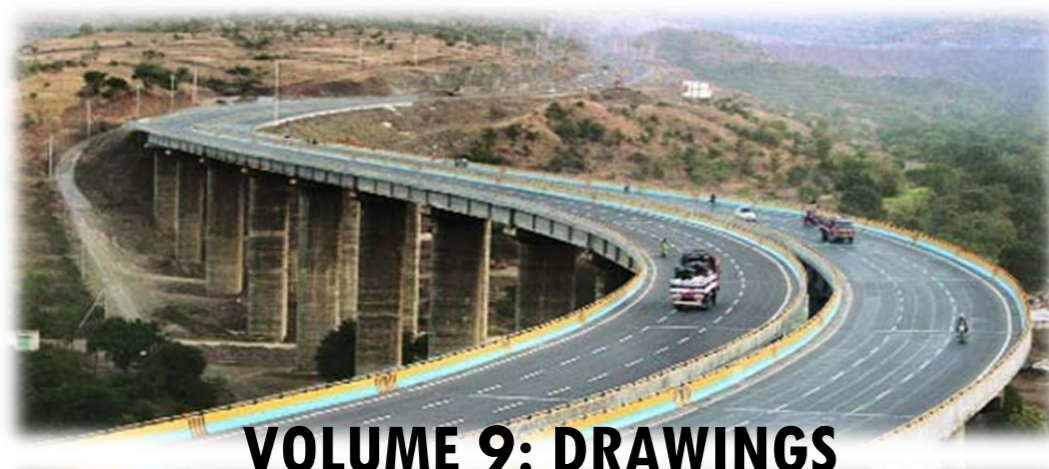
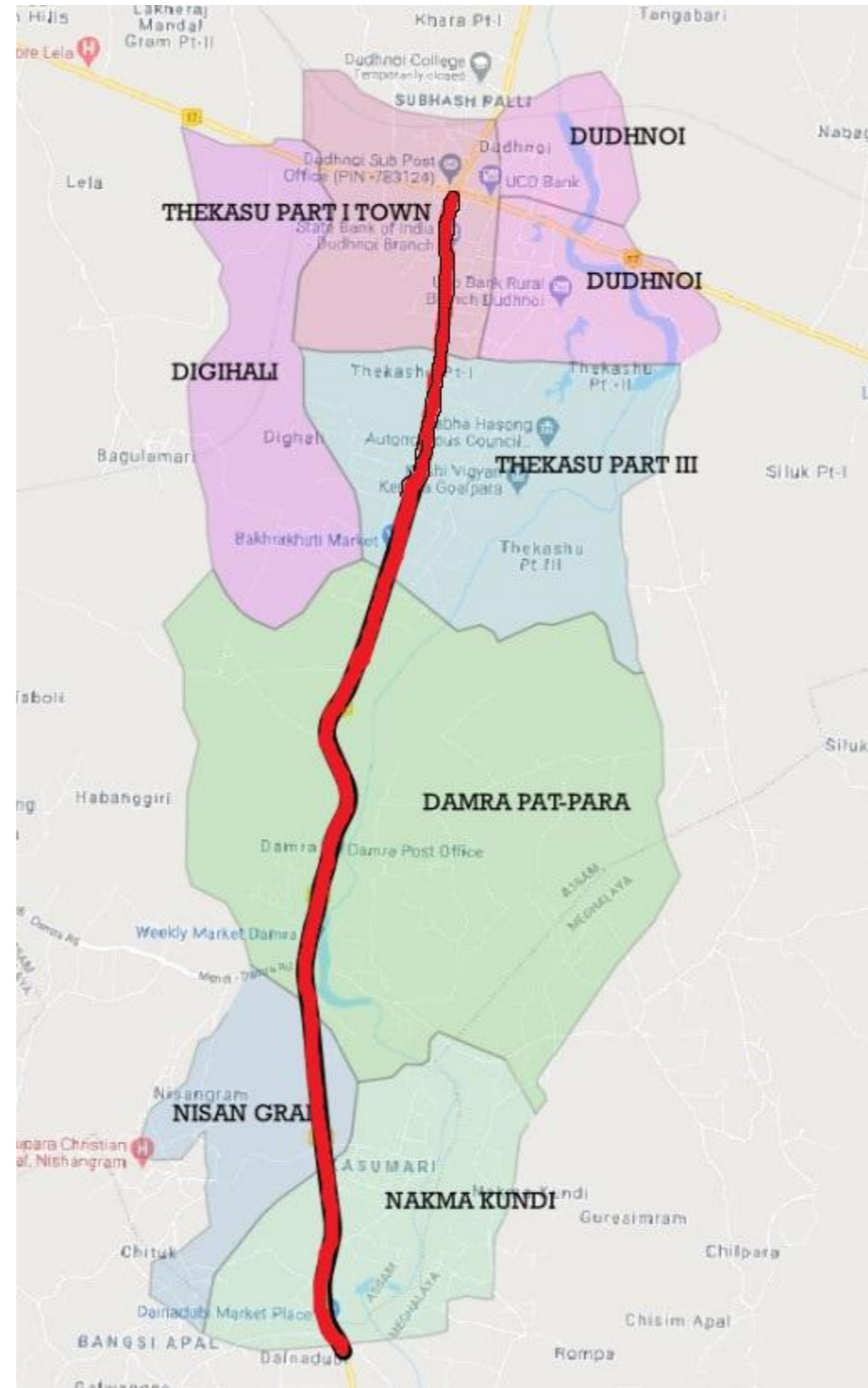
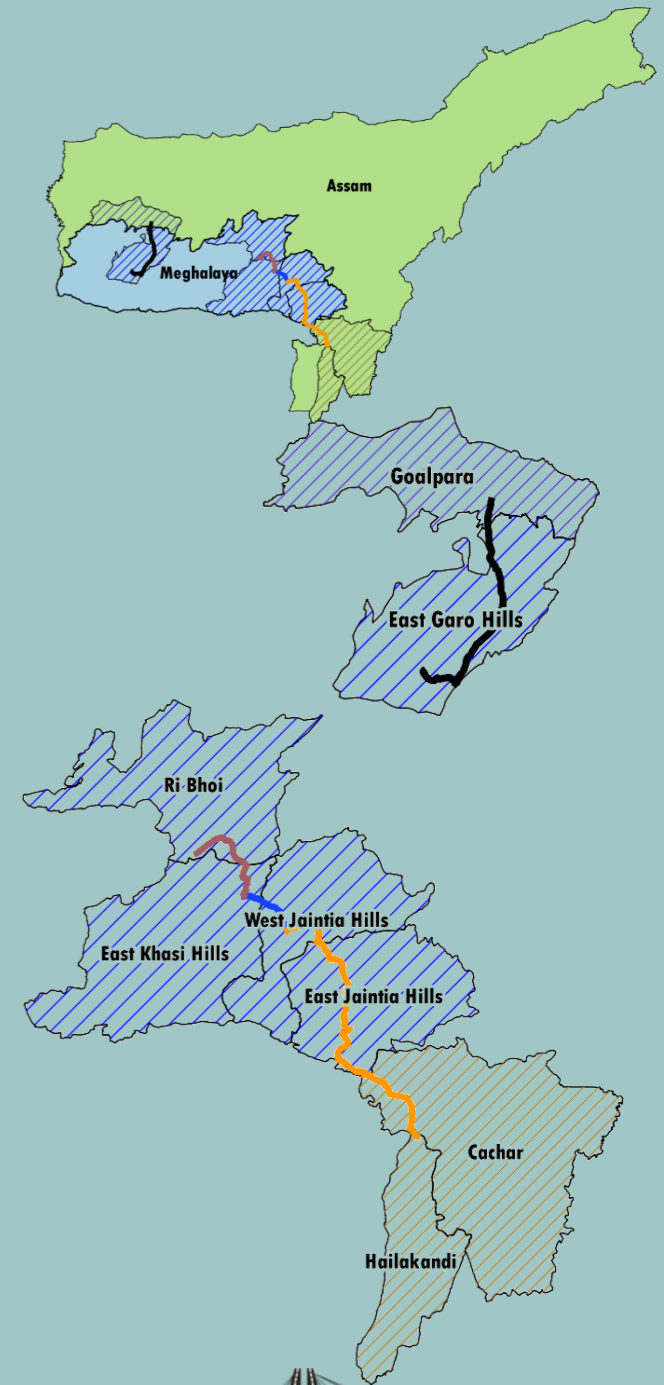
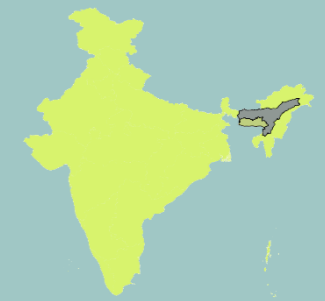


DRAFT DETAILED PROJECT REPORT

CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1

NHIDCL/BHARATMALA/DPR/PHASE1/LOT1/PKG 1A/PKG1B/2018



VOLUME 9: DRAWINGS

Consultant:



Global Krishna JV
ISO 9001 certified

In association with Infycons Creative Software Pvt. Ltd.

F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal -462039

e: globalinfrasonlutions@gmail.com



National Highway & Infrastructure Development Corporation Ltd.
(Ministry of Road Transport & Highways)
Government of India

PTI Building, 3rd Floor, Parliament Street,
New Delhi -110001



TYPICAL CROSS SECTIONS



TYPE - 01

TYPICAL CROSS SECTION FOR 2 - LANE WITH PAVED SHOULDER HIGHWAY OVERLAY WIDENING (BUILT-UP SECTION WITH)

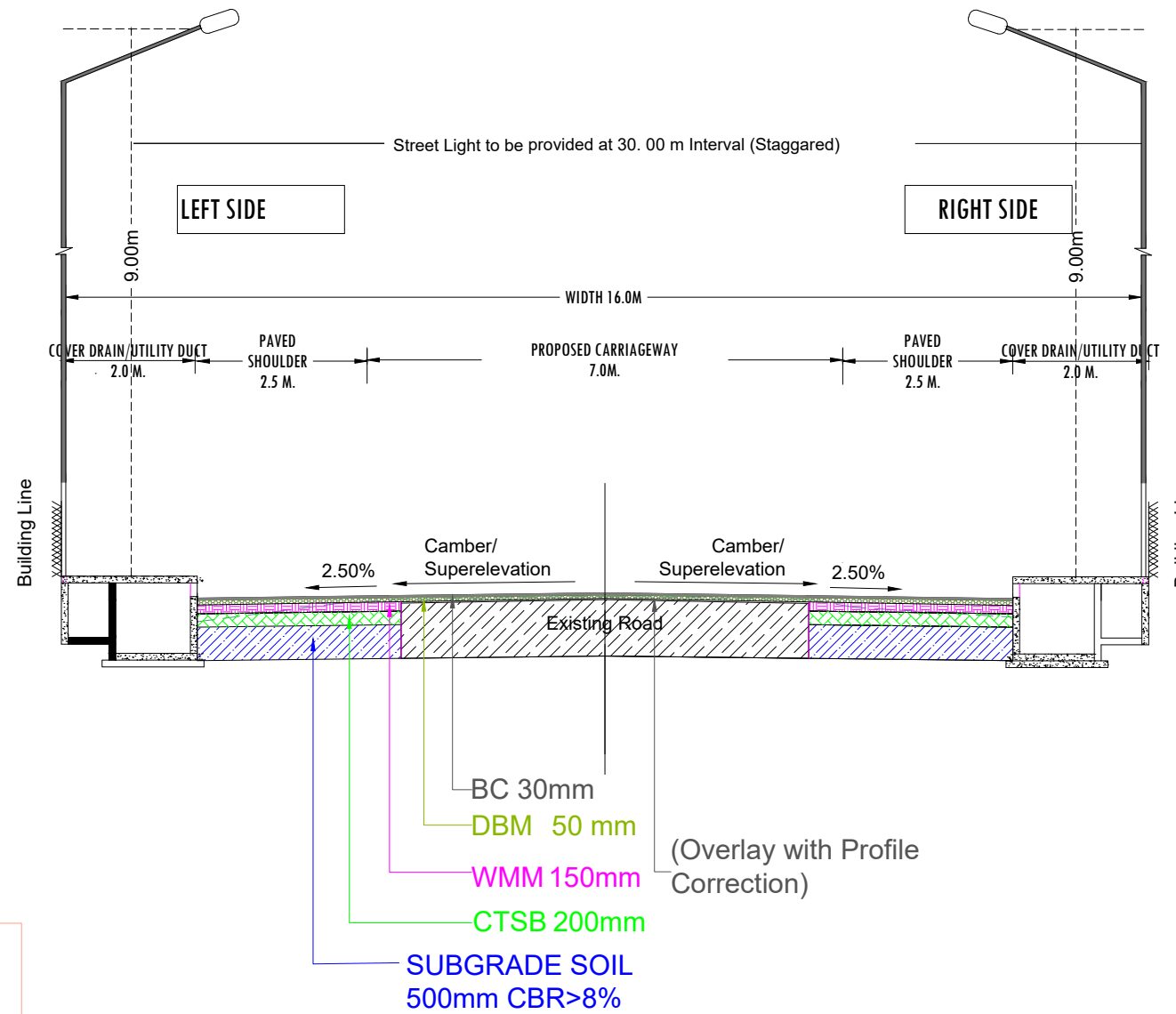
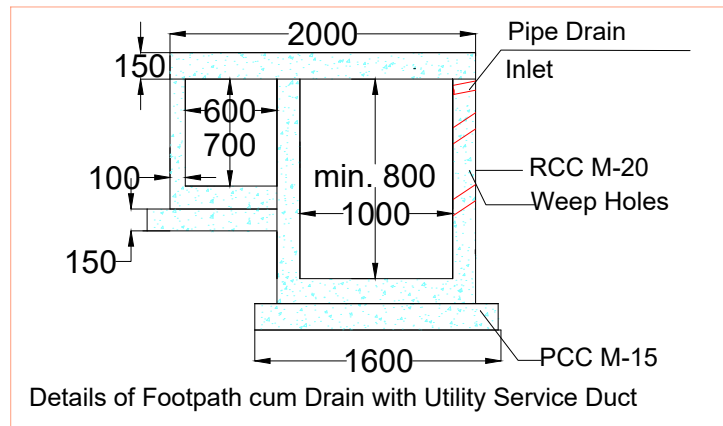


Fig. 2.9 Modified
As per IRC SP 73: 2018



NOTES:

1. ALL DIMENSIONS ARE IN METERS, UNLESS NOTED OTHERWISE.
2. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING. ONLY WRITTEN DIMENSION SHALL BE FOLLOWED

Sr. No.	Chainage From (Km.)	Chainage To (Km.)	Length (Km)	TCS Type
1	0.040	0.650	0.610	1
2	0.650	1.360	0.710	1
3	1.700	2.160	0.460	1
4	2.400	3.390	0.990	1
5	4.230	4.525	0.295	1
6	4.525	4.600	0.075	1
7	5.530	5.900	0.370	1
8	8.250	8.415	0.165	1
Total Length			3.675	

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PFI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI -110001			DESIGN CONSULTANT: Global Infra Solutions in JV with Krishna Techno Consultant. F-2, E-8/11A, Global Tower, Trilanga, Bhopal -462039 e: globalinfra@globalinfra.com web: globalinfra.com		PROJECT: CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) -(PKG-1B)- DUDHNOI-DAINADUBI ROAD (NH-217) IN THE STATE ON MEGHALAYA.			SCALE: Not to scale Dimensions as mentioned	TITLE: TYPICAL CROSS SECTION		CLIENT APPROVAL: _____ SIGNATURE: _____
REV.	DATE	REVISIONS	DWG NO:- GIS/1B/NH/DCL/FS/TCS DRAWN: LK CHECKED: SJ DESIGNED: SC APPROVED: LA								

TYPE - 02

TYPICAL CROSS SECTION FOR 2 - LANE WITH PAVED SHOULDER HIGHWAY OVERLAY WIDENING (BUILT-UP SECTION WITH)

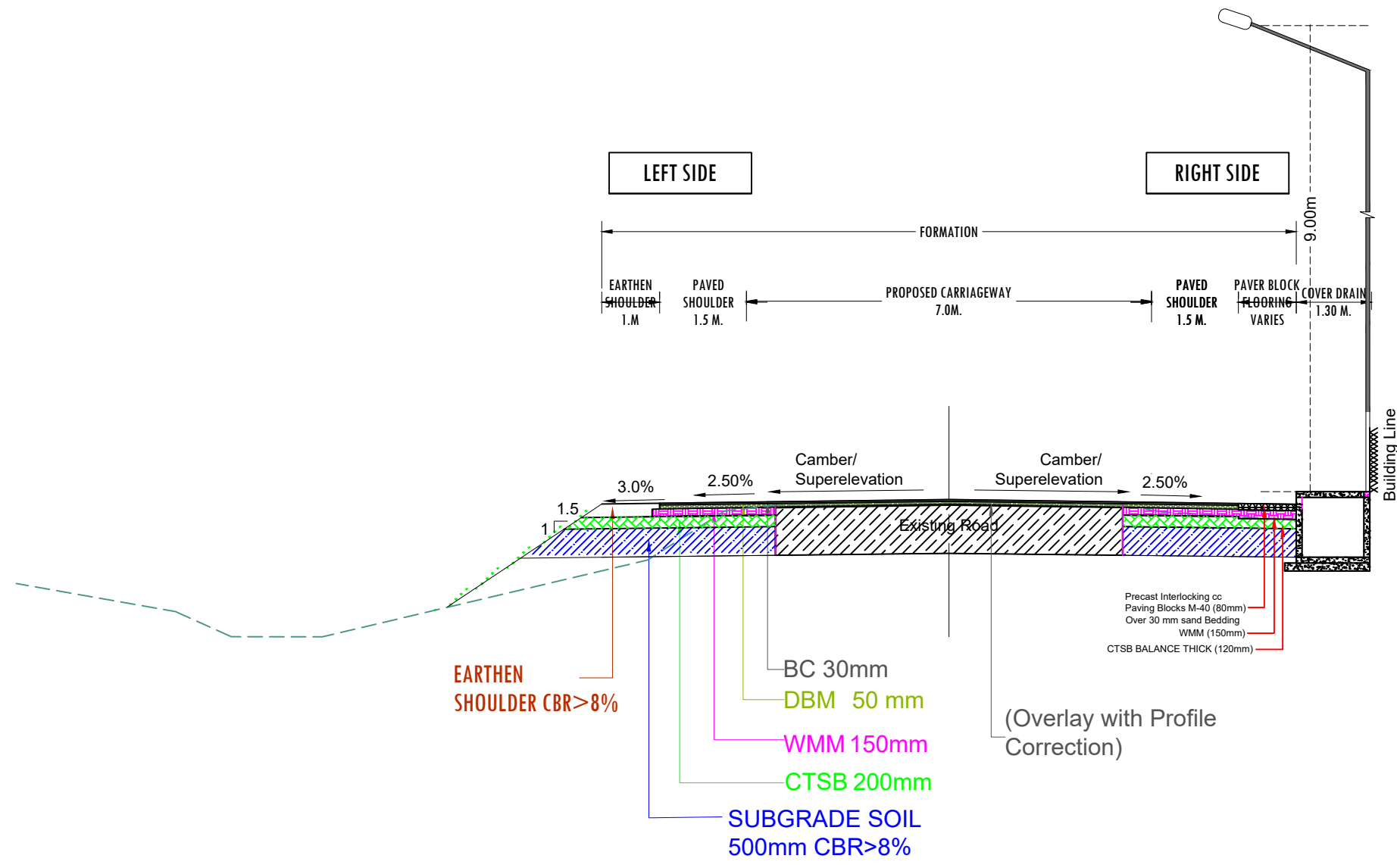


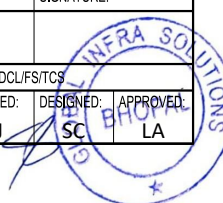
Fig. 2.9 Modified
As per IRC SP 73: 2018

NOTES:

1. ALL DIMENSIONS ARE IN METERS, UNLESS NOTED OTHERWISE.
2. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING.
ONLY WRITTEN DIMENSION SHALL BE FOLLOWED

Sr. No.	Chainage From (Km.)	Chainage To (Km.)	Length (Km)	TCS Type
1	2.160	2.400	0.240	2
2	3.390	3.550	0.160	2
3	4.600	4.720	0.120	2
Total Length			0.520	

		NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI -110001	DESIGN CONSULTANT: Global Infra Solutions in JV with Krishna Techno Consultant. F-2, E-8/11A, Global Tower, Trilanga, Bhopal -462039 e: globalinfra@globalinfra.com web: globalinfra.com	PROJECT: CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) -(PKG-1B)- DUDHNOI-DAINADUBI ROAD (NH-217) IN THE STATE OF MEGHALAYA.	SCALE: Not to scale Dimensions as mentioned	TITLE: TYPICAL CROSS SECTION	CLIENT APPROVAL: _____ SIGNATURE: _____ DWG NO.-GIS/1B/NHDC/IFS/TCS DRAWN: LK CHECKED: SJ DESIGNED: SC APPROVED: LA
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TYPE - 03

TYPICAL CROSS SECTION FOR 2 - LANE WITH PAVED SHOULDER HIGHWAY OVERLAY WIDENING (OPEN COUNTRY -PLAIN TERRAIN)

BANKING SECTION HEIGHT LESS THAN 3m

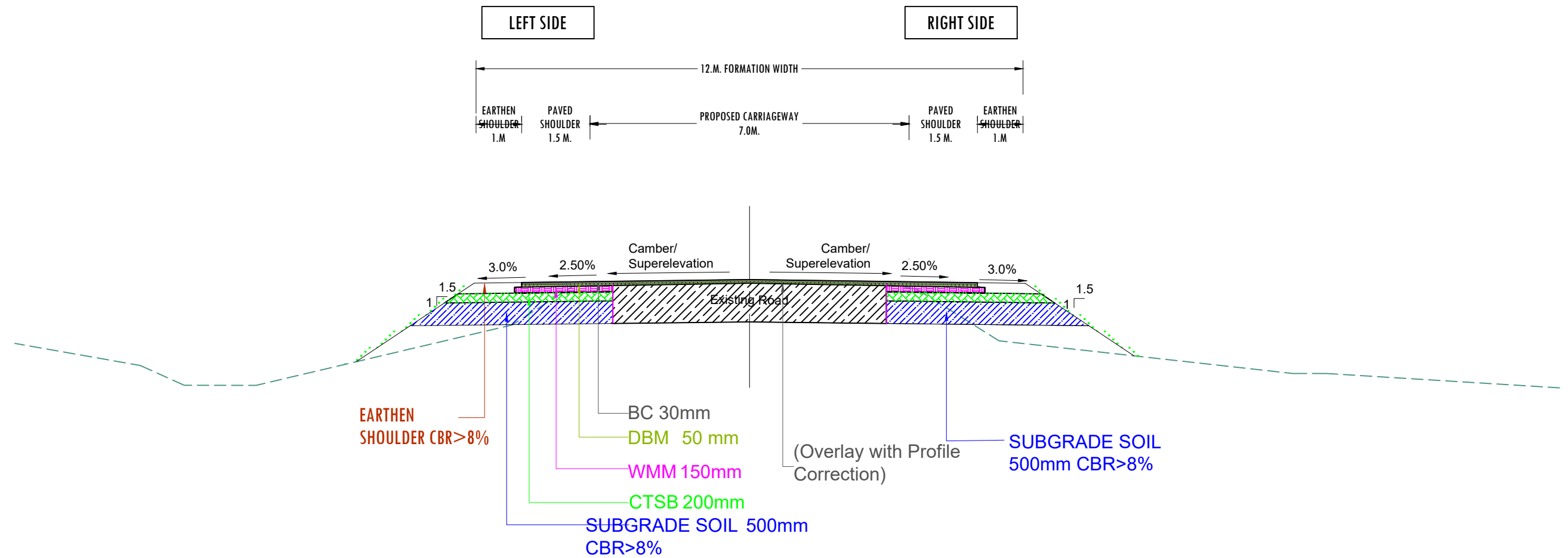


Fig. 2.9 Modified
As per IRC SP 73: 2018

NOTES:

1. ALL DIMENSIONS ARE IN METERS, UNLESS NOTED OTHERWISE.
2. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING. ONLY WRITTEN DIMENSION SHALL BE FOLLOWED

Sr. No.	Chainage From (Km.)	Chainage To (Km.)	Length (Km)	TCS Type
1	1.360	1.700	0.340	3
2	3.550	3.650	0.100	3
3	4.720	5.200	0.480	3
4	5.900	8.250	2.350	3
Total Length			3.270	

	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PFI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI -110001	DESIGN CONSULTANT: Global Infra Solutions in JV with Krishna Techno Consultant. F-2, E-8/11A, Global Tower, Trilanga, Bhopal -462039 e: globalinfra@globalinfra.com web: globalinfra.com	PROJECT: CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) -(PKG-1B)- DUDHNOI-DAINADUBI ROAD (NH-217) IN THE STATE ON MEGHALAYA.	SCALE: Not to scale Dimensions as mentioned	TITLE: TYPICAL CROSS SECTION	CLIENT APPROVAL: _____ SIGNATURE: _____ DWG NO.-GIS/1B/NH/DCL/FS/TCS DRAWN: LK CHECKED: SJ DESIGNED: SC APPROVED: LA
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TYPE - 04

TYPICAL CROSS SECTION FOR 2 - LANE WITH PAVED SHOULDER HIGHWAY (OPEN COUNTRY -PLAIN TERRAIN)

BANKING SECTION HEIGHT LESS THAN 3m

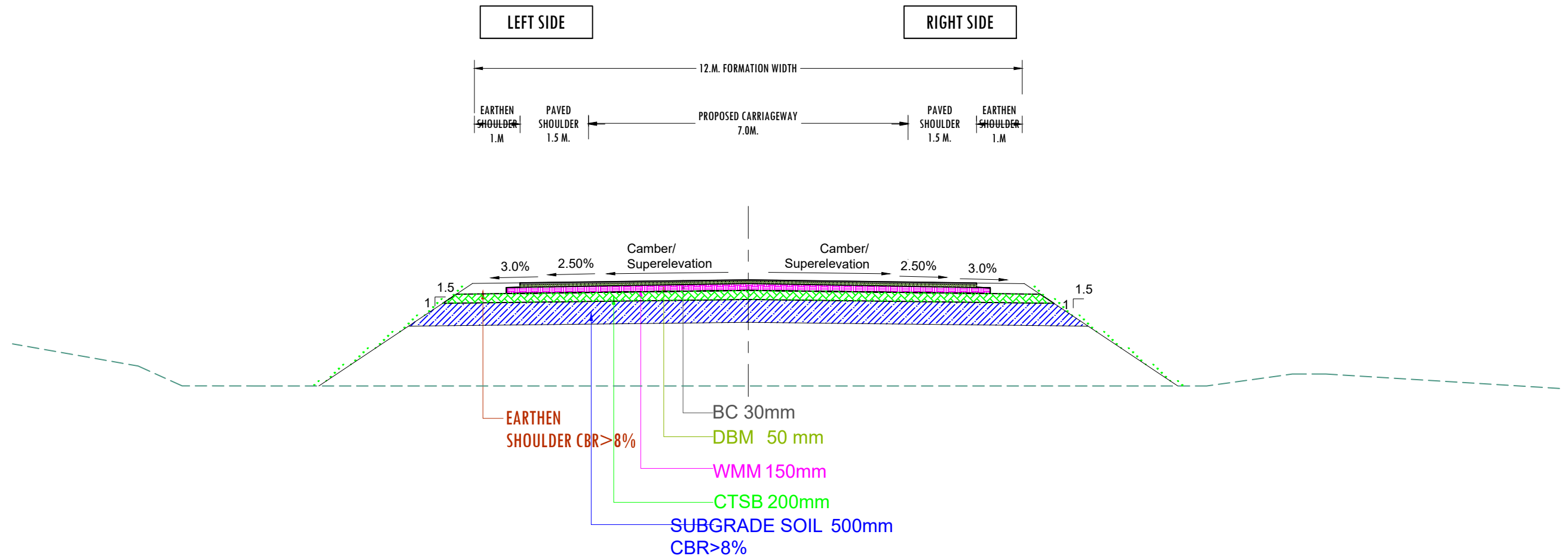


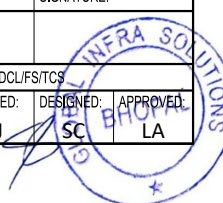
Fig. 2.9 Modified
As per IRC SP 73:
2018

NOTES:

1. ALL DIMENSIONS ARE IN METERS, UNLESS NOTED OTHERWISE.
2. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING. ONLY WRITTEN DIMENSION SHALL BE FOLLOWED

Sr. No.	Chainage From (Km.)	Chainage To (Km.)	Length (Km)	TCS Type
1	3.650	3.740	0.090	4
2	3.900	4.230	0.330	4
3	5.200	5.380	0.180	4
Total Length			0.600	

		NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI -110001	DESIGN CONSULTANT: Global Infra Solutions in JV with Krishna Techno Consultant. <small>F-2, E-8/11A, Global Tower, Trilanga, Bhopal -462039 e: globalinfrasolutions.bpi@gmail.com web: globalinfrasolutions.org</small>	PROJECT: CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) -(PKG-1B)- DUDHNOI-DAINADUBI ROAD (NH-217) IN THE STATE ON MEGHALAYA.	SCALE: Not to scale Dimensions as mentioned	TITLE: TYPICAL CROSS SECTION	CLIENT APPROVAL: _____ SIGNATURE: _____ <small>DWG NO:-GIS/1B/NH/DCL/FS/TCS</small> DRAWN: LK CHECKED: SJ DESIGNED: SC APPROVED: LA
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TYPE - 05
TYPICAL CROSS SECTION FOR 2 - LANE WITH PAVED SHOULDER HIGHWAY
(OPEN COUNTRY -PLAIN TERRAIN)

CUTTING SECTION

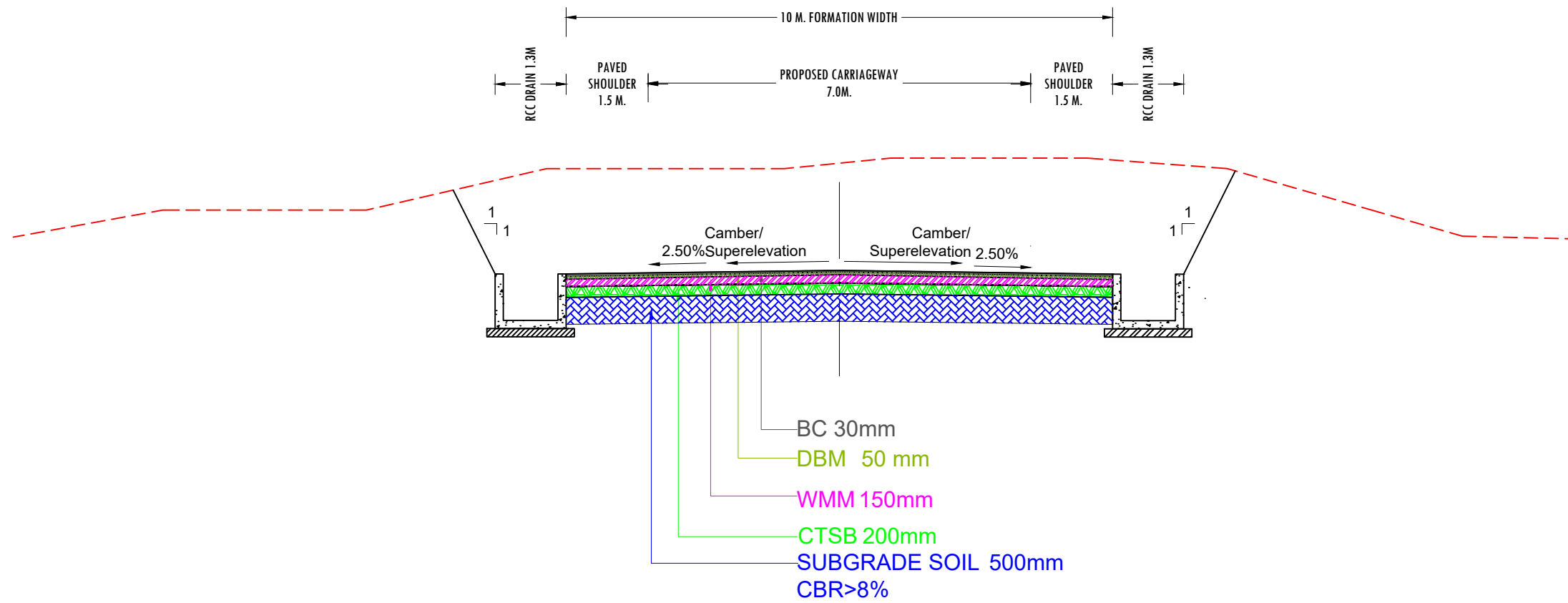


Fig. 2.9 Modified
 As per IRC SP 73:
 2018

NOTES:

1. ALL DIMENSIONS ARE IN METERS, UNLESS NOTED OTHERWISE.
2. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING. ONLY WRITTEN DIMENSION SHALL BE FOLLOWED

Sr. No.	Chainage From (Km.)	Chainage To (Km.)	Length (Km)	TCS Type
1	3.740	3.900	0.160	5
Total Length			0.160	

	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PFI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI -110001	DESIGN CONSULTANT: Global Infra Solutions in JV with Krishna Techno Consultant. F-2, E-8/11A, Global Tower, Trilanga, Bhopal -462039 e: globalinfra@globalinfra.com web: globalinfra.com	PROJECT: CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) -(PKG-1B)- DUDHNOI-DAINADUBI ROAD (NH-217) IN THE STATE ON MEGHALAYA.	SCALE: Not to scale Dimensions as mentioned	TITLE: TYPICAL CROSS SECTION	CLIENT APPROVAL: SIGNATURE: DWG NO.-GIS/1B/NHDC/LIFS/TCS DRAWN: LK CHECKED: SJ DESIGNED: SC APPROVED: LA
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TYPE - 06

TYPICAL CROSS SECTION FOR 2 - LANE WITH PAVED SHOULDER HIGHWAY (OPEN COUNTRY -PLAIN TERRAIN)

BANKING SECTION WITH RETAINING WALL IN ONE SIDE HEIGHT MORE THAN 3m

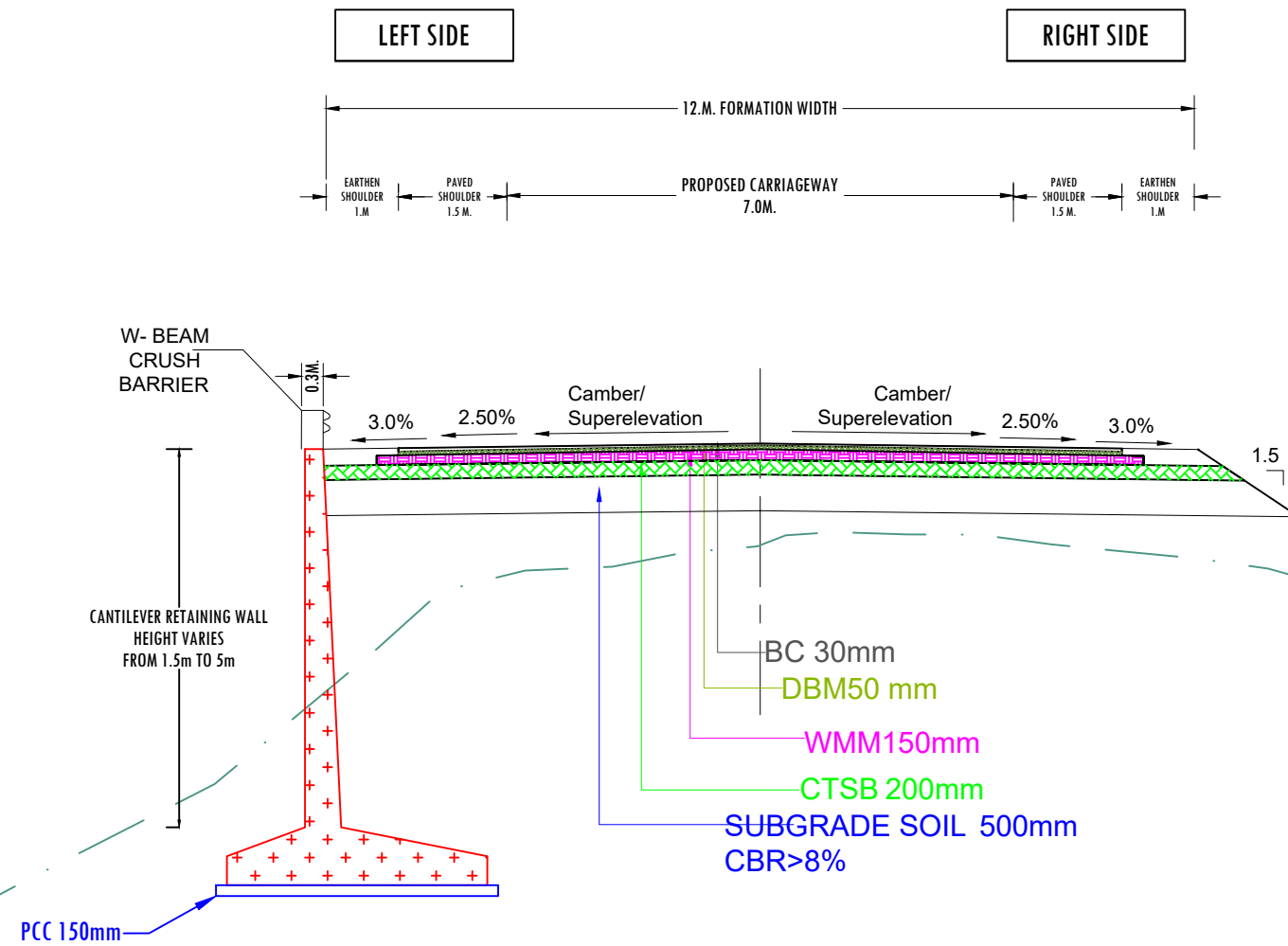


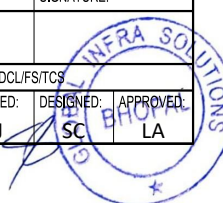
Fig. 2.9 Modified
As per IRC SP 73:
2018

NOTES:

1. ALL DIMENSIONS ARE IN METERS, UNLESS NOTED OTHERWISE.
2. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING.
ONLY WRITTEN DIMENSION SHALL BE FOLLOWED

Sr. No.	Chainage From (Km.)	Chainage To (Km.)	Length (Km)	TCS Type
1	5.38	5.53	0.15	6
Total Length			0.150	

		NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI -110001	DESIGN CONSULTANT: Global Infra Solutions in JV with Krishna Techno Consultant. F-2, E-8/11A, Global Tower, Trilanga, Bhopal -462039 e: globalinfrasolutions.bpi@gmail.com web: globalinfrasolutions.org	PROJECT: CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) -(PKG-1B)- DUDHNOI-DAINADUBI ROAD (NH-217) IN THE STATE ON MEGHALAYA.	SCALE: Not to scale Dimensions as mentioned	TITLE: TYPICAL CROSS SECTION	CLIENT APPROVAL: _____ SIGNATURE: _____ DWG NO:-GIS/1B/NH/DCL/IFS/TCS DRAWN: LK CHECKED: SJ DESIGNED: SC APPROVED: LA
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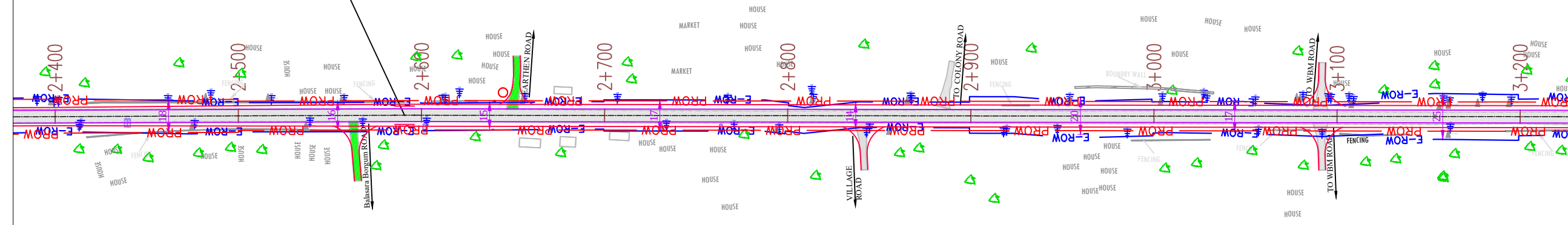




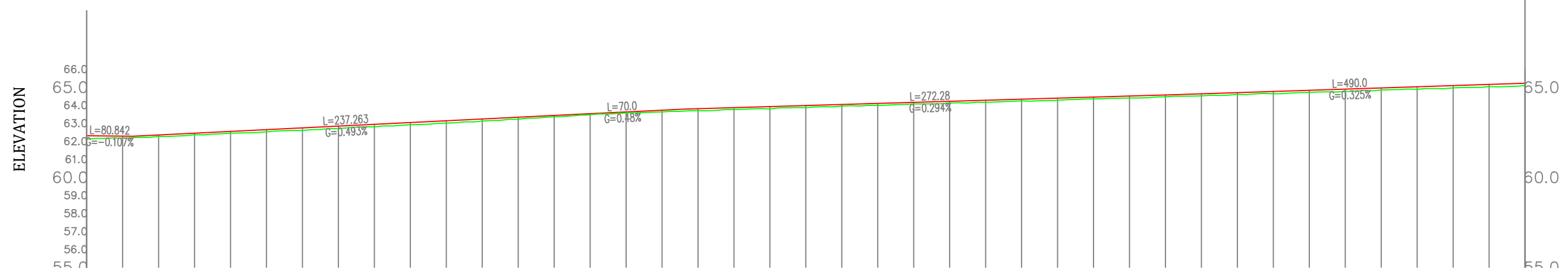
PLAN & PROFILE



Curve Name	S-R
Deflection Angle	0°18'24.362
Circular Radius	2000.0
Transition Length	0.0
Starting Chainage	2+583.38
Ending Chainage	2+594.088
Circular Curve Length	10.708
Total X of Spiral (Xt)	0.0
Total Y of Spiral (Yt)	0.0
Chord of spiral (Lc)	0.0
SPEED (Kmh)	100
Super Elevation (e)	2.5 %



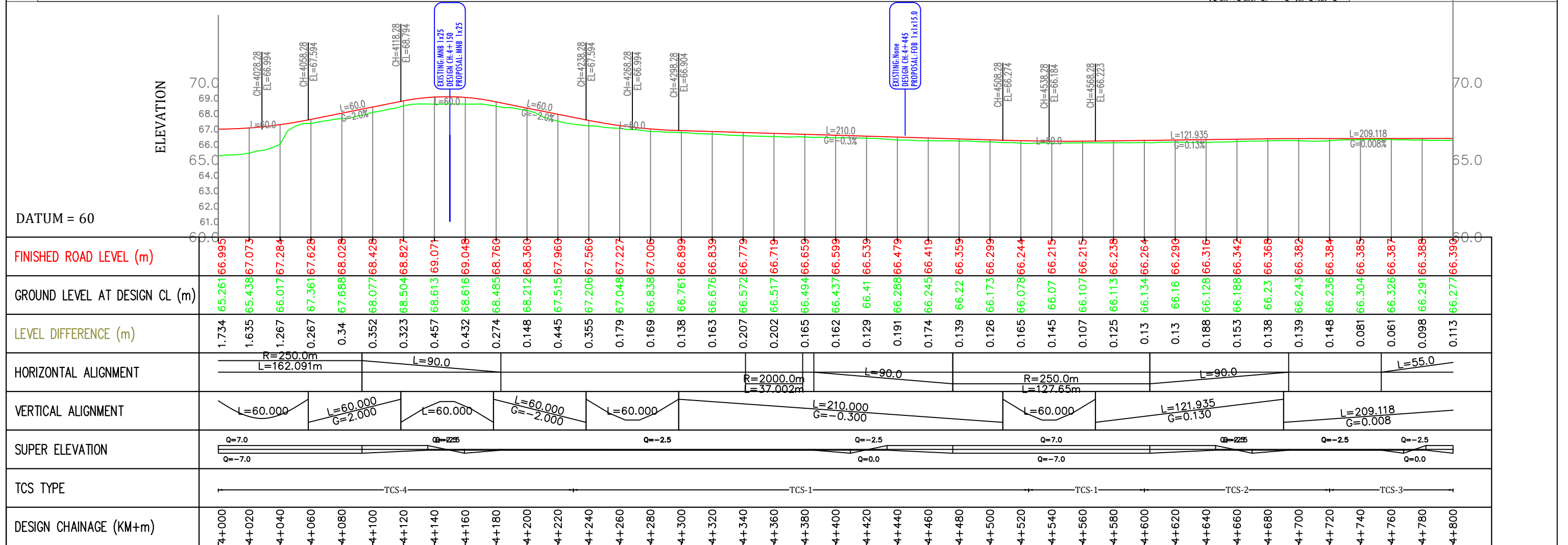
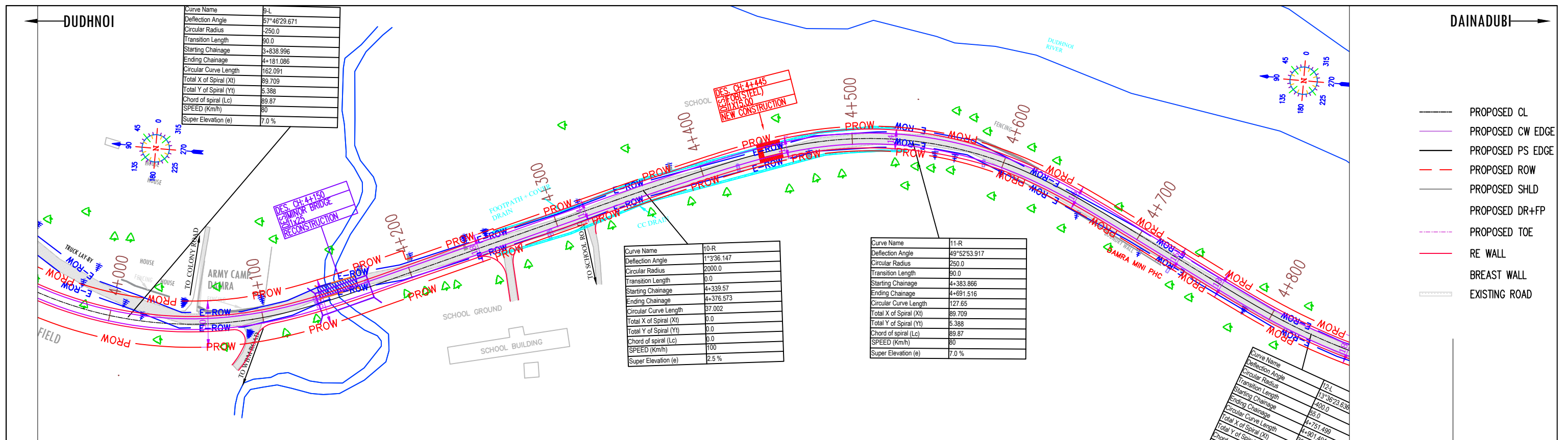
- PROPOSED CL
- PROPOSED CW EDGE
- PROPOSED PS EDGE
- PROPOSED ROW
- PROPOSED SHLD
- PROPOSED DR+FP
- PROPOSED TOE
- RE WALL
- BREAST WALL
- EXISTING ROAD



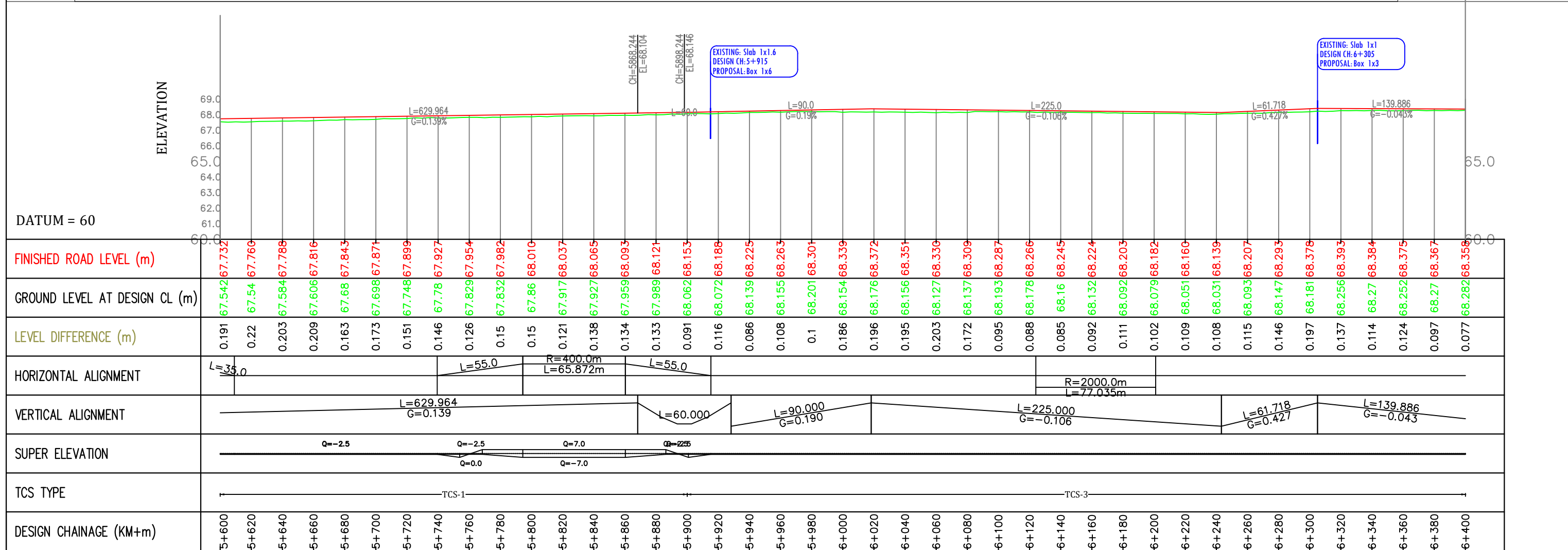
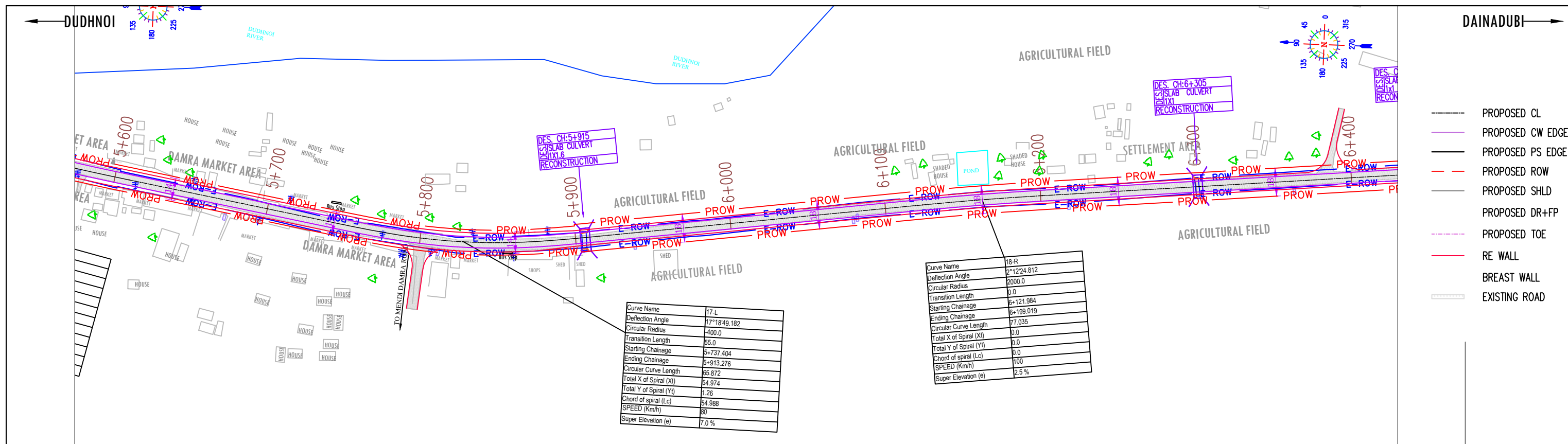
DATUM = 55

FINISHED ROAD LEVEL (m)	62.309	62.283	62.347	62.446	62.545	62.643	62.742	62.844	62.939	63.038	63.137	63.236	63.334	63.433	63.529	63.625	63.724	63.804	63.863	63.922	63.986	64.039	64.098	64.157	64.215	64.274	64.333	64.394	64.456	64.509	64.568	64.634	64.696	64.764	64.826	64.894	64.956	65.024	65.086	65.154	65.216															
GROUND LEVEL AT DESIGN CL (m)	62.115	62.171	62.27	62.36	62.44	62.522	62.592	62.693	62.797	62.914	63.007	63.119	63.219	63.354	63.465	63.574	63.627	63.702	63.759	63.797	63.862	63.951	63.984	64.071	64.123	64.154	64.237	64.333	64.265	64.394	64.349	64.456	64.397	64.509	64.467	64.568	64.512	64.634	64.607	64.696	64.633	64.764	64.712	64.826	64.756	64.894	64.845	64.956	64.879	65.024	64.958	65.086	65.03	65.154	65.09	65.216
LEVEL DIFFERENCE (m)	0.19	0.112	0.078	0.086	0.105	0.121	0.15	0.147	0.143	0.124	0.129	0.117	0.116	0.079	0.065	0.052	0.094	0.102	0.104	0.125	0.118	0.088	0.114	0.085	0.093	0.12	0.096	0.127	0.101	0.112	0.1	0.119	0.089	0.128	0.114	0.135	0.111	0.142	0.128	0.121	0.126															
HORIZONTAL ALIGNMENT	R=2000.0m L=10.708m																																																							
VERTICAL ALIGNMENT	$L=80.842$ $G=-0.107$ $L=237.263$ $G=0.493$ $L=70.000$ $G=0.480$ $L=272.280$ $G=0.294$ $L=490.000$ $G=0.325$																																																							
SUPER ELEVATION	—																																																							
TCS TYPE	TCS-1																																																							
DESIGN CHAINAGE (KM+m)	2+400	2+420	2+440	2+460	2+480	2+500	2+520	2+540	2+560	2+580	2+600	2+620	2+640	2+660	2+680	2+700	2+720	2+740	2+760	2+780	2+800	2+820	2+840	2+860	2+880	2+900	2+920	2+940	2+960	2+980	3+000	3+020	3+040	3+060	3+080	3+100	3+120	3+140	3+160	3+180	3+200															

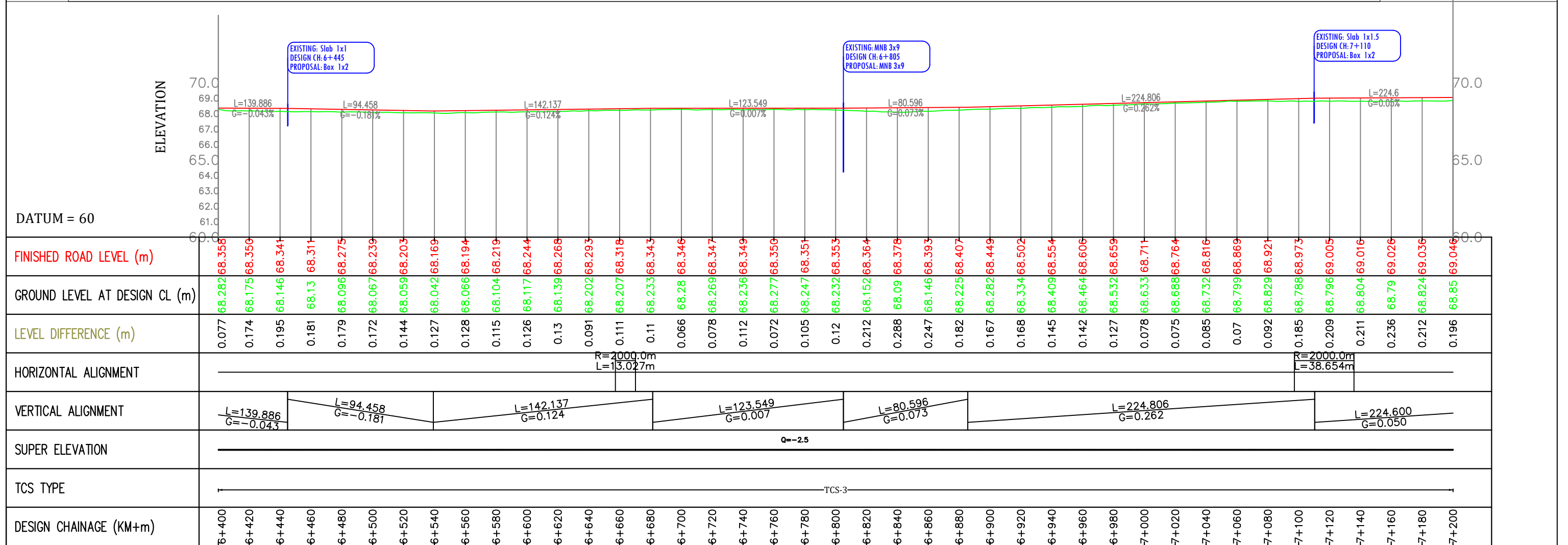
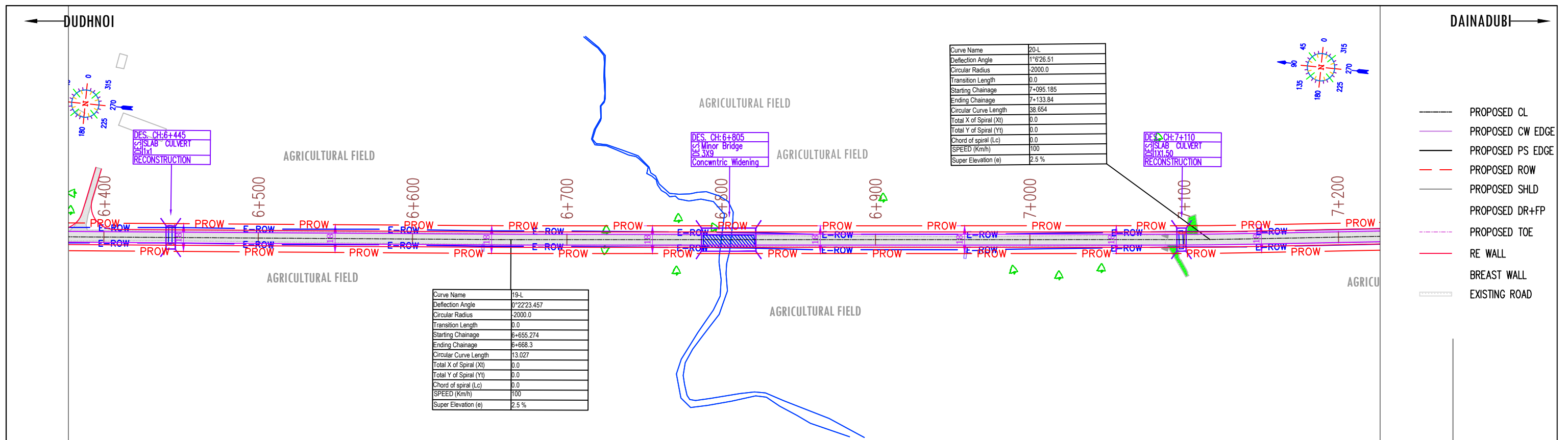
REV.	DATE	REVISIONS	<p>NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI - 110001</p>	<p>Global Infra Solutions DESIGN CONSULTANT in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd. F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039 e: globalinfra@globalinfra.com web: globalinfra.com</p>	<p>CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)</p>	<p>SCALE AT AS SIZE DRAWING HORIZ. 1:2500 VERT. 1:250</p>	<p>PLAN AND PROFILE Km - 2+400 to Km - 3+200</p>	CLIENT APPROVAL:	SIGNATURE:
								<p>DWG NO: - DRAWN: LK CHECKED: SJ DESIGNED: SG APPROVED: LA</p>	



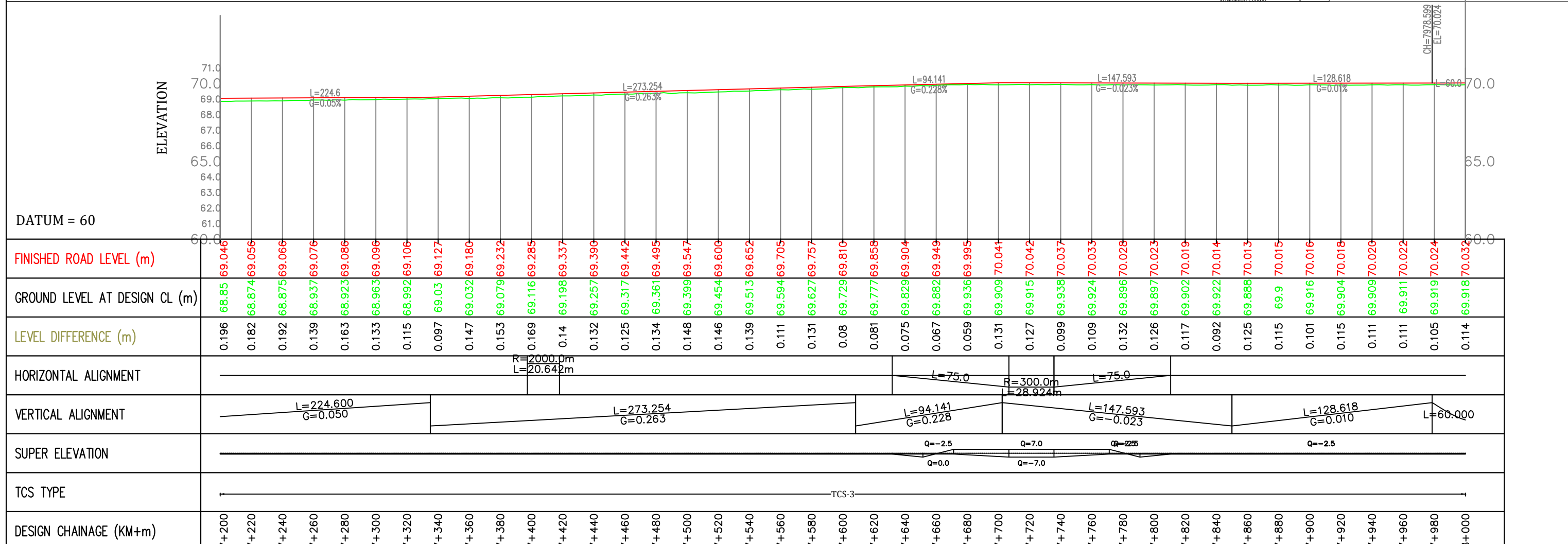
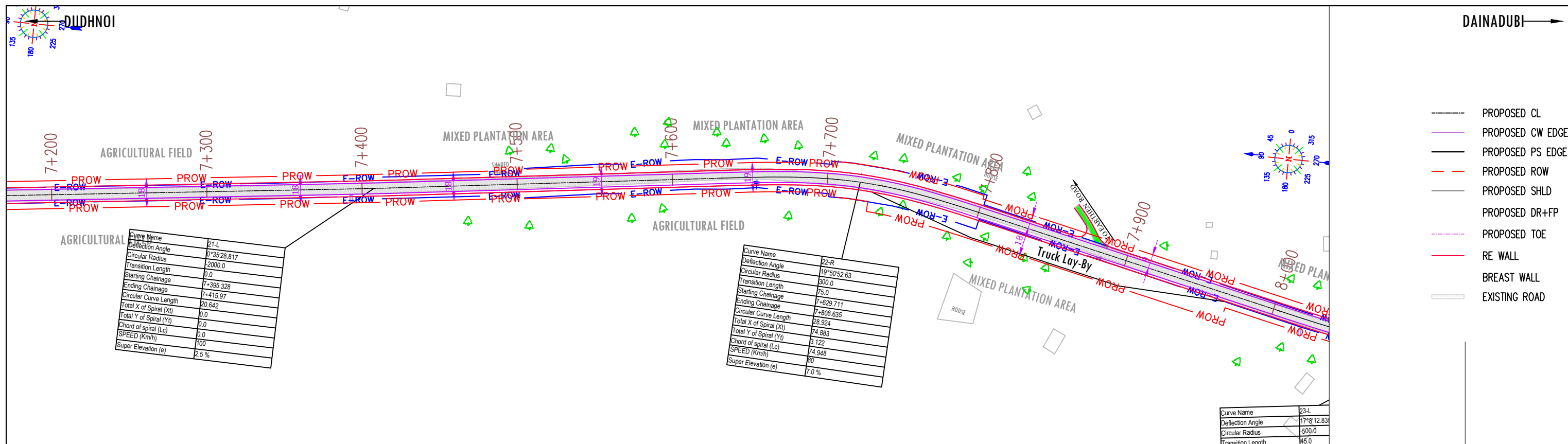
REV.	DATE	REVISIONS	<p>NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI - 110001</p>	<p>Global Infra Solutions DESIGN CONSULTANT in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd. F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039 e: globalinfra@globalinfra.com web: globalinfra.com</p>	<p>CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)</p>	<p>SCALE AT AS SIZE DRAWING HORIZ. 1:2500 VERT. 1:250</p>	<p>PLAN AND PROFILE Km - 4+000 to Km - 4+800</p>	CLIENT APPROVAL:	SIGNATURE:		
								DWG NO.:	DESIGNED:	APPROVED:	
								LK	SJ	SG	LA



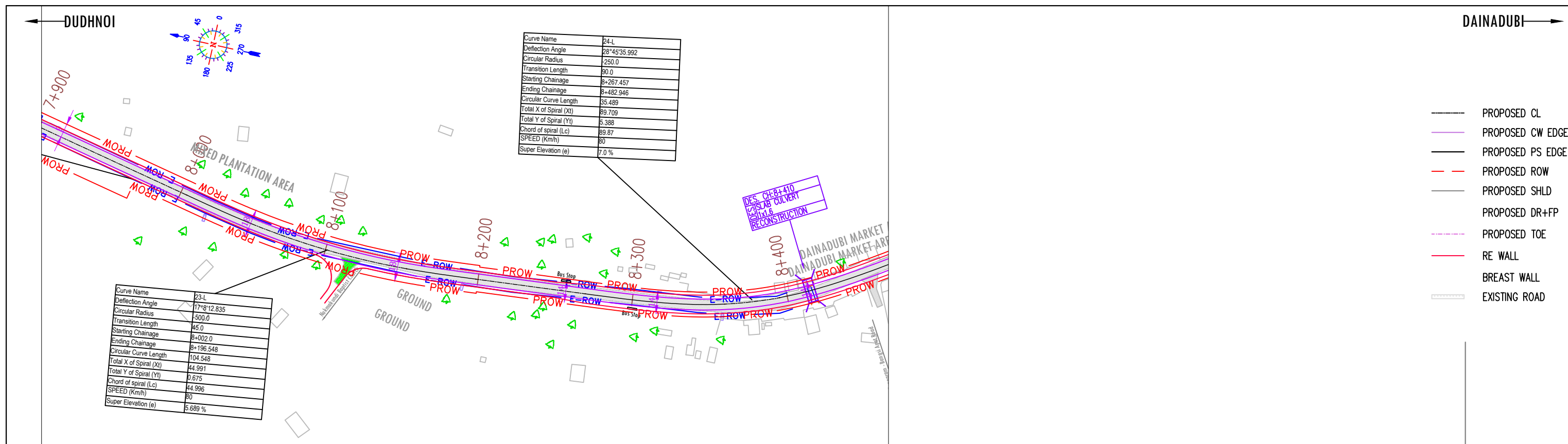
CLIENT: NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI - 110001		DESIGN CONSULTANT: Global Infra Solutions IN JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd. F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039 e: globalinfra@globalinfra.com web: globalinfra.com		PROJECT: CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)		SCALE AT AS SIZE DRAWING HORIZ. 1:2500 VERT. 1:250		TITLE: PLAN AND PROFILE		CLIENT APPROVAL: DWG NO:- DRAWN: LK CHECKED: SJ DESIGNED: SG APPROVED: LA		SIGNATURE: 	
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<p>CLIENT: NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI - 110001</p>	<p>DESIGN CONSULTANT: Global Infra Solutions in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd. F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039 e: globalinfra@globalinfra.com web: globalinfra.com</p>	<p>PROJECT: CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)</p>	<p>SCALE AT A3 SIZE DRAWING HORIZ. 1:2500 VERT. 1:250</p>	<p>TITLE: PLAN AND PROFILE Km - 6+400 to Km - 7+200</p>	<p>CLIENT APPROVAL: SIGNATURE: _____ DWG NO: - DRAWN: LK CHECKED: SJ DESIGNED: SG APPROVED: LA</p>
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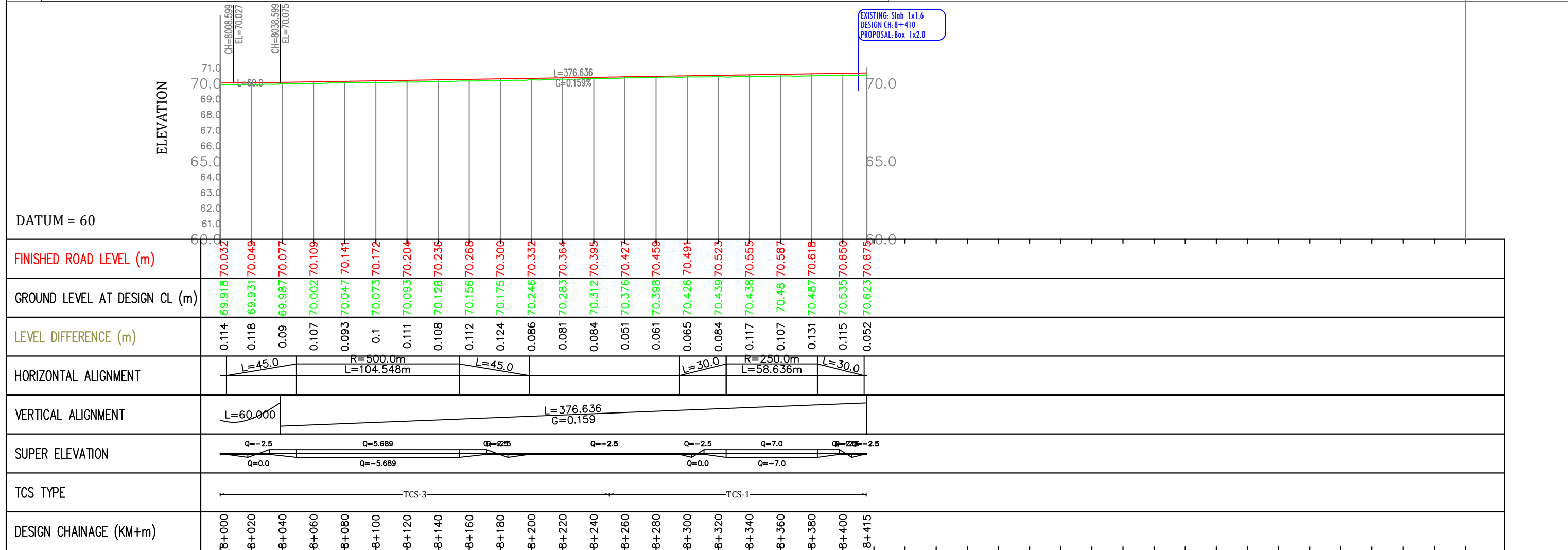
REV.	DATE	REVISIONS		NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI - 110001		Global Infra Solutions in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd. F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039 e: globalinfraolutions@gmail.com web: globalinfraolutions.org	CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)	SCALE AT AS SIZE DRAWING HORIZ. 1:2500 VERT. 1:250 	PLAN AND PROFILE Km - 7+200 to Km - 8+000	CLIENT APPROVAL:	SIGNATURE:		
										DWG NO.:	CHECKED:	DESIGNED:	APPROVED:
										LK	SJ	SG	LA



Curve Name	24-L
Deflection Angle	28°45'35.992
Circular Radius	250.0
Transition Length	30.0
Starting Chainage	8+267.457
Ending Chainage	8+482.946
Circular Curve Length	35.489
Total X of Spiral (Xt)	89.709
Total Y of Spiral (Yt)	5.388
Chord of spiral (Lc)	89.87
SPEED (Kmh)	80
Super Elevation (e)	7.0 %

Curve Name	23-L
Deflection Angle	17°8'12.835
Circular Radius	500.0
Transition Length	45.0
Starting Chainage	8+002.0
Ending Chainage	8+196.548
Circular Curve Length	104.548
Total X of Spiral (Xt)	44.991
Total Y of Spiral (Yt)	0.675
Chord of spiral (Lc)	44.996
SPEED (Kmh)	80
Super Elevation (e)	5.689 %

- PROPOSED CL
- PROPOSED CW EDGE
- PROPOSED PS EDGE
- PROPOSED ROW
- PROPOSED SHLD
- PROPOSED DR+FP
- PROPOSED TOE
- RE WALL
- BREAST WALL
- EXISTING ROAD

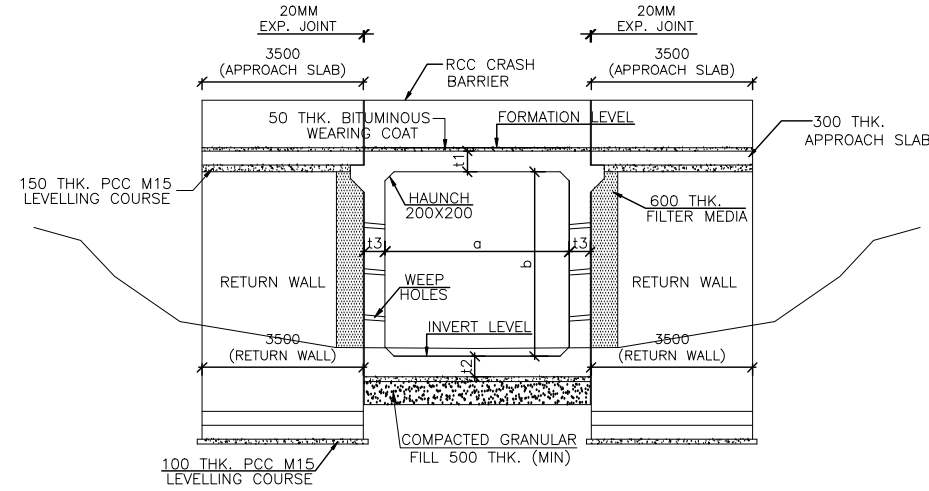


REV.	DATE	REVISIONS	NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI - 110001	Global Infra Solutions in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd. F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039 e: globalinfraolutions@gmail.com web: globalinfraolutions.org	CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)	SCALE AT A3 SIZE DRAWING HORIZ. 1:2500 VERT. 1:250	TITLE: PLAN AND PROFILE Km - 8+000 to Km - 8+415	CLIENT APPROVAL:	SIGNATURE:
								DWG NO:-	DESIGNED: LA
			DRWN: LK	CHECKED: SJ	APPROVED: SG				

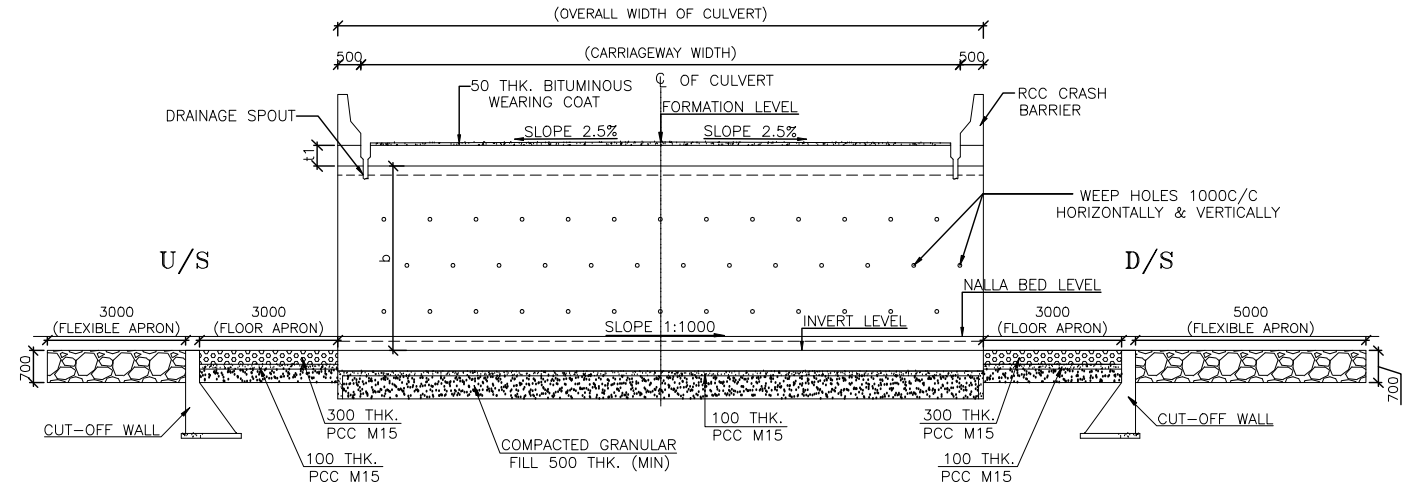


STRUCTURAL DRAWING – CULVERT & BRIDGES

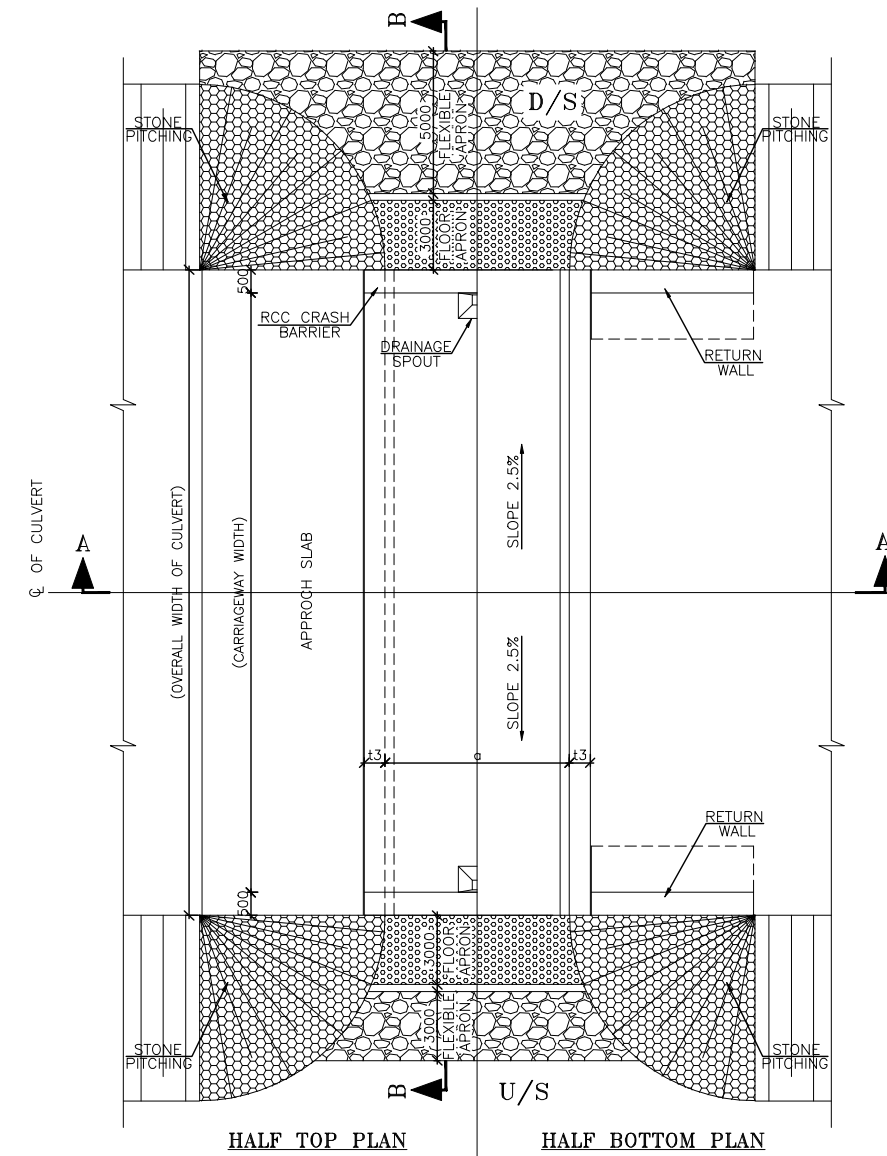




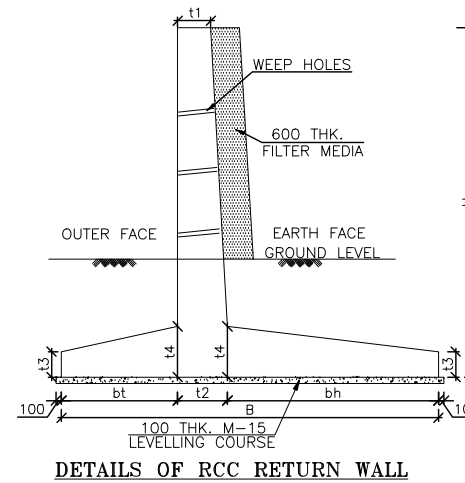
LONGITUDINAL SECTION OF BOX CULVERT
(SECTION AT A-A)



CROSS-SECTION OF BOX CULVERT
(SECTION AT B-B)



Sr. No.	Existing Chainage	Design Chainage	Type of Structure	Span Arrangement (m)	Overall Width (m)	FRL (M)	Bed Level (M)	Invert Level (M)	Cut-off Level (M)	DIMENSIONAL DETAILS OF BOX					DIMENSIONAL DETAILS OF RETURN WALL							Length of Box (m)		
										Box Size	a (mm)	b (mm)	t ₁ (mm)	t ₂ (mm)	t ₃ (mm)	H (mm)	B (mm)	b ₁ (mm)	b ₂ (mm)	t ₁ (mm)	t ₂ (mm)		t ₃ (mm)	t ₄ (mm)
1	0+800	0+800	Box Culvert	1 / 2x2 / 0	12.00	59.836	58.220	57.536	55.736	2x2	2000	2000	250	300	300	4100	2460	740	1370	175	350	280	560	2600
2	2+345	2+345	Box Culvert	1 / 2x2 / 0	12.00	62.350	60.474	60.050	58.250	2x2	2000	2000	250	300	300	4100	2460	740	1370	175	350	280	560	2600
3	3+380	3+385	Box culvert	1 / 2x2 / 0	12.00	65.985	64.408	63.685	61.885	2x2	2000	2000	250	300	300	4100	2460	740	1370	175	350	280	560	2600
4	5+500	5+515	Box culvert	1 / 2x2 / 0	12.00	67.354	66.714	65.054	63.254	2x2	2000	2000	250	300	300	4100	2460	740	1370	175	350	280	560	2600
5	5+900	5+915	Box culvert	1 / 6x3 / 0	12.00	68.335	66.777	64.835	63.035	6x3	6000	3000	450	500	350	5300	3180	960	1770	225	450	360	720	6700
6	6+295	6+305	Box culvert	1 / 3x2.5 / 0	12.00	68.949	66.793	66.099	64.299	3x2.5	3000	2500	300	350	330	4650	2790	840	1560	195	390	310	620	3660
7	6+435	6+445	Box culvert	1 / 2x1.5 / 0	12.00	68.919	67.209	67.119	65.319	2x1.5	2000	1500	250	300	250	3600	2160	650	1210	150	300	240	480	2500
8	7+090	7+110	Box culvert	1 / 2x2 / 0	12.00	69.495	69.825	67.195	65.395	2x2	2000	2000	250	300	300	4100	2460	740	1370	175	350	280	560	2600
9	8+355	8+410	Box culvert	1 / 2x1.5 / 0	12.00	71.110	69.536	69.310	67.510	2x1.5	2000	1500	250	300	250	3600	2160	650	1210	150	300	240	480	2500

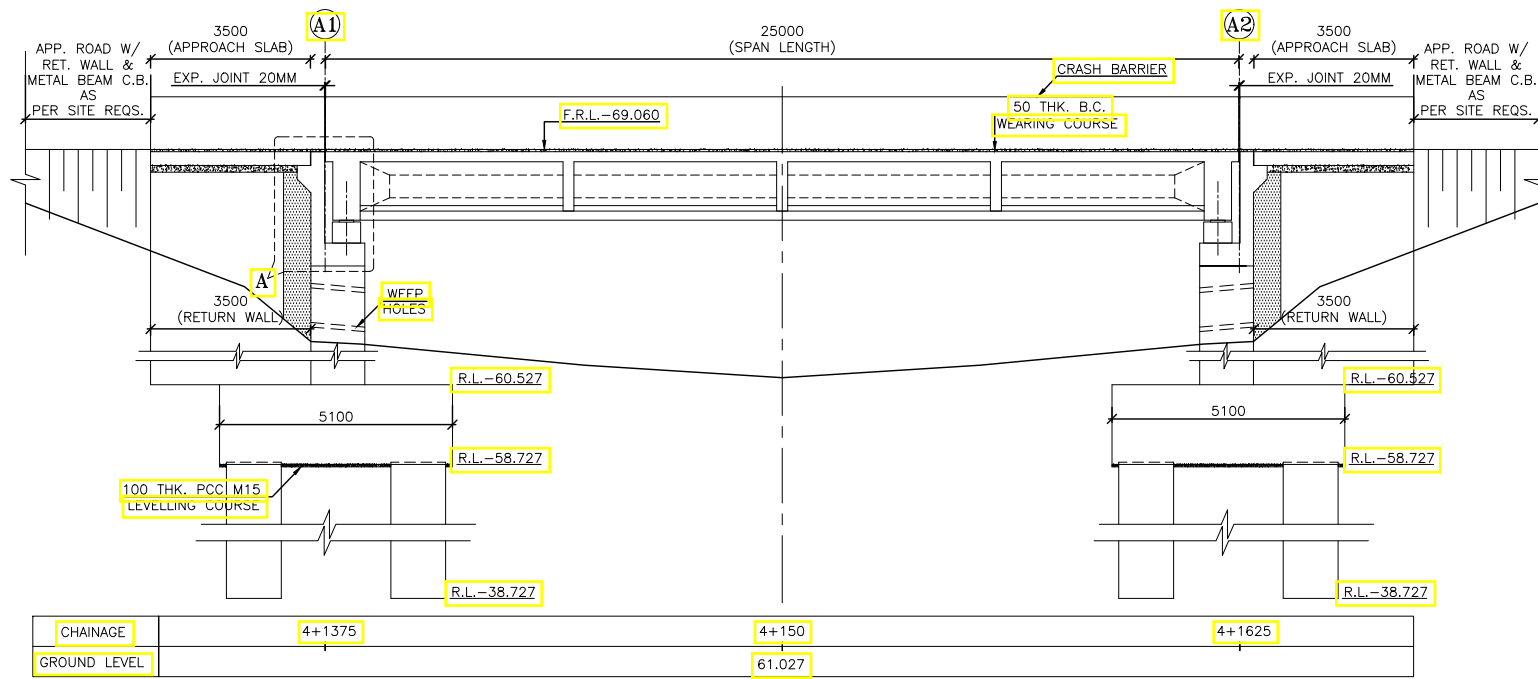


NOTE: THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. NO. ICS/NHIDCL/WBP/FS/GAD/2.

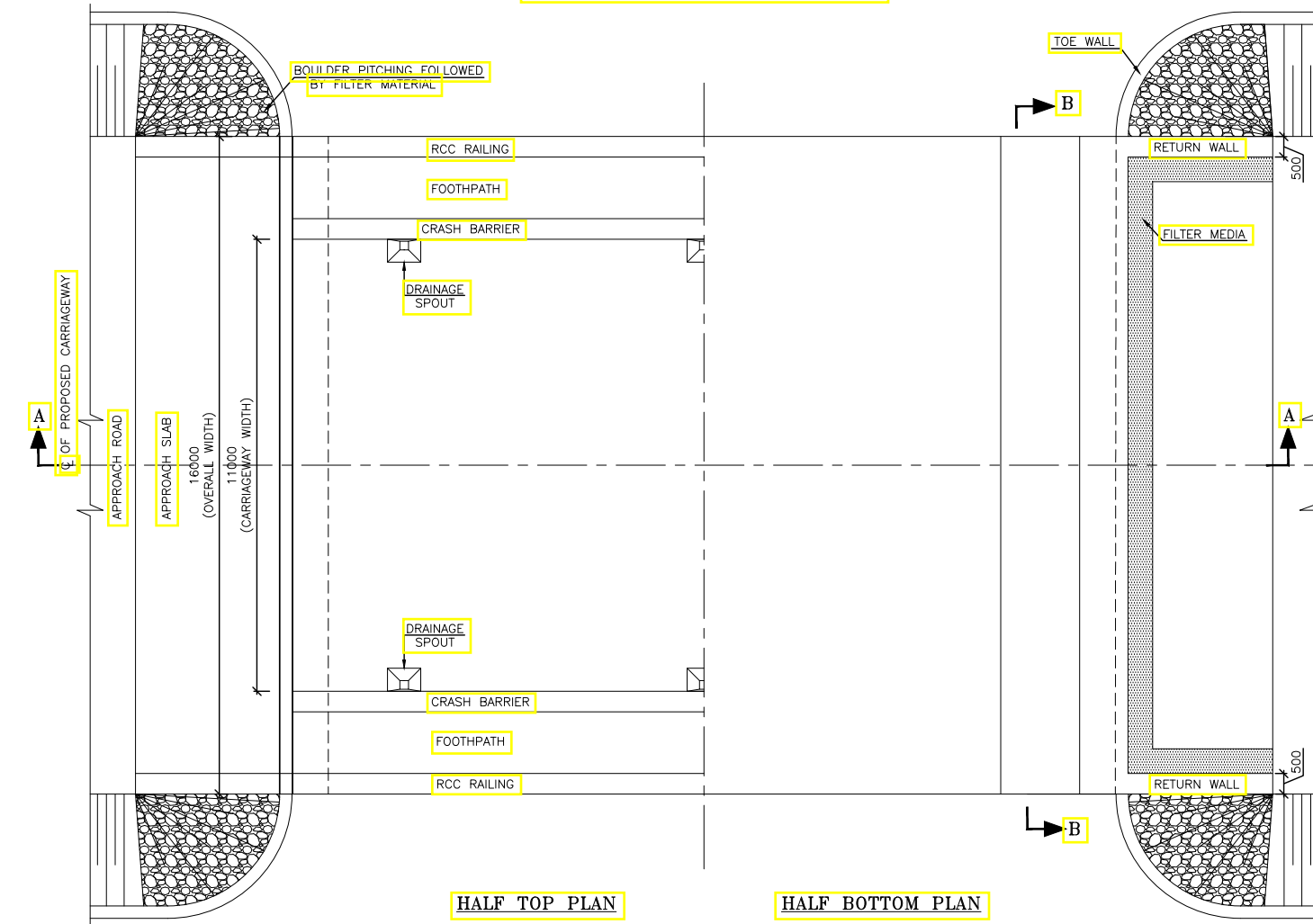
NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED. LEVELS ARE IN METERS.
- PROPOSED STRUCTURE IS DESIGNED FOR LOAD COMBINATIONS AS PER IRC: 6-2017.
- RCC CRASH BARRIER AS PER IRC: 5-2015 CLAUSE 109.6.
- BACKFILLING BEHIND BOX SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX 6 OF IRC: 78-2014 HAVING PROPERTIES DENSITY=2 T/CUM, PHI=30, DELTA=15
- MIN. 600 MM THK. FILTER MEDIA SHALL BE PROVIDED BEHIND RETURN WALL ABOVE GROUND LEVEL.
- 100 Ø WEEP HOLES WITH A.C. PIPE @ 1.0 M C/C VERTICALLY & HORIZONTALLY STAGGERED SHALL BE PROVIDED ABOVE G.L.
- MATERIAL SPECIFICATIONS:
 - a. CONCRETE - M-30 FOR RCC, M-20 FOR PCC & M-15 FOR LEVelling COURSE.
 - b. STEEL - HYSD BARS CONFORMING TO IS: 1786, OF GRADE Fe-500.
 - c. AGGREGATE - AGGREGATE SIZE SHALL BE 20mm AND DOWNGRADED.
 - d. COVER - 75mm AT FOUNDATION, 40mm ELSEWHERE.
 - e. WATER CEMENT RATIO - 0.45 MAX.
 - f. MIN. CEMENT CONTENT - 360 KG/CUM.
- APPROACH SLAB, DRAINAGE SPOUT, EXPANSION JOINT & WEARING COAT SHALL BE AS PER MORTH STANDARDS.

REV.	DATE	REVISIONS	CLIENT: NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI - 110001	DESIGN CONSULTANT: Global Infra Solutions in JV with Kirilman Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd. F-2, 64/71A, Subhagar Apartment, Tilaga, Ghaziabad - 201009 g@globalinfra.com website: globalinfra.com	PROJECT: CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) (PKG-1B)- Dhudnoi To Dainadubi .	SCALE: Not to scale Dimensions as mentioned	TITLE: GENERAL ARRANGEMENT DRAWING FOR BOX CULVERT	CLIENT APPROVAL: DRAWN: LK CHECKED: SJ DESIGNED: SC APPROVED: LA	SIGNATURE:
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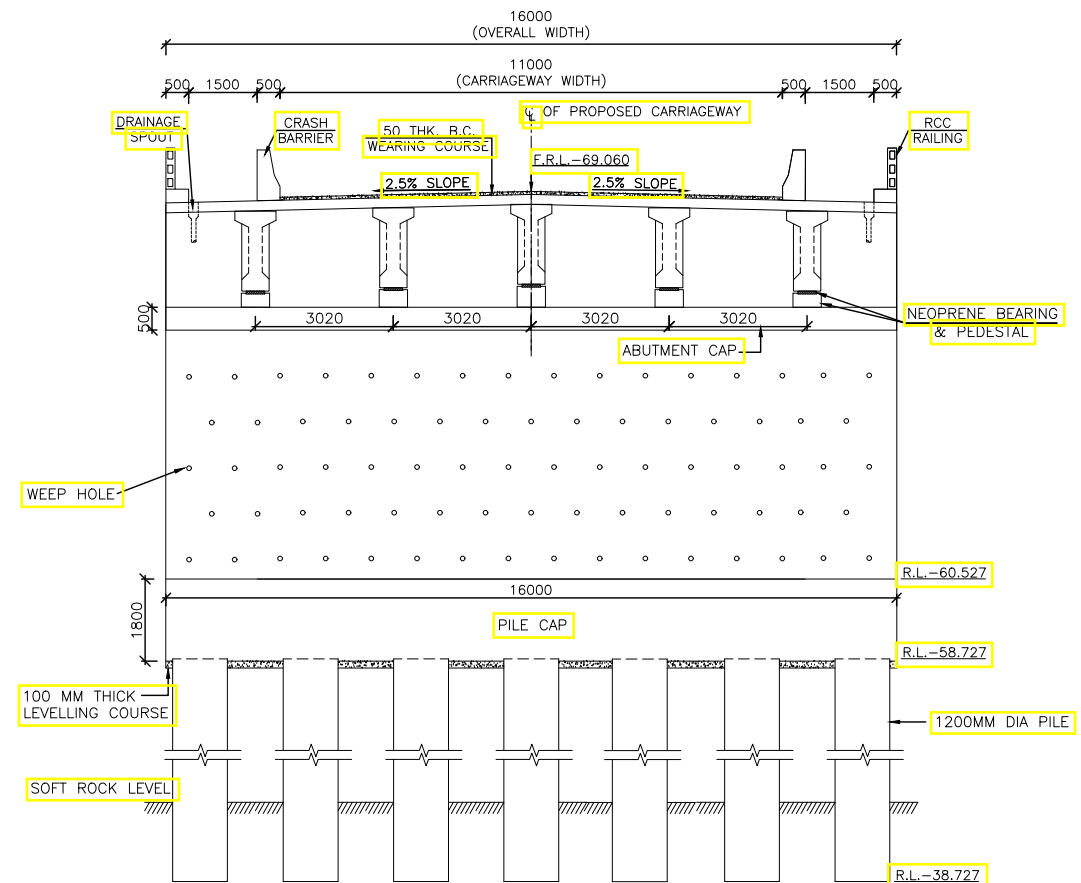


LONGITUDINAL SECTION OF BRIDGE
(SECTION A-A)

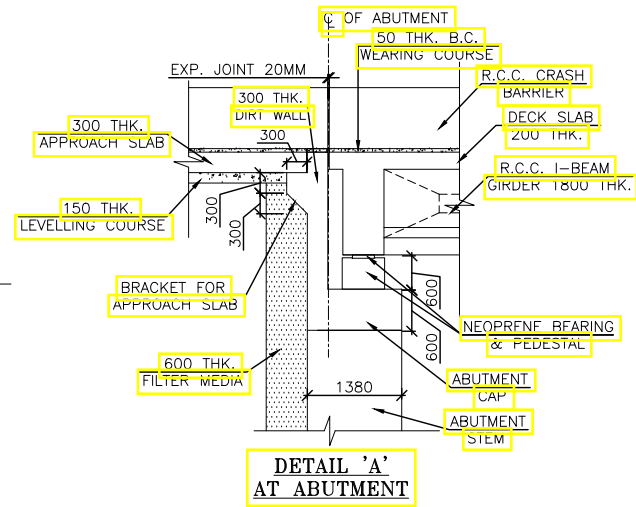


HALF TOP PLAN

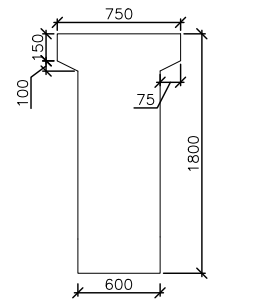
HALF BOTTOM PLAN



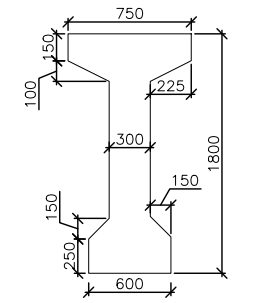
CROSS-SECTION AT ABUTMENT
(SECTION AT B-B)



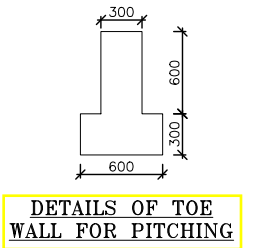
DETAIL 'A'
AT ABUTMENT



DETAILS OF GIRDER 25M
SPAN (AT END SPAN)




DETAILS OF GIRDER 25M
SPAN (AT MID SPAN)



DETAILS OF TOE
WALL FOR PITCHING

- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED. ONLY WRITTEN DIMENSION SHALL BE FOLLOWED.
 - DESIGN MANUALS TO BE FOLLOWED :-
DESIGN LOADING - IRC:6-2017.
RCC & PSC SUPER STRUCTURE - IRC:112-2011.
BEARINGS - IRC:83
FOUNDATION & SUB-STRUCTURE DESIGN - IRC:78-2014.
 - THE REINFORCEMENT STEEL SHALL BE HYSD BARS OF GRADE Fe-500 CONFORMING TO IS:1786.
 - GRADES OF CONCRETE :-
a. SUPER STRUCTURE - M30
b. SUB STRUCTURE - M30
c. FOUNDATION - M30
d. CRASH BARRIER - M40
e. LEVELLING COURSE - M15
 - CLEAR COVER TO OUTER MOST REINFORCEMENTS SHALL BE AS FOLLOWED:-
a. FOUNDATION - 75mm
b. ELSEWHERE - 40mm
 - BACKFILLING BEHIND ABUTMENTS & RETURN WALL SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX 6 OF IRC: 78-2014 HAVING PROPERTIES; DENSITY=2 T/CUM, PHI=30, DELTA=15
 - MIN. 600 MM THK. FILTER MEDIA SHALL BE PROVIDED BEHIND ABUTMENT & RETURN WALL ABOVE GROUND LEVEL.
 - 100 Ø WEEP HOLES WITH A.C. PIPE @ 1.0 M C/C VERTICALLY & HORIZONTALLY STAGGERED SHALL BE PROVIDED ABOVE G.L.
 - EXPANSION JOINT- AS PER M.O.R.T.H. STD. DRG. NO. SD/103.
 - DRAINAGE SPOUT- AS PER M.O.R.T.H. STD. DRG. NO. SD/103.
 - R.C.C. RAILING- AS PER M.O.R.T.H. STD. DRG. NO. SD/201.
 - CRASH BARRIER- AS PER IRC:5-2015, CLAUSE 109.6.
 - THIS DRAWING IS ONLY FOR GENERAL ARRANGEMENT, SEPARATE DRAWING SHALL BE FOLLOWED FOR EXECUTION.
 - SOIL PROPERTIES TO BE TAKEN FOR DESIGN PURPOSE; DENSITY=2, PHI=30°, DELTA=15°
 - EXPANSION JOINT IN RAILING, KERB & CRASH BARRIER SHALL BE AT THE SAME LOCATION AS THE EXPANSION JOINT IN THE SLAB.

REV.	DATE	REVISIONS

CLIENT:

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 PTI BUILDING, 4 PARLIAMENT STREET
 SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:

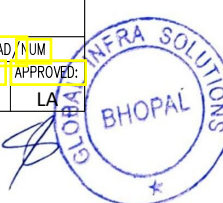
Global Infra Solutions
 in JV with Krishna Techno Consultants Pvt. Ltd. and
 association with Infycons Creative Software Pvt. Ltd.
 F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal-462039
 e: globalinfraolutions@gmail.com web: globalinfraolutions.org

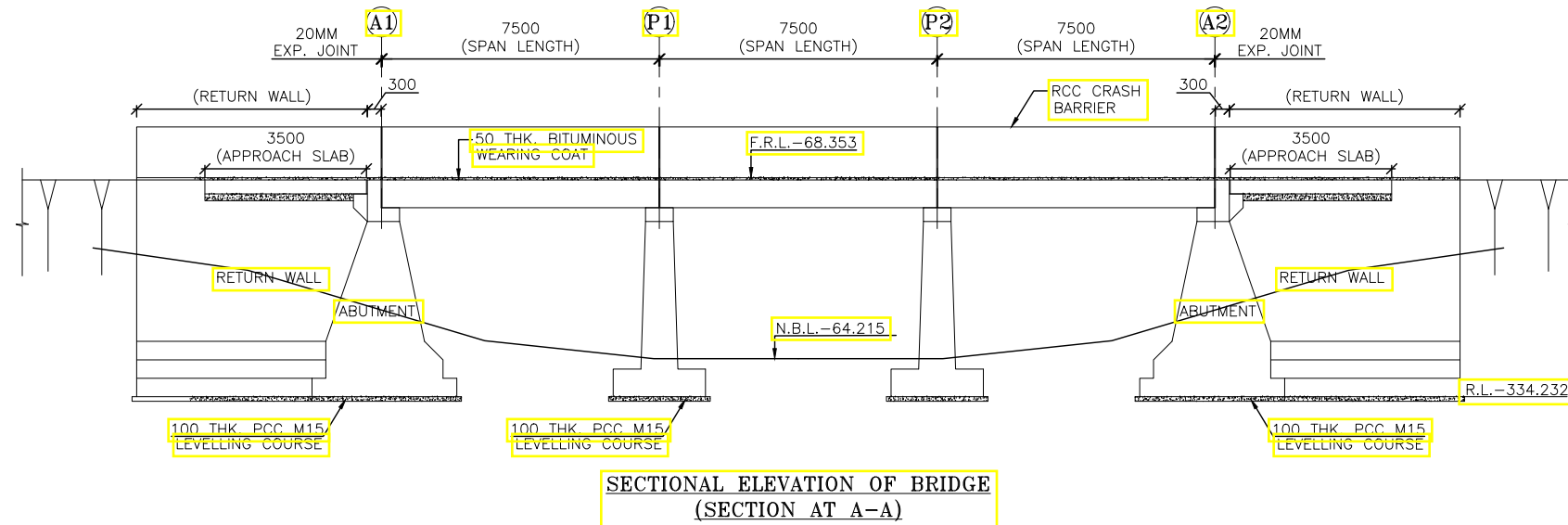
PROJECT:
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) (PKG-1B)- Dhudnoi To Dainadubi .

SCALE:
 Not to scale
 Dimensions
 as mentioned

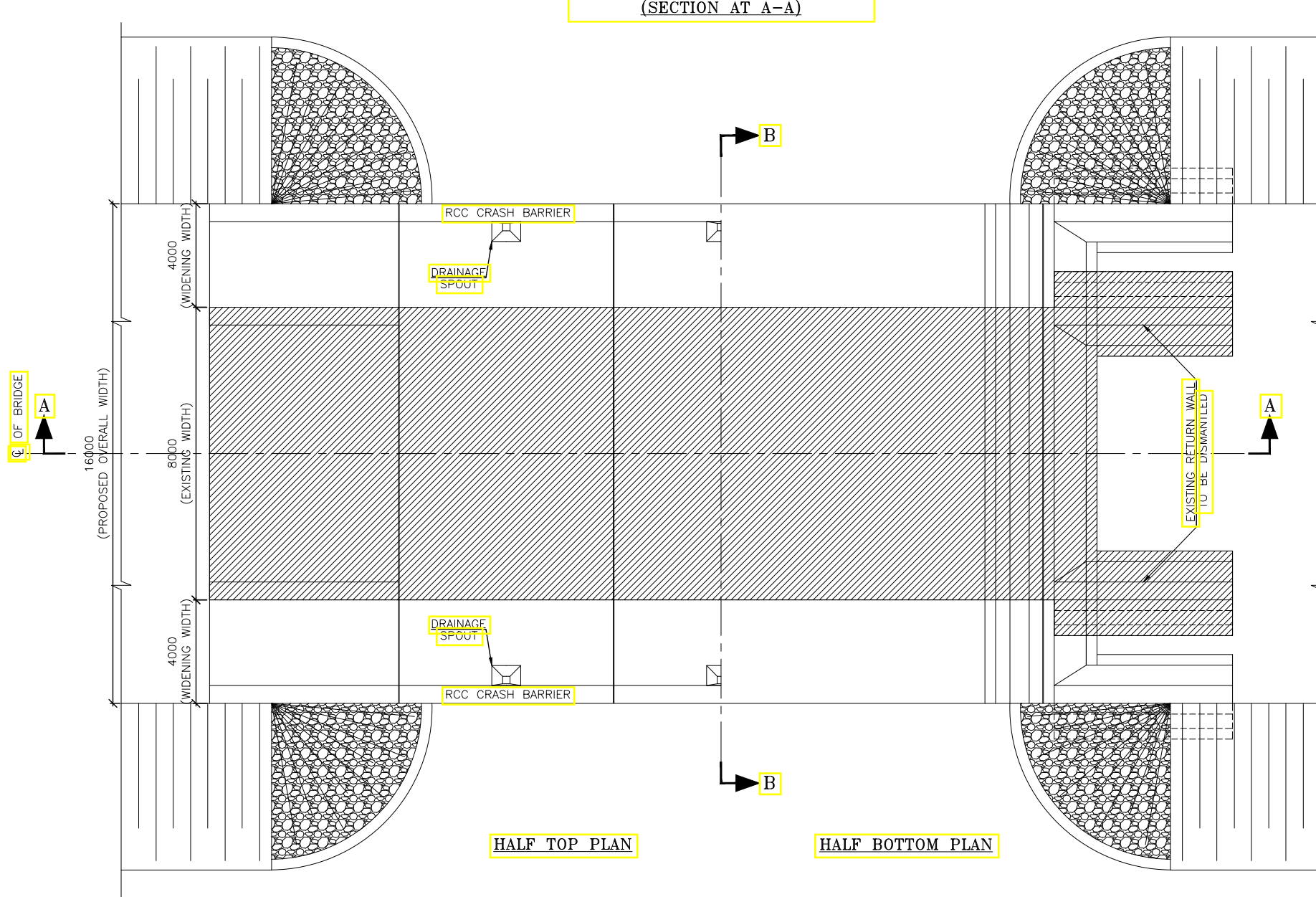
TITLE:
**GENERAL ARRANGEMENT
 DRAWING FOR MINOR
 BRIDGE AT CH. 4+150**

CLIENT APPROVAL:	SIGNATURE:





SECTIONAL ELEVATION OF BRIDGE
(SECTION AT A-A)




HALF TOP PLAN

HALF BOTTOM PLAN

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED. ONLY WRITTEN DIMENSION SHALL BE FOLLOWED.
- DESIGN MANUALS TO BE FOLLOWED :-
DESIGN LOADING - IRC:6-2017.
RCC & PSC SUPER STRUCTURE - IRC:112-2011.
BEARINGS - IRC:83.
FOUNDATION & SUB-STRUCTURE DESIGN - IRC:78-2014.
- THE REINFORCEMENT STEEL SHALL BE HYSD BARS OF GRADE Fe-500 CONFORMING TO IS:1786.
- GRADES OF CONCRETE :-
a. SUPER STRUCTURE - M30
b. SUB STRUCTURE - M30
c. FOUNDATION - M30
d. CRASH BARRIER - M40
e. LEVELLING COURSE - M15
- CLEAR COVER TO OUTER MOST REINFORCEMENTS SHALL BE AS FOLLOWED:-
a. FOUNDATION - 75mm
b. ELSEWHERE - 40mm
- BACKFILLING BEHIND ABUTMENTS & RETURN WALL SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX 6 OF IRC: 78-2014 HAVING PROPERTIES; DENSITY=2 T/CUM, PHI=30, DELTA=15
- MIN. 600 MM THK. FILTER MEDIA SHALL BE PROVIDED BEHIND ABUTMENT & RETURN WALL ABOVE GROUND LEVEL.
- 100 Ø WEEP HOLES WITH A.C. PIPE @ 1.0 M C/C VERTICALLY & HORIZONTALLY STAGGERED SHALL BE PROVIDED ABOVE G.L.
- EXPANSION JOINT- AS PER M.O.R.T.H. STD. DRG. NO. SD/103.
- DRAINAGE SPOUT- AS PER M.O.R.T.H. STD. DRG. NO. SD/103.
- R.C.C. RAILING- AS PER M.O.R.T.H. STD. DRG. NO. SD/201.
- CRASH BARRIER- AS PER IRC:5-2015, CLAUSE 109.6.
- THIS DRAWING IS ONLY FOR GENERAL ARRANGEMENT, SEPARATE DRAWING SHALL BE FOLLOWED FOR EXECUTION.
- SOIL PROPERTIES TO BE TAKEN FOR DESIGN PURPOSE; DENSITY=2, PHI=30°, DELTA=15°
- EXPANSION JOINT IN RAILING, KERB & CRASH BARRIER SHALL BE AT THE SAME LOCATION AS THE EXPANSION JOINT IN THE SLAB.

REV.	DATE	REVISIONS

CLIENT:

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 PTI BUILDING, 4 PARLIAMENT STREET
 SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:

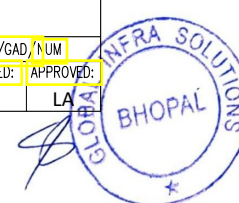
Global Infra Solutions
 in JV with Krishna Techno Consultants Pvt. Ltd. and
 association with Infycons Creative Software Pvt. Ltd.
 F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal -462039
 e: globalinfraolutions@gmail.com web: globalinfraolutions.org

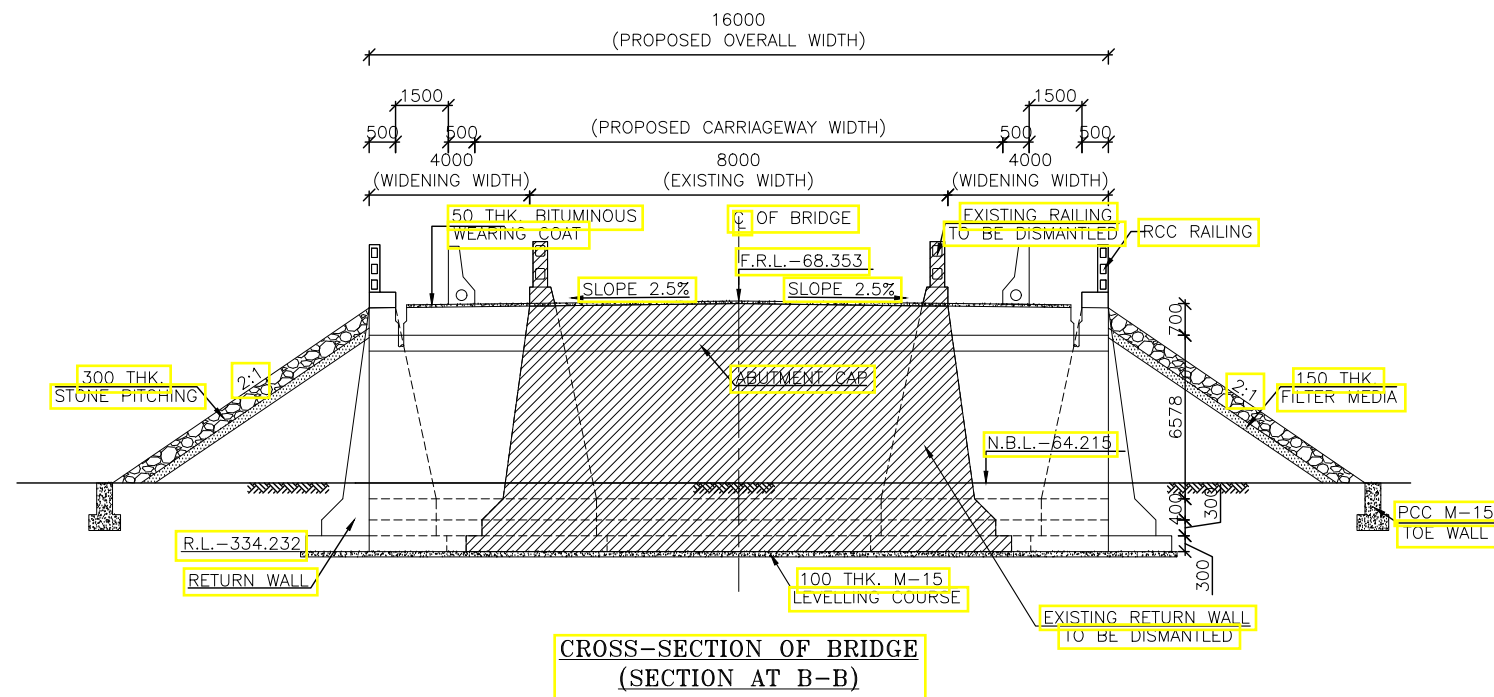
PROJECT:
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) -(PKG-1B)- Dhudnoi To Dainadubi .

SCALE:
 Not to scale
 Dimensions
 as mentioned

TITLE:
GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 6+800

CLIENT APPROVAL:	SIGNATURE:
DWG NO:- ICS/NHIDCL/WBP/FR/GAD/NUM	
DRAWN: LK	CHECKED: SJ
DESIGNED: SC	APPROVED: LA



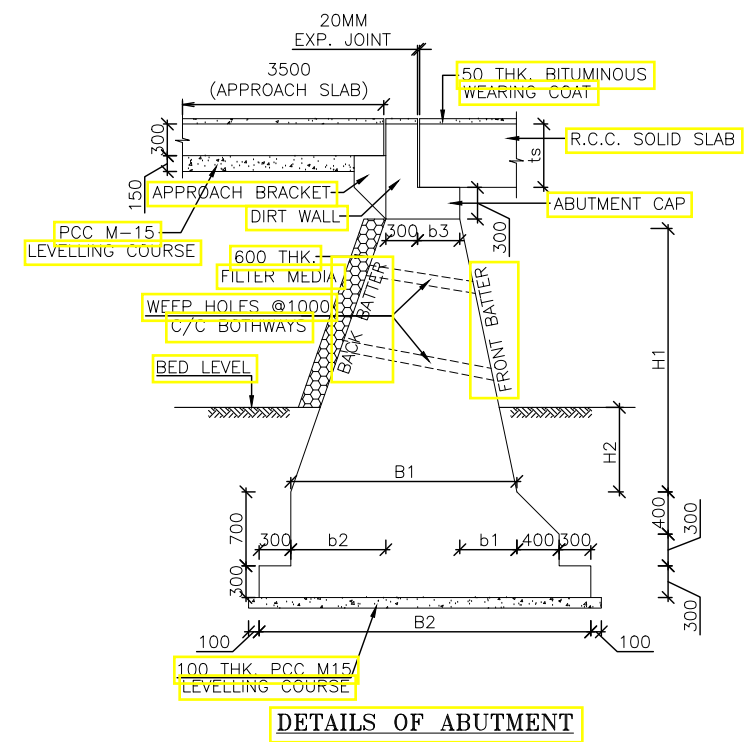


**CROSS-SECTION OF BRIDGE
(SECTION AT B-B)**

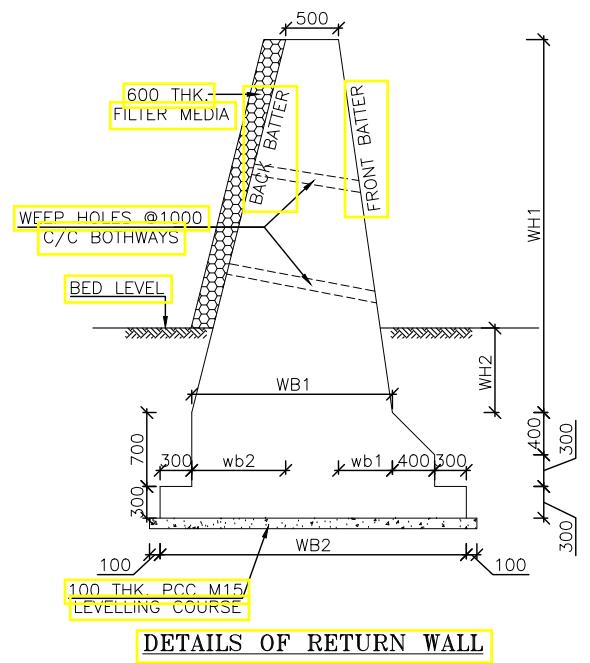
Table Showing General Parameters of Minor Bridge												
Sr. No.	Existing Chainage	Design Chainage	Type of Proposal	Bed Level (M)	Proposed Formation Level (M)	Height (m)	Span Arrangement		Overall Width (m)	Length of Railing / Crash Barrier / Parapet (m)	Thickness of Slab (m)	Vent Height (m)
							No. of Span	Span Length (m) L				
1	6+800	6+805	Concentric Widening	64.215	68.353	4.138	3	9.00	8.00	10.40	0.75	3.34

Table Showing Various Parameters of Abutment												
Sr. No.	Design Chainage	H1 (m)	b1 (m)	b2 (m)	b3 (m)	B1 (m)	B2 (m)	H2 (m)	Foundation Level (M)	Bed Level (M)	Front Batter	Back Batter
1	6+805	5.538	0.461	1.846	0.400	3.008	4.008	2.50	61.715	64.215	12	3

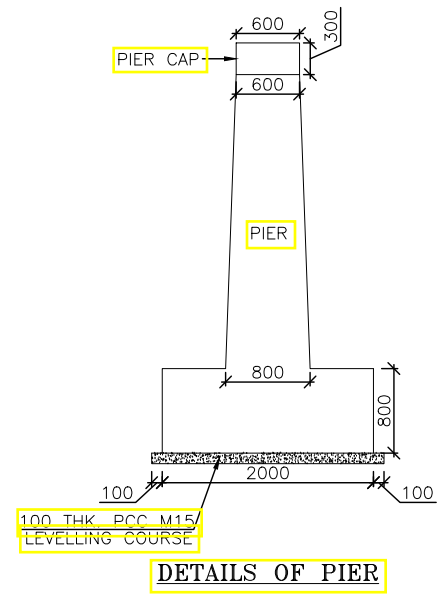
Table Showing Various Parameters of Return Wall												
Sr. No.	Design Chainage	Length of Return Wall (m)	WH1 (m)	wb1 (m)	wb2 (m)	WB1 (m)	WB2 (m)	WH2 (m)	Foundation Level (M)	Bed Level (M)	Front Batter	Back Batter
1	6+805	5.365	6.638	0.553	2.213	3.266	4.266	2.50	61.715	64.215	12	3



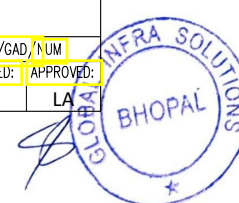
DETAILS OF ABUTMENT

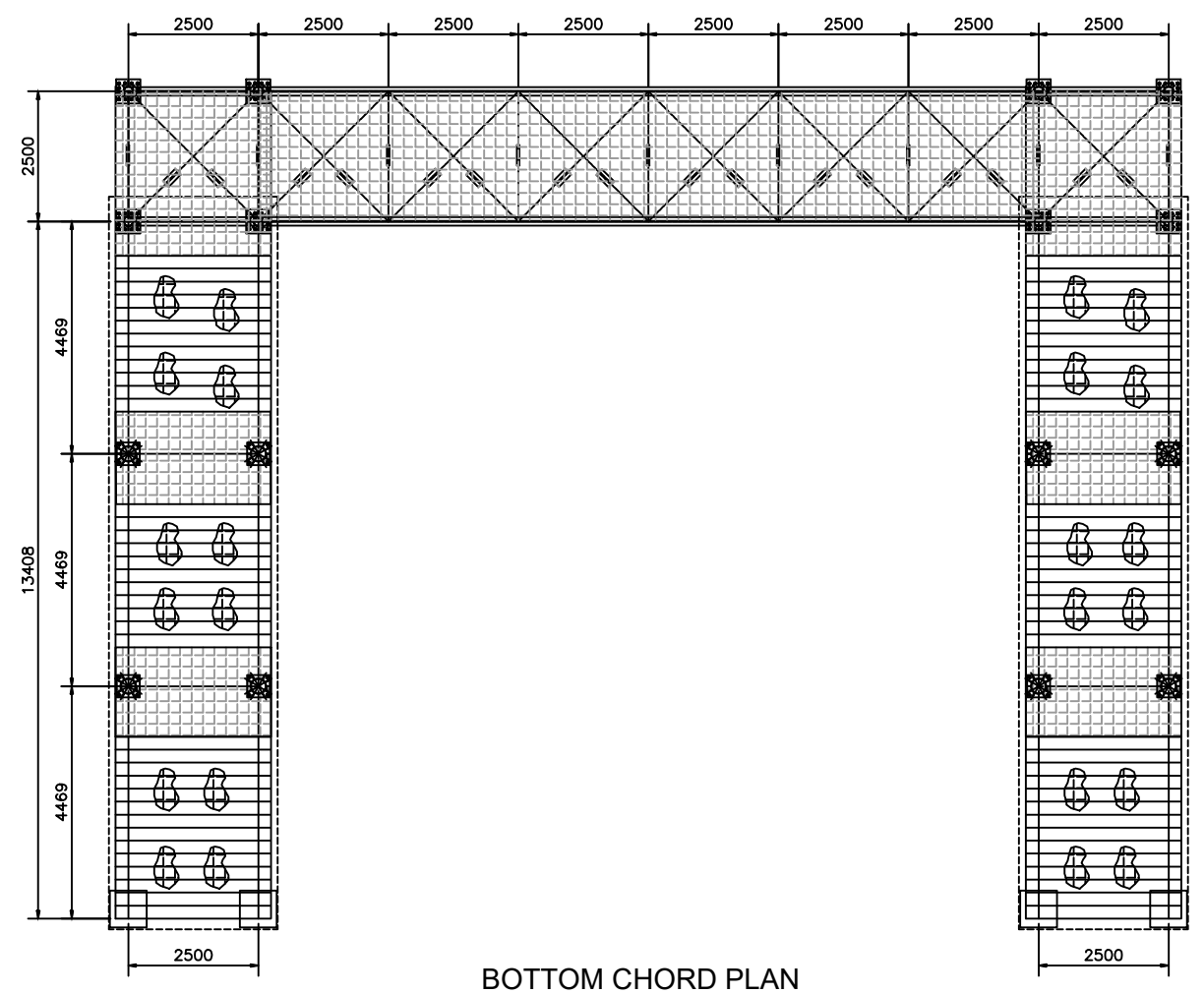
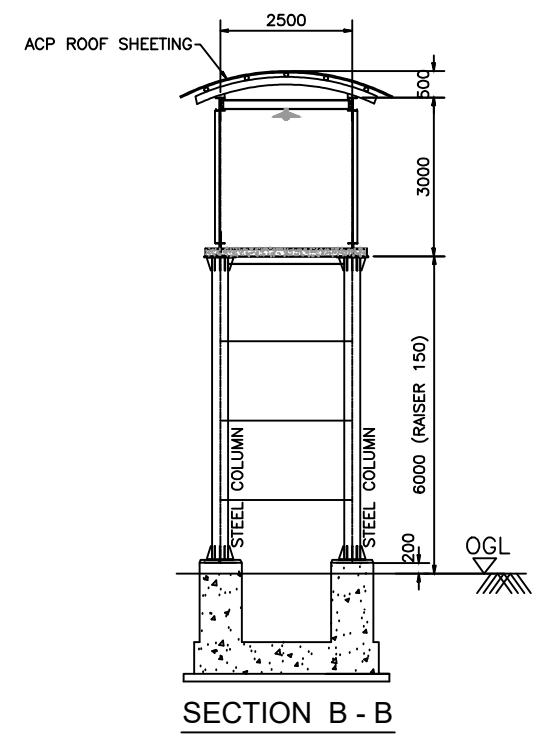
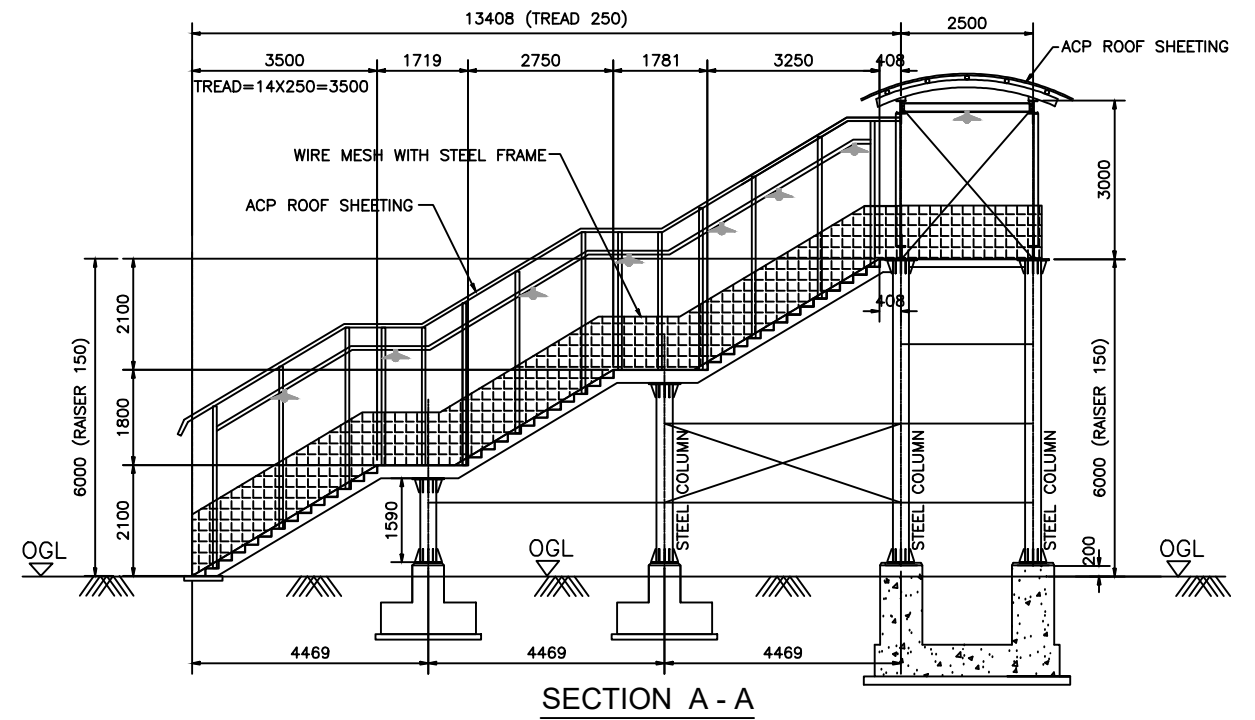
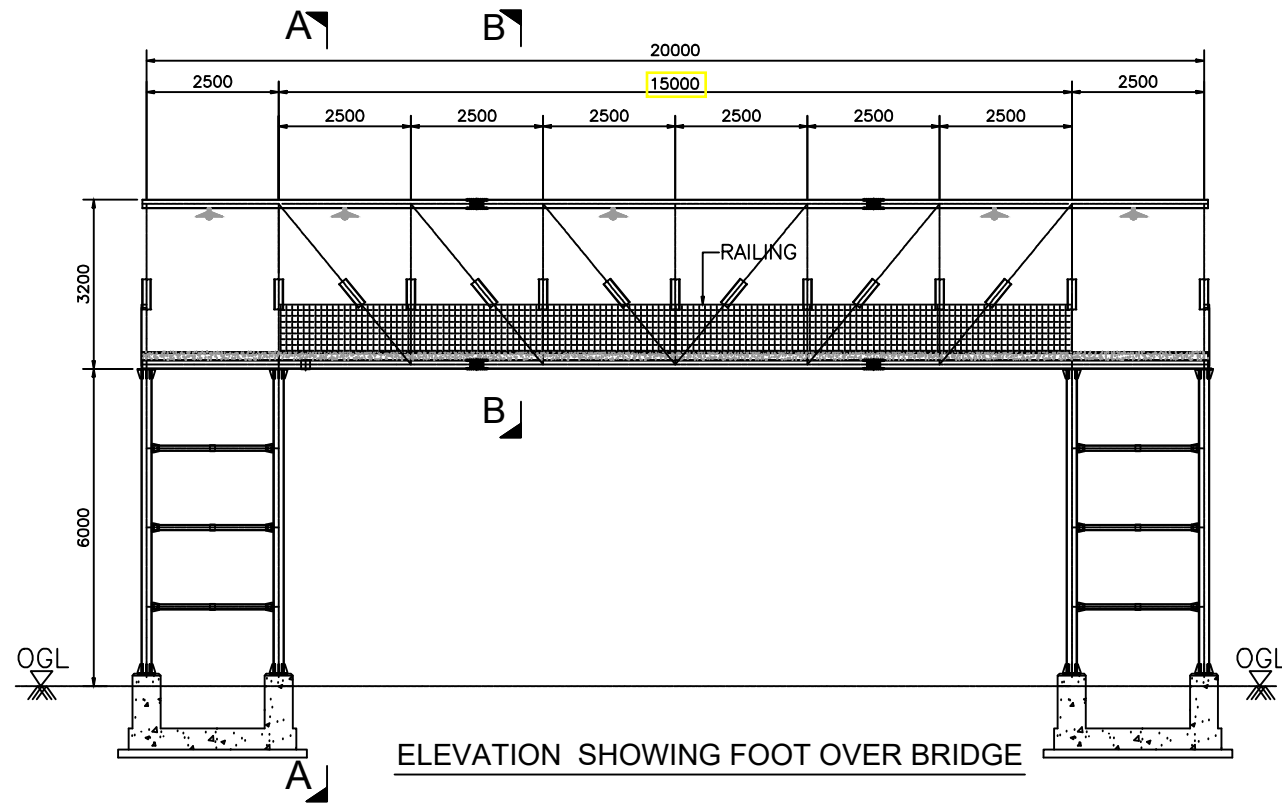


DETAILS OF RETURN WALL




DETAILS OF PIER





REV.	DATE	REVISIONS

CLIENT:

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 PTI BUILDING, 4 PARLIAMENT STREET
 SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:

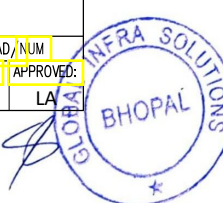
Global Infra Solutions
 in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd.
 F-2, E-8/11A, Sukhsegar Apartment, Trilanga, Bhopal - 462039
 e: globalinfraolutions@gmail.com web: globalinfraolutions.org

PROJECT:
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOJNA (LOT-01) -(PKG-1B)- Dhudnoi To Dainadubi .

SCALE:
 Not to scale
 Dimensions as mentioned

TITLE:
GENERAL ARRANGEMENT DRAWING FOR FOB

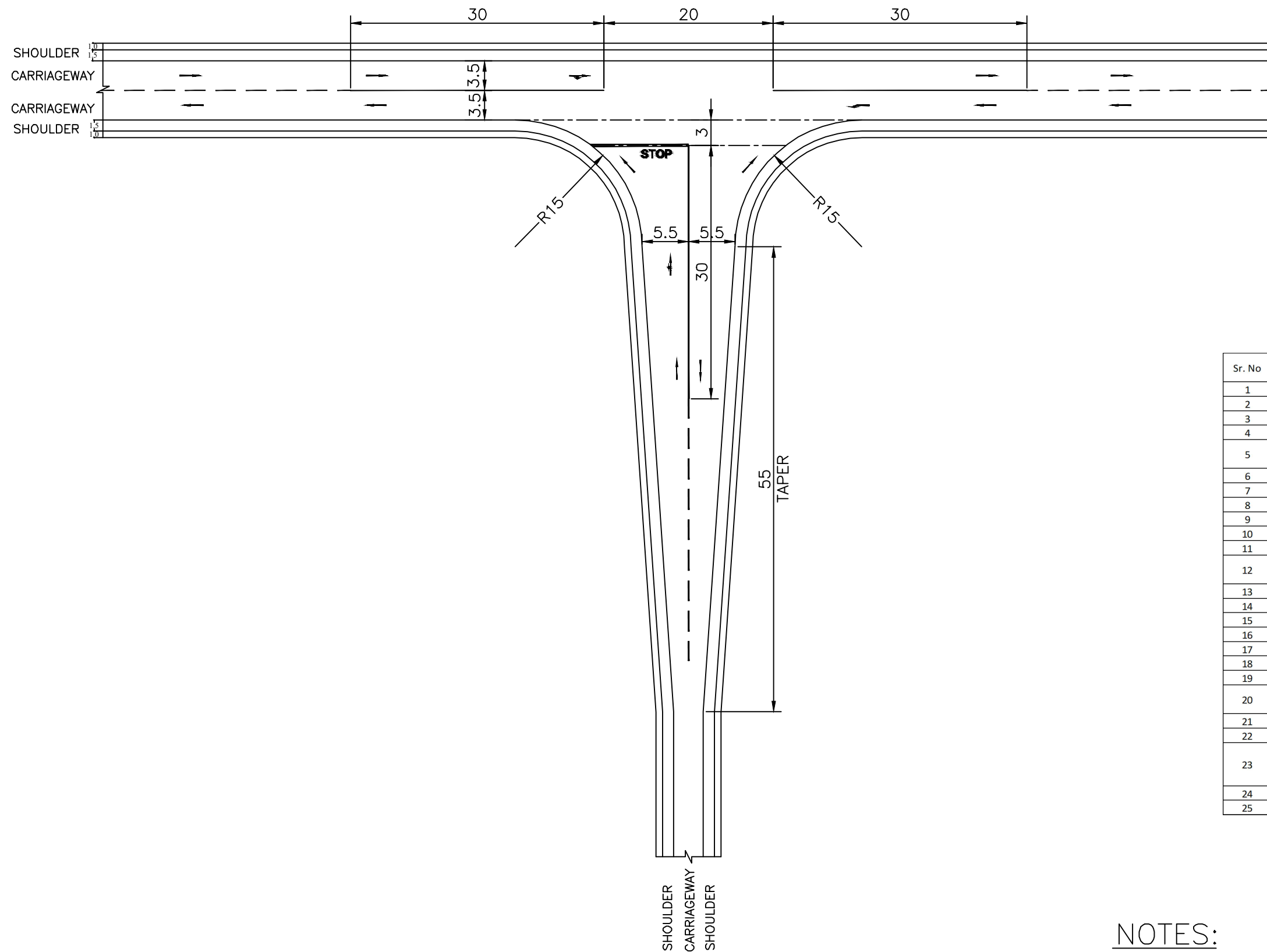
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DWG NO: - ICS/NHIDCL/WBP/FR/GAD/NUM			
DRAWN: LK	CHECKED: SJ	DESIGNED: SC	APPROVED: LA





MISCELLANEOUS DRAWINGS



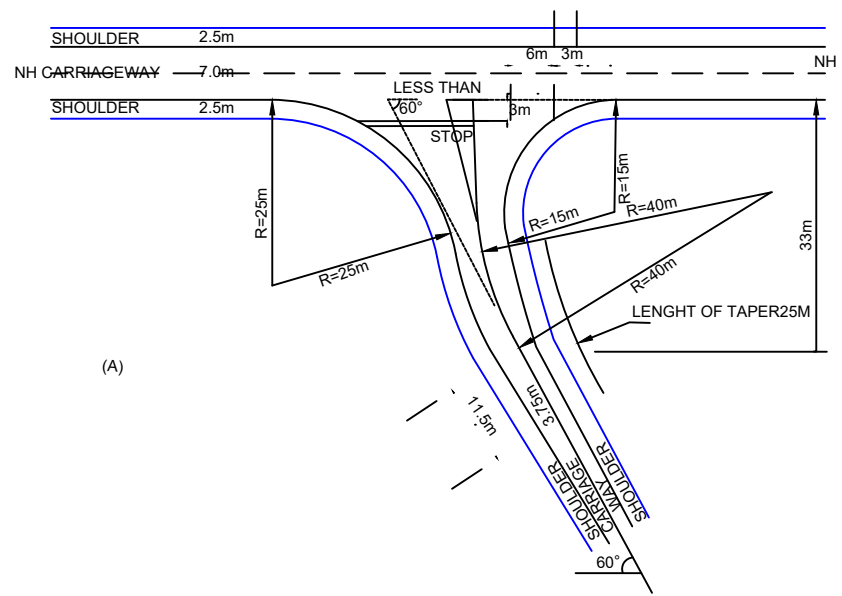


TYPICAL DETAIL OF 'T' JUNCTION

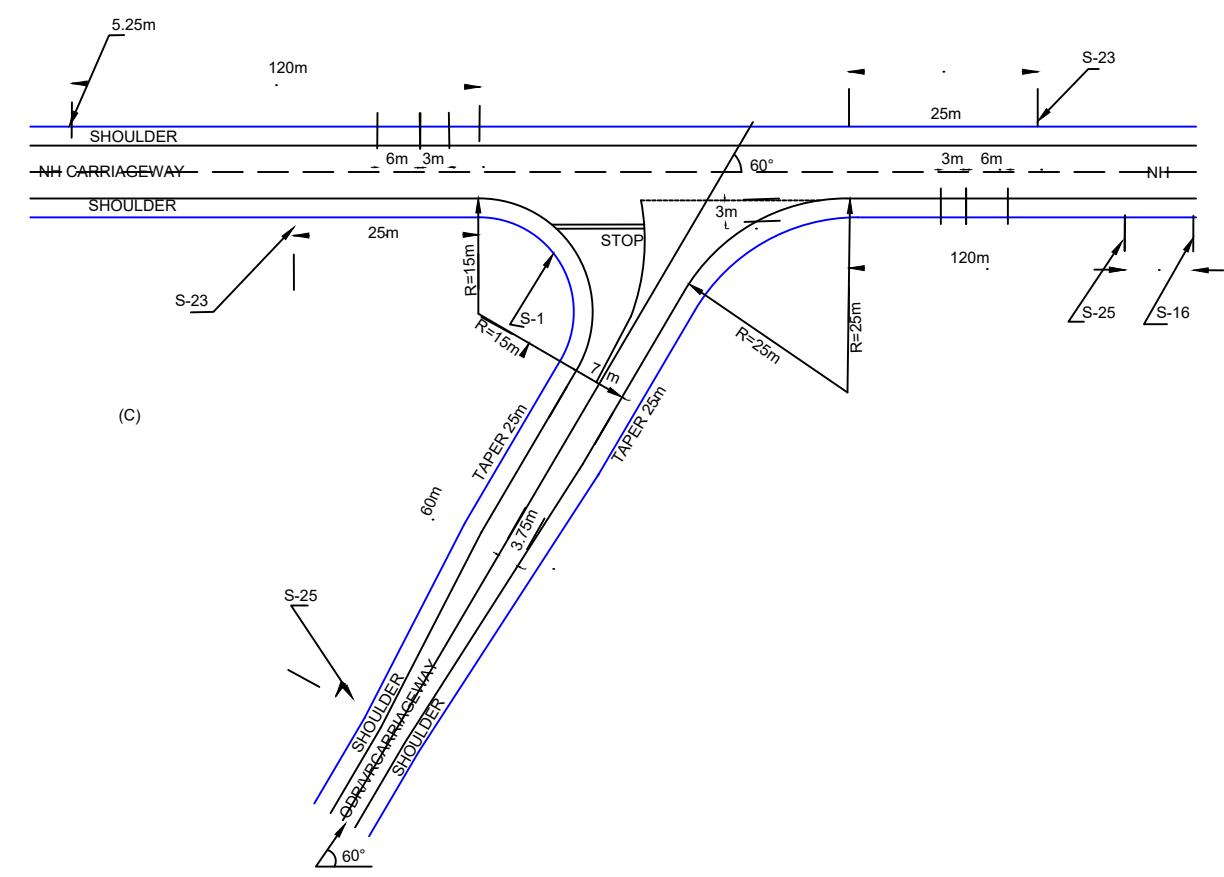
Sr. No	Chainage	Side	Type of Junction	Major/Minor	Cross Road Name
1	0.170	LHS	T	Minor	To Colony
2	0.305	LHS	T	Minor	To Colony
3		RHS	T	Minor	To Colony
4	0.470	LHS	T	Minor	To Colony
5	0.530	RHS	T	Minor	To Milan Path
6	0.680	LHS	T	Minor	To Colony
7	0.705	RHS	T	Minor	To Colony
8	0.800	RHS	T	Minor	To Colony
9	0.840	LHS	T	Minor	To Colony
10	1.010	LHS	T	Minor	To Colony
11	1.020	RHS	T	Minor	To Colony
12	1.180	RHS	T	Minor	To Jyoti Chira Mill
13	1.240	LHS	T	Minor	To Colony
14	1.360	LHS	T	Minor	To Colony
15	1.370	RHS	T	Minor	To Colony
16	2.570	RHS	T	Minor	To Colony
17	2.640	LHS	T	Minor	To Colony
18	3.100	LHS	T	Minor	To Colony
19		RHS	T	Minor	To Colony
20	4+540	LHS	T	Minor	To Damra village
21	5.140	RHS	T	Minor	To Colony
22	5.500	RHS	T	Minor	To Colony
23	5.800	RHS	T	Major	To Laskerpara village
24	6.390	LHS	T	Minor	Village road
25	8.110	RHS	T	Minor	Village road

NOTES:

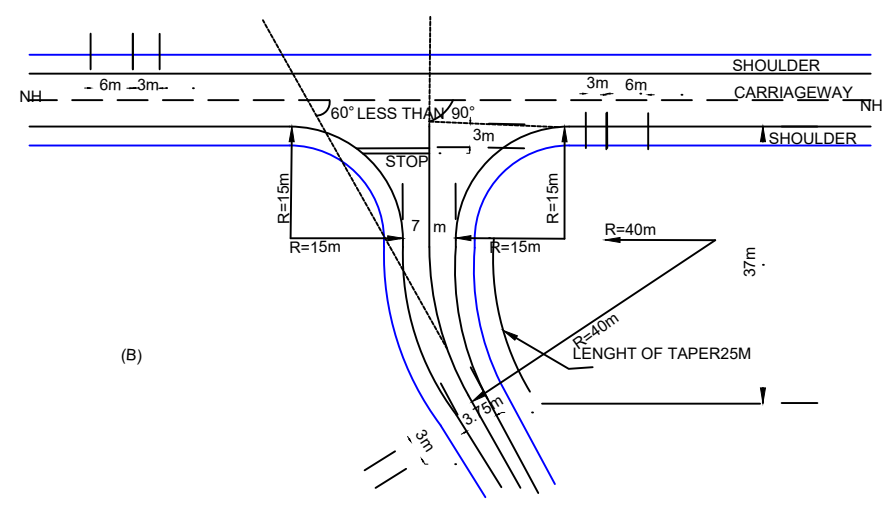
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2. DIMENSIONS SHALL NOT BE SCALED OF FROM THE DRAWING.



(A)



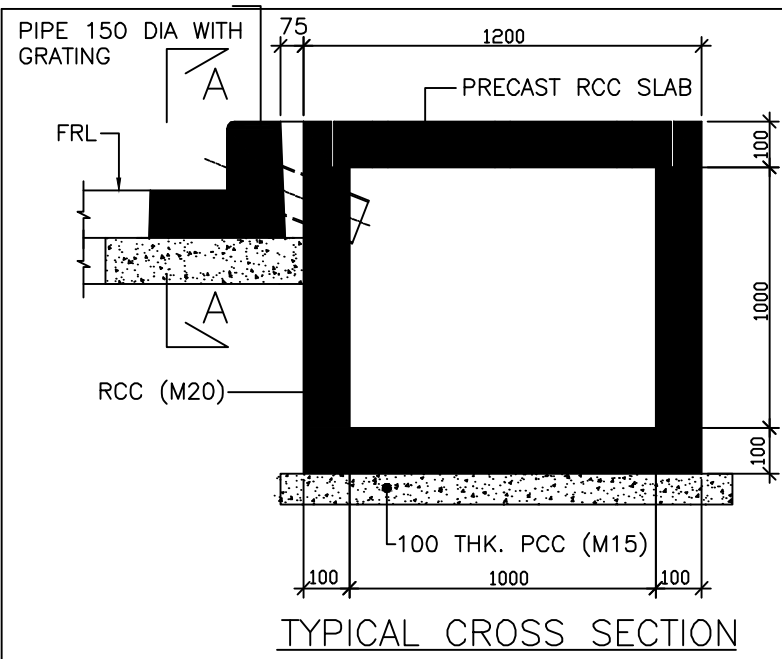
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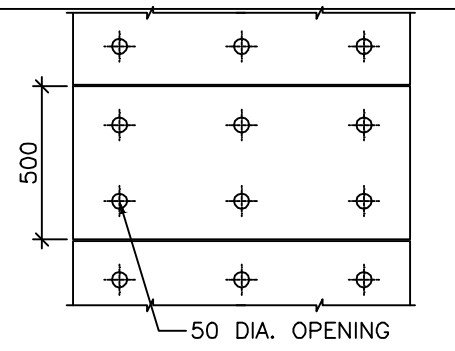
(B)

Sr. No	Chainage	Side	Type of Junction	Major/Minor	Cross Road Name
1	2.040	RHS	Y	Minor	To Colony
2	4.100	RHS	Y	Minor	To Bakrapur
3	7.880	LHS	Y	Minor	Village road

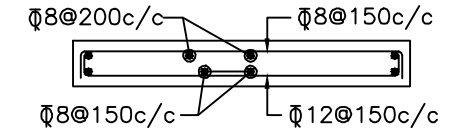
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	REV.	DATE	REVISIONS									



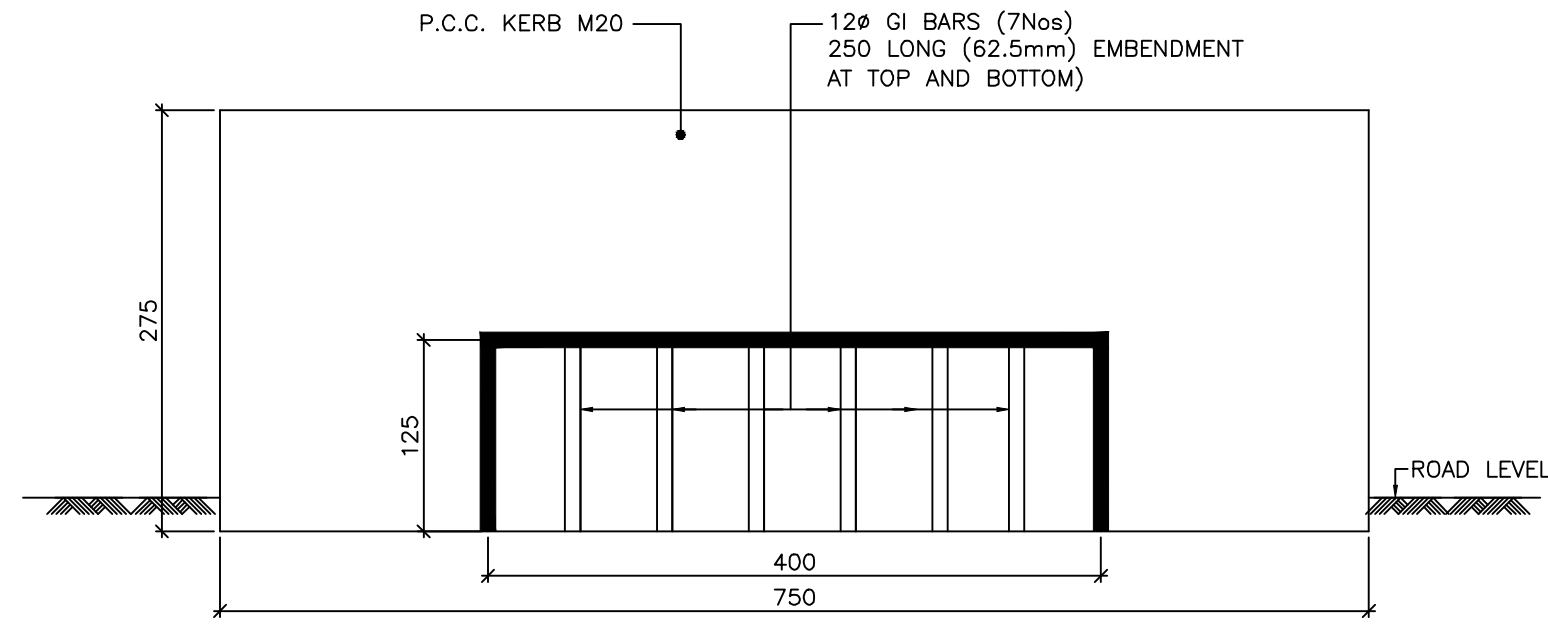
TYPICAL CROSS SECTION



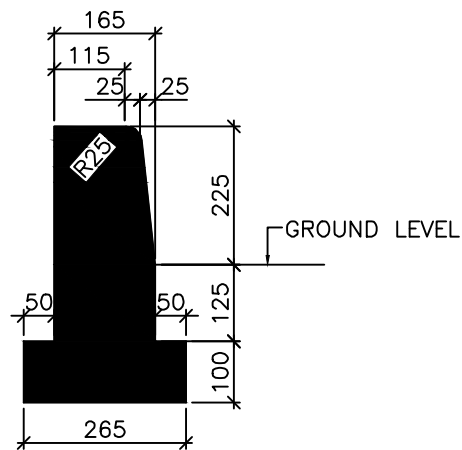
PLAN OF COVER SLAB



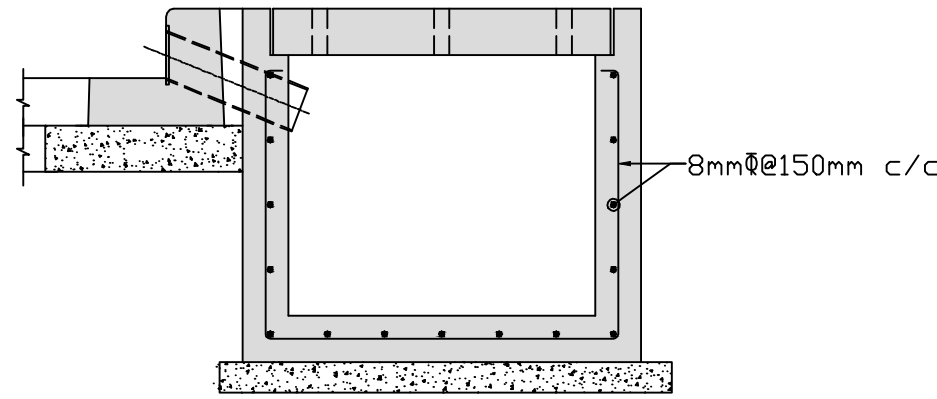
DETAILS OF COVER SLAB



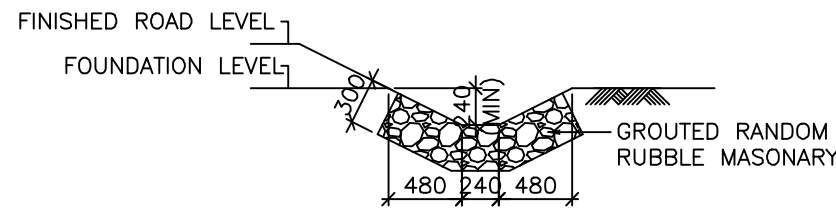
VIEW A-A



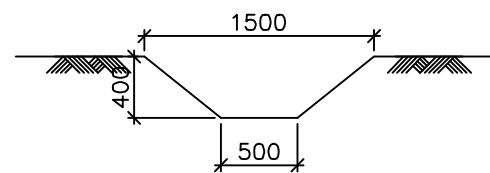
TYPICAL DETAILS OF COVERDRAIN



REINFORCEMENT DETAILS FOR DRAIN



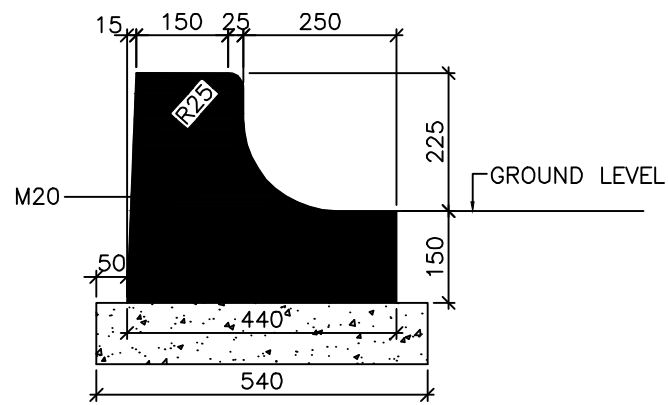
LINED DRAIN



DETAIL OF UNLINED DRAIN

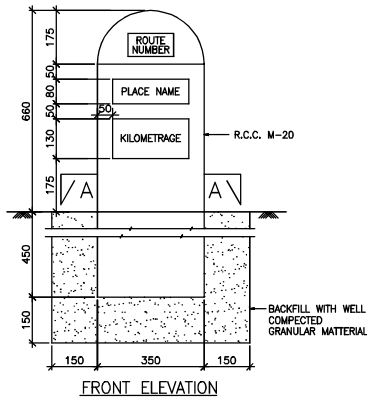
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. DIMENSIONS SHALL NOT BE SCALED OF FROM THE DRAWING.
3. GRADIENT OF SITE DRAINS HAVE TO BE FINALISED BY THE ENGINEER ON SITE.
4. PVC PIPE SHALL BE OF CLASS-4 AND AS PER SPECIFICATION OF IS: 4985-2000.
5. THE INLET SHOULD PROVIDE AS PER SITE CONDITION AND THE GAP IN BETWEEN TWO INLETS IS FINALISED BY SITE ENGINEER.
6. THE HIGHT AND GRADIENT OF COVER DRAIN SHOULD BE VARY ON SITE CONDITION. THIS SHOULD FINALIZED BY SITE ENGINEER.

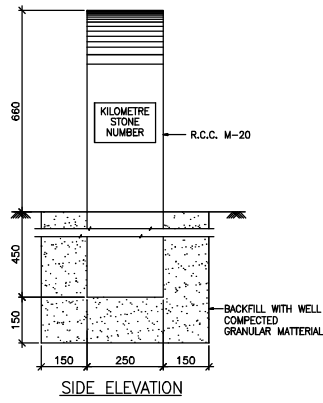


CHANNEL TYPE KERB (AT SUPERELEVATED PORTION)
TYPICAL DETAILS OF KERB (SCALE 1:10)

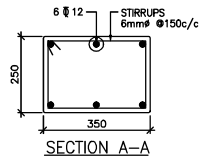
CLIENT: NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. PTI BUILDING, 4 PARLIAMENT STREET SANSAD MARG AREA, NEW DELHI - 110001			DESIGN CONSULTANT: Global Infra Solutions in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd. F-2, E-8/11A, Sukkissagar Apartment, Trilanga, Bhopal-462039 e: globalinfra@solutions@gmail.com web: globalinfra@solutions.org			PROJECT: CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)			SCALE AT A3 SIZE DRAWING NTS			TITLE: Miscellaneous			CLIENT APPROVAL: SIGNATURE:	
REV.	DATE	REVISIONS							DWG NO:- GLOBAL/NIHDC/MISC/2022/HOPAL DRAWN: Priyanka CHECKED: SJ DESIGNED: SC APPROVED: LA							



FRONT ELEVATION

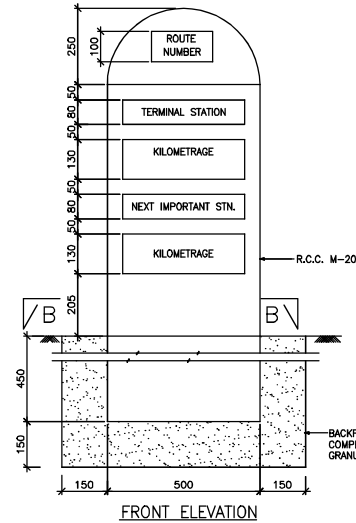


SIDE ELEVATION

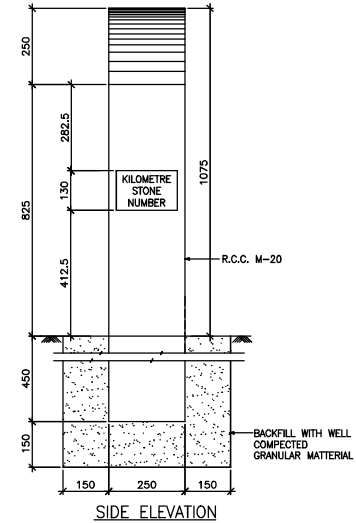


SECTION A-A

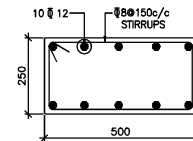
TYPICAL DETAILS OF ORDINARY KILOMETRE STONE



FRONT ELEVATION

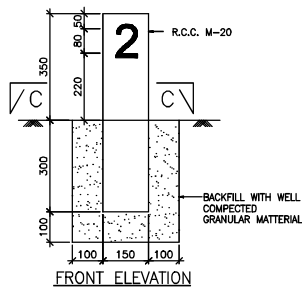


SIDE ELEVATION

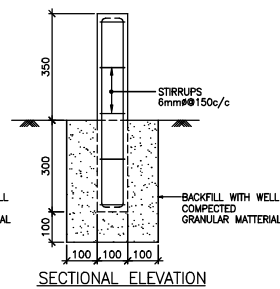


SECTION B-B

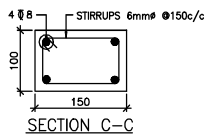
TYPICAL DETAILS OF FIFTH (5th) KILOMETRE STONE



FRONT ELEVATION



SECTIONAL ELEVATION

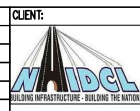


SECTION C-C

TYPICAL DETAILS OF 200 METRE STONE

NOTES:

- 1 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED
- 2 DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED
- 3 DETAILS OF ORDINARY KM STONE AND 5th KM STONE ARE GENERALLY BASED ON IRC: 8-1980
- 4 DETAILS OF 200m STONE ARE GENERALLY BASED ON IRC: 26-1967



NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
PTI BUILDING, 4 PARLIAMENT STREET
SANSAD MARG AREA, NEW DELHI - 110001

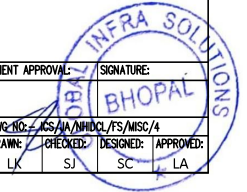
DESIGN CONSULTANT:
Global Infra Solutions
in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd.
P-2, E-8/11A, Sukhsagar Apartment, Tirilanga, Bhopal - 462039
e: globalinfra@solutions@gmail.com web: globalinfra@solutions.org

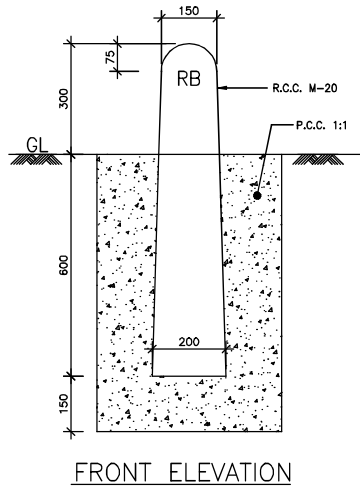
PROJECT: CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

SCALE: Not to scale
Dimensions as mentioned

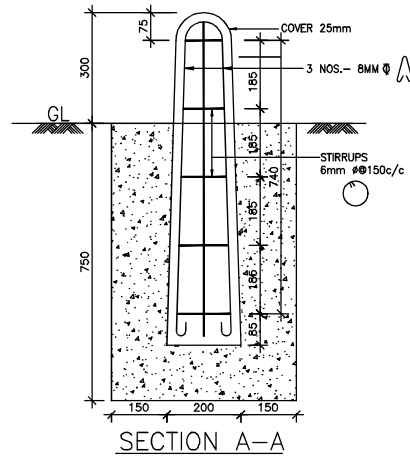
TITLE: DETAILS OF STONES

CLIENT APPROVAL:	SIGNATURE:
DWG NO: ACS/A/INDCL/FS/MISC/4	
DRAWN: LK	CHECKED: SI
DESIGNED: SC	APPROVED: LA

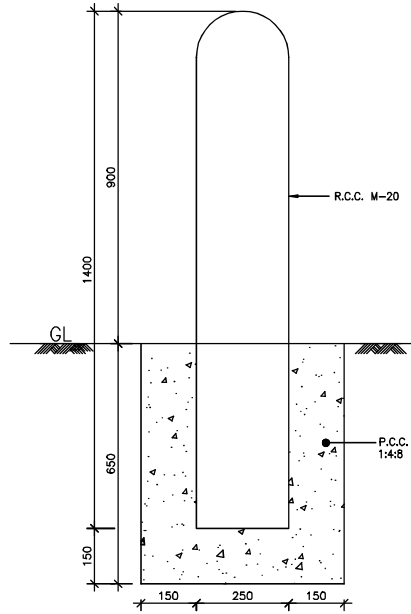




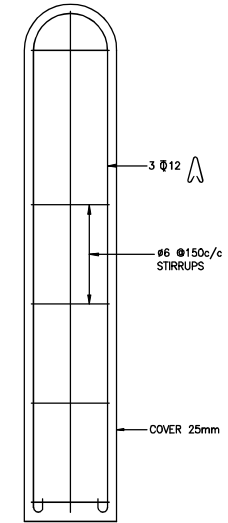
FRONT ELEVATION



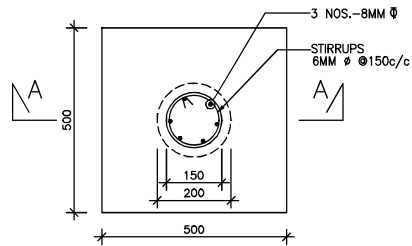
SECTION A-A



FRONT ELEVATION

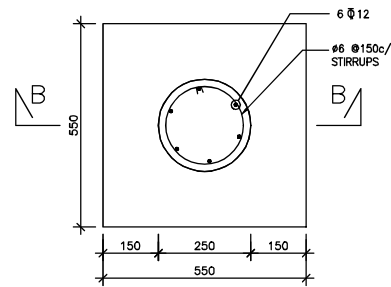


SECTION B-B



PLAN
TYPE DESIGN WITH R.C.C.

BOUNDARY PILLAR

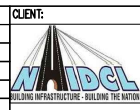


PLAN

GUARD POST

NOTE:-

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE STATED.



**NATIONAL HIGHWAYS & INFRASTRUCTURE
DEVELOPMENT CORPORATION LTD.**
PTI BUILDING, 4 PARLIAMENT STREET
SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:
Global Infra Solutions
in JV with Krishna Techno Consultants Pvt. Ltd. and
association with Infycos Creative Software Pvt. Ltd.
P-2, E-8/11A, Sukhsagar Apartment, Tilaknagar, Bhopal - 462039
e: globalinfra@globalinfra.com web: globalinfra.com

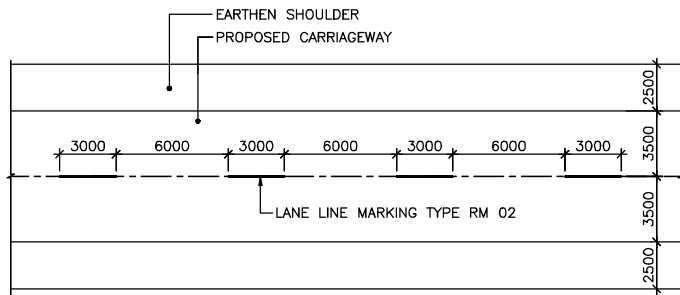
PROJECT:
**CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS,
INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF
FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR
DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)**

SCALE:
Not to scale
Dimensions
as mentioned

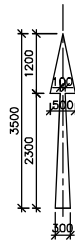
TITLE:
**BOUNDARY PILLAR
& GUARD POST**

CLIENT APPROVAL:		SIGNATURE:	
DWG NO: ACS/IA/INDCL/FS/MISC/5		BHO PAL	
DRAWN: LK	CHECKED: SI	DESIGNED: SC	APPROVED: LA

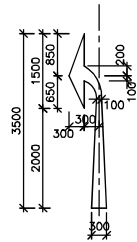




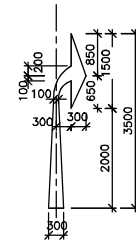
TYPICAL LAYOUT OF ROAD MARKING



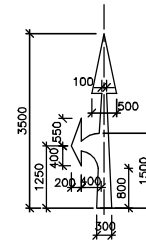
STRAIGHT-RM 14



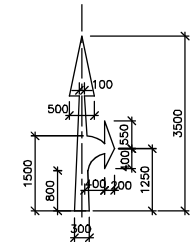
LEFT-RM 15



RIGHT-RM 16

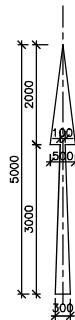


STRAIGHT AND LEFT-RM 17

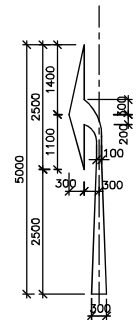


STRAIGHT AND RIGHT-RM 18

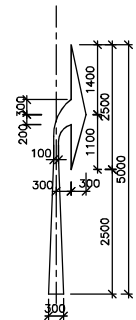
ROUTE DIRECTIONAL ARROWS FOR ROADS WITH DESIGN SPEED UP TO 50 km/hr



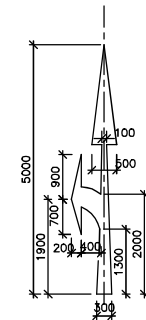
STRAIGHT-RM 14



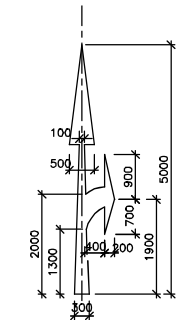
LEFT-RM 15



RIGHT-RM 16



STRAIGHT AND LEFT-RM 17

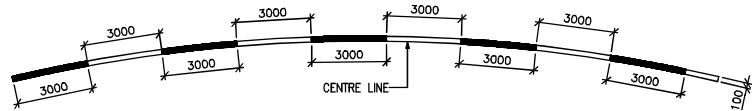


STRAIGHT AND RIGHT-RM 18

ROUTE DIRECTIONAL ARROWS FOR ROADS WITH DESIGN SPEED MORE THAN 50 km/hr



LANE LINE MARKING-RM 02
(FOR STRAIGHT REACH)




LANE LINE MARKING-RM 02
(AT HORIZONTAL CURVES)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE MENTIONED.
2. DIMENSIONS SHALL NOT BE MEASURED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.

REV.	DATE	REVISIONS

CLIENT:



NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
PTI BUILDING, 4 PARLIAMENT STREET
SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:

Global Infra Solutions
in JV with **Krishna Techno Consultants Pvt. Ltd.** and association with **Infycons Creative Software Pvt. Ltd.**
F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039
e: globalinfra@globalinfra.com | web: globalinfra.com

PROJECT:

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SCALE:

Not to scale
Dimensions as mentioned

TITLE:

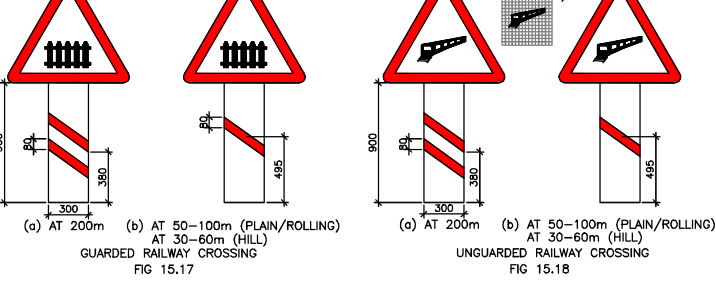
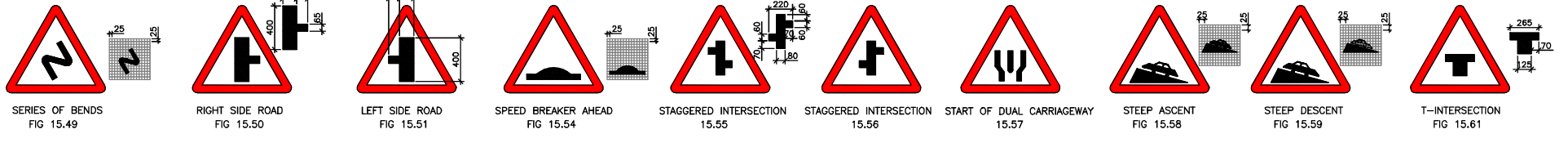
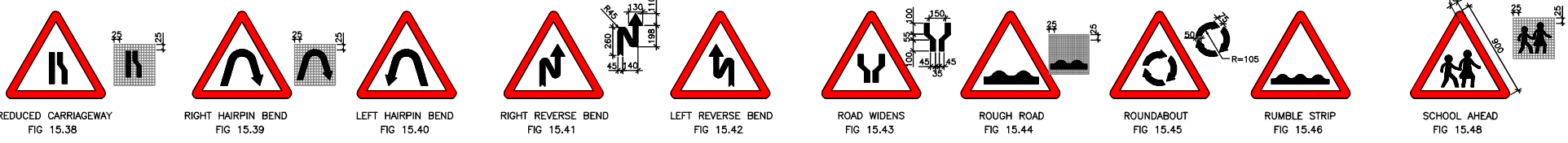
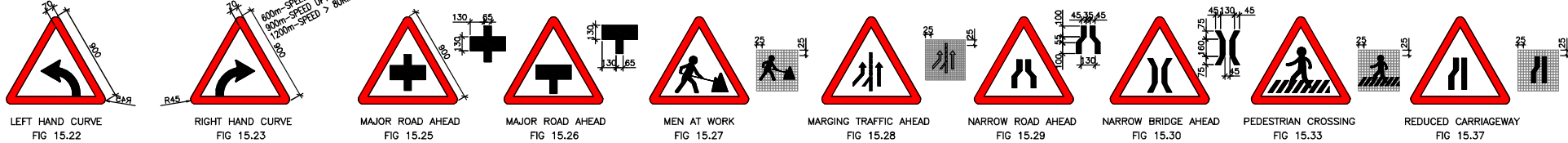
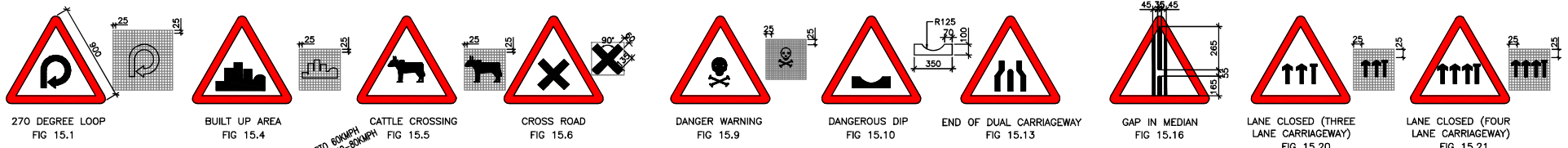
ROAD MARKERS & DIR. ARROWS

CLIENT APPROVAL: _____ SIGNATURE: _____

DWG NO: ACS/A/INDCL/FS/MSC/7

DRAWN: LK CHECKED: SI DESIGNED: SC APPROVED: LA



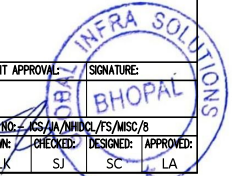


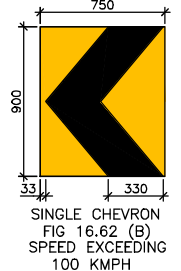
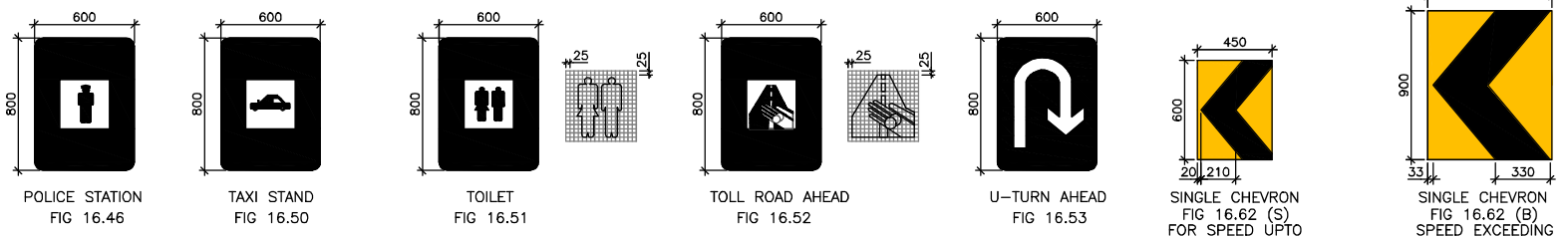
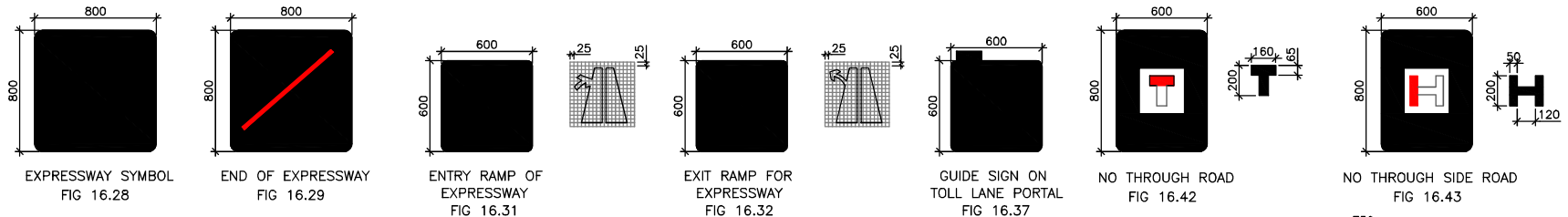
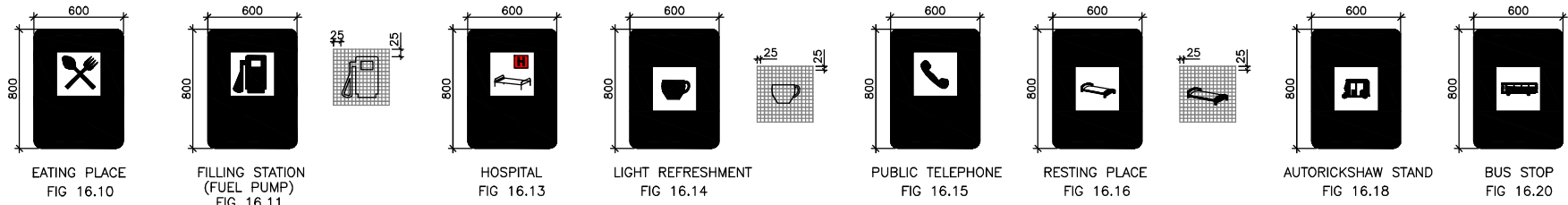
SIZE & SITING OF CAUTIONARY/WARNING SIGNS

SIZE TYPE	LENGTH OF TRIANGLE(mm)	DISTANCE OF SIGN FROM HAZARD (m)
TRAFFIC SPEED UP TO 60 KMPH	600mm	45m-80m
60 - 80 KMPH	900mm	80m-120m
> 80 KMPH	1200mm	> 120m

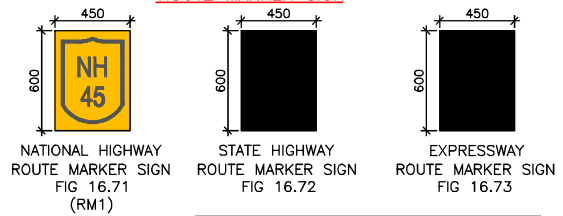
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE MENTIONED.
2. DIMENSIONS SHALL NOT BE MEASURED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
3. FIGURE NUMBER REFER TO IRC:67-2010



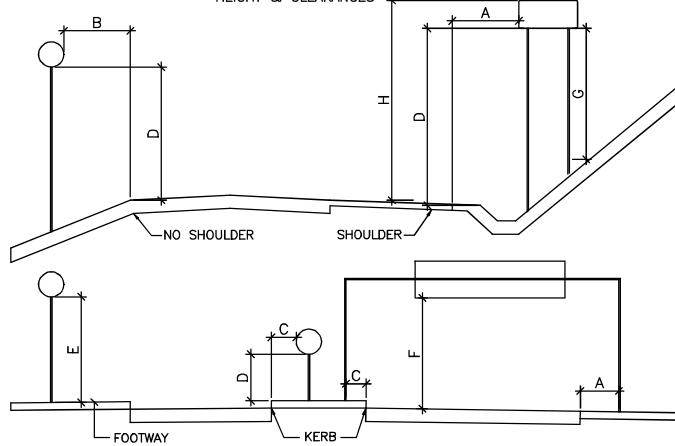


ROUTE MARKER SIGN



	MINIMUM (mm)	DESIRABLE (mm)	MAXIMUM (mm)
A	600	1000	2500
B	1000	2000	3000
C	300	600	1000
D	2000	2000	2500
E	2100	2100	2500
F	5500	6000	
G	750		
H			5000

SITING OF SIGNS WITH RESPECT TO THE CARRIAGEWAY



NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE MENTIONED.
 - FIGURE NUMBER REFER TO IRC:67-2010
 - MANDATORY SIGNS (e.g. KEEP LEFT) ON TRAFFIC ISLANDS ARE NORMALLY MOUNTED SO THAT THE BOTTOM EDGE IS ABOUT 1000 mm ABOVE THE PAVED SURFACE. WHEN SEVERAL SIGNS HAVE TO BE PLACED ALONG THE SAME SECTION OF ROAD TAKE CARE THAT THEY DO NOT OBSCURE EACH OTHER. LOCATE THE SIGNS A MINIMUM OF 0.6V METRES APART (WHERE V IS THE 85 PERCENTILE SPEED IN km/h)
- SIGNS ARE NORMALLY ERRECTED ON THE LEFT SIDE OF THE ROAD. BUT FOR EXTRA EMPHASIS A SECOND SIGN MAY BE PLACED ON THE RIGHT SIDE OF THE ROAD. THIS IS ESPECIALLY USEFUL ON LEFT HAND BENDS.

REV.	DATE	REVISIONS

CLIENT:

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
PTI BUILDING, 4 PARLIAMENT STREET
SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:

Global Infra Solutions
in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd.
P-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039
e: globalinfra@globalinfra.com web: globalinfra.com

PROJECT:

CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

SCALE:

Not to scale
Dimensions as mentioned

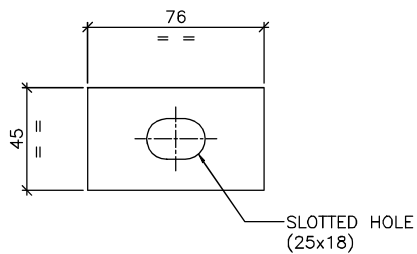
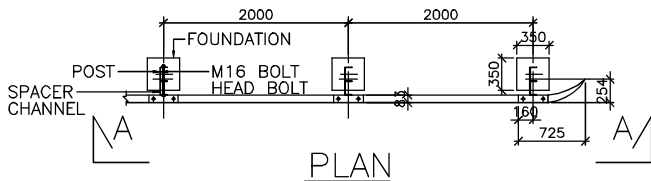
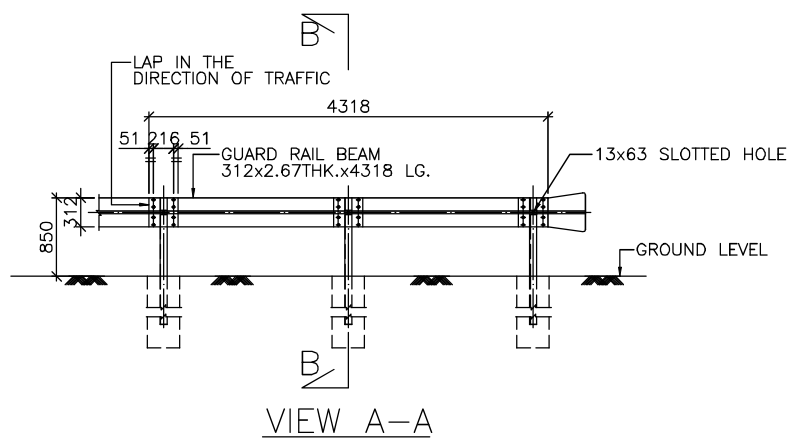
TITLE:

INFORMATION/ DIRECTION SIGNS

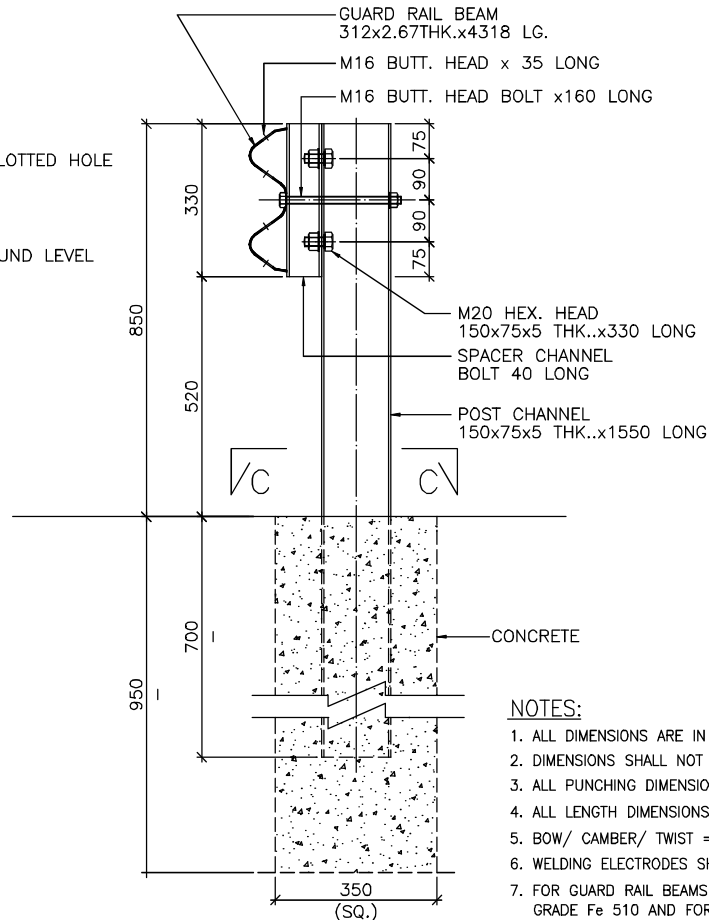
CLIENT APPROVAL: _____ SIGNATURE: _____

DWG NO: ACS/IA/NHDC/FS/MISC/9

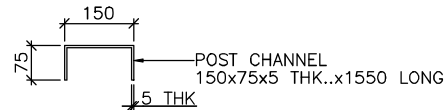
DRAWN: LK CHECKED: SI DESIGNED: SC APPROVED: LA



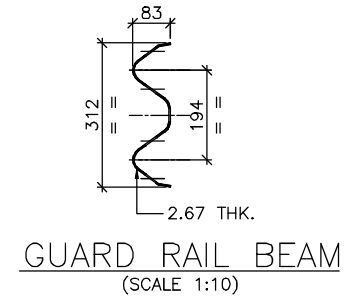
RECTANGULAR WASHER DETAILS
(SCALE 1:2)



SECTION B-B
(SCALE 1:10)



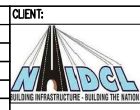
SECTION C-C
(SCALE 1:10)



GUARD RAIL BEAM
(SCALE 1:10)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. DIMENSIONS SHALL NOT BE SCALED OF FROM THE DRAWING.
3. ALL PUNCHING DIMENSIONS UNLESS OTHERWISE STATED ± 1 mm.
4. ALL LENGTH DIMENSIONS UNLESS OTHERWISE STATED ± 2 mm.
5. BOW/ CAMBER/ TWIST = 1mm /METER.
6. WELDING ELECTRODES SHALL CONFORM TO IS:814.
7. FOR GUARD RAIL BEAMS MATERIAL SHALL CONFORM TO IS:5956 GRADE Fe 510 AND FOR POSTS SPACER CHANNEL SHALL BE OF IS:5986, GRADE Fe 380.
8. BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANISHED.
9. GUARD RAIL BEAM, POSTS & SPACERS SHALL BE HOT DIP GALVANISHED TO 550g/m.
10. ALL BOLTS SHALL CONFORM TO IS:1367, CLASS 4.6.



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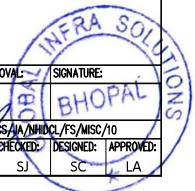
DESIGN CONSULTANT:
Global Infra Solutions
in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd.
F-2, E-8/11A, Sukhsagar Apartment, Tilanga, Bhopal - 462039
e: globalinfra@globalinfra.com web: globalinfra.com

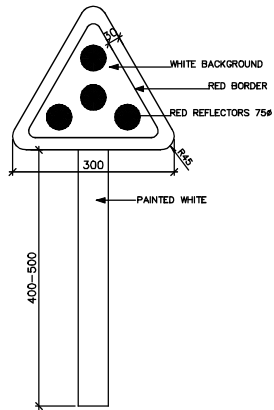
PROJECT: CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

SCALE: Not to scale
Dimensions as mentioned

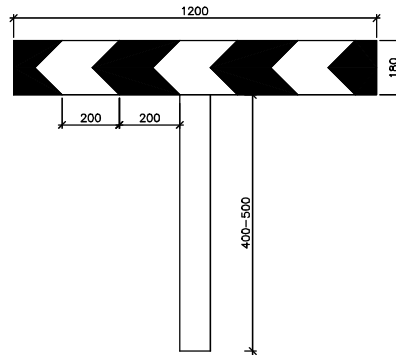
TITLE: METAL BEAM CRASH BARRIER

CLIENT APPROVAL:		SIGNATURE:	
[Signature]		[Signature]	
DWG NO: ACS/A/INDCL/FS/MSC/10	CHECKED:	DESIGNED:	APPROVED:
LK	SL	SC	LA

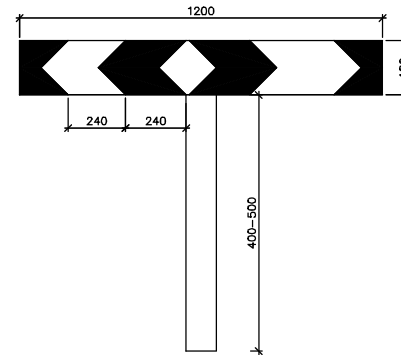




CLUSTER OF RED REFLECTORS
TA-1



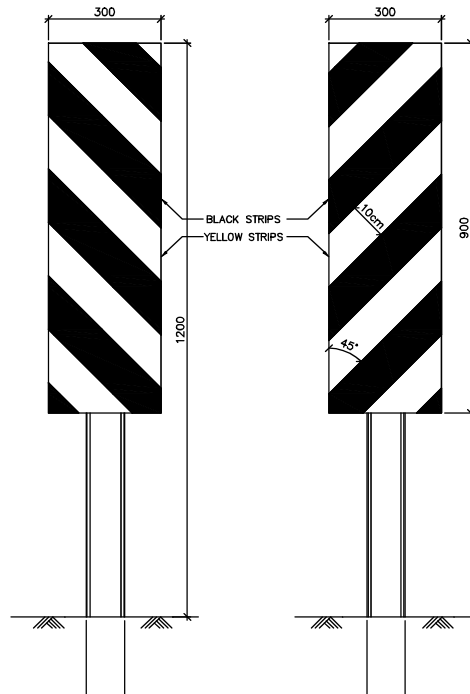
ONE WAY HAZARD MARKER
TA-2



TWO-WAY HAZARD MARKER
TA-3

NOTES:

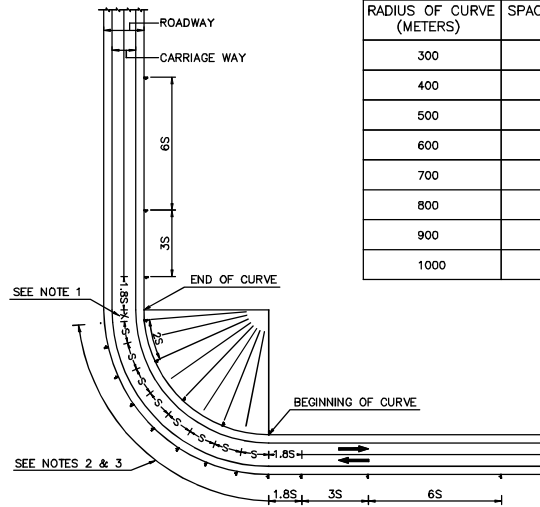
1. ALL DIMENSIONS ARE IN mm EXCEPT WHERE OTHERWISE MENTIONED.
2. ADJUST DISTANCE 'X' SUITABLY SO THAT THE LAST ROADWAY DELINEATOR IS AT THE END OF THE CURVE.
3. INSTALL ALL DELINEATORS AT EDGE OF THE ROADWAY PERPENDICULAR TO THE ONCOMING TRAFFIC.
4. SEE TABLE 1 FOR VALUE OF 'S' i.e. SPACING OF DELINEATORS ON THE CURVE.
5. THE SPACING OF FIRST, SECOND & THIRD DELINEATORS ON THE APPROACHES SHALL BE 1.85S, 3S & 6S RESPECTIVELY BUT NOT EXCEEDING 50m.



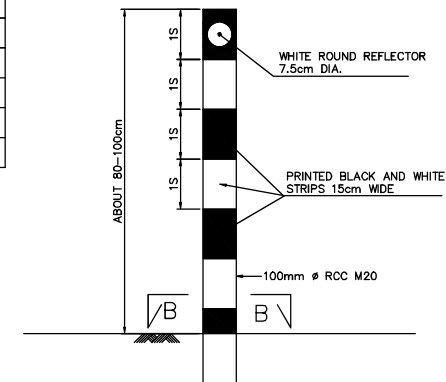
(LEFT) HAZARD MARKERS (RIGHT)

TABLE FOR RECOMMENDED SPACING FOR ROADWAY DELINEATORS ON HORIZONTAL CURVES

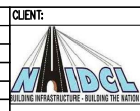
RADIUS OF CURVE (METERS)	SPACING ON CURVE, S (METERS)
300	25
400	30
500	35
600	38
700	42
800	45
900	48
1000	50



ROADWAY DELINEATOR SPACING ON CURVES



DELINEATOR WITH RECTANGULAR REFLECTOR



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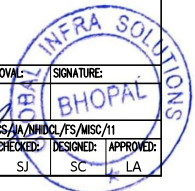
DESIGN CONSULTANT:
Global Infra Solutions
in JV with Krishna Techno Consultants Pvt. Ltd. and
association with Infycons Creative Software Pvt. Ltd.
F-2, E-8/11A, Sukhsagar Apartment, Tilanga, Bhopal - 462039
e: globalinfra@globalinfra.com web: globalinfra.com

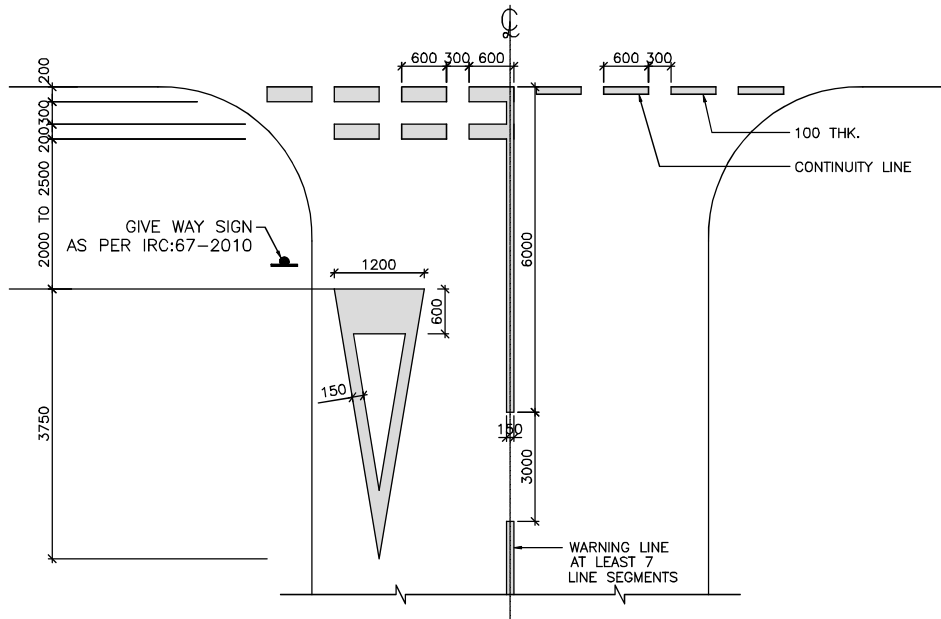
PROJECT: CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS,
INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF
FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR
DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

SCALE:
Not to scale
Dimensions
as mentioned

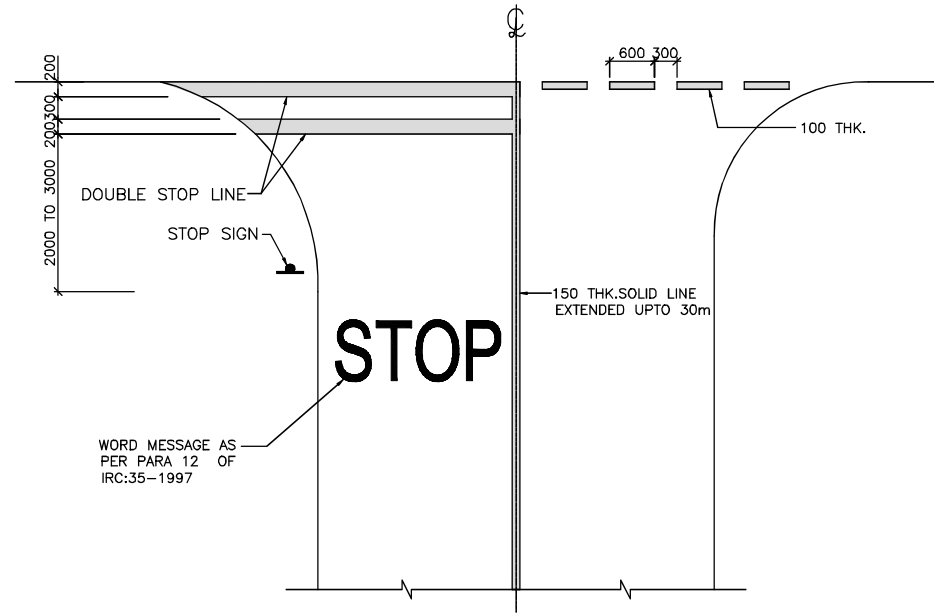
TITLE:
HAZARD/
OBJECT MARKERS

CLIENT APPROVAL: [Signature]
SIGNATURE: [Signature]
DWG NO: ACS/IA/INDCL/FS/MISC/11
DRAWN: LK CHECKED: SI DESIGNED: SC APPROVED: LA





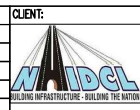
MARKING FOR GIVE WAY LINES
(FIG -13) IRC:35



STOP LINE MARKINGS FOR USE WITH STOP SIGN
(FIG -10) IRC:35

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE MENTIONED.
2. DIMENSIONS SHALL NOT BE MEASURED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.



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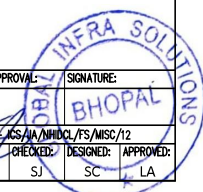
DESIGN CONSULTANT:
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 in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd.
 P-2, E-8/11A, Sukhsagar Apartment, Tilanga, Bhopal - 462039
 e: globalinfra@globalinfra.com web: globalinfra.com

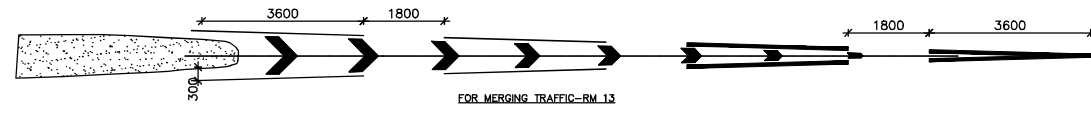
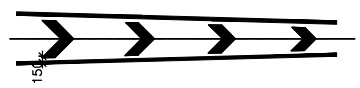
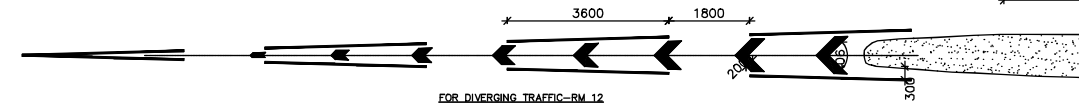
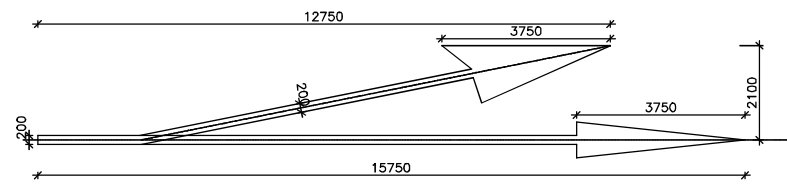
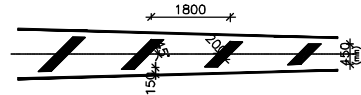
PROJECT:
CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

SCALE:
 Not to scale
 Dimensions as mentioned

TITLE:
STOP/GIVE WAY LINES MARKING

CLIENT APPROVAL:		SIGNATURE:	
DWG NO: ACS/A/NHDCL/FS/MISC/12		BHO PAL	
DRAWN: LK	CHECKED: SI	DESIGNED: SC	APPROVED: LA






CHEVRON MARKING AT APPROACH TO ISLAND

- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE MENTIONED.
 2. DIMENSIONS SHALL NOT BE MEASURED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.

REV.	DATE	REVISIONS

CLIENT:



NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
PTI BUILDING, 4 PARLIAMENT STREET
SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:



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in JV with Krishna Techno Consultants Pvt. Ltd. and association with Infycons Creative Software Pvt. Ltd.
F-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039
e: globalinfra@globalinfra.com web: globalinfra.com

PROJECT:

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SCALE:

Not to scale
Dimensions as mentioned

TITLE:

CHEVRON MARKINGS

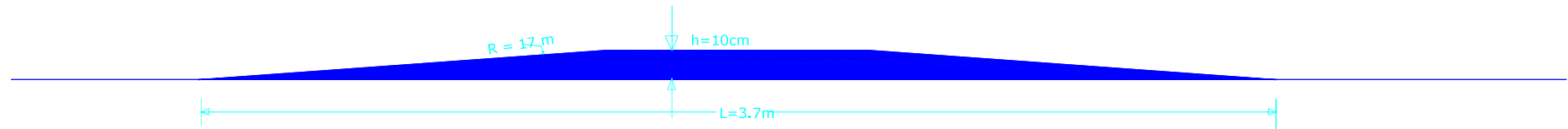
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SIGNATURE: 

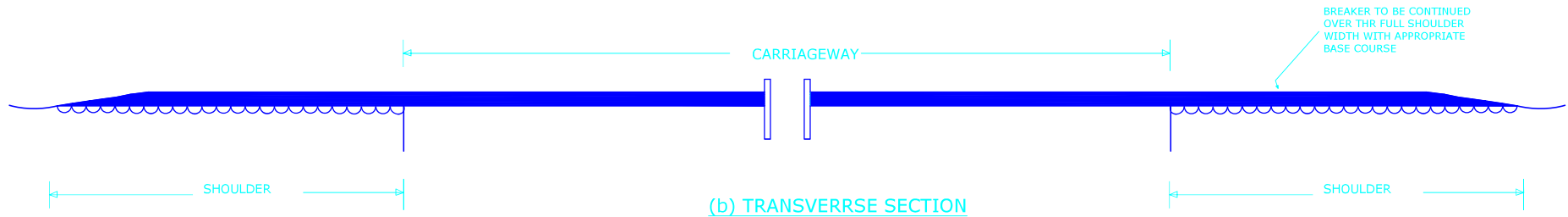
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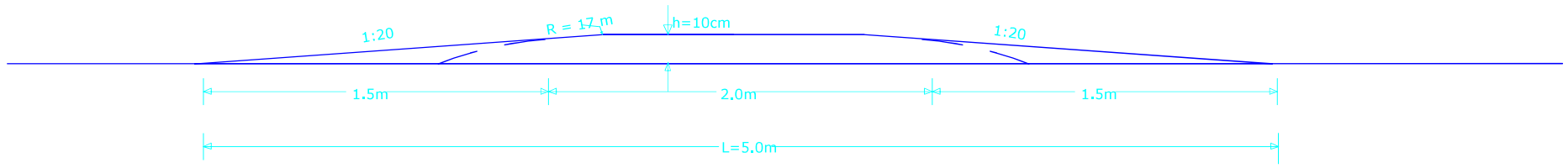


(a) LONGITUDINAL SECTION



(b) TRANSVERSE SECTION

Fig. 1. Recommended specification for rounded hump type of speed breaker for general traffic at preferred crossing speed 25 km/h




(a) LONGITUDINAL SECTION
 (b) TRANSVERSE SECTION IS SAME AS GIVEN IN FIG.1

- NOTES:-
- 1) Recommended specification for rounded hump type of speed breaker for heavy truck and bus traffic at preferred crossing speed 25 km/h
 - 2) All dimensions are in meters.
 - 3) Dimension shall not be in Scaled of from the Drawing.

REV.	DATE	REVISIONS

CLIENT:



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 PTI BUILDING, 4 PARLIAMENT STREET
 SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:

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 P-2, E-8/11A, Sukhsagar Apartment, Trilanga, Bhopal - 462039
 e: globalinfra@globalinfra.com web: globalinfra.com

PROJECT:

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SCALE:

Not to scale
 Dimensions as mentioned

TITLE:

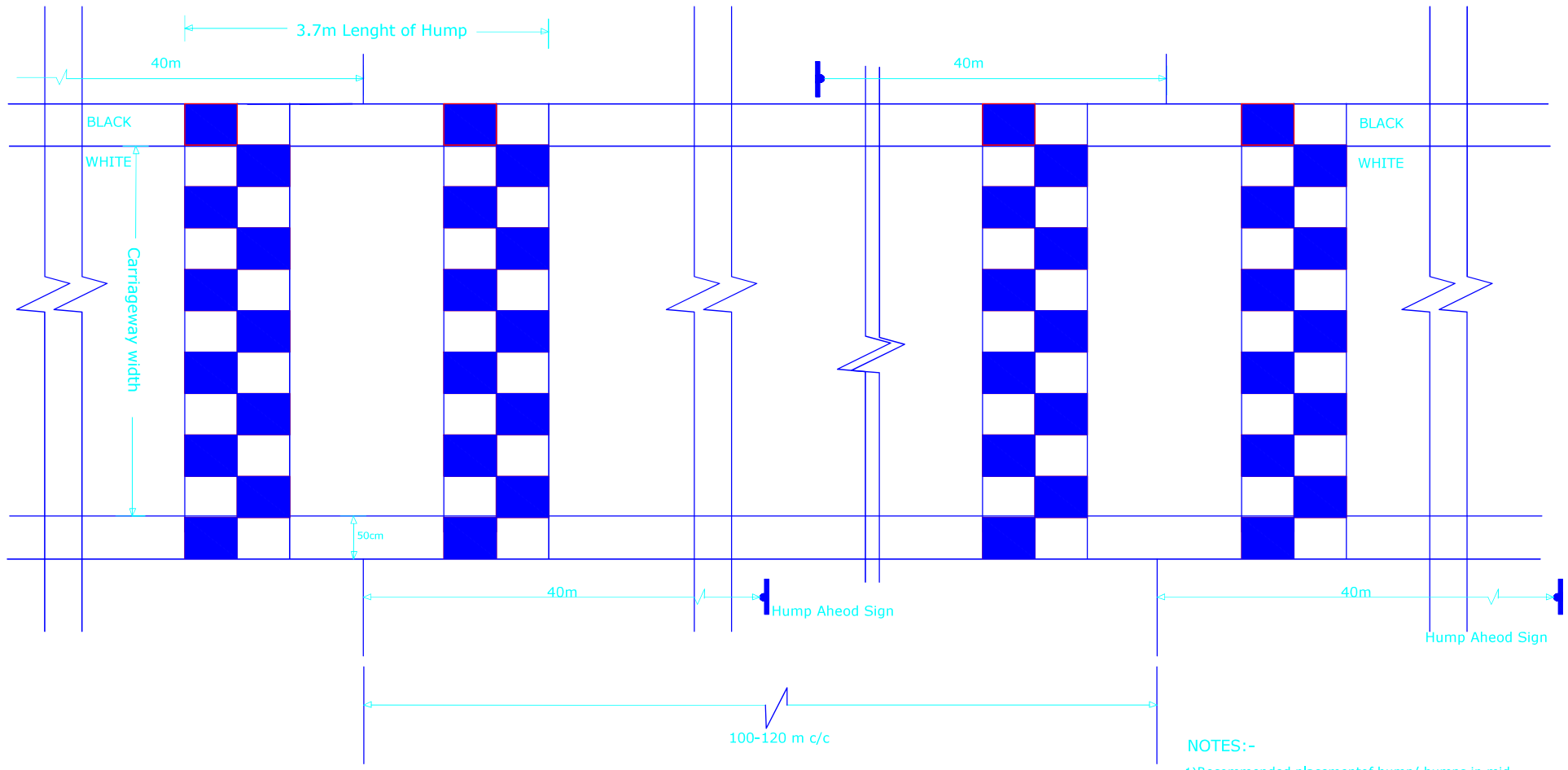
SPEED BRAKER

CLIENT APPROVAL: _____ SIGNATURE: _____

DWG NO: ACS/A/NHDC/FS/MISC/14

DRAWN: LK CHECKED: SJ DESIGNED: SC APPROVED: LA






NOTES:-

- 1) Recommended placement of hump/ humps in mid-block section, hump marking in chequered pattern and sign board locations
- 2) All dimensions are in Meters.
- 3) Dimension shall not be in Scaled of from the Drawing.

REV.	DATE	REVISIONS

CLIENT:

NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
 PTI BUILDING, 4 PARLIAMENT STREET
 SANSAD MARG AREA, NEW DELHI - 110001


DESIGN CONSULTANT:

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 in JV with **Krishna Techno Consultants Pvt. Ltd.** and
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 e: globalinfraolutions@gmail.com web: globalinfraolutions.org

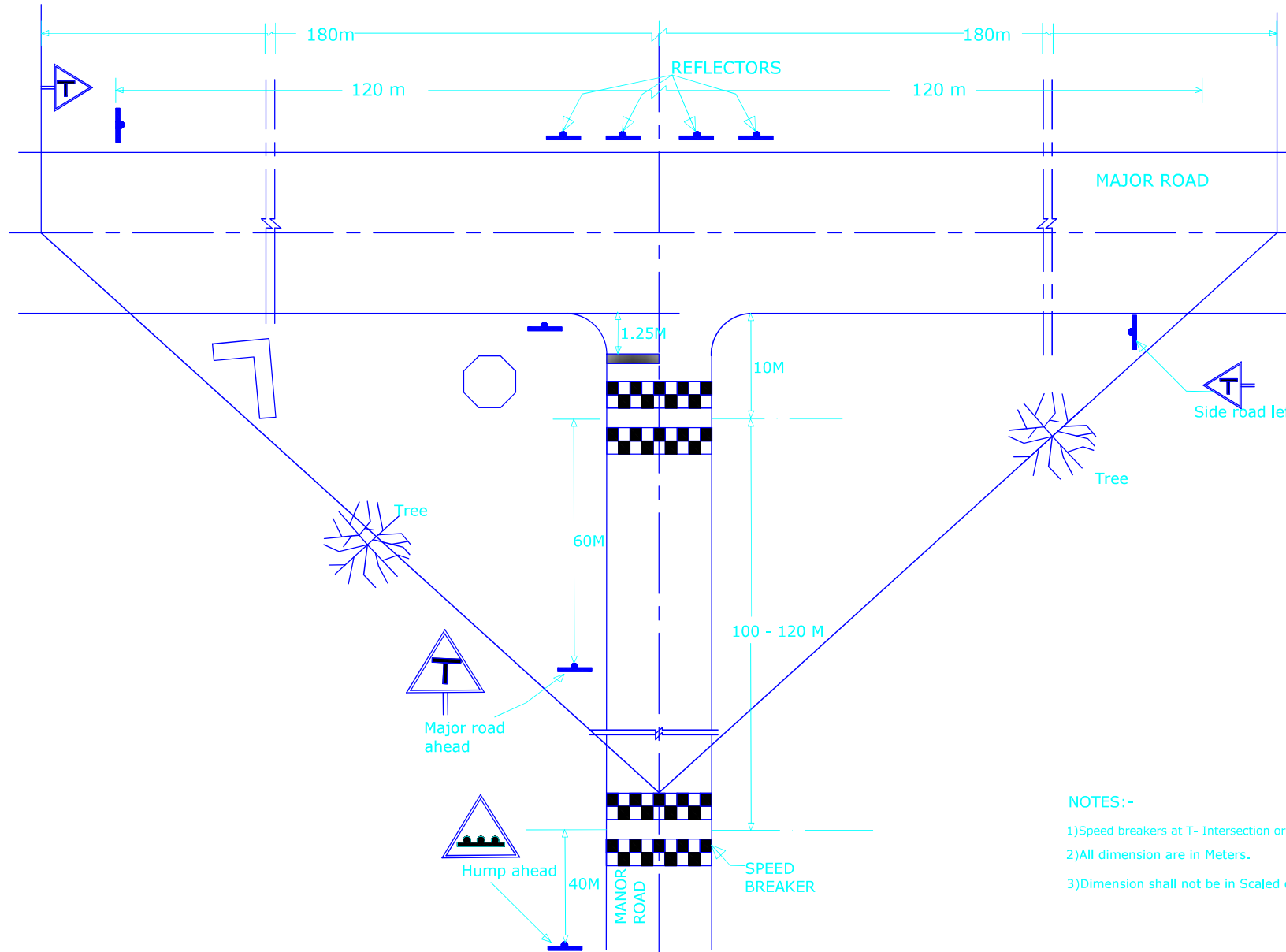
PROJECT:
CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

SCALE:
 Not to scale
 Dimensions as mentioned

TITLE:
HUMP AHEAD SIGN (REFLECTORLESS)

CLIENT APPROVAL:  **SIGNATURE:** 
DWG NO.: ACS/A/INDCL/FS/MISC/15
DRAWN: LK **CHECKED:** SJ **DESIGNED:** SC **APPROVED:** LA






NOTES:-

- 1) Speed breakers at T- Intersection or Railway crossing
- 2) All dimension are in Meters.
- 3) Dimension shall not be in Scaled of from the Drawing.

REV.	DATE	REVISIONS

CLIENT:

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 e: globalinfraolutions@gmail.com web: globalinfraolutions.org

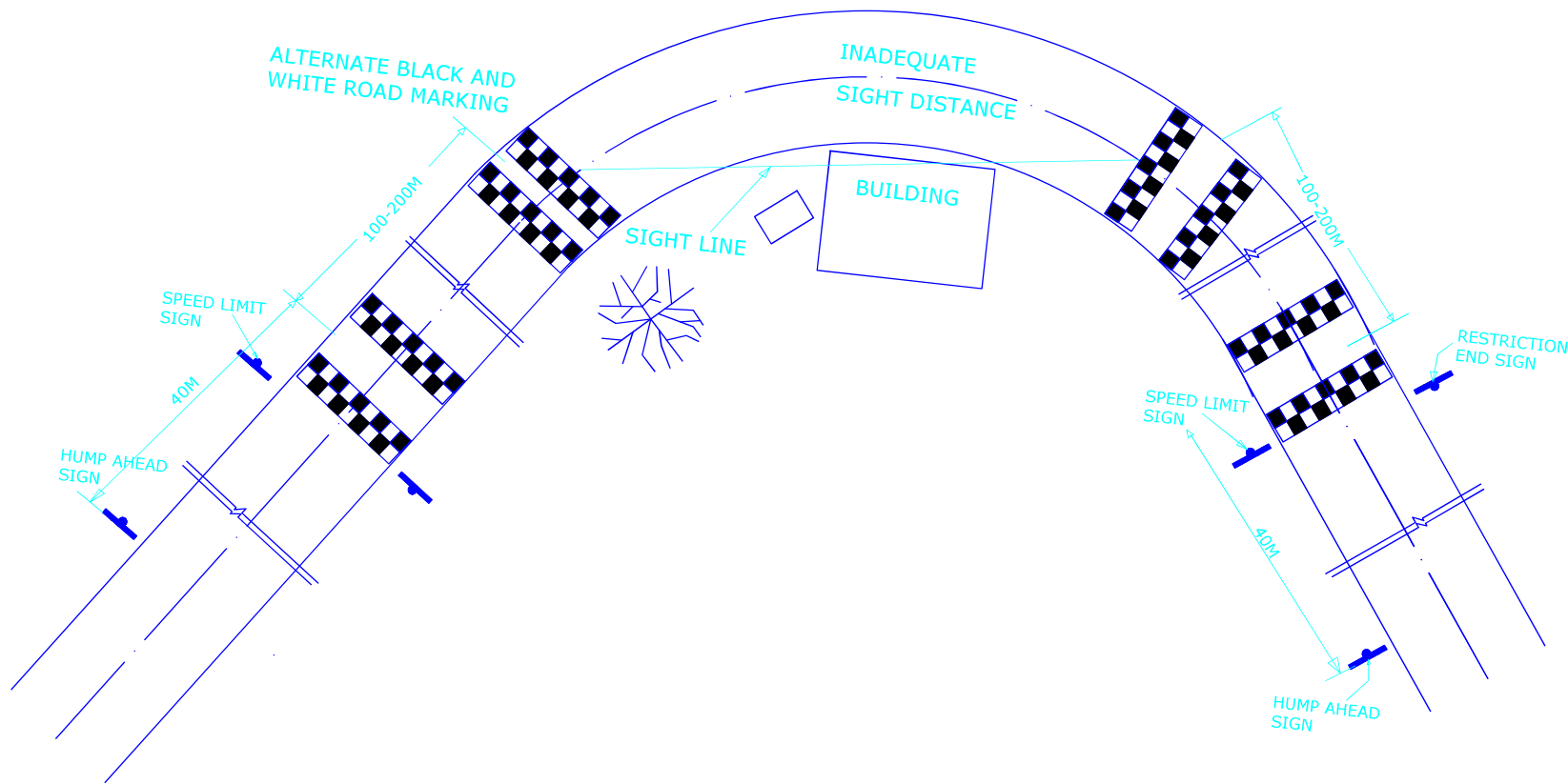
PROJECT:
CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

SCALE:
 Not to scale
 Dimensions as mentioned

TITLE:
SPEED BREAKER PLAN (STRAIGHT)

CLIENT APPROVAL:  **SIGNATURE:** 
DWG NO.: ACS/A/INDCL/FS/MISC/16
DRAWN: LK **CHECKED:** SI **DESIGNED:** SC **APPROVED:** LA






NOTES:-

- 1) Plan of speed breakers on approach to a sharp curve
- 2) All dimension are in Meters.
- 3) Dimension shall not be in Scaled of from the Drawing.

REV.	DATE	REVISIONS

CLIENT:



NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
PTI BUILDING, 4 PARLIAMENT STREET
SANSAD MARG AREA, NEW DELHI - 110001

DESIGN CONSULTANT:



Global Infra Solutions
in JV with Krishna Techno Consultants Pvt. Ltd. and
in association with Infycons Creative Software Pvt. Ltd.
F-2, E-8/11A, Sukhsagar Apartment, Trihanga, Bhopal - 462039
e: globalinfra@globalinfra.com web: globalinfra.com

PROJECT: CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

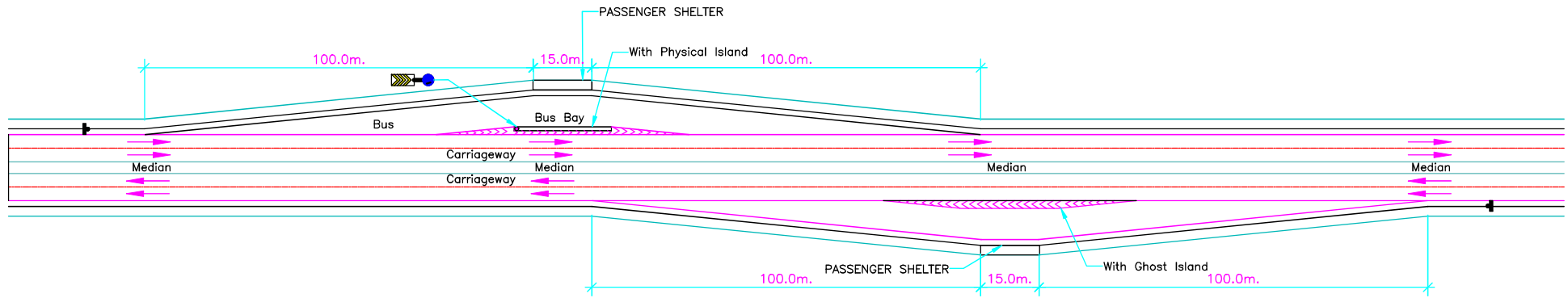
SCALE: Not to scale
Dimensions as mentioned

TITLE: SPEED BREAKER PLAN (CURVE)

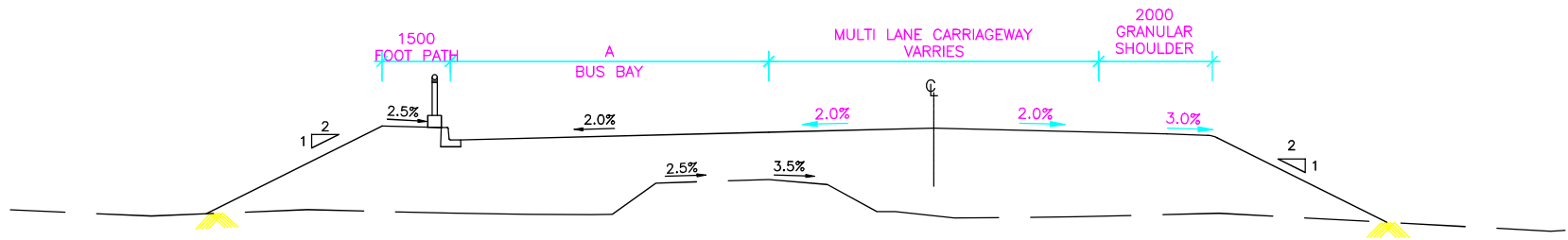
CLIENT APPROVAL:  **SIGNATURE:** 

DWG NO.: ACS/A/NHDCL/FS/MSC/17
DRAWN: LK **CHECKED:** SJ **DESIGNED:** SC **APPROVED:** LA





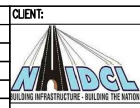
TYPICAL LAYOUT OF BUS BAY



SECTION D-D
SCALE 1:100

Notes :

1. ALL THE DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.



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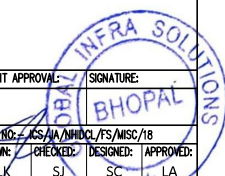
DESIGN CONSULTANT:
Global Infra Solutions
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P-2, E-8/11A, Sukhsagar Apartment, Tilaknagar, Bhopal - 462039
e: globalinfra@globalinfra.com web: globalinfra.com

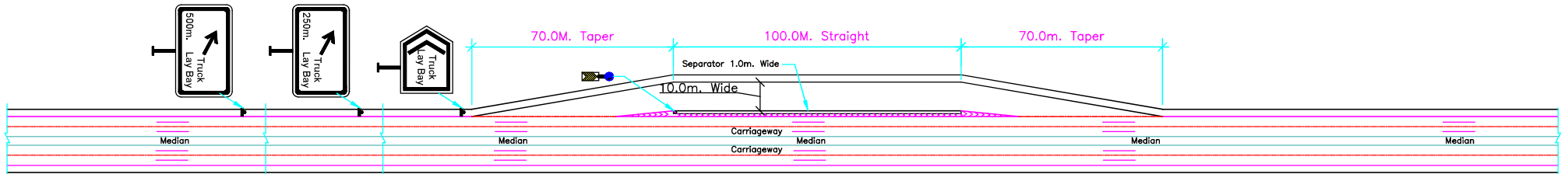
PROJECT: **CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)**

SCALE: Not to scale
Dimensions as mentioned

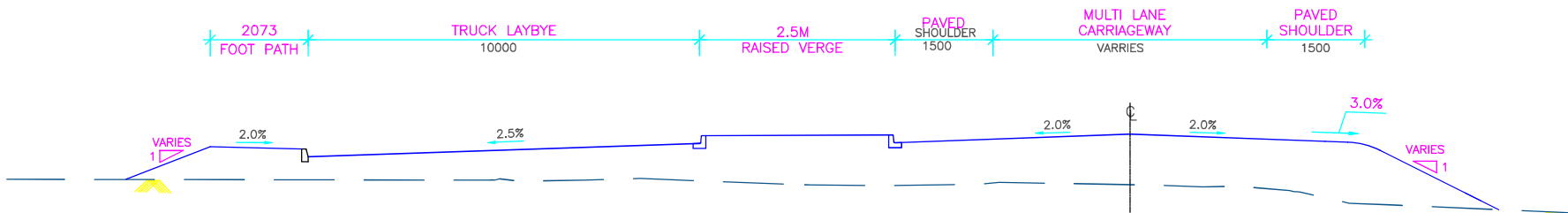
TITLE: **TRUCK LAYBYE**

CLIENT APPROVAL:	SIGNATURE:
BHO PAL	
DWG NO: ACS/IA/INDCL/FS/MISC/18	
DRAWN: LK	CHECKED: SJ
DESIGNED: SC	APPROVED: LA



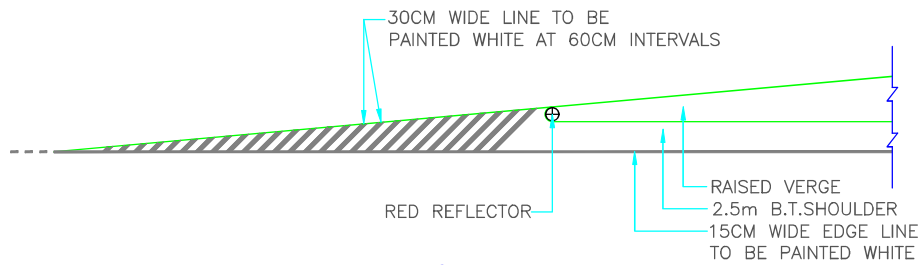


TYPICAL LAYOUT OF TRUCK LAY BAY

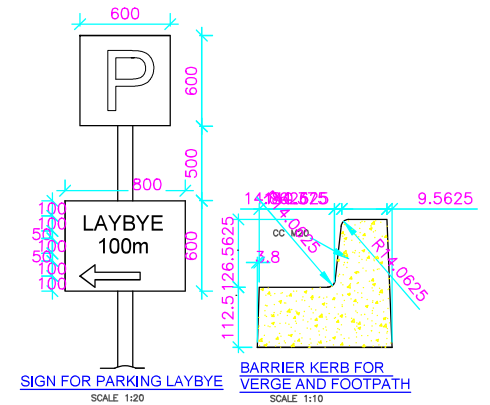


CROSS SECTION A-A

SCALE 1:100



PAVEMENT MARKING



SIGN FOR PARKING LAYBYE

BARRIER KERB FOR VERGE AND FOOTPATH

SCALE 1:20

SCALE 1:10

CLIENT:



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SCALE:

Not to scale
Dimensions as mentioned

TITLE:

TRUCK LAYBYE

CLIENT APPROVAL:

LK SI SC LA

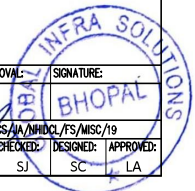
SIGNATURE:

SC LA

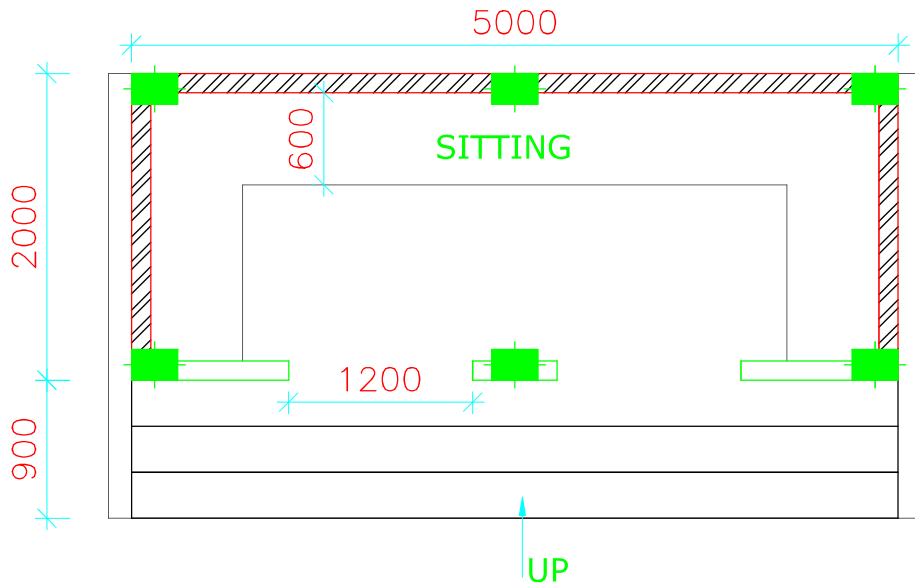
DWG NO: ACS/A/NHDCL/FS/MISC/19

DRAWN: CHECKED: DESIGNED: APPROVED:

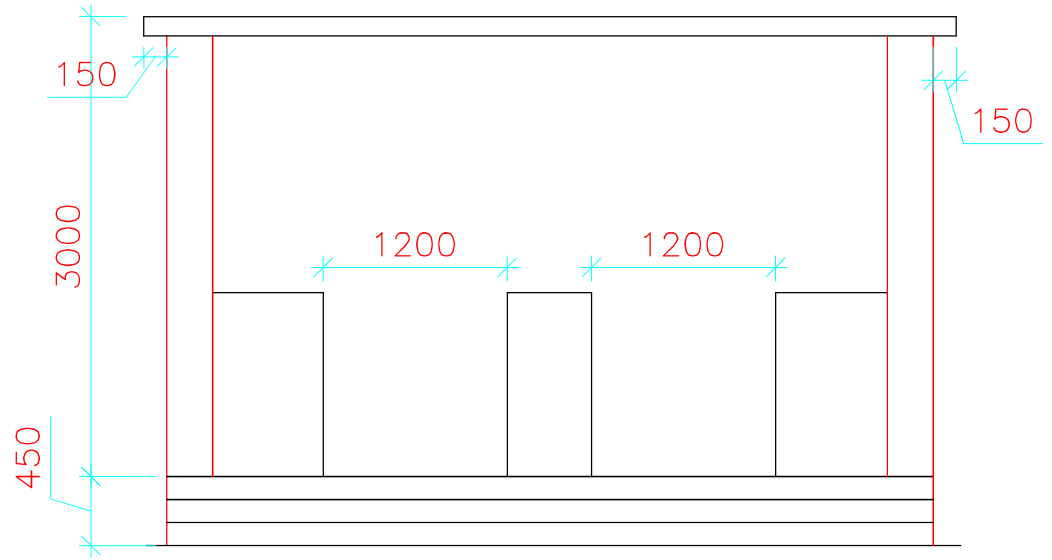
LK SI SC LA



REV.	DATE	REVISIONS



BUS SHELTER PLAN



ELEVATION

(I. M.S. TUBES SHALL CONFORM TO IS:1239)

REV.	DATE	REVISIONS



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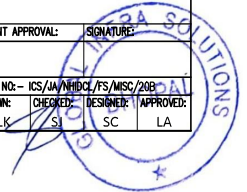
DESIGN CONSULTANT:
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 F-2, E-8/11A, Sakshigaur Apartment, Trikanga, Bhopal-462039
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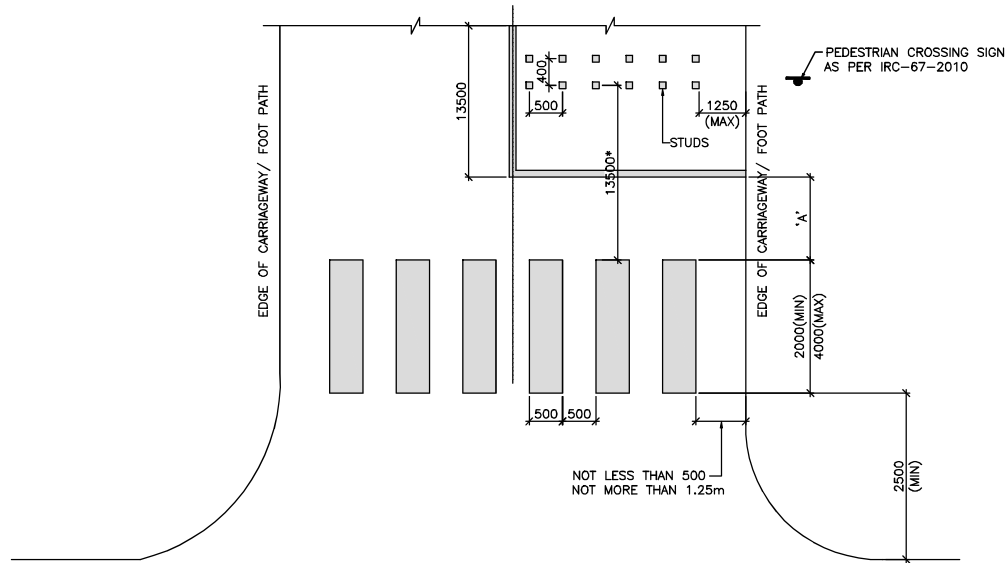
PROJECT: CONSULTANCY SERVICES FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER CORRIDORS AND FEEDER ROUTES TO IMPROVE THE EFFICIENCY OF FREIGHT MOVEMENT IN INDIA UNDER BHARATMALA PARIYOGANA LOT-1 FOR DUDHNOI-DAINADUBI STRETCH (ECONOMIC CORRIDOR DUDHNOI-WILLIAMNAGAR)

SCALE:
 Not to scale
 Dimensions as mentioned

TITLE:
 LAYOUT OF
 BUS SHELTER

CLIENT APPROVAL:	SIGNATURE:
DWG NO:- ICS/44/MBGL/FS/MSC/208	
DRAWN: LK	CHECKED: SJ
DESIGNED: SC	APPROVED: LA

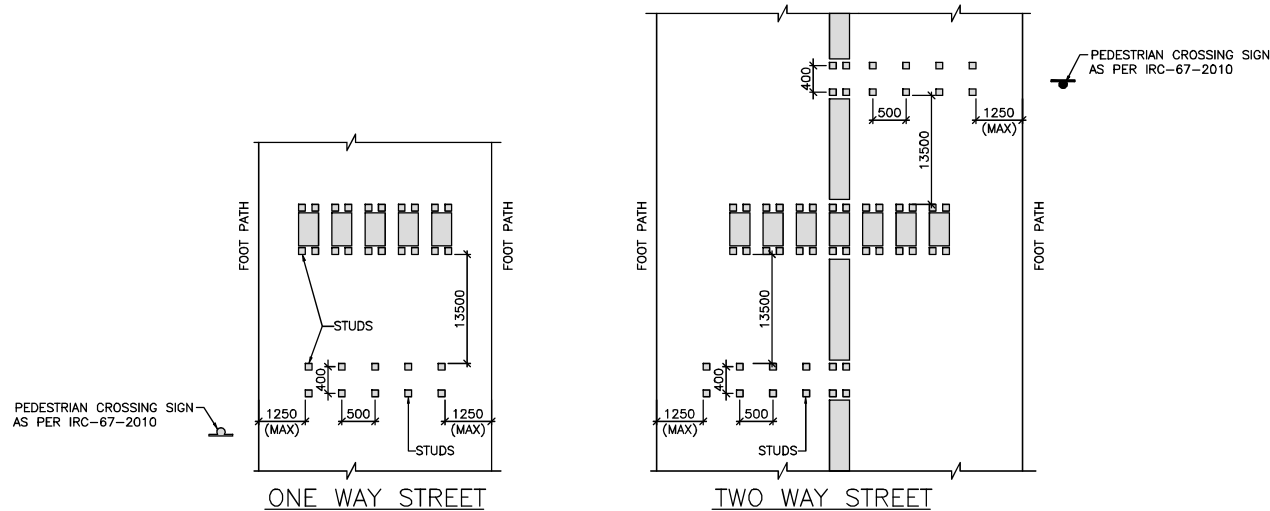




NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE MENTIONED.
2. DIMENSIONS SHALL NOT BE MEASURED FROM THE DRAWING. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
3. STUDS MAY BE SQUARE OF SIDE 0.15m OR CIRCULAR OF DIA. 0.15m
4. STUDS NOT TO PROTRUDE THE SURFACE BY MORE THAN 15mm AT THE HIGHEST POINT OR 6mm AT THE EDGES.
5. * IN EXCEPTIONAL CASES 9.0m
6. THE DISTANCE 'A' SHALL BE AS PER PARA 9.6.5 OF IRC:35-1997.

PEDESTRIAN CROSSING AT AN UNSIGNALLED INTERSECTION




ONE WAY STREET

TWO WAY STREET

PEDESTRIAN CROSSING AND APPROACHES THERETO FOR LOCATIONS OTHER THAN INTERSECTIONS

REV.	DATE	REVISIONS

CLIENT:



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SCALE:

Not to scale
 Dimensions as mentioned

TITLE:

PEDESTRIAN/ CROSSING MARKING

CLIENT APPROVAL:

SIGNATURE:

DWG NO: ACS/A/INDCL/FS/MSC/21

DRAWN: LK **CHECKED: SI** **DESIGNED: SC** **APPROVED: LA**

