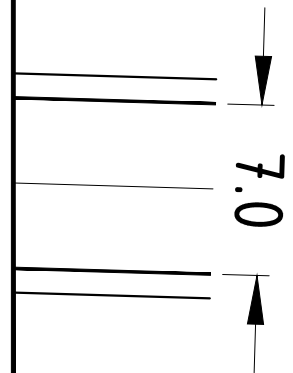
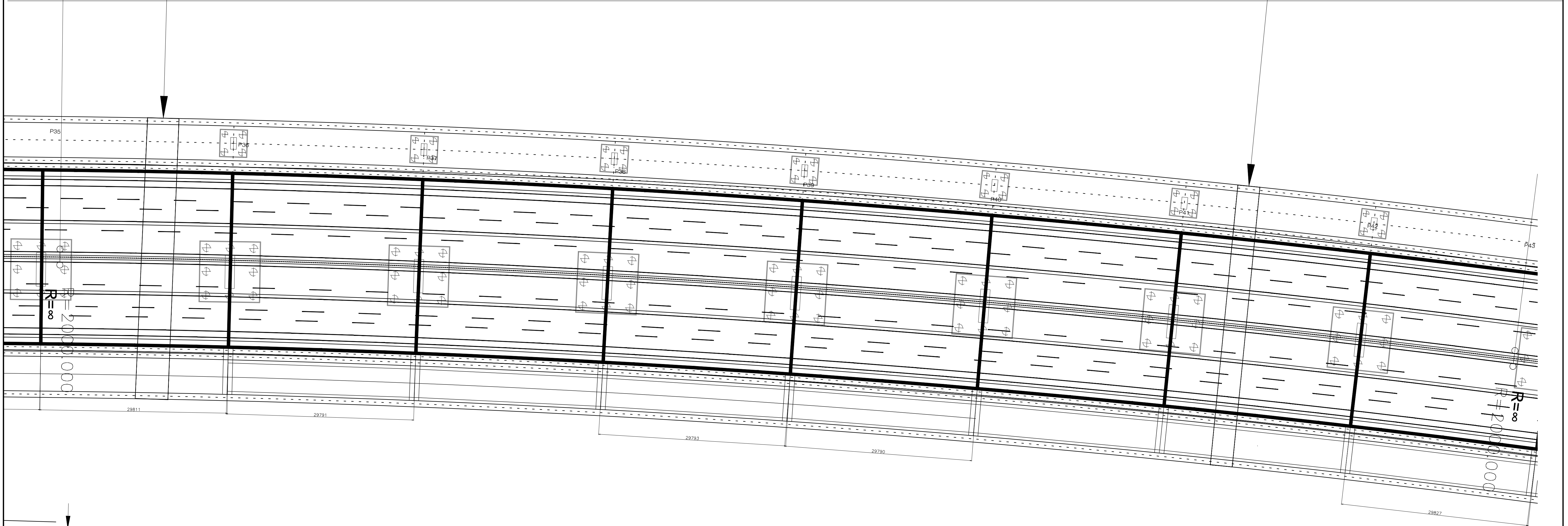
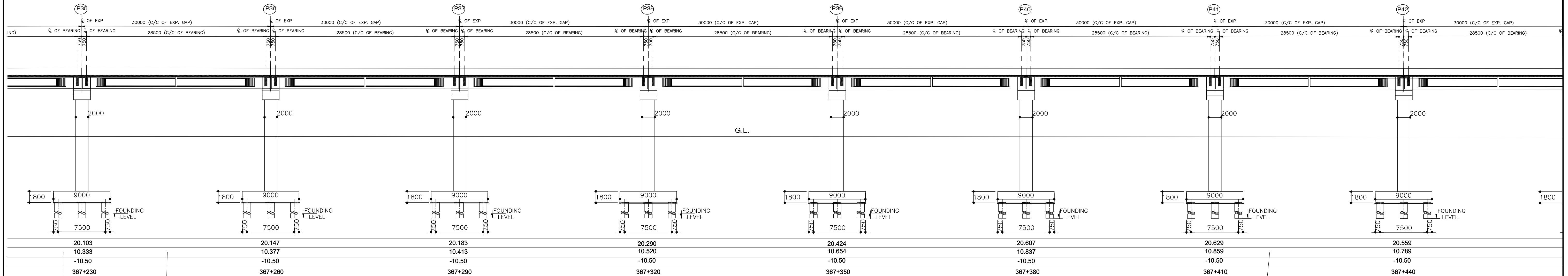
5 OF 9

REV:

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CURVE DETAILS

REV.	DATE	DESCRIPTION

AUTHORITY:

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SCALE:

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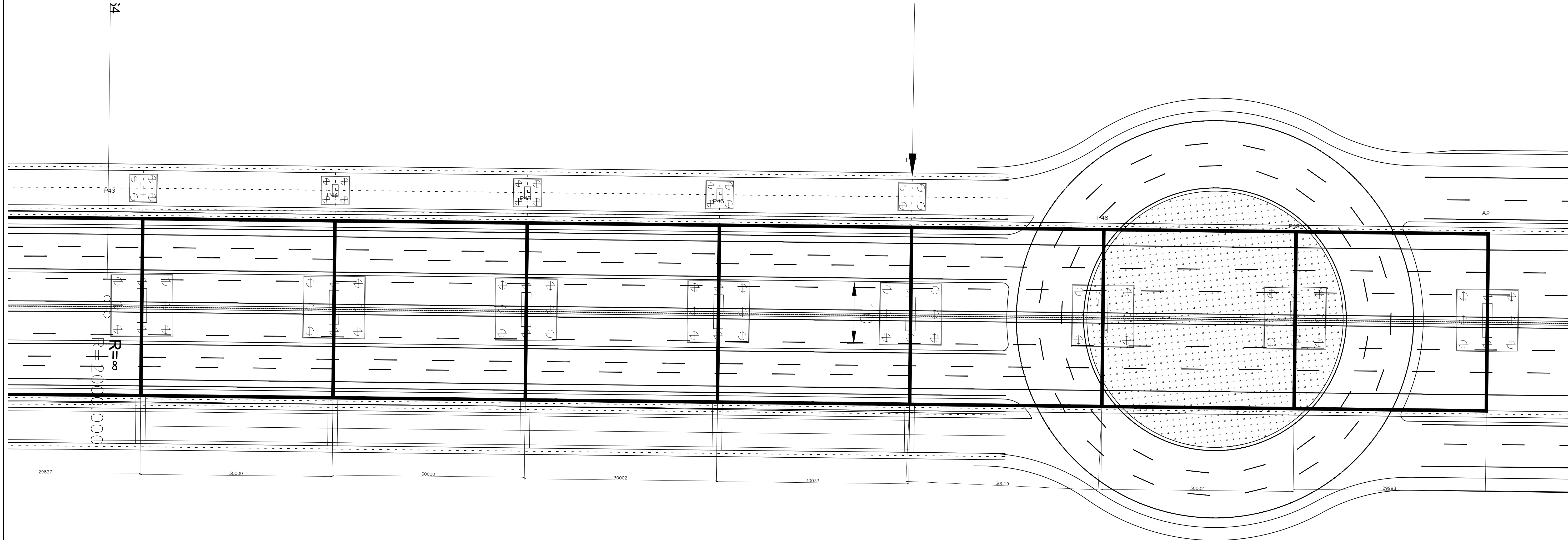
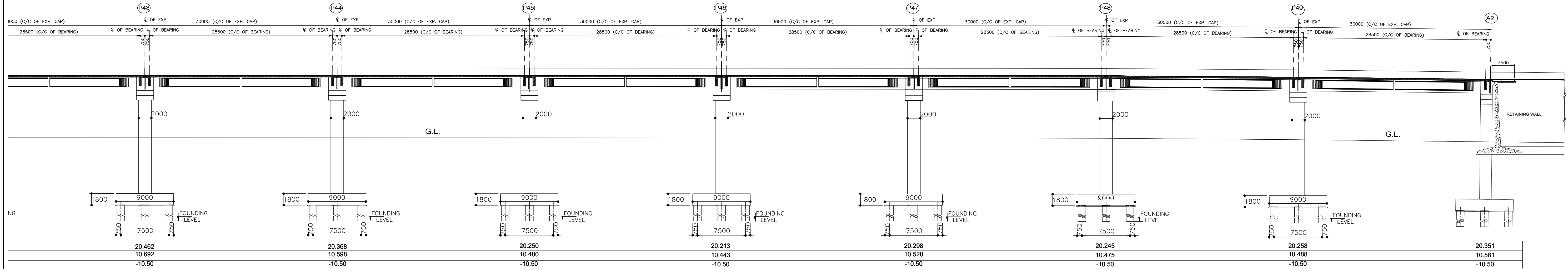
6 OF 9

REV:

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REV.	DATE	DESCRIPTION

AUTHORITY:
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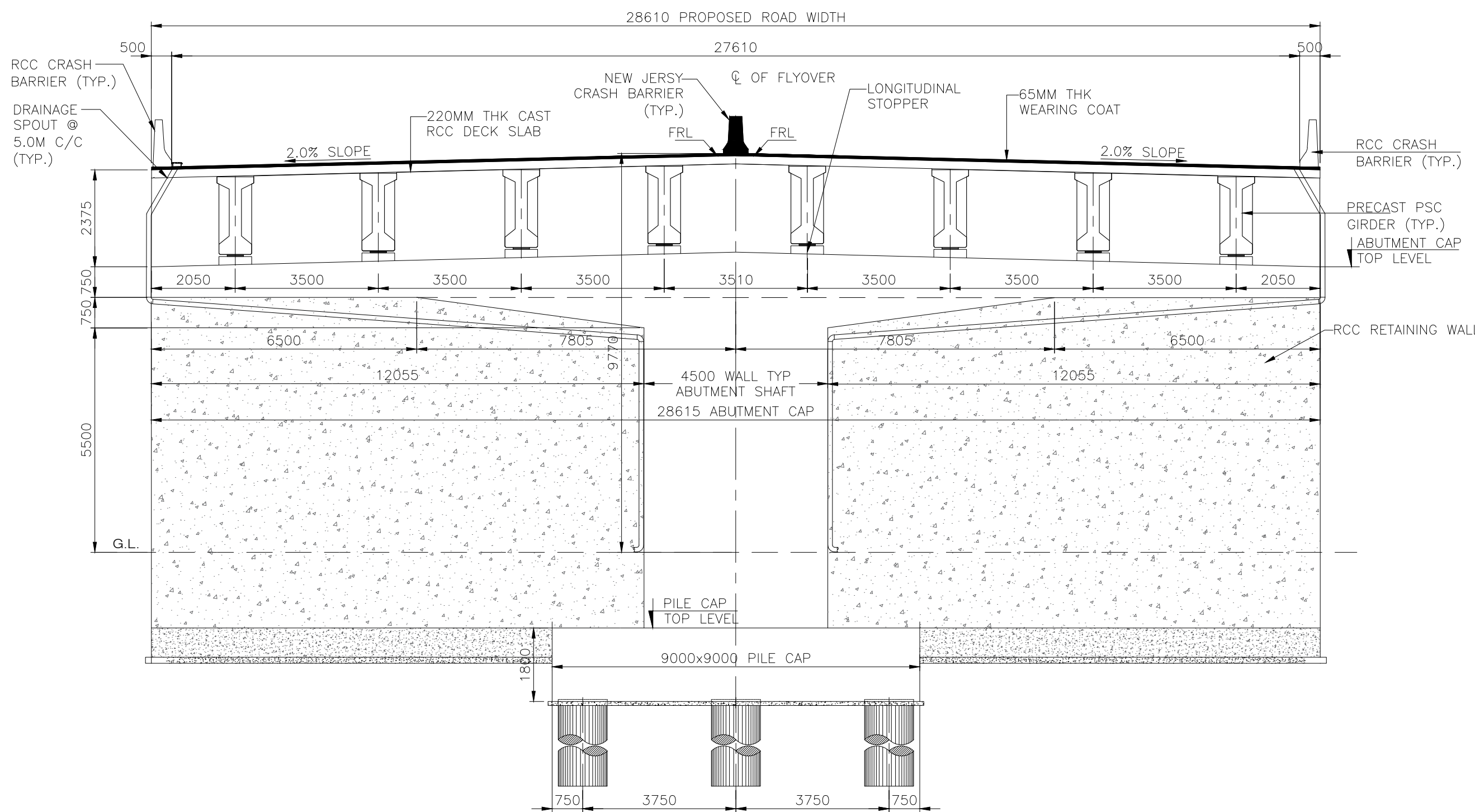
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CP/MSPARK/KIOCAL/FLY/CH 366+155

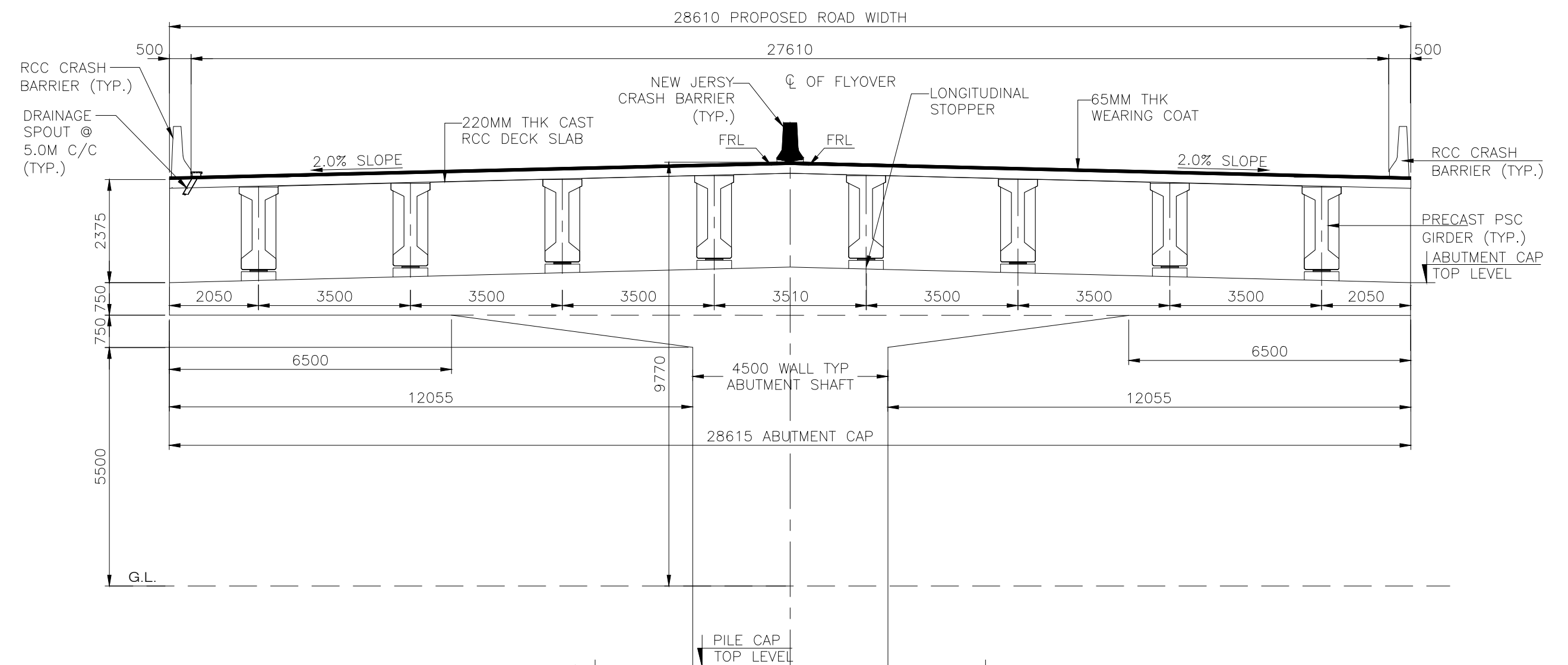
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NOV.
2025

SHEET
7 OF 9

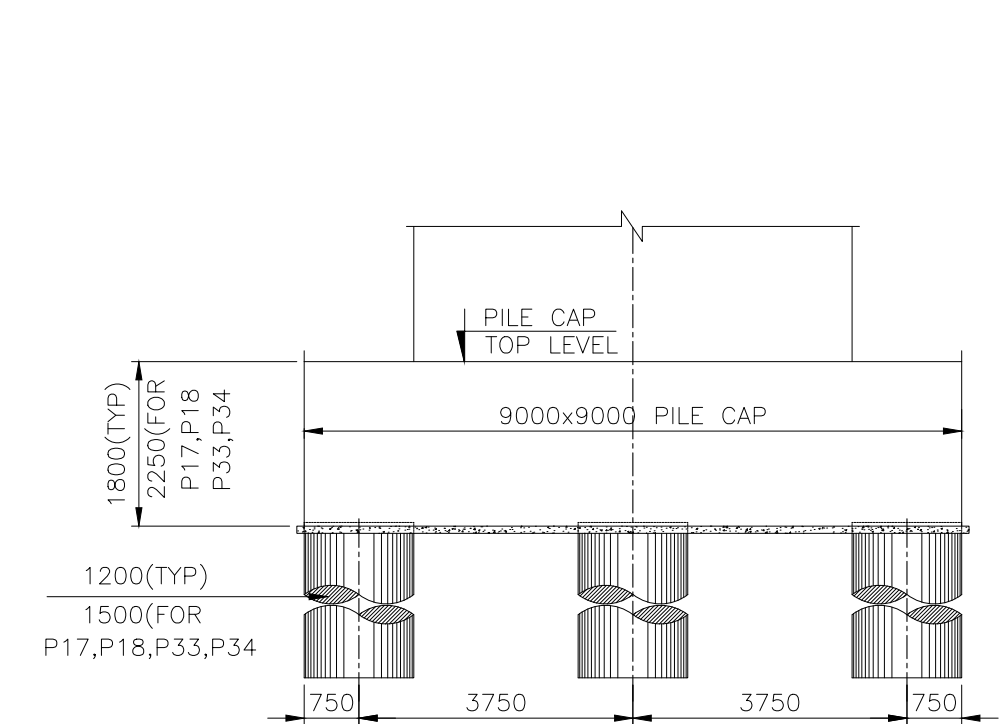
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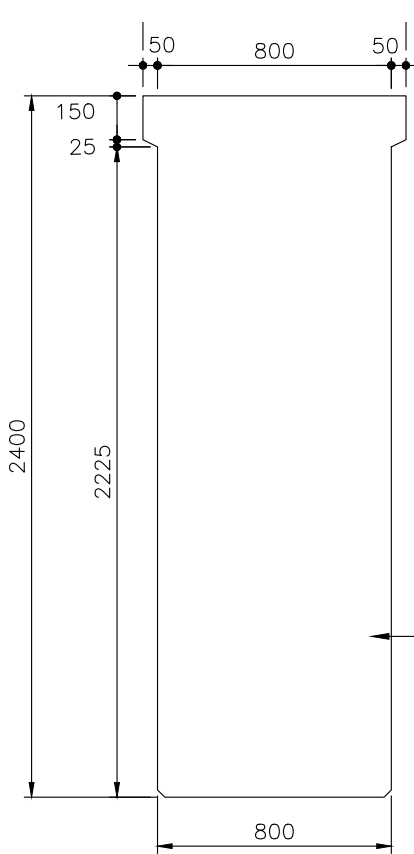
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(SCALE 1:100)



SECTION AT ABUTMENT
(SCALE 1:100)

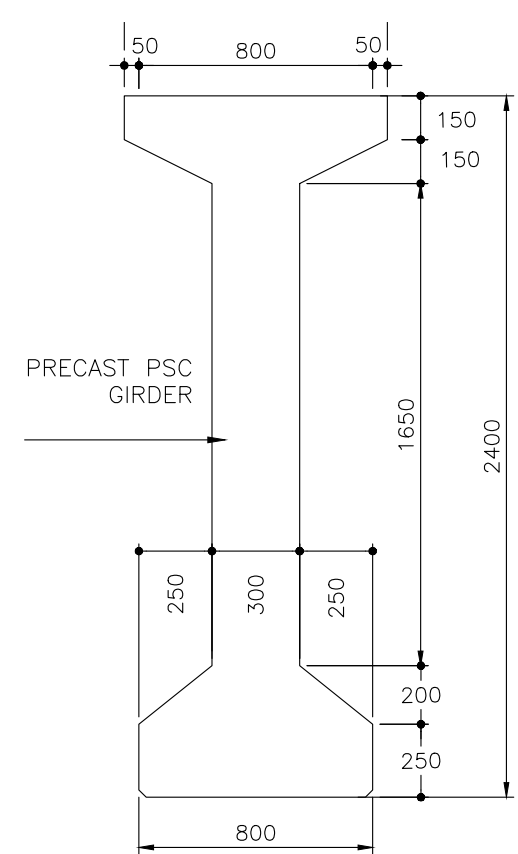


SECTION 1-1
(SCALE 1:100)

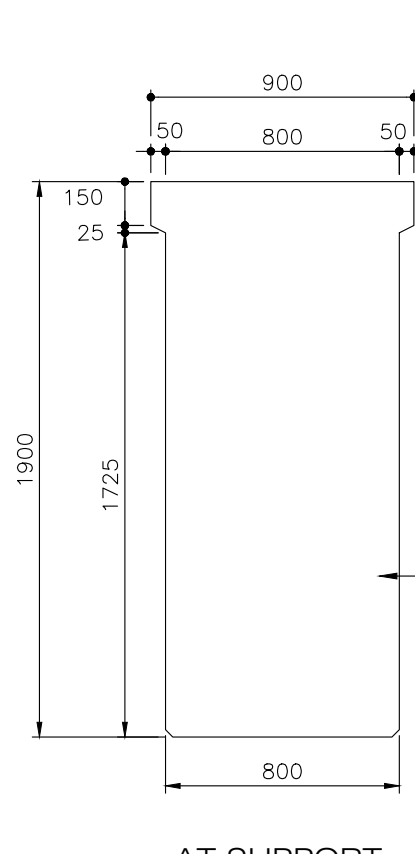


AT SUPPORT

GIRDER SECTION
DETAILS OF PSC GIRDER
FOR 40.0M
(SCALE 1:25)

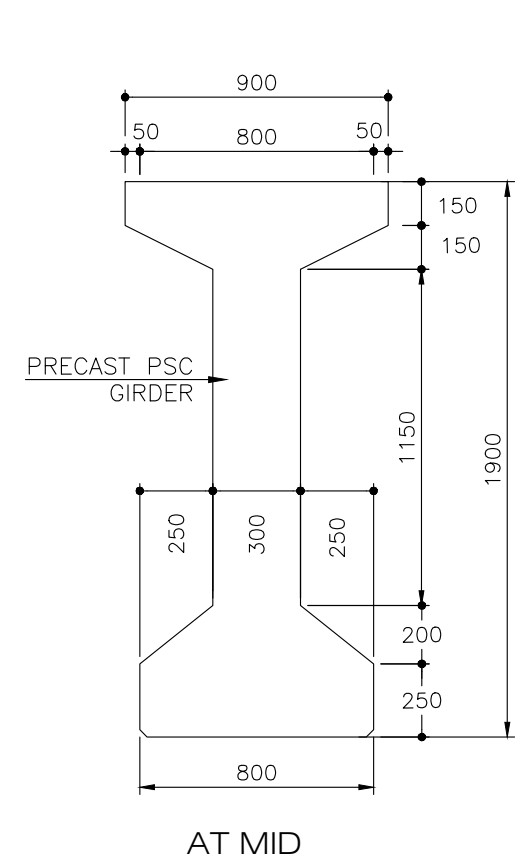


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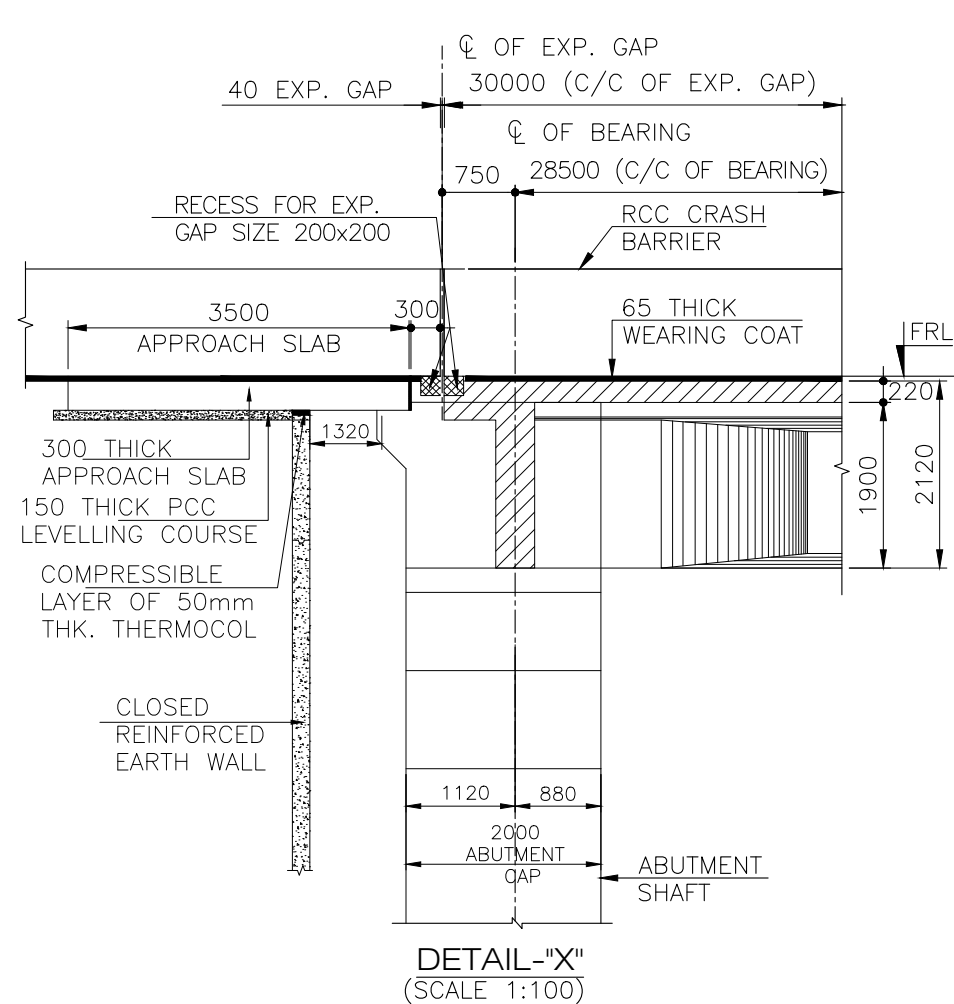


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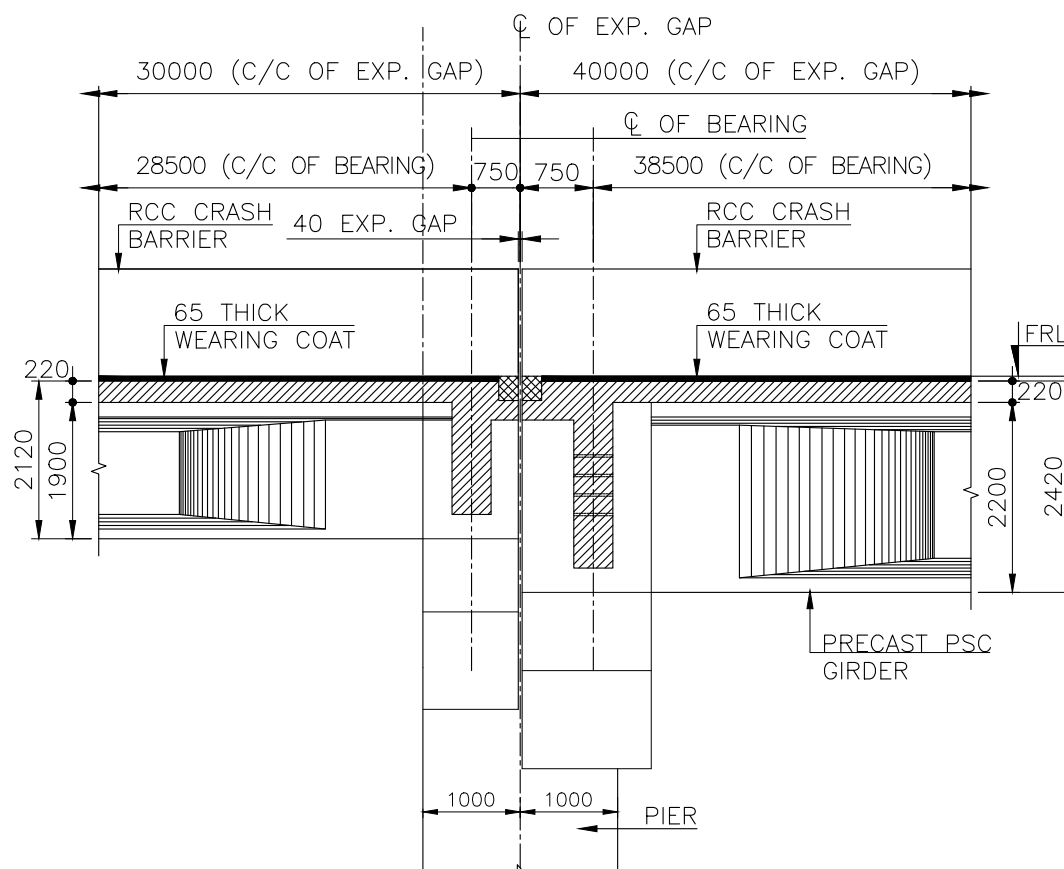
GIRDER SECTION
DETAILS OF PSC GIRDER
FOR 30.0M
(SCALE 1:50)



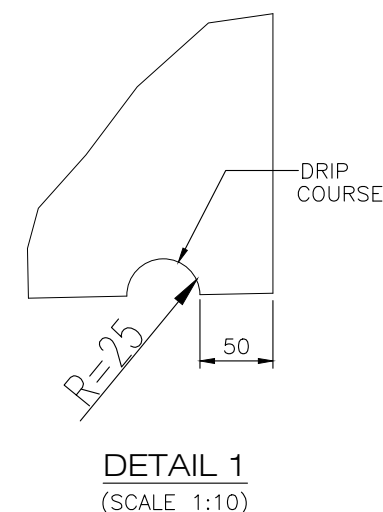
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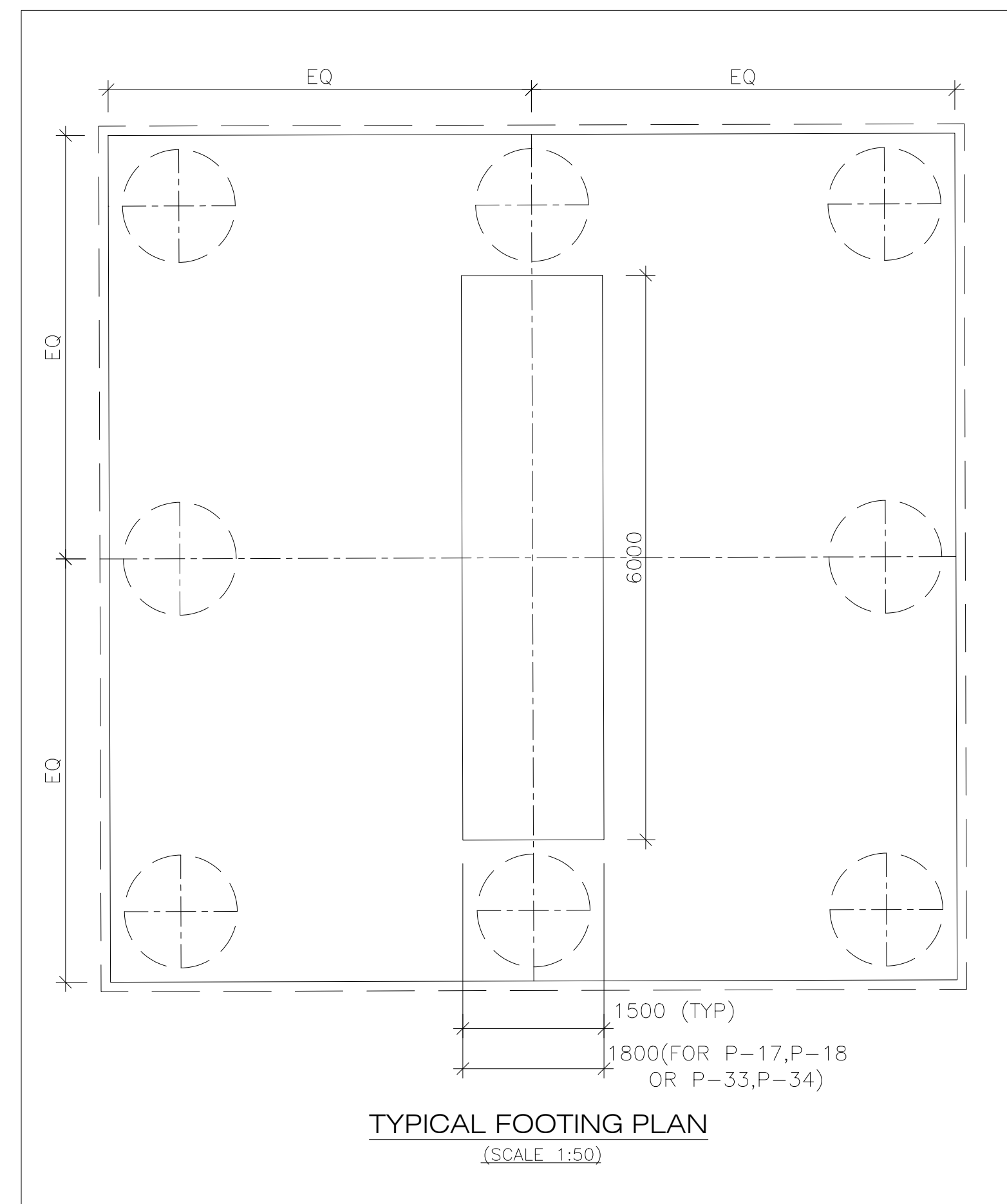
DETAIL-'X'
(SCALE 1:100)



DETAIL-'Y'
(SCALE 1:100)



DETAIL 1
(SCALE 1:10)



TYPICAL FOOTING PLAN
(SCALE 1:50)

- ALL DIMENSION ARE IN MILLIMETERS, LEVELS IN METERS AND CHANGES IN KILOMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSION TO BE FOLLOWED.
- CONCRETE SHALL BE DESIGN MIX AND SHALL HAVE MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150MM CUBES FOR ALL ELEMENTS OF STRUCTURES AS INDICATED BELOW:-
 - RCC CRASH BARRIER.....M40
 - PRECAST PSC GIRDER (SUPERSTRUCTURE).....M45
 - CAST-IN-SITU DECK SLAB (SUPERSTRUCTURE).....M40
 - SUBSTRUCTURE & FOUNDATION.....M35
 - APPROACH SLAB.....M30
 - RCC LEVELLING COURSE.....M15
- THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR 2-LANES OF IRC CLASS A OR 1-LANE OF IRC CLASS TOR WHOEVER GOVERNS.
- 1-LANE OF SV LOADING CLOSE TO CENTRE-LINE OF CARRIAGEWAY AS PER IRC-6, 2017 TABLE 6A AND CLAUSE 204.5.3, INCLUDING CONGESTION FACTOR AS PER CL204.4.
- UNTENSIONED REINFORCING STEEL SHALL BE OF THERMO MECHANICALLY TREATED (TMT) BARS. (GRADE DESIGNATION FE500) CONFORMING TO IS:1786.
- 65MM THICK CONCRETE WEARING COAT SHALL BE PROVIDED AS PER MORTH SPECIFICATION.
- CLEAR COVER TO OUTERMOST STEEL SHALL BE AS BELOW:-
 - SUPERSTRUCTURE (PRECAST).....40MM
 - SUPERSTRUCTURE (CAST IN-SITU).....40MM
 - SUB-STRUCTURE (EARTH FACE).....75MM
 - SUB-STRUCTURE (OPEN FACE).....50MM
- ALL SPACE EXCAVATED AND NOT OCCUPIED BY THE FOUNDATION & OTHER PERMANENT WORK SHALL BE FILLED WITH EARTH UP TO SURFACE OF SURROUNDING GROUND IN ACCORDANCE WITH SECTION 300 OF "MORTH" SPECIFICATION. IN CASE OF EXCAVATION IN ROCK, 300 OF "MORTH" SPECIFICATION SHALL BE FILLED WITH M15 PCC UP TO THE TOP OF ROCK.
- 800 THICK FILTER MEDIA SHALL BE PROVIDED AS PER IRC 78:2014 (APPENDIX-6)/GEOCOMPOSITE AS PER CLAUSE "704" OF MORTH.
- 40 THICK STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER MORTH SPECIFICATIONS FOR ROAD AND BRIDGE WORKS.
- 100x80 WEAP HOLES SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A STAGGERED MANNER IN VERTICAL WALLS.
- BACK FILLING BEHIND ABUTMENT AND RETURN WALL SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX 6 OF IRC:78-2014 HAVING PROPERTIES $C_u > 0.4$ & 30° AND $10=1/87$ MP.
- LAYING, COMPACTION AND EXTENT OF BACK FILL BEHIND SIDE WALL SHALL CONFORM TO SPECIFICATIONS IN APPENDIX : 6 OF IRC : 78-2014.
- LAP/SPICES SHALL BE PROVIDED AS PER CLAUSE NO. 15.2.4 & 15.2.5 OF IRC : 112-2011.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED HIGHWAY DRAWINGS FOR STRUCTURE ORIENTATION, SKEW FRL & CAMBER/SUPER ELEVATION, ETC IF ANY DISCREPANCY FOUND IT SHALL BE BROUGHT TO THE NOTICE OF DESIGN CONSULTANT/PROOF CHECKING CONSULTANT.
- PROPOSED CHAINAGE / FRL SHALL BE CHECKED AND CONFIRMED AS PER APPROVED PLAN & PROFILE.
- BEARING TYPE SHALL BE POT-PITF BEARING.
- EXPOSURE CONDITION IS SEVERE-STEEL CONFORMING TO THE IS 15651:2017 SHALL BE USED FOR RC BRIDGES.
- (SUPERSTRUCTURE AND SUBSTRUCTURE) ON NATIONAL HIGHWAYS.
- DIMENSIONS OF SUBSTRUCTURE ARE TENTATIVE. & SHALL BE CONFIRMED AFTER FINAL DESIGN.
- SIZE & WEIGHT OF STONE PITCHING SHALL BE PROVIDED AS PER IRC-84-1987, TABLE 2.2
- THE PROJECT ROAD FALLS WITHIN SEISMIC ZONE-IV.
- MAXIMUM DESIGN VERTICAL LOAD OF PILE 360T & HORIZONTAL LOAD OF PILE 33T
- VIA-DUCT (ELEVATED STRUCTURE) SHALL BE BUILT IN FROM BOTTOM TO TOP IN A SEQUENCE AS FOLLOWS: A. DRIVE PILE. B. CONSTRUCT PILE-CAP C. CAST PIER IN 3 LIFTS. D. CAST PIER CAP ALONG WITH PEDESTAL / SEISMIC RESTRAINER. E. PSC GIRDER LIFTED FROM YARD AND PLACED ON BEARING. F. CAST END DIAPHRAGM G. CAST SLAB H. EXPANSION JOINT TO BE COMPLETED.

REV.	DATE	DESCRIPTION

AUTHORITY:

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CONNECTIVITY MASTER PLAN OF KIOCL
FLYOVER IN THE STATE OF KARNATAKA

DRAWN

DESIGNED

CHECKED

APPROVED

TITLE:

GENERAL ARRANGEMENT DRAWING
OF FLYOVER AT CH-366+155 TO CH.367+675
(17X30.0M+1X40.0M+15X30.0M+1X40.0M+16X30.0M)

SCALE:

AS SHOWN

DRG. NO:

CP/MSPARK/KIOCAL/FLY/CH 366+155

DATE:

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8 OF 9

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ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS IN METERS AND CHANGES IN KILOMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN INSTRUCTIONS TO BE FOLLOWED.

2. CONCRETE SHALL BE DESIGN MIX AND SHALL HAVE MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150MM CUBES FOR ALL ELEMENTS OF STRUCTURE INDICATED BELOW:-

I) RCC CURB BARRIER.....M40

II) PRECAST PSC GIRDER (SUPERSTRUCTURE).....M45

III) ASH-IN-SITU DECK SLAB (SUPERSTRUCTURE).....M40

IV) SUBSTRUCTURE & FOUNDATIONM40

V) APPROACHM30

VI) PCC LEVELING COURSEM15

3. THE CARRIAGEWAY OF PROPOSED BRIDGE IS DESIGNED FOR

2 LANES OF IRC CLASS '70' WHICHEVER COVERS.

4. UNSTRENGTHENED REINFORCING STEEL SHALL BE OF THERMO MECHANICALLY TREATED (TM) BARS, (GRADE DESIGNATION F500) CONFORMING TO IS:1786.

5. 65MM THICK CONCRETE WEARING COAT SHALL BE PROVIDED AS PER NORTH SPECIFICATION.

6. CLEAR COURSE TO OUTERMOST STEEL SHALL BE AS BELOW:-

I) SUPERSTRUCTURE (PRECAST).....40MM

II) SUPERSTRUCTURE (CAST-IN-SITU).....40MM

III) SUPERSTRUCTURE (GRAVEL FILL).....40MM

IV) SUB-STRUCTURE (OPEN FACE).....50MM

7. ALL SPACE EXCAVATED AND NOT OCCUPIED BY THE FOUNDATION & OTHER PERMANENT WORK SHALL BE REFILLED WITH EARTH UP TO SURFACE OF SUBSTRUCTURE. THE EXPANSION JOINTS SHALL BE PROVIDED AS PER NORTH SPECIFICATION. IN CASE OF EXCAVATION IN ROCK, THE ANNUAL SPACE AROUND FOUNDATION SHALL BE FILLED WITH M15 GRADE CONCRETE.

8. 600 THICK FILTER MEDIA SHALL BE PROVIDED AS PER IRC 78:2014 (APPENDIX-6)/GEOCOMPOSITE AS PER CLAUSE 704* OF NORTH SPECIFICATION.

9. 10.00W WEP HOLES SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A STAGGERED MANNER IN VERTICALLY.

10. BACK FILLING BEHIND ABUTMENT AND RETURN WALL SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX 6 OF IRC:78-2014 HAVING MINIMUM C_u >= 30 and I_p <= 41.

11. LAYING, COMPACTION AND EXTENT OF BACK FILL BEHIND SIDE WALL SHALL CONFORM TO SPECIFICATIONS IN APPENDIX : 6 OF IRC : 78-2014

12. LAP/SPLICES SHALL BE PROVIDED AS PER CLAUSE NO. 15.2.4 & 15.2.5 OF IRC : 112-2011.

13. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED HIGHWAY DRAWINGS FOR STRUCTURE ORIENTATION, SKEW RAIL & CAMBER/SURFACE ELEVATION, ETC IF ANY DISCREPANCY FOUND IT SHALL BE BROUGHT TO THE NOTICE OF DESIGN CONSULTANT/PROF. CHIEF ENGINEER.

14. PROPOSED CHANGING / RAIL SHALL BE CHECKED AND CONFIRMED AS PER APPROVED PLAN & PROFILE.

17. BEARING CAPACITY SHALL BE AS PER RAILWAY BRIDGE BEARING.

18. EXPOSURE CONDITION IS SEVERE.

19. DIMENSIONS OF SUBSTRUCTURE ARE TENTATIVE, & SHALL BE CONFIRMED AFTER FINAL DESIGN.

20. SIZE & WEIGHT OF STONE PITCHING SHALL BE PROVIDED AS PER IRC-89-1997, TABLE 5.2.

21. THE PROPOSED ROAD TO WITHIN SEISMIC ZONE-V.

22. MAXIMUM DESIGN VERTICAL LOAD OF PAV 360T & HORIZONTAL LOAD OF LOAD OF PAV 33T.

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