

CLIENT:-



NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED
(Ministry of Road Transport & Highways)

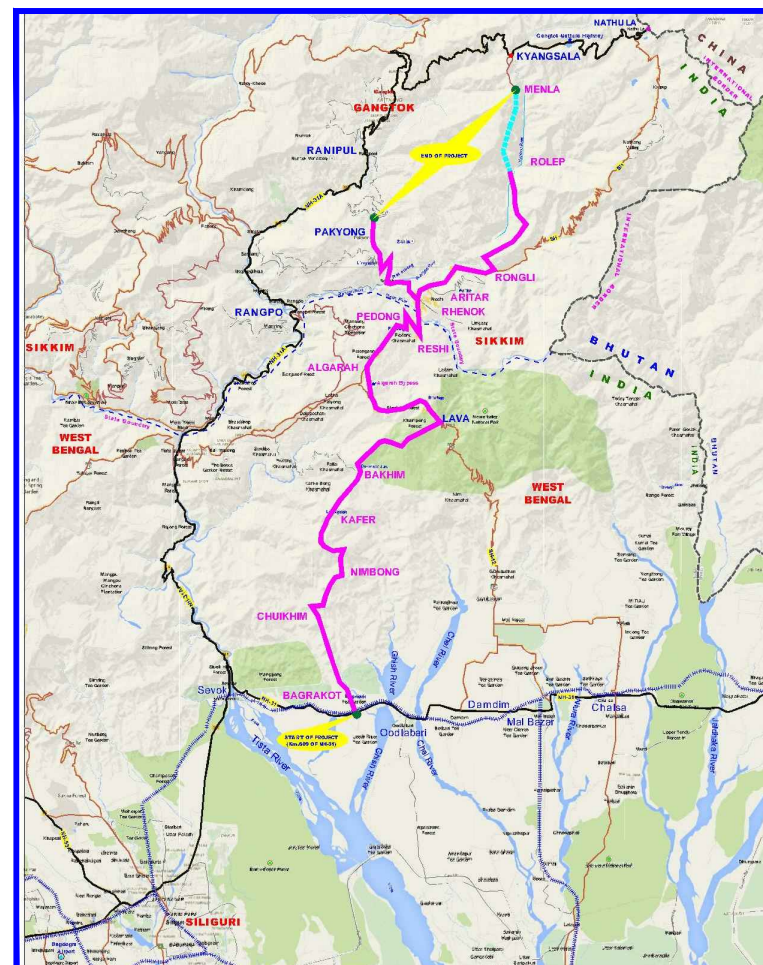
Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot-Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim.

FINAL DETAILED PROJECT REPORT

PACKAGE- II (C)

(Km 37+600 To Km 52+000)

DRAWING VOLUME: STRUCTURE (GAD)



JULY -2020

CONSULTANT :-

SA INFRASTRUCTURE CONSULTANTS PVT. LTD.

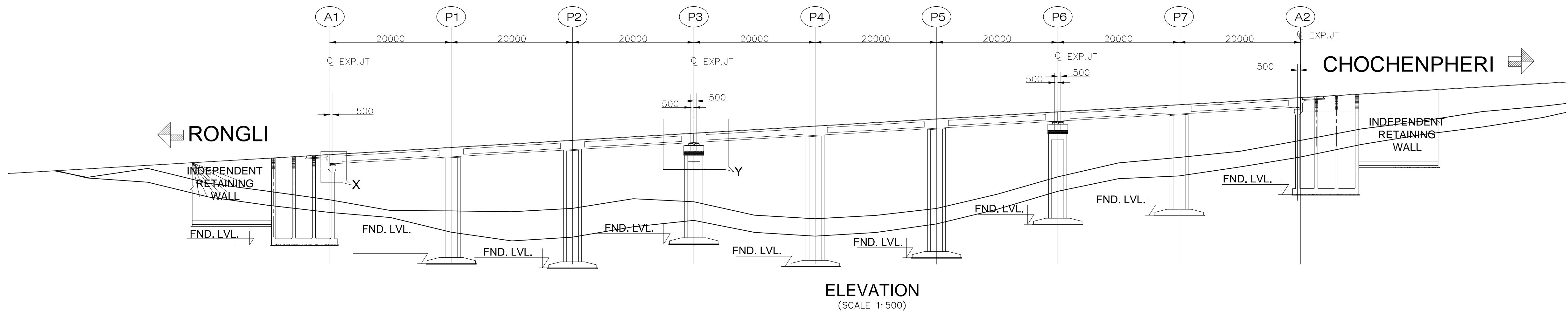


In Association with
Specialized Engineering Service Pvt. Ltd.
1101A, 11th Floor, Tower A-II, Corporate Park,
Plot No. 7A/1, Sector-142, Noida 201301, Uttar Pradesh.

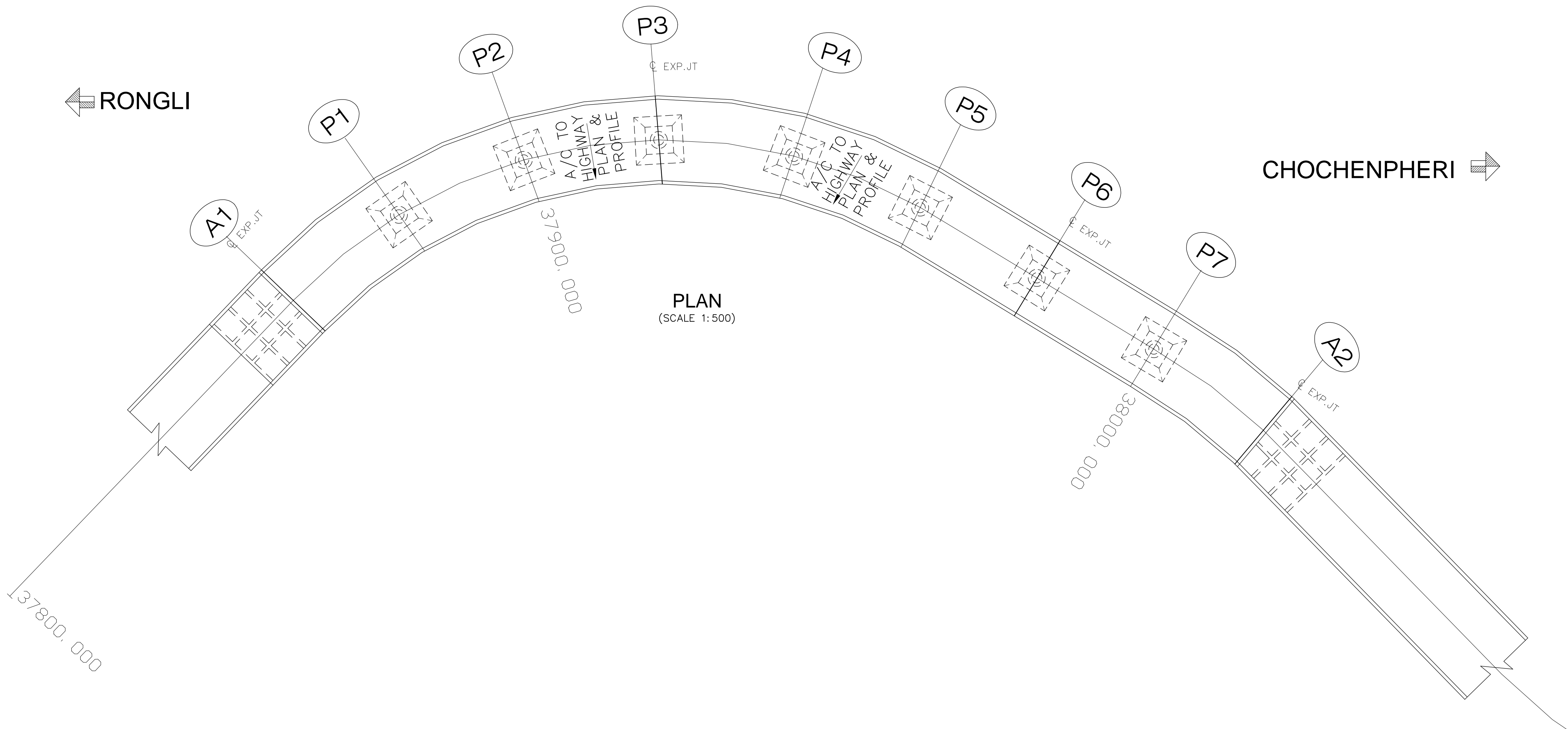
VIADUCT

NOTES

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3. THE DIMENSION OF THE FOUNDATION SHOWN HERE TENTATIVE ONLY. THIS SHALL BE FINALIZED AFTER DETAILED SUBSOIL INVESTIGATION.
4. BRIDGE HAS BEEN DESIGNED FOR CARRIAGEWAY LIVE LOAD OF 1 LANE 70R +1 LANE CLASS A OR 3 LANES OF CLASS A WHICHEVER GIVES WORST EFFECT.
5. GRADE OF CONCRETE FOR VARIOUS ELEMENTS ARE AS FOLLOWS: –
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 - (vi) APPROACH SLAB ----- M30
 - (vii) PEDESTAL ----- M40
6. TYPE OF BEARING PROPOSED HERE IS POT–PTFE AS PER IRC:83, PART–III
7. SINGLE STRIP SEAL EXPANSION JOINT IS USED.
8. GRADE OF CEMENT IS USED HERE IS OPC 43/OPc 53.
- 9 ALL REINFORCEMENT BARS ARE TMT BARS (GRADE DESIGNATION Fe500D) AS PER IS:1786.
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11. SUPERELEVATION SHALL BE MAINTAINED AS PER HIGHWAY PLAN & PROFILE.
12. SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²

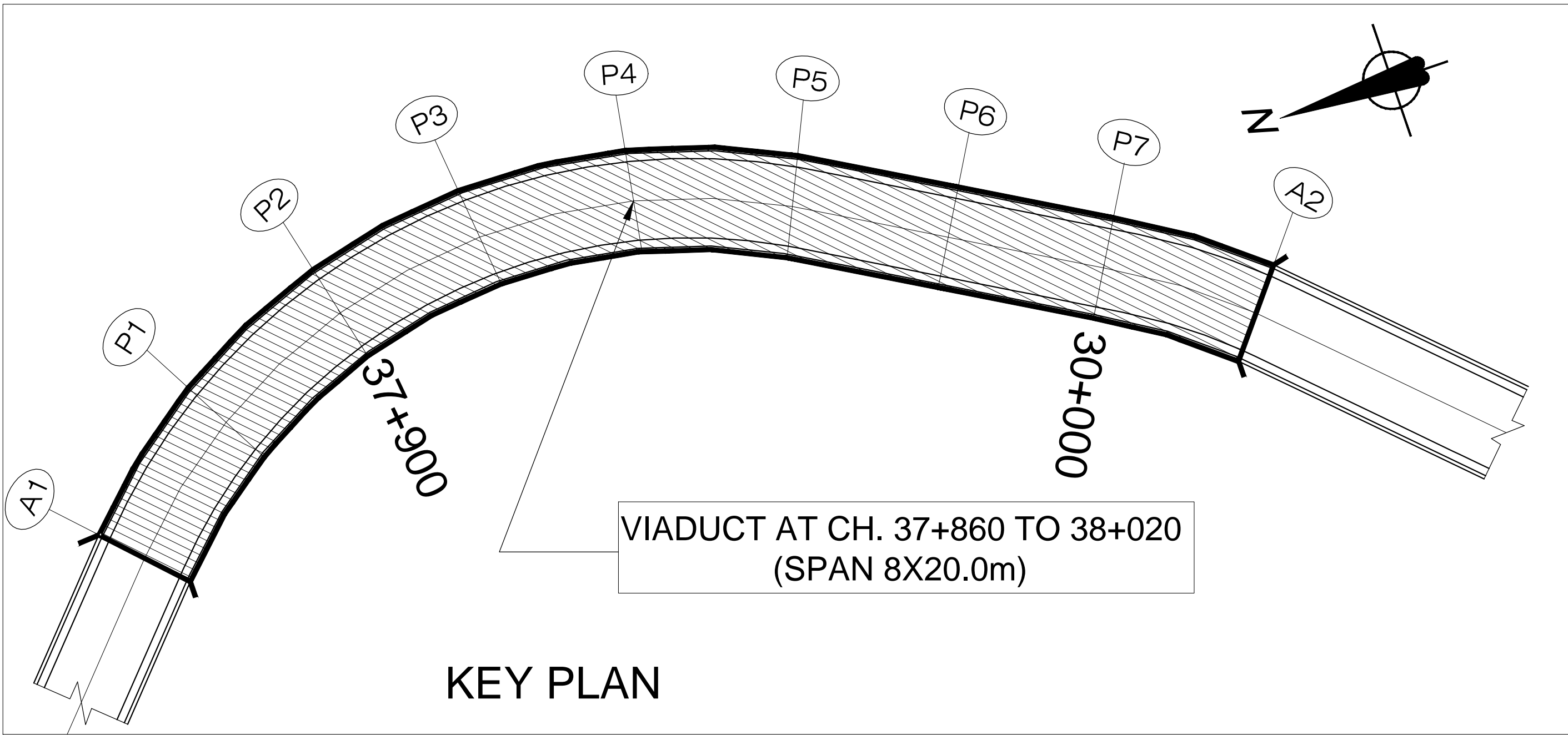


FORMATION LEVEL	1044.790	1045.966	1047.141	1048.317	1049.493	1050.669	1051.845	1053.020	1054.196
EX.GROUND LEVEL	1037.291	1035.464	1035.887	1036.977	1034.167	1035.874	1041.090	1044.300	1047.091
GROUND LEVEL (RHS)–6(M)	1039.074	1036.632	1037.843	1038.776	1037.027	1038.632	1043.480	1047.063	1048.082
CHAINAGE	37+860	37+880	37+900	37+920	37+940	37+960	37+980	38+000	38+020



TO RONGLI

TO CHOCHENPHERI



R0	JUNE-20	DRAFT DETAILED PROJECT REPORT			
			A	B	C
REV	DATE	DESCRIPTION OF REVISIONS			INITIALS

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

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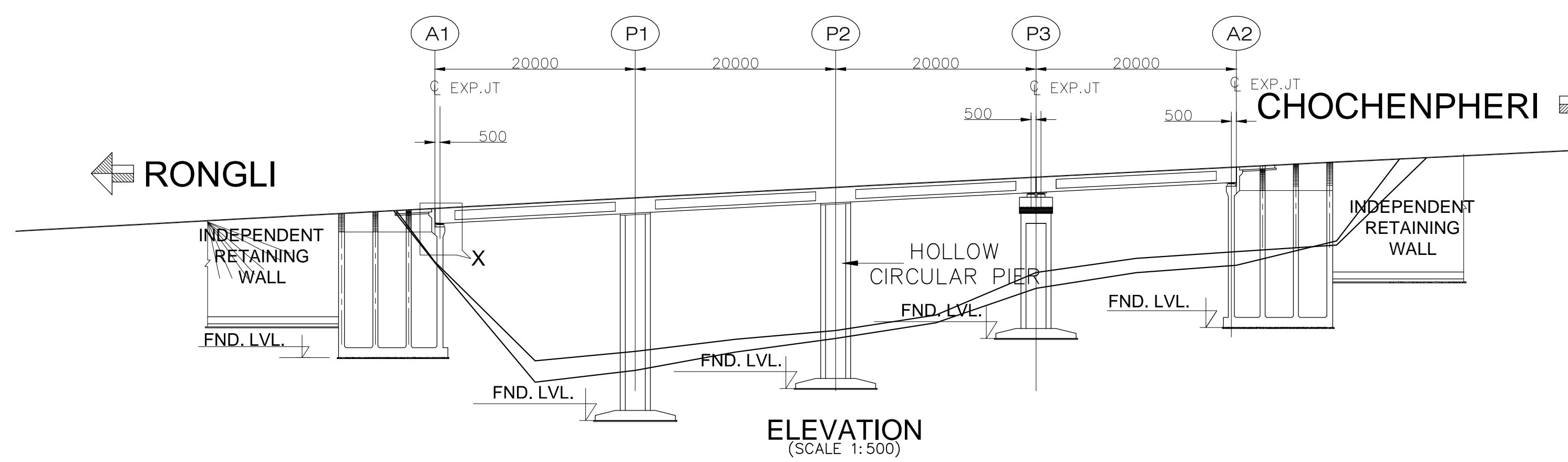
DATE : JUNE- 2020	REVISION R0	
DESIGNED BY RAVI KUMAR	DRAWN BY A SEN	CHECKED BY A.REHMAN
	APPROVED BY S.Shukla	
SCALE:- AS SHOWN	SHEET:- 01 OF 01	DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/37+860/GAD-01

GENERAL ARRANGEMENT DRAWINGS
OF VIADUCT AT CH- 37+860 TO 38+020
(SPAN-8x20.0m)

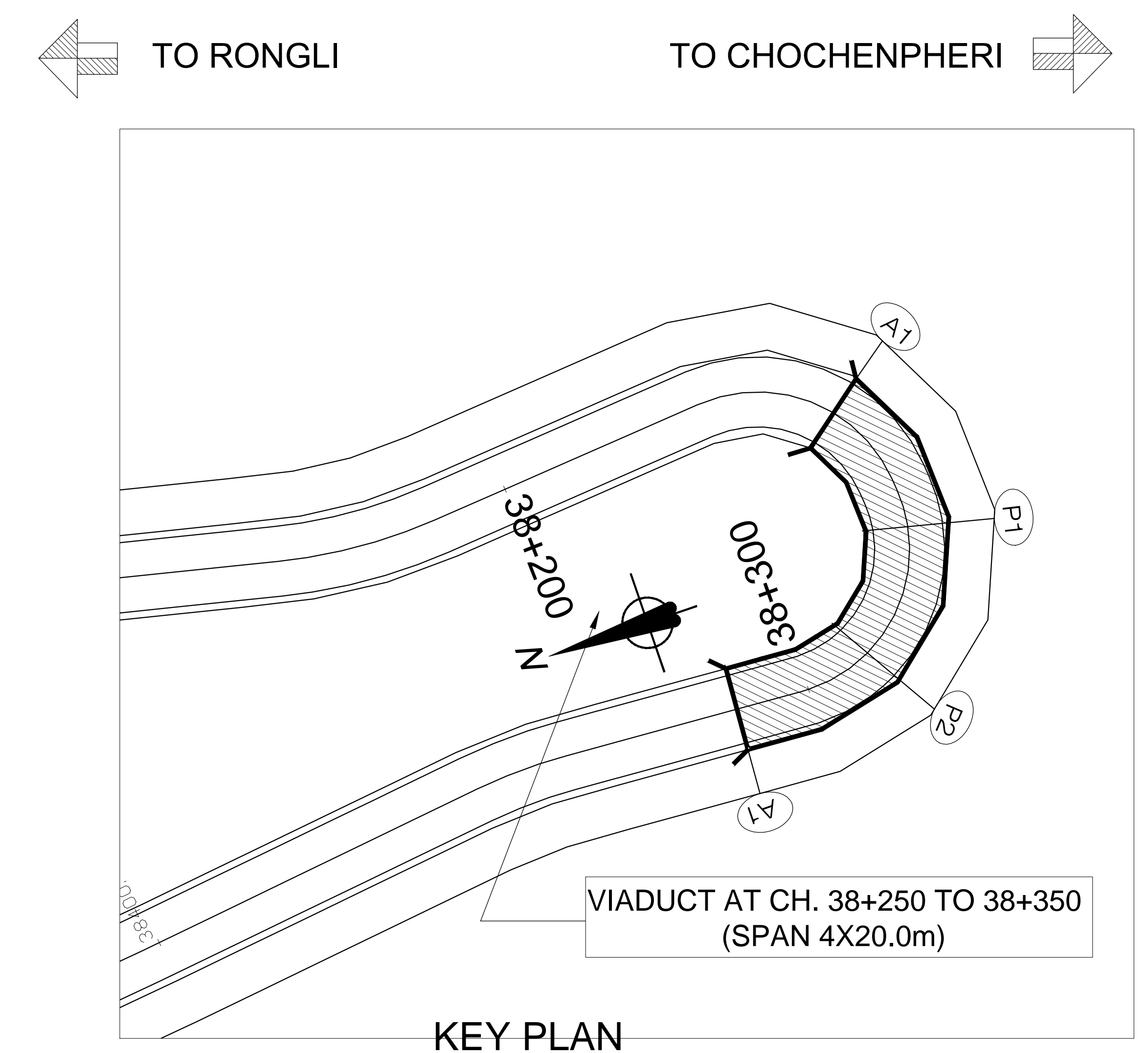
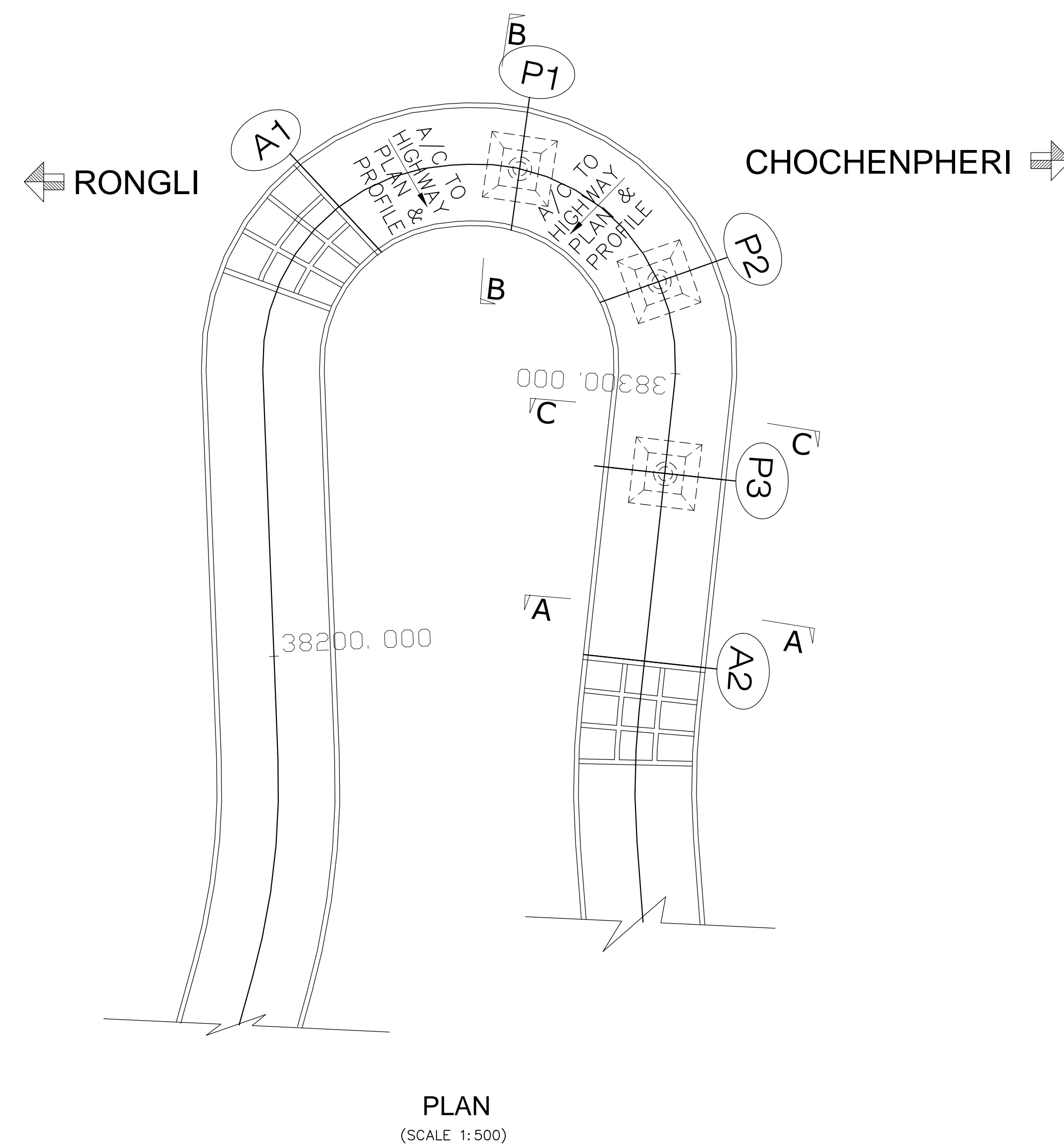
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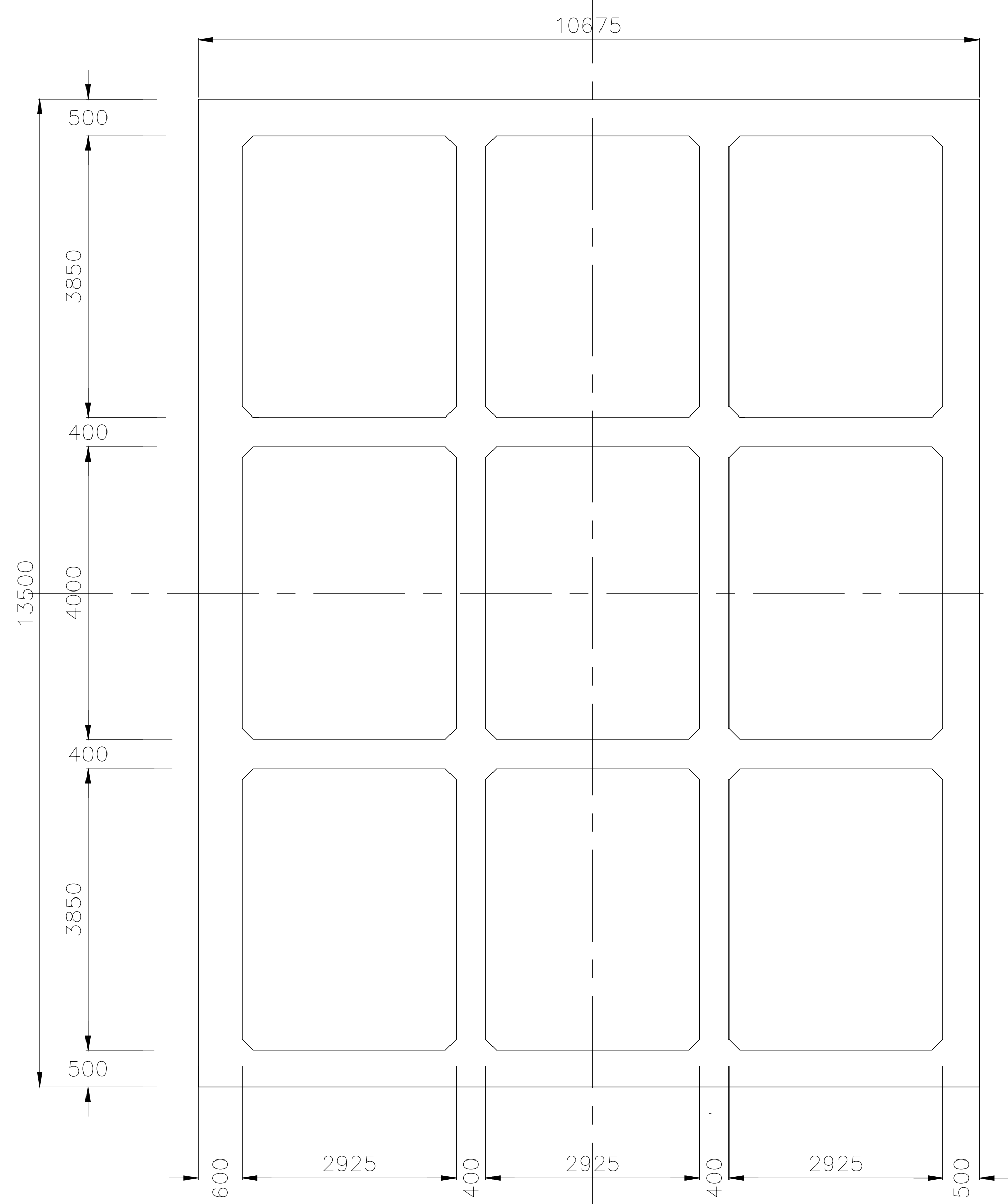
NOTES

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4. BRIDGE HAS BEEN DESIGNED FOR CARRIAGEWAY LIVE LOAD OF 1 LANE 70R +1 LANE CLASS A OR 3 LANES OF CLASS A WHICHEVER GIVES WORST EFFECT.
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6. TYPE OF BEARING PROPOSED HERE IS POT-PTFE AS PER IRC:83, PART-III
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12. SAFE BEARING CAPACITY FOR PRELIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS $40t/m^2$

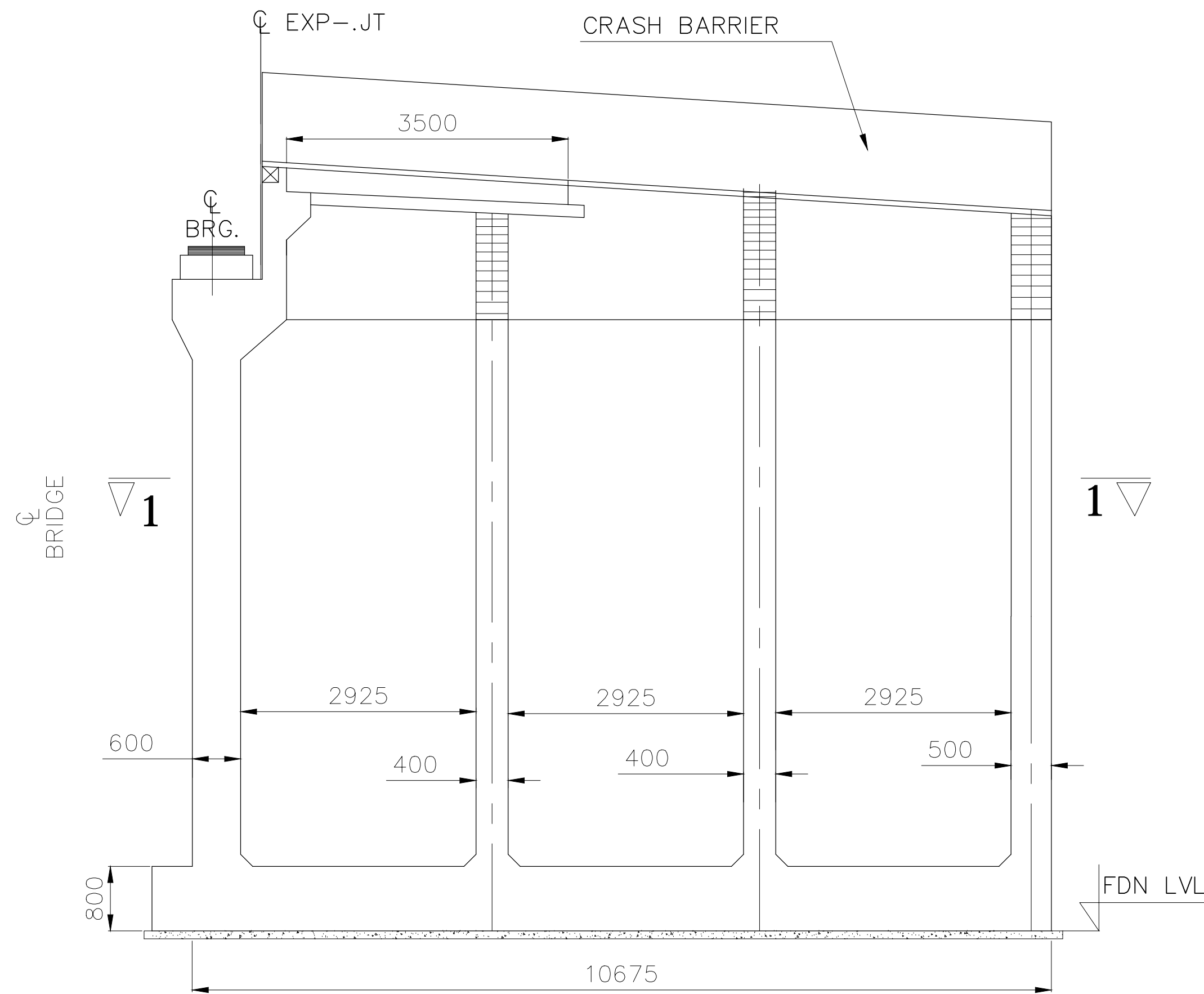


FORMATION LEVEL	1067.405	1068.465	1069.508	1070.532	1071.538
EX-GROUND LEVEL	1062.039	1063.202	1055.183	1060.980	1063.058
GROUND LEVEL (RHS)-12(M)	1062.137	1055.001	1055.966	1061.686	1064.417
CHAINAGE	38+250	38+270	38+290	38+310	38+350

[illegible]

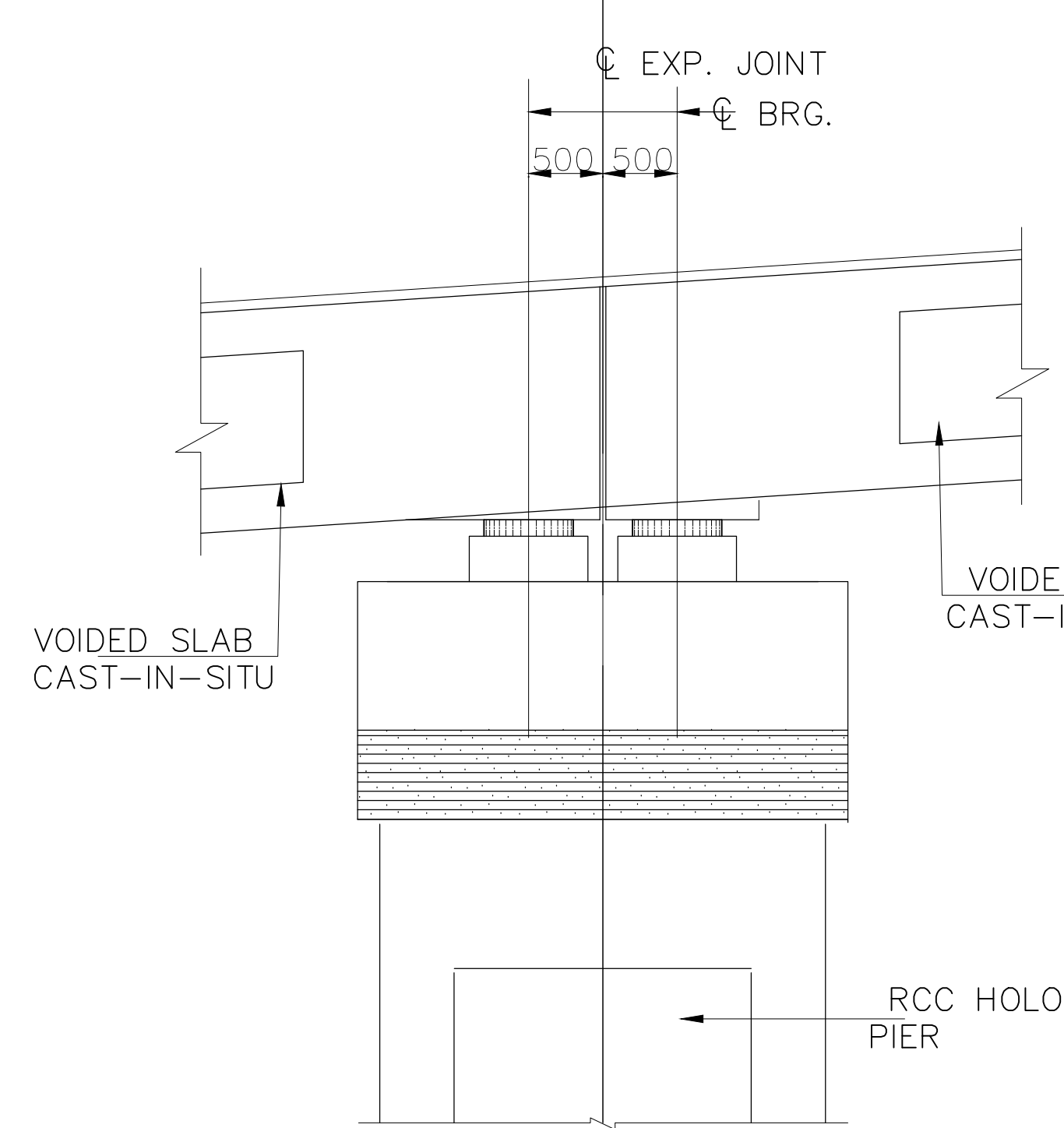


SECTION 1-1



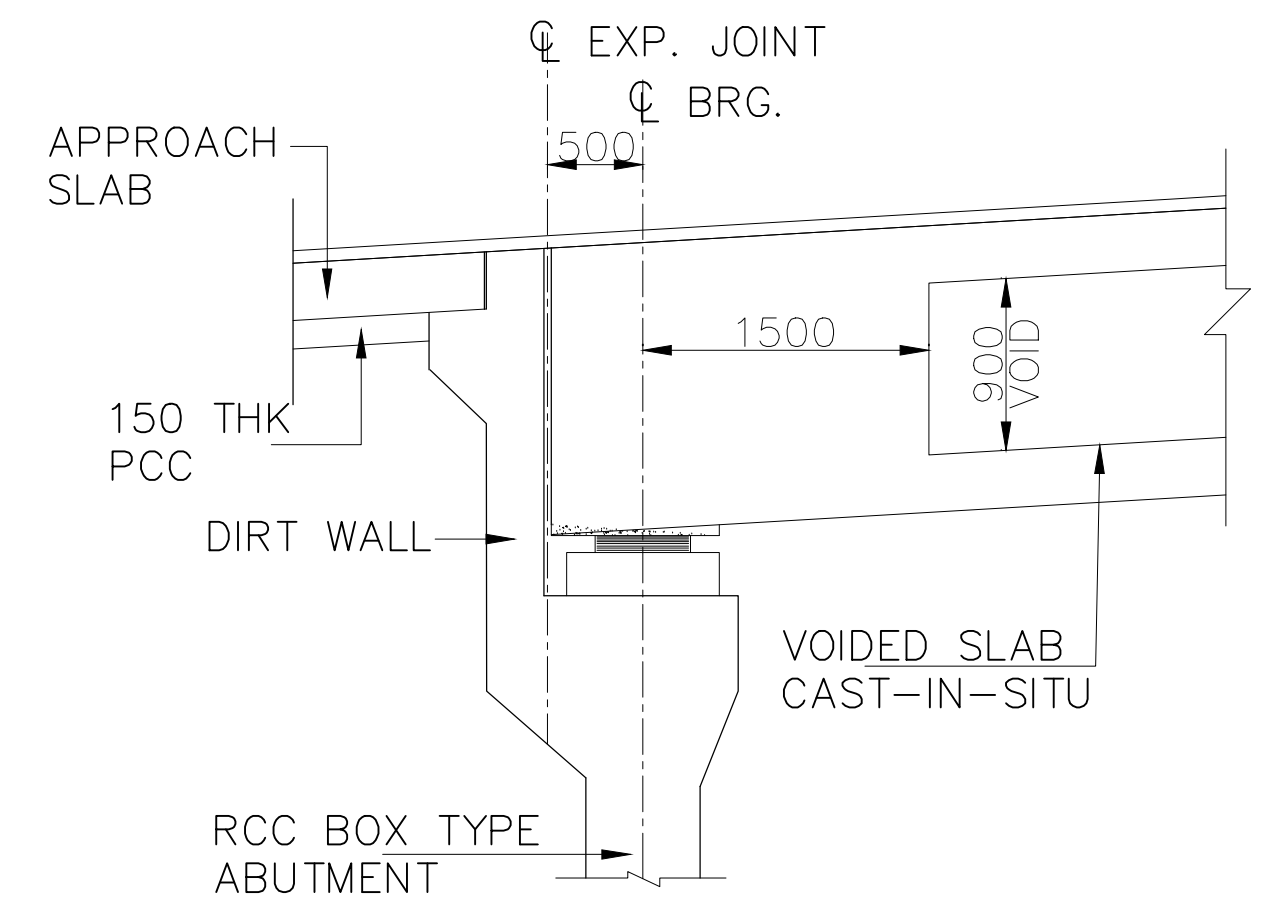
BOX ABUTMENT

SCALE 1:100



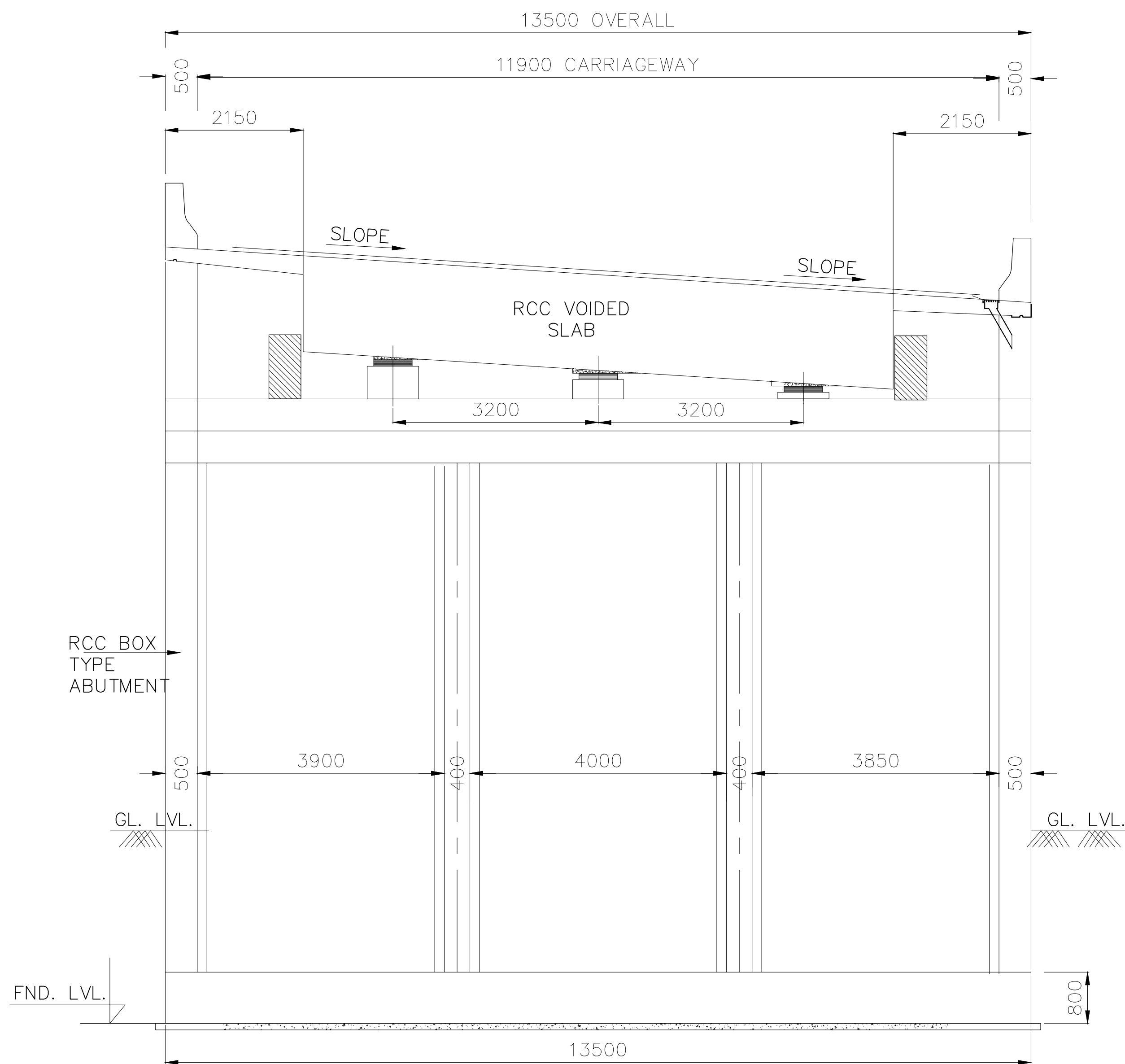
DETAIL-Y

(SCALE 1:70)



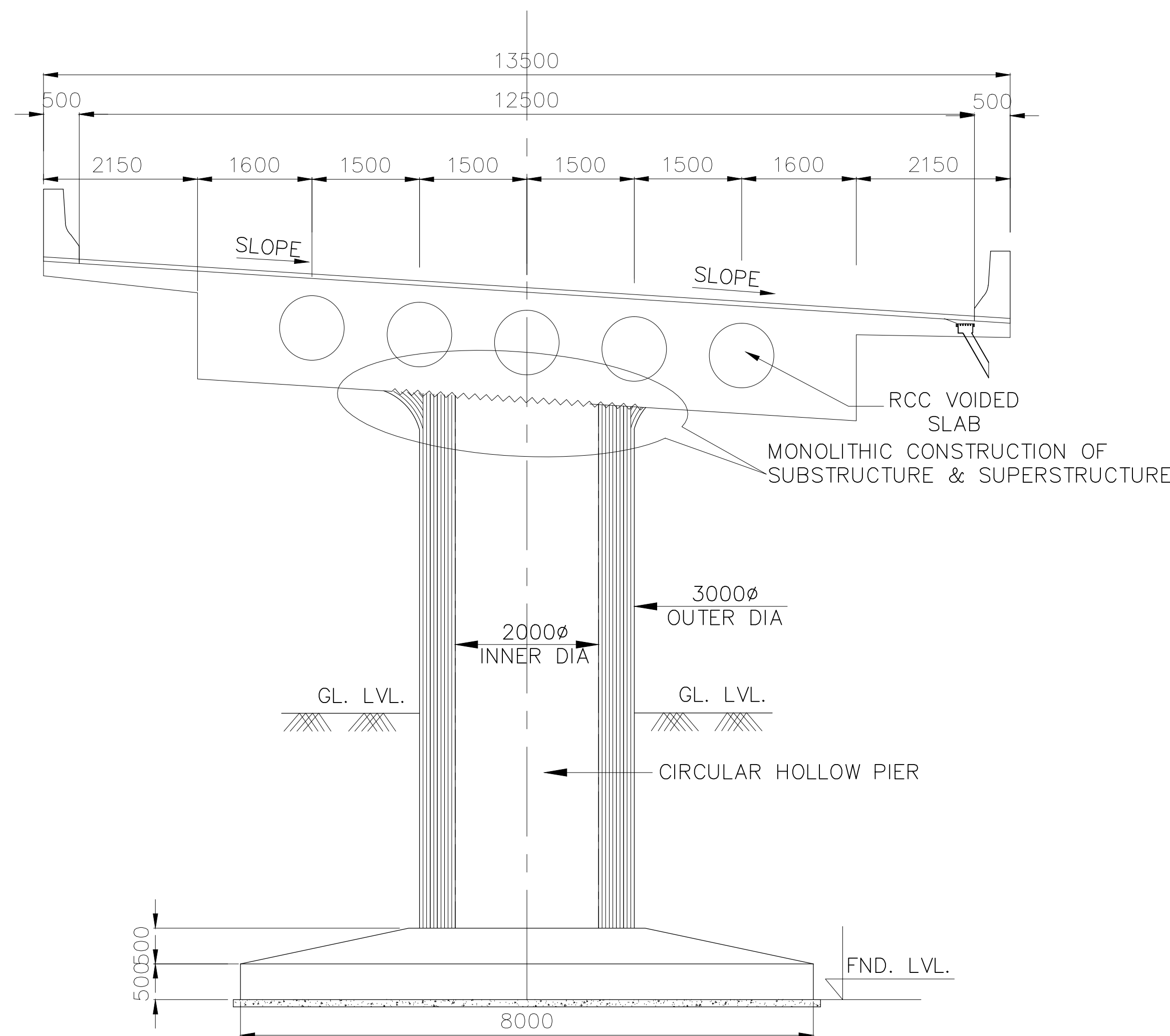
DETAIL-X

(SCALE 1:75)



SECTION A-A

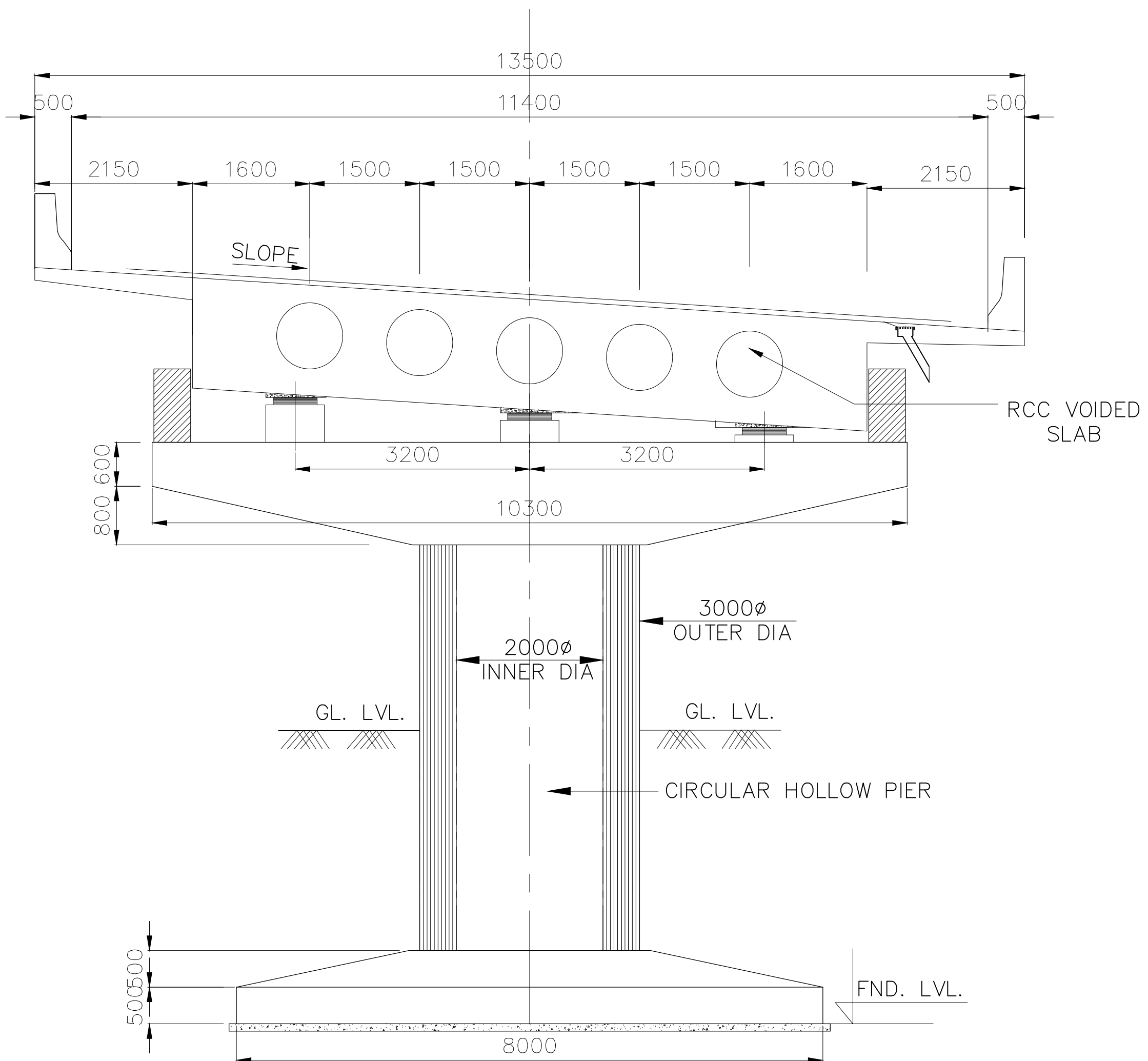
SCALE 1:100



SECTION B-B

SECTION NEAR FIX & FREE JOINT

SCALE 1:100



SECTION C-C

SECTION NEAR EXPANSION JOINT

SCALE 1:100

R0	JUNE-20	DRAFT DETAILED PROJECT REPORT			
			A	B	C
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS		

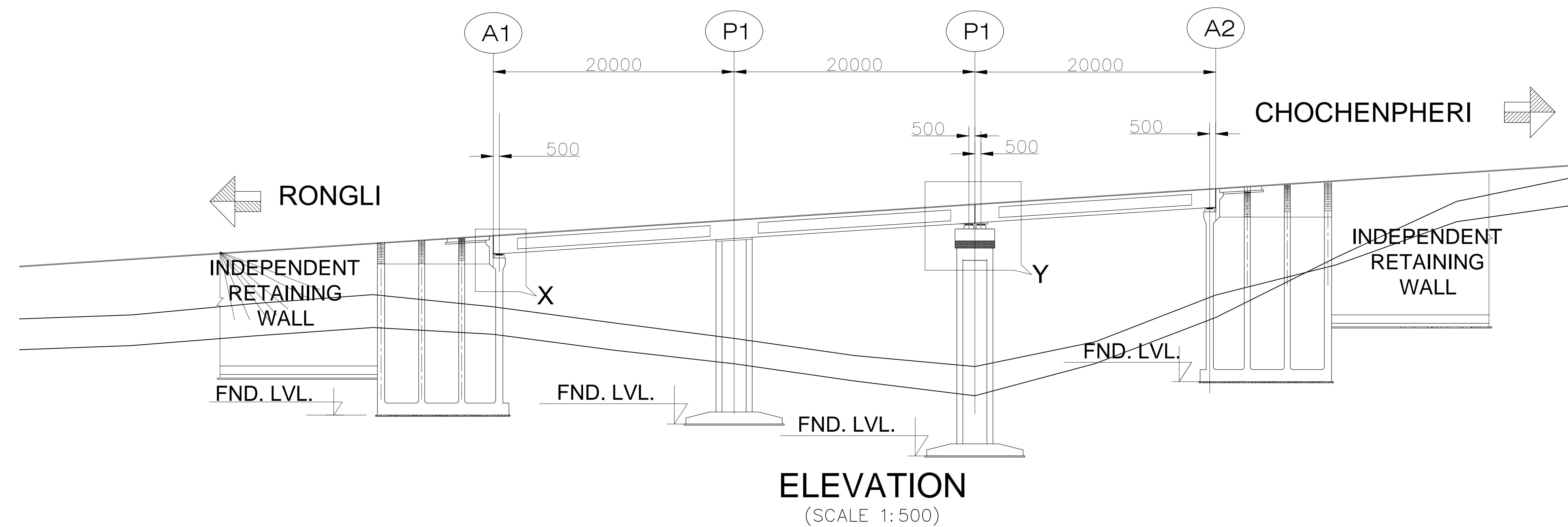
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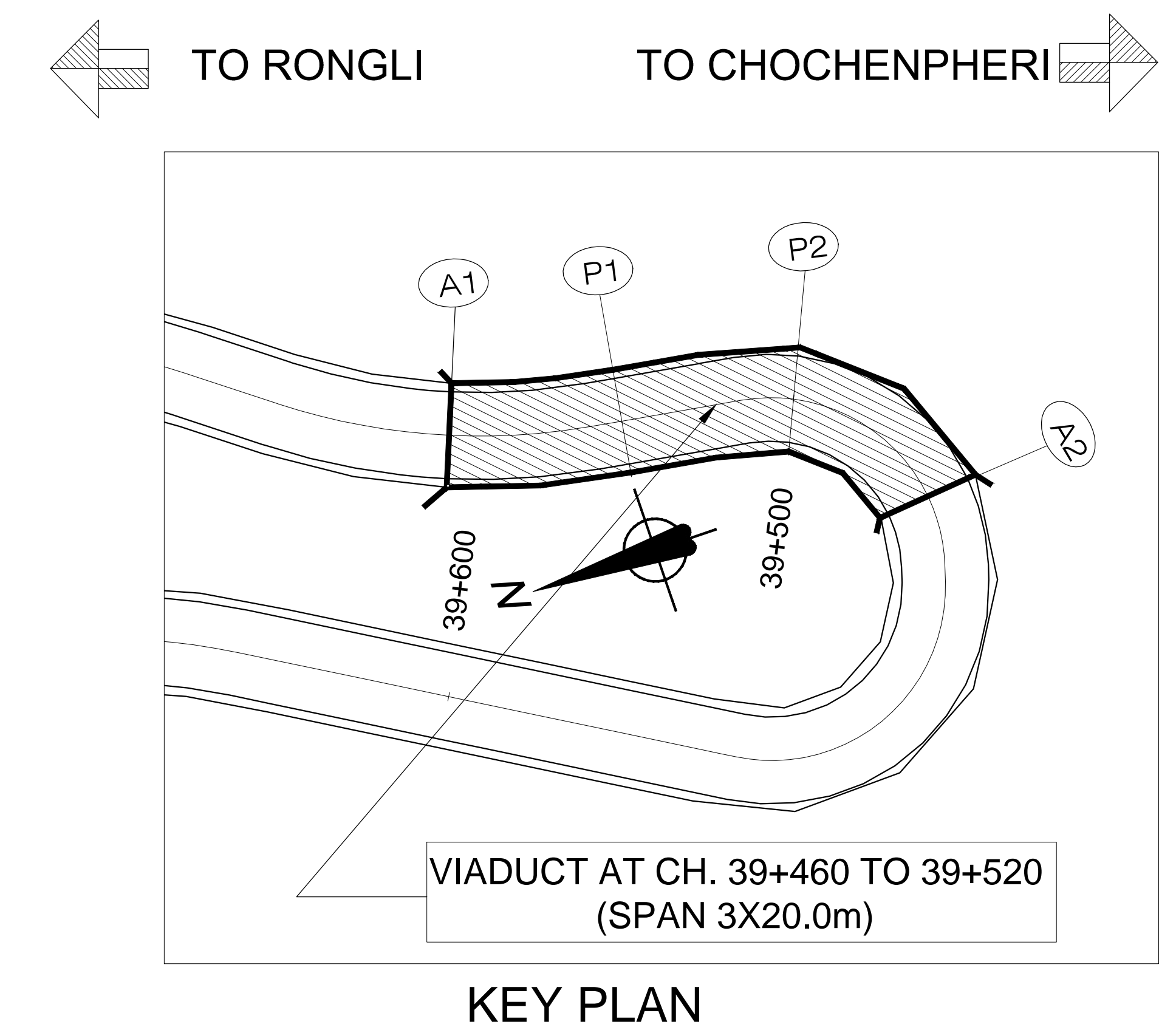
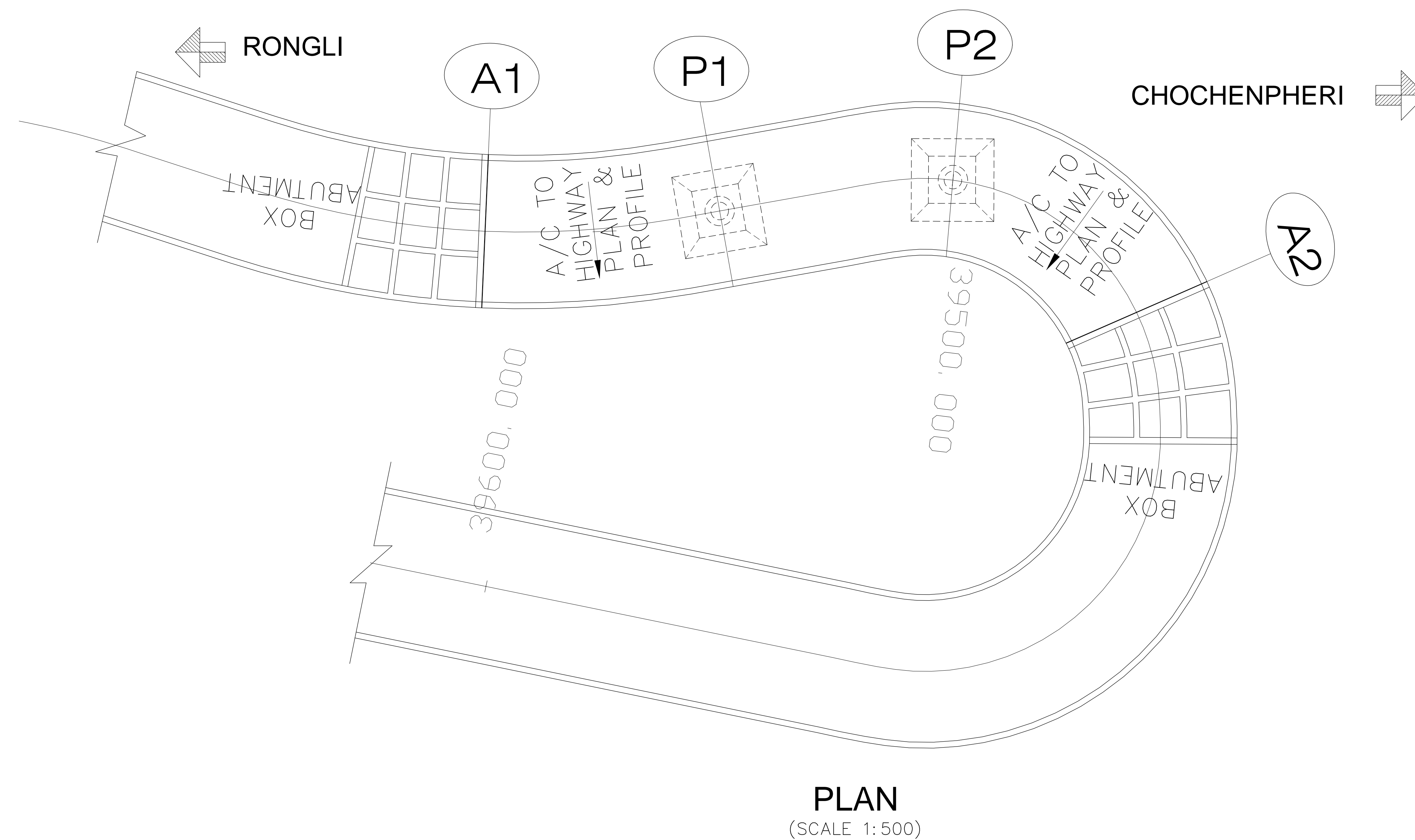
DATE :	JUNE- 2020	REVISION	R0	GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 38+250 TO 38+330 (SPAN-4x20.0m)
DESIGNED BY	RAVI KUMAR	DRAWN BY	A SEN	
CHECKED BY	A.REHMAN	APPROVED BY	S.Shukla	DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/38+250/GAD-01
SCALE:- AS SHOWN			SHEET:- 02 OF 02	

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12. SAFE BEARING CAPACITY FOR PRELIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS $40t/m^2$



FORMATION LEVEL	1123.644	1124.944	1126.244	1127.544
EX.GROUND LEVEL	1117.705	1115.084	1112.748	1118.676
GROUND LEVEL (RHS)-6(M)	1119.532	1117.315	1115.173	1119.866
CHAINAGE	39+460	39+480	39+500	39+520

[illegible]



DETAIL-Y
(SCALE 1:70)



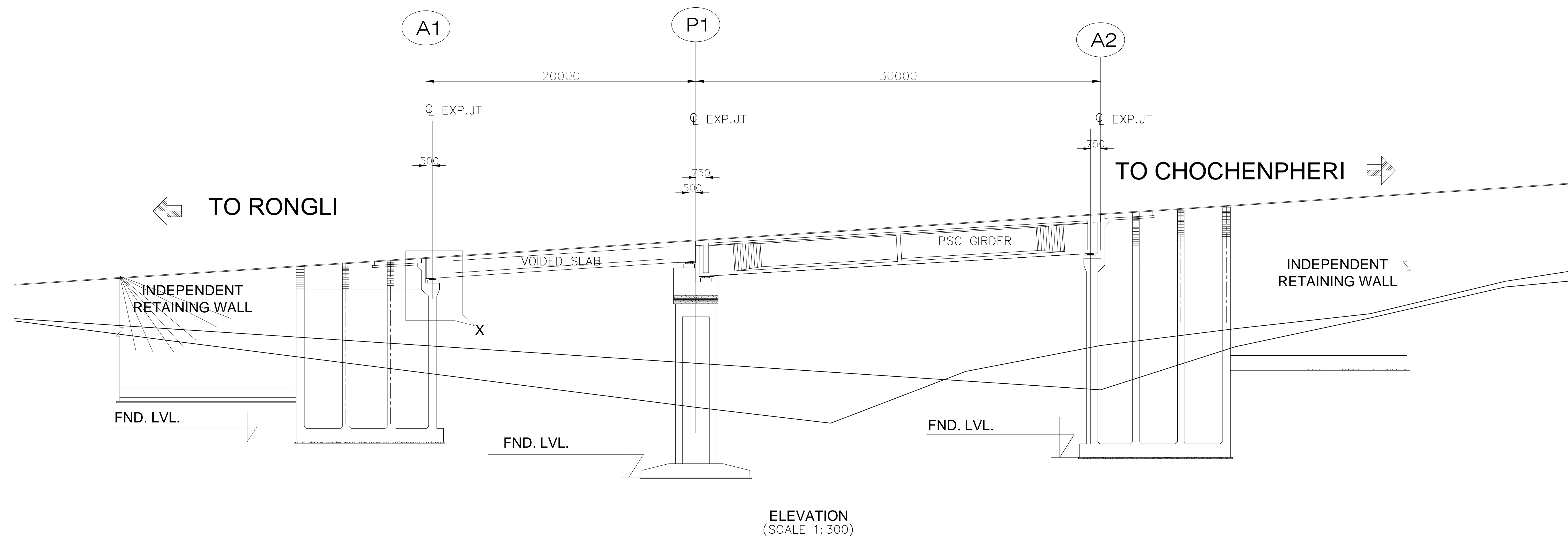
SECTION B-B

SECTION C-C

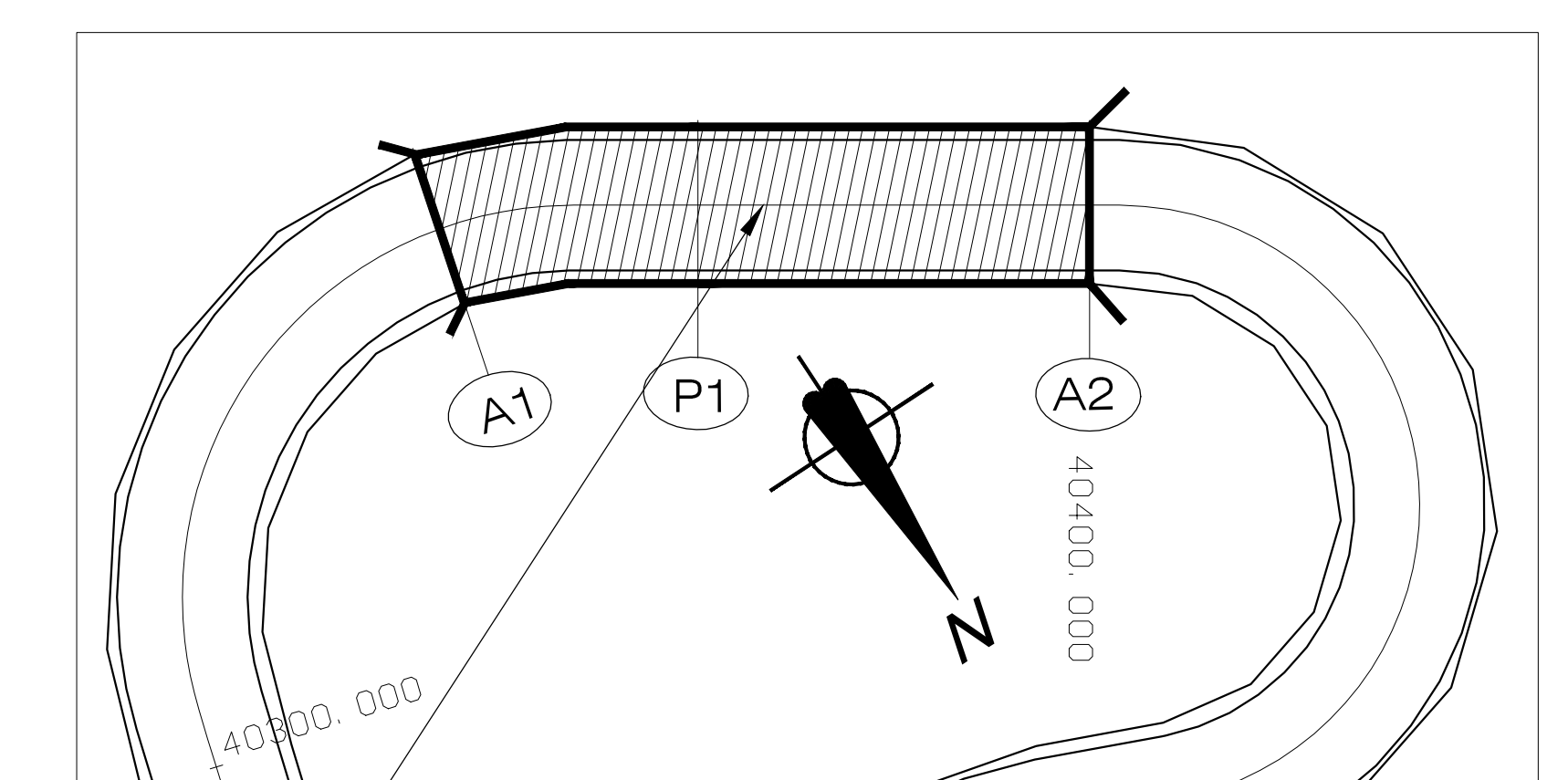
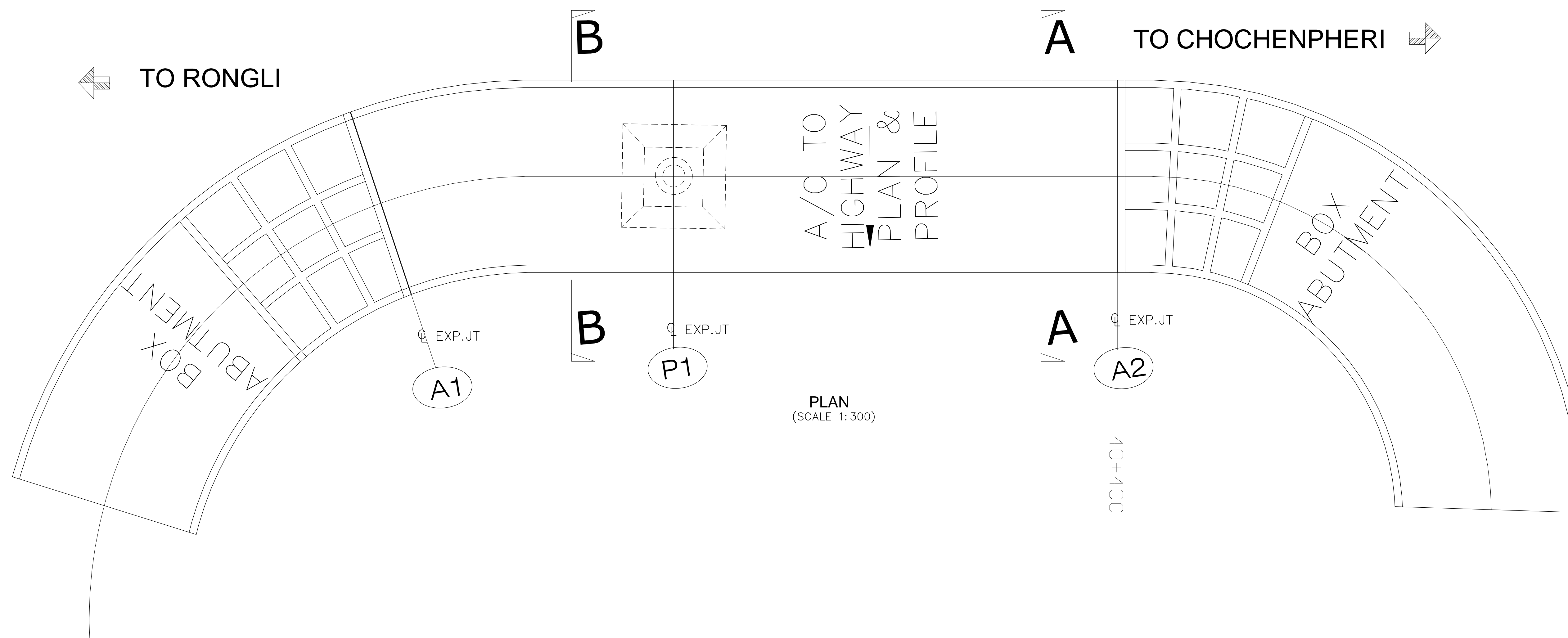
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FORMATION LEVEL	1181.494	1182.794	1184.744
EX.GROUND LEVEL	1174.970	1173.658	1171.690
GROUND LEVEL (RHS)-12(M)	1172.932	1170.398	1174.976
CHAINAGE	40+350	40+370	40+400



KEY PLAN

[illegible]



SCALE 1:100



(SCALE 1:70)



(SCALE 1:75)



SCALE 1:100

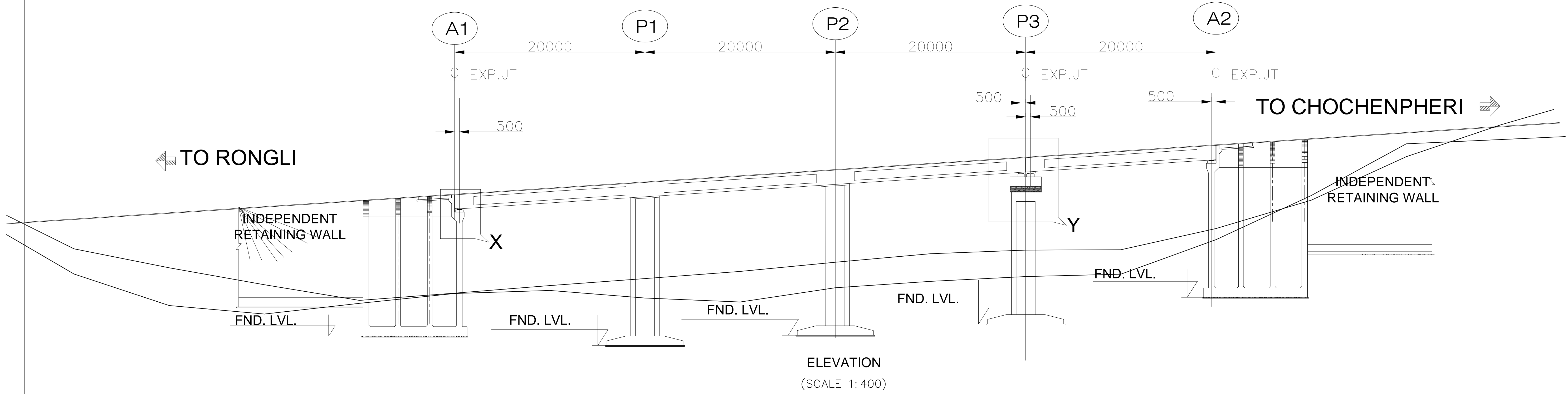


SECTION NEAR EXPANSION JOINT
SCALE 1:100

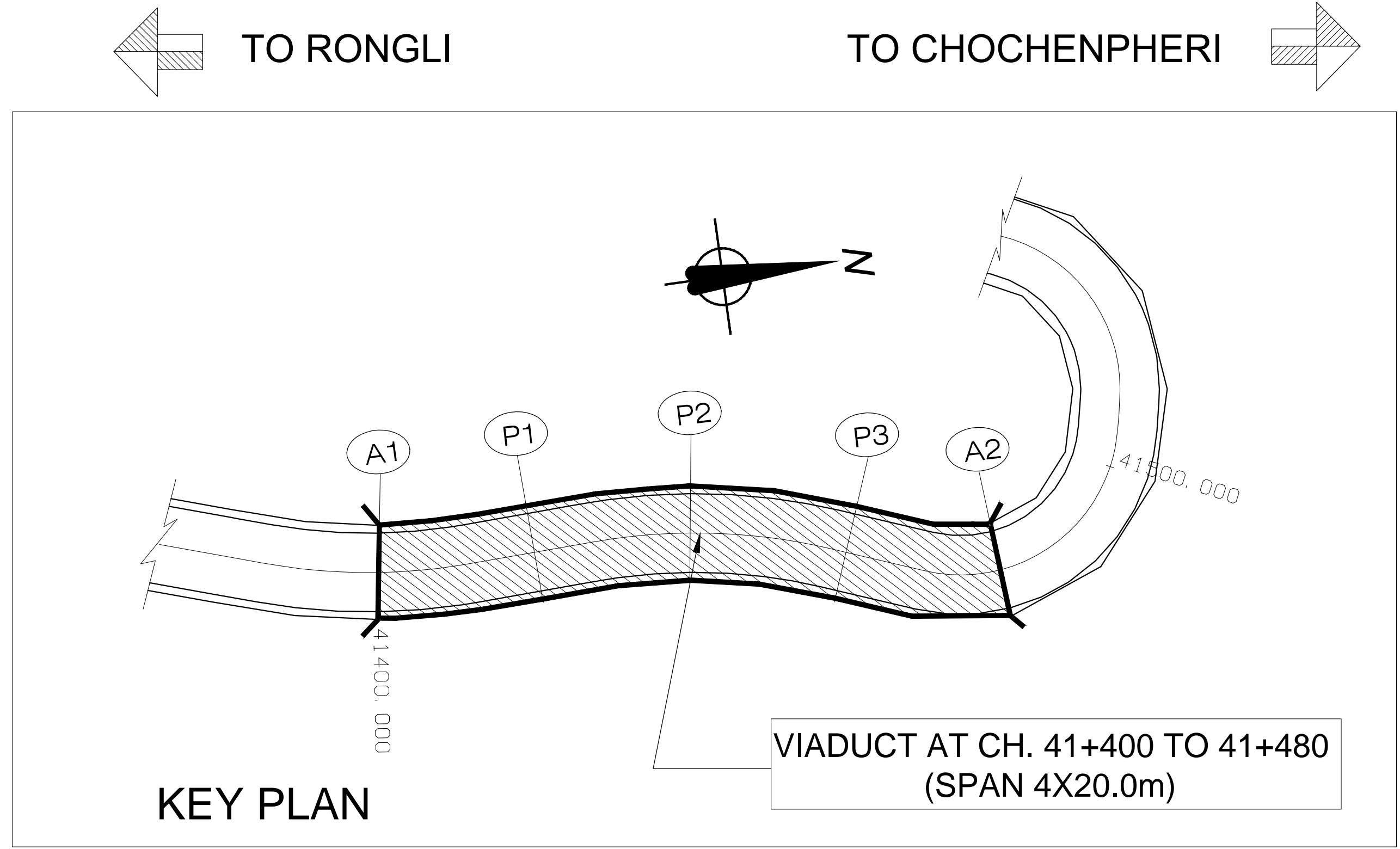
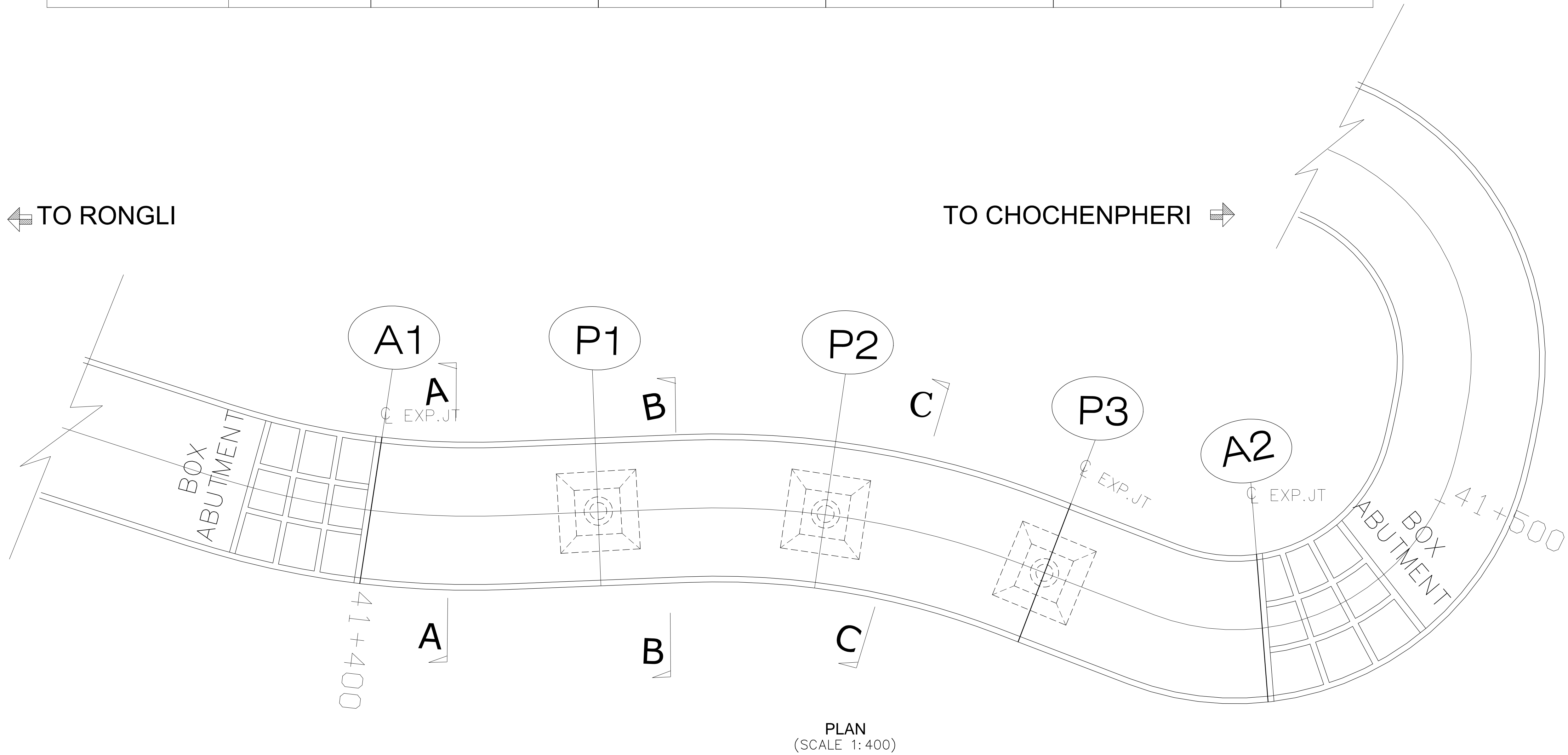
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FORMATION LEVEL	1249.744	1251.044	1252.344	1253.644	1254.944
EX.GROUND LEVEL	1239.333	1240.865	1242.591	1243.863	1246.127
GROUND LEVEL (RHS)–12(M)	1239.297	1238.821	1239.902	1241.084	1244.960
CHAINAGE	41+400	41+420	41+440	41+460	41+480

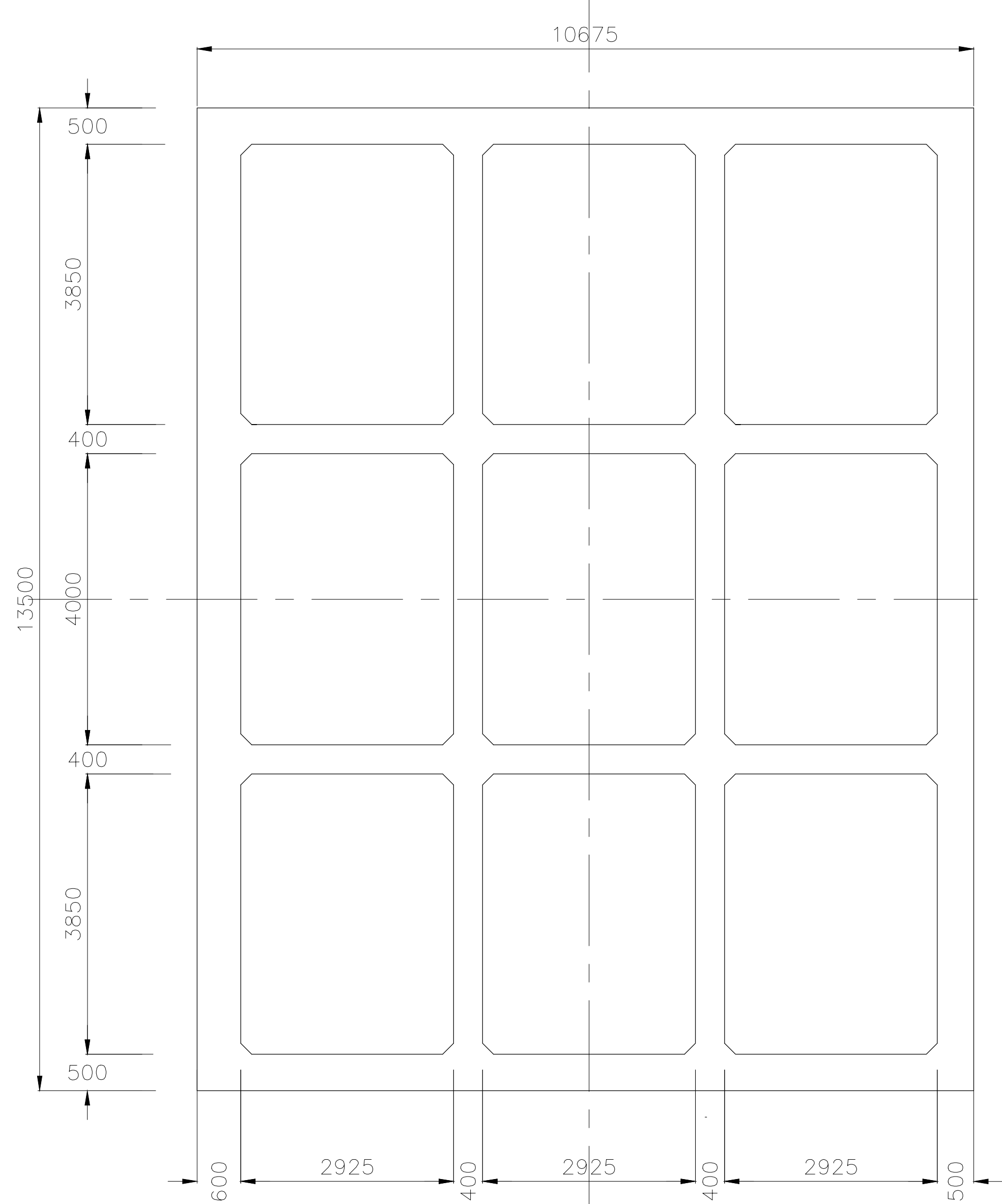


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REV	DATE	DESCRIPTION OF REVISIONS	A	B	C D

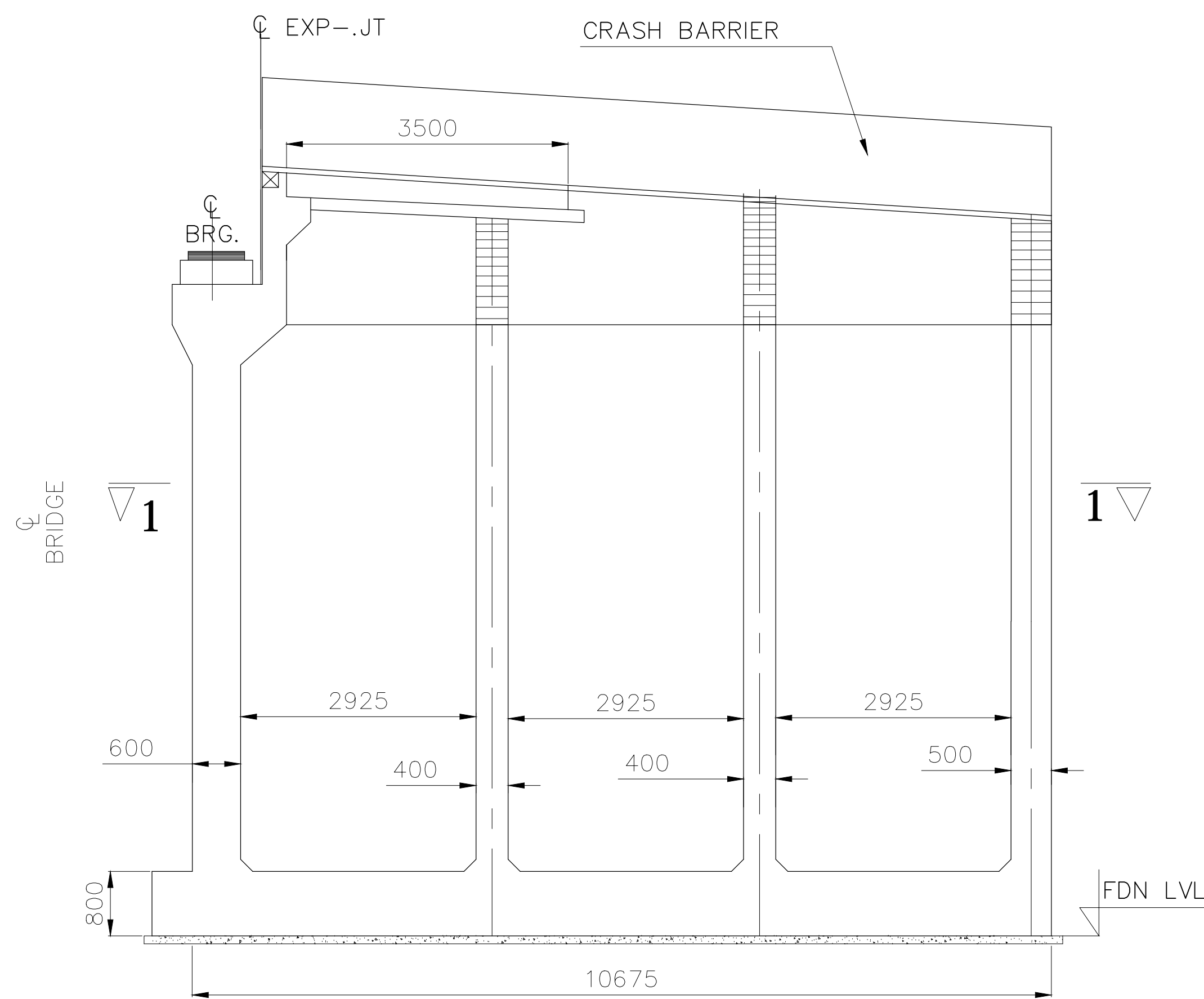
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CHECKED BY	A.REHMAN	APPROVED BY	S.Shukla	
SCALE:- AS SHOWN		SHEET:- 01 OF 01		DWG. NO. :- SAICPL-SESPL/NHDC/WB-SKM/41+480/GAD-01

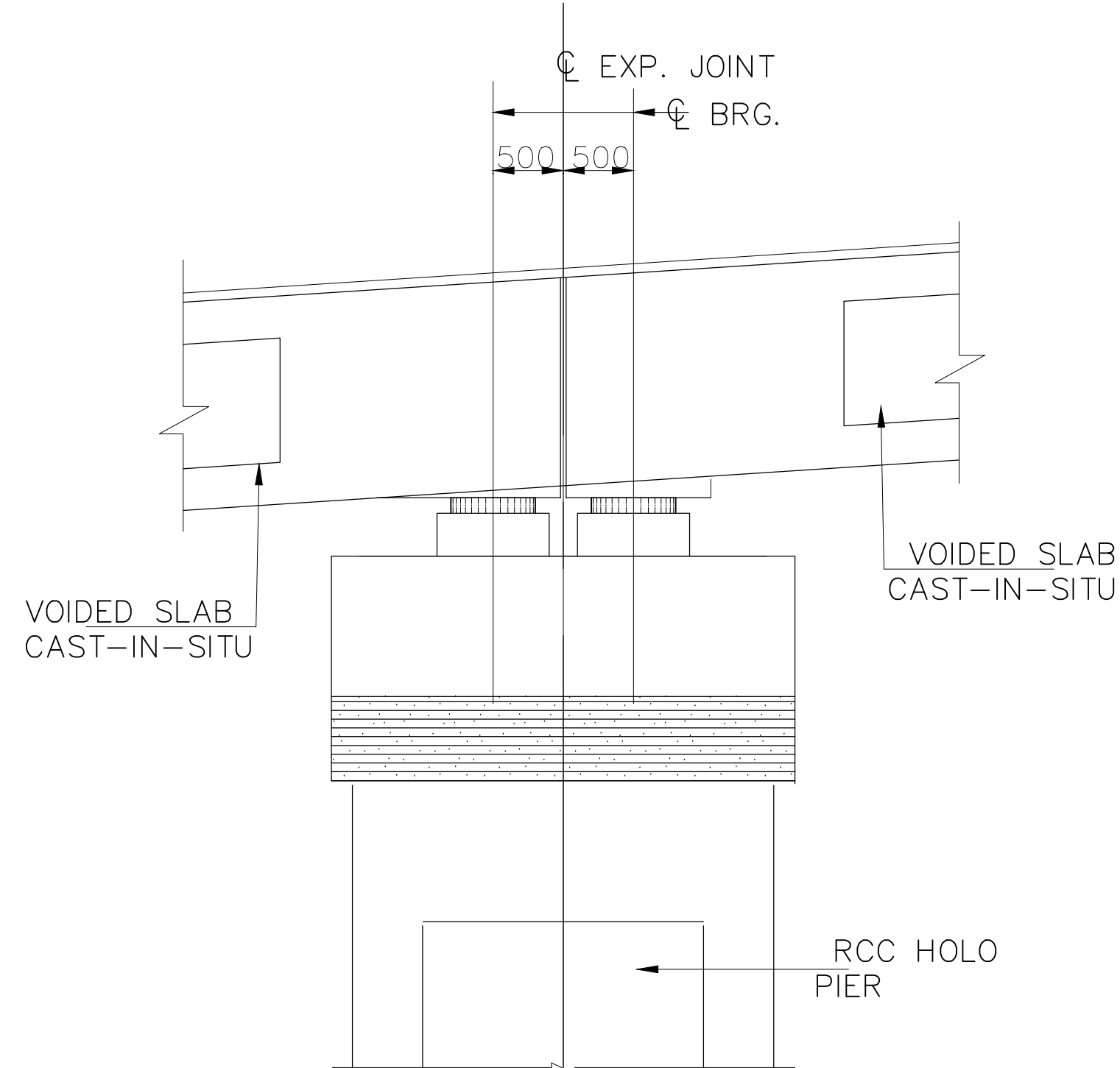


SECTION 1-1



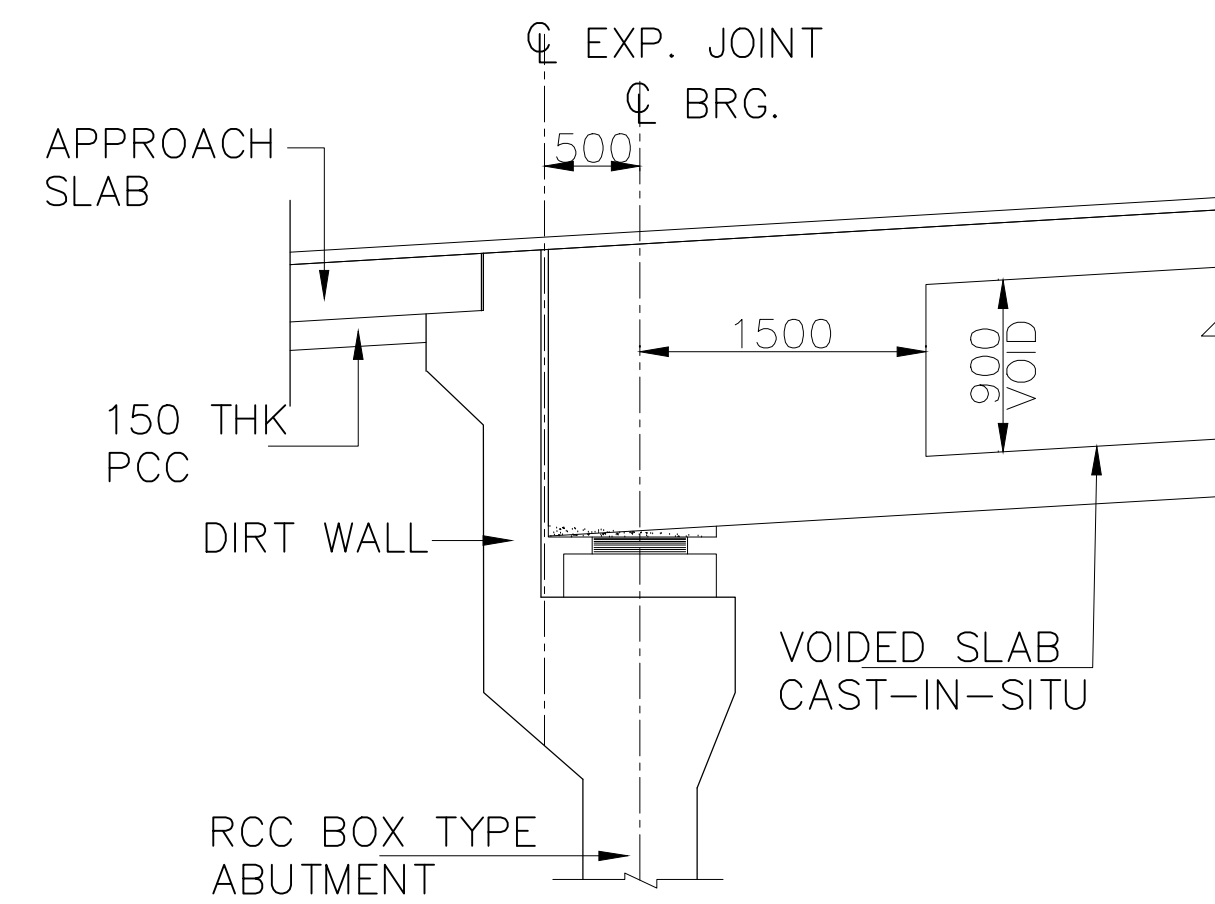
BOX ABUTMENT

SCALE 1:100



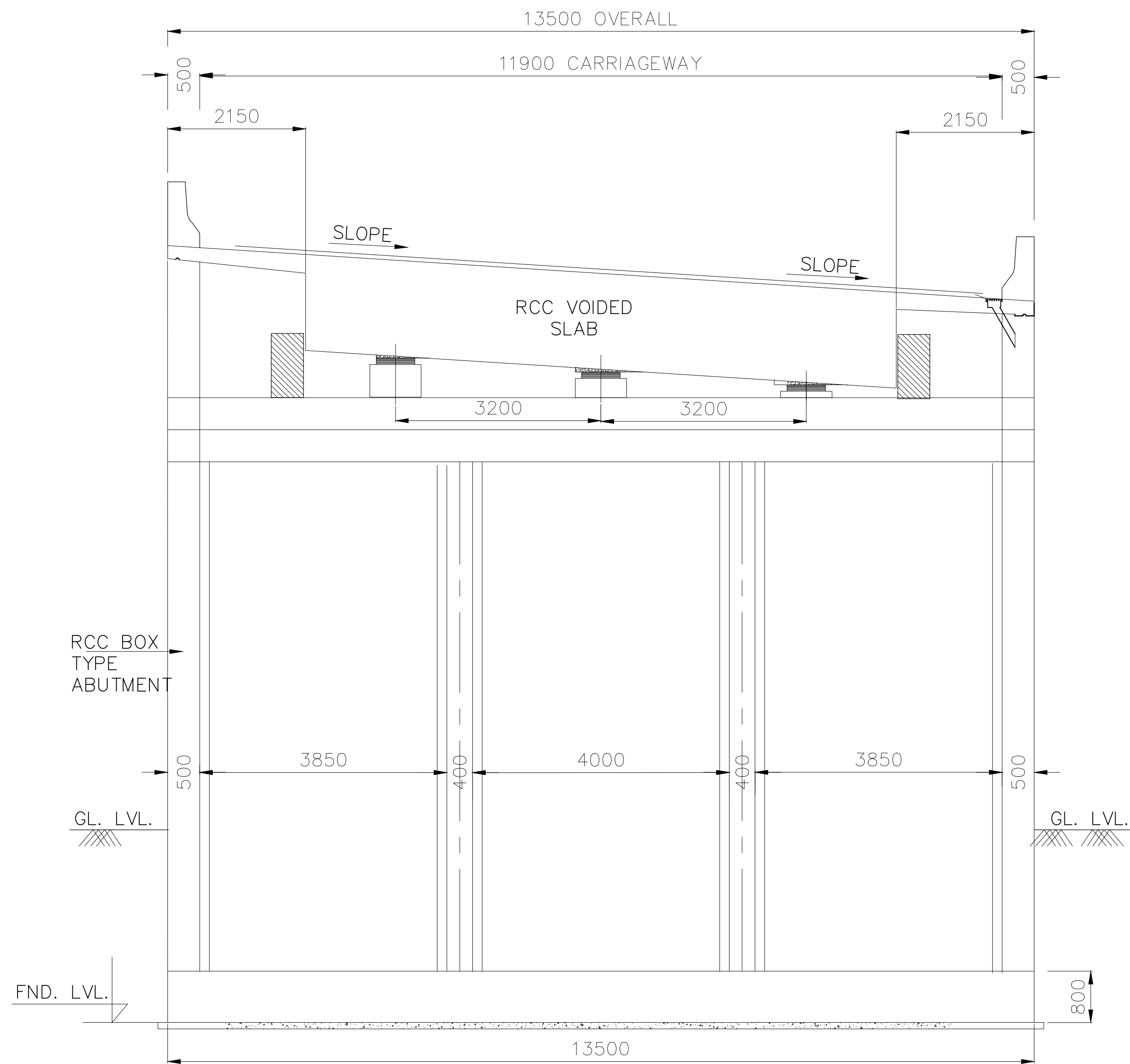
DETAIL-Y

(SCALE 1:70)



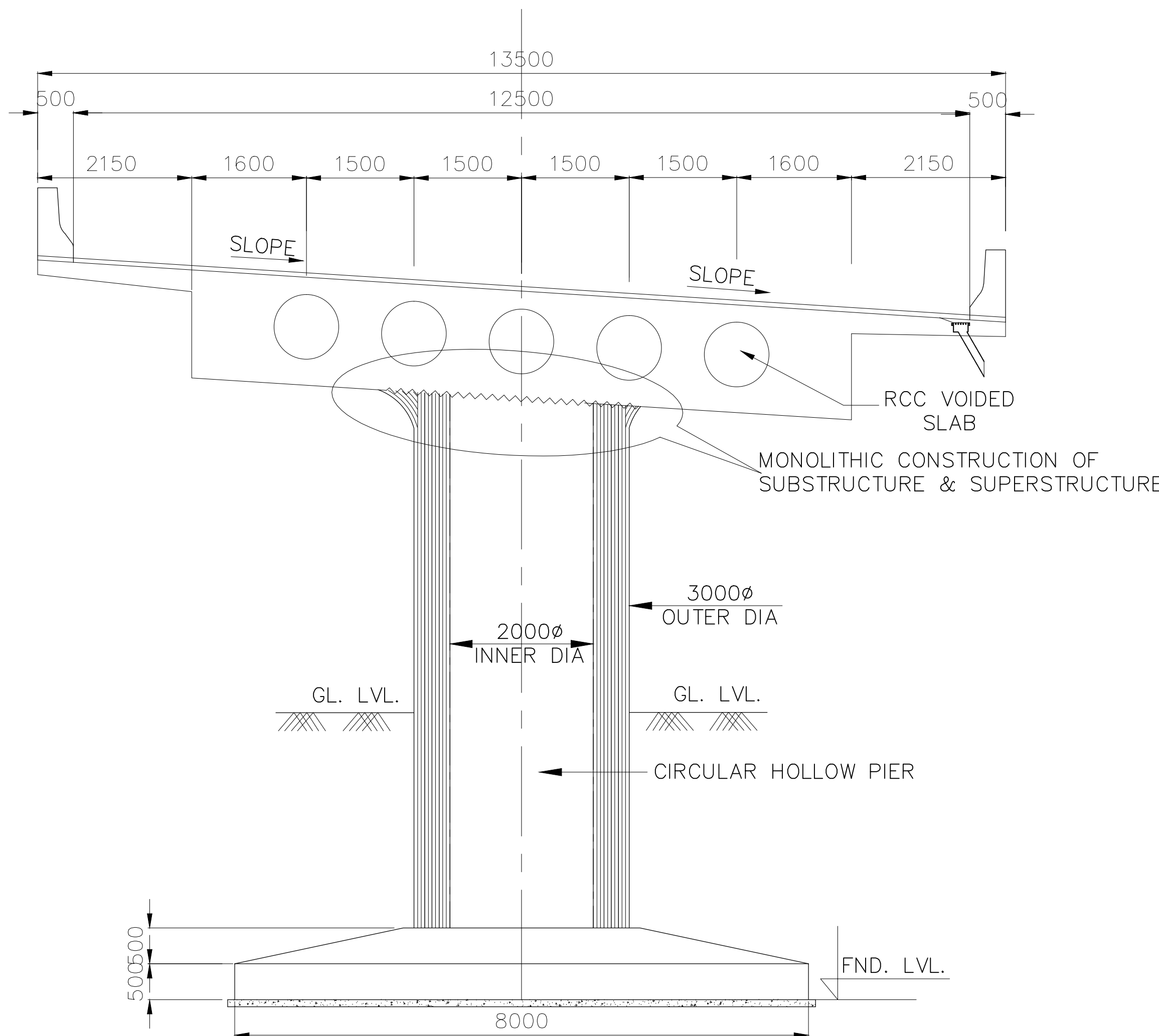
DETAIL-X

(SCALE 1:75)



SECTION A-A

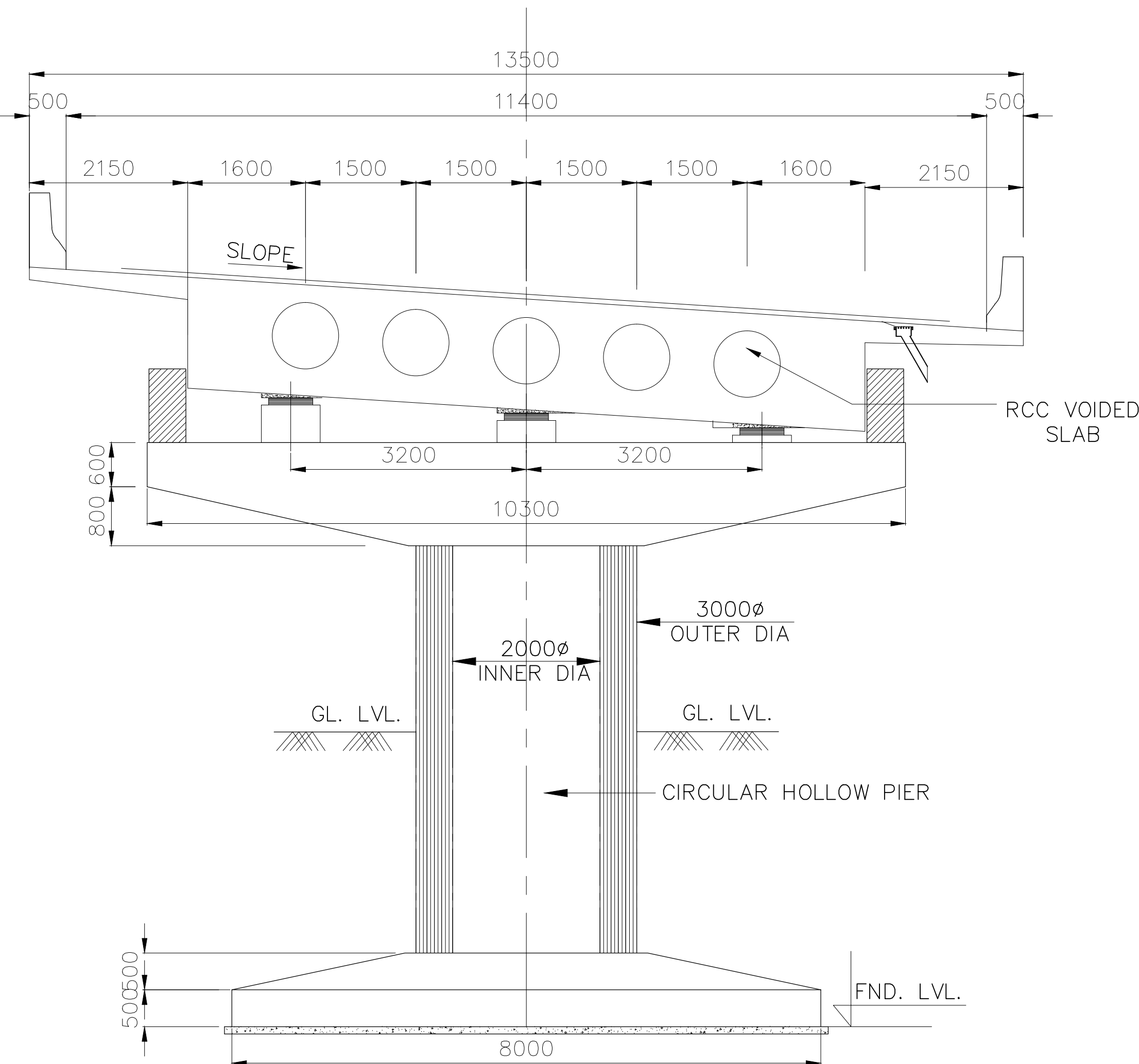
SCALE 1:100



SECTION B-B

SECTION NEAR FIX & FREE JOINT

SCALE 1:100



SECTION C-C

SECTION NEAR EXPANSION JOINT

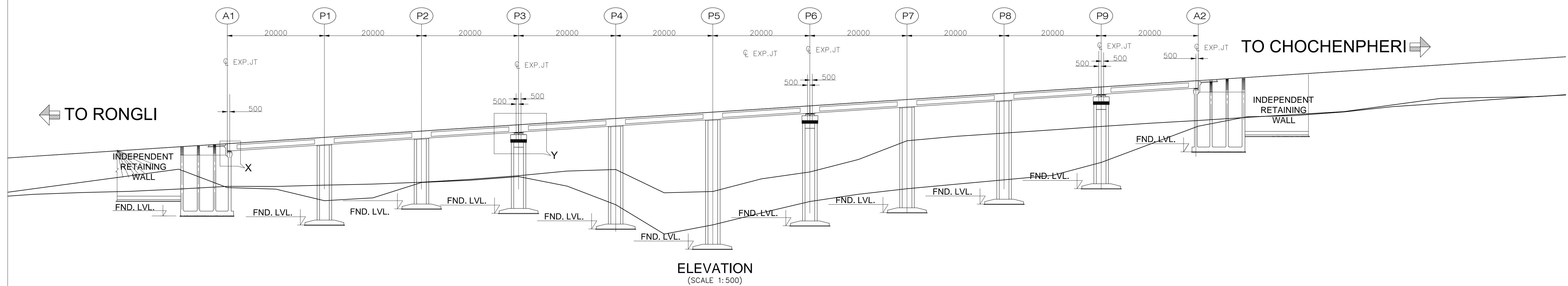
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R0	JUNE-20	DRAFT DETAILED PROJECT REPORT			
			A	B	C
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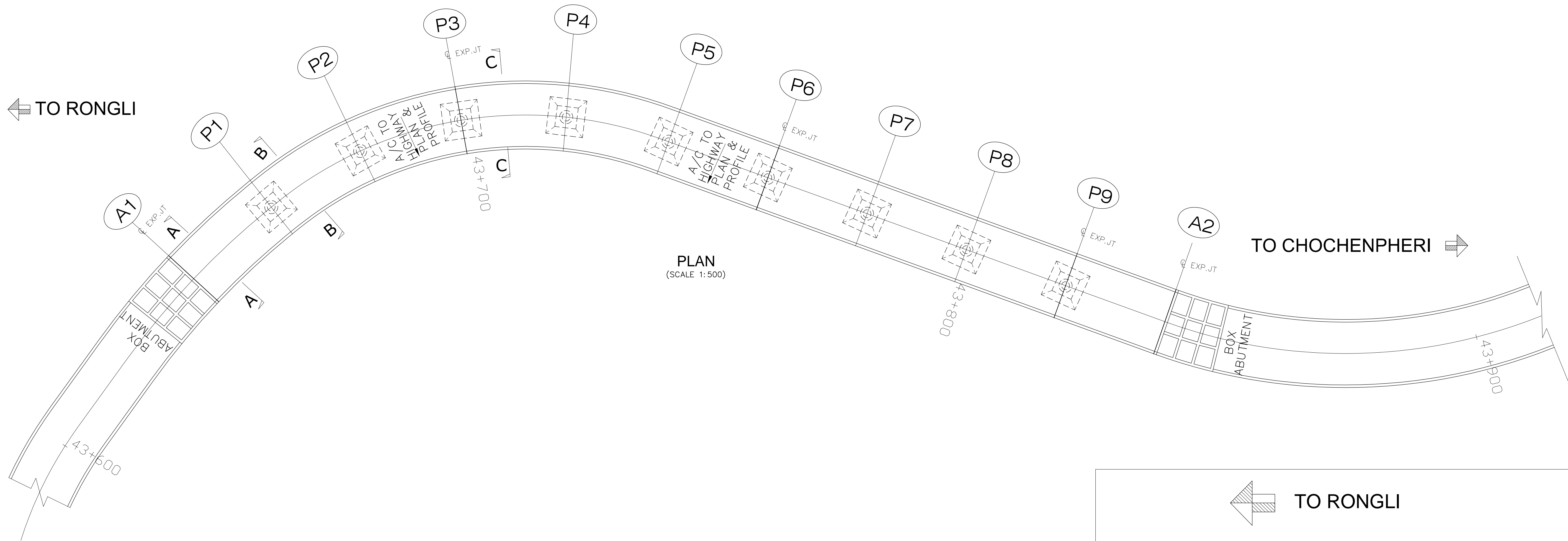
CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No.- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim /P lo dqpi /Mhgt/Dcnj lo /Cn ctcj /Tj gpqnlk'p'y g'Ucvg'qH'Y gu'Dgpi cn and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
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DATE :	JUNE- 2020	REVISION	R0	GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 41+400 TO 41+480 (SPAN-4x20.0m)
DESIGNED BY	RAVI KUMAR	DRAWN BY	A SEN	
CHECKED BY	A.REHMAN	APPROVED BY	S.Shukla	DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/41+480/GAD-01
SCALE:- AS SHOWN			SHEET:- 02 OF 02	

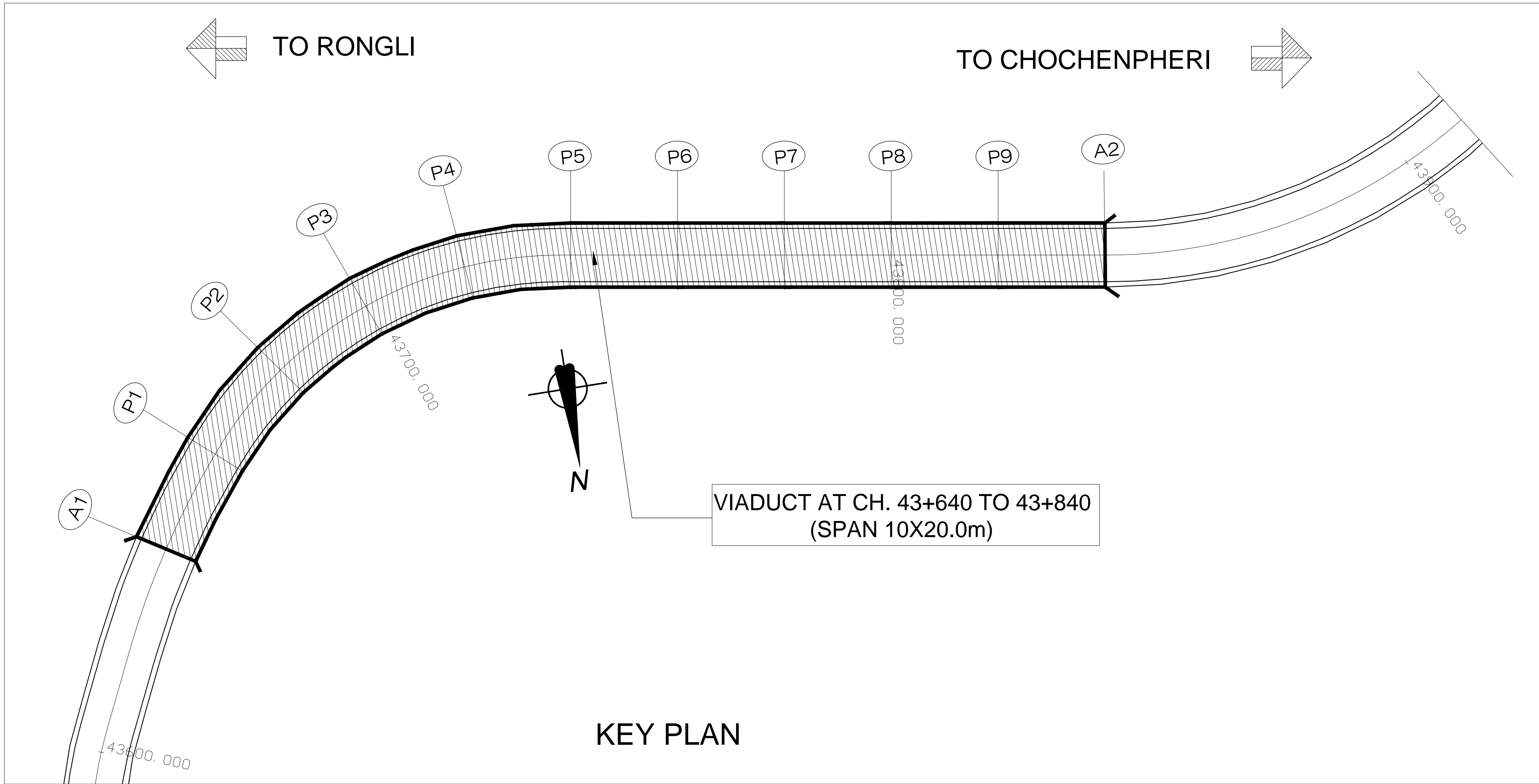


FORMATION LEVEL	1395.344	1396.644	1397.944	1399.244	1400.544	1401.844	1403.144	1404.444	1405.744	1407.044	1408.344
EX.GROUND LEVEL	1386.512	1386.755	1387.362	1388.707	1389.980	1385.453	1389.487	1395.902	1397.491	1398.862	1400.095
GROUND LEVEL (RHS)-6(M)	1389.037	1389.899	1388.822	1389.624	1390.348	1392.969	1394.444	1394.168	1396.415	1399.300	1398.600
CHAINAGE	43+640	43+660	43+680	43+700	43+720	43+740	43+760	43+780	43+800	43+820	43+840



NOTES

1. ALL DIMENSIONS ARE MILLIMETERS AND LEVELS ARE IN METERS.
2. DIMENSIONS ARE NOT TO SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. THE DIMENSION OF THE FOUNDATION SHOWN HERE TENTATIVE ONLY. THIS SHALL BE FINALIZED AFTER DETAILED SUBSOIL INVESTIGATION.
4. BRIDGE HAS BEEN DESIGNED FOR CARRIAGEWAY LIVE LOAD OF 1 LANE 70R +1 LANE CLASS A OR 3 LANES OF CLASS A WHICHEVER GIVES WORST EFFECT.
5. GRADE OF CONCRETE FOR VARIOUS ELEMENTS ARE AS FOLLOWS: –
 - (i) SUPERSTRUCTURE(PSC) ----- M45
 - (ii) SUPERSTRUCTURE(VOIDED) ----- M40
 - (iii) RCC SUBSTRUCTURE & FOUNDATION ---- M35
 - (iv) RCC RAILING -----M30
 - (v) RCC CRASH BARRIER ----- M40
 - (vi) APPROACH SLAB ----- M30
 - (vii) PEDESTAL ----- M40
6. TYPE OF BEARING PROPOSED HERE IS POT-PTFE AS PER IRC:83, PART-III
7. SINGLE STRIP SEAL EXPANSION JOINT IS USED.
8. GRADE OF CEMENT IS USED HERE IS OPC 43/OPc 53.
9. ALL REINFORCEMENT BARS ARE TMT BARS (GRADE DESIGNATION Fe500D) AS PER IS:1786.
10. BRIDGE HAS BEEN DESIGNED CONSIDERING SEISMIC ZONE AS IV.
11. SUPERELEVATION SHALL BE MAINTAINED AS PER HIGHWAY PLAN & PROFILE.
12. SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²



R0	JUNE-20	DRAFT DETAILED PROJECT REPORT	A	B	C	D
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS			

CLIENT :





**NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED**
(Ministry of Road Transport & Highways)

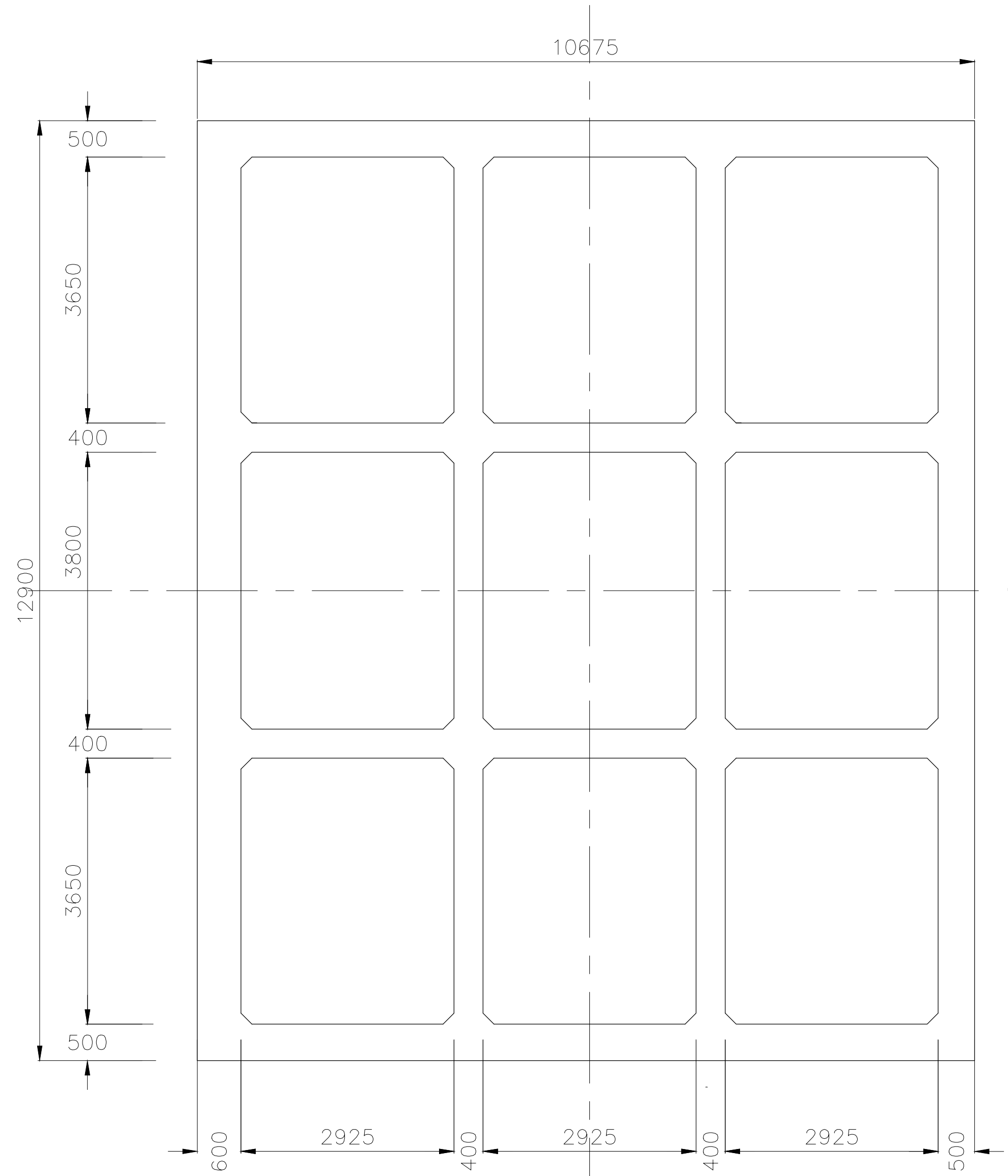
CONSULTANT:

**S.A. Infrastructure Consultants Pvt. Ltd.**
1101A, 11 Floor Tower A-II, Ansal Corporate Park,
Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh)
Phone No- 0120-6148000 Fax-0120-6148090
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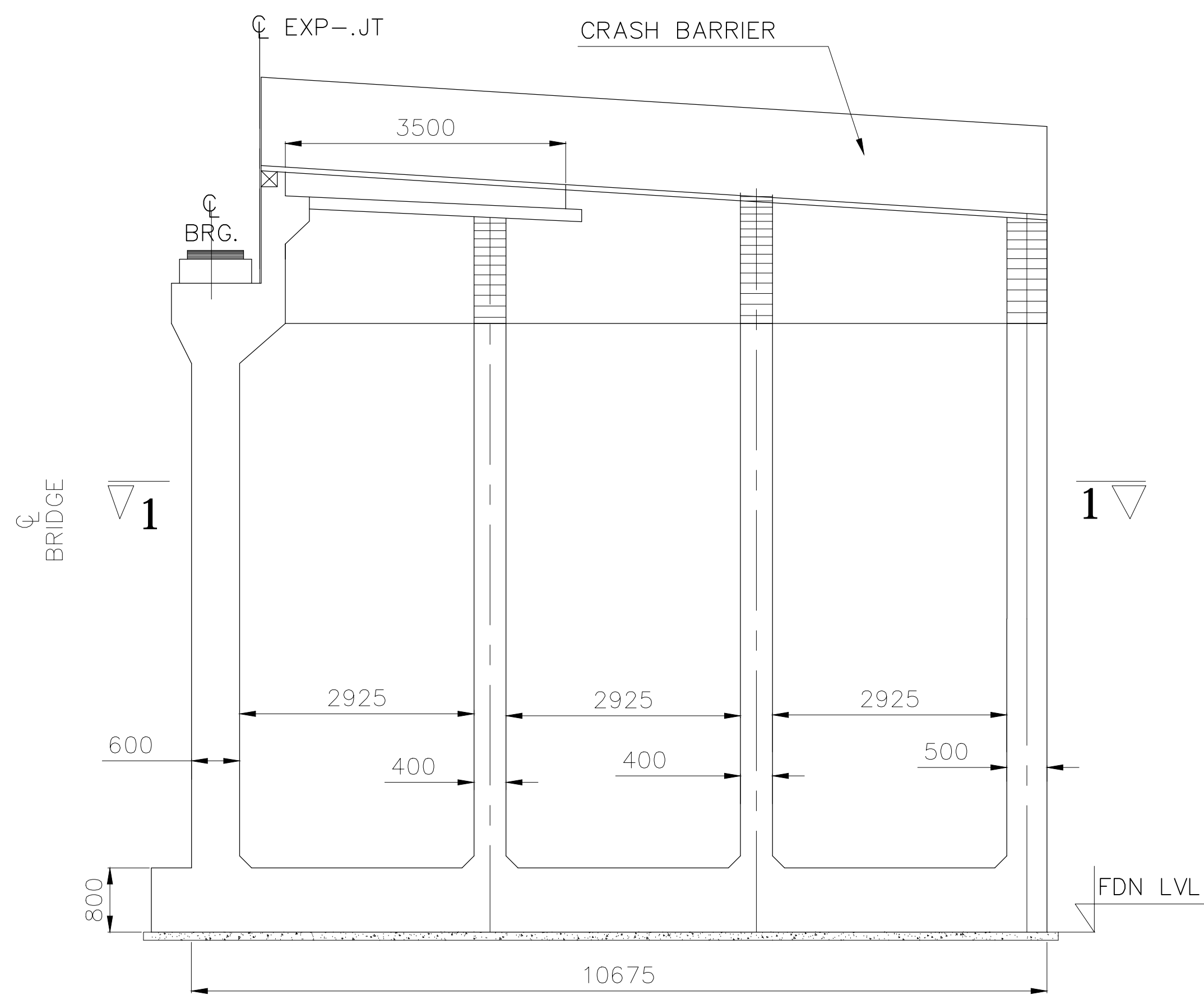
PROJECT :

Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim /P lo dqpi /Mhgt/Dcnj lo /Cn ctcl /Tj gpnltk'Y g'Ucvg'qH'Y gu'Dgpi cn and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- III-A)

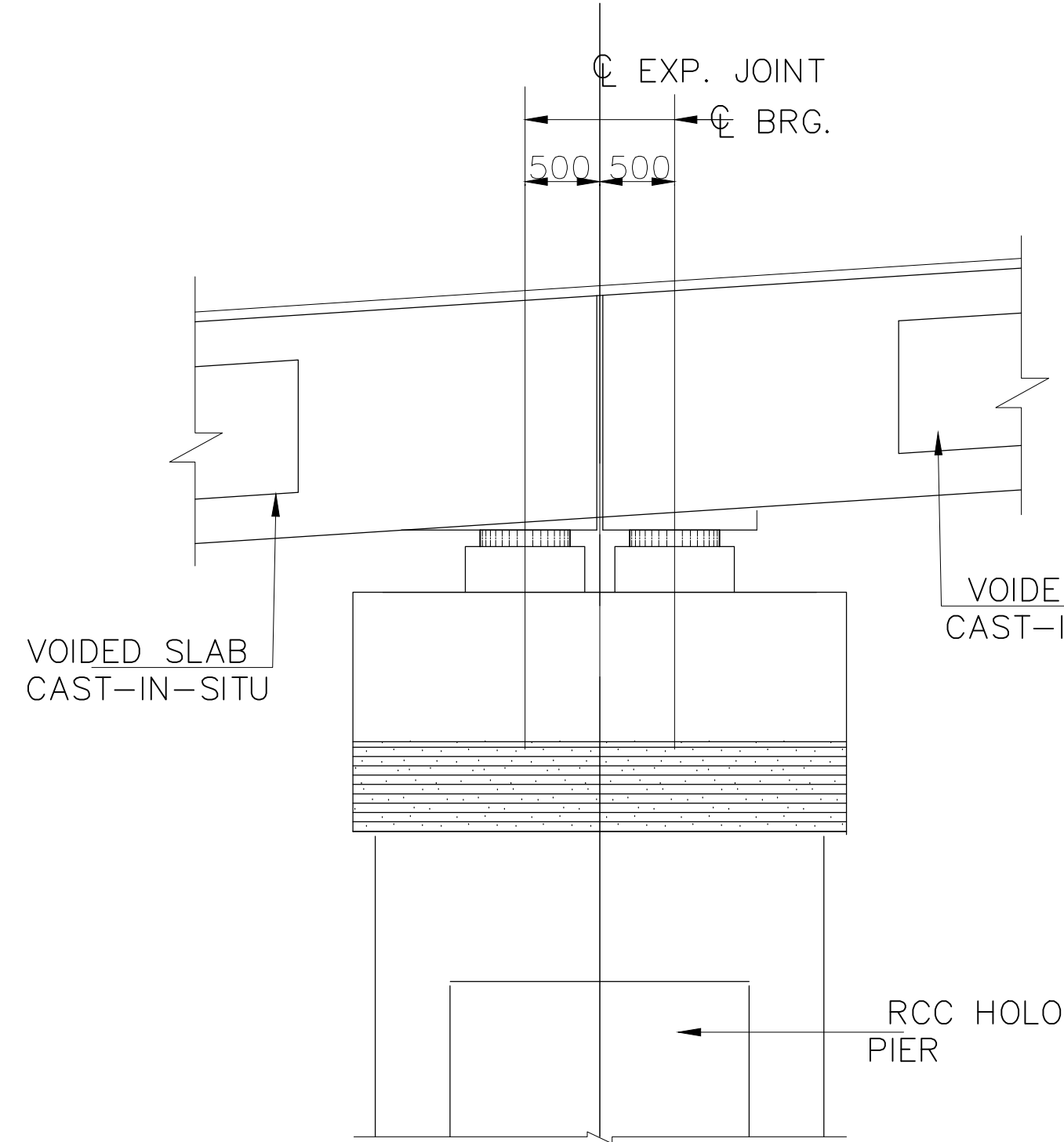
DATE : JUNE- 2020	REVISION R0	GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 43+640 TO 43+840 (SPAN-10x20.0m)
DESIGNED BY  RAVI KUMAR	DRAWN BY  A SEN	CHECKED BY  A.REHMAN
APPROVED BY  S.Shukla	SCALE:- AS SHOWN	SHEET:- 01 OF 01
		DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/43+640/GAD-01



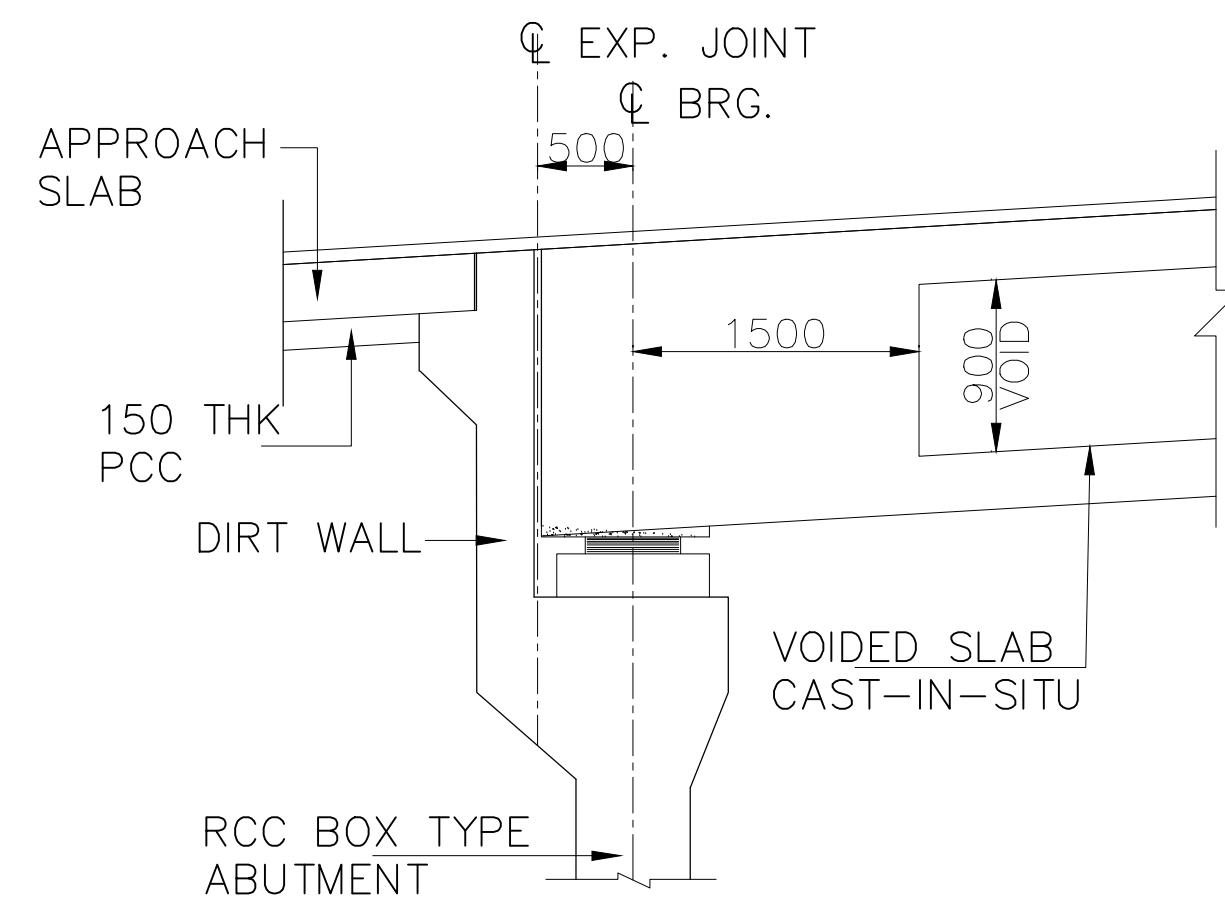
SECTION 1-1
SCALE 1:100



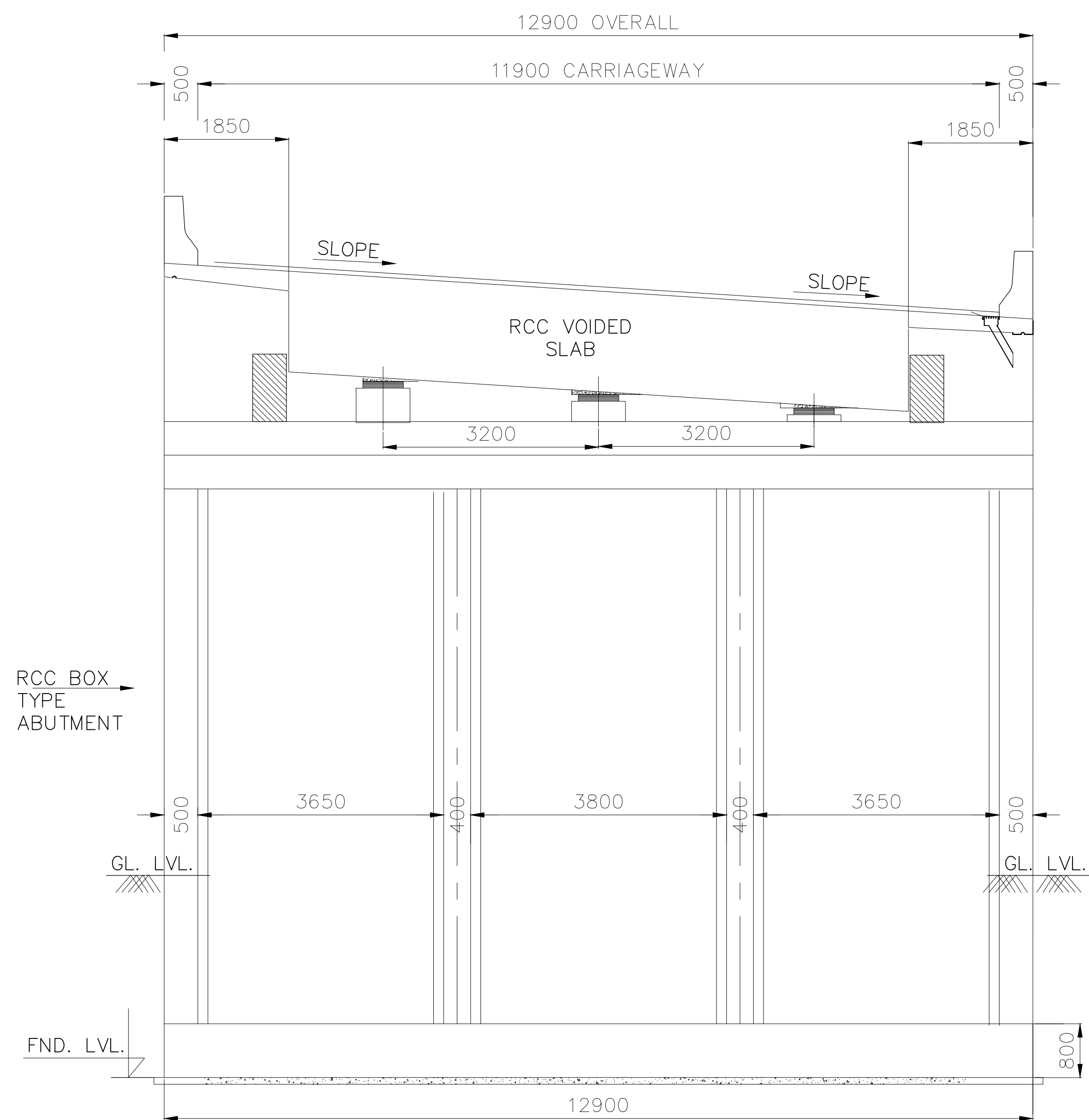
BOX ABUTMENT
SCALE 1:100



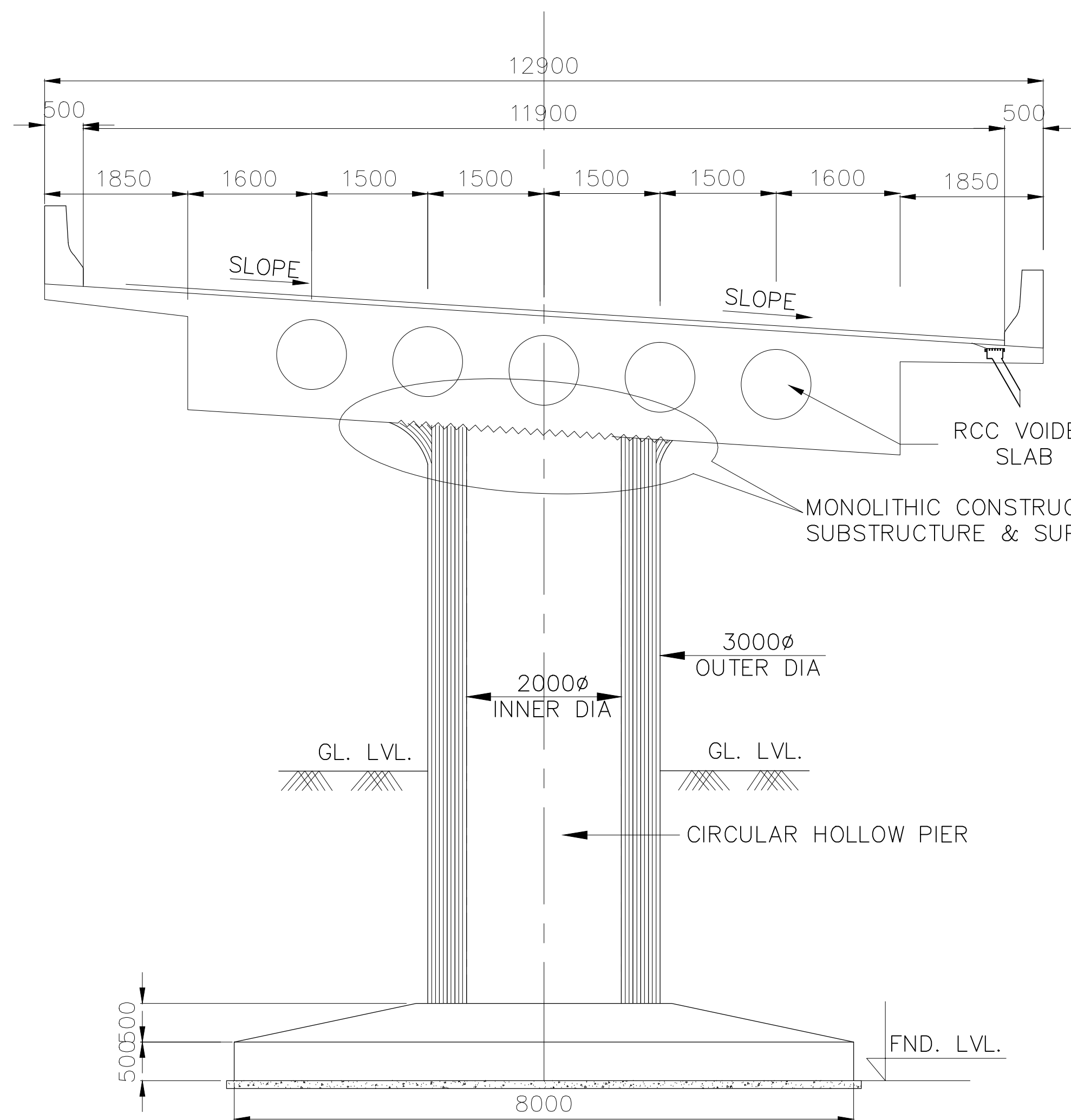
DETAIL-Y
(SCALE 1:70)



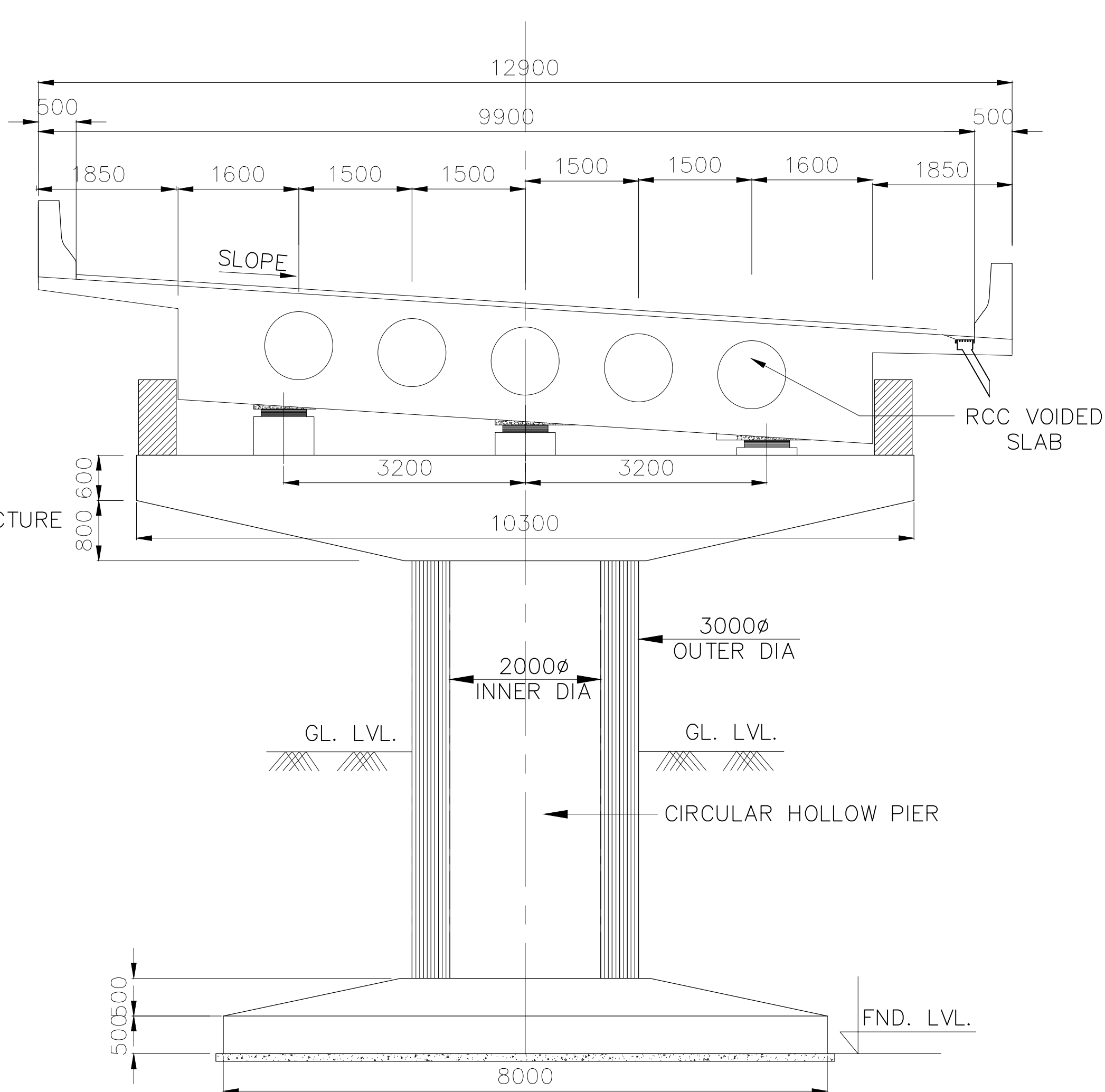
DETAIL-X
(SCALE 1:75)



SECTION A-A
SCALE 1:100



SECTION B-B
SECTION NEAR FIX & FREE JOINT
SCALE 1:100







SECTION C-C
SECTION NEAR EXPANSION JOINT
SCALE 1:100

R0	JUNE-20	DRAFT DETAILED PROJECT REPORT			
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS	A	B C D

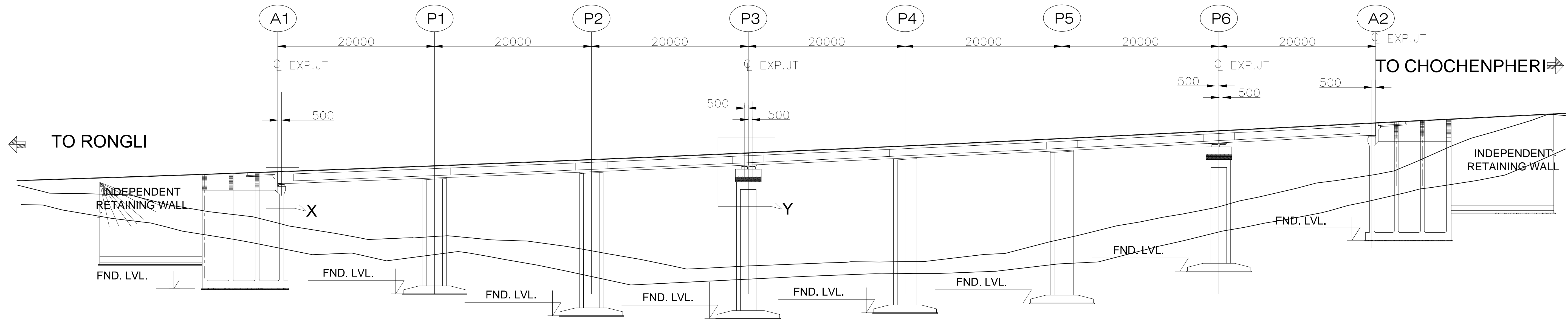
CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim /P lo dqpi /Mhgt/Dcnj lo /Cn ctcj /Tj gpqnlk'p'y g'Ucvg'qH'Y gu'Dgpi cn and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
-----------	--

DATE : JUNE- 2020		REVISION R0		GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 43+640 TO 43+840 (SPAN-10x20.0m)
DESIGNED BY  RAVI KUMAR	DRAWN BY  A SEN	CHECKED BY  A.REHMAN	APPROVED BY  S.Shukla	
SCALE:- AS SHOWN		SHEET:- 02 OF 02		

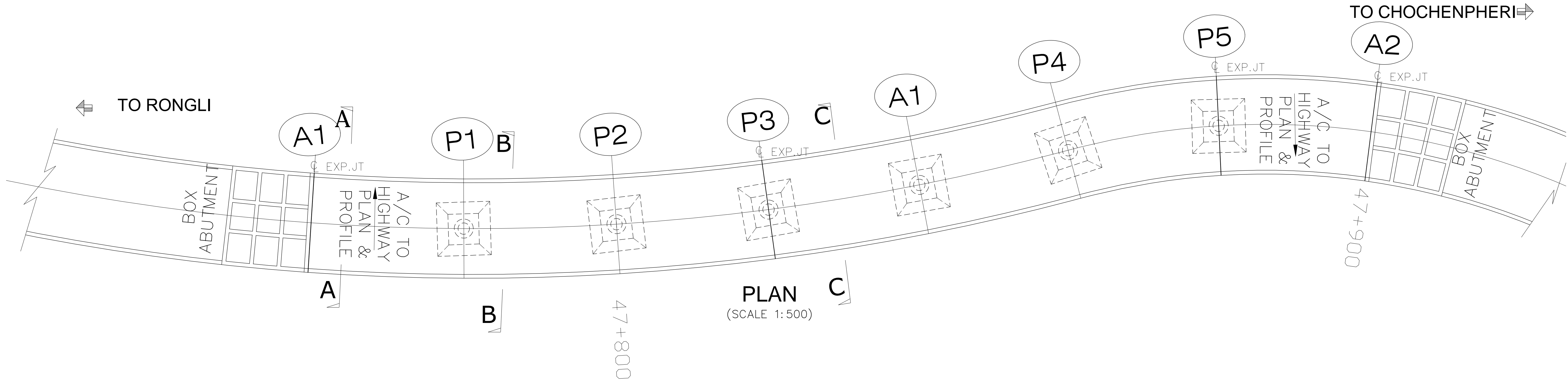
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12. SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²

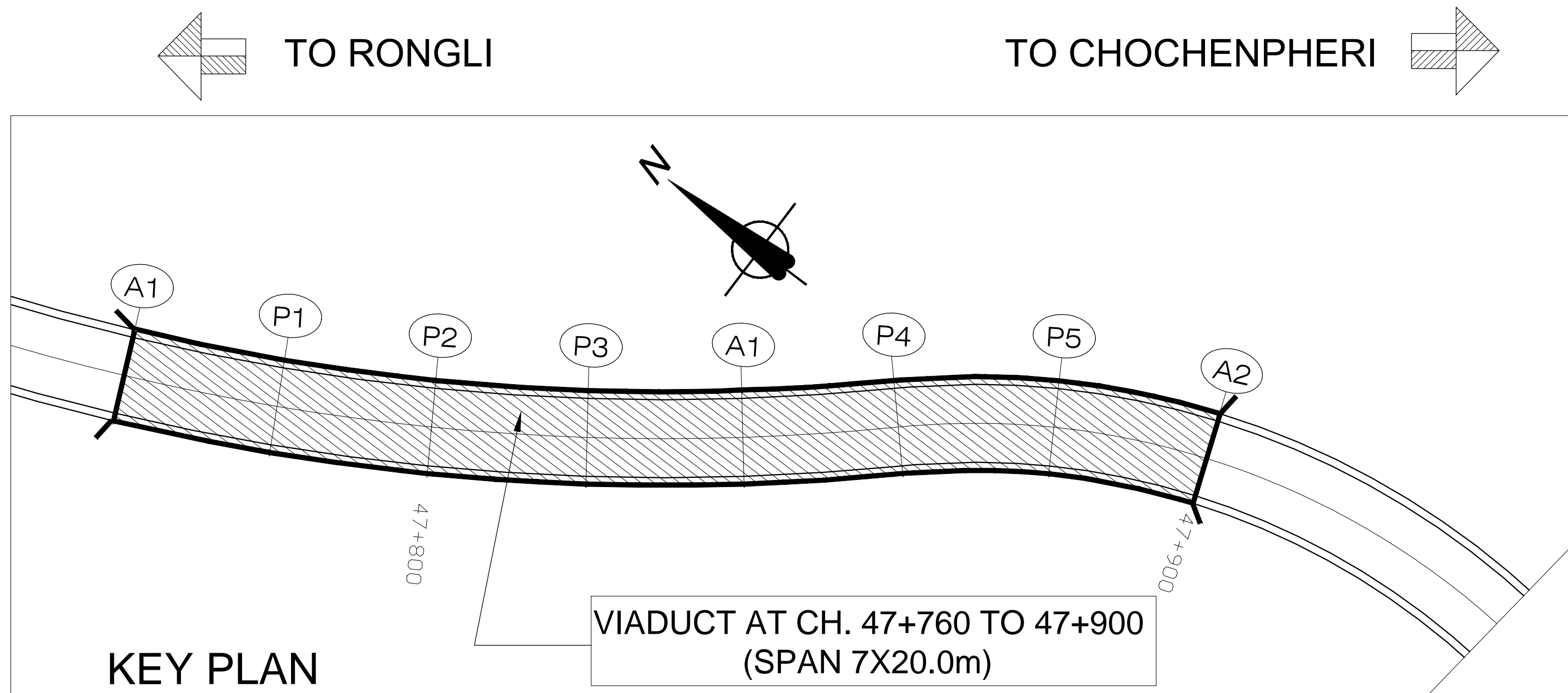


ELEVATION
(SCALE 1:500)

FORMATION LEVEL	1588.414	1589.160	1589.956	1590.801	1591.696	1592.639	1593.630	1594.636
EX.GROUND LEVEL	1581.850	1580.138	1578.316	1576.377	1576.926	1579.807	1583.927	1588.043
CHAINAGE	47+760	47+780	47+800	47+820	47+840	47+860	47+880	47+900



PLAN
(SCALE 1:500)



KEY PLAN

VIADUCT AT CH. 47+760 TO 47+900
(SPAN 7x20.0m)

				CLIENT : NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)				PROJECT : Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim /P lo dqpi /Mhgt/Dcnj lo /Cn ctcj /Tj gpqnlp'y g'Ucvg'qh'Y gu'Dgpi cn and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)				DATE : JUNE- 2020		REVISION R0		GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 47+760 TO 47+900 (SPAN-7x20.0m)	
R0	JUNE-20	DRAFT DETAILED PROJECT REPORT										DESIGNED BY RAVI KUMAR	DRAWN BY A SEN	CHECKED BY A.REHMAN	APPROVED BY S.Shukla		
REV	DATE	DESCRIPTION OF REVISIONS		A	B	C	D	CONSULTANT: S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com				SCALE:- AS SHOWN		SHEET:- 01 OF 01		DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/47+760/GAD-01	



SCALE 1:100



(SCALE 1:70)



(SCALE 1:75)



SCALE 1:100



SECTION NEAR FIX & FREE JOINT

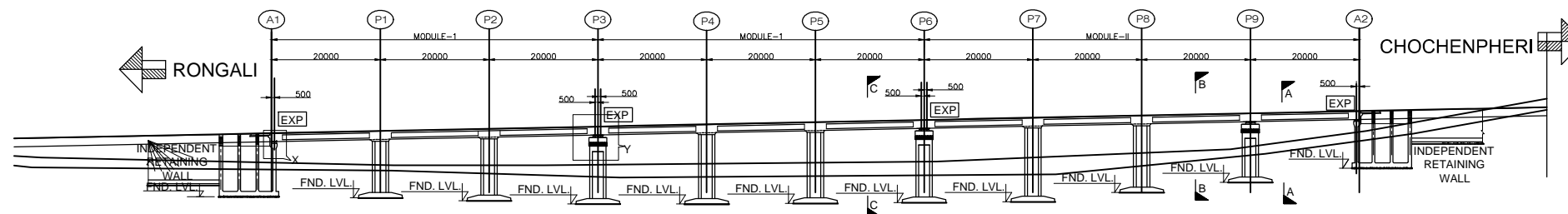
SCALE 1:100



SECTION NEAR EXPANSION JOINT

SCALE 1:100

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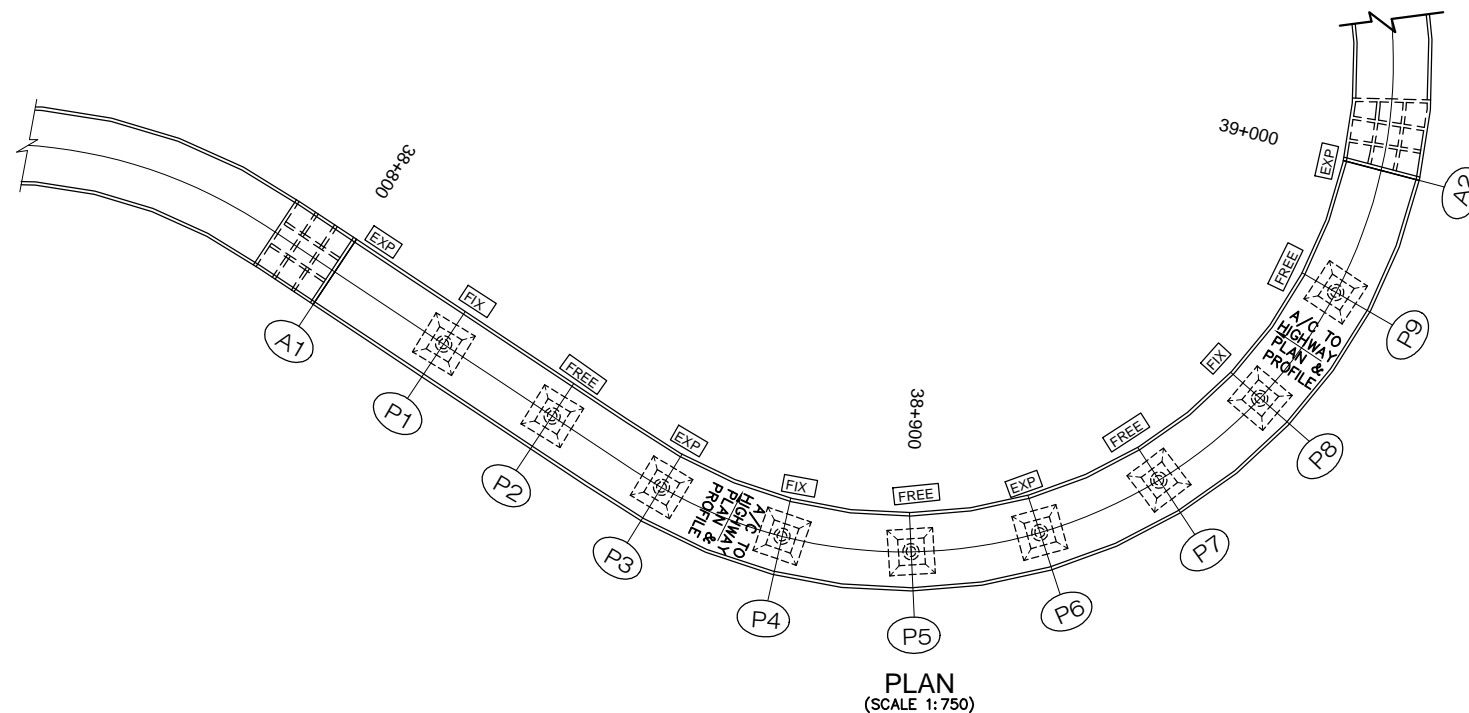


ELEVATION
(SCALE 1:750)

FORMATION LEVEL	1091.605	1092.419	1093.234	1094.048	1094.863	1095.678	1096.492	1097.307	1098.122	1098.936	1099.751
EX.GROUND LEVEL	1089.769	1091.231	1092.693	1094.155	1095.617	1097.079	1098.541	1100.003	1101.465	1102.927	1106.500
GROUND LEVEL (RHS)-6(M)	1090.000	1091.424	1092.848	1094.272	1095.696	1097.120	1098.544	1099.968	1101.392	1100.427	1106.500
CHAINAGE	38+800	38+820	38+840	38+860	38+880	38+900	38+920	38+940	38+960	38+980	39+000

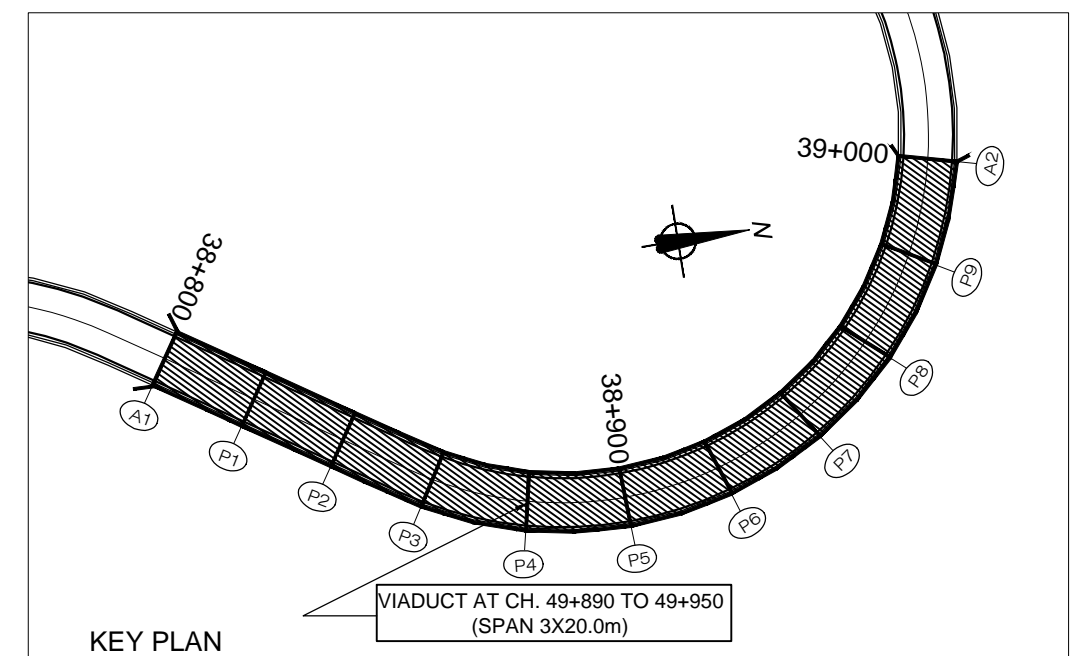
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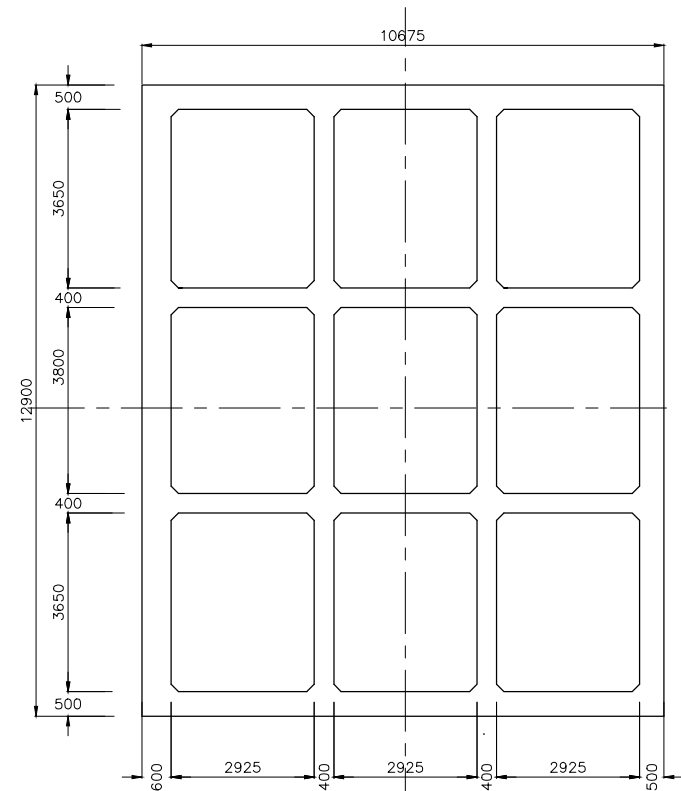
PLAN
(SCALE 1:750)

TO RONGALI TO CHOCHENPHERI

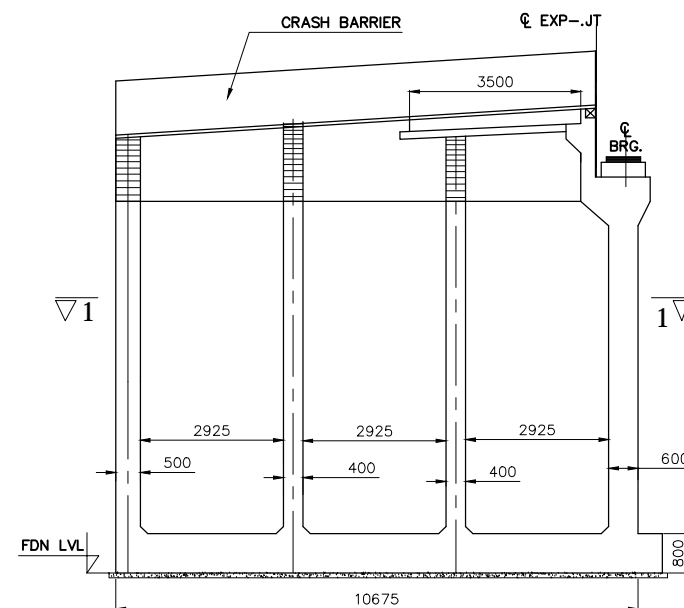


KEY PLAN

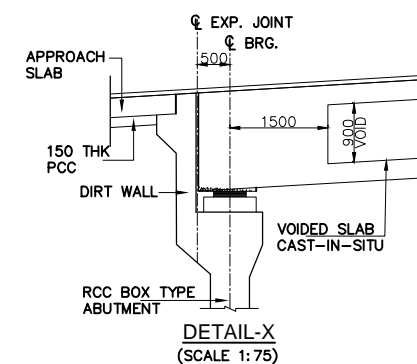
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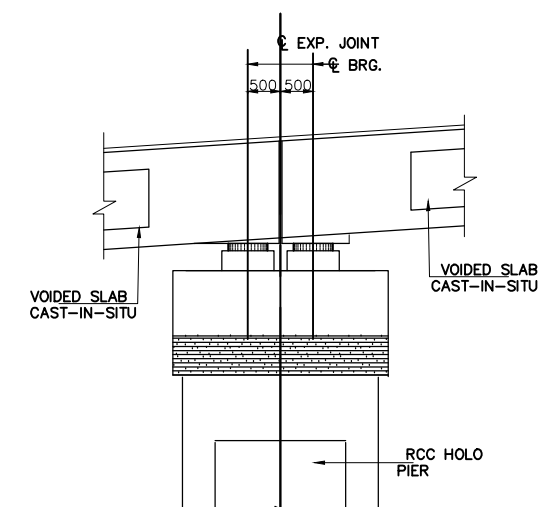
SECTION 1-1
SCALE 1:100



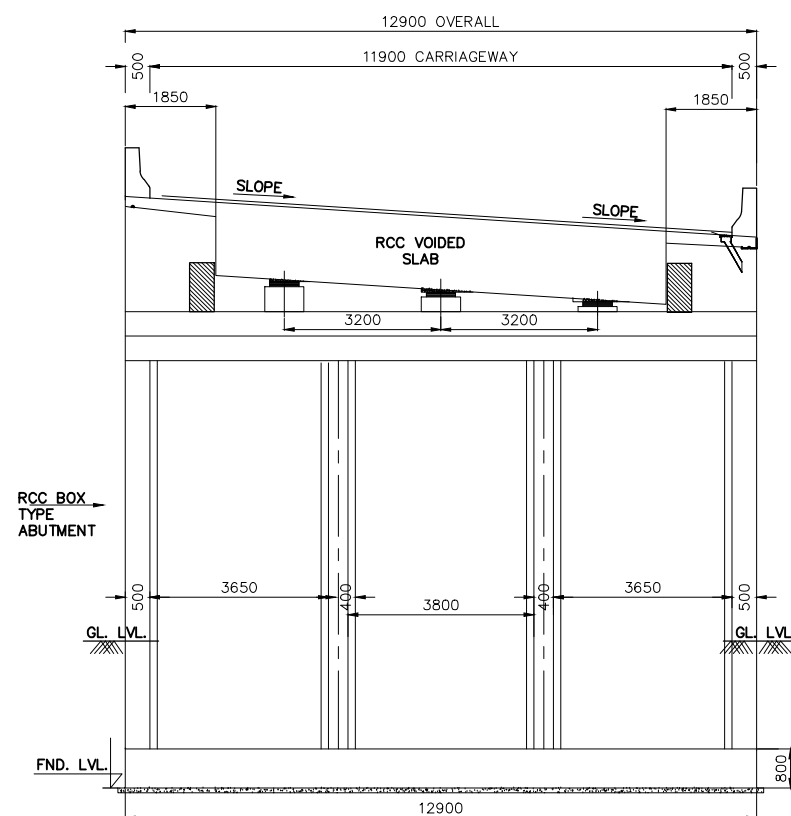
BOX ABUTMENT
SCALE 1:100



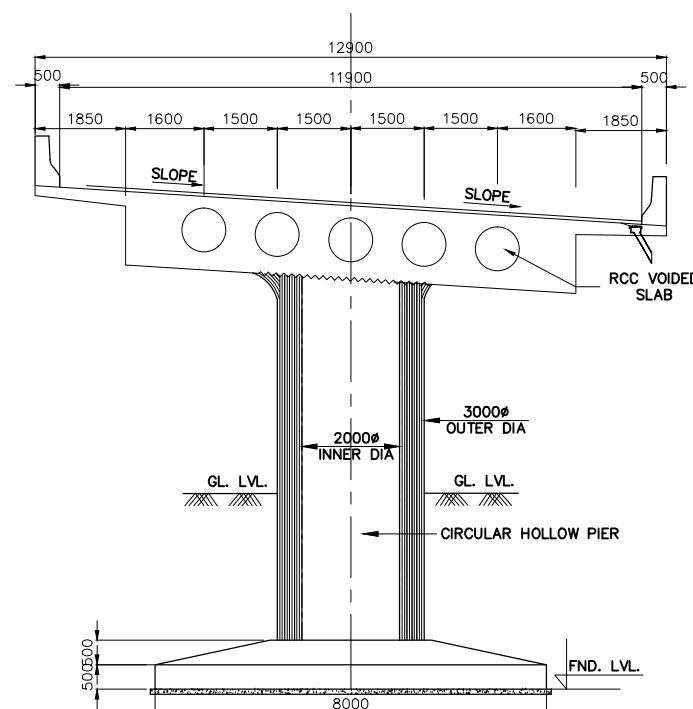
DETAIL-X
(SCALE 1:75)



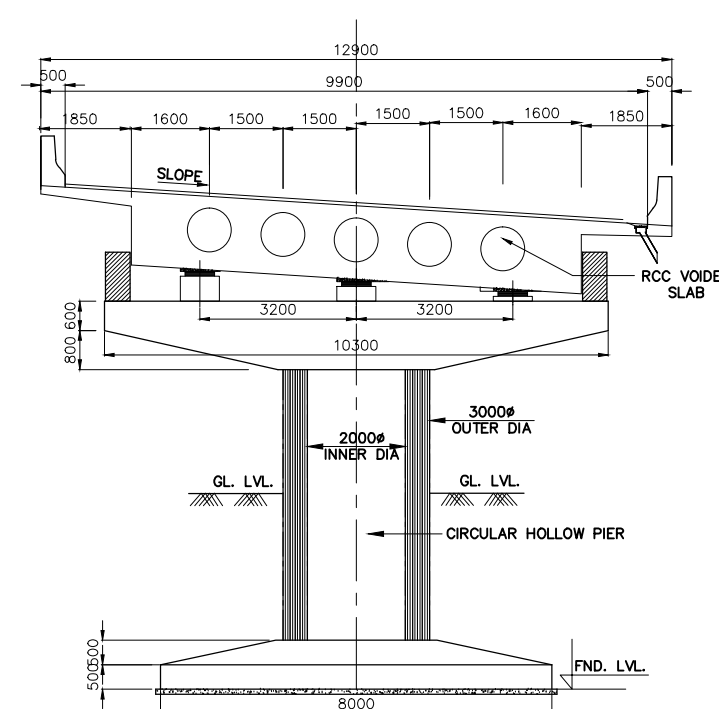
DETAIL-Y
(SCALE 1:75)



SECTION A-A
SCALE 1:100



SECTION B-B
SECTION NEAR FIX & FREE JOINT
SCALE 1:100



SECTION C-C
SECTION NEAR EXPANSION JOINT
SCALE 1:100

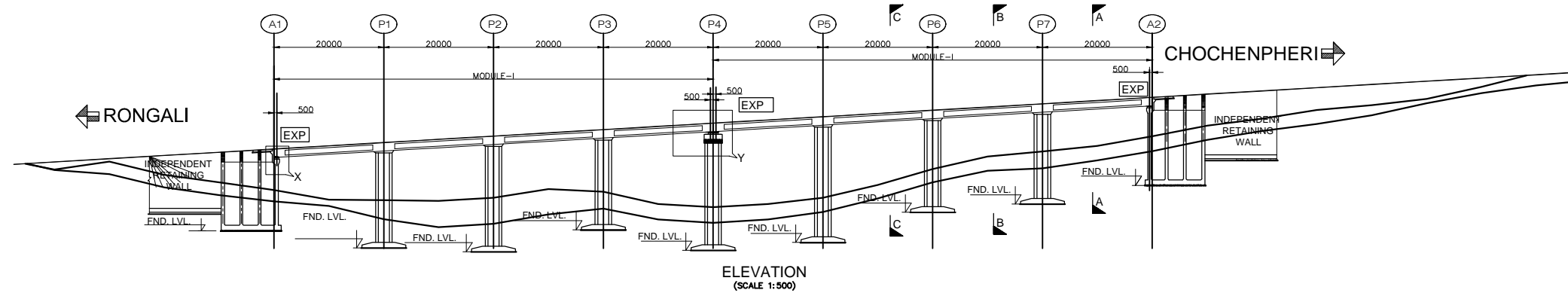
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE-20	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT :	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
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DATE :	JULY- 2020
DESIGNED BY	RAVI KUMAR
DRAWN BY	A SEN
CHECKED BY	A. REHMAN
APPROVED BY	S. Shukla
SCALE:-	AS SHOWN
SHEET:-	02 OF 02

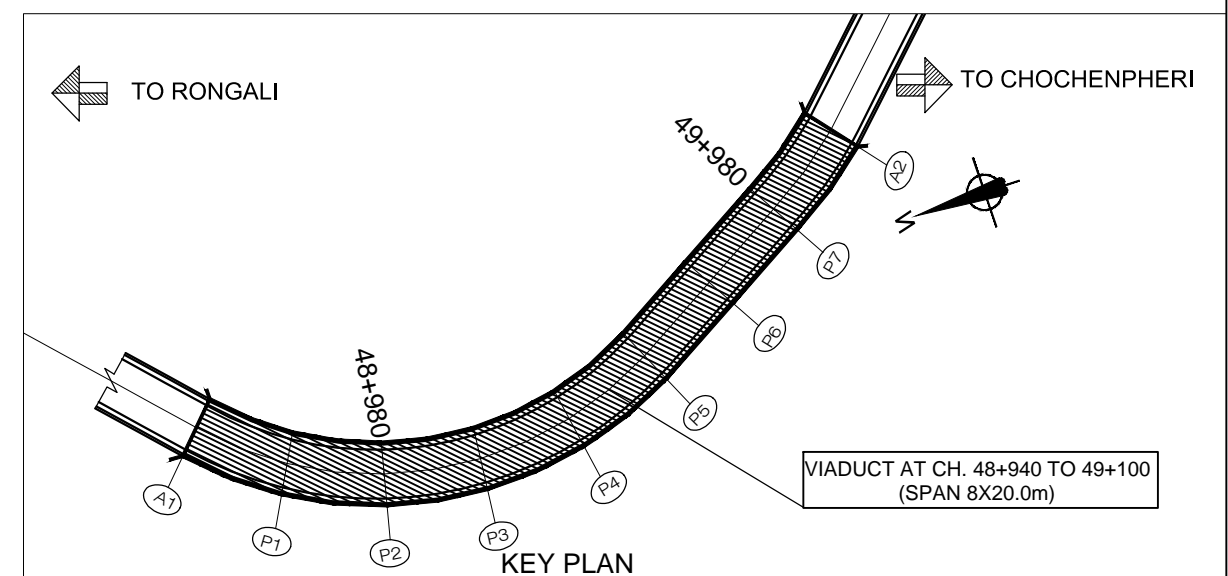
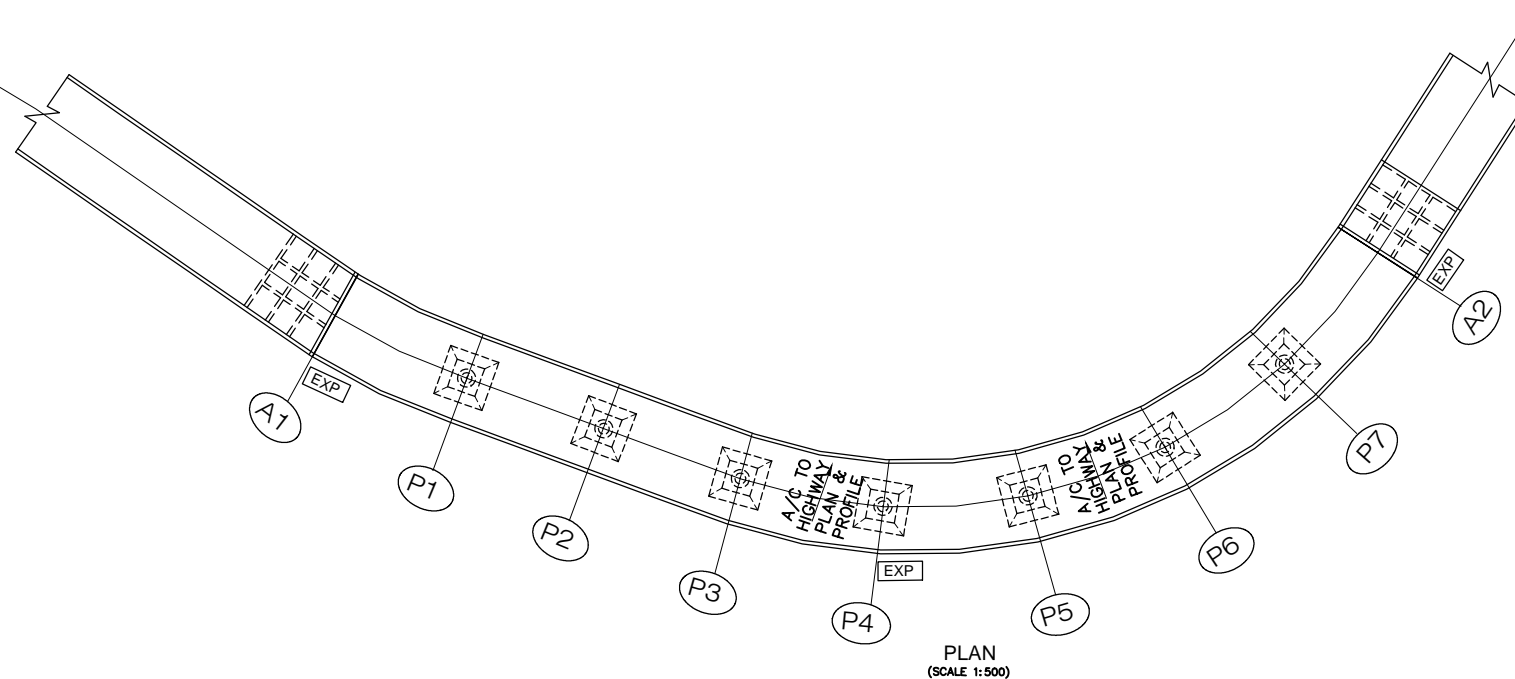
GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 38+800 TO 30+000 (SPAN-10x20.0m)
DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/38+800/GAD-01



FORMATION LEVEL	1636.543	1637.141	1637.739	1638.337	1638.935	1639.533	1640.131	1640.729	1641.327
EX.GROUND LEVEL	1630.647	1628.697	1627.122	1623.854	1619.101	1616.380	1619.570	1628.168	1635.229
CHAINAGE	48+940	48+960	48+980	49+000	49+020	49+040	49+060	49+080	49+100

NOTES

- ALL DIMENSIONS ARE MILLIMETERS AND LEVELS ARE IN METERS.
- DIMENSIONS ARE NOT TO SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- THE DIMENSION OF THE FOUNDATION SHOWN HERE TENTATIVE ONLY. THIS SHALL BE FINALIZED AFTER DETAILED SUBSOIL INVESTIGATION.
- BRIDGE HAS BEEN DESIGNED FOR CARRIAGEWAY LIVE LOAD OF 1 LANE 70R +1 LANE CLASS A OR 3 LANES OF CLASS A WHICHEVER GIVES WORST EFFECT.
- GRADE OF CONCRETE FOR VARIOUS ELEMENTS ARE AS FOLLOWS:—
 - SUPERSTRUCTURE(PSC) ----- M45
 - SUPERSTRUCTURE(VOIDED) ----- M40
 - RCC SUBSTRUCTURE & FOUNDATION ---- M35
 - RCC RAILING -----M30
 - RCC CRASH BARRIER ----- M40
 - APPROACH SLAB ----- M30
 - PEDESTAL ----- M40
- TYPE OF BEARING PROPOSED HERE IS POT-PTFE AS PER IRC:83, PART-III
- SINGLE STRIP SEAL EXPANSION JOINT IS USED.
- GRADE OF CEMENT IS USED HERE IS OPC 43/OPc 53.
- ALL REINFORCEMENT BARS ARE TMT BARS (GRADE DESIGNATION Fe500D) AS PER IS:1786.
- BRIDGE HAS BEEN DESIGNED CONSIDERING SEISMIC ZONE AS IV.
- SUPERELEVATION SHALL BE MAINTAINED AS PER HIGHWAY PLAN & PROFILE.
- SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²

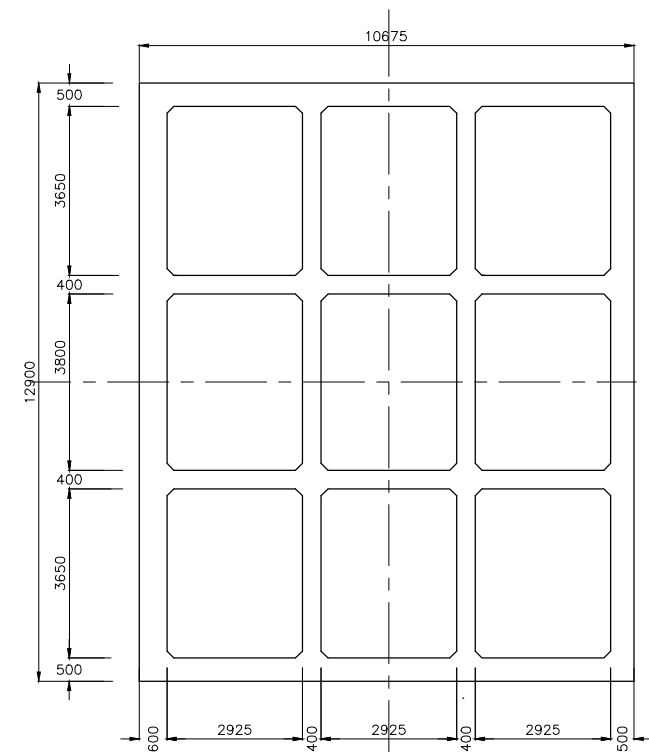


REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE-20	DRAFT DETAILED PROJECT REPORT	A B C D

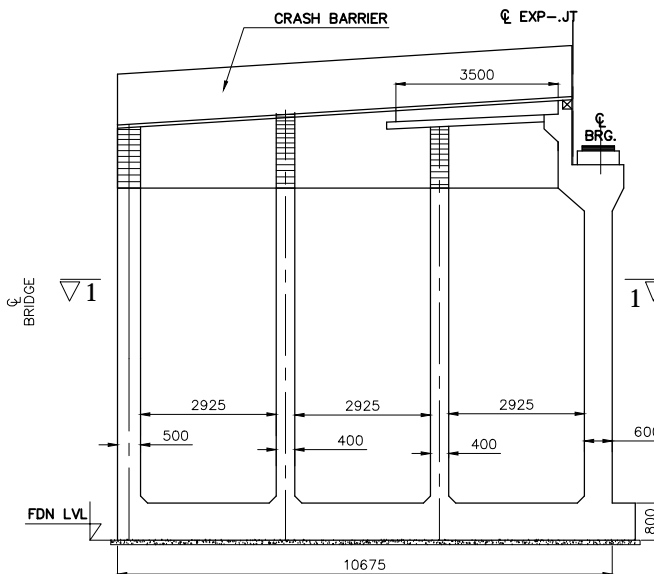
CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

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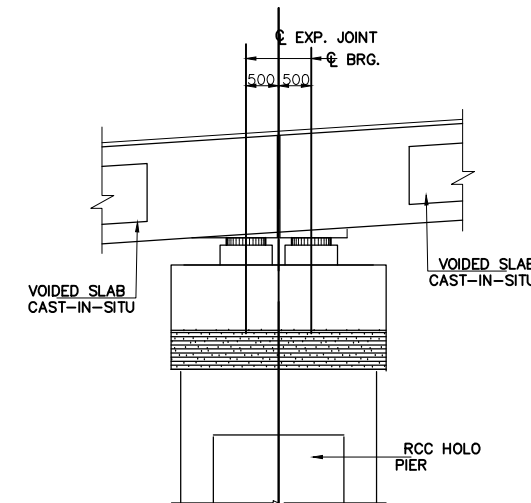
DATE : JUNE- 2020	REVISION R0	GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 48+940 TO 49+100 (SPAN-8x20.0m)
DESIGNED BY RAVI KUMAR	DRAWN BY A SEN	CHECKED BY A REHMAN
APPROVED BY S.Shukla	SCALE:- AS SHOWN	SHEET:- 01 OF 01
DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/48+940/GAD-01		



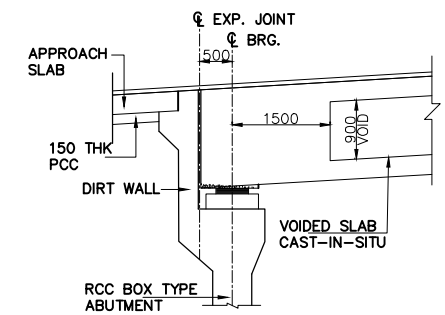
SECTION 1-1
SCALE 1:100



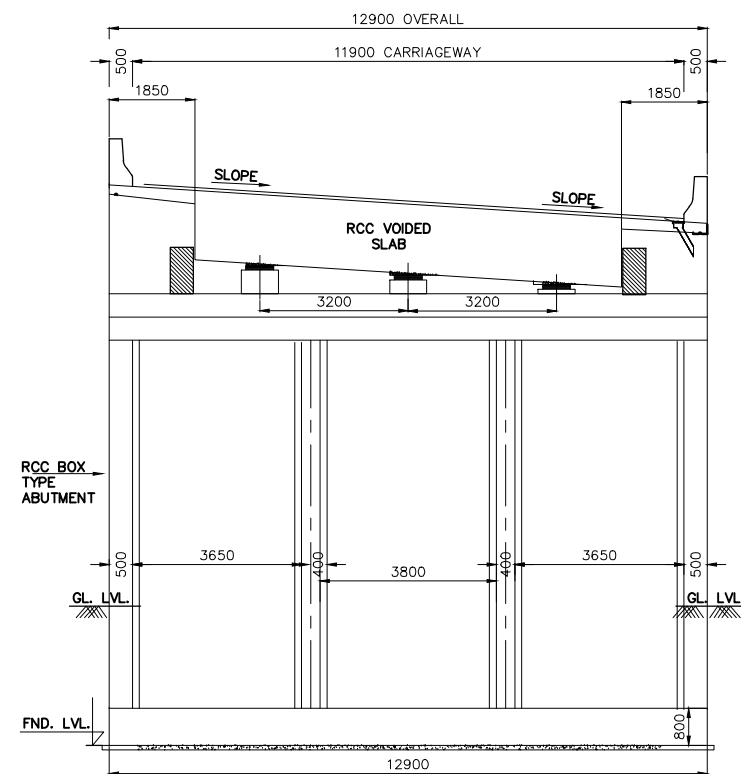
BOX ABUTMENT
SCALE 1:100



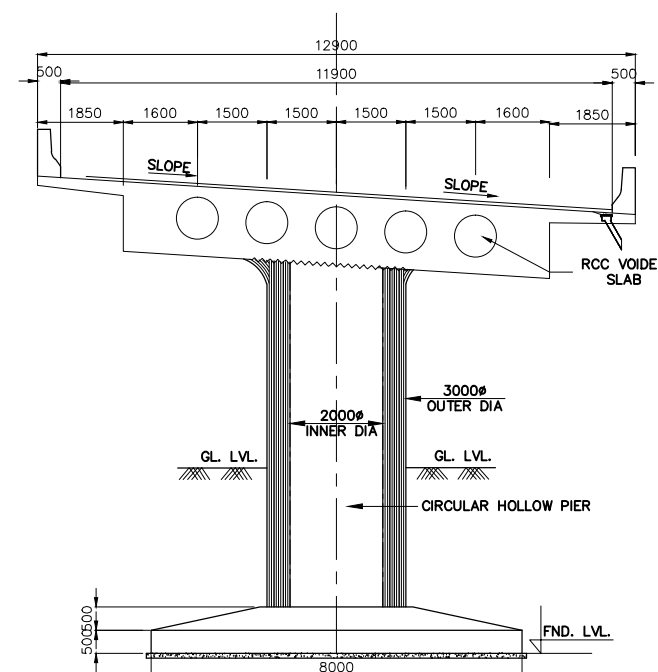
DETAIL-Y
(SCALE 1:70)



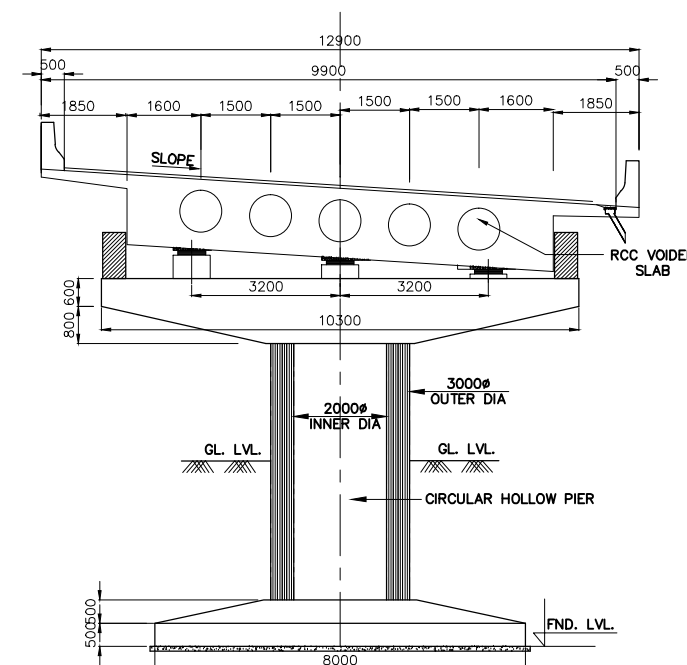
DETAIL-X
(SCALE 1:75)



SECTION A-A
SCALE 1:100



SECTION B-B
SECTION NEAR FIX & FREE JOINT
SCALE 1:100



SECTION C-C
SECTION NEAR EXPANSION JOINT
SCALE 1:100

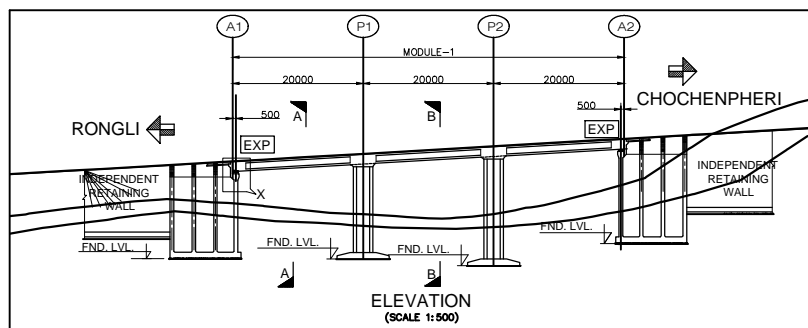
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE-20	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT :	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

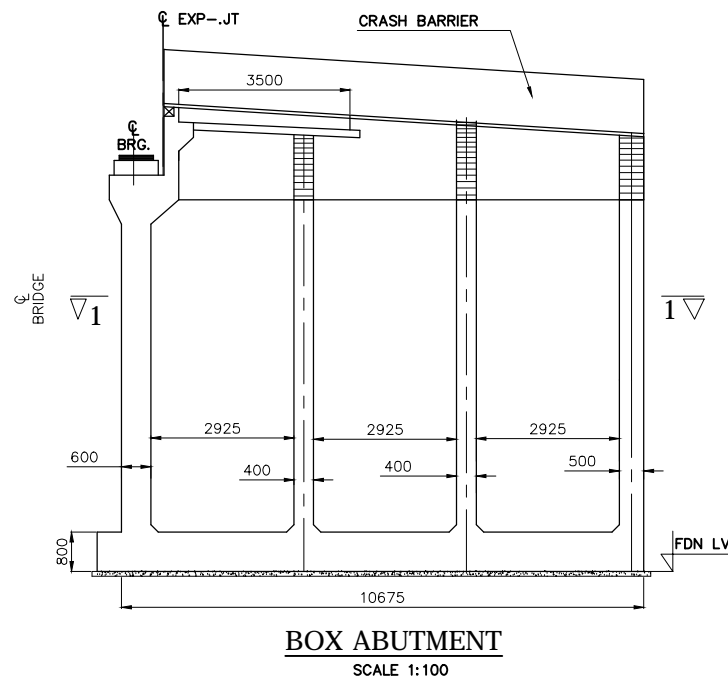
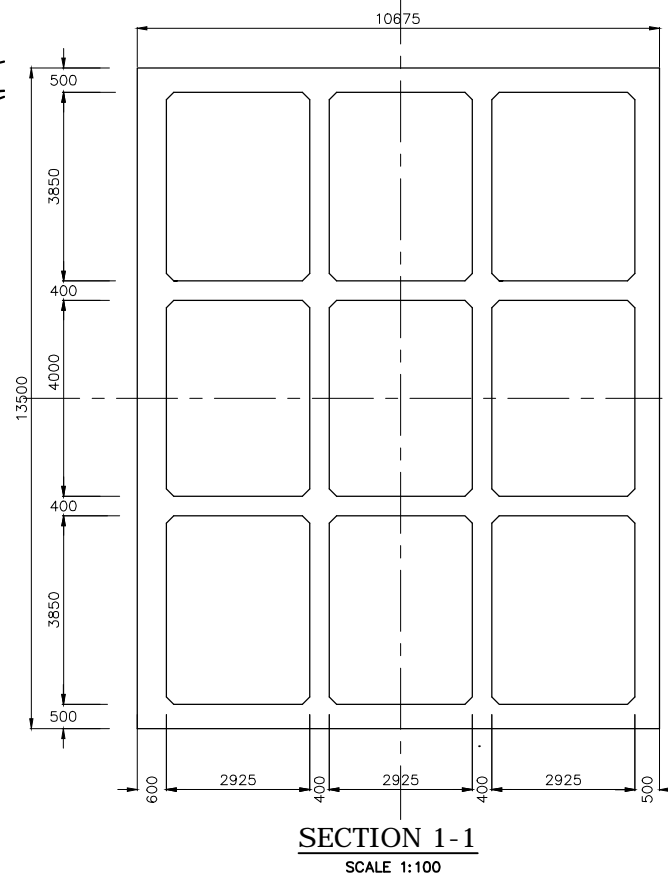
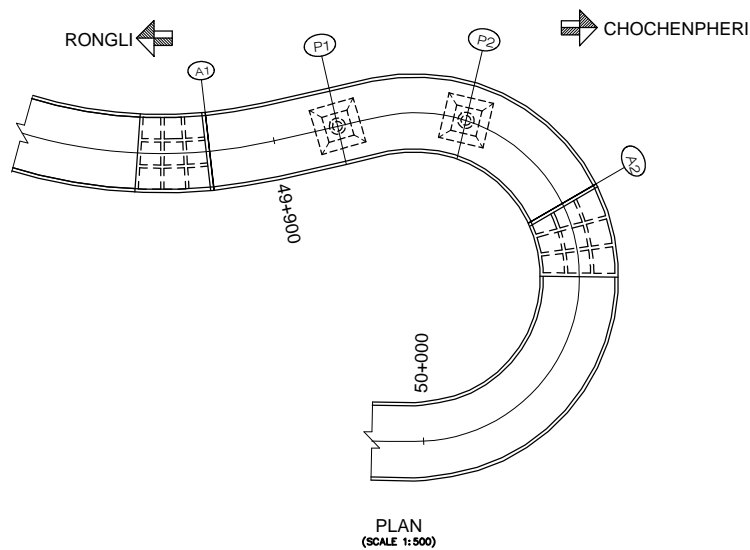
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DATE :	JUNE- 2020	REVISION	R0
DESIGNED BY	RAVI KUMAR	DRAWN BY	A SEN
CHECKED BY	A.REHMAN	APPROVED BY	S.Shukla
SCALE:-	AS SHOWN	SHEET:-	02 OF 02

GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 48+940 TO 49+100 (SPAN-8x20.0m)
DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/48+940/GAD-01

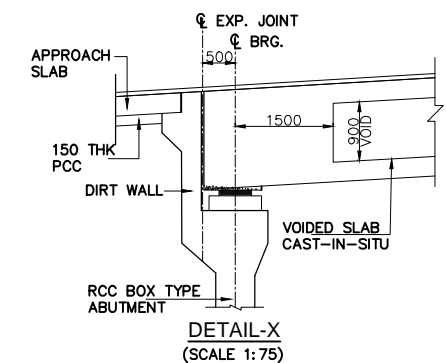


FORMATION LEVEL	1680.388	1681.541	1682.694	1683.847
EX.GROUND LEVEL	1673.987	1672.272	1672.307	1676.877
CHAINAGE	49+890	49+910	49+930	49+950

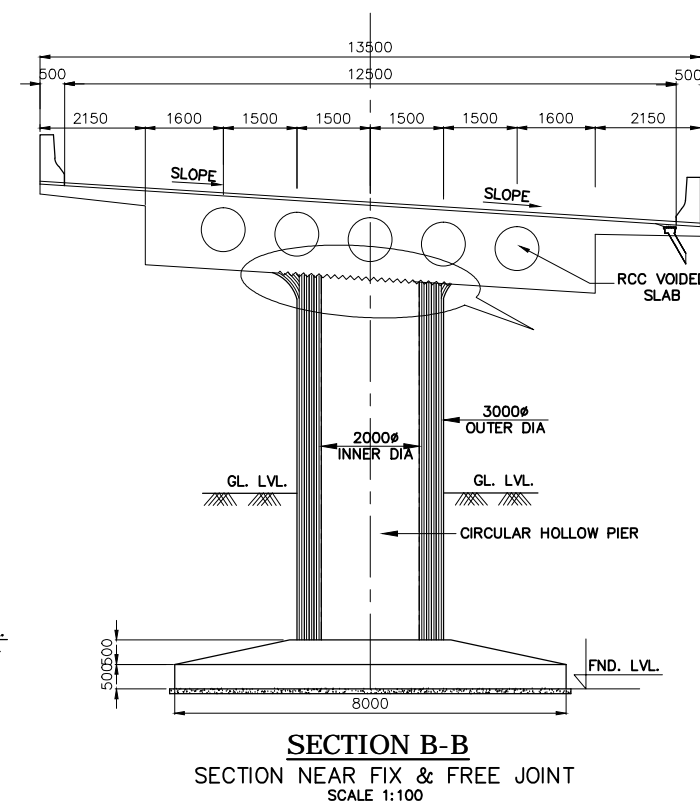
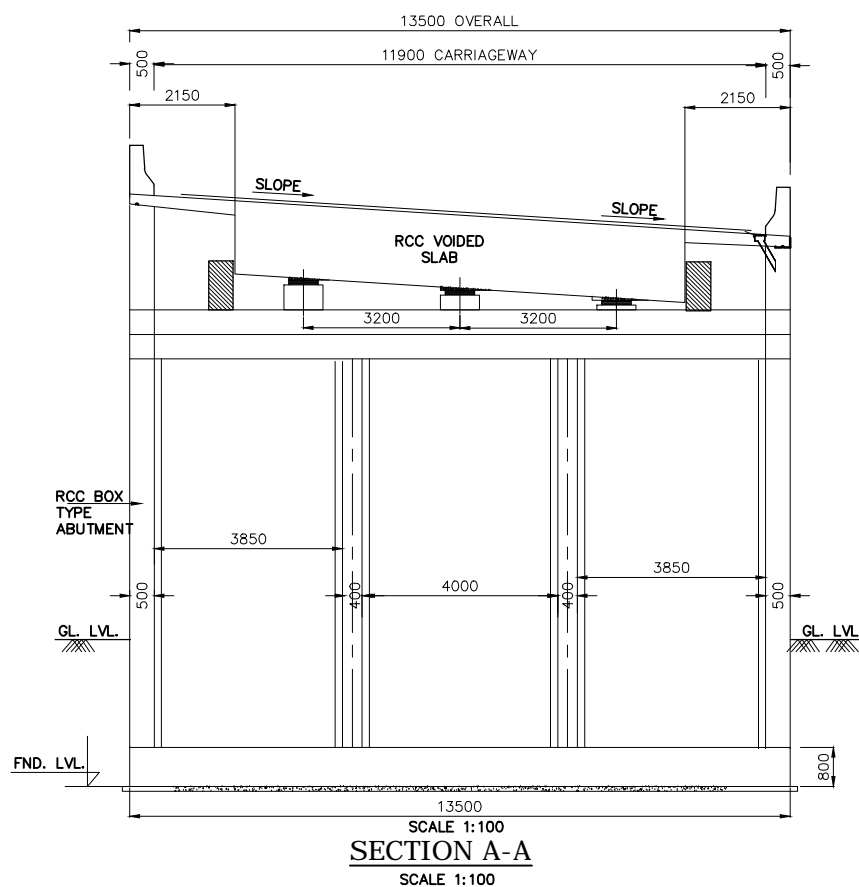
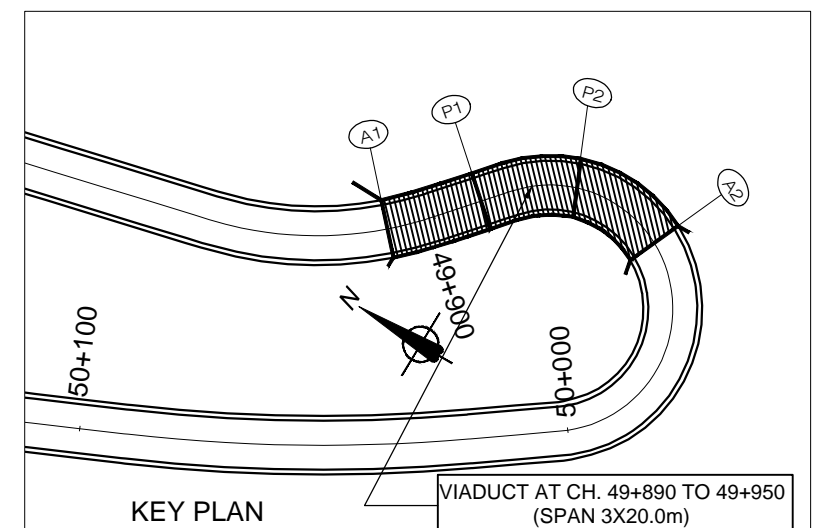


NOTES

1. ALL DIMENSIONS ARE MILLIMETERS AND LEVELS ARE IN METERS.
2. DIMENSIONS ARE NOT TO SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. THE DIMENSION OF THE FOUNDATION SHOWN HERE TENTATIVE ONLY. THIS SHALL BE FINALIZED AFTER DETAILED SUBSOIL INVESTIGATION.
4. BRIDGE HAS BEEN DESIGNED FOR CARRIAGEWAY LIVE LOAD OF 1 LANE 70R +1 LANE CLASS A OR 3 LANES OF CLASS A WHICHEVER GIVES WORST EFFECT.
5. GRADE OF CONCRETE FOR VARIOUS ELEMENTS ARE AS FOLLOWS: -
 - (i) SUPERSTRUCTURE(PSC) ----- M45
 - (ii) SUPERSTRUCTURE(VOIDED) ----- M40
 - (iii) RCC SUBSTRUCTURE & FOUNDATION ---- M35
 - (iv) RCC RAILING -----M30
 - (v) RCC CRASH BARRIER ----- M40
 - (vi) APPROACH SLAB ----- M30
 - (vii) PEDESTAL ----- M40
6. TYPE OF BEARING PROPOSED HERE IS POT-PTEF AS PER IRC: 83, PART-III
7. SINGLE STRIP SEAL EXPANSION JOINT IS USED.
8. GRADE OF CEMENT IS USED HERE IS OPC 43/OPc 53.
9. ALL REINFORCEMENT BARS ARE TMT BARS (GRADE DESIGNATION Fe500D) AS PER IS:1786.
10. BRIDGE HAS BEEN DESIGNED CONSIDERING SEISMIC ZONE AS IV.
11. SUPERELEVATION SHALL BE MAINTAINED AS PER HIGHWAY PLAN & PROFILE.
12. SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²



TO RONGLI TO CHOCHOENPHERI



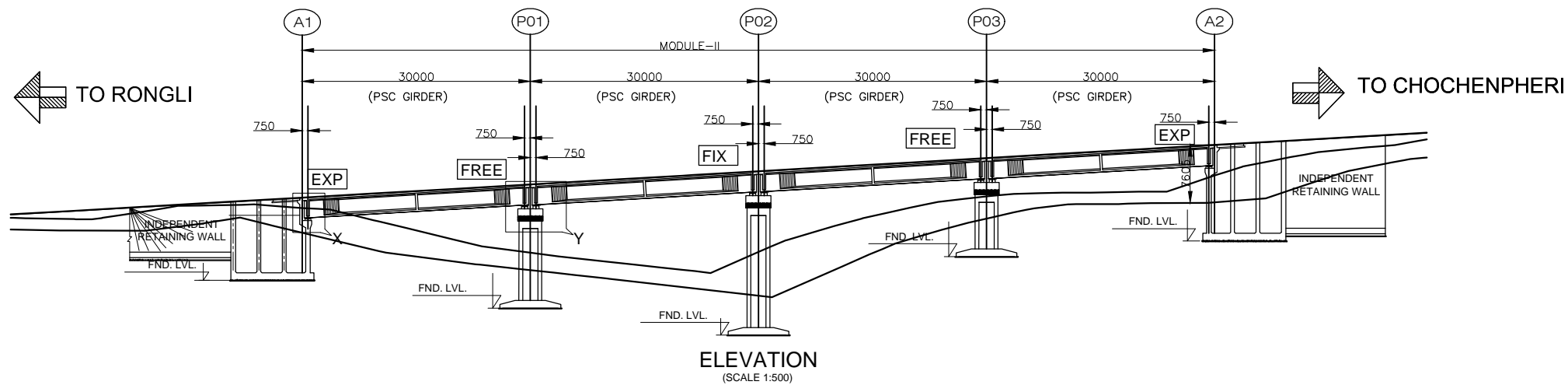
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE-20	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

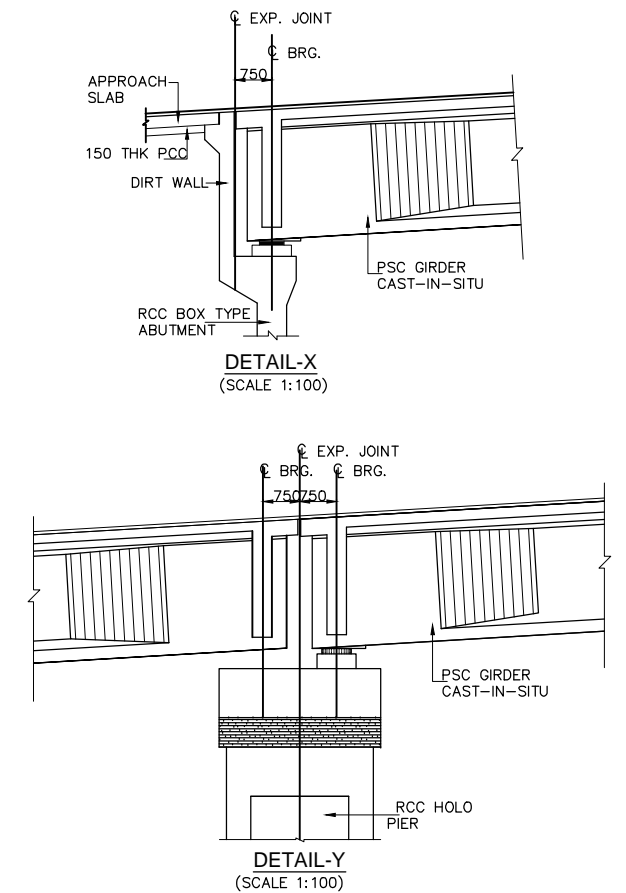
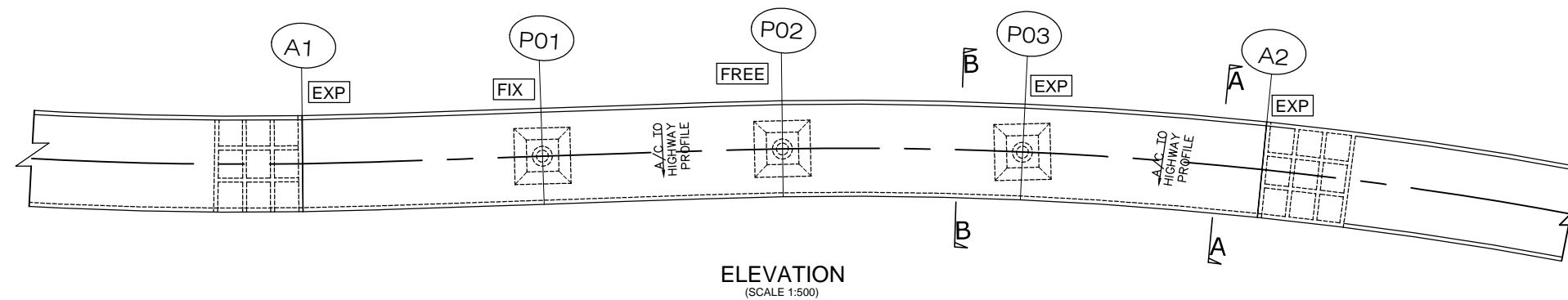
PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
-----------	---

DATE :	JUNE- 2020
DESIGNED BY	RAVI KUMAR
DRAWN BY	A SEN
CHECKED BY	A. REHMAN
APPROVED BY	S. Shukla
SCALE:-	AS SHOWN
SHEET:-	01 OF 01

GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 49+890 TO 49+950 (SPAN-3x20.0m)
DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/49+890/GAD-01

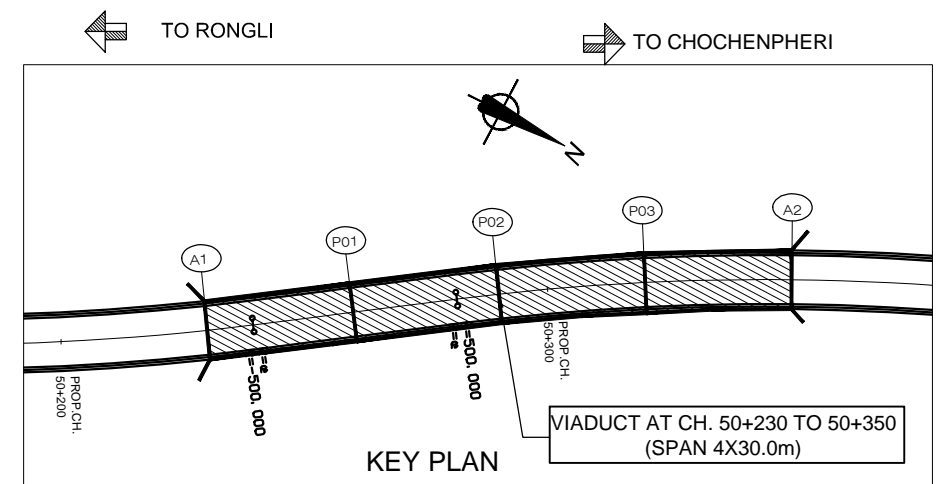


FORMATION LEVEL	1699.987	1701.716	1703.445	1705.174	1706.903
EX.GROUND LEVEL	1698.622	1692.754	1692.852	1700.138	1702.880
CHAINAGE	50+230	50+260	50+290	50+320	50+350

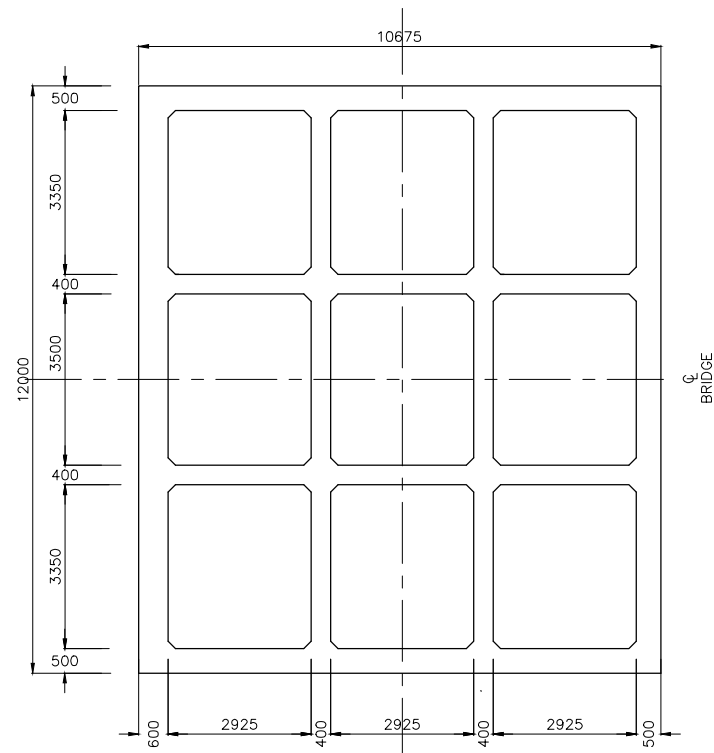


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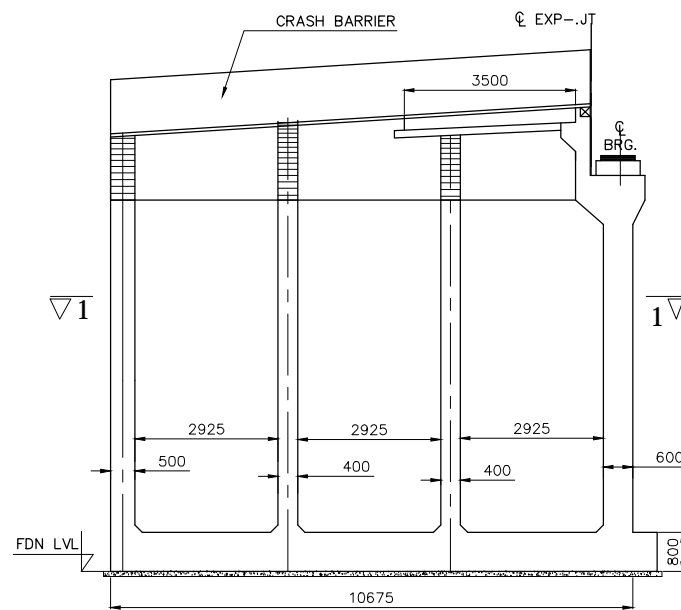
- ALL DIMENSIONS ARE MILLIMETERS AND LEVELS ARE IN METERS.
- DIMENSIONS ARE NOT TO SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- THE DIMENSION OF THE FOUNDATION SHOWN HERE TENTATIVE ONLY. THIS SHALL BE FINALIZED AFTER DETAILED SUBSOIL INVESTIGATION.
- BRIDGE HAS BEEN DESIGNED FOR CARRIAGEWAY LIVE LOAD OF 1 LANE 70R OR 2 LANES OF CLASS A WHICHEVER GIVES WORST EFFECT.
- GRADE OF CONCRETE FOR VARIOUS ELEMENTS ARE AS FOLLOWS:-
 - SUPERSTRUCTURE(PSC) ----- M45
 - SUPERSTRUCTURE(VOIDED) ----- M40
 - RCC SUBSTRUCTURE & FOUNDATION --- M40
 - RCC RAILING -----M30
 - RCC CRASH BARRIER ----- M40
 - APPROACH SLAB ----- M30
 - PEDESTAL ----- M40
- TYPE OF BEARING PROPOSED HERE IS POT-PTFE AS PER IRC:83, PART-III
- SINGLE STRIP SEAL EXPANSION JOINT IS USED.
- GRADE OF CEMENT IS USED HERE IS OPC 43/OPC 53.
- ALL REINFORCEMENT BARS ARE TMT BARS (GRADE DESIGNATION Fe500D) AS PER IS:1786.
- BRIDGE HAS BEEN DESIGNED CONSIDERING SEISMIC ZONE AS IV.
- SUPERELEVATION SHALL BE MAINTAINED AS PER HIGHWAY PLAN & PROFILE.
- SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²



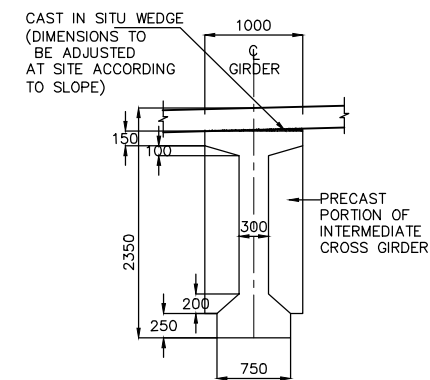
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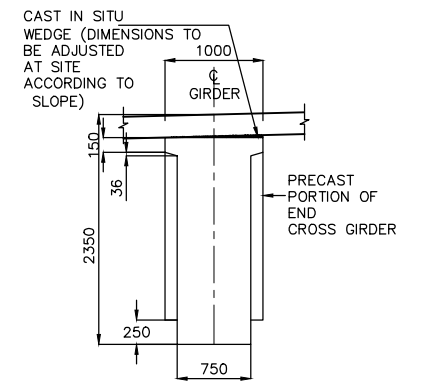
SECTION 1-1
SCALE 1:100



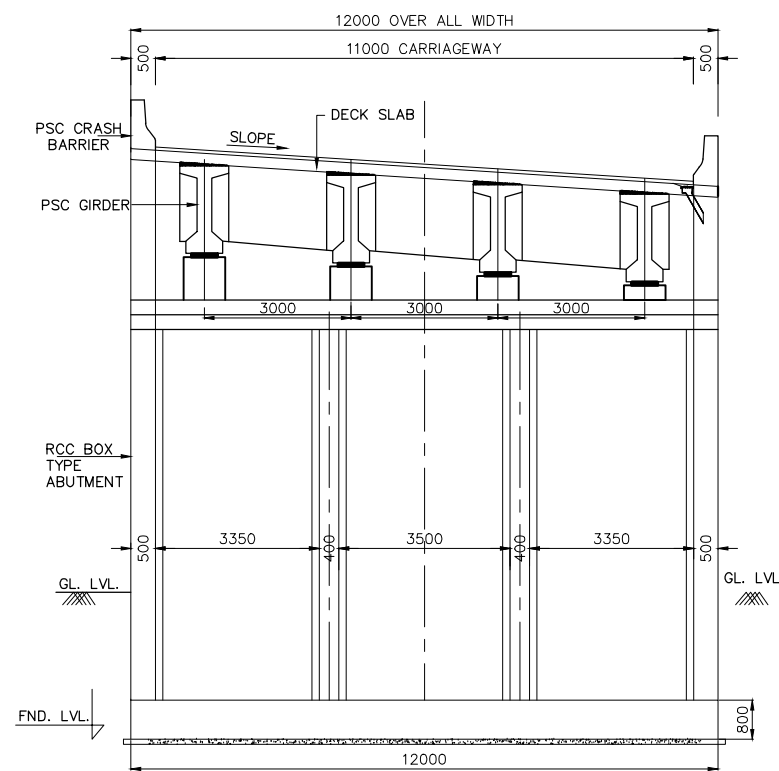
BOX ABUTMENT
SCALE 1:100



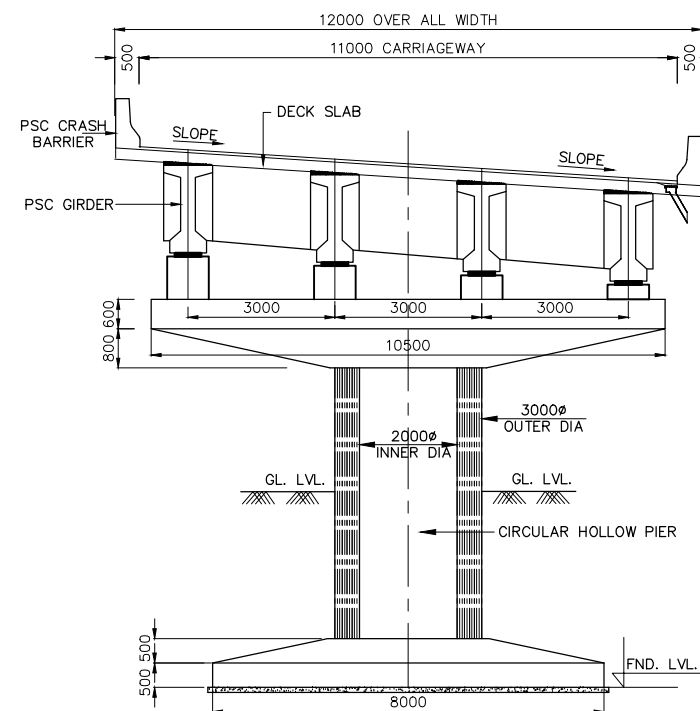
SECTION OF GIRDER AT MID
(SCALE 1:50)



SECTION OF GIRDER AT SUPPORT
(SCALE 1:50)



SECTION A-A
SCALE 1:100



SECTION B-B
SCALE 1:100

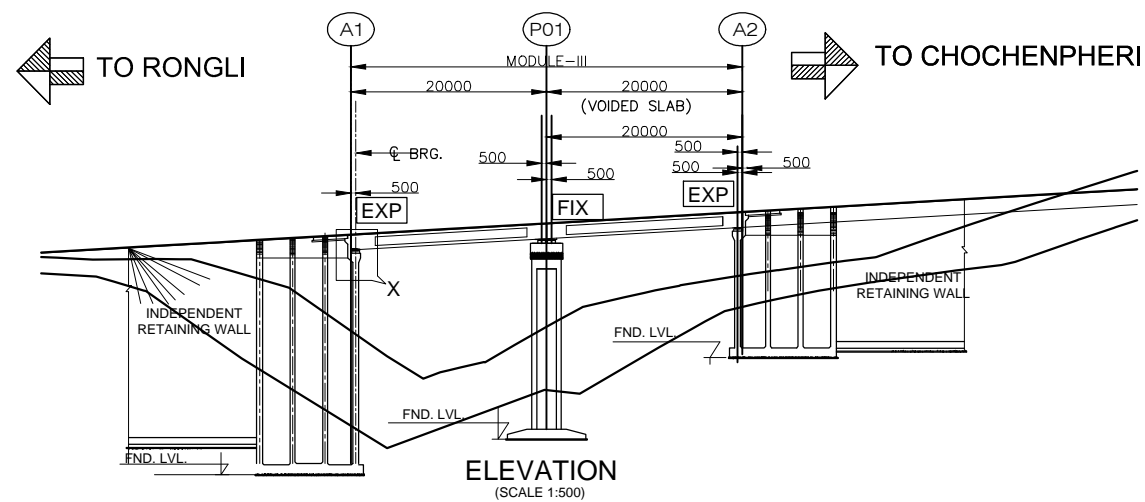
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT :	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

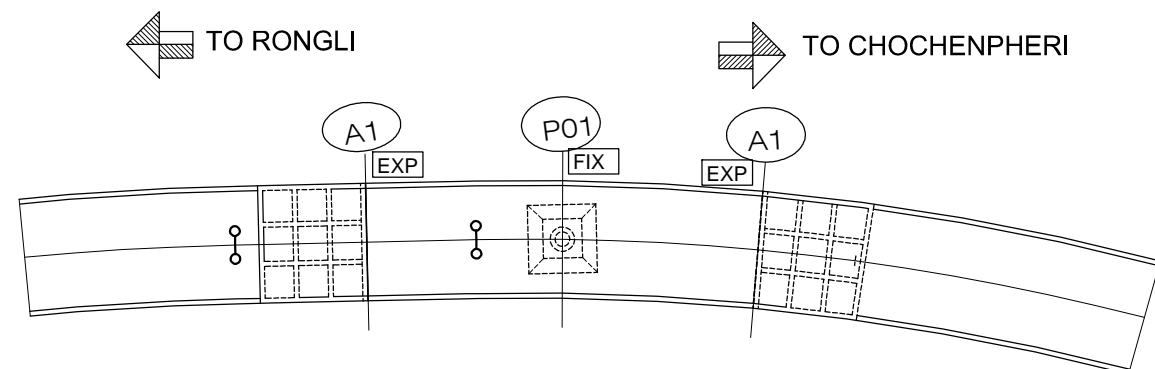
PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
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DATE :	JULY- 2020	REVISION	R0
DESIGNED BY	RAVI KUMAR	DRAWN BY	A SEN
CHECKED BY	A.REHMAN	APPROVED BY	S.Shukla
SCALE:-	AS SHOWN	SHEET:-	02 OF 02

GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 50+230 TO 50+350 (SPAN-4x23.0)
DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/50+230/GAD-01

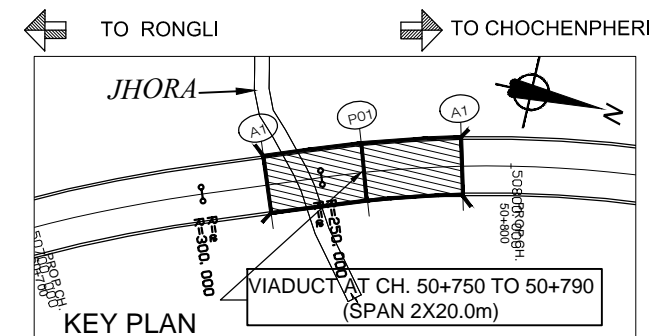
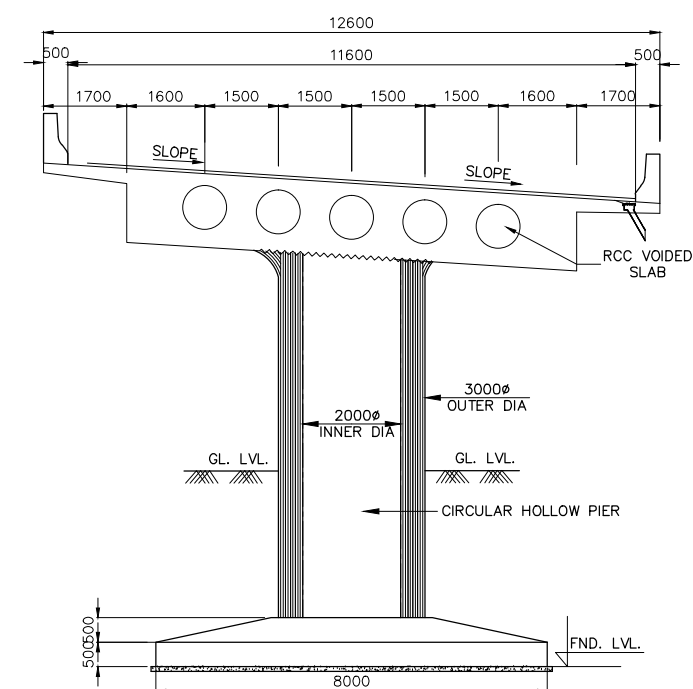
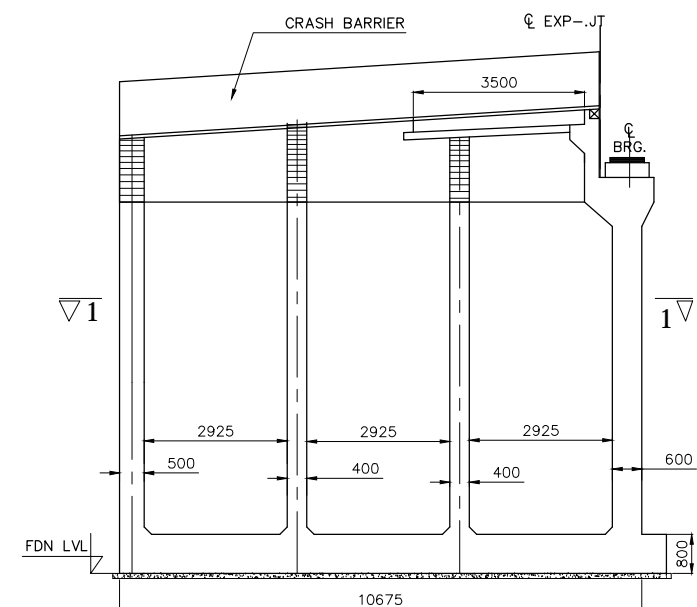
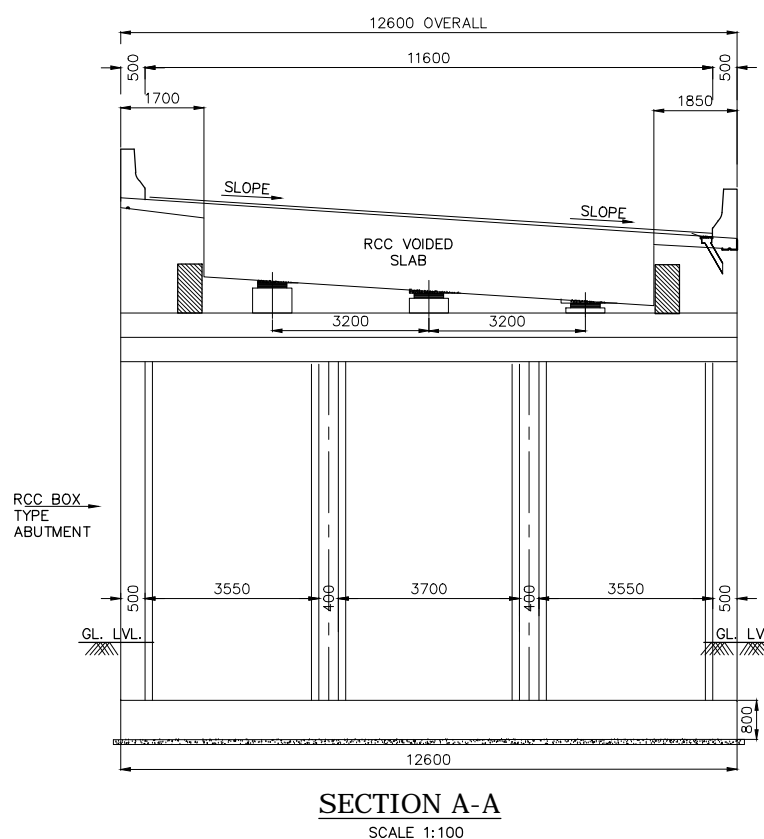
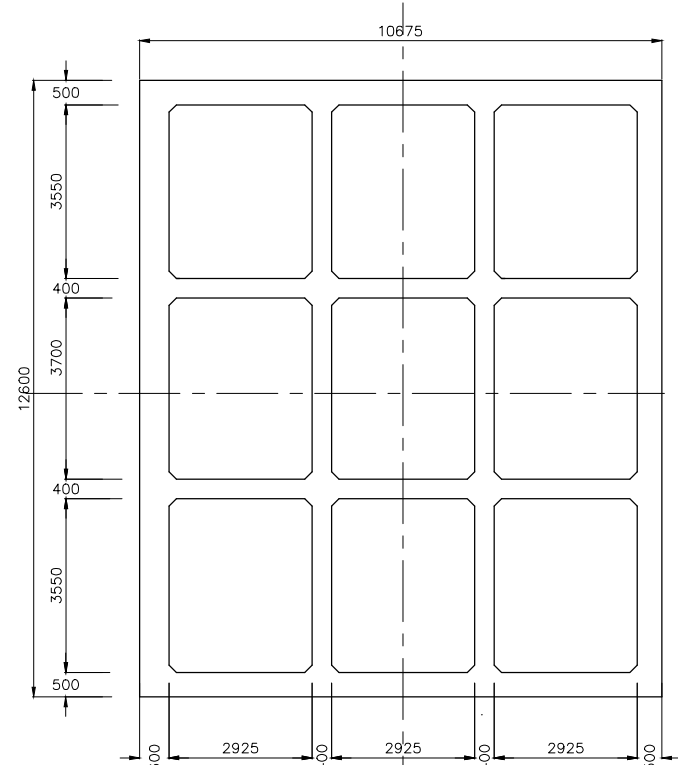
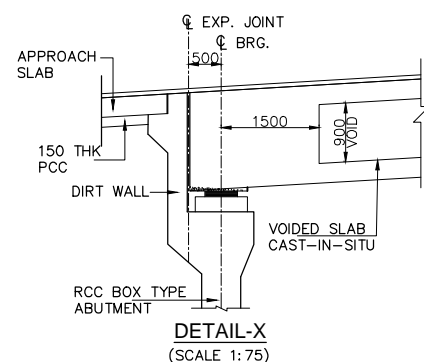


FORMATION LEVEL	1729.960	1731.113	1732.266
EX.GROUND LEVEL	1720.114	1720.552	1725.810
CHAINAGE	50+750	50+770	50+790



NOTES

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- THE DIMENSION OF THE FOUNDATION SHOWN HERE TENTATIVE ONLY. THIS SHALL BE FINALIZED AFTER DETAILED SUBSOIL INVESTIGATION.
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 - SUPERSTRUCTURE(PSC) ----- M45
 - SUPERSTRUCTURE(VOIDED) ----- M40
 - RCC SUBSTRUCTURE & FOUNDATION ---- M40
 - RCC RAILING -----M30
 - RCC CRASH BARRIER ----- M40
 - APPROACH SLAB ----- M30
 - PEDESTAL ----- M40
- TYPE OF BEARING PROPOSED HERE IS POT-PTFE AS PER IRC:83, PART-III
- SINGLE STRIP SEAL EXPANSION JOINT IS USED.
- GRADE OF CEMENT IS USED HERE IS OPC 43/OPC 53.
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- SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²



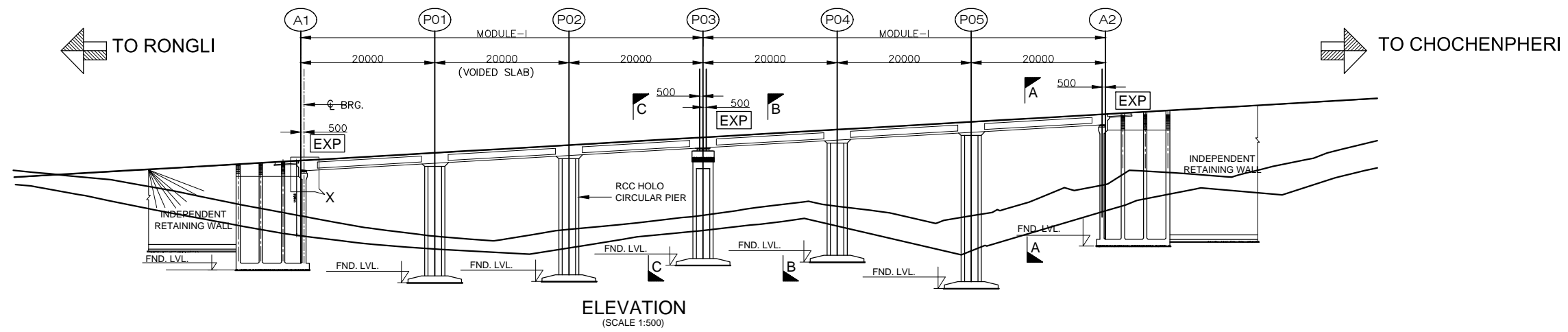
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

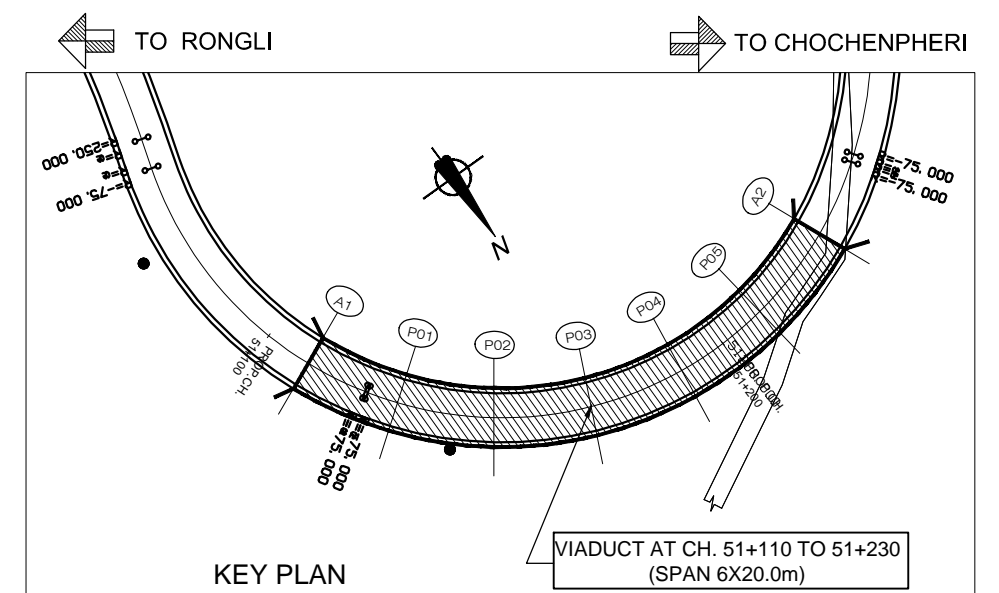
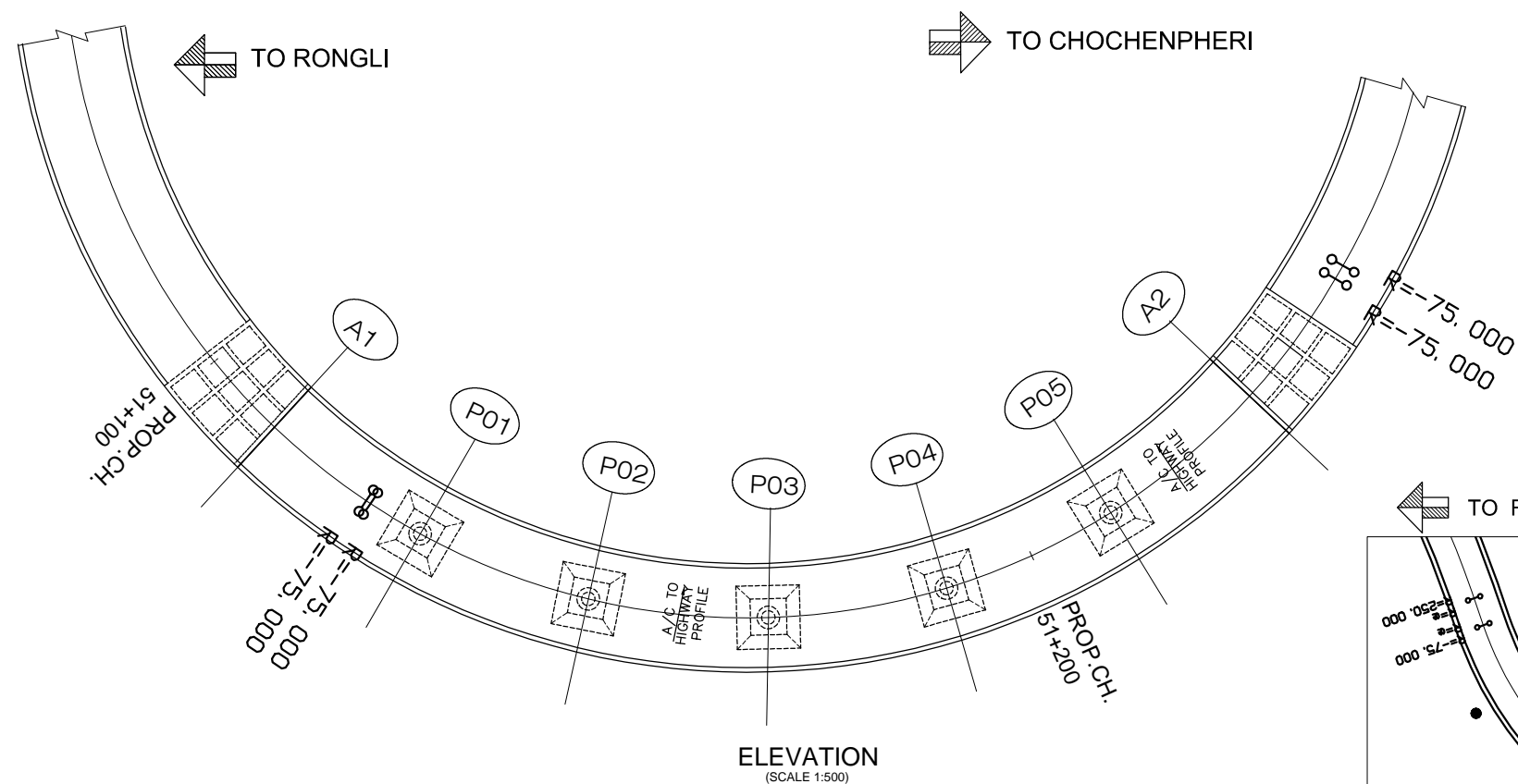
PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
-----------	---

DATE :	JULY- 2020	REVISION	R0
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
RAVI KUMAR	A SEN	A. REHMAN	S. Shukla
SCALE:- AS SHOWN	SHEET:- 01 OF 01		

GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 50+750 TO 50+790 (SPAN-2x20.0)	DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/50+750/GAD-01
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FORMATION LEVEL	1750.711	1751.864	1753.017	1754.169	1755.322	1756.475	1757.628
EX.GROUND LEVEL	1742.471	1739.431	1740.457	1742.547	1743.875	1742.483	1747.128
CHAINAGE	51+110	51+130	51+150	51+170	51+190	51+210	51+230



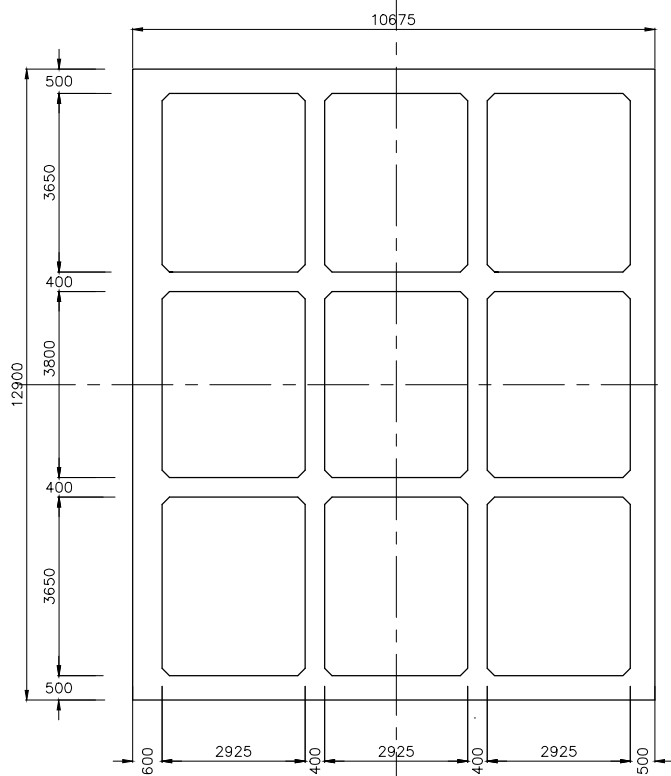
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT :	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

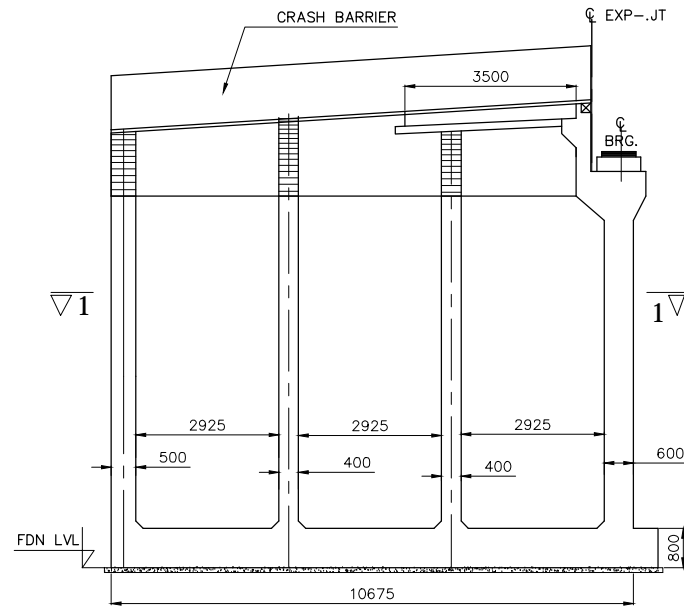
PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
-----------	---

DATE :	JULY- 2020	REVISION	R0
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
Ravi Kumar	A. Sen	A. Rehman	S. Shukla
SCALE:-	AS SHOWN	SHEET:-	01 OF 02

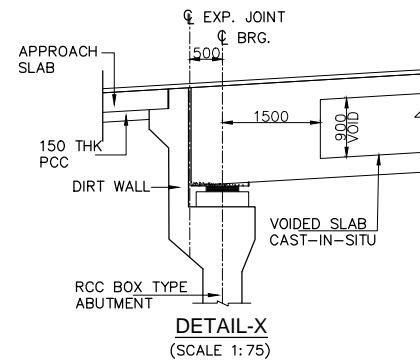
GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 51+110 TO 51+230 (SPAN-6x20.0)
DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/51+110/GAD-01



SECTION 1-1
SCALE 1:100



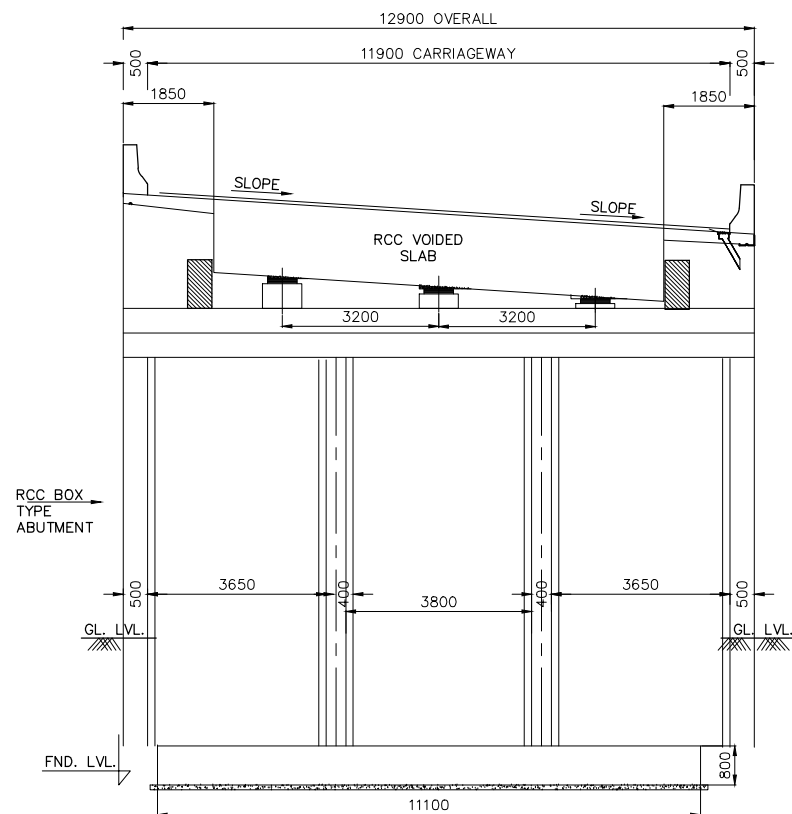
BOX ABUTMENT
SCALE 1:100



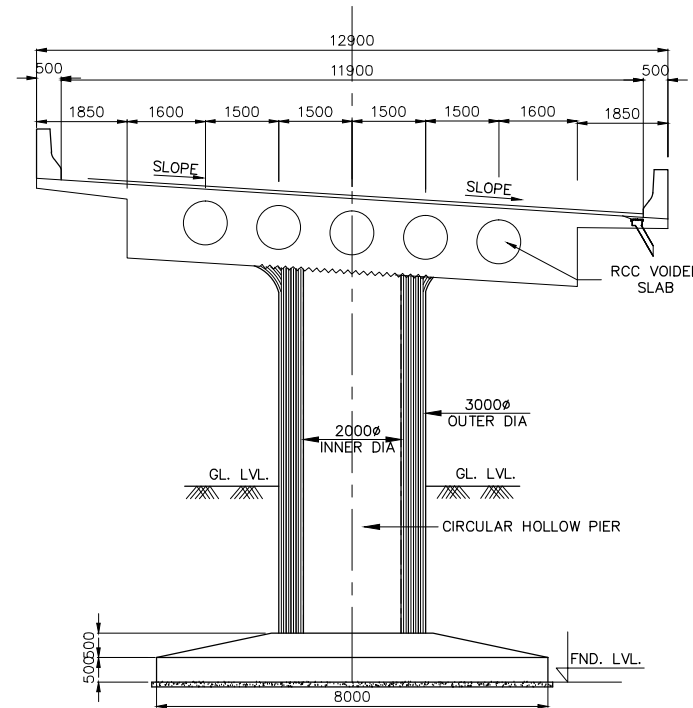
DETAIL-X
(SCALE 1:75)

NOTES

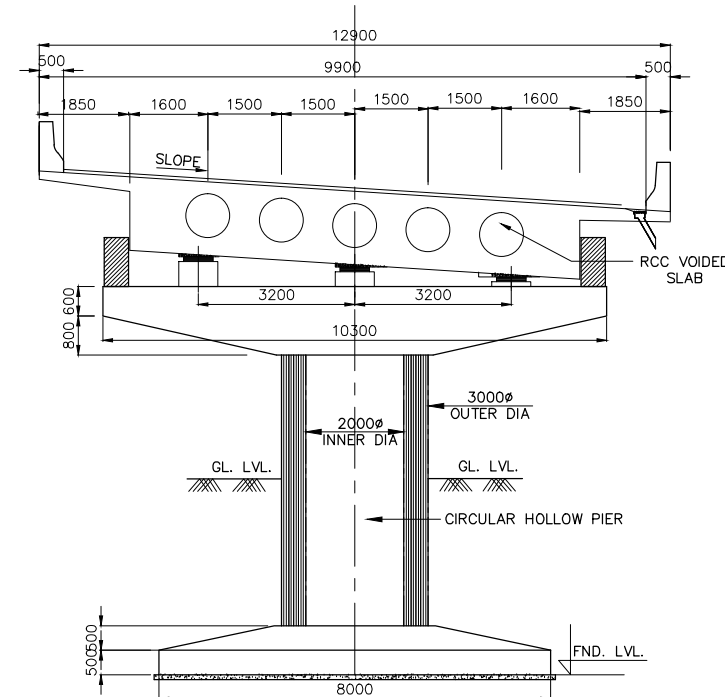
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- THE DIMENSION OF THE FOUNDATION SHOWN HERE TENTATIVE ONLY. THIS SHALL BE FINALIZED AFTER DETAILED SUBSOIL INVESTIGATION.
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 - SUPERSTRUCTURE(VOIDED) ----- M40
 - RCC SUBSTRUCTURE & FOUNDATION ---- M40
 - RCC RAILING -----M30
 - RCC CRASH BARRIER ----- M40
 - APPROACH SLAB ----- M30
 - PEDESTAL ----- M40
- TYPE OF BEARING PROPOSED HERE IS POT-PTFE AS PER IRC:83, PART-III
- SINGLE STRIP SEAL EXPANSION JOINT IS USED.
- GRADE OF CEMENT IS USED HERE IS OPC 43/OPc 53.
- ALL REINFORCEMENT BARS ARE TMT BARS (GRADE DESIGNATION Fe500D) AS PER IS:1786.
- BRIDGE HAS BEEN DESIGNED CONSIDERING SEISMIC ZONE AS IV.
- SUPERELEVATION SHALL BE MAINTAINED AS PER HIGHWAY PLAN & PROFILE.
- SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²



SECTION A-A
SCALE 1:100



SECTION B-B
SECTION NEAR FIX & FREE JOINT
SCALE 1:100



SECTION C-C
SECTION NEAR EXPANSION JOINT
SCALE 1:100

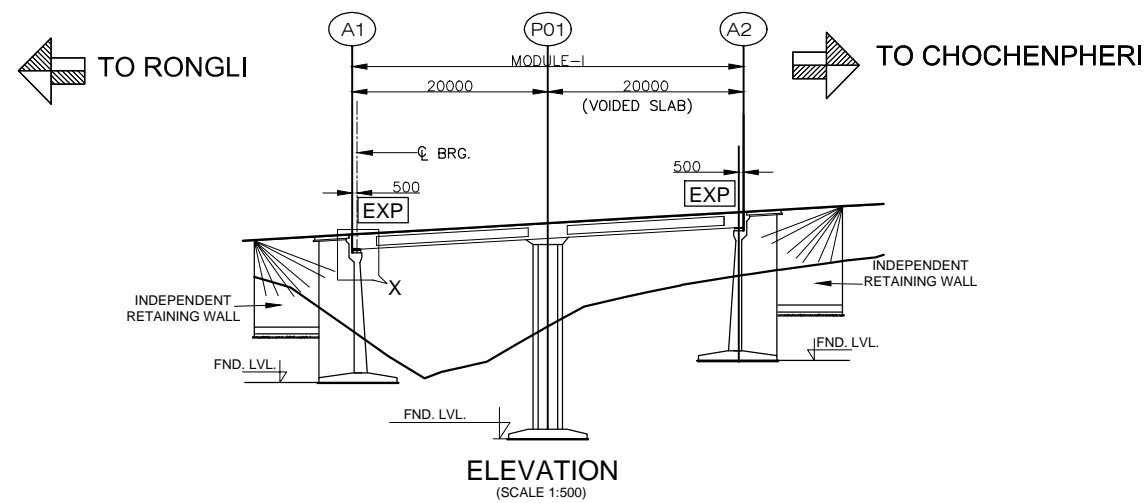
REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

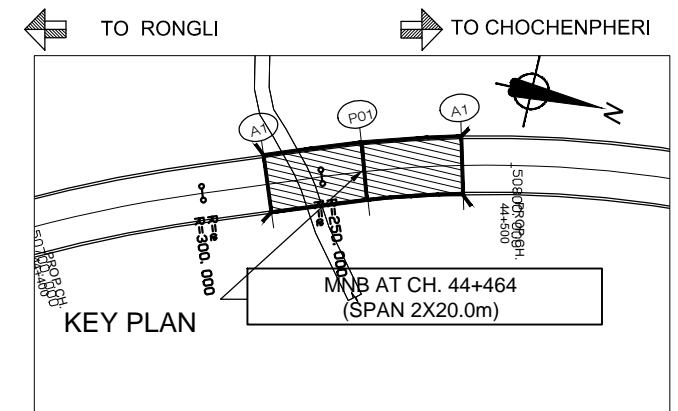
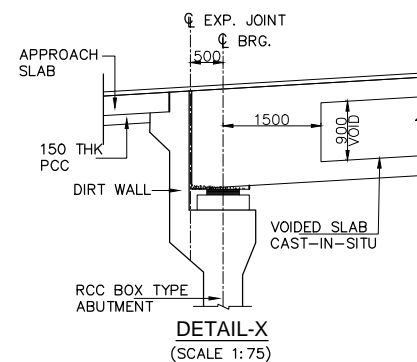
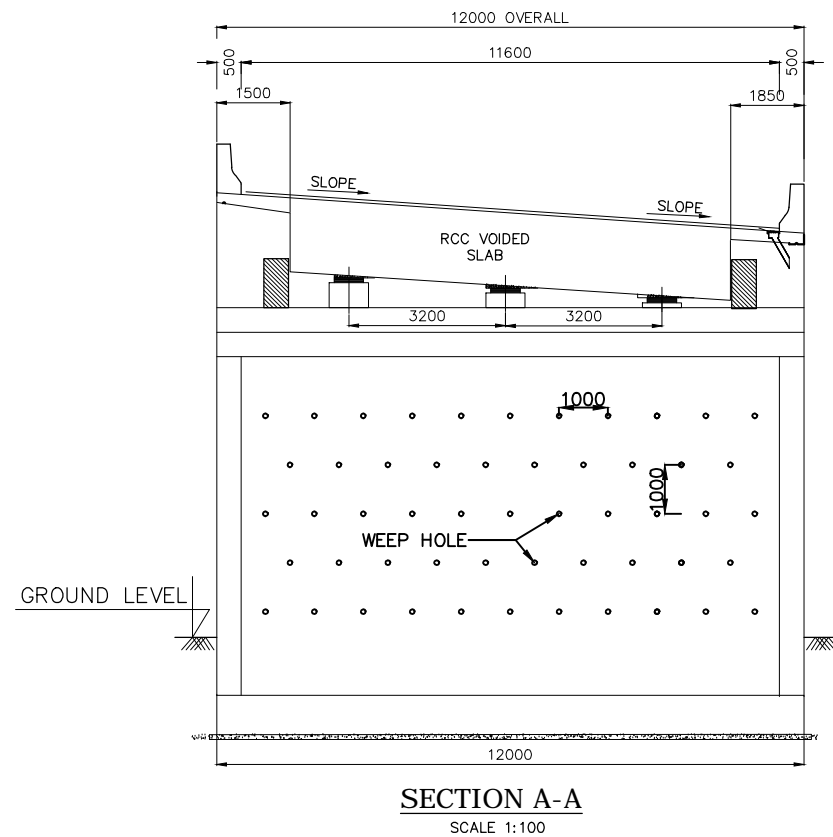
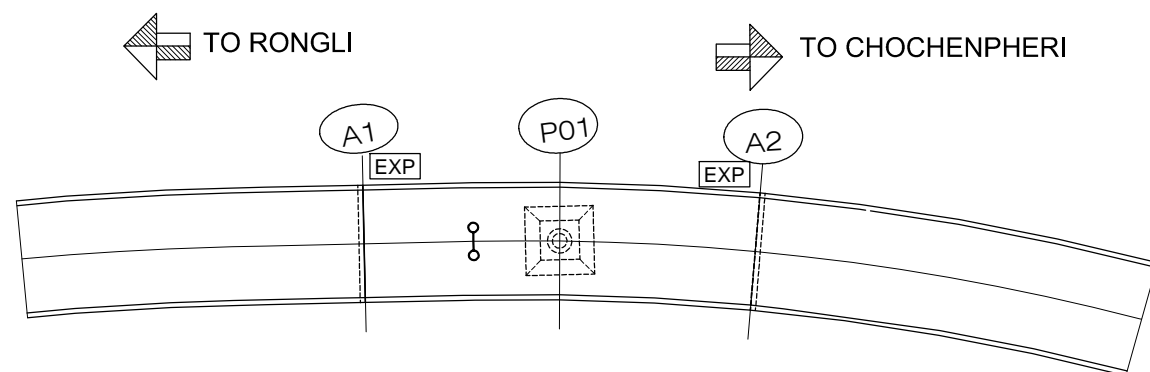
PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
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DATE : JULY- 2020	REVISION R0	GENERAL ARRANGEMENT DRAWINGS OF VIADUCT AT CH- 51+110 TO 51+230 (SPAN-6x20.0)
DESIGNED BY RAVI KUMAR	DRAWN BY A SEN	
CHECKED BY A.REHMAN	APPROVED BY S.Shukla	DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/51+110/GAD-01
SCALE:- AS SHOWN	SHEET:- 02 OF 02	

MNB



FORMATION LEVEL	1455.653	1456.952	1457.602
EX.GROUND LEVEL	1455.242	1455.126	1456.790
CHAINAGE	44+444	44+464	44+484



NOTES

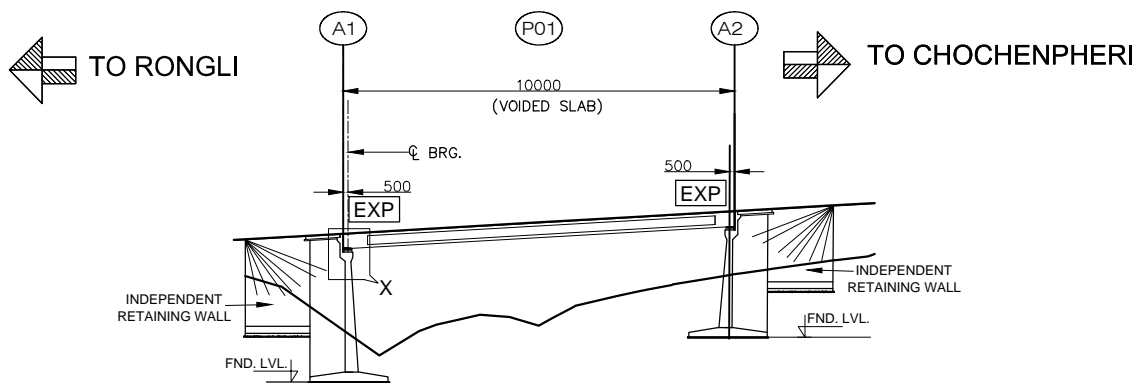
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 - RCC RAILING -----M30
 - RCC CRASH BARRIER ----- M40
 - APPROACH SLAB ----- M30
 - PEDESTAL ----- M40
- TYPE OF BEARING PROPOSED HERE IS POT-PTFE AS PER IRC:83, PART-III
- SINGLE STRIP SEAL EXPANSION JOINT IS USED.
- GRADE OF CEMENT IS USED HERE IS OPC 43/OPc 53.
- ALL REINFORCEMENT BARS ARE TMT BARS (GRADE DESIGNATION Fe500D) AS PER IS:1786.
- BRIDGE HAS BEEN DESIGNED CONSIDERING SEISMIC ZONE AS IV.
- SUPERELEVATION SHALL BE MAINTAINED AS PER HIGHWAY PLAN & PROFILE.
- SAFE BEARING CAPACITY FOR PRILIMINARY DESIGN AT FOUNDING LEVEL IS CONSIDERED AS 40t/m²

REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

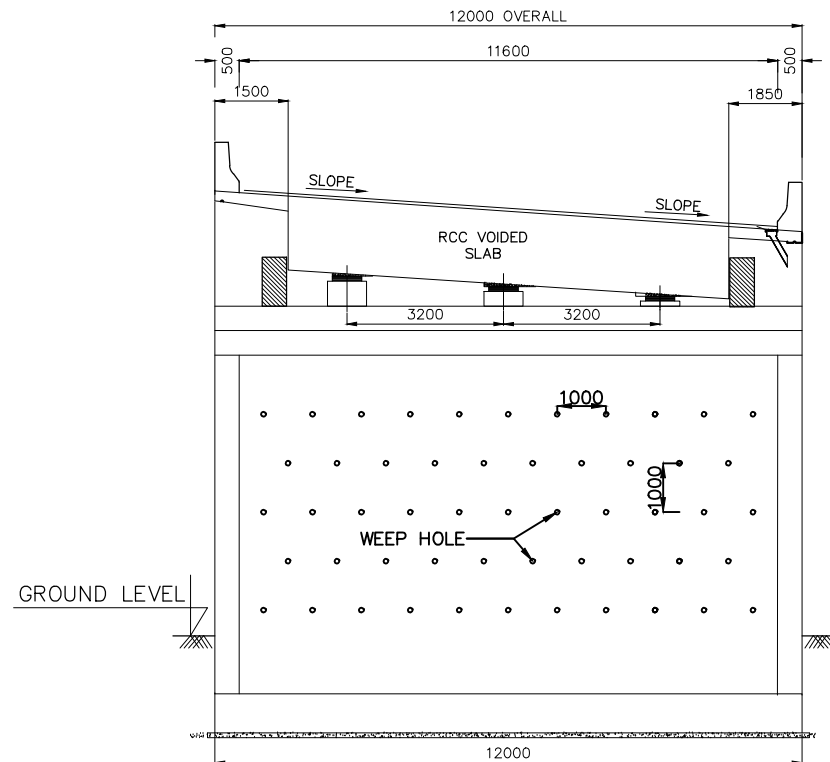
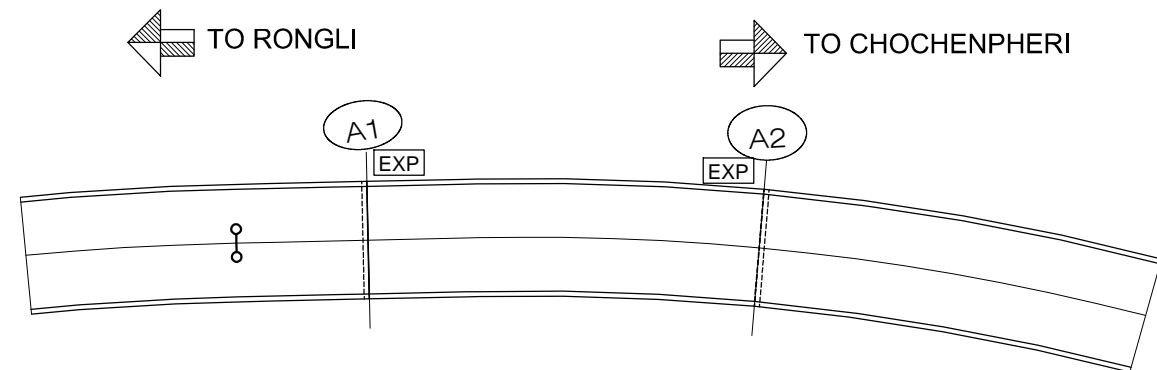
PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aritar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
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DATE : JULY- 2020	REVISION R0	GENERAL ARRANGEMENT DRAWINGS OF MNB AT CH- 44+464 (SPAN-2x20.0)
DESIGNED BY RAVI KUMAR	DRAWN BY A SEN	CHECKED BY A REHMAN
APPROVED BY S.Shukla	SCALE:- AS SHOWN	SHEET:- 01 OF 01
		DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/44+464/GAD-01



ELEVATION
(SCALE 1:500)

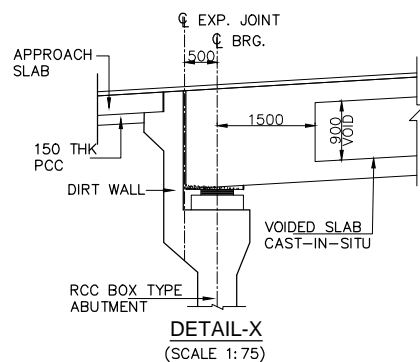
FORMATION LEVEL	1466.048	1466.697
EX.GROUND LEVEL	1462.654	1464.142
CHAINAGE	44+805	44+815



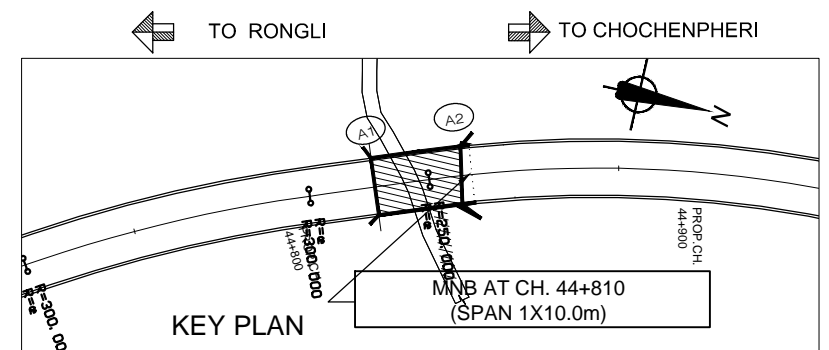
SECTION A-A
SCALE 1:100

NOTES

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DETAIL-X
(SCALE 1:75)



KEY PLAN

REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R0	JUNE	DRAFT DETAILED PROJECT REPORT	

CLIENT :	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (Ministry of Road Transport & Highways)
CONSULTANT:	S.A. Infrastructure Consultants Pvt. Ltd. 1101A, 11 Floor Tower A-II, Ansal Corporate Park, Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh) Phone No- 0120-6148000 Fax-0120-6148090 Email: info@sainfra.com

PROJECT :	Against Supplementary Agreement dated 05.12.2019 - To execute the work of preparation of DPR as 'Additional work' for Package-II, III, IV-C and V which forms part of the original Contract Agreement dated 30.09.2014 for Preparation of Feasibility Report cum Preliminary Design for alternative Highway to Gangtok in Sikkim via Bagrakot- Chuikhim -Nimbong-Kafer-Bakhim-Algarah-Rhenok in the State of West Bengal and from Rhenok-Rorathang-Pakyong along with spur from Aitar-Rolep-Menla in the State of Sikkim. (Package:- II-C)
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DATE : JULY- 2020	REVISION R0	GENERAL ARRANGEMENT DRAWINGS OF MNB AT CH- 44+810 (SPAN-1x10.0)
DESIGNED BY RAVI KUMAR	DRAWN BY A SEN	CHECKED BY A.REHMAN
APPROVED BY S.Shukla	SCALE:- AS SHOWN	SHEET:- 01 OF 01
		DWG. NO. :- SAICPL-SESPL/NHIDC/WB-SKM/44+810/GAD-01