

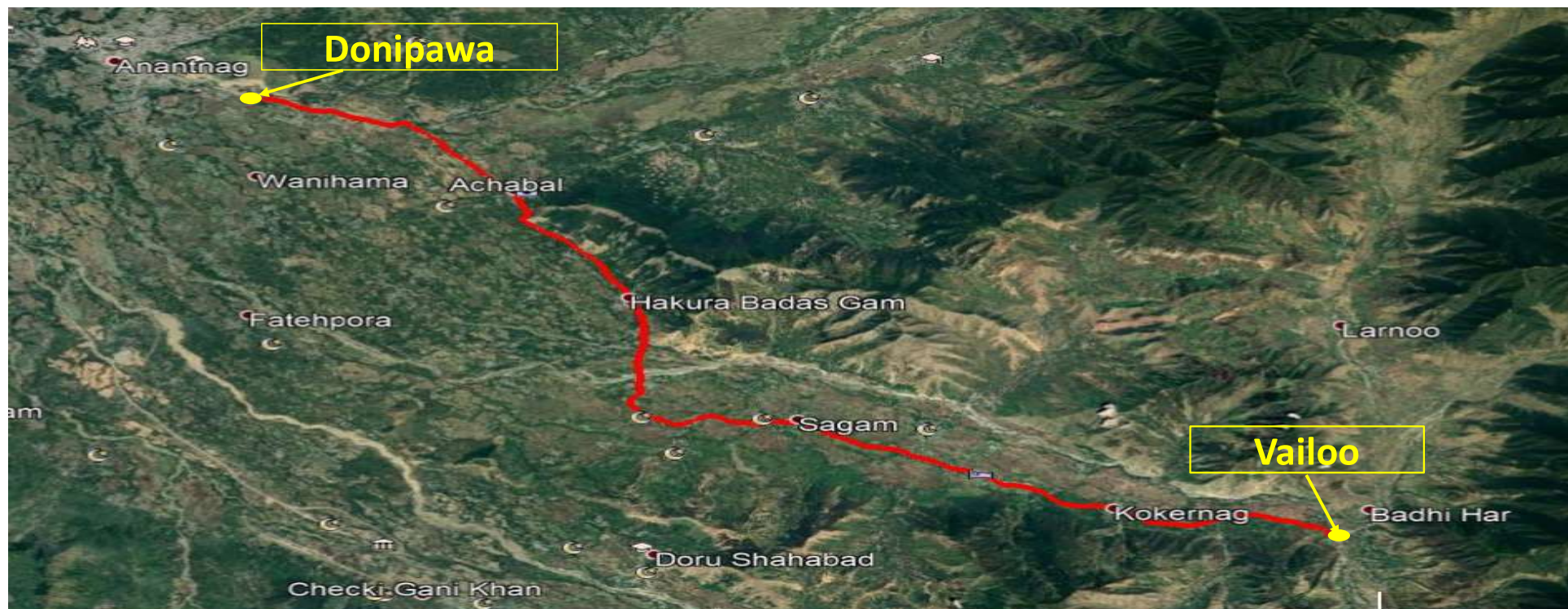


NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

(MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVT. OF INDIA)

3RD FLOOR, PTI BUILDING, 4-PARLIAMENT STREET, NEW DELHI – 110001

Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244 in the state of Jammu & Kashmir.



FINAL DETAILED PROJECT REPORT VAILOO TO DONIPAWA SECTION VOLUME-IX: DRAWINGS

NOVEMBER - 2020

RODIC CONSULTANTS PVT. LTD.
IN JV WITH

MONARCH SURVEYORS AND ENGINEERING CONSULTANTS PVT. LTD.



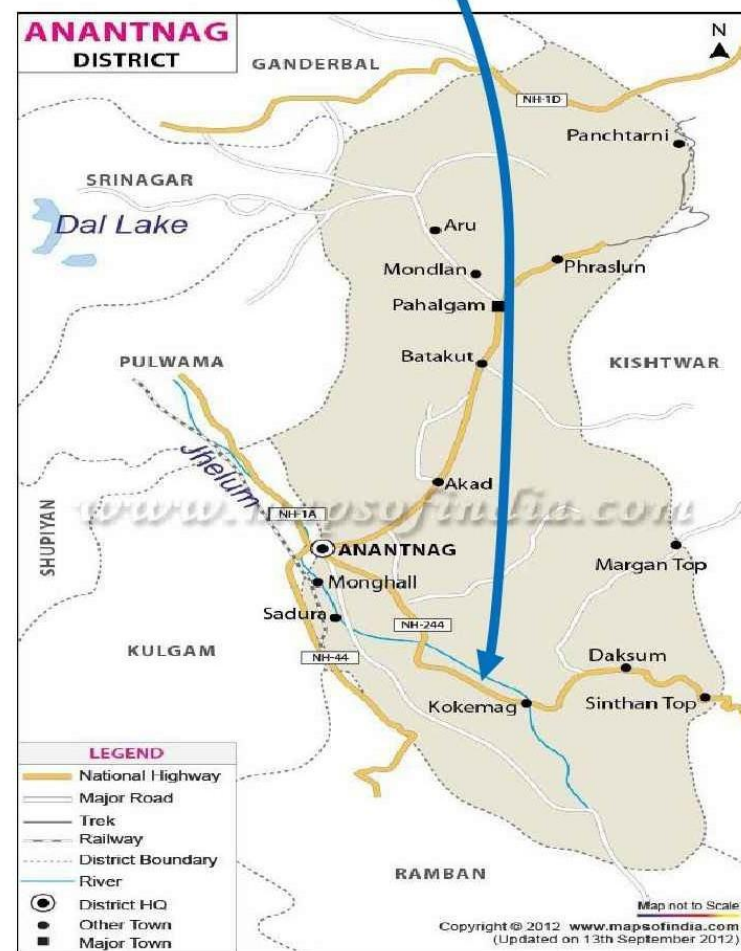
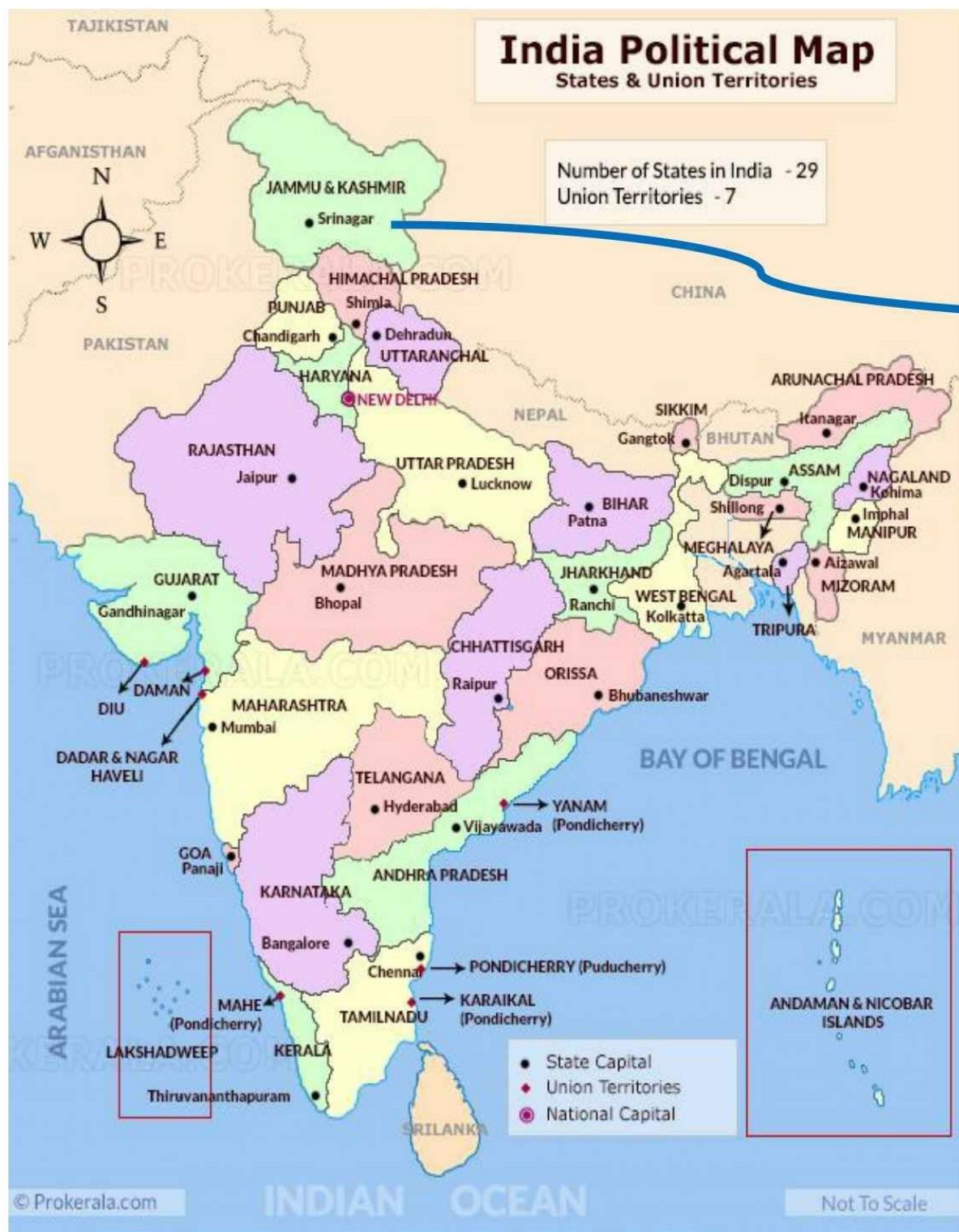
HIGHWAYS

FINAL DETAILED PROJECT REPORT

Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & **(ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal)** of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244

	DRAWINGS	DRAWING NO.
S.NO.		
1.	KEY PLAN	NHIDCL/NH-244-PACK-II/KP/01 ot 04/R0
2.	LINE DIAGRAM	NHIDCL/NH-244-PACK-II/LD/01 ot 04/R0
3.	LINEAR PLAN	NHIDCL/NH-244-PACK-II/LP/01ot 28/R0
4.	TBM & GPS DETAILS	NHIDCL/NH-244-PACK-II/TBM&GPS/01 ot 04/R0
5.	SET-OUT DATA	NHIDCL/NH-244-PACK-II/VR-ALIGN/01 ot 35/R0
6.	HORIZONTAL ALIGNMENT REPORT	NHIDCL/NH-244-PACK-II/HOR-ALIGN/01 ot 09/R0
7.	VERTICAL ALIGNMENT REPORT	NHIDCL/NH-244-PACK-II/VR-ALIGN/01 ot 07/R0
8.	ROAD PLAN & PROFILE (Km.148+589+ to Km.176+532)	NHIDCL/NH244-PKG-II/RP&P/01 to 30/R0
9.	TYPICAL CROSS SECTION -1 TO 4	NHIDCL/NH244-PKG-II/TCS/01 to 04/R0
10.	DRAINAGE PLAN & PROFILE ROAD (Km.148+589+ to Km.176+532)	NHIDCL/NH244-PKG-II/DP&P/01to30/R0
11.	TRAFFIC SIGNAGE AND ROAD MARKING PLAN	NHIDCL/NH244-PKG-II/TSMP/01to28/R0

KEY PLAN



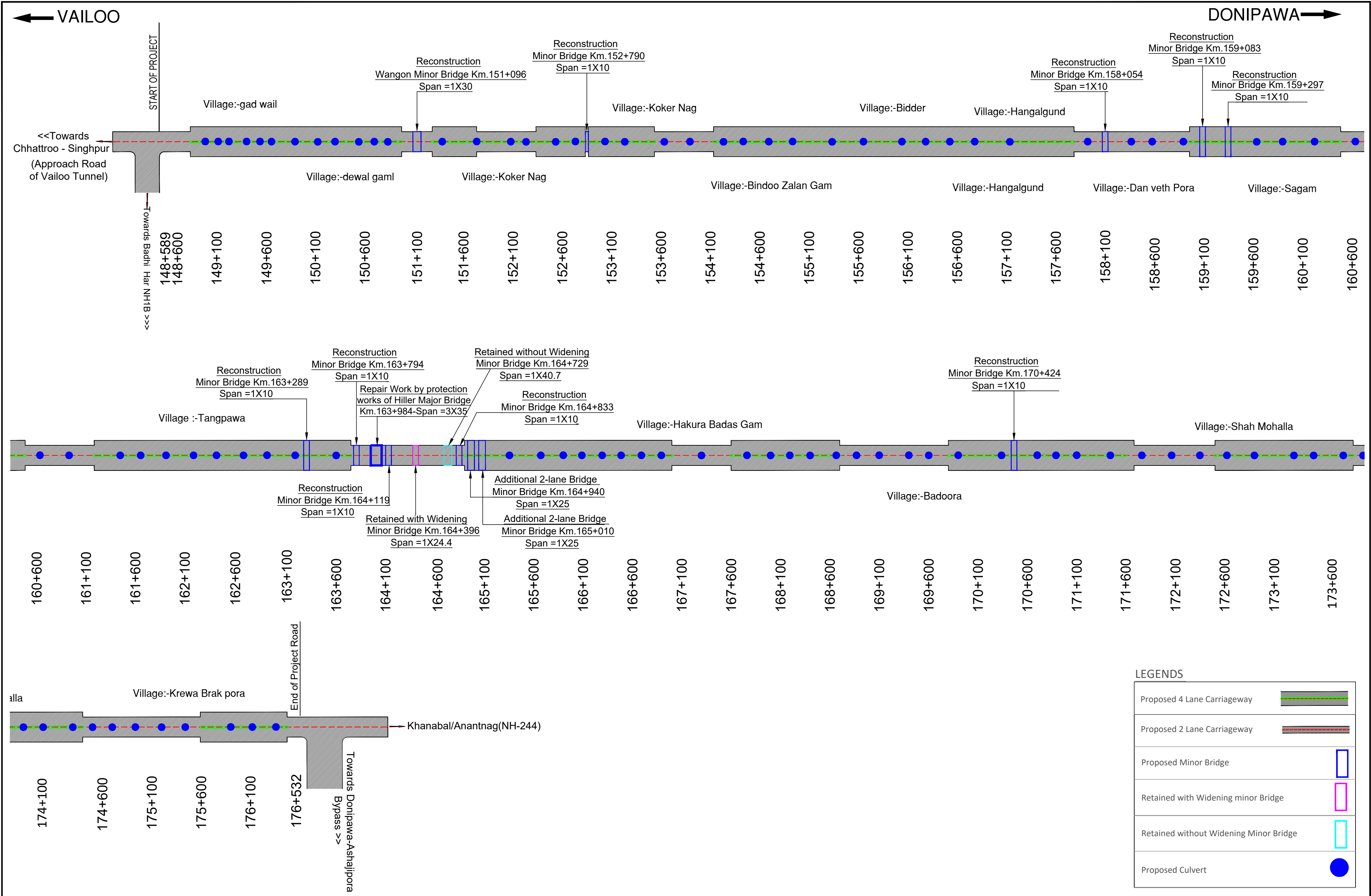
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	August-2020	

CLIENT
NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA


CONSULTANT:
RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,


FINAL FEASIBILITY REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khellani – Kishitwar – Chattroo - Khanabal Section of NH 244.
Designed:	Scale :-	Drawing Title	KEY MAP
Drawn:	N.T.S		
Checked:			
Approved:			

LINE DIAGRAM



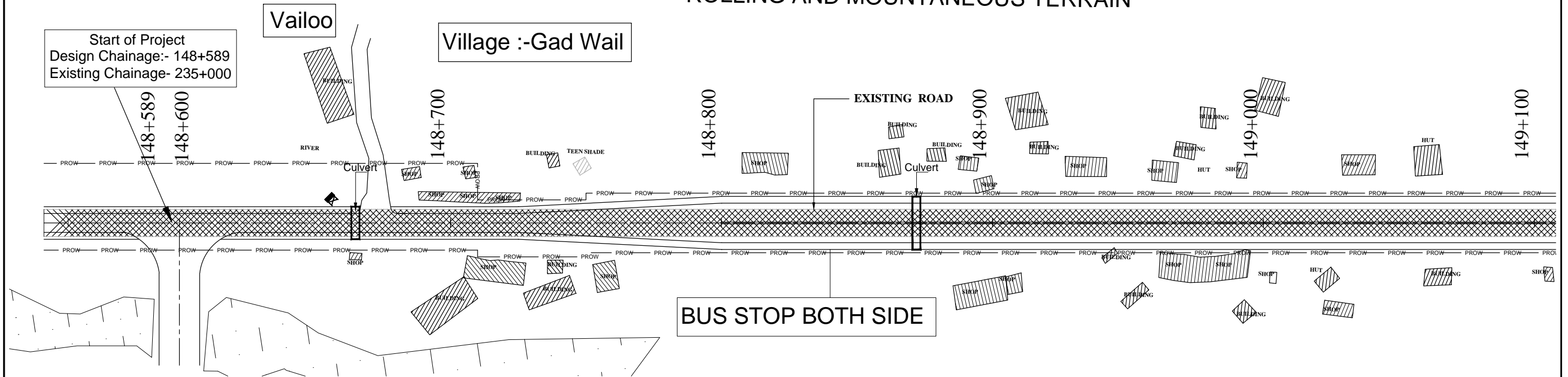
REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	
R0	OCT:- 2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div> <div></div>	<div> RODIC CONSULTANTS PVT. LTD. 1. JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT	
					Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.	
					Drawing Title	
			LINE DIAGRAM			
			Drawing No.			
			Date			
			Project No.			
			October -2020			
			1564			
			Drawing No.			
			NHIDCL/NH-244-PACK-I/ILD/01/R0			
			Sheet size: A2			

LINEAR PLAN

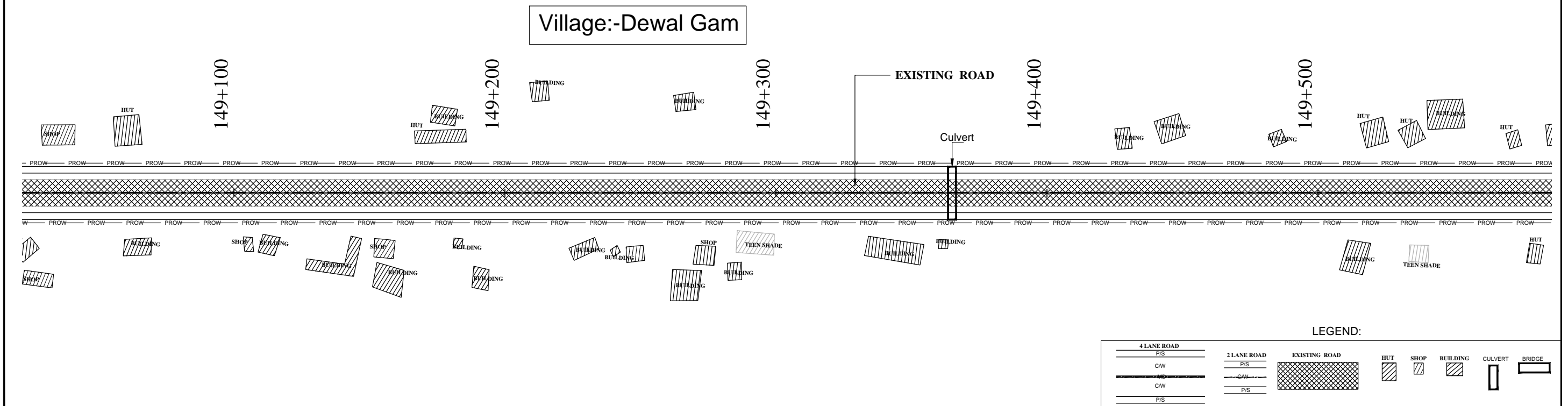
VAILOO

DONIPAWA

ROLLING AND MOUNTANEOUS TERRAIN



ROLLING AND MOUNTANEOUS TERRAIN



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

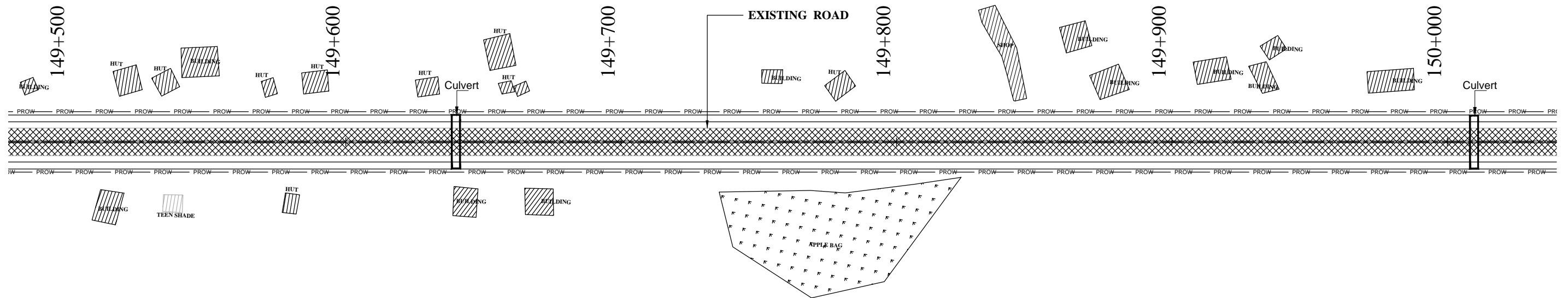
REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Project No. 1564	
					Drawing No. NHIDCLNH-244-PACK-III/P- 01/R0	

VAILOO

DONIPAWA

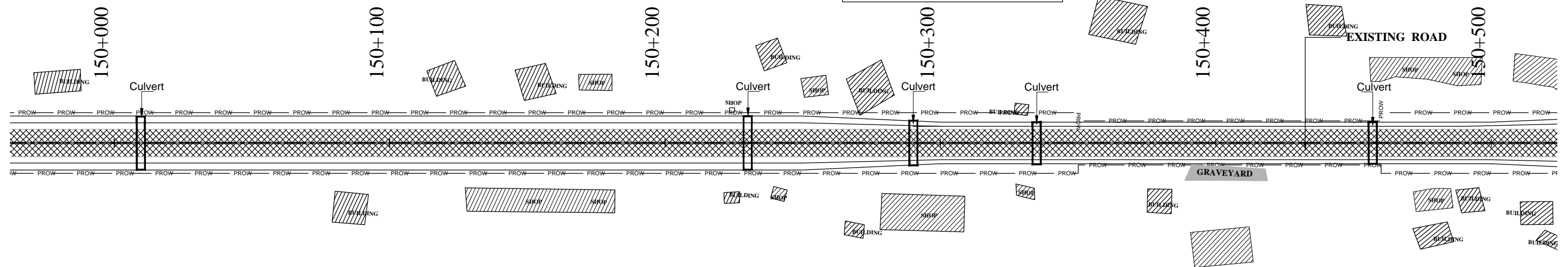
ROLLING AND MOUNTANEOUS TERRAIN

Village:-Dewal Gam



ROLLING AND MOUNTANEOUS TERRAIN

Village:-Koker Nag



LEGEND:

Figure 10-1: Symbols for Roadway Features. The figure shows symbols for 4 Lane Road, 2 Lane Road, Existing Road, Hut, Shop, Building, Culvert, and Bridge. Each symbol is accompanied by a label and a corresponding drawing.

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

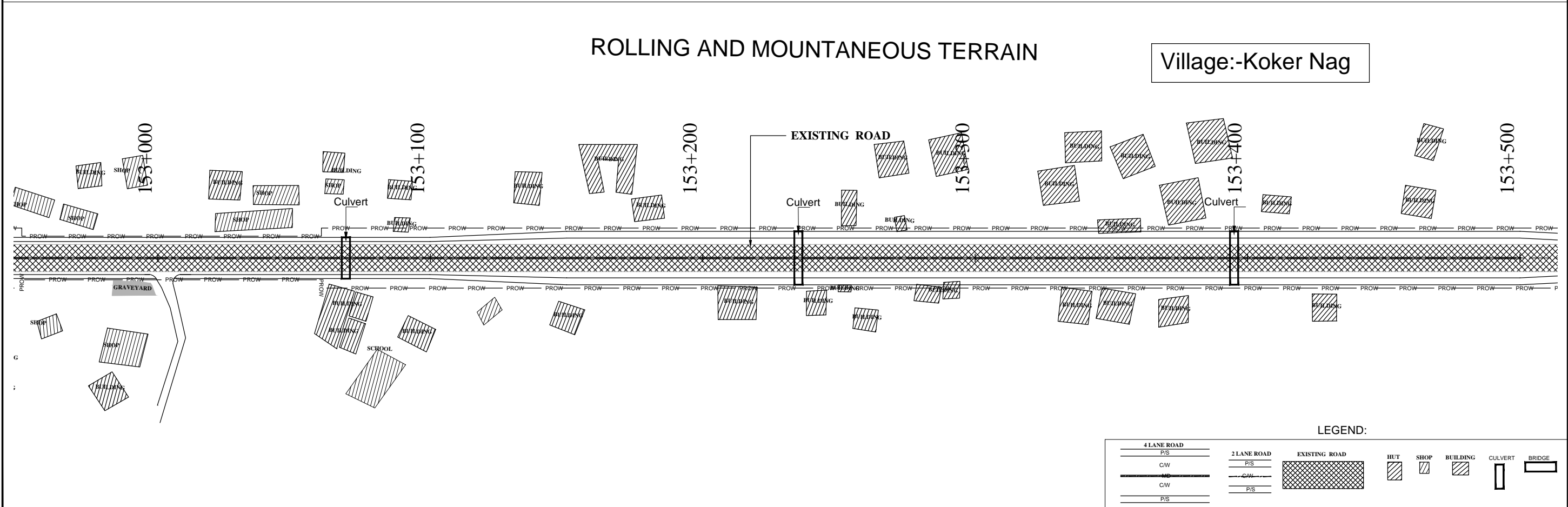
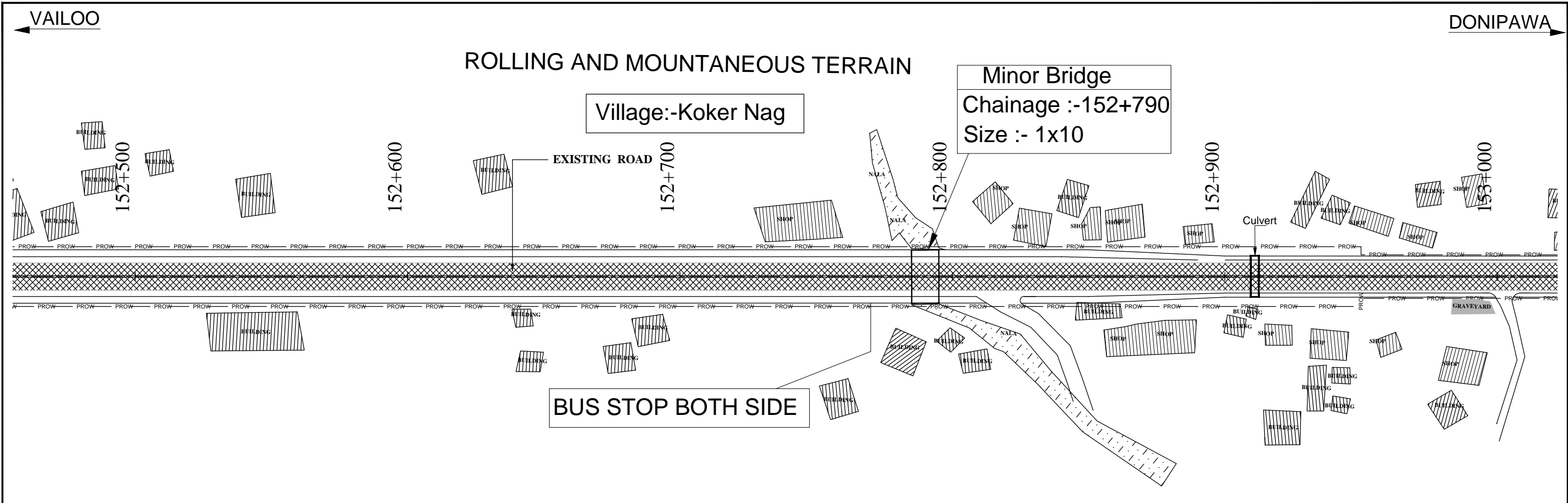
REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project			
R0	OCT. 2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div> <div></div>	FINAL DETAILED PROJECT REPORT			
						Drawing Title		
						LINEAR PLAN		
						Date: OCT-2020		
						Project No. 136/244/RA/C/13.1.2020		
						Drawing No. NH/DC/136/244/RA/C/13.1.2020		

VAILOO DONIPAWA

VAILOO DONIPAWA

Plan view of a road layout. The layout includes a 4 LANE ROAD, a 2 LANE ROAD, an EXISTING ROAD, and various structures: HUT, SHOP, BUILDING, CULVERT, and BRIDGE. The 4 LANE ROAD is shown with a central median (MB) and two lanes on each side (C/W). The 2 LANE ROAD is shown with two lanes (C/W). The EXISTING ROAD is shown with a cross-hatched pattern. The structures are represented by specific symbols: HUT (a rectangle with diagonal lines), SHOP (a rectangle with vertical lines), BUILDING (a rectangle with horizontal lines), CULVERT (a rectangle with a vertical line through the center), and BRIDGE (a rectangle with a horizontal line through the center).

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
R0	OCT. 2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div> <div></div>	<div> RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</div> <div> In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</div>			FINAL DETAILED PROJECT REPORT	Drawing Title	LINEAR PLAN		
				<div>Designed: <input type="text"/></div> <div>Drawn: <input type="text"/></div> <div>Checked: <input type="text"/></div> <div>Approved: <input type="text"/></div>	<div>Scale</div> <div>H=1:1000</div>	<div>Date: <input type="text"/></div> <div>OCT-2020</div>			<div>Project No. <input type="text"/></div> <div>2019/2020</div>	<div>Drawing No. <input type="text"/></div> <div>NH/DC/2019/2020</div>	



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
M/C	M/C						
C/W	C/W						
P/S	P/S						

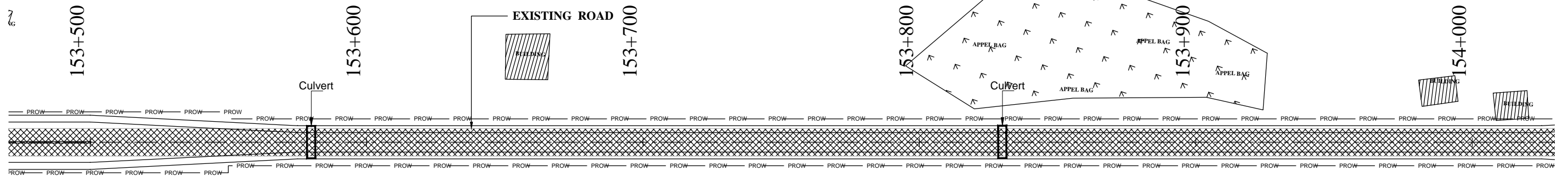
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					LINEAR PLAN		
					Date: OCT -2020		
					Project No: 1564		
					Drawing No: NHIDCLNH-244-PACK-4ILP_05/R0		

← VAILOO

DONIPAWA →

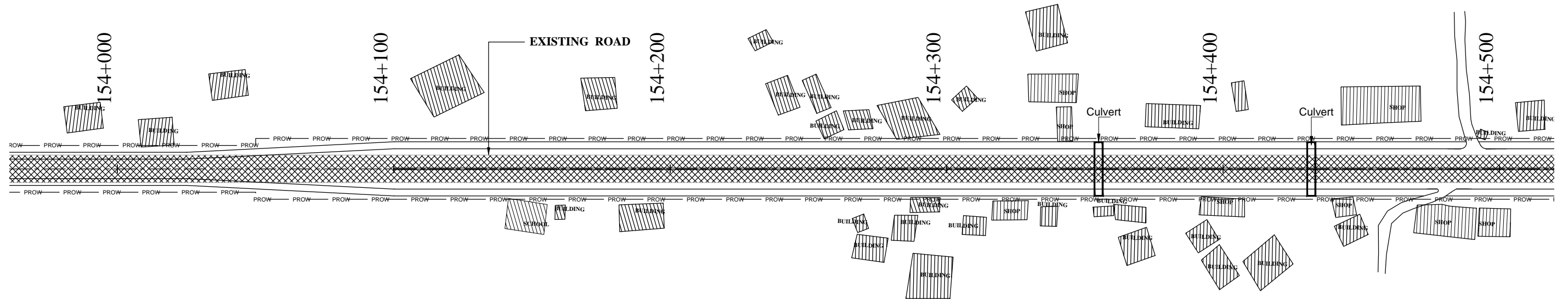
ROLLING AND MOUNTANEOUS TERRAIN

Village:-Bindoo Zalan Gam



ROLLING AND MOUNTANEOUS TERRAIN

Village:-Bindoo Zalan Gam



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
M/C	C/W						
C/W	P/S						
P/S							

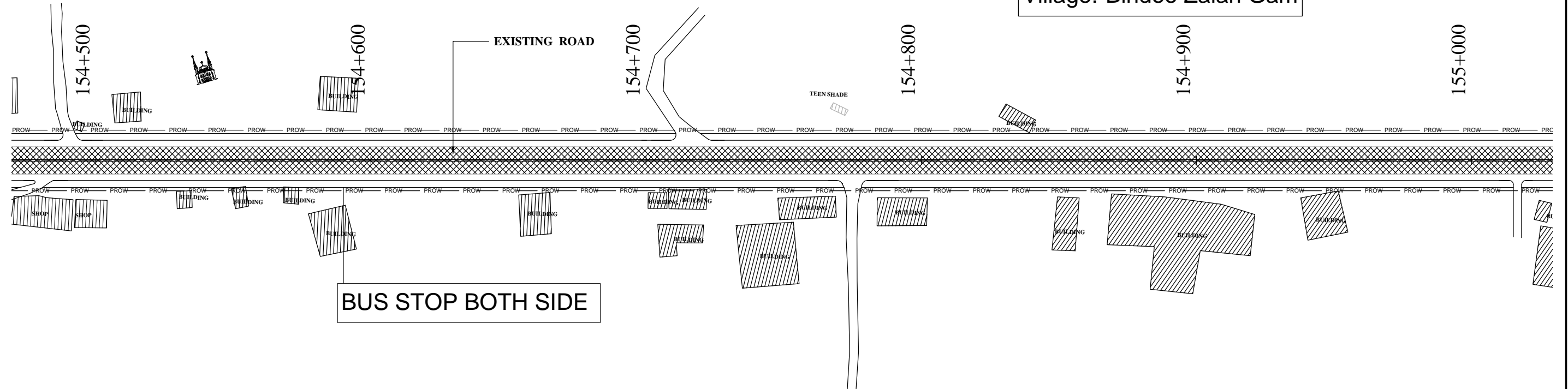
REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project			Drawing Title		
R0	OCT. 2020		<div><div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div><div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div><div>GOVERNMENT OF INDIA</div><div></div></div>	<div><div>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</div><div></div></div>	FINAL DETAILED PROJECT REPORT			H=1:1000		

VAILOO

DONIPAWA

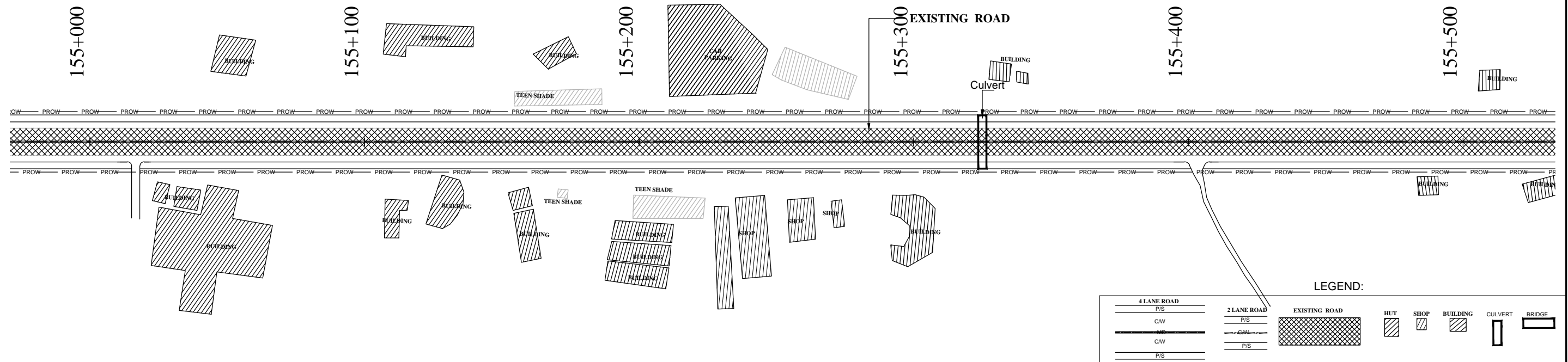
ROLLING AND MOUNTANEOUS TERRAIN

Village:-Bindoo Zalan Gam



ROLLING AND MOUNTANEOUS TERRAIN

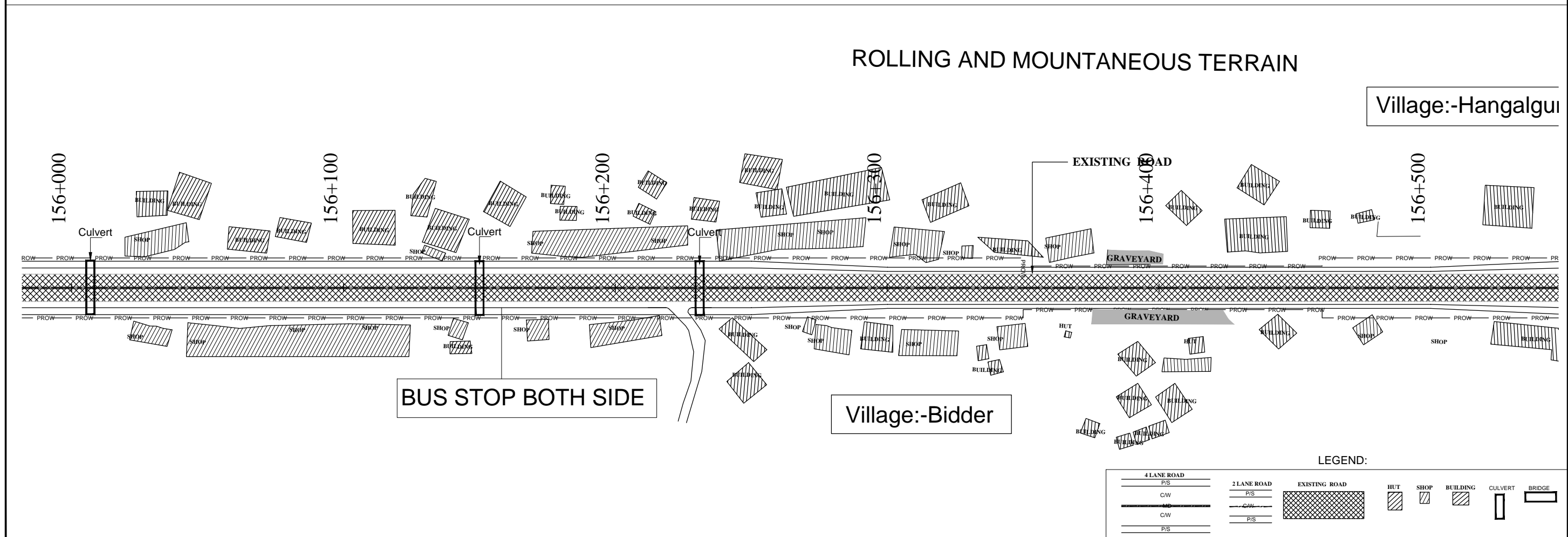
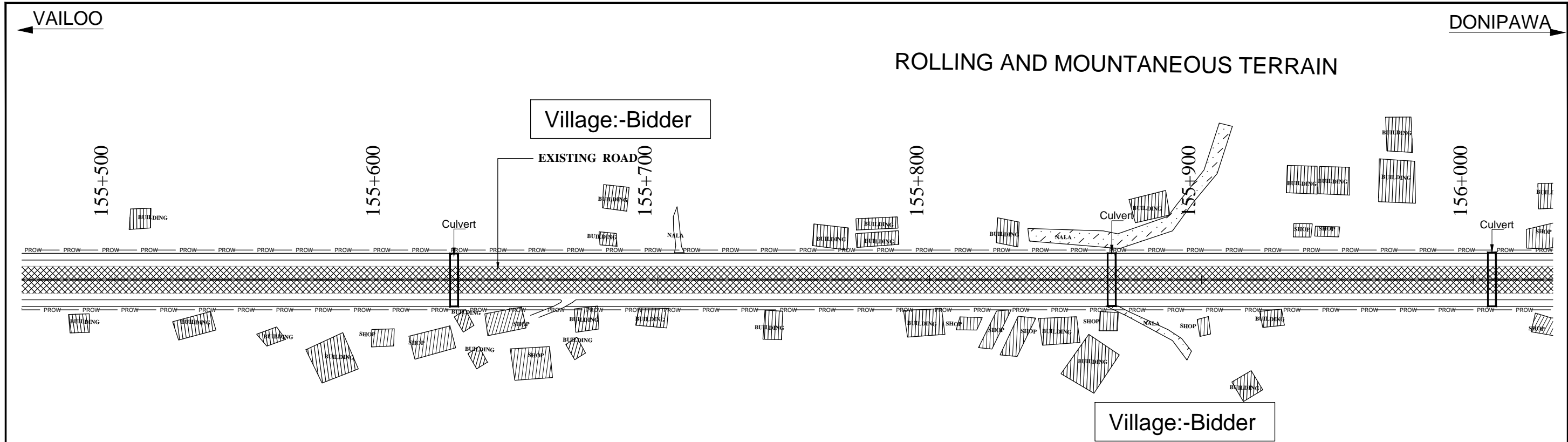
Village:-Bindoo Zalan Gam



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	P/S						
MC	C/W						
C/W	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	Project	Drawing Title	Project No.	Drawing No.
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	H=1:1000	1564	NHIDCLNH-244-PACK-4/ILP-07/R0



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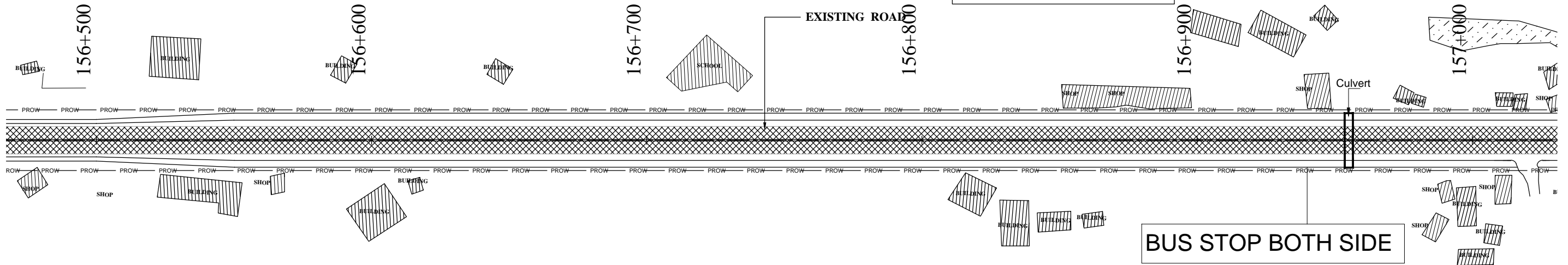
←VAILOO

→DONIPAWA

Village:-Hangalgund

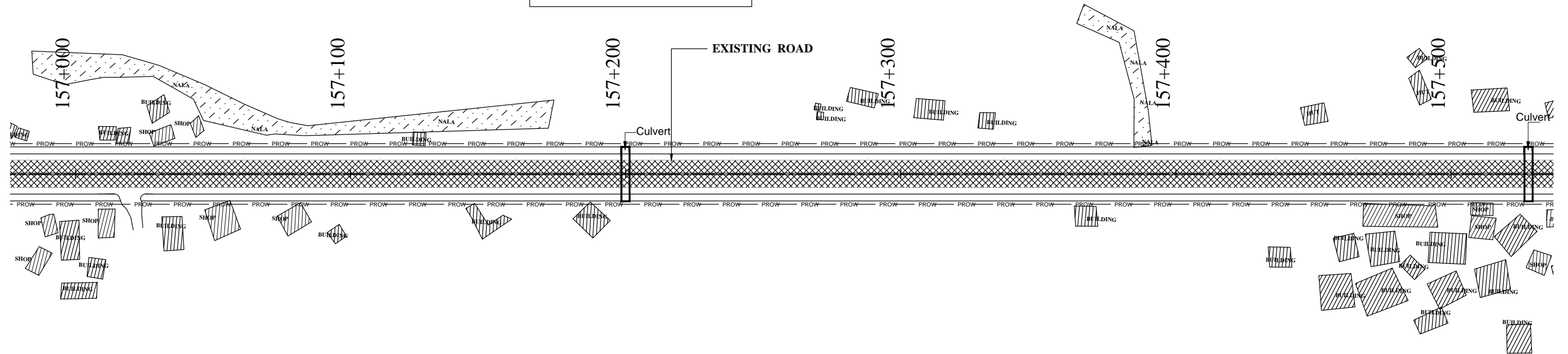
ROLLING AND MOUNTANEOUS TERRAIN

Village:-Hangalgund



ROLLING AND MOUNTANEOUS TERRAIN

Village:-Hangalgund



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
CAW	P/S						
MC	CAW						
CAW	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title	Project Description
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	H=1:1000	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
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					Project No: 1564		
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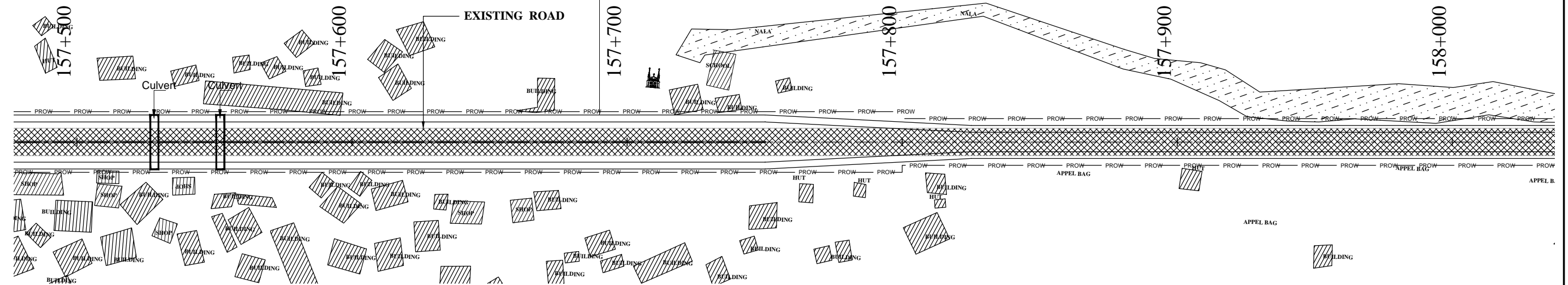
VAILOO

DONIPAWA

ROLLING AND MOUNTANEOUS TERRAIN

BUS STOP BOTH SIDE

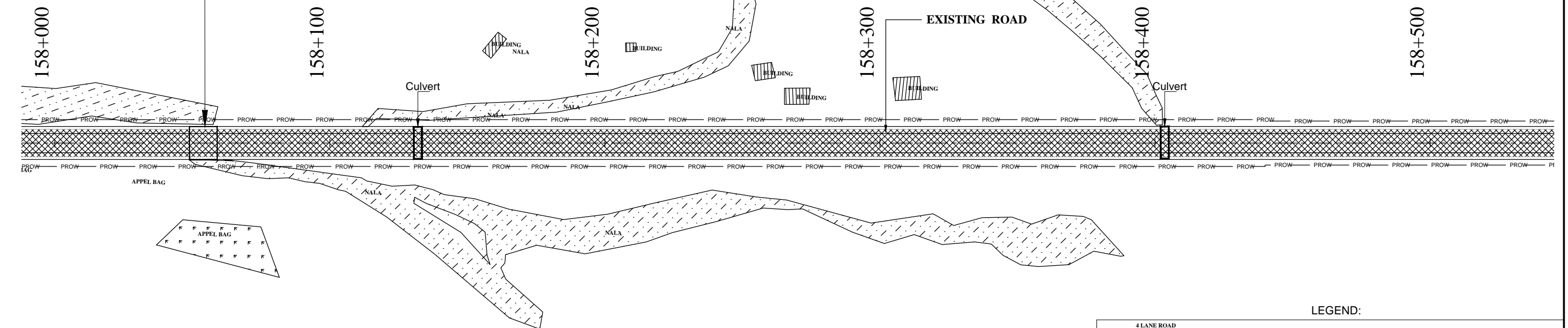
Village:-Dan veth Pora



ROLLING AND MOUNTANEOUS TERRAIN

Minor Bridge
Chainage :-158+054
Size :- 1x10

Village:-Dan veth Po



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
MC	C/W						
C/W	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title	Project No.	Date	Drawing No.
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT		1564	OCT -2020	NHIDCLNH-244-PACK-I/LP- 10/R0

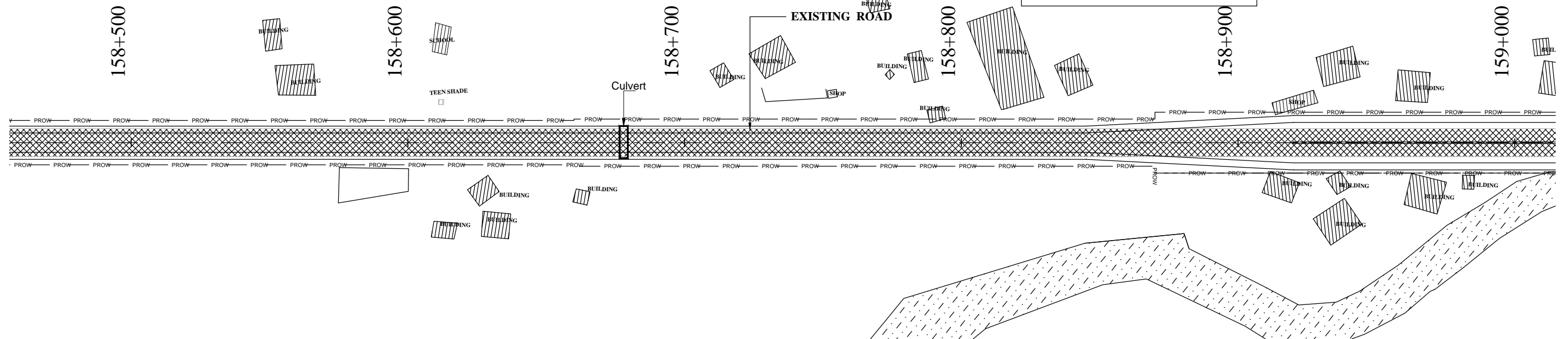
← VAILOO

DONIPAWA →

Village:-Dan veth Pora

ROLLING AND MOUNTANEOUS TERRAIN

Village:-Dan veth Pora

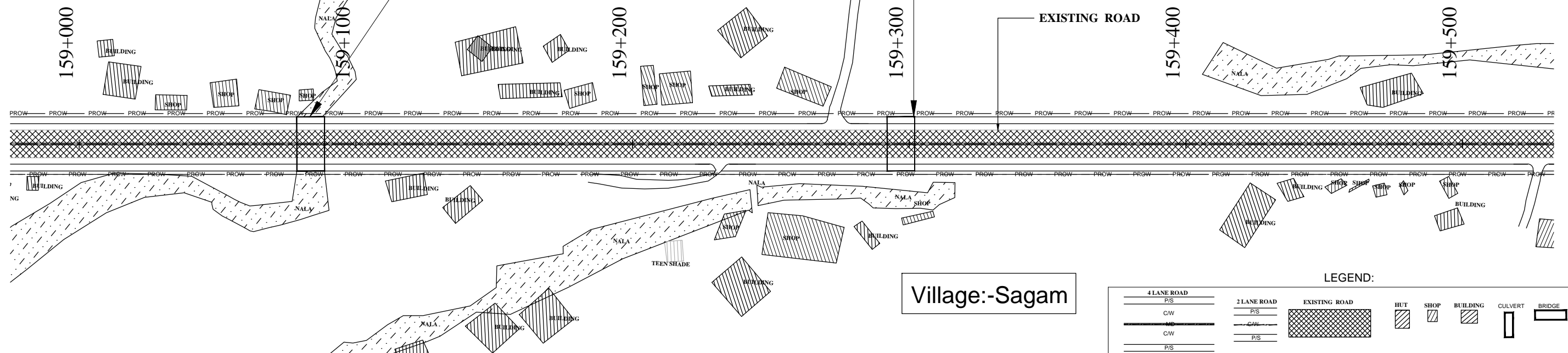


Minor Bridge
Chainage :-159+083
Size :- 1x10

ROLLING AND MOUNTANEOUS TERRAIN

Minor Bridge
Chainage :-159+297
Size :- 1x10

Village:-Sagam



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
M/C	C/W						
C/W	P/S						
P/S							

Village:-Sagam

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title	Project Description
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	H=1:1000	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					LINEAR PLAN		
					Project No. 1564		
					Drawing No. NHIDCLNH-244-PACK-4/ILP-11/R0		

VAILOO

DONIPAWA

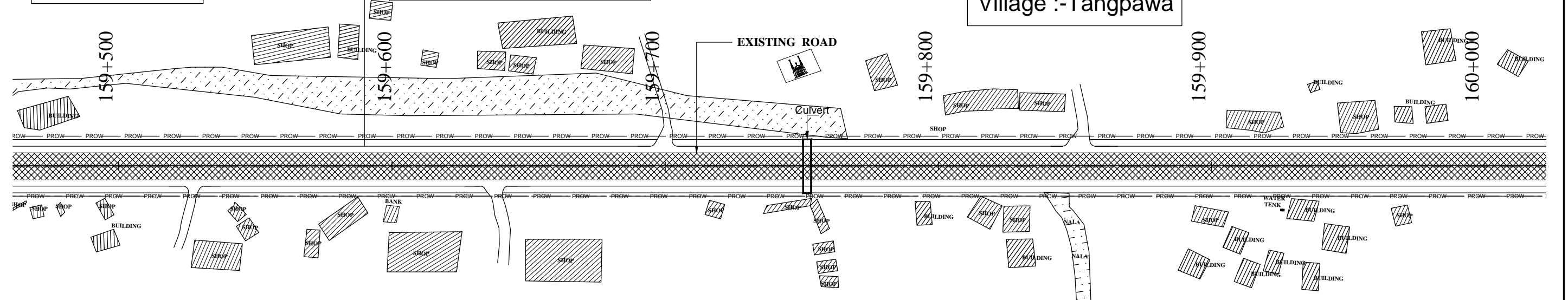
RRAIN

ROLLING AND MOUNTANEOUS TERRAIN

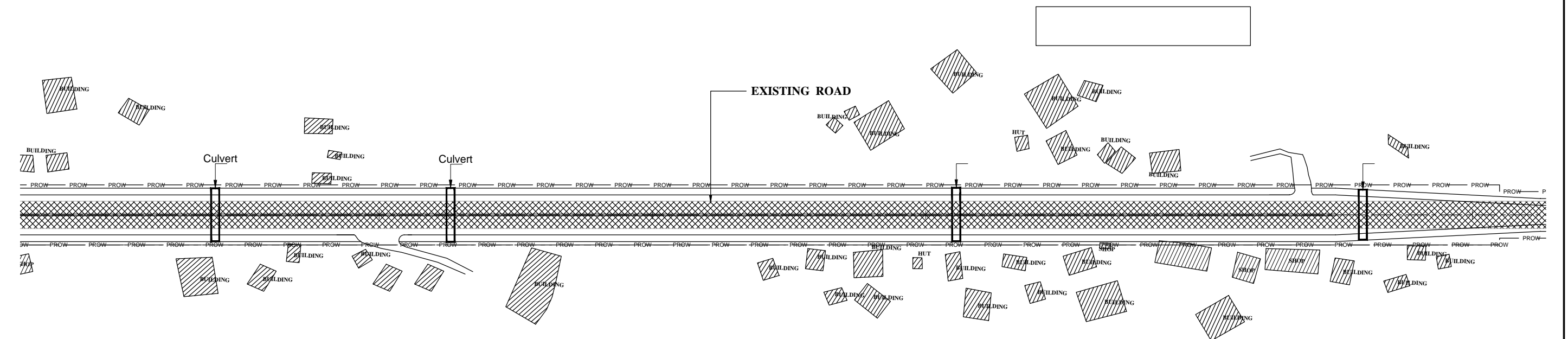
Village:-Sagam

BUS STOP BOTH SIDE

Village :-Tangpawa



ROLLING AND MOUNTANEOUS TERRAIN



LEGEND:

4 LANE ROAD

C/L

L/W

2 LANE ROAD

C/L

L/W

EXISTING ROAD

C/L

L/W

HUT

SHOP

BUILDING

CULVERT

BRIDGE

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT. 2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div> <div></div>	<div>Designed: <div></div></div> <div>Drawn: <div></div></div> <div>Checked: <div></div></div> <div>Approved: <div></div></div> <div>Scale</div> <div>H=1:1000</div>			Drawing Title	LINEAR PLAN		
Date: OCT-2020			Project No. -1564		Drawing No. NHIDCL/244/244/RS/CK/14.1/12/20						

Village :-Tangpawa

Village:-Krewa Brak pora

ROLLING AND MOUNTANEOUS TERRAIN

Stationing: 161+000, 161+100, 161+200, 161+300, 161+400, 161+500

Key Features: POWER HOUSE, EXISTING ROAD, Village :-Buchoo, Culvert, BUILDING, HUT, SHOP, PROW

LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
NO	C/W						
C/W	P/S						
P/S							

Village :-Buchoo

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:		Project		Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
R0	OCT. 2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div></div> <div>RODICE CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div>Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</div> <div></div>	FINAL DETAILED PROJECT REPORT	Designed: Drawn: Checked: Approved:	Scale H=1:1000	Drawing Title	LINEAR PLAN		
Date:	Project No.	Drawing No.									
OCT_2020	-1564	NHIDCL 234/244 RA/CK 14.1.12									

ROLLING AND MOUNTANEOUS TERRAIN

Diagram illustrating a road project in rolling and mountainous terrain, showing stationing from 162+000 to 162+500. The road features a 4-lane road with a central cross-hatched median and 2-lane roads on either side. Key features include:

- Stationing:** 162+000, 162+100, 162+200, 162+300, 162+400, 162+500.
- Structures:** Two Culverts, a Water Tank, and an Existing Road branching off at station 162+300.
- Buildings:** Numerous buildings, huts, and shops are scattered along the road.
- Legend:**
 - 4 LANE ROAD:** P/S, C/W, MD, C/W, P/S
 - 2 LANE ROAD:** P/S, C/W, P/S
 - EXISTING ROAD:** Cross-hatched pattern
 - HUT:** Hatched rectangle
 - SHOP:** Hatched rectangle
 - BUILDING:** Hatched rectangle
 - CULVERT:** Rectangular structure
 - BRIDGE:** Rectangular structure

ROLLING AND MOUNTANEOUS TERRAIN

Diagram illustrating a road project in rolling and mountainous terrain, showing stationing from 162+000 to 162+500. The road layout includes a 4-lane road with a central cross-hatched median and two 2-lane roads on either side. Key features include:

- Stationing:** 162+000, 162+100, 162+200, 162+300, 162+400, 162+500.
- Structures:** Two Culverts are shown crossing the road. A Water Tank is located near station 162+100.
- Buildings and Structures:** Numerous buildings, huts, and shops are scattered along the road, some labeled as "BUILDING", "HUT", or "SHOP".
- Existing Road:** An existing road branches off from the main road near station 162+300.
- Legend:**
 - 4 LANE ROAD:** P/S, C/W, MD, C/W, P/S.
 - 2 LANE ROAD:** P/S, C/W, P/S.
 - EXISTING ROAD:** Cross-hatched area.
 - HUT:** Hatched rectangle.
 - SHOP:** Hatched rectangle.
 - BUILDING:** Hatched rectangle.
 - CULVERT:** Rectangular structure.
 - BRIDGE:** Rectangular structure.

ROLLING AND MOUNTANEOUS TERRAIN

Diagram illustrating a road project in rolling and mountainous terrain, showing stationing from 162+000 to 162+500.

The road layout includes:

- 4 LANE ROAD** (Centered section)
- 2 LANE ROAD** (Outer sections)
- EXISTING ROAD** (Branching off to the right)
- Structures and Features:**
 - Buildings (various shapes)
 - HUTS (small squares)
 - WATER TANK (circle)
 - SHOP (rectangle)
 - Culverts (rectangles with vertical lines)
 - TEEN SHADE (area near station 162+100)

LEGEND:

- 4 LANE ROAD:** P/S, C/W, C/W, C/W, P/S
- 2 LANE ROAD:** P/S, C/W, P/S
- EXISTING ROAD:** (Cross-hatched pattern)
- HUT:** (Small square)
- SHOP:** (Rectangle)
- BUILDING:** (Various shapes)
- CULVERT:** (Rectangle with vertical lines)
- BRIDGE:** (Rectangle with vertical lines)

ROLLING AND MOUNTANEOUS TERRAIN

Diagram illustrating a road project in rolling and mountainous terrain, showing stationing from 162+000 to 162+500.

The road layout includes:

- 4 LANE ROAD** (Centered section)
- 2 LANE ROAD** (Outer sections)
- EXISTING ROAD** (Branching off to the right)
- Structures and Features:**
 - Buildings (various shapes)
 - HUTS (small squares)
 - WATER TANK (circle)
 - SHOP (rectangle)
 - Culverts (rectangles with vertical lines)
 - TEEN SHADE (area near station 162+100)

LEGEND:

- 4 LANE ROAD:** P/S, C/W, C/W, C/W, P/S
- 2 LANE ROAD:** P/S, C/W, P/S
- EXISTING ROAD:** (Cross-hatched pattern)
- HUT:** (Small square)
- SHOP:** (Rectangle)
- BUILDING:** (Various shapes)
- CULVERT:** (Rectangle with vertical lines)
- BRIDGE:** (Rectangle with vertical lines)

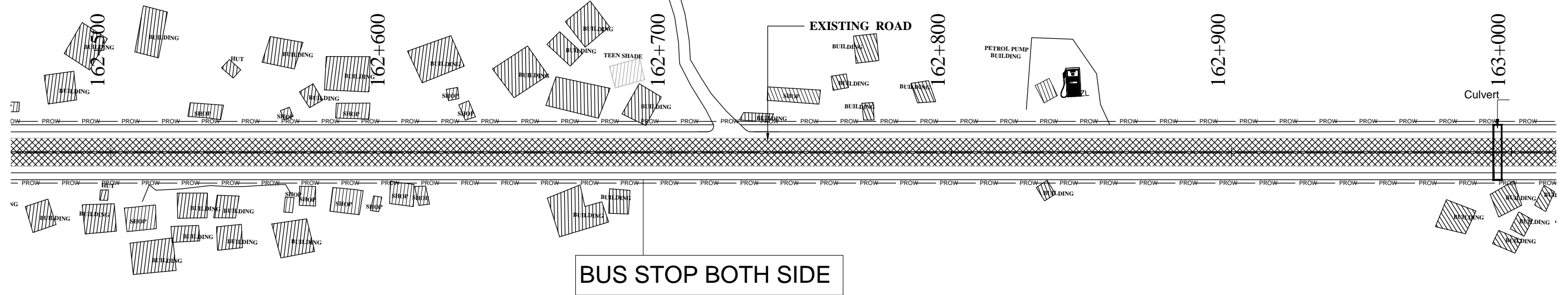
REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd., 	FINAL DETAILED PROJECT REPORT Designed: <table><tr><td></td><td></td></tr></table> Scale H=1:1000 Drawn: <table><tr><td></td><td></td></tr></table> Checked: <table><tr><td></td><td></td></tr></table> Approved: <table><tr><td></td><td></td></tr></table>									Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT. 2020		Drawing Title	<table><tr><td colspan="3">LINEAR PLAN</td></tr><tr><td>Date</td><td>Project No.</td><td>Drawing No.</td></tr><tr><td>OCT-2020</td><td>1564</td><td>NHAI/ NH-244/ RACK III B 1 X 100</td></tr></table>	LINEAR PLAN			Date	Project No.	Drawing No.	OCT-2020	1564	NHAI/ NH-244/ RACK III B 1 X 100		
LINEAR PLAN															
Date	Project No.	Drawing No.													
OCT-2020	1564	NHAI/ NH-244/ RACK III B 1 X 100													

VAILOO

DONIPAWA

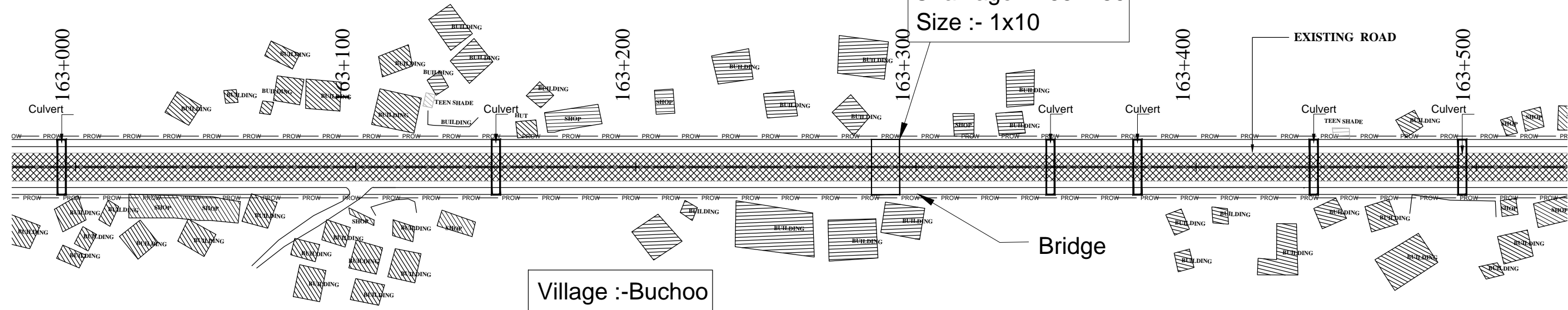
ROLLING AND MOUNTANEOUS TERRAIN

Village :-Buchoo



ROLLING AND MOUNTANEOUS TERRAIN

Minor Bridge
Chainage :-163+289
Size :- 1x10



Village :-Buchoo

LEGEND:

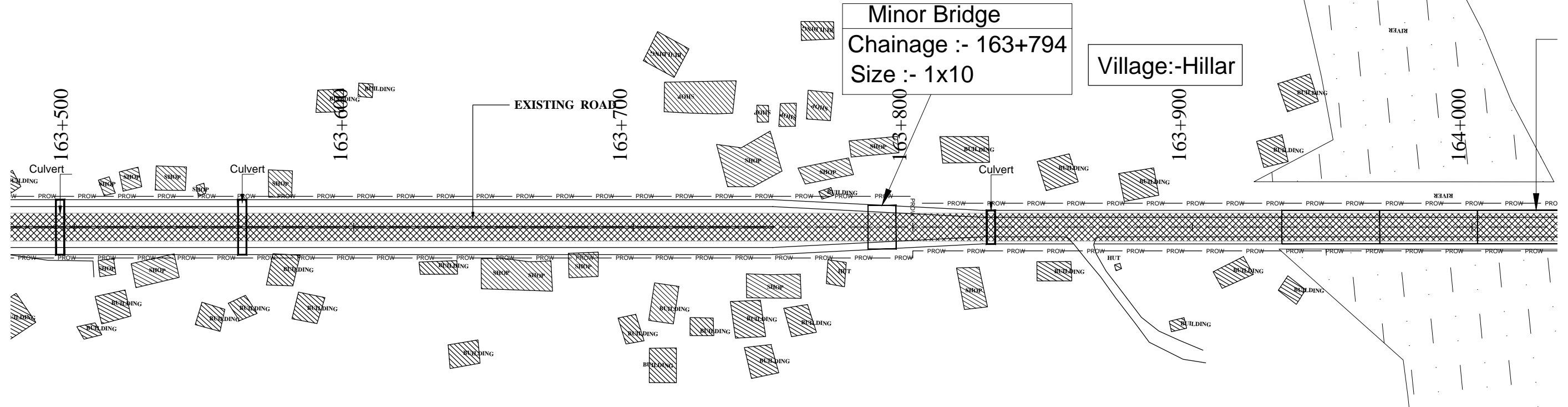
4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
M/C	C/W						
C/W	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title	Project Description
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	H=1:1000	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					LINEAR PLAN		
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					OCT -2020	1564	NHIDCLNH-244-PACK-I/ILP- 15/R0

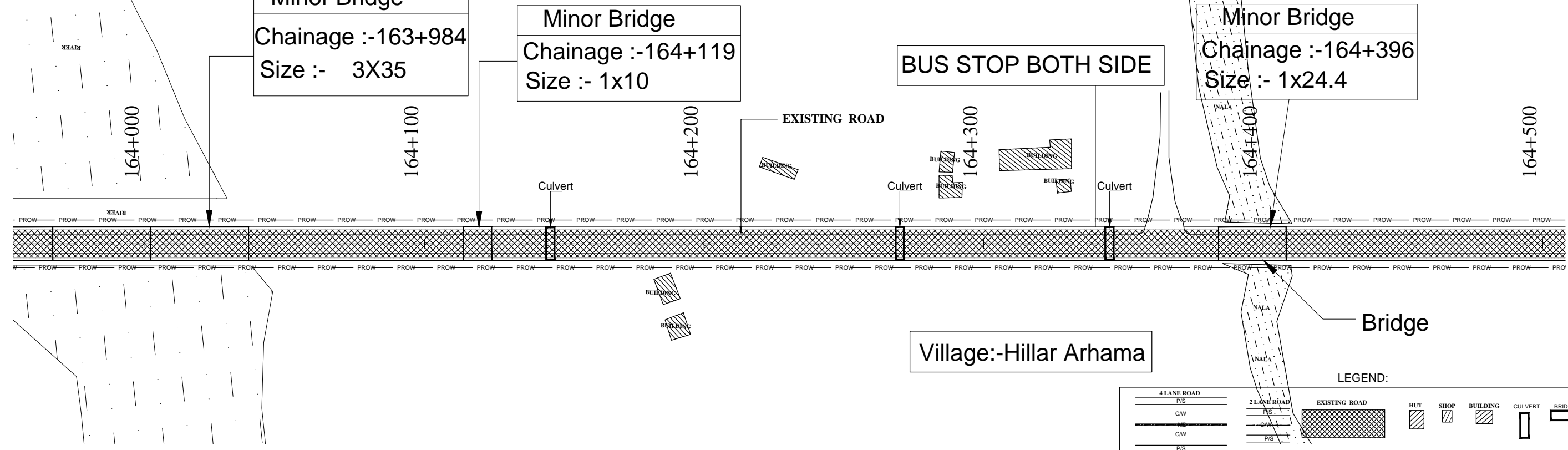
VAILOO

DONIPAWA

ROLLING AND MOUNTANEOUS TERRAIN



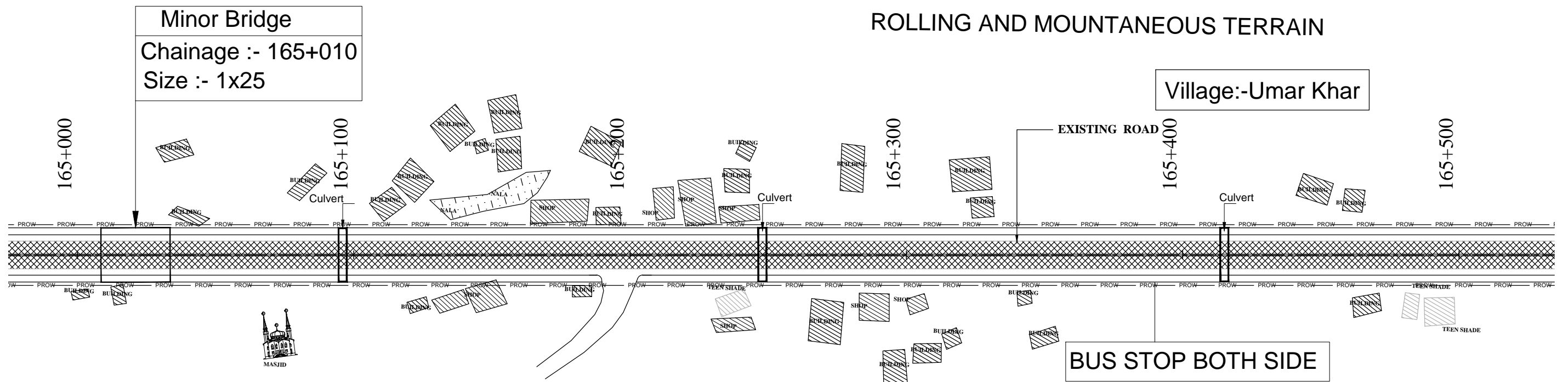
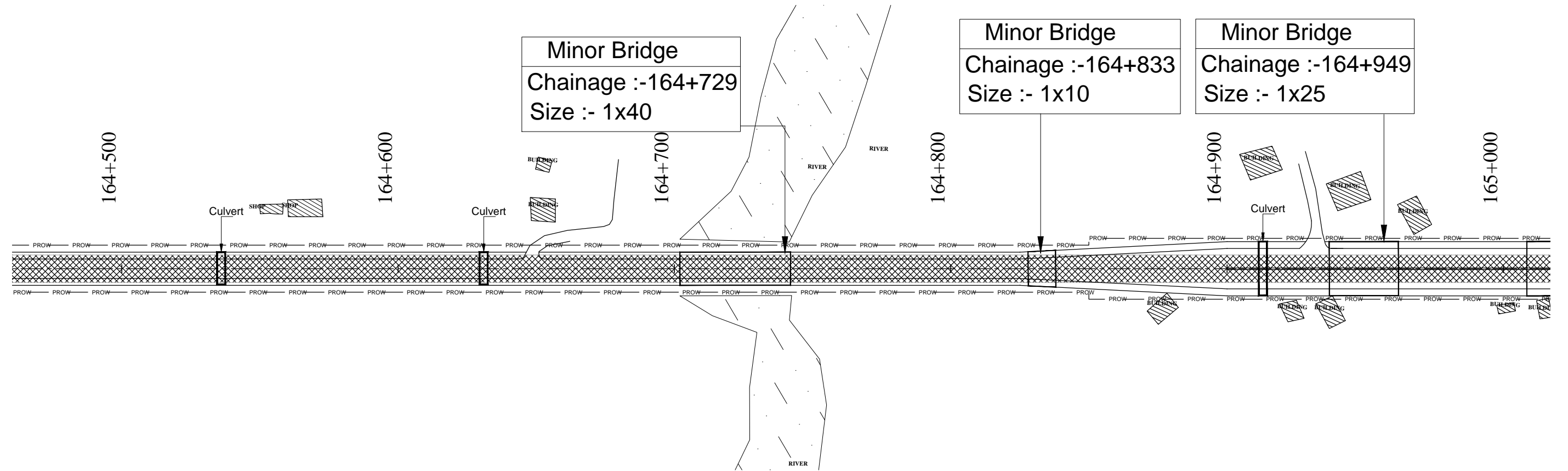
ROLLING AND MOUNTANEOUS TERRAIN



REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Project No. 1564	
					Drawing No. NHIDCLNH-244-PACK-4/ILP-16/R0	

← VAILOO

DONIPAWA →



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
M/C	C/W						
C/W	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title	Project No.	Date	Drawing No.
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Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.

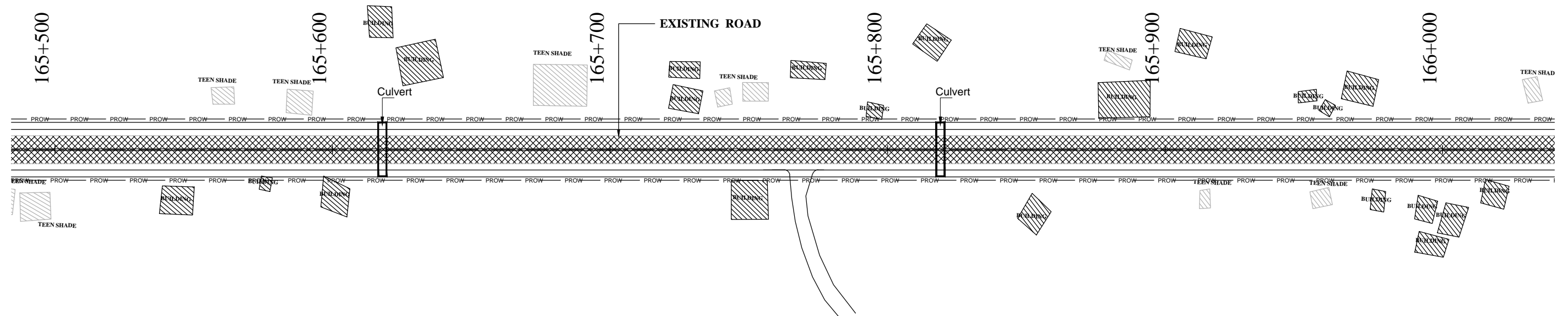
Project No.	Date	Drawing No.
1564	OCT -2020	NHIDCLNH-244-PACK-I/ILP-17/R0

← VAILOO

DONIPAWA →

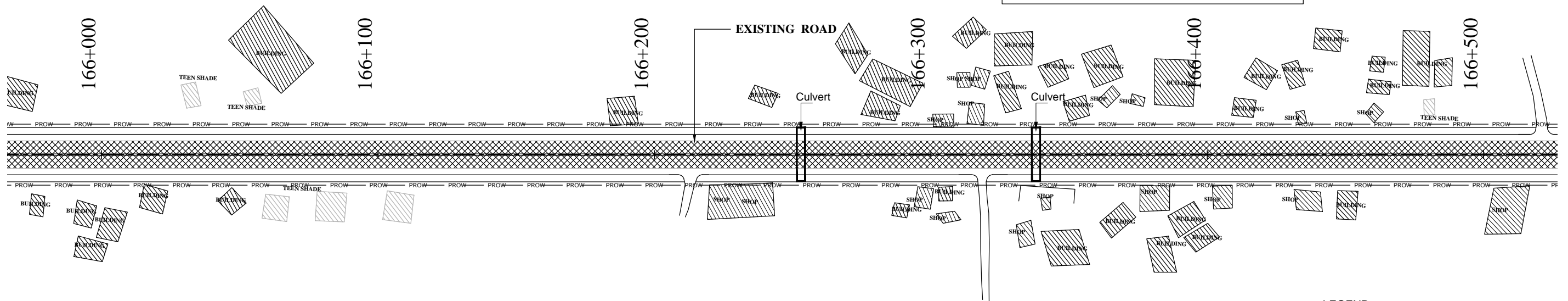
ROLLING AND MOUNTANEOUS TERRAIN

Village:-Hakura Badas Gam



ROLLING AND MOUNTANEOUS TERRAIN

Village:-Hakura Badas Gam



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
MC	C/W						
C/W	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title	Project No.	Date	Drawing No.
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	H=1:1000	1564	OCT -2020	NHIDCLNH-244-PACK-4/ILP- 18/R0

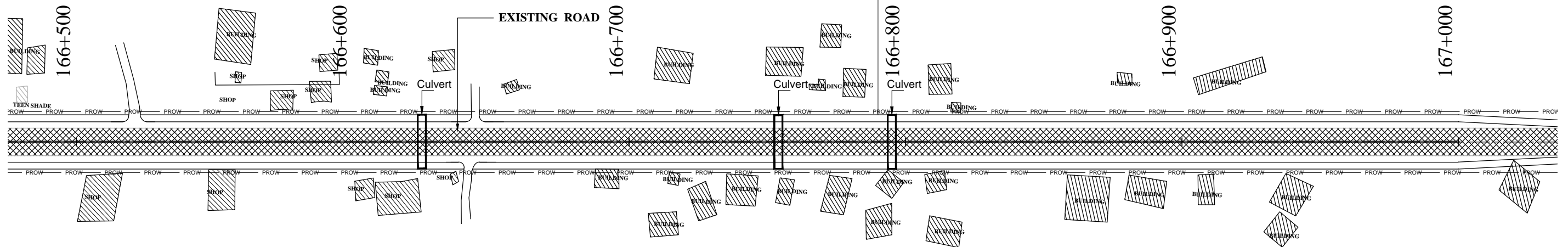
← VAILOO

DONIPAWA →

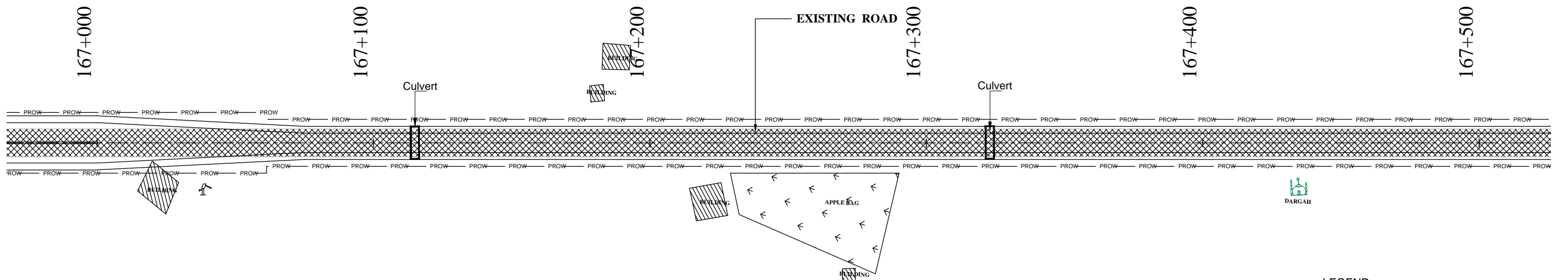
ROLLING AND MOUNTANEOUS TERRAIN

BUS STOP BOTH SIDE

Village:-Hakura Badas Gam



ROLLING AND MOUNTANEOUS TERRAIN



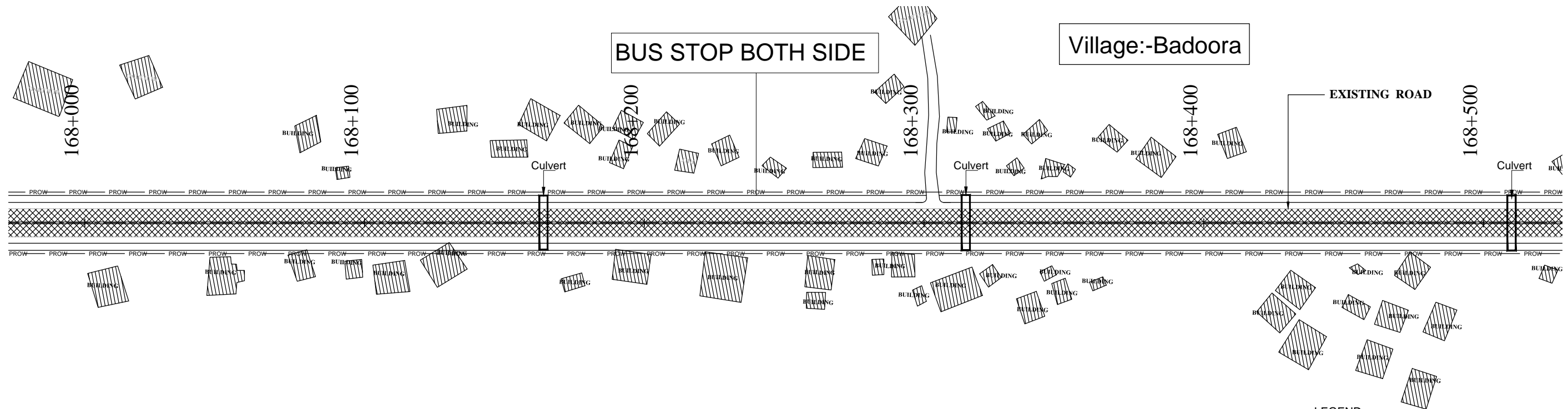
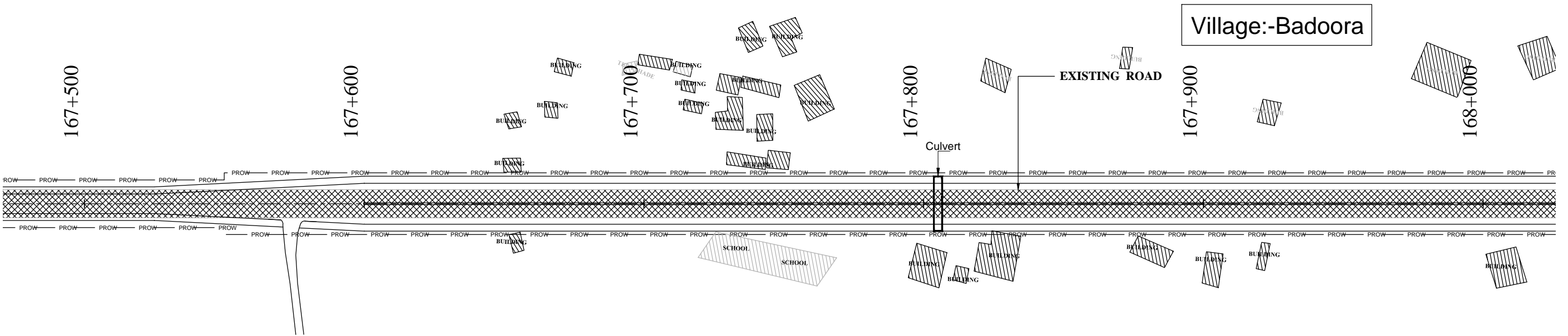
LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
M/C	C/W						
C/W	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project			Drawing Title		
R0	OCT. 2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div> <div></div>	FINAL DETAILED PROJECT REPORT			H=1:1000		
			<div></div>	<div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div> <div></div>	Scale			LINEAR PLAN		
					Date: OCT -2020			Project No: 1564		
					Drawing No: NHIDCLNH-244-PACK-I/LP- 19/R0					

VAILOO

DONIPAWA

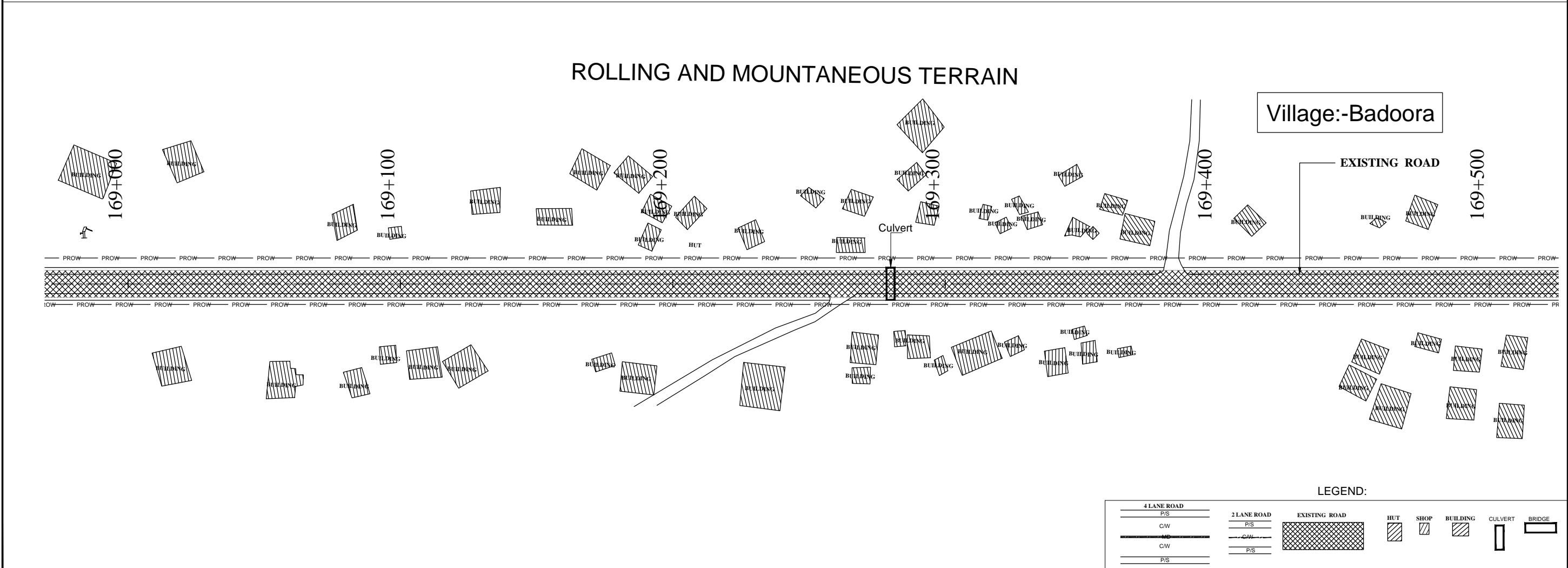
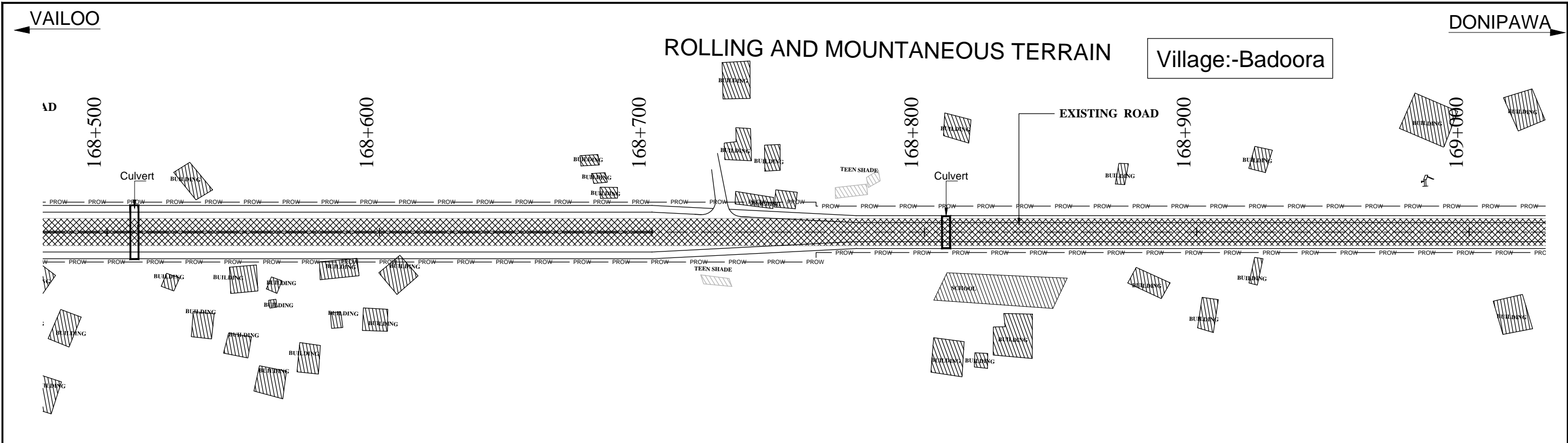


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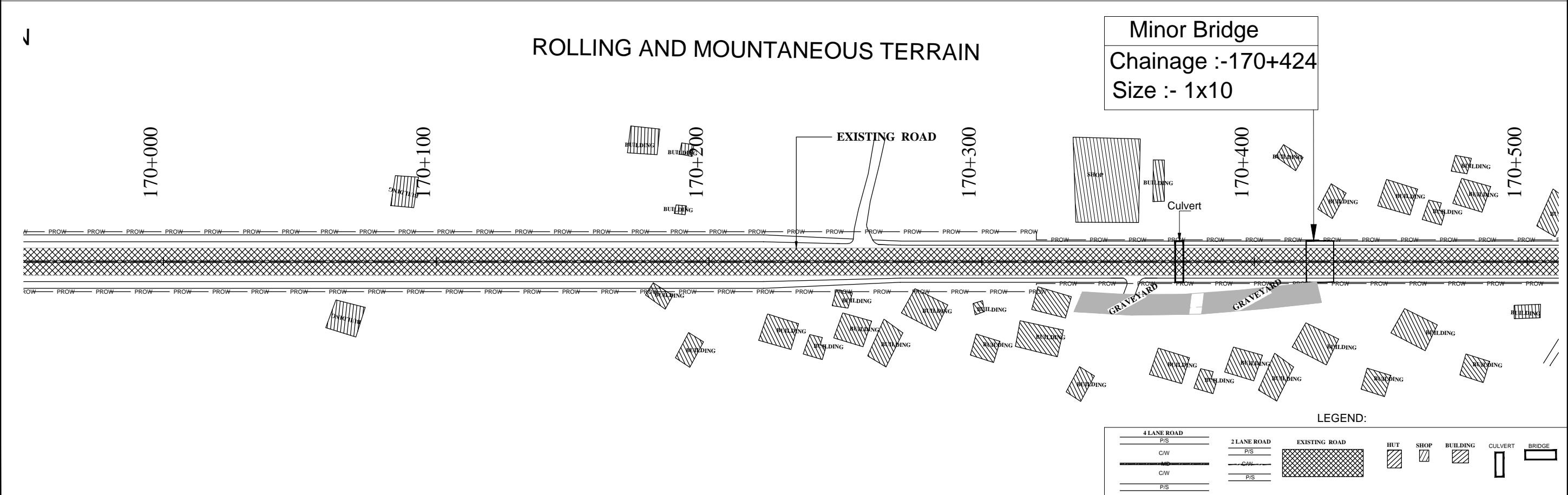
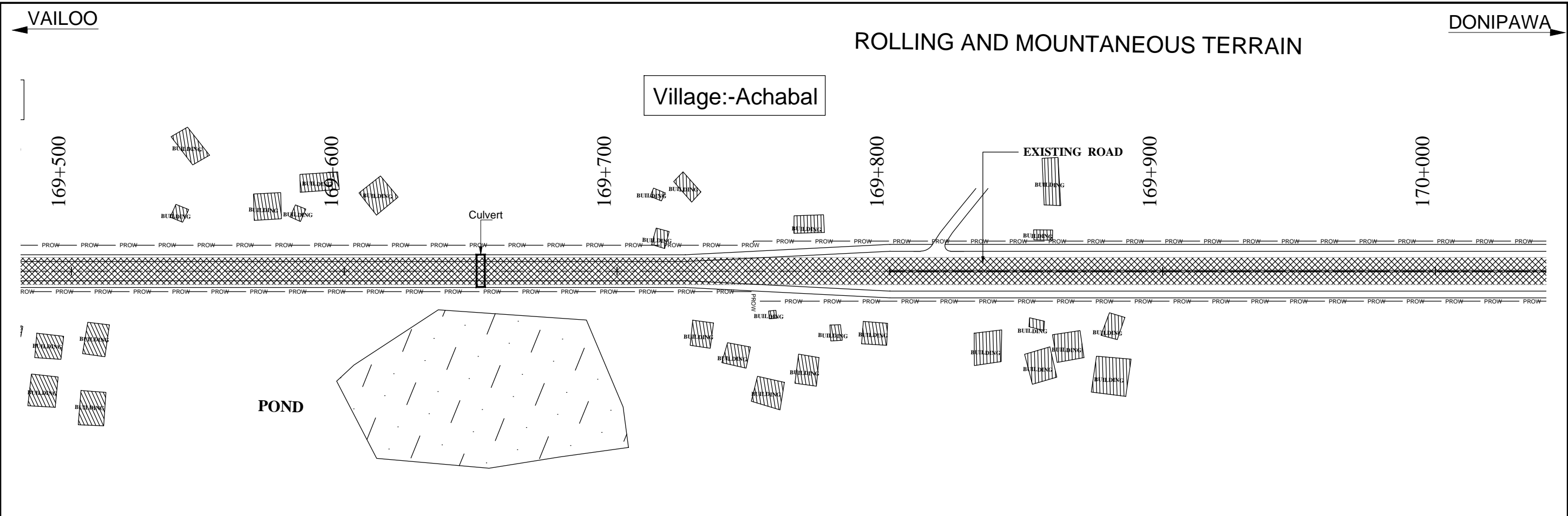
4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
M/C	C/W						
C/W	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)	FINAL DETAILED PROJECT REPORT	
				In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Drawing Title	

LINEAR PLAN		
Date:	Project No.	Drawing No.
OCT -2020	1564	NHIDCLNH-244-PACK-I/LP- 20/R0



REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Drawing Title
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: Drawn: Checked: Approved:	Scale H=1:1000	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
				LINEAR PLAN			
		Date	Project No.	Drawing No.			
		OCT -2020	1564	NHIDCLNH-244-PACK-4ILP- 21/R0			



REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title	Project Description
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	H=1:1000	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Project No. 1564		
					Drawing No. NHIDCLNH-244-PACK-I/LP- 22/R0		

VAILOO

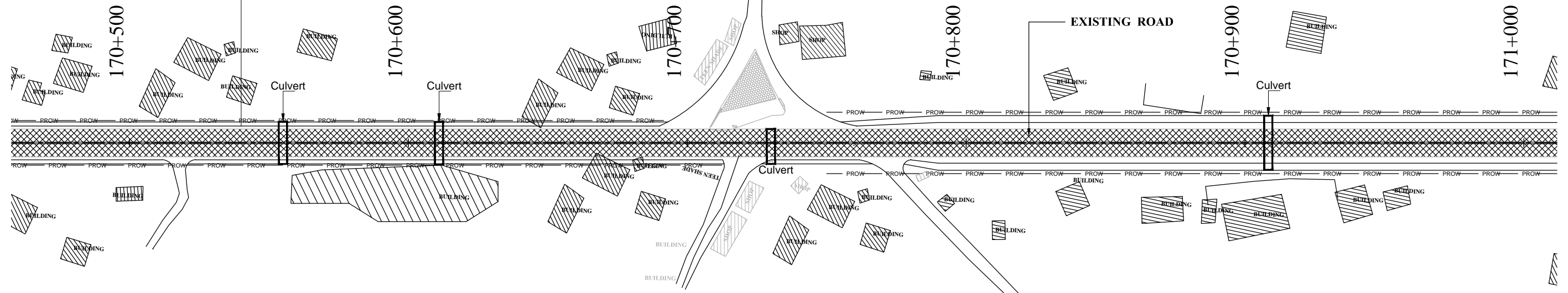
DONIPAWA

Village:-Achabal

ROLLING AND MOUNTANEOUS TERRAIN

Shah Mohalla

BUS STOP BOTH SIDE



LEGEND:

The plan view shows a proposed road layout. On the left, a 4-lane road is shown with a central median and two lanes on each side, labeled 'P/S' (Proposed Road). To the right of the 4-lane road is a 2-lane road, also labeled 'P/S'. Further right is an 'EXISTING ROAD' shown as a hatched rectangular area. To the right of the existing road are several structures: a 'HUT' (hatched rectangle), a 'SHOP' (hatched rectangle), a 'BUILDING' (hatched rectangle), a 'CULVERT' (vertical rectangle), and a 'BRIDGE' (horizontal rectangle). The road layout is shown as a solid line with a central median and two lanes on each side, labeled 'C/W' (Carriageway). The road layout is shown as a solid line with a central median and two lanes on each side, labeled 'P/S' (Proposed Road).

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd., 	Drawing: _____ Checked: _____ Approved: _____ Scale H=1:1000		Drawing Title	LINEAR PLAN		
								Date: OCT-2020	Project No. 1564	Drawing No. NHDC/1564/44/R/C/15.1.23.20

The map illustrates the proposed road layout for the Shah Mohalla area. The main road runs horizontally, with a cross-hatched median. Stationing is marked along the top and bottom edges of the road. Key features include:

- Shah Mohalla:** A large building complex located between station 171+700 and 171+800.
- Culvert:** A structure crossing the road at station 171+600.
- Existing Road:** A road branching off to the right at station 172+000.
- Buildings and Shops:** Numerous buildings and shops are shown along the road and in the surrounding area.
- Directional Indicators:** Arrows at the top left point towards Vailoo, and an arrow at the top right points towards Donipawa.

The map illustrates the proposed road layout for the Shah Mohalla area. The main road runs horizontally, with a cross-hatched median. Stationing is marked along the top and bottom edges, ranging from 171+500 to 172+000. Key features include:

- Shah Mohalla:** A large building complex located between stations 171+700 and 171+800.
- Culvert:** A structure crossing the road near station 171+600.
- Existing Road:** A road branching off to the right near station 172+000.
- Buildings and Shops:** Numerous rectangular shapes representing buildings and shops are scattered along the road and in the surrounding areas.
- Directional Indicators:** Arrows at the top point left towards 'VAILOO' and right towards 'DONIPAWA'.

STING ROAD

172+000

Culvert

172+100

172+200

172+300

EXISTING ROAD

172+400

172+500

BUS STOP BOTH SIDE

Culvert

BRIDGE

LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

ROLLING AND MOUNTANEOUS TERRAIN

Shah Mohalla

BUS STOP BOTH SIDE

STING ROAD

EXISTING ROAD

172+000

172+100

172+200

172+300

172+400

172+500

Culvert

Culvert

LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

ROLLING AND MOUNTANEOUS TERRAIN

Shah Mohalla

BUS STOP BOTH SIDE

STING ROAD

EXISTING ROAD

172+000

172+100

172+200

172+300

172+400

172+500

Culvert

Culvert

LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

ROLLING AND MOUNTANEOUS TERRAIN

Shah Mohalla

BUS STOP BOTH SIDE

STING ROAD

EXISTING ROAD

172+000

172+100

172+200

172+300

172+400

172+500

Culvert

Culvert

LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

STING ROAD

172+000

Culvert

172+100

172+200

172+300

EXISTING ROAD

172+400

172+500

BUS STOP BOTH SIDE

Culvert

BRIDGE

LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:		Project		
R0	OCT. 2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div></div> <div>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</div> <div>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</div> <div></div>	<div>FINAL DETAILED PROJECT REPORT</div> <div>Designed: <div></div></div> <div>Drawn: <div></div></div> <div>Checked: <div></div></div> <div>Approved: <div></div></div>	<div>Scale</div> <div>H=1:1000</div>	<div>Drawing Title</div> <div>LINEAR PLAN</div> <div><div>Date</div><div>Project No.</div><div>Drawing No.</div></div> <div><div>OCT-2020</div><div>~1564</div><div>NH/DC/ NH&ID/ R&CK/ H.R. 24/20</div></div>	<div>Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.</div>

DONIPAWA



The plan view shows a proposed road layout. On the left, a 4-lane road is shown with a central median and two lanes on each side, labeled 'P/S' (Proposed Road). To the right of the 4-lane road is a 2-lane road, also labeled 'P/S'. Further right is an 'EXISTING ROAD' shown as a hatched rectangular area. To the right of the existing road are several structures: a 'HUT' (hatched rectangle), a 'SHOP' (hatched rectangle), a 'BUILDING' (hatched rectangle), a 'CULVERT' (vertical rectangle), and a 'BRIDGE' (horizontal rectangle). The road layout is shown as a solid line with a central median and two lanes on each side, labeled 'P/S'.

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project		Drawing Title	
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd., 	FINAL DETAILED PROJECT REPORT Designed: <input type="text"/> Drawn: <input type="text"/> Checked: <input type="text"/> Approved: <input type="text"/>		Scale H=1:1000	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					LINEAR PLAN Date: OCT-2020 Project No. 1564 Drawing No. NH/DC/244/64/R/C/K/14.2/2520			

The diagram illustrates a proposed road project in Thagiwara village, showing a road layout with culverts, buildings, and terrain features. The road is labeled "EXISTING ROAD" and "Culvert" at several points. The road is flanked by buildings and shops, with labels such as "VEYARI", "SHOP", "BUILDING", and "BUS STOP BOTH SIDE". The road is marked with stationing numbers: 173+500, 173+600, 173+700, 173+800, 173+900, and 174+000. The terrain is described as "ROLLING AND MOUNTANEOUS TERRAIN". The road is flanked by buildings and shops, with labels such as "VEYARI", "SHOP", "BUILDING", and "BUS STOP BOTH SIDE". The road is marked with stationing numbers: 173+500, 173+600, 173+700, 173+800, 173+900, and 174+000. The terrain is described as "ROLLING AND MOUNTANEOUS TERRAIN".

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The diagram illustrates a road project in Thagi wara village, showing a 4-lane road with two culverts, an existing road, and various buildings and shops. The diagram includes stationing from 174+000 to 174+500 and a legend for road types and structures.

Legend:

- 4 LANE ROAD: P/S, C/W, C/W, C/W, P/S
- 2 LANE ROAD: P/S, C/W, C/W, P/S
- EXISTING ROAD: C/W
- HUT: Hatched rectangle
- SHOP: Hatched rectangle
- BUILDING: Hatched rectangle
- CULVERT: Rectangle with vertical lines
- BRIDGE: Rectangle with horizontal lines

ROLLING AND MOUNTANEOUS TERRAIN

Village:-Thagi wara

LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

The diagram illustrates a road project in Thagi wara village, showing a 4-lane road with two culverts, an existing road, and various buildings and shops. The diagram includes stationing from 174+000 to 174+500 and a legend for road types and structures.

Legend:

- 4 LANE ROAD: P/S, C/W, C/W, C/W, P/S
- 2 LANE ROAD: P/S, C/W, C/W, P/S
- EXISTING ROAD: C/W
- HUT: Hatched rectangle
- SHOP: Hatched rectangle
- BUILDING: Hatched rectangle
- CULVERT: Rectangle with vertical lines
- BRIDGE: Rectangle with horizontal lines

ROLLING AND MOUNTANEOUS TERRAIN

Village:-Thagi wara

LEGEND:

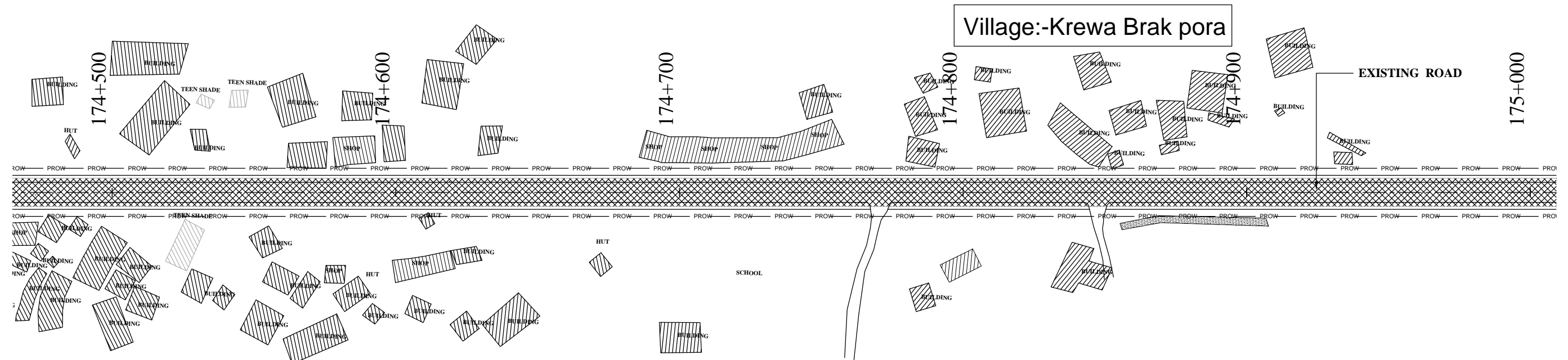
4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
C/W	C/W						
P/S	P/S						

[illegible]

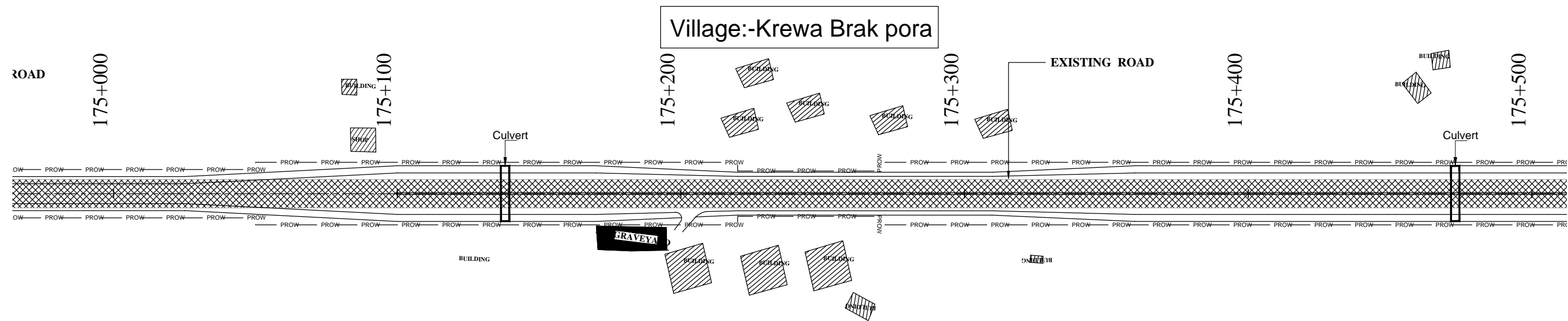
← VAILOO

DONIPAWA →

ROLLING AND MOUNTANEOUS TERRAIN



ROLLING AND MOUNTANEOUS TERRAIN



LEGEND:

4 LANE ROAD	2 LANE ROAD	EXISTING ROAD	HUT	SHOP	BUILDING	CULVERT	BRIDGE
P/S	P/S						
C/W	C/W						
MC	C/W						
C/W	P/S						
P/S							

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Drawing Title
R0	OCT. 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: Drawn: Checked: Approved:	Scale H=1:1000	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
							LINEAR PLAN
							Date: OCT -2020
							Project No. 1564
							Drawing No. NHIDCLNH-244-PACK-4/ILP- 27/R0

TBM & GPS DETAILS

TBM & GPS Details Vailoo to Donipawa						
Point	Chainage	Offset From Existing CL	Easting(m)	Northing(m)	Elevation (m)	TBM GPS Details
1	148+589	11.9248	533235.115	3713945.381	2018.701	GPS12PL
2	148+677	-8.21	533239.922	3714044.6	2021.486	GPS12APL
3	149+008	-4.298	533011.337	3714272.321	2020.811	TBM108
4	149+241	10.653	532795.096	3714359.015	2015.373	TBM107
5	149+527	7.319	532562.021	3714515.19	2009.272	TBM106
6	149+765	8.441	532345.02	3714609.699	2004.926	TBM105
7	149+947	-5.502	532195.705	3714715.2	1995.103	TBM104
8	150+208	-4.77	531959.756	3714826.893	1990.074	TBM103
9	150+464	-7.2	531705.999	3714843.215	1987.577	TBM102
10	150+648	-5.389	531521.279	3714838.855	1986.045	TBM101
11	150+956	11.847	531224.718	3714773.284	1983.487	TBM100
12	151+125	-5.335	531073.188	3714716.722	1977.181	TBM99
13	151+377	8.418	530824.365	3714675.473	1984.67	TBM98
14	151+559	-4.007	530647.348	3714724.489	1982.766	TBM97
15	151+771	-5.835	530446.51	3714790.542	1981.098	GPS11APL
16	151+907	-5.662	530316.362	3714830.646	1979.208	GPS11PL
17	152+024	5.683	530200.262	3714848.867	1977.707	TBM96
18	152+223	4.916	530019.132	3714931.904	1972.106	TBM95
19	152+468	-5.542	529847.884	3715107.749	1969.122	TBM94
20	152+672	11.07	529685.804	3715230.078	1964.713	TBM93
21	152+975	4.946	529476.123	3715447.421	1947.273	TBM92
22	153+263	-5.064	529219.077	3715575.523	1948.024	TBM91
23	153+370	10.373	529111.235	3715570.998	1950.225	TBM90
24	153+595	-4.581	528890.2	3715609.634	1949.356	TBM89
25	153+836	11.644	528665.88	3715692.89	1944.032	TBM88
26	154+045	10.817	528492.355	3715811.689	1942.301	TBM87
27	154+321	-5.495	528381.189	3716067.19	1937.768	TBM86
28	154+546	-4.484	528215.521	3716220.263	1937.255	TBM85
29	154+681	-6.357	528116.21	3716312.382	1930.963	GPS10APL
30	154+923	-10.24	527898.739	3716421.38	1921.059	GPS10PL
31	155+049	-7.962	527778.268	3716458.999	1914.742	TBM84
32	155+512	8.661	527421.792	3716723.027	1897.668	TBM83
33	155+711	5.433	527261.175	3716837.491	1889.002	TBM82

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R0	OCT-2020							
					Designed:	Scale NTS	Drawing Title	STANDARD DRAWING TBM & GPS Details Vailoo to Donipawa
					Drawn:			
					Checked:			
					Approved:			Date: AUG -2020
								Project No. 1564
								Drawing No. NHIDCL/NH-244-PACK-III/ TBM /01/R0

TBM & GPS Details Vailoo to Donipawa						
Point	Chainage	Offset From Existing CL	Easting(m)	Northing(m)	Elevation (m)	TBM GPS Details
34	156+028	-5.95	527037.216	3717061.466	1881.483	TBM81
35	156+342	8.127	526748.512	3717177.374	1884.863	TBM80
36	156+621	-4.763	526563.252	3717387.634	1874.779	TBM79
37	156+867	-5.627	526363.792	3717531.639	1872.38	TBM78
38	157+179	-10.412	526125.649	3717718.779	1865.278	TBM77
39	157+430	-12.889	525939.877	3717890.989	1861.562	TBM76
40	157+665	5.196	525713.592	3717962.455	1854.146	TBM75
41	157+852	-4.771	525540.22	3718030.582	1848.186	GPS9APL
42	158+015	6.139	525379.302	3718061.225	1843.795	GPS9PL
43	158+150	5.231	525282.601	3718156.395	1843.12	TBM74
44	158+470	5.747	525039.813	3718362.159	1841.949	TBM73
45	158+640	-5.601	524910.897	3718473.519	1837.236	TBM72
46	158+936	5.959	524675.335	3718651.973	1826.617	TBM71
47	159+156	-8.839	524539.802	3718827.994	1819.308	TBM70
48	159+655	-5.738	524169.988	3719053.161	1810.627	TBM69
49	159+855	-6.297	523976.271	3719092.914	1810.767	TBM68
50	159+996	-9.082	523841.272	3719139.934	1806.611	TBM67
51	160+258	11.553	523585.307	3719069.198	1807.228	TBM66
52	160+412	-7.215	523443.533	3719137.103	1806.44	TBM65
53	160+655	6.072	523209.447	3719200.171	1802.448	TBM64
54	160+822	5.252	523052.868	3719259.519	1800.985	GPS8APL
55	160+945	-6.103	522972.326	3719354.325	1797.841	GPS8PL
56	161+274	-8.4437	522673.831	3719496.533	1788.343	TBM63
57	161+484	-7.537	522467.947	3719456.262	1787.528	TBM62
58	161+674	9.793	522308.66	3719349.696	1785.95	TBM61
59	161+912	-6.93	522081.606	3719324.904	1784.205	TBM60
60	162+160	-7.522	521895.601	3719476.135	1779.779	TBM59
61	162+385	4.197	521700.014	3719588.552	1775.216	TBM58
62	162+645	5.12	521498.172	3719753.125	1770.245	TBM57
63	162+880	8.139	521384.36	3719959.145	1765.507	TBM56
64	163+118	13.207	521340.078	3720196.647	1758.328	TBM55
65	163+294	-12.385	521483.467	3720301.25	1757.884	TBM54
66	163+483	-12.498	521604.212	3720450.764	1758.333	TBM53

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
STANDARD DRAWING TBM & GPS Details Vailoo to Donipawa									
Date: AUG -2020			Project No. 1564			Drawing No. NHIDCL/NH-244-PACK-III/ TBM /02/R0			

TBM & GPS Details Vailoo to Donipawa						
Point	Chainage	Offset From Existing CL	Easting(m)	Northing(m)	Elevation (m)	TBM GPS Details
67	163+696	8.479	521586.191	3720668.549	1757.547	TBM52
68	163+882	-6.896	521651.661	3720844.567	1758.704	TBM51
69	164+078	-5.278	521672.854	3721040.201	1758.864	GPS7APL
70	164+254	-14.113	521689.233	3721215.839	1754.711	GPS7PL
71	164+436	-21.662	521718.312	3721390.192	1753.777	TBM50
72	164+722	5.522	521781.447	3721669.024	1756.931	TBM49
73	165+014	-4.468	521908.101	3721930.866	1758.925	TBM48
74	165+268	-6.729	521956.11	3722176.584	1759.147	TBM47
75	165+440	-11.054	521993.608	3722345.575	1756.42	TBM46
76	165+692	5.349	521993.954	3722598.755	1755.401	TBM45
77	165+907	-10.22	522011.21	3722813.499	1749.392	TBM44
78	166+202	6.029	521933.022	3723098.92	1735.682	TBM43
79	166+510	-6.202	521883.646	3723399.38	1733.388	TBM42
80	166+784	-7.089	521839.367	3723670.428	1730.2	TBM41
81	167+057	-5.52	521716.813	3723915.526	1725.102	GPS6APL
82	167+198	-5.942	521665.863	3724045.111	1720.727	GPS6PL
83	167+480	16.949	521564.58	3724310.742	1716.952	TBM40
84	167+757	3.975	521508.784	3724580.55	1713.63	TBM39
85	167+941	15.256	521404.047	3724729.288	1711.255	TBM38
86	168+073	0.305	521340.345	3724846.558	1706.872	TBM37
87	168+336	13.385	521175.828	3725047.562	1700.281	TBM36
88	168+451	11.257	521138.213	3725162.74	1701.496	TBM35
89	168+617	-4.622	521075.2921	3725310.315	1701.947	TBM34
90	168+856	-4.511	520916.8346	3725489.553	1698.08	TBM33
91	169+130	-4.597	520717.8696	3725678.457	1691.391	TBM32
92	169+290	-4.814	520614.884	3725798.833	1686.951	TBM31
93	169+556	-3.832	520449.543	3726006.933	1683.941	TBM30
94	169+734	-4.027	520367.712	3726150.874	1680.423	TBM29
95	169+952	-6.259	520487.639	3726333.142	1679.578	GPS5APL
96	170+070	-7.768	520484.495	3726453.034	1675.785	GPS5PL
97	170+236	-6.477	520423.059	3726607.728	1670.691	TBM28
98	170+932	-4.632	520198.907	3727225.25	1659.216	TBM27
99	171+070	-6.658	520131.109	3727343.399	1658.575	TBM26
100	171+286	5.772	519994.1	3727511.158	1657.574	TBM25
101	171+496	-7.743	519887.802	3727693.204	1654.327	TBM24

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
R0	OCT-2020				Designed:		Scale	NTS	Drawing Title	STANDARD DRAWING TBM & GPS Details Vailoo to Donipawa		
					Drawn:						Date: AUG -2020	
					Checked:						Project No. 1564	
					Approved:						Drawing No. NHIDCL/NH-244-PACK-III/ TBM /03/R0	

TBM & GPS Details Vailoo to Donipawa						
Point	Chainage	Offset From Existing CL	Easting(m)	Northing(m)	Elevation (m)	TBM GPS Details
102	171+757	7.469	519759.889	3727918.093	1650.813	TBM23
103	172+063	-4	519621.695	3728192.027	1646.812	TBM22
104	172+286	5.909	519475.829	3728360.559	1644.342	TBM21
105	172+524	5.402	519341.839	3728558.276	1642.825	TBM20
106	172+723	-4.313	519309.387	3728754.218	1641.204	TBM19
107	172+879	6.083	519220.21	3728861.102	1639.35	TBM18
108	173+014	-5.033	519152.353	3728977.267	1637.01	TBM17
109	173+162	6.728	519063.217	3729094.365	1635.249	TBM16
110	173+314	-6.862	518996.183	3729231.32	1632.653	TBM15
111	173+455	-6.167	518878.173	3729310.324	1633.185	TBM14
112	173+543	-5.165	518854.313	3729389.241	1634.483	GPS4APL
113	173+694	-5.656	518761.493	3729510.317	1634.702	GPS4PL
114	173+795	-4.395	518664.117	3729540.338	1633.115	TBM13
115	173+915	7.534	518549.358	3729512.832	1630.544	TBM12
116	174+071	9.585	518392.717	3729516.94	1630.002	TBM11
117	174+283	5.259	518210.759	3729628.939	1629.044	TBM10
118	174+579	-4.748	517962.34	3729787.986	1628.919	TBM9
119	174+800	7.095	517758.684	3729872.462	1626.457	TBM8
120	175+032	-5.358	517593.039	3730034.837	1624.21	TBM7
121	175+193	-4.345	517462.178	3730128.418	1621.103	TBM6
122	175+370	10.463	517285.14	3730137.31	1619.559	TBM5
123	175+604	5.937	517066.185	3730221.089	1617.822	TBM4
124	175+884	5.001	516840.806	3730385.067	1615.258	TBM3
125	176+119	7.416	516666.19	3730534.875	1612.968	TBM2
126	176+354	-8.251	516464.246	3730656.975	1611.417	TBM1
127	176+601	4.377	516231.862	3730738.423	1614.114	GPS3PL
128	176+666	7.372	516175.714	3730776.519	1613.855	GPS3APL

SET-OUT DATA

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
1	148589	533228.6050	3713956.3950	2018.9390	8	19	21.6220	Straight
2	148614	533232.1890	3713981.1360	2019.7950	7	47	20.9100	-602.0300
3	148639	533234.6780	3714006.0040	2020.6460	2	45	26.2300	-186.4020
4	148664	533233.9250	3714030.9650	2021.2330	353	32	8.7170	-150
5	148689	533229.0580	3714055.4570	2021.4130	343	59	11.2490	-150
6	148714	533220.2340	3714078.8200	2021.1850	335	2	48.0410	-204.4460
7	148739	533208.6650	3714100.9750	2020.5760	330	41	34.8980	-842.0560
8	148764	533196.3320	3714122.7210	2019.8840	330	17	14.2570	-1205.7230
9	148789	533183.3870	3714144.1030	2019.1920	326	26	48.1740	-220.6000
10	148814	533168.1550	3714163.8970	2018.7880	318	5	44.5300	-185.7260
11	148839	533150.5210	3714181.6070	2018.9680	313	2	9.2260	-595.0400
12	148864	533132.1060	3714198.5140	2019.6860	312	20	21.1190	-1542.2400
13	148889	533113.3540	3714215.0450	2020.5120	309	58	40.9070	-377.5850
14	148914	533093.5580	3714230.3000	2021.2660	304	54	9.4570	-250
15	148939	533072.3750	3714243.5570	2021.6490	299	10	22.9770	-250
16	148964	533049.9740	3714254.6320	2021.6260	293	26	36.4960	-250
17	148989	533026.6130	3714263.5150	2021.3260	288	37	11.9810	-415.0580
18	149014	533002.7540	3714270.9790	2021.0170	286	36	4.7340	-2443.1700
19	149039	532978.7900	3714278.0980	2020.7080	286	32	28.7620	Straight
20	149064	532954.8240	3714285.2160	2020.3990	286	32	28.7620	Straight

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT				Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.				
R0	OCT-2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div> <div></div>	<div> RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</div> <div></div>										
					Designed:		Scale	NTS		Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa			
					Drawn:							Date:	Project No.	Drawing No.
					Checked:							OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 01 / R0
					Approved:									

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
21	149089	532930.8590	3714292.3340	2020.0610	286	34	24.3850	3339.1020
22	149114	532906.9870	3714299.7540	2019.5790	288	26	5.3190	434.8810
23	149139	532883.5850	3714308.5300	2018.9420	293	7	43.8690	250
24	149164	532861.1240	3714319.4820	2018.1490	298	51	30.3500	250
25	149189	532839.8670	3714332.6220	2017.2290	304	35	16.8310	250
26	149214	532819.9680	3714347.7430	2016.2970	309	27	13.6350	408.6840
27	149239	532801.0240	3714364.0540	2015.3710	311	31	34.6460	2237.7370
28	149264	532782.3270	3714380.6500	2014.5990	311	35	52.0930	Straight
29	149289	532763.6310	3714397.2470	2014.0430	311	35	52.0930	Straight
30	149314	532744.9360	3714413.8440	2013.7050	311	35	52.0930	Straight
31	149339	532726.2400	3714430.4420	2013.5780	311	35	50.5620	-28432.6270
32	149364	532707.3940	3714446.8670	2013.5150	310	3	17.7200	-472.0310
33	149389	532687.7810	3714462.3630	2013.4070	306	31	26.2870	-400
34	149414	532667.2390	3714476.6050	2013.0030	302	56	34.7370	-400
35	149439	532645.8480	3714489.5360	2012.2660	299	21	43.1860	-400
36	149464	532623.6910	3714501.1050	2011.4080	295	46	51.6360	-400
37	149489	532600.8540	3714511.2680	2010.6380	292	12	0.0860	-400
38	149514	532577.4270	3714519.9850	2009.9700	288	37	8.5350	-400
39	149539	532553.5040	3714527.2290	2009.3480	285	11	30.3580	-546.0550
40	149564	532529.2870	3714533.4360	2008.7270	284	2	19.8320	Straight

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa			Date:	Project No.	Drawing No.	
						OCT - 2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 02 / R0	

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
41	149589	532505.0340	3714539.5000	2008.1050	284	2	19.8320	Straight
42	149614	532480.8100	3714545.6800	2007.4830	285	1	29.3340	602.6550
43	149639	532456.8680	3714552.8590	2006.8620	288	50	2.4580	273.2750
44	149664	532433.6420	3714562.0820	2006.2990	294	31	19.3190	250
45	149689	532411.4490	3714573.5700	2005.8750	300	4	44.6620	302.4920
46	149714	532390.2440	3714586.8050	2005.5710	303	22	55.1530	765.7740
47	149739	532369.4840	3714600.7340	2005.1990	303	59	33.5420	Straight
48	149764	532348.7560	3714614.7110	2004.4930	303	59	33.5420	Straight
49	149789	532328.0290	3714628.6880	2003.4360	303	59	33.5420	Straight
50	149814	532307.3010	3714642.6650	2002.2330	303	59	33.5420	Straight
51	149839	532286.5420	3714656.5970	2001.0300	303	31	6.1140	-1204.0150
52	149864	532265.5120	3714670.1120	1999.8270	301	50	55.8080	-800
53	149889	532244.0730	3714682.9700	1998.6240	300	3	30.0330	-800
54	149914	532222.2450	3714695.1560	1997.4210	298	21	9.3960	-1112.4850
55	149939	532200.1630	3714706.8760	1996.2240	297	47	49.4520	Straight
56	149964	532178.0480	3714718.5350	1995.1890	297	47	49.4520	Straight
57	149989	532155.9640	3714730.2510	1994.3850	298	23	51.5120	1200
58	150014	532134.0780	3714742.3340	1993.8110	299	7	22.9890	Straight
59	150039	532112.2380	3714754.5010	1993.4620	299	7	22.9890	Straight
60	150064	532090.3830	3714766.6410	1993.1530	298	42	25.9700	-909.2320

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
								Date:	Project No.
								OCT -2020	1564
									NHIDCL/NH-244-PACK-III/ SOD / 03 / R0

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
61	150089	532068.1950	3714778.1530	1992.7870	295	38	23.0860	-314.1530
62	150114	532045.2760	3714788.1260	1992.3740	291	49	40.1950	-600.0160
63	150139	532021.9560	3714797.1370	1991.9560	290	52	22.6350	Straight
64	150164	531998.5970	3714806.0440	1991.4880	290	52	22.6350	Straight
65	150189	531975.2300	3714814.9300	1990.8490	290	32	33.9050	-1020.3440
66	150214	531951.6430	3714823.2100	1990.0460	287	38	48.6190	-326.4350
67	150239	531927.5010	3714829.6590	1989.2070	281	46	27.0190	-200
68	150264	531902.7720	3714833.2200	1988.3890	274	36	43.9180	-200
69	150289	531877.7920	3714833.7150	1987.8370	267	58	46.8600	-266.0290
70	150314	531852.8640	3714831.8780	1987.6230	264	5	14.6970	-596.7840
71	150339	531828.0310	3714828.9960	1987.7430	263	7	19.7980	Straight
72	150364	531803.1900	3714826.1900	1987.9500	264	28	50.4700	503.0420
73	150389	531778.2450	3714824.6210	1988.0770	268	49	12.8310	245.6250
74	150414	531753.2770	3714825.5530	1988.1260	275	34	23.3490	225.8400
75	150439	531728.5430	3714829.1380	1988.0950	280	25	24.9220	426.5160
76	150464	531704.0560	3714834.1670	1987.9860	282	17	23.5370	3827.8410
77	150489	531679.6210	3714839.4520	1987.7970	281	46	15.7620	-796.1990
78	150514	531655.0330	3714843.9530	1987.5670	278	28	47.7820	-300
79	150539	531630.1810	3714846.6060	1987.3370	273	42	19.0480	-300
80	150564	531605.1950	3714847.1810	1987.1070	268	55	50.3140	-300

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R0	OCT-2020							Drawing Title	
					Designed:		Scale NTS		
					Drawn:				
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa						
			Date OCT -2020		Project No. 1564		Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 04 /R0		

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
81	150589	531580.2470	3714845.6810	1986.8750	264	18	10.1900	-373.1650
82	150614	531555.4420	3714842.5820	1986.5980	261	57	23.0490	-1676.5890
83	150639	531530.6940	3714839.0360	1986.2590	261	50	2.7750	Straight
84	150664	531505.9480	3714835.4850	1985.8830	261	50	2.7750	Straight
85	150689	531481.2140	3714831.8510	1985.5490	261	11	16.5980	-998.7740
86	150714	531456.5800	3714827.5980	1985.3770	258	57	58.1450	-500
87	150739	531432.1710	3714822.2020	1985.3740	256	6	4.9050	-500
88	150764	531408.0610	3714815.6010	1985.5330	253	22	12.6470	-647.3650
89	150789	531384.2150	3714808.0950	1985.7330	251	57	11.8850	-2306.2090
90	150814	531360.4590	3714800.3070	1985.8820	251	49	55.5900	Straight
91	150839	531336.7050	3714792.5140	1985.8000	251	56	3.8200	1122.6500
92	150864	531312.6940	3714785.5830	1985.4810	257	11	21.0220	155.1280
93	150889	531287.9700	3714782.0690	1985.0910	266	18	33.5180	205.9530
94	150914	531262.9830	3714781.3990	1984.6480	269	20	54.8480	Straight
95	150939	531237.9890	3714780.9300	1983.8840	266	54	44.2430	-153.3550
96	150964	531213.4010	3714776.7630	1982.7670	253	16	54.8130	-100
97	150989	531190.3700	3714767.1210	1981.5200	243	44	31.2620	-1159.7040
98	151014	531167.9560	3714756.0480	1980.5090	243	49	16.7420	1282.5970
99	151039	531145.2600	3714745.5760	1980.1060	247	29	45.4460	229.8270
100	151064	531121.6520	3714737.3950	1980.2910	253	54	46.5620	313.9650

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa			Date:	Project No.	Drawing No.	
						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 05 / R0	

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
101	151089	531097.4670	3714731.0690	1980.6350	255	56	50.2850	Straight
102	151114	531073.2150	3714724.9990	1980.9790	255	56	50.2850	Straight
103	151139	531048.9630	3714718.9280	1981.4480	255	56	50.2850	Straight
104	151164	531024.7110	3714712.8580	1982.2950	255	56	50.2850	Straight
105	151189	531000.4590	3714706.7880	1983.4950	255	56	50.2850	Straight
106	151214	530976.2050	3714700.7280	1984.7640	256	4	32.7970	3162.4020
107	151239	530951.9030	3714694.8640	1986.0330	256	55	40.5850	1144.6510
108	151264	530927.4780	3714689.5330	1986.9930	258	34	42.7430	698.7910
109	151289	530902.8800	3714685.0790	1987.3480	261	1	39.2710	502.9030
110	151314	530878.0930	3714681.8530	1987.0980	264	16	30.1690	392.7930
111	151339	530853.1550	3714680.1580	1986.4420	267	56	50.7340	390
112	151364	530828.1590	3714680.0630	1985.8120	271	37	12.8370	390
113	151389	530803.2090	3714681.5700	1985.2350	275	17	34.9400	390
114	151414	530778.4060	3714684.6730	1984.6910	278	57	57.0430	390
115	151439	530753.8480	3714689.3330	1984.1470	282	24	38.0060	466.6870
116	151464	530729.5730	3714695.3010	1983.6380	285	4	50.2470	630.7750
117	151489	530705.5530	3714702.2260	1983.3150	286	57	8.1180	972.8210
118	151514	530681.7180	3714709.7670	1983.1920	288	1	31.6190	2125.2880
119	151539	530657.9730	3714717.5870	1983.1370	288	18	35.6710	Straight
120	151564	530634.2380	3714725.4410	1983.0820	288	18	35.6710	Straight

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
								Date: OCT -2020	Project No. 1564
									Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 06 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
141	152089	530131.4090	3714875.7410	1975.6210	291	20	28.9580	500
142	152114	530108.3600	3714885.4170	1974.8640	294	12	22.1980	500
143	152139	530085.8240	3714896.2340	1974.2000	297	4	15.4390	500
144	152164	530063.8560	3714908.1630	1973.6090	299	56	8.6790	500
145	152189	530042.5130	3714921.1750	1973.0240	302	48	1.9190	500
146	152214	530021.8460	3714935.2370	1972.4380	305	39	55.1600	500
147	152239	530001.9080	3714950.3150	1971.8680	308	31	48.4000	500
148	152264	529982.7470	3714966.3690	1971.3990	311	20	58.5150	550.2000
149	152289	529964.3230	3714983.2660	1971.0440	313	34	33.7660	774.4710
150	152314	529946.4540	3715000.7490	1970.8030	315	2	55.0060	1307.3810
151	152339	529928.9230	3715018.5710	1970.6590	315	46	2.2360	4191.6080
152	152364	529911.5040	3715036.5040	1970.5280	315	50	41.0590	Straight
153	152389	529893.9830	3715054.3370	1970.3970	315	8	49.9620	-2000
154	152414	529876.2400	3715071.9490	1970.2660	314	25	51.6520	-2000
155	152439	529858.2790	3715089.3380	1970.1340	313	42	53.3420	-2000
156	152464	529840.1020	3715106.5020	1969.8900	312	59	55.0320	-2000
157	152489	529821.7120	3715123.4360	1969.4510	312	16	56.7220	-2000
158	152514	529803.1810	3715140.2180	1968.8190	312	9	13.2490	Straight
159	152539	529784.6480	3715156.9960	1967.9920	312	9	13.2490	Straight
160	152564	529766.1140	3715173.7740	1966.9710	312	9	13.2490	Straight

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa			Date:	Project No.	Drawing No.	
						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 08 / R0	

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
161	152589	529747.5610	3715190.5310	1965.7560	311	47	4.2830	-1042.3290
162	152614	529728.6490	3715206.8790	1964.4590	309	49	35.5200	-700
163	152639	529709.1800	3715222.5610	1963.1620	308	4	10.1430	-1726.0110
164	152664	529689.4660	3715237.9350	1961.8660	307	56	5.4840	Straight
165	152689	529669.7980	3715253.3670	1960.5690	308	35	48.5820	1200
166	152714	529650.4230	3715269.1650	1959.2730	309	47	25.7650	1200
167	152739	529631.3790	3715285.3610	1957.9760	310	50	55.7210	Straight
168	152764	529612.4730	3715301.7190	1956.6800	310	59	14.8090	2112.6900
169	152789	529593.7800	3715318.3180	1955.3830	312	29	39.7480	613.2190
170	152814	529575.7800	3715335.6620	1954.0860	315	39	32.7580	360
171	152839	529558.9050	3715354.1030	1952.7900	319	11	13.9220	519.6770
172	152864	529542.9330	3715373.3340	1951.4930	321	6	52.5150	1304.0080
173	152889	529527.3350	3715392.8710	1950.2440	321	28	42.5660	Straight
174	152914	529511.7650	3715412.4300	1949.1510	321	28	42.5660	Straight
175	152939	529495.9980	3715431.8300	1948.2180	319	28	46.6150	-312.1820
176	152964	529478.7450	3715449.9000	1947.4450	312	27	7.1690	-170
177	152989	529459.1270	3715465.3600	1946.8320	304	1	34.1100	-170
178	153014	529437.4660	3715477.7980	1946.3800	295	59	52.3030	-224.5290
179	153039	529414.5760	3715487.8390	1946.0870	292	15	4.9960	-1286.5090
180	153064	529391.4420	3715497.3160	1945.9550	292	42	0.0750	1200

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed:	Scale NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Drawn:				
					Checked:				
					Approved:				
								Date: OCT -2020	Project No. 1564
									Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 09 / R0

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
181	153089	529368.4800	3715507.2030	1945.9350	293	53	37.2590	1200
182	153114	529345.7250	3715517.5560	1945.9230	294	50	11.1670	Straight
183	153139	529323.0370	3715528.0570	1946.0340	294	50	11.1670	Straight
184	153164	529300.3500	3715538.5570	1946.3250	294	50	11.1670	Straight
185	153189	529277.6620	3715549.0580	1946.7980	294	50	11.1670	Straight
186	153214	529254.9740	3715559.5590	1947.4480	294	50	11.1670	Straight
187	153239	529232.1620	3715569.7830	1948.1560	292	34	36.1640	-292.5300
188	153264	529208.5770	3715578.0180	1948.8380	285	4	3.6410	-150
189	153289	529184.0090	3715582.4910	1949.3330	275	46	30.8790	-181.3520
190	153314	529159.0460	3715583.6730	1949.6140	270	31	45.8660	-552.3540
191	153339	529134.0460	3715583.6720	1949.8090	269	53	44.1380	Straight
192	153364	529109.0460	3715583.6270	1950.0040	269	53	44.1380	Straight
193	153389	529084.0460	3715583.6830	1950.1990	270	36	33.1680	981.5640
194	153414	529059.0550	3715584.3240	1950.3820	272	21	46.6170	800
195	153439	529034.0970	3715585.7450	1950.4550	274	9	12.3920	800
196	153464	529009.1850	3715587.8440	1950.3960	275	13	46.5380	4334.5870
197	153489	528984.2930	3715590.1670	1950.2760	275	35	22.1110	1412.0280
198	153514	528959.4480	3715592.9370	1950.1560	277	23	58.8260	549.6580
199	153539	528934.7460	3715596.7660	1950.0360	280	14	36.3070	500
200	153564	528910.2660	3715601.8250	1949.9160	283	6	29.5480	500

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
R0	OCT-2020				Designed:		Scale	NTS	Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa		
					Drawn:					Date:	Project No.	Drawing No.
					Checked:					OCT - 2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 10 / R0
			Approved:									

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
200	153564	528910.2660	3715601.8250	1949.9160	283	6	29.5480	500
201	153589	528886.0690	3715608.1010	1949.7950	285	58	22.7880	500
202	153614	528862.2160	3715615.5790	1949.6750	288	50	16.0280	500
203	153639	528838.7670	3715624.2390	1949.5550	291	42	9.2680	500
204	153664	528815.7800	3715634.0600	1949.2890	294	34	2.5090	500
205	153689	528793.2830	3715644.9610	1948.7450	296	53	37.7830	920.7000
206	153714	528771.0900	3715656.4680	1947.9780	297	39	15.2030	Straight
207	153739	528748.9040	3715667.9920	1947.1910	296	57	14.0800	-1200
208	153764	528726.5030	3715679.0910	1946.4040	295	45	36.8960	-1200
209	153789	528703.8760	3715689.7210	1945.6170	294	33	59.7130	-1200
210	153814	528681.0330	3715699.8770	1944.8300	293	22	22.5290	-1200
211	153839	528658.0850	3715709.7960	1944.0610	293	37	35.6310	1414.3360
212	153864	528635.3180	3715720.1220	1943.4730	295	26	6.3850	550.0080
213	153889	528613.0470	3715731.4710	1943.1040	298	50	6.7170	341.3820
214	153914	528591.6530	3715744.3920	1942.9540	303	30	16.5890	300
215	153939	528571.3810	3715759.0120	1943.0050	307	52	53.8380	392.4790
216	153964	528552.0760	3715774.8920	1943.0930	310	44	7.6460	695.9920
217	153989	528533.3520	3715791.4570	1943.0880	311	59	51.8770	3070.4380
218	154014	528514.7910	3715808.2050	1942.9130	312	3	58.0140	Straight
219	154039	528496.4140	3715825.1520	1942.6040	314	7	28.0030	312.1320
220	154064	528479.4270	3715843.4750	1942.2840	320	38	21.8660	200

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
								Date:	Project No.
								OCT -2020	1564
									Drawing No.
									NHIDCL/NH-244-PACK-III/ SOD /11 /R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
221	154089	528464.8190	3715863.7430	1941.9640	327	48	4.9670	200
222	154114	528452.8530	3715885.6750	1941.6380	334	57	48.0670	200
223	154139	528443.5640	3715908.8730	1941.2020	340	39	55.0190	434.4580
224	154164	528435.6310	3715932.5810	1940.6230	341	43	39.7210	Straight
225	154189	528427.7490	3715956.3060	1939.9750	341	1	21.9380	-450.7700
226	154214	528418.5280	3715979.5300	1939.4250	334	58	46.3640	-211.4440
227	154239	528407.0970	3716001.7590	1938.9860	331	46	32.5570	Straight
228	154264	528395.7860	3716024.0510	1938.5900	334	31	35.7190	500
229	154289	528385.5170	3716046.8430	1938.1950	336	7	6.1840	-932.9770
230	154314	528374.7460	3716069.3980	1937.8000	331	57	0.0400	-210.6010
231	154339	528361.4950	3716090.5720	1937.4460	323	46	28.8920	-170
232	154364	528345.2940	3716109.5820	1937.2360	315	20	55.8320	-170
233	154389	528326.6630	3716126.2330	1937.1750	309	4	47.2570	-391.3960
234	154414	528306.9910	3716141.6590	1937.2610	307	48	29.3010	Straight
235	154439	528287.2390	3716156.9850	1937.4540	307	48	29.3010	Straight
236	154464	528267.4870	3716172.3100	1937.6510	307	48	29.3010	Straight
237	154489	528247.7350	3716187.6360	1937.7810	307	48	29.3010	Straight
238	154514	528228.1320	3716203.1480	1937.5800	309	34	40.8750	500
239	154539	528209.2690	3716219.5510	1937.0200	312	26	34.1160	500
240	154564	528191.0680	3716236.6890	1936.1020	313	27	23.5050	Straight

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R0	OCT-2020				Designed: <div></div> Drawn: <div></div> Checked: <div></div> Approved: <div></div>			Scale	NTS	Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa
											<div>Date: OCT -2020</div> <div>Project No: 1564</div> <div>Drawing No: NHIDCL/NH-244-PACK-III/ SOD / 12 / R0</div>

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
241	154589	528172.8730	3716253.8330	1934.8930	312	53	16.4190	-1070.5830
242	154614	528154.2890	3716270.5540	1933.6560	310	55	20.2200	-650
243	154639	528135.0890	3716286.5630	1932.4250	308	43	6.9580	-650
244	154664	528115.2880	3716301.8210	1931.2940	306	30	53.6960	-650
245	154689	528094.9140	3716316.3070	1930.3000	304	18	40.4350	-650
246	154714	528073.9980	3716329.9990	1929.3680	302	6	27.1730	-650
247	154739	528052.5720	3716342.8760	1928.3190	299	54	13.9110	-650
248	154764	528030.6660	3716354.9200	1927.1430	297	42	0.6490	-650
249	154789	528008.3130	3716366.1130	1925.9390	295	29	47.3870	-650
250	154814	527985.5470	3716376.4390	1924.8550	293	20	18.0860	-784.8620
251	154839	527962.4820	3716386.0820	1923.9060	292	18	1.2920	-5707.4690
252	154864	527939.3450	3716395.5510	1923.0100	292	2	40.7320	-1200
253	154889	527916.0760	3716404.6920	1922.1130	290	51	3.5480	-1200
254	154914	527892.6230	3716413.3470	1921.1680	289	39	26.3650	-1200
255	154939	527869.0230	3716421.5950	1920.1060	289	9	42.1410	Straight
256	154964	527845.4080	3716429.8010	1918.9440	289	9	42.1410	Straight
257	154989	527821.7930	3716438.0070	1917.8240	289	9	42.1410	Straight
258	155014	527798.1150	3716446.0280	1916.7750	287	47	32.1190	-511.3620
259	155039	527774.1300	3716453.0700	1915.7560	284	55	41.4240	-500
260	155064	527749.8230	3716458.9030	1914.6090	282	3	48.1840	-500

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT				Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.				
R0	OCT-2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div> 	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd. 										
					Designed:		Scale NTS		Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa				
					Drawn:					Date:	Project No.	Drawing No.		
					Checked:					OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 13 /R0		
					Approved:									

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
261	155089	527725.2600	3716463.5440	1913.2920	279	35	32.5890	-1051.1400
262	155114	527700.5900	3716467.5940	1911.8750	279	18	26.8150	1814.2800
263	155139	527676.0590	3716472.3750	1910.4600	284	4	33	163.7540
264	155164	527652.5750	3716480.8010	1909.3500	296	26	44.6760	100
265	155189	527631.6840	3716494.4420	1908.7250	308	47	32.1070	164.3790
266	155214	527613.0600	3716511.1080	1908.4550	313	31	38.4370	1894.1560
267	155239	527594.9440	3716528.3370	1908.0060	313	34	44.6870	6386.1960
268	155264	527576.9480	3716545.6900	1907.1990	314	35	56.9400	788.8310
269	155289	527559.5080	3716563.5990	1906.1330	317	7	5.7890	500
270	155314	527542.9610	3716582.3360	1905.2380	319	58	59.0290	500
271	155339	527527.3570	3716601.8650	1904.5680	322	37	12.4250	711.4390
272	155364	527512.4380	3716621.9250	1903.9990	323	50	15.7950	3395.6830
273	155389	527497.7040	3716642.1220	1903.2710	323	53	37.0400	Straight
274	155414	527482.9720	3716662.3200	1902.2280	323	53	37.0400	Straight
275	155439	527468.2340	3716682.5140	1900.9290	323	42	3.6910	-1020.4010
276	155464	527452.8960	3716702.2490	1899.6060	319	44	21.9150	-219.7110
277	155489	527435.6020	3716720.2810	1898.2840	312	37	4.0730	-200
278	155514	527416.1970	3716736.0160	1896.9610	305	27	20.9730	-200
279	155539	527395.0540	3716749.3370	1895.6380	299	40	31.3720	-421.0050
280	155564	527373.1460	3716761.3790	1894.3160	298	32	38.3250	Straight

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
								STANDARD DRAWING Set-Out Data Vailoo-Donipawa	
								Date:	Project No.
								OCT -2020	1564
								NHIDCL/NH-244-PACK-III/ SOD / 14 / R0	

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
281	155589	527351.1850	3716773.3250	1893.0530	298	35	25.7930	2718.4570
282	155614	527329.3960	3716785.5790	1891.8920	300	36	34.1650	407.9650
283	155639	527308.3790	3716799.1060	1890.8340	305	6	59.8340	300
284	155664	527288.5520	3716814.3220	1889.8790	309	53	28.5670	300
285	155689	527270.0600	3716831.1350	1889.0270	314	39	57.3010	300
286	155714	527252.9170	3716849.3260	1888.2770	318	14	59.5940	679.2210
287	155739	527236.4500	3716868.1360	1887.6300	318	43	37.7670	-800
288	155764	527219.6680	3716886.6650	1887.0860	316	56	11.9920	-800
289	155789	527202.3150	3716904.6600	1886.6440	315	8	46.2170	-800
290	155814	527184.4980	3716922.1970	1886.3050	314	22	54.5360	Straight
291	155839	527166.6310	3716939.6830	1886.0080	314	22	54.5360	Straight
292	155864	527148.7630	3716957.1690	1885.7120	314	22	54.5360	Straight
293	155889	527130.8590	3716974.6170	1885.4120	313	43	17.4830	-800
294	155914	527112.5240	3716991.6100	1885.0170	311	55	51.7080	-800
295	155939	527093.6710	3717008.0270	1884.4840	310	20	26.4350	Straight
296	155964	527074.6150	3717024.2100	1883.8150	310	20	26.4350	Straight
297	155989	527055.4380	3717040.2460	1883.0130	308	42	0.1400	-349.6140
298	156014	527035.1850	3717054.8820	1882.1710	302	27	22.2610	-200
299	156039	527013.3080	3717066.9470	1881.3910	295	17	39.1600	-200
300	156064	526990.1050	3717076.2120	1880.8470	288	32	39.8720	-280.3990

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							
					Designed:		Scale NTS	Drawing Title
					Drawn:			
					Checked:			
					Approved:			
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa			Date: OCT -2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 15 / R0

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
301	156089	526966.1790	3717083.4550	1880.5370	285	59	37.7870	Straight
302	156114	526942.1470	3717090.3440	1880.3450	285	59	37.7870	Straight
303	156139	526918.1150	3717097.2320	1880.5330	285	59	37.7870	Straight
304	156164	526894.0820	3717104.1200	1881.1490	285	59	37.7870	Straight
305	156189	526870.0500	3717111.0090	1882.1930	285	59	37.7870	Straight
306	156214	526846.0890	3717118.1380	1883.4490	287	59	10.1050	311.5440
307	156239	526822.7920	3717127.1600	1884.3770	295	13	28.7890	150
308	156264	526801.1660	3717139.6450	1884.8970	304	45	50.8520	155.2520
309	156289	526781.6100	3717155.1970	1885.0100	311	20	16.1080	365.3040
310	156314	526763.1580	3717172.0630	1884.7150	312	47	12.7310	Straight
311	156339	526744.8110	3717189.0450	1884.0140	312	47	12.7310	Straight
312	156364	526726.4820	3717206.0460	1882.9760	313	4	37.3930	1539.2710
313	156389	526708.4300	3717223.3410	1881.9030	314	37	11.0880	800
314	156414	526690.9120	3717241.1760	1880.8310	316	24	36.8630	800
315	156439	526673.9610	3717259.5490	1879.8030	318	12	2.6390	800
316	156464	526657.5520	3717278.4100	1878.9800	319	31	48.8180	2319.3140
317	156489	526641.3620	3717297.4600	1878.3720	319	39	28.9550	Straight
318	156514	526625.1780	3717316.5140	1877.8150	319	39	28.9550	Straight
319	156539	526608.9670	3717335.5450	1877.1720	319	11	58.7800	-866.0110
320	156564	526592.2070	3717354.0920	1876.4310	316	14	26.9900	-400

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed:		Scale NTS		
					Drawn:				
					Checked:				
					Approved:				
						STANDARD DRAWING Set-Out Data Vailoo-Donipawa			
						Date:	Project No.	Drawing No.	
						OCT - 2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 16 / R0	

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
321	156589	526574.3640	3717371.5960	1875.6540	312	39	35.4390	-400
322	156614	526555.4610	3717387.9520	1874.9870	309	4	43.8890	-400
323	156639	526535.5750	3717403.0950	1874.4870	305	29	52.3380	-400
324	156664	526514.8080	3717417.0090	1874.1530	302	28	51.7170	-820.3650
325	156689	526493.6250	3717430.2850	1873.9850	302	2	18.3190	2291.4390
326	156714	526472.6170	3717443.8350	1873.9700	304	1	39.8030	500
327	156739	526452.2560	3717458.3370	1873.9870	306	53	33.0440	500
328	156764	526432.5380	3717473.7050	1874.0040	308	29	57.1630	7959.6240
329	156789	526412.9740	3717489.2690	1873.9980	308	30	17.5110	Straight
330	156814	526393.3360	3717504.7390	1873.7390	307	40	1.7110	-847.4340
331	156839	526373.2870	3717519.6710	1873.1660	305	39	28.8950	-700
332	156864	526352.7180	3717533.8790	1872.2800	303	36	42.2950	-700
333	156889	526331.6550	3717547.3440	1871.1040	301	33	55.6940	-700
334	156914	526310.1250	3717560.0470	1870	299	31	9.0940	-700
335	156939	526288.1550	3717571.9740	1869.2500	297	28	22.4940	-700
336	156964	526265.7970	3717583.1580	1868.8200	295	55	5.5250	-1906.0590
337	156989	526243.2840	3717594.0290	1868.3700	295	45	9.3940	Straight
338	157014	526220.8150	3717604.9890	1867.8030	296	53	18.4900	412.6060
339	157039	526199.0680	3717617.2960	1867.1630	303	0	45.4640	163.2030
340	157064	526179.3200	3717632.5790	1866.6610	312	30	20.4290	150

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)  JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT-2020				Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa					
					Designed: <div></div>	Scale NTS			Drawing No.		
									Date: OCT -2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 17 /R0

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
341	157089	526162.1760	3717650.7500	1866.3360	319	58	25.2900	295.3370
342	157114	526146.6190	3717670.3180	1866.0770	322	11	26.4000	Straight
343	157139	526131.2930	3717690.0690	1865.6050	322	11	26.4000	Straight
344	157164	526115.9670	3717709.8200	1864.8770	322	11	26.1320	-89842.4570
345	157189	526100.5410	3717729.4930	1864.0370	321	19	19.3190	-832.2190
346	157214	526084.5530	3717748.7110	1863.4240	319	3	53.3680	-600
347	157239	526067.7840	3717767.2500	1863.1200	316	40	39.0020	-600
348	157264	526050.2580	3717785.0750	1863.0090	314	17	24.6350	-600
349	157289	526032.0040	3717802.1550	1862.9000	311	54	10.2680	-600
350	157314	526013.0550	3717818.4590	1862.7910	309	30	55.9010	-600
351	157339	525993.4920	3717834.0230	1862.6820	307	45	51.5290	-1566.4410
352	157364	525973.6750	3717849.2640	1862.5580	307	31	8.8840	Straight
353	157389	525953.8210	3717864.4560	1862.2390	307	1	15.0750	-830.6160
354	157414	525933.5110	3717879.0290	1861.6680	303	48	15.4060	-304.2050
355	157439	525912.1830	3717892.0570	1860.8460	299	1	49.2990	-300
356	157464	525889.8540	3717903.2870	1859.8440	294	36	13.5210	-429.7110
357	157489	525866.9170	3717913.2290	1858.9370	292	45	44.8020	-4101.5420
358	157514	525843.8610	3717922.8940	1858.1840	292	44	31.2360	Straight
359	157539	525820.8020	3717932.5520	1857.5380	292	37	9.7070	-2292.5000
360	157564	525797.6300	3717941.9340	1856.8950	291	11	55.5750	-646.2800

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed:		Scale NTS		
					Drawn:				
					Checked:				
					Approved:				
							STANDARD DRAWING Set-Out Data Vailoo-Donipawa		
							Date: OCT -2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 18 / R0

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
361	157589	525774.1220	3717950.4340	1856.2520	288	27	57.8530	-500
362	157614	525750.2310	3717957.7920	1855.5810	285	58	23.1630	-806.1270
363	157639	525726.1240	3717964.4100	1854.8100	284	59	31.1710	-7728.7160
364	157664	525701.9730	3717970.8730	1853.9400	284	58	52.3240	Straight
365	157689	525677.8230	3717977.3350	1853.0780	284	58	52.3240	Straight
366	157714	525653.6780	3717983.8180	1852.3570	285	14	17.7760	1529.7840
367	157739	525629.6460	3717990.7040	1851.7860	287	0	29.7750	600
368	157764	525605.8990	3717998.5130	1851.1430	289	23	44.1420	600
369	157789	525582.4980	3718007.3040	1850.2570	291	46	58.5090	600
370	157814	525559.4470	3718016.9790	1849.1660	293	28	53.3710	1675.9190
371	157839	525536.5480	3718027.0120	1848.1030	293	41	44.4680	Straight
372	157864	525513.6170	3718036.9700	1847.2860	292	39	1.5860	-438.0120
373	157889	525490.1610	3718045.5880	1846.7280	286	58	7.6530	-200
374	157914	525465.8730	3718051.4560	1846.2520	280	45	39.2780	-354.7630
375	157939	525441.2230	3718055.6190	1845.7290	279	10	3.1920	Straight
376	157964	525416.5580	3718059.6960	1845.1340	280	12	2.1010	440.5940
377	157989	525392.1780	3718065.1810	1844.4910	286	0	34.1360	171.2010
378	158014	525368.8810	3718074.1450	1843.8460	296	56	2.6710	106.2410
379	158039	525348.1510	3718088.0180	1843.2010	310	5	34.9290	130.5070
380	158064	525330.4060	3718105.5960	1842.7490	318	30	38.9110	244.4390

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT				Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
R0	OCT-2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div> <div></div>	<div> RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</div> <div></div>									
			<div></div>	<div></div>	Designed:		Scale NTS		Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa			
					Drawn:					Date:	Project No.	Drawing No.	
					Checked:					OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 19 / R0	
					Approved:								

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
381	158089	525314.5360	3718124.9080	1842.6640	321	48	46.3930	1924.6640
382	158114	525299.0980	3718144.5720	1842.9460	321	52	1.2800	Straight
383	158139	525283.4240	3718164.0460	1843.4000	319	37	45.3000	-299.3560
384	158164	525266.2300	3718182.1740	1843.7500	313	1	10.3220	-200
385	158189	525247.0070	3718198.1400	1843.7160	307	3	40.2230	-392.1410
386	158214	525226.8000	3718212.8580	1843.2850	305	45	25.5150	Straight
387	158239	525206.5120	3718227.4670	1842.7050	305	45	25.5150	Straight
388	158264	525186.2420	3718242.0990	1842.2840	306	4	17.2860	1431.8900
389	158289	525166.2340	3718257.0870	1842.0850	307	52	3.3440	552.6420
390	158314	525146.8830	3718272.9120	1842.0280	310	41	39.8680	540.6600
391	158339	525128.2340	3718289.5600	1842.0030	312	32	52.7140	1354.1340
392	158364	525109.8970	3718306.5530	1842.0860	312	53	57.8080	-77870.5970
393	158389	525091.5020	3718323.4820	1842.2770	312	5	6.7990	-889.7170
394	158414	525072.6410	3718339.8880	1842.4030	309	42	54.4300	-500
395	158439	525053.0820	3718355.4560	1842.2800	307	35	2.0680	-1071.5880
396	158464	525033.1630	3718370.5640	1841.9300	307	1	21.2760	Straight
397	158489	525013.2030	3718385.6170	1841.5420	307	1	21.2760	Straight
398	158514	524993.2430	3718400.6710	1841.1540	307	1	21.2760	Straight
399	158539	524973.2830	3718415.7240	1840.7490	307	1	21.2760	Straight
400	158564	524953.3230	3718430.7770	1840.0450	307	1	21.2760	Straight

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	<div>FINAL DETAILED PROJECT REPORT</div>		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT-2020									
					<div>Designed:</div> <div>Drawn:</div> <div>Checked:</div> <div>Approved:</div>	<div>Scale</div> <div>NTS</div>	Drawing Title	STANDARD DRAWING		
					Set-Out Data Vailoo-Donipawa					
						<div>Date</div> <div>OCT -2020</div>	<div>Project No.</div> <div>1564</div>	<div>Drawing No.</div> <div>NH/DC/ NH-244/PA/CK/JI/ S/O/ 20/10</div>		

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
401	158589	524933.3630	3718445.8300	1838.9390	307	1	21.2760	Straight
402	158614	524913.4030	3718460.8840	1837.5260	307	1	21.2760	Straight
403	158639	524893.4430	3718475.9370	1836.0940	307	1	21.2760	Straight
404	158664	524873.5490	3718491.0770	1834.6610	307	47	35.5260	1200
405	158689	524853.9550	3718506.6020	1833.2290	308	59	12.7090	1200
406	158714	524834.6870	3718522.5310	1831.8140	310	10	49.8920	1200
407	158739	524815.7560	3718538.8590	1830.7010	311	22	27.0760	1200
408	158764	524797.0070	3718555.3950	1829.9890	311	24	40.2670	Straight
409	158789	524778.2570	3718571.9320	1829.5180	311	24	40.2670	Straight
410	158814	524759.5010	3718588.4610	1829.0480	311	11	4.6510	-1200
411	158839	524740.5170	3718604.7260	1828.5780	309	59	27.4680	-1200
412	158864	524721.1970	3718620.5920	1828.1080	308	47	50.2840	-1200
413	158889	524701.6750	3718636.2100	1827.6360	308	50	39.7190	1230.9950
414	158914	524682.5050	3718652.2530	1827.0530	311	30	0.1830	345.3420
415	158939	524664.4740	3718669.5590	1826.2970	316	12	31.8730	300
416	158964	524647.9440	3718688.3060	1825.4230	320	59	0.6070	300
417	158989	524633.0280	3718708.3600	1824.6730	325	37	52.1270	366.9030
418	159014	524619.4450	3718729.3450	1824.1120	328	2	35.1080	1557.1850
419	159039	524606.2270	3718750.5650	1823.6740	327	36	22.4360	-578.0950
420	159064	524592.0650	3718771.1570	1823.0570	322	28	33.1150	-184.0430

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R0	OCT-2020							Drawing Title	
					Designed:	Scale NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Drawn:				
					Checked:				
					Approved:				
								Date: OCT -2020	Project No. 1564
									Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 21 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
421	159089	524575.3440	3718789.7040	1822.1480	313	13	14.2330	-150
422	159114	524555.8470	3718805.3140	1821.0260	304	46	30.0360	-233.7750
423	159139	524534.7880	3718818.7800	1819.9410	301	18	1.2720	-1742.4150
424	159164	524513.4130	3718831.7450	1819.0030	301	14	11.9760	Straight
425	159189	524492.1890	3718844.9550	1818.2160	303	28	48.4170	282.5060
426	159214	524472.0520	3718859.7520	1817.5790	309	10	18.3560	250
427	159239	524453.4920	3718876.4850	1817.0940	314	54	4.8370	250
428	159264	524436.6950	3718894.9880	1816.7580	320	37	51.3170	250
429	159289	524421.8290	3718915.0750	1816.5280	326	21	37.7980	250
430	159314	524409.0420	3718936.5450	1816.2890	332	5	24.2790	250
431	159339	524398.4400	3718959.1750	1815.9580	337	22	13.1360	413.9360
432	159364	524389.1580	3718982.3880	1815.5240	338	24	55.0500	Straight
433	159389	524379.9600	3719005.6350	1815.0550	338	22	7.7740	-1137.8660
434	159414	524369.3680	3719028.2440	1814.6190	328	35	1.7730	-78.2250
435	159439	524352.9720	3719046.9640	1814.2130	310	10	26.6850	-115.7350
436	159464	524332.9450	3719061.9160	1813.8150	305	19	55.7640	-414.2740
437	159489	524311.5030	3719074.6790	1813.4160	293	20	54.4600	-70
438	159514	524287.2840	3719080.3220	1813.0050	272	53	8.4580	-70
439	159539	524262.6210	3719077.1430	1812.5630	252	26	28.3470	-72.8110
440	159564	524239.9190	3719066.7710	1812.0920	241	17	40.8090	-546.6360

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R0	OCT-2020							Drawing Title	
					Designed:		Scale NTS		
					Drawn:				
					Checked:				
					Approved:				
						STANDARD DRAWING Set-Out Data Vailoo-Donipawa			
						Date:	Project No.	Drawing No.	
						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 22 / R0	

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
441	159589	524217.7780	3719055.1790	1811.6140	246	8	11.4520	106.5880
442	159614	524193.8980	3719048.0040	1811.1360	260	26	18.8510	100
443	159639	524168.9850	3719046.9610	1810.6590	274	45	45.0520	100
444	159664	524144.4250	3719051.4860	1810.2220	283	28	1.2670	10354.1830
445	159689	524120.1130	3719057.3090	1809.9990	283	28	3.1910	Straight
446	159714	524095.7820	3719063.0540	1810.0100	282	48	35.6070	-1200
447	159739	524071.3480	3719068.3430	1810.2360	281	36	58.4230	-1200
448	159764	524046.8100	3719073.1210	1810.4990	280	25	21.2400	-1200
449	159789	524022.2090	3719077.5730	1810.5980	280	14	37.2660	Straight
450	159814	523997.6380	3719082.1780	1810.4740	281	42	49.4120	369.3440
451	159839	523973.4420	3719088.4200	1810.2090	287	49	18.4030	200
452	159864	523950.0990	3719097.3440	1809.9110	293	14	10.6270	488.2690
453	159889	523927.2460	3719107.4790	1809.4290	294	4	26.9770	-8062.7960
454	159914	523904.2670	3719117.3190	1808.7460	291	29	6.2400	-286.4480
455	159939	523880.5330	3719125.1190	1807.9910	284	12	30.0850	-165
456	159964	523855.9260	3719129.3990	1807.2370	275	31	37.8420	-165
457	159989	523830.9530	3719130.2210	1806.4980	269	2	42.0100	-351.4530
458	160014	523805.9720	3719129.2650	1806.0600	267	19	22.5110	Straight
459	160039	523781.0010	3719128.0680	1806.0240	266	55	44.8220	-953.5910
460	160064	523756.0740	3719126.1940	1806.3910	263	59	40.6210	-328.0120

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R0	OCT-2020					Designed:		Scale		Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa
				Drawn:		NTS					
				Checked:							
				Approved:							
				Date: OCT -2020						Project No: 1564	Drawing No: NHIDCL/NH-244-PACK-III/ SOD / 23 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
461	160089	523731.3650	3719122.4580	1807.0670	258	35	20.8680	-250
462	160114	523707.1350	3719116.3350	1807.6070	253	20	40.3010	-352.5780
463	160139	523683.3900	3719108.5230	1807.7550	250	42	51.4450	-1195.8110
464	160164	523659.8240	3719100.1780	1807.5090	250	27	49.9160	Straight
465	160189	523636.2380	3719091.8880	1807.1000	251	20	12.9730	479.2590
466	160214	523612.2550	3719084.8670	1806.6910	256	53	0.7860	176.7410
467	160239	523587.5470	3719081.3020	1806.2820	267	32	45.1010	108.3490
468	160264	523562.6780	3719083.2180	1805.9130	280	48	17.3410	127.7440
469	160289	523538.6170	3719089.9170	1805.8440	289	27	35.8940	234.9230
470	160314	523515.3860	3719099.1410	1806.1190	292	59	57.9470	1459.2270
471	160339	523492.3880	3719108.9450	1806.5380	293	5	36.9850	Straight
472	160364	523469.3860	3719118.7370	1806.8360	292	48	45.0040	-1200
473	160389	523446.2420	3719128.1890	1806.9300	291	37	7.8210	-1200
474	160414	523422.9060	3719137.1570	1806.8200	290	25	30.6380	-1200
475	160439	523399.3890	3719145.6370	1806.5070	289	13	53.4540	-1200
476	160464	523375.7620	3719153.8080	1806.1120	289	3	55.9580	Straight
477	160489	523352.1330	3719161.9750	1805.7160	289	3	55.9580	Straight
478	160514	523328.5050	3719170.1410	1805.3210	289	3	55.9580	Straight
479	160539	523304.8760	3719178.3050	1804.9140	289	0	44.8800	-3484.8420
480	160564	523281.1740	3719186.2550	1804.3950	287	48	20.3620	-715.2730

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R0	OCT-2020				Designed:		Scale	NTS	Drawing Title
			Drawn:			Drawing No.			
			Checked:				Date: OCT -2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 24 / R0
			Approved:						

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
481	160589	523257.2130	3719193.3820	1803.7400	285	10	43.7570	-521.5690
482	160614	523232.9650	3719199.4590	1803.0530	283	13	41.8070	-1240.4190
483	160639	523208.5970	3719205.0450	1802.5880	282	48	33.6690	Straight
484	160664	523184.2360	3719210.6620	1802.3730	283	24	44.0810	1033.9930
485	160689	523160.0200	3719216.8670	1802.2560	285	35	35.9620	481.1770
486	160714	523136.1610	3719224.3190	1802.1390	289	21	57.4200	313.5440
487	160739	523112.9460	3719233.5770	1802.0130	294	7	38.0460	300
488	160764	523090.5820	3719244.7340	1801.7910	298	54	6.7790	300
489	160789	523069.2240	3719257.7140	1801.4530	303	40	35.5130	300
490	160814	523049.0150	3719272.4190	1801.0560	308	17	17.3270	353.3060
491	160839	523029.8800	3719288.5030	1800.6580	311	32	47.8930	581.6320
492	160864	523011.4530	3719305.3960	1800.2440	313	12	48.8820	1644.2260
493	160889	522993.2910	3719322.5760	1799.6110	313	27	7.1930	-338346.0690
494	160914	522975.0600	3719339.6830	1798.7010	312	38	2.0540	-877.7170
495	160939	522956.3510	3719356.2620	1797.6360	310	11	17.1200	-439.4290
496	160964	522936.7700	3719371.7980	1796.5840	306	39	12.2770	-425.9250
497	160989	522916.3540	3719386.2230	1795.6920	304	6	15.3140	-825.4470
498	161014	522895.5090	3719400.0240	1795.0080	303	10	58.1470	-13315.3440
499	161039	522874.5850	3719413.7060	1794.4390	303	10	45.3500	Straight
500	161064	522853.6540	3719427.3770	1793.8350	302	57	58.5600	-1270.4280

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R0	OCT-2020				Designed:	Scale		Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Drawn:	NTS			Date: OCT -2020
					Checked:				Project No. 1564
					Approved:				Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 25 /R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
501	161089	522832.4330	3719440.5890	1792.9830	300	20	48.1160	-348.3750
502	161114	522810.3710	3719452.3330	1791.8470	295	38	44.5270	-300
503	161139	522787.4100	3719462.2030	1790.5970	290	54	15.5410	-330.8770
504	161164	522763.8080	3719470.4390	1789.5000	288	4	2.3160	-1065.0330
505	161189	522740.0060	3719478.0850	1788.8310	287	45	51.2520	Straight
506	161214	522716.0850	3719485.3400	1788.5980	284	42	30.7530	-205.3990
507	161239	522691.4950	3719489.6300	1788.7870	273	46	44.8730	-100
508	161264	522666.5800	3719488.3410	1789.1030	261	18	28.3050	-161.0550
509	161289	522642.1170	3719483.2250	1789.3590	256	23	34.4980	-1530.2170
510	161314	522617.8240	3719477.3210	1789.3130	256	20	16.2990	Straight
511	161339	522593.5310	3719471.4160	1788.9420	256	21	8.6890	3842.4140
512	161364	522569.1420	3719465.9350	1788.3520	259	5	52.6920	300
513	161389	522544.4330	3719462.1700	1787.8000	263	5	44.3720	698.4610
514	161414	522519.5950	3719459.3290	1787.5280	263	32	5.9810	-11928.0290
515	161439	522494.8200	3719456.0100	1787.5690	260	5	57.0490	-212.1580
516	161464	522470.6330	3719449.8130	1787.6760	250	11	22.7170	-120
517	161489	522448.1620	3719438.9600	1787.4720	238	15	27.2910	-122.5240
518	161514	522428.0790	3719424.1090	1786.9250	229	52	57.2140	-283.1210
519	161539	522409.3710	3719407.5280	1786.2920	228	4	11.7640	1048.3370
520	161564	522390.2040	3719391.4910	1785.8300	233	24	54.5680	153.6230

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R0	OCT-2020							Drawing Title	
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Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
521	161589	522368.9850	3719378.3270	1785.5450	242	57	40.5640	150
522	161614	522345.8750	3719368.8660	1785.3780	252	29	56.4580	157.0510
523	161639	522321.6550	3719362.7080	1785.5390	257	38	26.5950	1231.8160
524	161664	522297.2380	3719357.3390	1786.0410	257	4	19.3510	-619.2720
525	161689	522273.0700	3719350.9690	1786.5230	252	46	6.8370	-250
526	161714	522249.5320	3719342.5600	1786.6750	248	33	29.0290	-650.0780
527	161739	522226.3410	3719333.2240	1786.5270	247	57	53.6660	Straight
528	161764	522203.1610	3719323.8620	1786.3300	248	18	41.6450	746.8710
529	161789	522179.6520	3719315.3770	1786.1320	252	52	55.2370	198.3100
530	161814	522155.2970	3719309.8530	1785.9350	261	55	16.6120	150
531	161839	522130.3670	3719308.4140	1785.6630	271	28	14.0800	150
532	161864	522105.5450	3719311.1300	1785.2470	281	1	11.5470	150
533	161889	522081.4940	3719317.8620	1784.7140	289	43	52.2510	218.1050
534	161914	522058.3400	3719327.2790	1784.1870	293	38	45.8110	1134.7540
535	161939	522035.4640	3719337.3610	1783.7740	293	47	46.4350	Straight
536	161964	522012.6670	3719347.6200	1783.4910	295	26	33.0700	342.7250
537	161989	521990.6920	3719359.5100	1783.2470	302	16	28.3210	151.0230
538	162014	521970.7620	3719374.5550	1782.8740	311	49	24.3690	150
539	162039	521953.5520	3719392.6530	1782.3430	320	31	53.3840	218.2970
540	162064	521938.4840	3719412.5960	1781.7300	324	26	26.1670	1139.9660

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							STANDARD DRAWING Set-Out Data Vailoo-Donipawa		
							Date:	Project No.	Drawing No.
							OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 27 /R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
541	162089	521923.8970	3719432.8990	1781.1360	323	22	37.3650	-399.3760
542	162114	521908.0710	3719452.2350	1780.6010	317	8	16.3910	-161.0930
543	162139	521889.6580	3719469.1060	1780.1220	308	13	54.7600	-204.0210
544	162164	521869.3370	3719483.6580	1779.6550	303	51	49.0510	-834.8890
545	162189	521848.5170	3719497.4990	1779.1870	303	35	10.3370	Straight
546	162214	521827.6910	3719511.3280	1778.7190	303	35	10.3370	Straight
547	162239	521806.8650	3719525.1580	1778.2140	303	35	10.3370	Straight
548	162264	521786.0380	3719538.9880	1777.6500	303	35	10.3370	Straight
549	162289	521765.2120	3719552.8180	1777.0420	303	35	10.3370	Straight
550	162314	521744.3840	3719566.6450	1776.4310	303	30	25.2950	-2126.6620
551	162339	521723.3470	3719580.1500	1775.8210	301	28	48.9680	-500
552	162364	521701.8020	3719592.8300	1775.2230	299	57	8.1750	-14728.3270
553	162389	521680.1460	3719605.3190	1774.7700	300	7	49.8670	1410.8720
554	162414	521658.7390	3719618.2300	1774.4990	302	23	53.7700	500
555	162439	521637.9740	3719632.1470	1774.3210	305	15	47.0100	500
556	162464	521617.9310	3719647.0840	1774.0380	308	7	40.2500	500
557	162489	521598.6590	3719663.0050	1773.6080	310	59	33.4910	500
558	162514	521580.1910	3719679.8520	1773.0830	313	31	48.5850	957.8320
559	162539	521562.1630	3719697.1720	1772.5570	313	55	13.7450	Straight
560	162564	521544.1550	3719714.5140	1772.0310	313	55	13.7450	Straight

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed:		Scale NTS		
					Drawn:				
					Checked:				
					Approved:				
							STANDARD DRAWING Set-Out Data Vailoo-Donipawa		
							Date:	Project No.	Drawing No.
							OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 28 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
561	162589	521526.1560	3719731.8640	1771.5200	314	5	58.6870	1875.6360
562	162614	521508.4030	3719749.4650	1771.0740	315	40	37.8500	598.9760
563	162639	521491.4000	3719767.7870	1770.6980	318	49	24.5230	400
564	162664	521475.5390	3719787.1060	1770.3410	322	24	16.0740	400
565	162689	521460.9150	3719807.3780	1769.9840	325	59	7.6240	400
566	162714	521447.5870	3719828.5240	1769.6280	329	33	59.1740	400
567	162739	521435.6050	3719850.4610	1769.2710	333	8	50.7250	400
568	162764	521425.0160	3719873.1040	1768.8850	336	42	33.2820	429.9930
569	162789	521415.6940	3719896.2980	1768.3050	339	13	35.7250	840.8610
570	162814	521407.0640	3719919.7610	1767.5020	340	6	58.3730	18906.0340
571	162839	521398.5620	3719943.2710	1766.4770	340	7	4.7210	Straight
572	162864	521390.0600	3719966.7810	1765.2600	340	7	4.7210	Straight
573	162889	521381.5580	3719990.2910	1763.9740	340	7	4.7210	Straight
574	162914	521373.0560	3720013.8010	1762.5860	340	7	4.7210	Straight
575	162939	521364.5540	3720037.3110	1761.1110	340	7	4.7210	Straight
576	162964	521356.0520	3720060.8210	1759.6240	340	7	4.7210	Straight
577	162989	521347.8590	3720084.4380	1758.4270	342	29	40.9000	285.2390
578	163014	521341.7670	3720108.6650	1757.8240	350	6	43.2610	150
579	163039	521339.5420	3720133.5370	1757.8150	359	39	40.7290	150
580	163064	521341.4730	3720158.4330	1758.2170	9	12	38.1960	150

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.	
R0	OCT-2020				Designed:		Scale	NTS	Drawing Title	STANDARD DRAWING
					Drawn:				Set-Out Data Vailoo-Donipawa <td>Drawing No.</td>	Drawing No.
			Checked:				Date	Project No.	Drawing No.	
			Approved:				OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 29 / R0	

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
581	163089	521347.5080	3720182.6640	1758.5820	18	45	35.6640	150
582	163114	521357.4790	3720205.5580	1758.6840	28	18	33.1320	150
583	163139	521371.1100	3720226.4810	1758.5020	37	51	30.5990	150
584	163164	521388.0130	3720244.8620	1758.2260	47	7	9.0740	183.6550
585	163189	521407.1950	3720260.8810	1757.9620	52	15	57.5150	574.2890
586	163214	521427.0980	3720276.0100	1757.9130	52	51	8.2730	Straight
587	163239	521447.0250	3720291.1070	1758.1480	52	51	8.2730	Straight
588	163264	521466.9520	3720306.2030	1758.5530	52	51	8.2730	Straight
589	163289	521486.8790	3720321.3000	1758.8140	52	51	8.2730	Straight
590	163314	521506.7100	3720336.5230	1758.8380	51	39	43.4300	-551.7920
591	163339	521525.8270	3720352.6250	1758.6820	47	39	2.7310	-263.9520
592	163364	521543.3840	3720370.4050	1758.5180	41	32	10.6990	-230
593	163389	521558.9130	3720389.9820	1758.4520	35	18	30.6120	-230
594	163414	521572.2260	3720411.1270	1758.5490	29	4	50.5240	-230
595	163439	521583.1670	3720433.5930	1758.7670	22	51	10.4370	-230
596	163464	521591.6060	3720457.1120	1758.9820	16	37	30.3490	-230
597	163489	521597.4440	3720481.4080	1758.9880	10	23	50.2610	-230
598	163514	521600.6120	3720506.1940	1758.7040	4	10	10.1740	-230
599	163539	521601.1050	3720531.1780	1758.2360	358	21	25.3740	-305.1340
600	163564	521599.5710	3720556.1280	1757.8770	355	4	41.3420	-768.6630

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
								Date: OCT -2020	Project No. 1564
									Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 30 / R0

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
601	163589	521597.2180	3720581.0170	1757.7600	354	27	53.2670	Straight
602	163614	521594.8110	3720605.9000	1757.8470	354	35	3.7090	1295.0570
603	163639	521593.0630	3720630.8350	1757.9590	358	14	53.7290	230.2240
604	163664	521593.8250	3720655.8070	1758.0500	5	19	25.7760	200
605	163689	521597.6920	3720680.4900	1757.9330	12	29	8.8760	200
606	163714	521604.2880	3720704.5960	1757.5620	17	16	16.4280	642.0660
607	163739	521611.8840	3720728.4140	1757.0760	17	45	27.6220	Straight
608	163764	521619.5090	3720752.2230	1756.8620	17	45	27.6220	Straight
609	163789	521627.1290	3720776.0330	1757.0250	17	39	45.9770	-2606.1590
610	163814	521634.4890	3720799.9250	1757.4780	16	19	2.5590	-668.9780
611	163839	521640.9690	3720824.0680	1758.1030	13	37	1.5270	-500
612	163864	521646.2450	3720848.5020	1758.8810	10	45	8.2870	-500
613	163889	521650.2940	3720873.1690	1759.4890	7	54	17.1810	-544.5540
614	163914	521653.2780	3720897.9900	1759.8190	6	4	12.5330	-1378.8270
615	163939	521655.8060	3720922.8610	1759.8690	5	43	51.9760	Straight
616	163964	521658.3030	3720947.7370	1759.7990	5	43	51.9760	Straight
617	163989	521660.7990	3720972.6120	1759.7290	5	43	51.9760	Straight
618	164014	521663.2960	3720997.4870	1759.6450	5	43	51.9760	Straight
619	164039	521665.7920	3721022.3620	1759.3840	5	43	51.9760	Straight
620	164064	521668.2410	3721047.2410	1758.8950	5	19	42.1210	-1460.8170

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed: Drawn: Checked: Approved:	Scale NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
									Date: OCT -2020 Project No. 1564 Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 31 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
621	164089	521670.2840	3721072.1570	1758.3020	3	58	53.3810	-1000
622	164114	521671.7080	3721097.1160	1757.8120	2	32	56.7610	-1000
623	164139	521672.5470	3721122.1010	1757.4310	1	28	9.5360	-2781.8820
624	164164	521673.1460	3721147.0940	1757.0860	1	21	29.7390	Straight
625	164189	521673.7390	3721172.0870	1756.7400	1	21	29.7390	Straight
626	164214	521674.3310	3721197.0800	1756.3980	1	21	29.7390	Straight
627	164239	521674.9240	3721222.0730	1756.1310	1	21	29.7390	Straight
628	164264	521675.5160	3721247.0660	1755.9680	1	21	29.7390	Straight
629	164289	521676.1740	3721272.0570	1755.9100	1	53	49.5600	1093.7250
630	164314	521677.4020	3721297.0260	1755.9520	4	0	9.0820	493.7250
631	164339	521679.8930	3721321.8970	1756.0240	7	41	58.1820	318.8240
632	164364	521684.2170	3721346.5140	1756.0950	12	1	57.3040	395.3500
633	164389	521690.0860	3721370.8130	1756.1670	14	51	35.6850	705.0740
634	164414	521696.8130	3721394.8900	1756.0520	16	5	44.4870	3255.4140
635	164439	521703.7200	3721418.9170	1755.9770	15	38	6.3170	-1200
636	164464	521710.2060	3721443.0610	1755.9810	14	26	29.1340	-1200
637	164489	521716.4220	3721467.2750	1756.0490	14	23	45.9460	Straight
638	164514	521722.6380	3721491.4900	1756.0910	14	23	45.9460	Straight
639	164539	521728.8530	3721515.7050	1756.0430	14	23	45.9460	Straight
640	164564	521735.0720	3721539.9200	1755.9080	14	28	29.0140	2863.1440

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)  JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.	
R0	OCT-2020				Designed:		Scale		Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Drawn:		NTS			
			Checked:							
			Approved:							
								Date: OCT -2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 32 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
641	164589	521741.5380	3721564.0680	1755.8070	15	46	14.8380	684.7540
642	164614	521748.8810	3721587.9630	1755.8950	18	39	30.2390	388.8800
643	164639	521757.7390	3721611.3340	1756.1810	23	3	32.1490	300
644	164664	521768.4270	3721633.9280	1756.5810	27	20	20.5310	406.9320
645	164689	521780.4830	3721655.8260	1756.9810	30	3	47.6920	742.7750
646	164714	521793.2690	3721677.3090	1757.2900	31	11	45.2750	4251.8520
647	164739	521806.2310	3721698.6860	1757.3460	31	13	53.6320	Straight
648	164764	521819.1930	3721720.0630	1757.1710	31	13	53.6320	Straight
649	164789	521832.0970	3721741.4760	1756.9600	30	40	5.2390	-1069.5790
650	164814	521844.4950	3721763.1830	1756.8410	28	32	4.2030	-500
651	164839	521855.8830	3721785.4360	1756.8630	25	40	10.9620	-500
652	164864	521866.1450	3721808.2290	1756.9810	22	48	17.7220	-500
653	164889	521875.2550	3721831.5080	1757.1580	19	56	24.4820	-500
654	164914	521883.1900	3721855.2120	1757.6200	17	4	55.5080	-526.9430
655	164939	521890.0760	3721879.2440	1758.3900	15	9	34.3780	-1271.2490
656	164964	521896.4850	3721903.4090	1759.1060	14	45	38.5050	Straight
657	164989	521902.8540	3721927.5840	1759.4350	14	45	38.5050	Straight
658	165014	521909.3310	3721951.7300	1759.3760	15	41	58.8520	617.5500
659	165039	521916.6620	3721975.6280	1758.9450	18	17	27.2420	824.2520
660	165064	521924.6720	3721999.3100	1758.5620	18	34	50.3620	-919.2140

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa			Date:	Project No.	Drawing No.	
						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 33 / R0	

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
661	165089	521931.9590	3722023.2190	1758.4650	14	27	52.2990	-214.6240
662	165114	521936.6860	3722047.7520	1758.6050	7	19	53.1960	-206.9240
663	165139	521938.7430	3722072.6600	1758.7690	2	58	1.0490	-792.8510
664	165164	521939.9150	3722097.6330	1758.9320	2	38	52.6050	Straight
665	165189	521941.5070	3722122.5800	1759.0950	5	2	47.7640	500
666	165214	521944.3280	3722147.4180	1759.1820	7	54	41.0040	500
667	165239	521948.3860	3722172.0830	1759.0630	10	46	34.2440	500
668	165264	521953.6720	3722196.5160	1758.7580	13	38	27.4850	500
669	165289	521959.5970	3722220.8030	1758.4220	13	0	50.6510	-800
670	165314	521964.8460	3722245.2450	1758.0860	11	13	24.8760	-800
671	165339	521969.3280	3722269.8390	1757.7510	9	25	59.1010	-800
672	165364	521973.4200	3722294.5010	1757.4150	9	25	16.0420	Straight
673	165389	521977.5120	3722319.1640	1757.0800	9	25	16.0420	Straight
674	165414	521981.5990	3722343.8280	1756.7440	9	19	0.2380	-2592.9860
675	165439	521985.4220	3722368.5330	1756.5280	8	2	0.6290	-711.2050
676	165464	521988.4730	3722393.3450	1756.5490	5	59	15.3090	-700
677	165489	521990.6370	3722418.2500	1756.7640	3	57	57.3480	-805.6240
678	165514	521992.0850	3722443.2080	1756.9970	2	55	7.5000	-4527.6430
679	165539	521993.3440	3722468.1760	1757.1480	2	53	4.2410	Straight
680	165564	521994.6030	3722493.1440	1757.0900	2	53	4.2410	Straight

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Checked:				Date: OCT -2020
					Approved:				Project No. 1564
									Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 34 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
681	165589	521995.8610	3722518.1130	1756.8440	2	53	4.2410	Straight
682	165614	521997.1190	3722543.0810	1756.5700	2	53	4.2410	Straight
683	165639	521998.3280	3722568.0520	1756.2590	2	22	6.5350	-1200
684	165664	521999.1010	3722593.0390	1755.7740	1	10	29.3510	-1200
685	165689	521999.3530	3722618.0370	1755.1030	359	58	52.1680	-1200
686	165714	521999.3080	3722643.0370	1754.4180	0	1	22.2500	1232.0870
687	165739	521999.9140	3722668.0260	1753.8730	3	25	52.3550	300
688	165764	522002.2920	3722692.9090	1753.4580	6	48	12.9920	1284.2600
689	165789	522005.2600	3722717.7320	1753.0390	6	18	46.4370	-588.2170
690	165814	522007.1800	3722742.6520	1752.4020	2	6	41.0800	-300
691	165839	522007.0600	3722767.6440	1751.5160	357	20	12.3460	-300
692	165864	522004.8600	3722792.5400	1750.5260	352	33	43.6120	-300
693	165889	522000.8680	3722817.2170	1749.5370	349	50	45.1390	-4199.3070
694	165914	521996.4560	3722841.8240	1748.5480	349	50	1.2760	Straight
695	165939	521992.0430	3722866.4320	1747.5580	349	50	1.2760	Straight
696	165964	521987.6300	3722891.0390	1746.5690	349	50	1.2760	Straight
697	165989	521983.2530	3722915.4510	1745.5620	349	50	1.2750	Straight
698	166014	521978.8400	3722940.0590	1744.4040	349	48	36.0980	-1200
699	166039	521974.1610	3722964.6160	1743.0690	348	36	58.9150	-1200
700	166064	521968.9720	3722989.0710	1741.5630	347	25	21.7310	-1200

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
							STANDARD DRAWING Set-Out Data Vailoo-Donipawa		
							Date:	Project No.	Drawing No.
							OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 35 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
701	166089	521963.2740	3723013.4130	1740.0080	346	13	44.5480	-1200
702	166114	521957.0710	3723037.6310	1738.5860	345	2	7.3640	-1200
703	166139	521950.3640	3723061.7140	1737.4030	343	50	30.1810	-1200
704	166164	521943.2180	3723085.6710	1736.4590	343	14	25.4120	Straight
705	166189	521936.0090	3723109.6090	1735.7550	343	14	25.4120	Straight
706	166214	521928.6370	3723133.4960	1735.2910	341	58	58.6210	Transition
707	166239	521920.3160	3723157.0680	1734.9780	339	7	25.8850	-500
708	166264	521910.8460	3723180.2030	1734.6680	336	34	29.5920	Transition
709	166289	521900.7750	3723203.0850	1734.3650	336	10	18.6700	Straight
710	166314	521890.9820	3723226.0850	1734.1430	338	33	1.2740	Transition
711	166339	521883.1440	3723249.8080	1734.0230	345	13	36.3700	200
712	166364	521878.2940	3723274.3170	1733.9510	352	23	19.4710	200
713	166389	521876.4190	3723299.2350	1733.7800	358	21	14.1310	Transition
714	166414	521876.1370	3723324.2320	1733.4770	359	39	54.4760	Straight
715	166439	521875.9910	3723349.2320	1733.1020	359	39	54.4760	Straight
716	166464	521875.8440	3723374.2320	1732.7630	359	39	54.4760	Straight
717	166489	521875.6580	3723399.2310	1732.4650	359	16	23.1280	Transition
718	166514	521874.9820	3723424.2210	1732.1840	357	21	36.7900	Transition
719	166539	521873.2100	3723449.1550	1731.9030	354	30	11.1230	-500
720	166564	521870.1940	3723473.9700	1731.6220	351	38	17.8830	-500

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed: Drawn: Checked: Approved:	Scale NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
									Date: OCT -2020 Project No. 1564 Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 36 /R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
721	166589	521865.9830	3723498.6110	1731.3500	349	10	50.9780	Transition
722	166614	521861.0350	3723523.1160	1731.1330	348	15	1.6700	Transition
723	166639	521855.9420	3723547.5910	1730.9750	348	14	41.1830	Straight
724	166664	521850.8480	3723572.0670	1730.8390	348	14	41.1830	Straight
725	166689	521845.7550	3723596.5430	1730.7030	348	14	41.1830	Straight
726	166714	521840.6620	3723621.0180	1730.5660	348	14	41.1830	Straight
727	166739	521835.5570	3723645.4920	1730.4300	348	4	0.7760	Transition
728	166764	521830.1100	3723669.8900	1730.2720	346	29	31.2960	Transition
729	166789	521823.6530	3723694.0390	1729.9740	343	20	51.7060	-400
730	166814	521815.7460	3723717.7510	1729.5190	339	46	0.1560	-400
731	166839	521806.3720	3723740.9230	1729.0020	336	11	8.6060	-400
732	166864	521795.5890	3723763.4740	1728.4850	332	51	41.3090	Transition
733	166889	521783.7750	3723785.5050	1727.9680	331	0	30.8380	Transition
734	166914	521771.5590	3723807.3170	1727.4510	330	40	36.9490	Straight
735	166939	521759.3160	3723829.1140	1726.9480	330	40	36.9490	Straight
736	166964	521747.0720	3723850.9110	1726.4950	330	40	36.9490	Straight
737	166989	521734.8290	3723872.7070	1726.0910	330	40	36.9490	Straight
738	167014	521722.5860	3723894.5040	1725.6970	330	40	36.9490	Straight
739	167039	521710.4350	3723916.3530	1725.2020	331	25	43.9790	Transition
740	167064	521698.8790	3723938.5200	1724.5590	333	44	53.5260	500

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa						
			Date: OCT - 2020		Project No. 1564		Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 37 / R0		

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
741	167089	521688.3860	3723961.2080	1723.7700	336	36	46.7660	500
742	167114	521679.0390	3723984.3920	1722.8590	339	25	50.2760	Transition
743	167139	521670.6550	3724007.9430	1721.9540	341	6	44.1060	Transition
744	167164	521662.6450	3724031.6250	1721.2050	341	21	31.6040	Straight
745	167189	521654.6540	3724055.3140	1720.6440	341	21	31.6040	Straight
746	167214	521646.6630	3724079.0020	1720.1730	341	21	31.6040	Straight
747	167239	521638.6720	3724102.6910	1719.7020	341	21	31.6040	Straight
748	167264	521630.6810	3724126.3790	1719.2310	341	22	0.0890	Transition
749	167289	521622.7640	3724150.0930	1718.7650	341	49	52.5020	Transition
750	167314	521615.1890	3724173.9170	1718.4240	343	0	14.7390	1000
751	167339	521608.1810	3724197.9140	1718.2570	344	26	11.3590	1000
752	167364	521601.7750	3724222.0790	1718.1990	345	52	7.9800	1000
753	167389	521595.9610	3724246.3920	1718.1410	347	8	35.1970	Transition
754	167414	521590.5500	3724270.8000	1718.0330	347	44	29.1290	Transition
755	167439	521585.2580	3724295.2330	1717.8510	347	46	54.1540	Straight
756	167464	521579.9670	3724319.6670	1717.6200	347	46	54.1540	Straight
757	167489	521574.6760	3724344.1010	1717.3870	347	46	54.1540	Straight
758	167514	521569.3850	3724368.5340	1717.1540	347	46	54.1540	Straight
759	167539	521564.0940	3724392.9680	1716.9210	347	46	54.1540	Straight
760	167564	521558.8030	3724417.4020	1716.6880	347	46	54.1540	Straight

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R0	OCT-2020							Drawing Title	
					Designed: Drawn: Checked: Approved:	Scale NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
									Date: OCT -2020 Project No. 1564 Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 38 /R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
761	167589	521553.5120	3724441.8350	1716.4550	347	46	54.1540	Straight
762	167614	521548.1730	3724466.2590	1716.2110	347	26	33.6850	Transition
763	167639	521542.5450	3724490.6170	1715.8900	346	25	31.6350	Transition
764	167664	521536.3430	3724514.8340	1715.4790	344	43	48.0030	Transition
765	167689	521529.2850	3724538.8150	1715.0320	342	21	22.7890	Transition
766	167714	521521.1100	3724562.4380	1714.5850	339	25	35.2860	-480
767	167739	521511.7190	3724585.6040	1714.1370	336	26	32.3270	-480
768	167764	521501.1350	3724608.2500	1713.7110	333	27	29.3690	-480
769	167789	521489.3870	3724630.3150	1713.3930	330	29	47.0480	Transition
770	167814	521476.5890	3724651.7880	1713.1930	328	1	32.3880	Transition
771	167839	521463	3724672.7710	1713.0300	326	13	59.3100	Transition
772	167864	521448.8830	3724693.4040	1712.8480	325	7	7.8130	Transition
773	167889	521434.4880	3724713.8430	1712.4990	324	40	57.8980	Transition
774	167914	521420.0330	3724734.2410	1711.9530	324	40	32.9370	Straight
775	167939	521405.5780	3724754.6380	1711.2190	324	40	32.9370	Straight
776	167964	521391.1230	3724775.0350	1710.4250	324	40	32.9370	Straight
777	167989	521376.6680	3724795.4330	1709.5870	324	40	32.9370	Straight
778	168014	521362.2130	3724815.8300	1708.6940	324	40	32.9370	Straight
779	168039	521347.7580	3724836.2270	1707.7720	324	40	32.9370	Straight
780	168064	521333.3670	3724856.6700	1706.8560	325	10	54.7570	2000

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R0	OCT-2020							Drawing Title	
					Designed:		Scale NTS		
					Drawn:				
					Checked:				
					Approved:				
								Date: OCT - 2020	Project No. 1564
									Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 39 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
781	168089	521319.2210	3724877.2830	1706.0180	325	53	53.0670	2000
782	168114	521305.3340	3724898.0710	1705.2820	326	36	51.3770	2000
783	168139	521291.6210	3724918.9740	1704.6010	326	44	44.6000	Straight
784	168164	521277.9120	3724939.8800	1703.9160	326	44	44.6000	Straight
785	168189	521264.2030	3724960.7860	1703.2110	326	44	44.6000	Straight
786	168214	521250.4200	3724981.6430	1702.4850	325	46	45.3030	Transition
787	168239	521235.6130	3725001.7780	1701.7810	321	19	13.6240	-300
788	168264	521219.2530	3725020.6750	1701.2490	317	26	28.2620	Transition
789	168289	521202.2660	3725039.0170	1700.9090	317	33	38.4900	Transition
790	168314	521186.0580	3725058.0410	1700.7610	322	27	56.2780	Transition
791	168339	521172.4250	3725078.9640	1700.8040	331	38	27.7210	150
792	168364	521162.4340	3725101.8500	1701.0400	341	10	48.0740	Transition
793	168389	521155.9280	3725125.9740	1701.4400	347	44	45.5810	Transition
794	168414	521151.0870	3725150.5000	1701.7810	349	11	21.7150	Straight
795	168439	521146.3460	3725175.0460	1701.9260	348	29	24.3400	Transition
796	168464	521140.4040	3725199.3200	1701.8970	343	6	49.0940	Transition
797	168489	521131.2660	3725222.5600	1701.8430	333	46	55.7910	-150
798	168514	521118.5900	3725244.0850	1701.8250	326	2	47.1600	Transition
799	168539	521104.0210	3725264.3980	1701.8740	323	32	3.9700	Straight
800	168564	521089.1620	3725284.5040	1701.9760	323	32	3.9700	Straight

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT				Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				NTS				Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Designed:		Scale			
			Drawn:							
			Checked:							
			Approved:							

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
801	168589	521074.2970	3725304.6040	1702.0820	323	25	47.5650	Transition
802	168614	521059.2890	3725324.5980	1702.1240	322	39	42.7770	Transition
803	168639	521043.8870	3725344.2890	1702.0630	321	9	14.7460	-800
804	168664	521027.9050	3725363.5120	1701.8990	319	21	48.9710	-800
805	168689	521011.3380	3725382.2330	1701.6310	317	41	58.6640	Transition
806	168714	520994.3340	3725400.5600	1701.2590	316	42	59.9000	Transition
807	168739	520977.1370	3725418.7050	1700.7840	316	28	2.2040	Straight
808	168764	520959.9180	3725436.8300	1700.2050	316	28	2.2040	Straight
809	168789	520942.7330	3725454.9870	1699.5240	316	51	50.6130	2000
810	168814	520925.7540	3725473.3370	1698.8340	317	34	48.9230	2000
811	168839	520908.9360	3725491.8340	1698.2510	317	44	18.0990	Straight
812	168864	520892.1230	3725510.3360	1697.7710	317	44	18.0990	Straight
813	168889	520875.2810	3725528.8110	1697.3140	317	26	15.3410	Transition
814	168914	520858.2260	3725547.0900	1696.8570	316	24	32.9700	Transition
815	168939	520840.7320	3725564.9480	1696.3920	314	39	14.8010	-700
816	168964	520822.6380	3725582.1980	1695.8090	312	36	33.3360	Transition
817	168989	520803.9820	3725598.8380	1695.0680	310	58	26.5650	Transition
818	169014	520784.9610	3725615.0610	1694.2330	310	4	10.7240	Transition
819	169039	520765.7870	3725631.1040	1693.4060	309	52	15.1850	Straight
820	169064	520746.6050	3725647.1360	1692.6790	310	0	3.4880	Transition

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.				
R0	OCT-2020				Designed:		Scale	NTS	Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa			
					Drawn:								
					Checked:						Date	Project No.	Drawing No.
					Approved:						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 41 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
821	169089	520727.6280	3725663.4110	1692.0790	311	31	10.7520	Transition
822	169114	520709.2610	3725680.3680	1691.5420	313	54	24.8480	600
823	169139	520691.6160	3725698.0750	1690.8710	316	17	39.2150	600
824	169164	520674.7230	3725716.5020	1690.0010	318	40	53.5820	600
825	169189	520658.6090	3725735.6140	1688.9960	320	58	23.1880	Transition
826	169214	520643.0800	3725755.2050	1688.0630	321	56	10.7480	Transition
827	169239	520627.6750	3725774.8950	1687.3590	322	7	14.8660	2000
828	169264	520612.4490	3725794.7230	1686.8900	322	50	13.1760	2000
829	169289	520597.4720	3725814.7400	1686.6560	323	33	11.4860	2000
830	169314	520582.7460	3725834.9430	1686.6560	324	16	9.7960	2000
831	169339	520568.1890	3725855.2680	1686.7730	324	24	6.6890	Straight
832	169364	520553.6370	3725875.5960	1686.8800	324	24	6.6890	Straight
833	169389	520539.0840	3725895.9230	1686.8840	324	22	17.3260	Transition
834	169414	520524.3720	3725916.1360	1686.7650	323	15	53.0660	Transition
835	169439	520509.0040	3725935.8520	1686.5880	320	41	27.0790	-500
836	169464	520492.7250	3725954.8230	1686.2880	318	15	59.9140	Transition
837	169489	520475.8970	3725973.3110	1685.7070	317	22	54.6870	Transition
838	169514	520458.9690	3725991.7070	1684.8420	317	22	45.7270	Straight
839	169539	520442.0640	3726010.1250	1683.7690	317	42	10.0020	2000
840	169564	520425.3550	3726028.7210	1682.6890	318	25	8.3120	2000

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
841	169589	520408.8260	3726047.4770	1681.7780	318	38	40.6340	Straight
842	169614	520392.3080	3726066.2430	1681.1180	318	42	12.5260	Transition
843	169639	520376.4160	3726085.5310	1680.7090	323	39	0.7920	Transition
844	169664	520363.7320	3726107.0130	1680.5520	336	33	16.9480	Transition
845	169689	520357.8510	3726131.1690	1680.6460	357	21	29.1020	60
846	169714	520361.7270	3726155.7040	1680.8700	19	41	40.0020	Transition
847	169739	520373.3660	3726177.7480	1681.0940	34	38	35.1090	Transition
848	169764	520389.0220	3726197.2190	1681.3080	41	38	2.3270	Transition
849	169789	520405.7930	3726215.7590	1681.3420	42	12	14.4250	Straight
850	169814	520422.3630	3726234.4760	1681.1380	39	59	26.7700	Transition
851	169839	520437.3710	3726254.4530	1680.7930	33	40	26.2140	Transition
852	169864	520450.5410	3726275.7000	1680.4460	30	45	51.1950	Transition
853	169889	520463.2840	3726297.2080	1680.0980	30	6	6.7290	Transition
854	169914	520474.9800	3726319.2930	1679.7510	24	49	21.4430	Transition
855	169939	520483.6310	3726342.7190	1679.3800	15	31	11.6320	-150
856	169964	520488.2870	3726367.2520	1678.8790	5	58	14.1640	-150
857	169989	520488.8080	3726392.2180	1678.2350	356	25	16.6970	-150
858	170014	520485.3210	3726416.9510	1677.4490	348	14	38.0720	Transition
859	170039	520479.3840	3726441.2330	1676.5890	345	9	44.8900	Transition
860	170064	520472.9740	3726465.3970	1675.7420	345	5	29.9350	Transition

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed: Drawn: Checked: Approved:	Scale NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
									Date: OCT -2020 Project No. 1564 Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 43 /R0

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
861	170089	520466.2140	3726489.4640	1674.9490	343	2	4.4530	Transition
862	170114	520458.0230	3726513.0770	1674.2120	338	34	16.9710	Transition
863	170139	520448.2470	3726536.0840	1673.4890	335	53	10.8490	Transition
864	170164	520437.9510	3726558.8660	1672.7420	335	38	52.4280	Straight
865	170189	520427.6460	3726581.6430	1671.9540	335	44	53.7500	Transition
866	170214	520417.7310	3726604.5910	1671.1360	338	0	51.5050	Transition
867	170239	520409.2850	3726628.1140	1670.3290	342	36	56.9500	300
868	170264	520402.6330	3726652.2080	1669.5860	346	1	20.9170	Transition
869	170289	520396.8000	3726676.5180	1668.9100	346	38	18.1880	Straight
870	170314	520391.0220	3726700.8420	1668.2520	346	38	18.1880	Straight
871	170339	520385.2520	3726725.1670	1667.5950	346	49	42.3530	Transition
872	170364	520380.1750	3726749.6410	1666.9380	350	22	22.2830	300
873	170389	520377.0250	3726774.4350	1666.2810	355	8	51.0170	300
874	170414	520375.9500	3726799.4040	1665.6240	359	55	19.7510	300
875	170439	520376.7220	3726824.3900	1664.9670	2	51	2.4450	Transition
876	170464	520377.8350	3726849.3640	1664.3220	1	21	29.6470	Transition
877	170489	520377.0320	3726874.3360	1663.7470	354	37	38.3940	-200
878	170514	520373.3100	3726899.0470	1663.2500	349	9	42.5270	Transition
879	170539	520368.7520	3726923.6260	1662.7800	351	6	29.9120	350
880	170564	520365.7730	3726948.4420	1662.3100	355	12	3.1130	350

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.	
R0	OCT-2020				Designed:		Scale	NTS	Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Drawn:					
					Checked:				Date:	
			Approved:		Project No.					

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
881	170589	520364.5720	3726973.4080	1661.8820	359	17	36.3130	350
882	170614	520365.1570	3726998.3960	1661.6380	3	23	9.5130	350
883	170639	520367.4430	3727023.2880	1661.5800	6	14	50.1930	Straight
884	170664	520366.6630	3727047.9560	1661.5720	338	27	35.2500	-30
885	170689	520349.6760	3727065.5660	1661.4720	302	34	43.1830	Straight
886	170714	520329.3310	3727080.0500	1661.2420	311	1	7.2520	100
887	170739	520312.5960	3727098.5510	1660.9280	323	21	40.1840	Transition
888	170764	520297.9820	3727118.8340	1660.6580	324	20	0.1530	Straight
889	170789	520283.4050	3727139.1450	1660.6060	324	20	0.1530	Straight
890	170814	520268.8240	3727159.4530	1660.7820	324	10	2.4020	Transition
891	170839	520253.4490	3727179.1520	1660.8520	318	33	46.4900	-150
892	170864	520235.4340	3727196.4460	1660.5840	309	24	49.2140	Transition
893	170889	520215.5300	3727211.5680	1660.0440	306	18	43.2000	Straight
894	170914	520195.5900	3727226.6430	1659.5140	309	6	3.4990	Transition
895	170939	520177.5590	3727243.9080	1659.1840	319	44	12.3140	100
896	170964	520163.6980	3727264.6590	1659.0750	331	36	35.8070	Transition
897	170989	520152.8680	3727287.1850	1659.0480	335	42	34.6470	Transition
898	171014	520142.5730	3727309.9670	1659.0120	335	24	45.0470	Transition
899	171039	520131.3120	3727332.2760	1658.9390	330	3	48.2890	-200
900	171064	520117.5160	3727353.1050	1658.8300	322	54	5.1880	-200

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Drawn:	Checked:	Drawing Title	
						Scale	NTS		
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa						
			Date: OCT - 2020		Project No. 1564		Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 45 / R0		

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
901	171089	520101.5800	3727372.3610	1658.7110	319	3	56.2830	Transition
902	171114	520085.2740	3727391.3110	1658.5920	320	12	22.7240	500
903	171139	520069.7600	3727410.9120	1658.4730	323	4	15.9650	500
904	171164	520055.2450	3727431.2640	1658.3530	325	56	9.2050	500
905	171189	520041.7510	3727452.3060	1658.2340	328	7	23.6390	-500
906	171214	520028.0230	3727473.1970	1658.1150	325	15	30.3990	-500
907	171239	520013.3880	3727493.4640	1657.9960	323	47	31.3890	Straight
908	171264	519998.6210	3727513.6360	1657.8770	323	47	31.3890	Straight
909	171289	519983.8530	3727533.8080	1657.7580	323	47	31.3890	Straight
910	171314	519969.0850	3727553.9800	1657.5980	323	47	31.3890	Straight
911	171339	519954.3170	3727574.1520	1657.2570	323	47	31.3890	Straight
912	171364	519939.5490	3727594.3240	1656.7280	323	47	31.3890	Straight
913	171389	519924.8690	3727614.5600	1656.1500	324	33	13.5080	Transition
914	171414	519910.7440	3727635.1850	1655.6350	326	52	52.7320	500
915	171439	519897.6140	3727656.4570	1655.1980	329	44	45.9730	500
916	171464	519885.5630	3727678.3570	1654.8380	332	36	39.2130	500
917	171489	519874.6220	3727700.8330	1654.5490	335	28	32.4530	500
918	171514	519864.7490	3727723.7990	1654.2760	337	44	47.9250	Transition
919	171539	519855.4750	3727747.0150	1653.9960	338	26	38.6050	Straight
920	171564	519846.1880	3727770.2260	1653.6730	337	40	33.8890	Transition

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.				
R0	OCT-2020				Designed:		Scale	NTS	Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa			
					Drawn:					Drawing No.			
					Checked:					Date	Project No.	Drawing No.	
					Approved:					OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 46 / R0	

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
921	171589	519836.2720	3727793.1740	1653.3000	335	20	35.7730	-500
922	171614	519825.2870	3727815.6280	1652.9540	332	37	2.1670	Transition
923	171639	519813.4660	3727837.6560	1652.7500	331	12	46.4940	Transition
924	171664	519801.3890	3727859.5450	1652.6760	331	5	47.6180	Straight
925	171689	519789.3050	3727881.4310	1652.5820	331	5	47.6180	Straight
926	171714	519777.1180	3727903.2590	1652.1950	330	17	22.2880	-1200
927	171739	519764.5020	3727924.8420	1651.4750	329	5	45.1040	-1200
928	171764	519751.4490	3727946.1630	1650.7180	328	8	45.6220	Straight
929	171789	519738.2550	3727967.3980	1650.2960	328	8	45.6220	Straight
930	171814	519725.0880	3727988.6500	1650.1990	328	33	50.7710	1200
931	171839	519712.2730	3728010.1150	1650.1470	329	45	27.9550	1200
932	171864	519699.9070	3728031.8420	1649.9590	330	57	5.1380	1200
933	171889	519687.9970	3728053.8220	1649.6210	332	8	42.3220	1200
934	171914	519676.4910	3728076.0160	1649.1360	332	44	54.9260	Straight
935	171939	519665.0430	3728098.2420	1648.5500	332	44	54.9260	Straight
936	171964	519653.5960	3728120.4670	1648.0980	332	44	54.9260	Straight
937	171989	519642.1470	3728142.6910	1647.8090	332	42	12.7140	Transition
938	172014	519630.5060	3728164.8150	1647.5840	331	31	44.5450	Transition
939	172039	519618.1210	3728186.5290	1647.3600	328	54	56.2760	-500
940	172064	519604.6840	3728207.6080	1647.1350	326	3	3.0360	-500

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Drawn:	NTS			Date: OCT -2020
					Checked:				Project No. 1564
					Approved:				Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 47 /R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
941	172089	519590.2440	3728228.0130	1646.9110	323	35	11.2290	Transition
942	172114	519575.1930	3728247.9740	1646.6860	322	38	46.9630	Transition
943	172139	519560.0220	3728267.8450	1646.4620	322	38	23.4130	Straight
944	172164	519544.8480	3728287.7130	1646.2380	322	28	24.3050	-1200
945	172189	519529.4140	3728307.3800	1646.0220	321	16	47.1210	-1200
946	172214	519513.5740	3728326.7210	1645.8270	320	5	9.9380	-1200
947	172239	519497.5170	3728345.8830	1645.6510	320	2	17.7940	Straight
948	172264	519481.4610	3728365.0450	1645.4780	320	2	17.7940	Straight
949	172289	519465.4040	3728384.2070	1645.3050	320	2	17.7940	Straight
950	172314	519449.3470	3728403.3690	1645.1310	320	2	17.7940	Straight
951	172339	519433.2900	3728422.5300	1644.9580	320	2	17.7940	Straight
952	172364	519417.3230	3728441.7670	1644.7840	320	50	55.8420	Transition
953	172389	519401.9130	3728461.4510	1644.5940	323	19	1.8310	Transition
954	172414	519387.6430	3728481.9720	1644.3550	327	9	21.3500	360
955	172439	519374.8240	3728503.4290	1644.0680	331	8	5.2950	360
956	172464	519363.5250	3728525.7250	1643.7730	335	6	49.2390	360
957	172489	519353.8000	3728548.7500	1643.4780	339	5	33.1840	360
958	172514	519345.6960	3728572.3950	1643.1830	343	2	49.1140	Transition
959	172539	519339.0650	3728596.4970	1642.8880	345	54	43.9130	Transition
960	172564	519333.2940	3728620.8210	1642.6390	347	7	10.4020	Transition

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa			Date:	Project No.	Drawing No.	
						OCT - 2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 48 / R0	

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
961	172589	519327.7380	3728645.1960	1642.5100	347	9	45.8860	Straight
962	172614	519322.2120	3728669.5770	1642.4860	347	33	24.5090	1200
963	172639	519317.0790	3728694.0440	1642.4560	348	45	1.6920	1200
964	172664	519312.4580	3728718.6130	1642.3320	349	56	38.8760	1200
965	172689	519308.3220	3728743.2680	1642.1100	350	44	39.1630	Straight
966	172714	519304.2140	3728767.9280	1641.7890	349	36	54.8470	Transition
967	172739	519298.2430	3728792.1820	1641.3700	341	23	50.8820	Transition
968	172764	519287.5060	3728814.6880	1640.8900	327	21	28.3070	-100
969	172789	519271.5550	3728833.8560	1640.4100	313	24	40.4370	Transition
970	172814	519252.0880	3728849.5090	1639.9620	305	31	0.1250	Transition
971	172839	519231.5370	3728863.7450	1639.5660	304	33	12.0240	Straight
972	172864	519211.0580	3728878.0810	1639.2100	306	27	35.1400	Transition
973	172889	519192.0330	3728894.2620	1638.8560	314	58	58.9720	150
974	172914	519175.9010	3728913.3230	1638.5020	324	31	56.4400	150
975	172939	519163.1550	3728934.7960	1638.1480	334	4	25.8290	Transition
976	172964	519153.5290	3728957.8590	1637.7950	339	17	30.9860	Transition
977	172989	519144.7260	3728981.2580	1637.4170	339	23	18.3490	Straight
978	173014	519135.7370	3729004.5850	1636.9920	337	24	49.0960	Transition
979	173039	519124.5750	3729026.9270	1636.5300	328	50	28.4550	-150
980	173064	519110.1030	3729047.2900	1636.1410	321	27	17.4380	Transition

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:   RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa						
			Date: OCT -2020		Project No. 1564		Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 49 / R0		

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
981	173089	519094.2800	3729066.6450	1635.8970	320	36	10.6760	Straight
982	173114	519078.4130	3729085.9640	1635.7690	320	36	10.6760	Straight
983	173139	519062.5460	3729105.2830	1635.6500	320	36	10.6760	Straight
984	173164	519046.6880	3729124.6100	1635.5070	320	54	20.3040	Transition
985	173189	519031.7650	3729144.6520	1635.1260	327	3	23.2630	150
986	173214	519019.9620	3729166.6590	1634.4540	336	14	31.7060	Transition
987	173239	519010.7960	3729189.9140	1633.7310	339	25	20.1280	Transition
988	173264	519001.3420	3729213.0500	1633.2150	334	47	47.2140	Transition
989	173289	518988.5650	3729234.4810	1632.9070	322	31	39.8300	-100
990	173314	518971.0460	3729252.2250	1632.8060	308	12	13.6280	-100
991	173339	518949.8280	3729265.3620	1632.9120	296	31	49.7530	Transition
992	173364	518926.9840	3729275.5050	1633.0910	292	40	46.1040	Straight
993	173389	518904.0170	3729285.3750	1633.2150	295	40	5.4670	Transition
994	173414	518883.1850	3729299.0320	1633.2690	311	58	38.0830	80
995	173439	518867.4920	3729318.3630	1633.3070	329	52	55.8350	80
996	173464	518858.4770	3729341.5750	1633.5350	347	7	54.9350	Transition
997	173489	518854.4550	3729366.2420	1633.9850	351	53	44.9500	Straight
998	173514	518850.2320	3729390.8710	1634.5330	345	55	51.9480	-100
999	173539	518841.2030	3729414.1130	1634.9910	331	36	25.7470	-100
1000	173564	518826.7780	3729434.4640	1635.1800	318	53	13.3530	Transition

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa			Date:	Project No.	Drawing No.	
						OCT - 2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 50 / R0	

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
1001	173589	518809.9780	3729452.9760	1635.1160	317	36	59.0420	Straight
1002	173614	518793.1260	3729471.4430	1635.0050	317	36	59.0420	Straight
1003	173639	518776.2700	3729489.9050	1634.8930	317	26	41.2650	Transition
1004	173664	518758.6900	3729507.6660	1634.7810	311	48	47.8650	Transition
1005	173689	518738.4510	3729522.2470	1634.6680	298	53	7.2010	-100
1006	173714	518715.2870	3729531.4770	1634.5120	284	35	49.4430	Transition
1007	173739	518690.6330	3729535.4430	1634.2960	275	0	19.9900	Transition
1008	173764	518665.6810	3729536.9650	1634.0410	273	1	34.4650	Straight
1009	173789	518640.7130	3729538.2380	1633.7250	272	22	32.5570	Transition
1010	173814	518615.7220	3729538.3160	1633.1380	267	5	45.2330	Transition
1011	173839	518590.9560	3729535.1040	1632.2720	258	16	23.4600	Transition
1012	173864	518566.7580	3729528.8510	1631.5550	253	38	1.1690	Transition
1013	173889	518542.8050	3729521.6930	1631.2160	253	40	31.0400	Transition
1014	173914	518518.5960	3729515.4800	1631.1580	258	25	22.8810	Transition
1015	173939	518493.8190	3729512.3600	1631.1150	267	32	13.4590	150
1016	173964	518468.8630	3729513.3120	1631.0720	276	21	51.0850	Transition
1017	173989	518444.1680	3729517.1670	1631.0300	280	29	33.9840	Transition
1018	174014	518419.6010	3729521.7990	1630.9870	280	41	53.1580	Straight
1019	174039	518395.0940	3729526.7310	1630.9440	282	55	31.8440	Transition
1020	174064	518371.1080	3729533.7170	1630.9010	290	24	13.0250	150

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
					Date:	Project No.	Drawing No.		
					OCT - 2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 51 / R0		

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
1021	174089	518348.5080	3729544.3380	1630.8570	299	51	9.7780	Transition
1022	174114	518327.6050	3729558.0310	1630.7740	305	43	6.0390	Transition
1023	174139	518307.5080	3729572.9000	1630.6350	306	41	28.7760	Straight
1024	174164	518287.4540	3729587.8270	1630.4590	306	27	58.4930	Transition
1025	174189	518267.0750	3729602.3060	1630.2820	303	52	5.1670	-400
1026	174214	518245.8960	3729615.5800	1630.1050	300	17	13.6160	-400
1027	174239	518223.9410	3729627.5300	1629.9280	297	5	0.3230	Transition
1028	174264	518201.5730	3729638.6960	1629.7520	296	21	57.0130	Transition
1029	174289	518179.3710	3729650.1830	1629.5750	299	12	7.6400	Transition
1030	174314	518158.2990	3729663.6070	1629.4400	305	54	13.8220	Transition
1031	174339	518138.6030	3729678.9980	1629.3860	309	14	58.1170	Transition
1032	174364	518119.2590	3729694.8350	1629.4120	309	18	36.4850	Straight
1033	174389	518099.8520	3729710.5950	1629.5200	308	25	7.8900	Transition
1034	174414	518079.8530	3729725.5900	1629.7050	305	6	36.2790	-400
1035	174439	518058.9660	3729739.3200	1629.9160	301	31	44.7290	-400
1036	174464	518037.2620	3729751.7190	1630.1210	297	56	53.1780	-400
1037	174489	518014.8260	3729762.7390	1630.2210	294	22	1.6280	-400
1038	174514	517991.8060	3729772.4850	1630.1790	292	0	39.4180	Transition
1039	174539	517968.6090	3729781.8070	1629.9970	291	52	55.2060	Straight
1040	174564	517945.4100	3729791.1250	1629.6740	291	52	55.2060	Straight

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
			STANDARD DRAWING Set-Out Data Vailoo-Donipawa			Date:	Project No.	Drawing No.	
						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ SOD / 52 / R0	

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
1041	174589	517922.2260	3729800.4770	1629.2260	292	22	45.1890	1000
1042	174614	517899.2300	3729810.2830	1628.7590	293	48	41.8100	1000
1043	174639	517876.4870	3729820.6610	1628.2980	295	14	38.4300	1000
1044	174664	517854.0100	3729831.6050	1627.9360	296	40	35.0500	1000
1045	174689	517831.8130	3729843.1070	1627.7070	298	6	31.6700	1000
1046	174714	517809.9120	3729855.1600	1627.6100	299	32	28.2900	1000
1047	174739	517788.3180	3729867.7560	1627.5250	300	58	24.9100	1000
1048	174764	517767.0460	3729880.8890	1627.2040	302	24	21.5310	1000
1049	174789	517746.1090	3729894.5490	1626.6270	303	50	18.1510	1000
1050	174814	517725.5200	3729908.7290	1626.0070	305	16	14.7710	1000
1051	174839	517705.2910	3729923.4180	1625.5350	306	42	11.3910	1000
1052	174864	517685.4370	3729938.6090	1625.2170	308	8	8.0110	1000
1053	174889	517665.8270	3729954.1160	1625.0530	308	30	47.8210	Transition
1054	174914	517646.5490	3729970.0300	1624.9970	311	3	52.7590	Transition
1055	174939	517628.3810	3729987.1920	1624.9450	315	44	51.6550	Transition
1056	174964	517611.5200	3730005.6460	1624.8940	318	55	11.6820	Transition
1057	174989	517595.2120	3730024.5950	1624.8430	319	12	59.3220	Transition
1058	175014	517578.5520	3730043.2320	1624.7910	316	41	53.8310	Transition
1059	175039	517560.6950	3730060.7190	1624.6990	312	1	17.5230	-300
1060	175064	517541.4480	3730076.6610	1624.3180	307	14	48.7890	-300

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R0	OCT-2020							Drawing Title	
					Designed:		Scale NTS		
					Drawn:				
					Checked:				
					Approved:				
							STANDARD DRAWING Set-Out Data Vailoo-Donipawa		
							Date: OCT - 2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 53 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
1061	175089	517520.9400	3730090.9460	1623.6080	302	28	20.0550	-300
1062	175114	517499.3810	3730103.5960	1622.7720	298	48	5.2570	Transition
1063	175139	517477.3460	3730115.4040	1622.1580	297	59	4.8590	Straight
1064	175164	517455.1660	3730126.9360	1621.8590	295	52	10.4850	Transition
1065	175189	517431.9570	3730136.1450	1621.7640	286	5	19.4280	Transition
1066	175214	517407.3410	3730140.2150	1621.6700	273	41	58.0060	Transition
1067	175239	517382.3510	3730140.4870	1621.5570	268	52	28.5130	Transition
1068	175264	517357.3550	3730140.0270	1621.4200	269	29	12.1590	Transition
1069	175289	517332.3710	3730140.6850	1621.2730	274	7	38.5980	250
1070	175314	517307.5670	3730143.7270	1621.1250	279	51	25.0780	250
1071	175339	517283.1910	3730149.2300	1620.9770	285	35	11.5590	250
1072	175364	517259.3940	3730156.8760	1620.8150	289	15	18.6280	Transition
1073	175389	517235.8150	3730165.1860	1620.4850	289	25	48.8770	Transition
1074	175414	517212.1700	3730173.3010	1619.9470	287	58	32.3730	-500
1075	175439	517188.2100	3730180.4290	1619.3680	285	18	10.9510	Transition
1076	175464	517164.0450	3730186.8360	1619.0270	284	43	40.0480	Straight
1077	175489	517139.8750	3730193.2250	1618.9150	285	15	23.6400	Transition
1078	175514	517116.0100	3730200.6460	1618.8530	290	7	57.8360	200
1079	175539	517093.1360	3730210.6930	1618.7370	297	17	40.9360	200
1080	175564	517071.6910	3730223.5130	1618.2710	304	22	43.1220	Transition

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R0	OCT-2020				Drawing Title	Scale		Drawing No.	
					NTS		STANDARD DRAWING Set-Out Data Vailoo-Donipawa		
							Date: OCT -2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-III/ SOD / 54 / R0

SI No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
1081	175589	517051.6400	3730238.4370	1617.4150	308	5	21.3020	Transition
1082	175614	517031.9550	3730253.8470	1616.3260	307	32	21.3030	Transition
1083	175639	517011.7550	3730268.5710	1615.6310	304	22	10.1210	-400
1084	175664	516990.6920	3730282.0300	1615.4070	300	47	18.5710	-400
1085	175689	516968.8300	3730294.1480	1615.3830	297	12	51.7180	Transition
1086	175714	516946.3660	3730305.1160	1615.3820	295	19	40.1100	Transition
1087	175739	516923.7970	3730315.8690	1615.4200	296	38	37.5060	Transition
1088	175764	516902.7570	3730329.2670	1615.4870	309	26	31.1260	100
1089	175789	516885.3130	3730347.1240	1615.5550	319	38	5.9330	Transition
1090	175814	516868.9710	3730366.0410	1615.6230	317	28	1.7110	Transition
1091	175839	516850.8110	3730383.1840	1615.6720	308	41	17.1630	-150
1092	175864	516830.3740	3730397.5650	1615.6800	302	54	0.5700	Transition
1093	175889	516809.3390	3730411.0740	1615.6540	302	41	37.7920	Straight
1094	175914	516788.5710	3730424.9840	1615.6240	306	14	43.0370	Transition
1095	175939	516769.6620	3730441.2950	1615.5730	315	32	7.3630	150
1096	175964	516753.5230	3730460.3640	1615.3410	322	51	35.8550	Transition
1097	175989	516738.6700	3730480.4730	1614.8970	323	40	25.5150	Straight
1098	176014	516723.5770	3730500.3990	1614.3580	320	47	41.7390	Transition
1099	176039	516706.3710	3730518.4990	1613.9000	311	43	52.8980	-150
1100	176064	516686.4170	3730533.5120	1613.6100	302	11	49.0020	Transition

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed:	Scale NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
					Drawn:				
					Checked:				
					Approved:				
								Date: OCT - 2020	Project No.: 1564
									Drawing No.: NHIDCL/NH-244-PACK-III/ SOD / 55 / R0

Sl No	Chainage	PCL Coordinate		Level	Bearing			Radius
		Easting	Northing	Z (m)	D	M	S	
1101	176089	516664.5570	3730545.6250	1613.4590	297	6	47.4580	Transition
1102	176114	516642.2900	3730556.9900	1613.2970	297	2	11.3250	Straight
1103	176139	516620.0220	3730568.3540	1613.0910	297	2	11.3250	Straight
1104	176164	516597.7540	3730579.7180	1612.8610	297	2	11.3250	Straight
1105	176189	516575.4860	3730591.0820	1612.6700	297	2	11.3250	Straight
1106	176214	516553.2180	3730602.4460	1612.5250	297	2	11.3250	Straight
1107	176239	516530.9500	3730613.8100	1612.3970	297	2	11.3250	Straight
1108	176264	516508.6820	3730625.1740	1612.2680	297	2	11.3250	Straight
1109	176289	516486.4140	3730636.5380	1612.1400	297	2	11.3250	Straight
1110	176314	516464.1460	3730647.9020	1612.0110	297	2	11.3250	Straight
1111	176339	516441.8780	3730659.2660	1611.8930	297	2	11.3250	Straight
1112	176364	516419.6100	3730670.6300	1611.9310	297	2	11.3250	Straight
1113	176389	516397.2790	3730681.8670	1612.1720	295	41	25.5750	Transition
1114	176414	516374.2790	3730691.6350	1612.6170	289	41	32.7130	-200
1115	176439	516350.3580	3730698.8730	1613.2560	284	49	21.1360	Transition
1116	176464	516326.1410	3730705.0800	1613.8880	284	17	48.4010	Straight
1117	176489	516301.9800	3730711.4970	1614.2490	286	16	14.2400	Transition
1118	176514	516278.3950	3730719.7460	1614.3210	292	44	12.6040	200
1119	176539	516255.8320	3730730.4970	1614.2990	297	21	48.2300	Transition
1120	176564	516233.7060	3730742.1360	1614.2780	298	1	59.5450	Transition
1121	176+532	516212.1450	3730754.7650	1614.2560	304	0	8.2310	150

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattoo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattoo - Khanabal Section of NH 244.
R0	OCT-2020							Drawing Title	
					Designed: Drawn: Checked: Approved:	Scale NTS			STANDARD DRAWING Set-Out Data Vailoo-Donipawa
									Date: OCT -2020 Project No: 1564 Drawing No: NHIDCL/NH-244-PACK-III/ SOD / 56 / R0

HORIZONTAL ALIGNMENT REPORT

HORIZONTAL CURVE DETAILS													
HIP No.	HIP Chainage (Km)	Easting-X	Northing-Y	Radius (m)	Transition Length (m)	Transition Start Chainage (Km)	Circular Start Chainage (Km)	Circular End Chainage (Km)	Transition End Chainage (Km)	Design Speed (Kmph)	Deviation Angle	Lc-length of circular curve (m)	e : Super elevation (%)
1	148589	533228.605	3713956.395	0	0		PROJECT START						
2	148674	533241.338	3714043.438	150	45	148602	148647	148702	148747	50	37.90	54.228	-7.00
3	148804	533176.275	3714158.065	150	45	148758	148803	148805	148850	50	17.93	1.942	-7.00
4	148937	533077.115	3714248.896	250	50	148855	148905	148969	149019	65	25.95	63.221	-7.00
5	149164	532857.147	3714314.226	250	50	149085	149135	149194	149244	65	25.06	59.330	-7.00
6	149449	532641.962	3714505.262	400	30	149338	149368	149531	149561	65	27.56	162.398	-4.70
7	149661	532433.922	3714557.282	250	50	149593	149643	149680	149730	65	19.95	37.065	-7.00
8	149877	532254.765	3714678.091	800	30	149819	149849	149905	149935	80	6.20	56.507	-3.60
9	149990	532154.776	3714730.803	1200	0		149976	150004		80	1.33	27.771	-2.50
10	150092	532065.545	3714780.515	300	40	150050	150090	150094	150134	65	8.25	3.197	-6.30
11	150255	531911.882	3714839.110	200	60	150177	150237	150274	150334	65	27.75	36.869	-7.00
12	150403	531763.438	3714821.205	200	60	150340	150400	150407	150467	65	19.19	6.990	-7.00
13	150547	531621.833	3714852.114	300	40	150473	150513	150581	150621	65	20.48	67.229	-6.30
14	150732	531437.906	3714825.722	500	45	150666	150711	150753	150798	80	10.00	42.284	-5.70
15	150872	531304.273	3714781.869	150	30	150835	150865	150880	150910	40	17.52	15.858	-4.70
16	150958	531218.228	3714780.890	100	20	150925	150945	150970	150990	40	25.65	24.766	-7.00
17	151047	531137.905	3714741.191	200	35	151008	151043	151051	151086	50	12.25	7.753	-5.60
18	151367	530824.048	3714662.631	390	115	151199	151314	151420	151535	100	32.36	105.285	-7.00
19	151674	530529.662	3714760.047	2000	0		151647	151701		100	1.54	53.859	-2.50
20	151902	530311.000	3714825.927	2000	0		151854	151950		100	2.75	95.987	-2.50
21	152163	530053.560	3714890.196	500	95	151977	152072	152255	152350	100	31.83	182.748	-7.00
22	152429	529866.158	3715083.207	2000	0		152364	152493		100	3.69	128.842	-2.50
23	152611	529731.009	3715205.553	700	20	152575	152595	152627	152647	65	4.22	31.543	-2.70
24	152705	529656.611	3715263.544	1200	0		152675	152736		80	2.91	61.030	-2.50
25	152817	529572.151	3715336.573	360	60	152753	152813	152820	152880	80	10.63	6.788	-7.00
26	152980	529469.525	3715465.493	170	40	152917	152957	153004	153044	50	29.34	47.068	-6.50
27	153080	529376.184	3715503.458	1200	0		153052	153108		80	2.70	56.606	-2.50

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R0	OCT-2020							Drawing Title	HORIZONTAL CURVE DETAILS		
					Designed: <div></div>	Scale			Date: OCT -2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-IV/ HCD /01/R0
					Drawn: <div></div>	NTS					
					Checked: <div></div>						
					Approved: <div></div>						

HORIZONTAL CURVE DETAILS													
HIP No.	HIP Chainage (Km)	Easting-X	Northing-Y	Radius (m)	Transition Length (m)	Transition Start Chainage (Km)	Circular Start Chainage (Km)	Circular End Chainage (Km)	Transition End Chainage (Km)	Design Speed (Kmph)	Deviation Angle	Lc-length of circular curve (m)	e : Super elevation (%)
28	153271	529202.605	3715583.797	150	45	153215	153260	153281	153326	50	24.94	20.295	-7.00
29	153417	529055.973	3715583.530	800	30	153364	153394	153439	153469	80	5.37	44.988	-3.60
30	153593	528879.190	3715599.824	500	45	153473	153518	153668	153713	80	22.39	150.372	-5.70
31	153769	528721.569	3715682.417	1200	0		153724	153815		80	4.35	91.104	-2.50
32	153909	528592.624	3715737.961	300	75	153823	153898	153921	153996	80	18.76	23.236	-7.00
33	154085	528460.528	3715857.177	200	35	154016	154051	154120	154155	50	29.66	68.538	-5.60
34	154207	528421.888	3715974.202	200	25	154177	154202	154212	154237	40	9.95	9.739	-3.60
35	154259	528397.199	3716020.201	500	0		154240	154279		50	4.57	39.850	-2.50
36	154344	528363.042	3716098.169	170	40	154281	154321	154366	154406	50	28.53	44.662	-6.50
37	154523	528220.699	3716208.614	500	0		154498	154547		50	5.65	49.292	-2.50
38	154705	528087.433	3716334.886	650	35	154567	154602	154808	154843	80	21.18	205.236	-4.40
39	154891	527913.689	3716406.074	1200	0		154859	154924		80	3.12	65.317	-2.50
40	155045	527768.579	3716456.498	500	25	154989	155014	155075	155100	65	9.89	61.336	-3.80
41	155163	527650.160	3716475.823	100	45	155111	155156	155171	155216	40	34.30	14.856	-7.00
42	155303	527548.433	3716572.572	500	45	155235	155280	155325	155370	80	10.33	45.149	-5.70
43	155493	527435.433	3716727.497	200	35	155432	155467	155520	155555	50	25.35	53.487	-5.60
44	155658	527289.922	3716806.648	300	40	155584	155624	155691	155731	65	20.45	67.082	-6.30
45	155767	527217.768	3716889.637	800	0		155735	155799		65	4.61	64.413	-2.50
46	155908	527117.313	3716987.947	800	0		155879	155936		65	4.04	56.425	-2.50
47	156029	527024.559	3717066.722	200	35	155969	156004	156053	156088	50	24.35	49.987	-5.60
48	156249	526810.761	3717128.003	150	45	156192	156237	156262	156307	50	26.79	25.144	-7.00
49	156411	526691.649	3717238.251	800	30	156348	156378	156444	156474	80	6.87	65.940	-3.60
50	156601	526567.956	3717383.888	400	30	156525	156555	156648	156678	65	17.69	93.484	-4.70
51	156724	526463.430	3717449.128	500	25	156683	156708	156740	156765	65	6.53	32.026	-3.80
52	156882	526339.847	3717547.448	700	30	156789	156819	156945	156975	70	12.75	125.798	-3.10
53	157054	526183.398	3717622.919	150	45	156997	157042	157066	157111	50	26.44	24.215	-7.00
54	157258	526058.024	3717784.496	600	35	157163	157198	157317	157352	80	14.67	118.640	-4.70

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R0	OCT-2020				<div>Designed:</div> <div>Drawn:</div> <div>Checked:</div> <div>Approved:</div>	<div>Scale</div> <div>NTS</div>	<div>Drawing Title</div>	HORIZONTAL CURVE DETAILS			
								<div>Date:</div> <div>OCT -2020</div>	<div>Project No.</div> <div>1564</div>	<div>Drawing No.</div> <div>NHIDCL/NH-244-PACK-IV/ HCD /02/R0</div>	

HORIZONTAL CURVE DETAILS													
HIP No.	HIP Chainage (Km)	Easting-X	Northing-Y	Radius (m)	Transition Length (m)	Transition Start Chainage (Km)	Circular Start Chainage (Km)	Circular End Chainage (Km)	Transition End Chainage (Km)	Design Speed (Kmph)	Deviation Angle	Lc-length of circular curve (m)	e : Super elevation (%)
54	157258	526058.024	3717784.496	600	35	157163	157198	157317	157352	80	14.67	118.640	-4.70
55	157433	525918.566	3717891.580	300	40	157374	157414	157451	157491	65	14.78	37.373	-6.30
56	157585	525777.818	3717950.577	500	45	157529	157574	157596	157641	80	7.76	22.726	-5.70
57	157763	525605.859	3717996.593	600	35	157700	157735	157791	157826	80	8.71	56.258	-4.70
58	157890	525488.896	3718047.926	200	35	157848	157883	157898	157933	50	14.53	15.713	-5.60
59	158020	525358.441	3718068.979	100	70	157948	158018	158022	158092	50	42.70	4.525	-7.00
60	158161	525269.797	3718181.897	200	35	158115	158150	158171	158206	50	16.11	21.234	-5.60
61	158301	525155.387	3718264.281	500	45	158244	158289	158314	158359	80	7.97	24.541	-5.70
62	158417	525071.839	3718344.194	500	45	158367	158412	158422	158467	80	6.25	9.564	-5.70
63	158601	524926.051	3718455.953	1200	0		158572	158629		80	2.72	56.933	-2.50
64	158694	524849.659	3718508.958	500	45	158642	158687	158700	158745	80	6.66	13.087	-5.70
65	158838	524741.121	3718604.685	1200	0		158809	158867		80	2.79	58.511	-2.50
66	158950	524653.211	3718674.906	300	40	158879	158919	158981	159021	65	19.57	62.454	-6.30
67	159085	524581.545	3718790.423	150	45	159027	159072	159098	159143	50	26.95	25.550	-7.00
68	159260	524428.343	3718883.340	250	25	159167	159192	159329	159354	50	37.18	137.222	-4.40
69	159422	524367.510	3719037.107	70	30	159387	159417	159427	159457	40	32.73	9.990	-7.00
70	159513	524288.691	3719093.708	70	30	159459	159489	159538	159568	40	64.59	48.911	-7.00
71	159617	524191.718	3719040.161	100	20	159570	159590	159644	159664	40	42.37	53.957	-7.00
72	159734	524076.355	3719067.788	1200	0		159700	159767		80	3.22	67.521	-2.50
73	159836	523975.135	3719086.080	200	35	159795	159830	159843	159878	50	13.83	13.289	-5.60
74	159949	523871.621	3719132.335	165	45	159888	159933	159965	160010	50	26.75	32.047	-6.70
75	160087	523732.060	3719125.809	250	50	160026	160076	160099	160149	65	16.86	23.562	-7.00
76	160246	523579.658	3719071.733	100	70	160174	160244	160249	160319	50	42.63	4.403	-7.00
77	160400	523435.990	3719132.993	1200	0		160358	160442		80	4.03	84.364	-2.50
78	160582	523263.879	3719192.476	500	45	160532	160577	160587	160632	80	6.26	9.596	-5.70
79	160760	523088.536	3719232.343	300	75	160642	160717	160802	160877	80	30.64	85.445	-7.00

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R0	OCT-2020				Designed: <div></div>				Scale	NTS	Drawing Title	HORIZONTAL CURVE DETAILS			
					Drawn: <div></div>				NTS			Date: <div></div>			
			Checked: <div></div>				Project No: <div></div>								
			Approved: <div></div>							Drawing No: <div></div>					
									OCT -2020						
									1564						
									NHIDCL/NH-244-PACK-IV/ HCD /03/R0						

HORIZONTAL CURVE DETAILS													
HIP No.	HIP Chainage (Km)	Easting-X	Northing-Y	Radius (m)	Transition Length (m)	Transition Start Chainage (Km)	Circular Start Chainage (Km)	Circular End Chainage (Km)	Transition End Chainage (Km)	Design Speed (Kmph)	Deviation Angle	Lc-length of circular curve (m)	e : Super elevation (%)
79	160760	523088.536	3719232.343	300	75	160642	160717	160802	160877	80	30.64	85.445	-7.00
80	160952	522947.255	3719366.189	400	55	160889	160944	160960	161015	80	10.27	16.717	-7.00
81	161115	522810.822	3719455.398	300	40	161054	161094	161135	161175	65	15.42	40.713	-6.30
82	161242	522688.653	3719494.538	100	45	161192	161237	161247	161292	40	31.43	9.849	-7.00
83	161368	522564.941	3719464.466	300	25	161337	161362	161374	161399	50	7.20	12.690	-3.70
84	161473	522459.226	3719452.489	120	45	161413	161458	161488	161533	40	35.58	29.526	-5.90
85	161588	522371.765	3719373.608	150	30	161534	161564	161612	161642	40	29.77	47.946	-4.70
86	161688	522273.061	3719352.133	250	35	161650	161685	161692	161727	50	9.76	7.589	-4.40
87	161837	522131.705	3719294.921	150	45	161755	161800	161875	161920	50	45.83	74.986	-7.00
88	162007	521972.101	3719365.302	150	45	161944	161989	162025	162070	50	30.79	35.616	-7.00
89	162122	521904.588	3719460.265	150	45	162072	162117	162127	162172	50	21.00	9.986	-7.00
90	162336	521725.648	3719579.090	500	25	162308	162333	162340	162365	65	3.64	6.726	-3.80
91	162453	521623.904	3719637.715	500	25	162380	162405	162502	162527	65	13.97	96.910	-3.80
92	162696	521447.697	3719807.404	400	55	162577	162632	162760	162815	80	26.20	127.893	-7.00
93	163083	521310.246	3720187.482	150	45	162965	163010	163155	163200	50	72.73	145.418	-7.00
94	163435	521613.119	3720416.940	230	55	163291	163346	163525	163580	65	58.39	179.382	-7.00
95	163666	521589.659	3720659.017	200	35	163608	163643	163690	163725	50	23.29	46.307	-5.60
96	163855	521647.431	3720839.413	500	45	163780	163825	163885	163930	80	12.03	59.952	-5.70
97	164096	521671.549	3721079.717	1000	30	164043	164073	164119	164149	80	4.37	46.321	-2.80
98	164344	521677.436	3721328.012	300	75	164268	164343	164346	164421	80	14.7983	2.483	-7.00
99	164446	521705.859	3721426.122	1200	0		164428	164465		80	1.7604	36.870	-2.50
100	164637	521753.500	3721611.725	300	75	164556	164631	164644	164719	80	16.8355	13.150	-7.00
101	164862	521870.449	3721804.590	500	45	164768	164813	164911	164956	80	16.4709	98.735	-5.70
102	165024	521911.764	3721961.400	500	25	164993	165018	165029	165054	65	4.0573	10.407	-3.80
103	165102	521937.045	3722035.586	200	35	165056	165091	165113	165148	50	16.1700	21.444	-5.60
104	165217	521942.401	3722151.387	500	0		165168	165267		50	11.3631	99.162	-2.50
105	165307	521964.107	3722238.375	800	0		165275	165339		65	4.5899	64.087	-2.50

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT				Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.				
R0	OCT-2020				Designed:		Scale		NTS	Drawing Title	HORIZONTAL CURVE DETAILS			
					Drawn:						Date:			
					Checked:						Project No.			
			Approved:				Drawing No.							
	OCT -2020									NHIDCL/NH-244-PACK-III/ HCD /04/R0				

HORIZONTAL CURVE DETAILS													
HIP No.	HIP Chainage (Km)	Easting-X	Northing-Y	Radius (m)	Transition Length (m)	Transition Start Chainage (Km)	Circular Start Chainage (Km)	Circular End Chainage (Km)	Transition End Chainage (Km)	Design Speed (Kmph)	Deviation Angle	Lc-length of circular curve (m)	e : Super elevation (%)
105	165307	521964.107	3722238.375	800	0		165275	165339		65	4.5899	64.087	-2.50
106	165462	521989.466	3722391.208	700	35	165404	165439	165484	165519	80	6.5366	44.860	-4.10
107	165659	521999.416	3722588.672	1200	0		165628	165691		80	3.0032	62.899	-2.50
108	165739	521999.252	3722667.942	300	25	165708	165733	165745	165770	50	7.0526	11.927	-3.70
109	165833	522010.722	3722762.264	300	25	165776	165801	165866	165891	50	17.1002	64.536	-3.70
110	166082	521966.727	3723007.607	1200	0		166013	166151		80	6.5933	138.090	-2.50
111	166233	521923.045	3723152.660	500	25	166190	166215	166252	166277	65	7.0685	36.685	-3.80
112	166348	521876.524	3723257.997	200	35	166289	166324	166371	166406	50	23.4933	47.007	-5.60
113	166543	521875.377	3723454.195	500	45	166471	166516	166571	166616	80	11.4204	54.661	-5.70
114	166816	521819.746	3723721.530	400	55	166727	166782	166849	166904	80	17.5678	67.647	-7.00
115	167083	521688.326	3723955.497	500	45	167014	167059	167107	167152	80	10.6818	48.217	-5.70
116	167341	521605.941	3724199.717	1000	50	167260	167310	167372	167422	100	6.4229	62.101	-4.40
117	167740	521521.065	3724591.676	480	110	167589	167699	167782	167892	100	23.1059	83.571	-7.00
118	168082	521322.626	3724871.691	2000	0		168046	168118		100	2.0699	72.253	-2.50
119	168235	521238.453	3725000.055	300	25	168198	168223	168248	168273	50	9.6632	25.596	-3.70
120	168342	521164.660	3725079.417	150	45	168278	168323	168362	168407	50	32.1068	39.055	-7.00
121	168482	521138.158	3725218.206	150	45	168426	168471	168493	168538	50	25.6549	22.164	-7.00
122	168655	521034.973	3725357.828	800	60	168575	168635	168674	168734	100	7.0672	38.676	-5.60
123	168797	520936.957	3725460.997	2000	0		168775	168819		100	1.2711	44.369	-2.50
124	168949	520834.642	3725573.591	700	70	168866	168936	168962	169032	100	7.8675	26.119	-6.30
125	169134	520691.976	3725692.755	600	35	169054	169089	169180	169215	80	12.0690	91.386	-4.70
126	169275	520605.066	3725803.755	2000	0		169232	169318		100	2.4620	85.938	-2.50
127	169437	520510.967	3725935.201	500	45	169384	169429	169445	169490	80	7.0225	16.283	-5.70
128	169549	520434.731	3726018.047	2000	0		169527	169571		100	1.2653	44.166	-2.50
129	169692	520332.164	3726134.569	60	75	169610	169685	169698	169773	40	83.5594	12.503	-7.00
130	169828	520432.207	3726244.886	200	35	169790	169825	169830	169865	50	11.4519	4.975	-5.60

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R0	OCT-2020				Designed:		Scale		Drawing Title	HORIZONTAL CURVE DETAILS			
							NTS			Date:	Project No.	Drawing No.	
										OCT -2020	1564	NHIDCL/NH-244-PACK-IV/ HCD /05/R0	

HORIZONTAL CURVE DETAILS													
HIP No.	HIP Chainage (Km)	Easting-X	Northing-Y	Radius (m)	Transition Length (m)	Transition Start Chainage (Km)	Circular Start Chainage (Km)	Circular End Chainage (Km)	Transition End Chainage (Km)	Design Speed (Kmph)	Deviation Angle	Lc-length of circular curve (m)	e : Super elevation (%)
130	169828	520432.207	3726244.886	200	35	169790	169825	169830	169865	50	11.4519	4.975	-5.60
131	169958	520500.859	3726360.269	150	45	169876	169921	169995	170040	50	45.6070	74.399	-7.00
132	170104	520462.668	3726504.257	300	40	170059	170099	170108	170148	65	9.4972	9.727	-6.30
133	170231	520410.161	3726620.265	300	40	170182	170222	170240	170280	65	10.9905	17.546	-6.30
134	170386	520374.087	3726772.138	300	25	170331	170356	170416	170441	50	16.2470	60.069	-3.70
135	170484	520379.030	3726870.203	200	25	170447	170472	170496	170521	40	14.0715	24.119	-3.60
136	170578	520360.785	3726962.468	350	0		170524	170631		40	17.4334	106.495	-2.50
137	170666	520370.607	3727052.191	30	0		170649	170682		30	63.6686	33.337	-7.00
138	170718	520324.806	3727081.458	100	20	170689	170709	170727	170747	40	21.7547	17.969	-7.00
139	170847	520249.171	3727186.845	150	30	170808	170838	170856	170886	40	18.0214	17.180	-4.70
140	170941	520172.834	3727242.945	100	45	170893	170938	170944	170989	40	29.3985	6.310	-7.00
141	171048	520128.364	3727341.482	200	25	171006	171031	171064	171089	40	16.6496	33.118	-3.60
142	171144	520064.874	3727414.677	500	0		171103	171185		50	9.3784	81.842	-2.50
143	171206	520032.582	3727467.248	500	0		171186	171226		50	4.6472	40.555	-2.50
144	171450	519887.953	3727664.800	500	45	171364	171409	171492	171537	80	14.6520	82.863	-5.70
145	171593	519835.248	3727798.218	500	45	171539	171584	171603	171648	80	7.3475	19.119	-5.70
146	171727	519770.454	3727915.575	1200	0		171697	171758		80	2.9506	61.796	-2.50
147	171853	519704.232	3728022.157	1200	0		171805	171901		80	4.6026	96.396	-2.50
148	172049	519614.314	3728196.732	500	45	171982	172027	172071	172116	80	10.1088	43.216	-5.70
149	172187	519530.432	3728306.604	1200	0		172160	172214		80	2.6016	54.487	-2.50
150	172454	519358.006	3728512.372	360	60	172339	172399	172509	172569	80	27.1245	110.428	-7.00
151	172643	519315.682	3728698.104	1200	0		172605	172680		80	3.5815	75.010	-2.50
152	172763	519295.913	3728819.412	100	45	172700	172745	172781	172826	40	46.1909	35.618	-7.00
153	172907	519174.028	3728903.348	150	30	172846	172876	172937	172967	40	34.8351	61.198	-4.70
154	173035	519128.097	3729025.471	150	30	172996	173026	173045	173075	40	18.7855	19.180	-4.70
155	173196	519025.712	3729150.131	150	30	173157	173187	173206	173236	40	18.8456	19.338	-4.70

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R0	OCT-2020				<div>Designed:</div> <div>Drawn:</div> <div>Checked:</div> <div>Approved:</div>	<div>Scale</div> <div>NTS</div>	<div>Drawing Title</div>	HORIZONTAL CURVE DETAILS			
								<div>Date:</div> <div>OCT -2020</div>	<div>Project No:</div> <div>1564</div>	<div>Drawing No:</div> <div>NHIDCL/NH-244-PACK-III/ HCD /06/R0</div>	

HORIZONTAL CURVE DETAILS													
HIP No.	HIP Chainage (Km)	Easting-X	Northing-Y	Radius (m)	Transition Length (m)	Transition Start Chainage (Km)	Circular Start Chainage (Km)	Circular End Chainage (Km)	Transition End Chainage (Km)	Design Speed (Kmph)	Deviation Angle	Lc-length of circular curve (m)	e : Super elevation (%)
158	173533	518848.043	3729411.265	100	20	173493	173513	173553	173573	40	34.2794	39.829	-7.00
159	173695	518736.759	3729533.207	100	45	173633	173678	173711	173756	40	44.5902	32.825	-7.00
160	173824	518604.434	3729540.203	150	45	173776	173821	173828	173873	50	19.7647	6.744	-7.00
161	173937	518495.539	3729507.453	150	45	173879	173924	173950	173995	50	27.4365	26.829	-7.00
162	174072	518361.307	3729532.812	150	45	174016	174061	174084	174129	50	25.9932	23.050	-7.00
163	174205	518254.212	3729612.613	400	30	174154	174184	174226	174256	65	10.3331	42.138	-4.70
164	174302	518166.747	3729655.951	200	35	174262	174297	174307	174342	50	12.9519	10.211	-5.60
165	174445	518055.812	3729746.784	400	30	174369	174399	174491	174521	65	17.4281	91.671	-4.70
166	174723	517796.187	3729851.058	1000	0		174580	174867		65	16.4433	286.989	-2.50
167	174929	517634.276	3729979.043	300	40	174880	174920	174938	174978	65	11.0676	17.950	-6.30
168	175056	517550.862	3730076.340	300	40	174980	175020	175092	175132	65	21.4082	72.093	-6.30
169	175193	517428.371	3730141.428	100	45	175145	175190	175196	175241	40	29.1551	5.885	-7.00
170	175310	517310.022	3730139.010	250	30	175250	175280	175340	175370	50	20.6007	59.888	-4.40
171	175421	517204.848	3730176.110	500	25	175388	175413	175429	175454	65	4.7025	16.037	-3.80
172	175536	517093.669	3730205.335	200	35	175477	175512	175559	175594	50	23.4913	47.000	-5.60
173	175657	516997.886	3730280.761	400	30	175597	175627	175687	175717	65	12.9174	60.180	-4.70
174	175760	516903.845	3730325.217	100	20	175729	175749	175771	175791	40	24.4637	22.697	-7.00
175	175832	516857.184	3730380.365	150	30	175794	175824	175839	175869	40	17.0716	14.693	-4.70
176	175932	516772.145	3730434.947	150	30	175890	175920	175945	175975	40	20.9799	24.925	-4.70
177	176042	516706.504	3730524.220	150	30	175992	176022	176062	176092	40	26.6373	39.736	-4.70
178	176410	516378.000	3730691.864	200	35	176370	176405	176415	176450	50	12.7397	9.470	-5.60
179	176508	516283.301	3730715.997	200	35	176466	176501	176514	176549	50	13.4849	12.071	-5.60
180	176589	516211.734	3730755.043	0	0	PROJECT END							

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R0	OCT-2020				Designed:		Scale	NTS	Drawing Title	HORIZONTAL CURVE DETAILS		
					Drawn:							
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					Approved:							
								Date	Project No.	Drawing No.		
								OCT -2020	1564	NHIDCL/NH-244-PACK-IV/ HCD /07/R0		

VERTICAL ALIGNMENT

Vertical Alignment Details							
Sl. No.	VIP Chainage	VIP Level (m)	Gradient (%)	% Change in grade	Type of Curve	Curve Length (m)	K Value
1	148.589	1545.9	3.43	PROJECT START			
2	148.682	2022.1	-2.8	-6.19	Hog	95	15.3
3	148.822	2018.3	3.3	6.07	Sag	65	10.7
4	148.934	2022.0	-1.2	-4.54	Hog	70	15.4
5	149.124	2019.7	-3.7	-2.49	Hog	100	40.1
6	149.283	2013.7	-0.3	3.48	Sag	100	28.8
7	149.406	2013.4	-3.5	-3.22	Hog	60	18.6
8	149.483	2010.7	-2.5	0.98	Sag	60	61.0
9	149.671	2006.1	-1.2	1.33	Sag	60	45.0
10	149.754	2005.1	-4.8	-3.66	Hog	65	17.8
11	149.983	1994.1	-1.1	3.69	Sag	100	27.1
12	150.069	1993.1	-1.7	-0.55	Hog	60	109.5
13	150.175	1991.4	-3.4	-1.68	Hog	60	35.6
14	150.295	1987.3	1.0	4.33	Sag	80	18.5
15	150.415	1988.5	-0.9	-1.90	Hog	150	79.1
16	150.612	1986.7	-1.5	-0.61	Hog	60	99.0
17	150.713	1985.1	0.5	2.04	Sag	85	41.6
18	151.292	1988.1	-2.5	-3.02	Hog	185	61.3
19	151.487	1983.2	-0.2	2.28	Sag	60	26.3
20	151.605	1983.0	-1.3	-1.07	Hog	60	56.3
21	151.693	1981.9	-0.7	0.56	Sag	60	108.2
22	151.851	1980.7	-2.7	-1.98	Hog	60	30.3
23	151.918	1978.9	-1.0	1.69	Sag	60	35.6
24	152.018	1977.9	-3.2	-2.21	Hog	80	36.2
25	152.116	1974.7	-2.3	0.90	Sag	60	67.0
26	152.274	1971.0	-0.5	1.82	Sag	100	55.0
27	152.511	1969.8	-5.2	-4.66	Hog	150	32.2
28	152.968	1946.0	-0.1	5.12	Sag	200	39.0
29	153.158	1945.9	2.8	2.87	Sag	100	34.9
30	153.281	1949.4	0.8	-2.03	Hog	60	29.6
31	153.433	1950.5	-0.5	-1.26	Hog	60	47.6
32	153.668	1949.4	-3.1	-2.67	Hog	60	22.5
33	153.879	1942.8	0.4	3.50	Sag	100	28.6
34	153.993	1943.2	-1.3	-1.63	Hog	60	36.7

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					Checked:				
					Approved:				
			VERTICAL ALIGNMENT DETAILS			Date:	Project No.	Drawing No.	
						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ VAD /01/R0	

Vertical Alignment Details							
Sl. No.	VIP Chainage	VIP Level (m)	Gradient (%)	% Change in grade	Type of Curve	Curve Length (m)	K Value
35	154.136	1941.4	-2.7	-1.37	Hog	60	43.7
36	154.206	1939.5	-1.6	1.07	Sag	60	56.0
37	154.370	1936.9	0.8	2.37	Sag	100	42.2
38	154.524	1938.1	-4.9	-5.74	Hog	100	17.4
39	154.662	1931.3	-3.6	1.31	Sag	60	46.0
40	154.730	1928.8	-4.9	-1.25	Hog	60	48.2
41	154.806	1925.1	-3.6	1.30	Sag	60	46.1
42	154.921	1920.9	-4.7	-1.14	Hog	60	52.8
43	154.985	1917.9	-4.0	0.68	Sag	60	88.1
44	155.061	1914.9	-5.7	-1.63	Hog	60	36.8
45	155.166	1908.9	-1.0	4.66	Sag	60	12.9
46	155.243	1908.2	-4.4	-3.44	Hog	60	17.5
47	155.308	1905.3	-2.3	2.17	Sag	60	27.7
48	155.394	1903.3	-5.3	-3.02	Hog	60	19.9
49	155.687	1887.8	-1.2	4.11	Sag	250	60.9
50	155.933	1884.9	-3.4	-2.19	Hog	100	45.8
51	156.051	1880.9	-1.0	2.36	Sag	60	25.4
52	156.146	1880.0	5.2	6.16	Sag	90	14.6
53	156.277	1886.7	-4.3	-9.45	Hog	145	15.4
54	156.453	1879.2	-2.2	2.12	Sag	60	28.4
55	156.531	1877.5	-3.1	-0.94	Hog	60	63.6
56	156.644	1873.9	0.1	3.19	Sag	120	37.7
57	156.829	1874.0	-4.9	-5.01	Hog	100	19.9
58	156.922	1869.4	-1.5	3.43	Sag	60	17.5
59	156.991	1868.4	-2.6	-1.13	Hog	60	53.3
60	157.059	1866.6	-0.9	1.69	Sag	60	35.5
61	157.133	1865.9	-3.4	-2.46	Hog	60	24.4
62	157.212	1863.2	-0.4	2.97	Sag	60	20.2
63	157.400	1862.4	-4.1	-3.62	Hog	90	24.9
64	157.489	1858.8	-2.6	1.48	Sag	60	40.5
65	157.625	1855.3	-3.6	-1.00	Hog	60	60.3
66	157.703	1852.5	-2.1	1.47	Sag	60	40.8

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R0	OCT-2020				Designed:	Scale		Drawing Title	
					Drawn:	NTS			
					Checked:				
					Approved:				
								Date:	Project No.
								OCT -2020	1564
									Drawing No.
									NHIDCL/NH-244-PACK-III/ VAD /02/R0

Vertical Alignment Details							
Sl. No.	VIP Chainage	VIP Level (m)	Gradient (%)	% Change in grade	Type of Curve	Curve Length (m)	K Value
67	157.769	1851.1	-4.4	-2.35	Hog	60	25.5
68	157.854	1847.4	-1.9	2.55	Sag	60	23.5
69	157.939	1845.8	-2.6	-0.68	Hog	60	88.0
70	158.076	1842.3	1.8	4.40	Sag	75	17.1
71	158.178	1844.1	-2.3	-4.16	Hog	65	15.6
72	158.263	1842.1	-0.2	2.13	Sag	60	28.2
73	158.351	1841.9	0.9	1.08	Sag	60	55.5
74	158.423	1842.6	-1.6	-2.42	Hog	60	24.8
75	158.564	1840.4	-5.7	-4.18	Hog	65	15.6
76	158.736	1830.5	-1.9	3.85	Sag	60	15.6
77	158.915	1827.2	-3.5	-1.66	Hog	60	36.3
78	158.989	1824.5	-1.7	1.81	Sag	60	33.2
79	159.065	1823.2	-4.5	-2.80	Hog	60	21.4
80	159.194	1817.4	-0.9	3.62	Sag	150	41.5
81	159.332	1816.1	-1.9	-1.01	Hog	60	59.6
82	159.399	1814.8	-1.6	0.32	Sag	60	186.4
83	159.523	1812.9	-1.9	-0.32	Hog	63	199.8
84	159.689	1809.7	1.1	3.00	Sag	80	26.8
85	159.787	1810.8	-1.1	-2.15	Hog	60	27.9
86	159.880	1809.8	-3.0	-1.95	Hog	60	30.7
87	160.027	1805.3	2.8	5.80	Sag	90	15.5
88	160.127	1808.1	-1.6	-4.42	Hog	70	15.8
89	160.282	1805.6	1.7	3.32	Sag	60	18.1
90	160.386	1807.3	-1.6	-3.26	Hog	100	30.7
91	160.559	1804.6	-2.9	-1.30	Hog	60	46.1
92	160.631	1802.5	-0.5	2.42	Sag	60	24.8
93	160.759	1801.9	-1.6	-1.12	Hog	60	53.5
94	160.885	1799.9	-4.3	-2.67	Hog	60	22.5
95	160.985	1795.7	-2.3	1.98	Sag	60	30.2
96	161.081	1793.5	-5.0	-2.73	Hog	60	22.0
97	161.188	1788.1	1.3	6.26	Sag	90	14.4
98	161.309	1789.7	-2.4	-3.65	Hog	70	19.2

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R0	OCT-2020				Designed:		Scale	NTS	Drawing Title	VERTICAL ALIGNMENT DETAILS		
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			Checked:						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ VAD /03/R0	
			Approved:									

Vertical Alignment Details							
Sl. No.	VIP Chainage	VIP Level (m)	Gradient (%)	% Change in grade	Type of Curve	Curve Length (m)	K Value
130	164.606	1755.7	-0.6	-0.90	Sag	70	31.7
131	164.723	1757.5	1.6	2.21	Hog	60	24.4
132	164.814	1756.7	-0.9	-2.46	Sag	60	44.7
133	164.904	1757.2	0.5	1.34	Sag	60	20.0
134	164.986	1760.1	3.5	3.00	Hog	90	16.1
135	165.069	1758.3	-2.1	-5.60	Sag	60	21.7
136	165.222	1759.3	0.7	2.76	Hog	60	30.1
137	165.444	1756.3	-1.3	-2.00	Sag	60	26.4
138	165.547	1757.3	0.9	2.27	Hog	60	29.5
139	165.654	1756.1	-1.1	-2.03	Hog	60	33.0
140	165.724	1754.1	-2.9	-1.82	Sag	60	44.0
141	165.807	1752.8	-1.6	1.36	Hog	60	25.0
142	166.018	1744.4	-4.0	-2.40	Hog	80	35.3
143	166.152	1736.0	-6.2	-2.26	Sag	130	26.1
144	166.310	1734.1	-1.2	4.98	Sag	60	61.6
145	166.387	1733.9	-0.3	0.97	Hog	60	47.5
146	166.456	1732.8	-1.5	-1.26	Sag	60	148.6
147	166.605	1731.2	-1.1	0.40	Sag	60	103.5
148	166.781	1730.2	-0.5	0.58	Hog	60	39.4
149	166.951	1726.7	-2.1	-1.52	Sag	60	119.6
150	167.054	1725.1	-1.6	0.50	Hog	90	42.4
151	167.158	1721.2	-3.7	-2.12	Sag	60	33.2
152	167.313	1718.3	-1.9	1.80	Sag	60	36.1
153	167.414	1718.1	-0.2	1.66	Hog	60	84.7
154	167.632	1716.1	-0.9	-0.71	Hog	60	70.0
155	167.779	1713.4	-1.8	-0.86	Sag	60	52.6
156	167.893	1712.7	-0.6	1.14	Hog	80	31.9
157	167.985	1709.8	-3.2	-2.51	Hog	60	113.1
158	168.085	1706.1	-3.7	-0.53	Sag	60	62.0
159	168.177	1703.6	-2.7	0.97	Hog	60	294.0
160	168.300	1700.0	-2.9	-0.20	Sag	150	32.6
161	168.422	1702.0	1.7	4.61	Hog	60	31.6
162	168.518	1701.8	-0.2	-1.90	Sag	60	93.5
163	168.686	1702.5	0.4	0.64	Hog	200	60.4

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R0	OCT-2020							Drawing Title					
							Designed:		Scale	NTS		VERTICAL ALIGNMENT DETAILS	
					Drawn:						Date:	Project No.	Drawing No.
					Checked:						OCT -2020	1564	NHIDCL/NH-244-PACK-III/ VAD /05/R0
					Approved:								

Vertical Alignment Details							
Sl. No.	VIP Chainage	VIP Level (m)	Gradient (%)	% Change in grade	Type of Curve	Curve Length (m)	K Value
163	168.686	1702.5	0.4	0.64	Hog	200	60.4
164	168.825	1698.5	-2.9	-3.31	Sag	60	56.8
165	168.961	1696.0	-1.8	1.06	Hog	60	39.7
166	169.060	1692.7	-3.3	-1.51	Sag	60	49.6
167	169.139	1691.0	-2.1	1.21	Hog	60	31.5
168	169.254	1686.4	-4.0	-1.90	Sag	120	26.6
169	169.383	1687.0	0.5	4.50	Hog	60	50.9
170	169.481	1686.3	-0.7	-1.18	Hog	80	22.1
171	169.624	1680.1	-4.3	-3.62	Sag	130	24.9
172	169.786	1681.5	0.9	5.23	Hog	60	26.3
173	169.969	1679.0	-1.4	-2.28	Hog	90	43.9
174	170.077	1675.3	-3.4	-2.05	Sag	60	109.3
175	170.166	1672.7	-2.9	0.55	Hog	60	153.3
176	170.253	1669.9	-3.3	-0.39	Sag	60	91.9
177	170.480	1663.9	-2.6	0.65	Sag	60	80.2
178	170.602	1661.6	-1.9	0.75	Sag	60	32.2
179	170.688	1661.6	0.0	1.86	Hog	60	48.3
180	170.778	1660.4	-1.3	-1.24	Sag	60	27.0
181	170.845	1661.1	1.0	2.23	Hog	60	18.6
182	170.932	1659.1	-2.3	-3.22	Sag	60	28.0
183	171.029	1659.0	-0.1	2.14	Hog	60	163.2
184	171.329	1657.6	-0.5	-0.37	Hog	60	32.3
185	171.431	1655.2	-2.3	-1.86	Sag	100	80.7
186	171.559	1653.8	-1.1	1.24	Hog	60	123.8
187	171.625	1652.8	-1.6	-0.49	Sag	60	43.5
188	171.708	1652.6	-0.2	1.38	Hog	60	18.7
189	171.777	1650.2	-3.4	-3.21	Sag	60	18.1
190	171.875	1650.1	-0.1	3.32	Hog	100	42.1
191	171.958	1648.1	-2.5	-2.38	Sag	60	38.2
192	172.198	1645.9	-0.9	1.57	Sag	60	293.6
193	172.400	1644.5	-0.7	0.20	Hog	60	123.2
194	172.573	1642.5	-1.2	-0.49	Sag	60	52.2
195	172.684	1642.5	0.0	1.15	Hog	120	63.5

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R0	OCT-2020				Designed: <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> Scale NTS <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> Approved:																				Drawing Title
			VERTICAL ALIGNMENT DETAILS																						
			Date: OCT - 2020Project No: 1564Drawing No: NHIDCL/NH-244-PACK-III/ VAD /06/R0																						

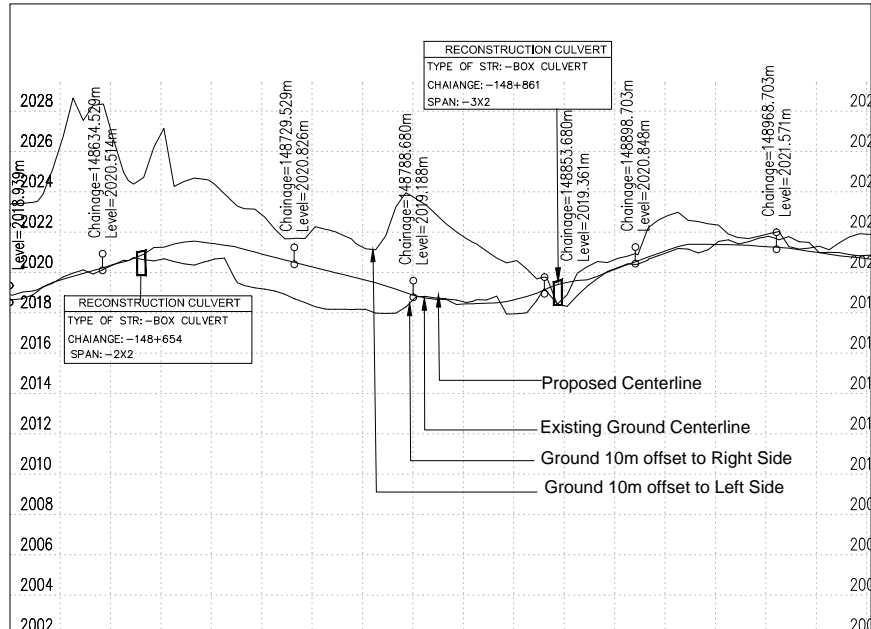
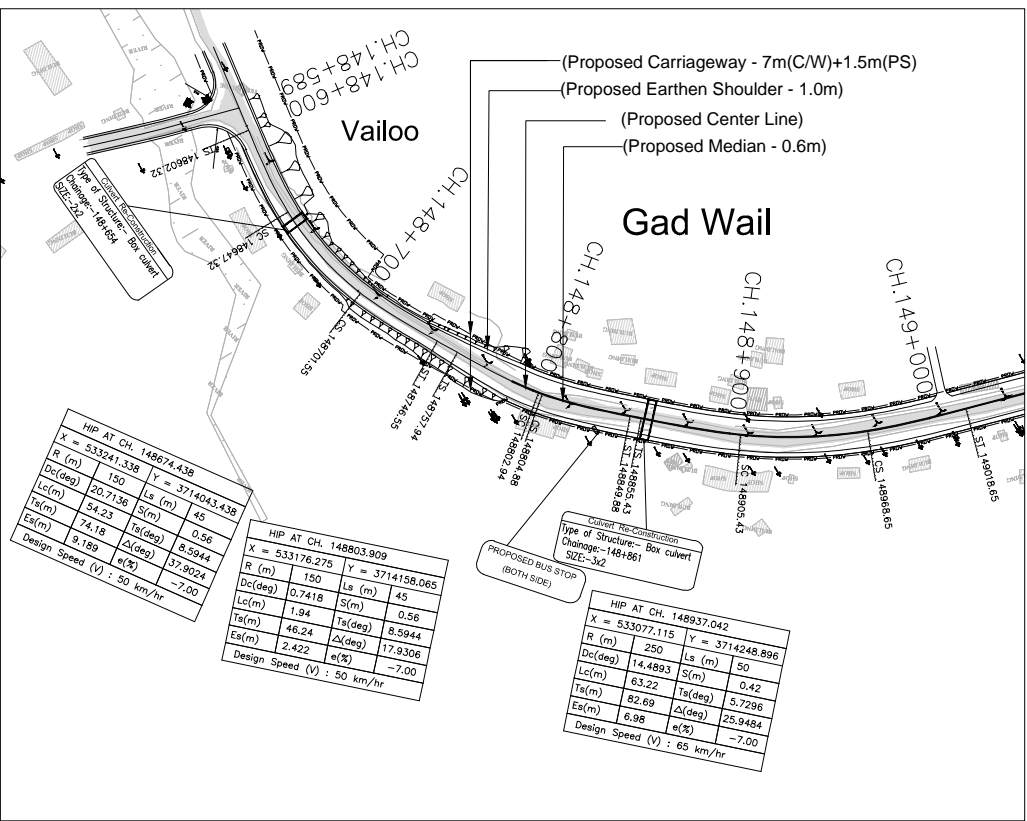
Vertical Alignment Details							
Sl. No.	VIP Chainage	VIP Level (m)	Gradient (%)	% Change in grade	Type of Curve	Curve Length (m)	K Value
196	172.818	1639.9	-1.9	-1.89	Sag	60	118.5
197	172.995	1637.4	-1.4	0.51	Hog	60	134.0
198	173.070	1636.0	-1.9	-0.45	Sag	60	43.2
199	173.185	1635.4	-0.5	1.39	Hog	60	21.6
200	173.277	1632.4	-3.3	-2.78	Sag	120	30.1
201	173.387	1633.3	0.7	3.99	Hog	60	89.0
202	173.459	1633.3	0.1	-0.67	Sag	60	28.1
203	173.550	1635.3	2.2	2.13	Hog	60	22.7
204	173.713	1634.6	-0.5	-2.65	Hog	60	105.1
205	173.802	1633.6	-1.0	-0.57	Hog	60	21.6
206	173.866	1631.2	-3.8	-2.78	Sag	60	16.5
207	174.113	1630.8	-0.2	3.63	Hog	60	112.0
208	174.348	1629.2	-0.7	-0.54	Sag	120	77.5
209	174.516	1630.6	0.8	1.55	Hog	120	44.3
210	174.671	1627.7	-1.9	-2.71	Sag	80	47.1
211	174.754	1627.5	-0.2	1.70	Hog	60	24.1
212	174.844	1625.1	-2.7	-2.49	Sag	100	40.7
213	175.056	1624.7	-0.2	2.46	Hog	60	18.9
214	175.138	1622.0	-3.4	-3.18	Sag	60	19.9
215	175.233	1621.6	-0.4	3.02	Hog	60	264.9
216	175.384	1620.7	-0.6	-0.23	Hog	60	29.9
217	175.450	1619.0	-2.6	-2.01	Sag	60	25.5
218	175.560	1618.7	-0.2	2.35	Hog	70	16.0
219	175.631	1615.4	-4.6	-4.39	Sag	60	13.2
220	175.716	1615.4	-0.1	4.53	Sag	60	162.5
221	175.844	1615.7	0.3	0.37	Hog	60	153.8
222	175.957	1615.6	-0.1	-0.39	Hog	60	29.4
223	176.044	1613.7	-2.2	-2.04	Sag	60	37.2
224	176.115	1613.3	-0.5	1.61	Hog	60	145.5
225	176.180	1612.7	-1.0	-0.41	Sag	60	136.3
226	176.381	1611.7	-0.5	0.44	Sag	100	30.7
227	176.478	1614.4	2.7	3.26	Hog	60	21.2
228	176.532	1614.3	-0.1	PROJECT END			

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			Approved:										

PLAN & PROFILE

VAILOO

DONIPAWA



(DATUM - 2002)

Proposed Road Level at Centerline (m)	2018.339	2018.896	2019.795	2020.646	2021.233	2021.413	2021.85	2020.576	2019.884	2019.92	2018.788	2018.968	2019.986	2020.512	2021.266	2021.649	2021.626	2021.326	2021.017
Existing Ground/Road Level at Centerline (m)	2018.339	2018.896	2019.795	2020.646	2021.233	2021.413	2021.85	2020.576	2019.884	2019.92	2018.788	2018.968	2019.986	2020.512	2021.266	2021.649	2021.626	2021.326	2021.017
Ground/Road Level at 10m Left Side (m)	2018.339	2018.896	2019.795	2020.646	2021.233	2021.413	2021.85	2020.576	2019.884	2019.92	2018.788	2018.968	2019.986	2020.512	2021.266	2021.649	2021.626	2021.326	2021.017
Ground/Road Level at 10m Right Side (m)	2018.339	2018.896	2019.795	2020.646	2021.233	2021.413	2021.85	2020.576	2019.884	2019.92	2018.788	2018.968	2019.986	2020.512	2021.266	2021.649	2021.626	2021.326	2021.017
Proposed Vertical Alignment Schematic	<div><div>L=45.99m</div><div><div><div>Lv=95.00m</div><div>Lv=65.00m</div></div><div>G=3.42%</div><div>G=-2.77%</div><div>L=59.15m</div><div>K=10.71</div><div>Lv=65.00m</div><div>L=45.02m</div><div>Lv=70.00m</div><div>K=-15.42</div><div>L=10.71</div></div></div>																		
Proposed Horizontal Alignment Schematic	<div><div>D</div><div>Ls=45.0m</div><div>R=-150.0m</div><div>Lc=54.2m</div><div>Ls=45.0m</div><div>D</div><div>Ls=45.0m</div><div>R=-150.0m</div><div>Lc=1.9m</div><div>Ls=45.0m</div><div>D</div><div>Ls=50.0m</div><div>R=-250.0m</div><div>Lc=63.2m</div><div>Ls=50.0m</div></div>																		
Superelevation/Crossfall (%)	<div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div><div>e=7.0%</div><div>e=2.5%</div></div>																		
Chainage (Km)	148+589	148+600	148+625	148+650	148+675	148+700	148+725	148+750	148+775	148+800	148+825	148+850	148+875	148+900	148+925	148+950	148+975	149+000	

LEGEND

Proposed Center Line

Proposed Median

Proposed Carriageway Edge

Proposed Service Road

Proposed Toe Line

Proposed Right of Way

Existing Right of Way

Proposed Box Culvert

Proposed HP Culvert

Proposed Slab Culvert

Proposed Vehicular Underpass

Proposed Tunnel

Proposed Cattle Underpass

Proposed Bridge/ROB

Toe Wall

Retaining Wall / Breast Wall

Grave Yard

Gate Temporary/Permanents

GPS

Temporary Bench Mark

Religious Structures

Telephone Box

Transformer Points

Pylon

Lamp Post

Tree-T1,T2,T3,T4,T5,T6

Tube Well, Well

Hand Pump

Municipal Tap

Kilometer Stone

OFC Pillar

Petrol Pump

North Symbol

Railway Track

Existing Paved Road

Existing Unpaved Road

Telephone Line

High Tension Lines

Low Tension Line

Drain

HFL Line

Water Pipe Line

Building

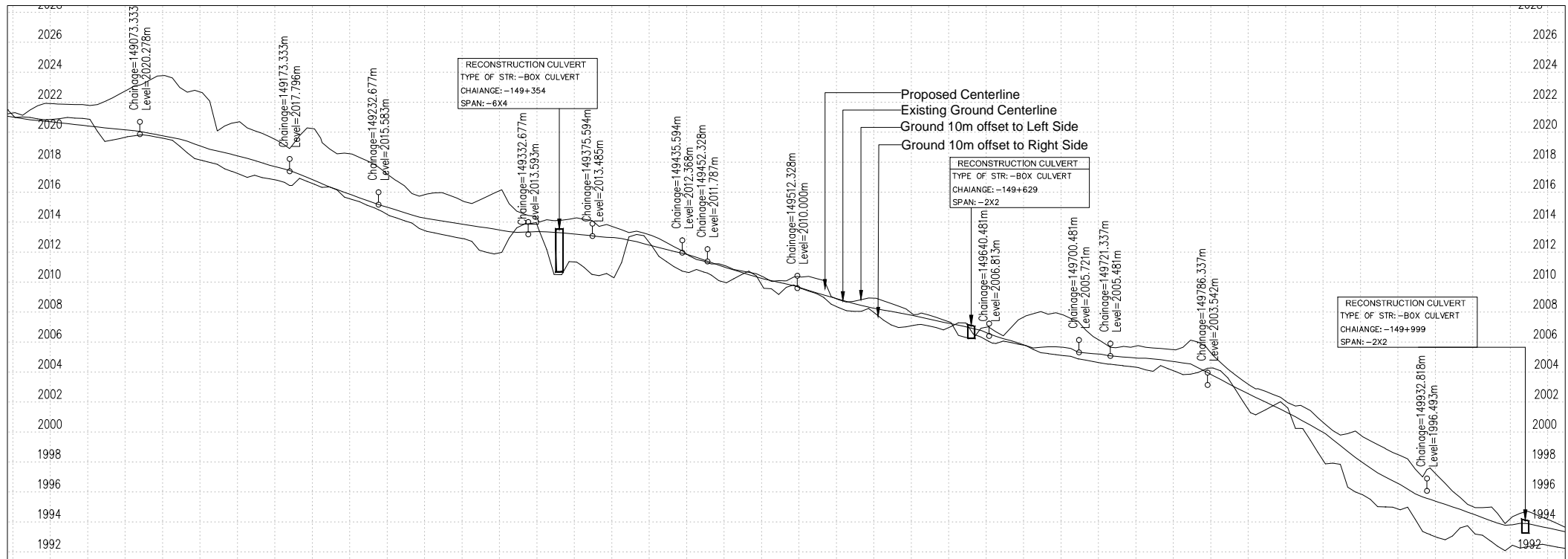
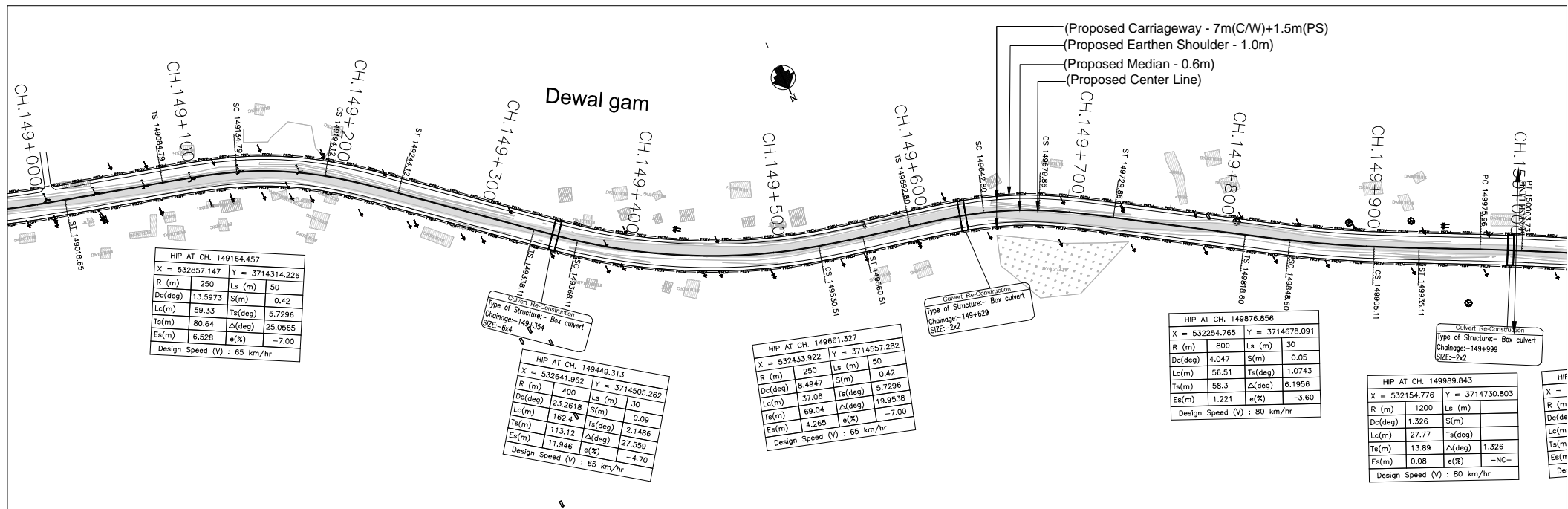
PLAN

R - Radius of Curve
Dc - Degree of Curvature
Lc - Length of Circular Curve
Ts - Tangent Length
Es - Apex Distance
LS - Length of Spiral Curve
S - Shift
Δ - Deflection Angle
V - Design Speed Km/Hr
e% - Superelevation
PC - Point of Curvature
PT - Point of Tangent
HIP - Horizontal Intersection Point

L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length & Change of Gradient (Lv(G2-G1))
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D - Straight Length of Horizontal Alignment
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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: _____			Drawing Title	Plan & Profile (km.148+589 to km.149+000)		
					Scale :- H:-1.2500 V:-1.250				Date: _____ Project No: 1564 Drawing No: _____		
									NHIDCL\NH-244-PACK-II\P&P\01\R0		



LEGEND

- Proposed Center Line
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- Proposed Carriageway Edge
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- Existing Unpaved Road
- Telephone Line
- High Tension Lines
- Low Tension Line
- Drain
- HFL Line
- Water Pipe Line
- Building

PLAN

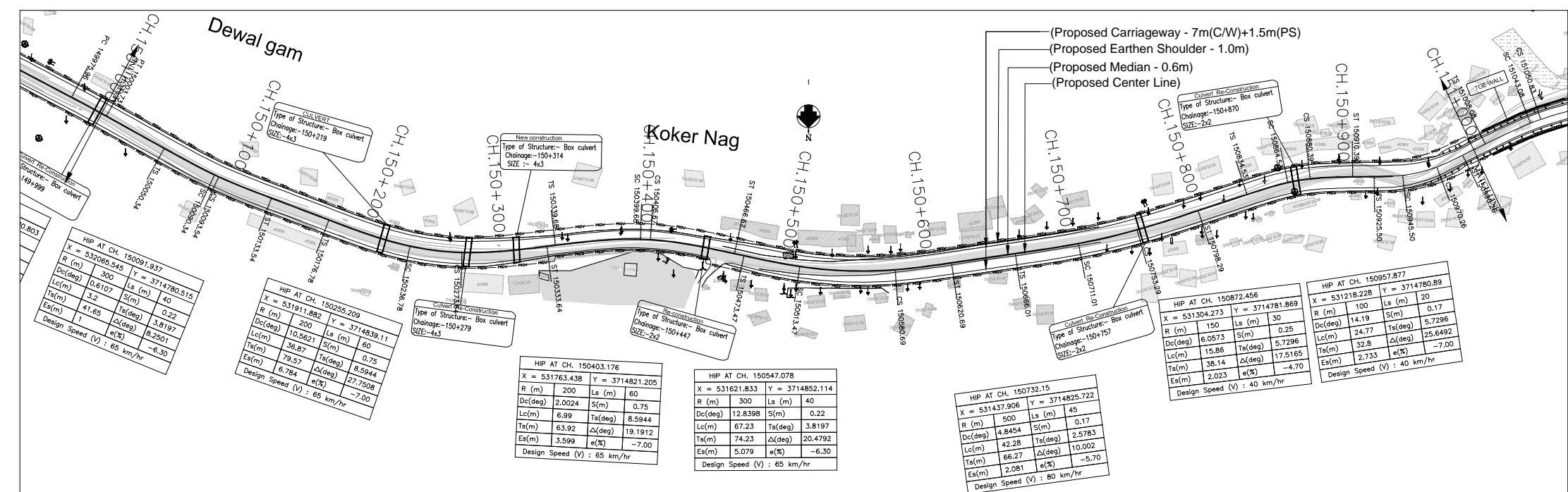
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(DATUM - 1992)

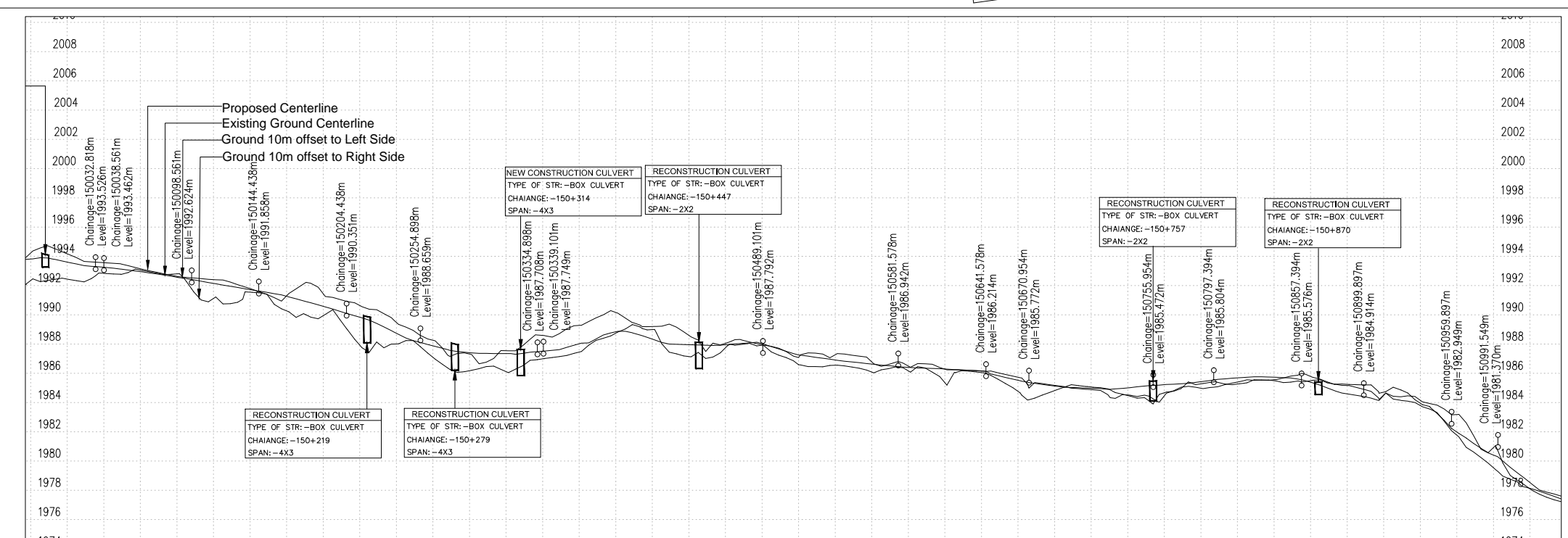
Proposed Road Level at Centerline (m)	2021.326	2021.004	2021.077	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2020.892	2020.904	2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VAILOO

DONIPAWA



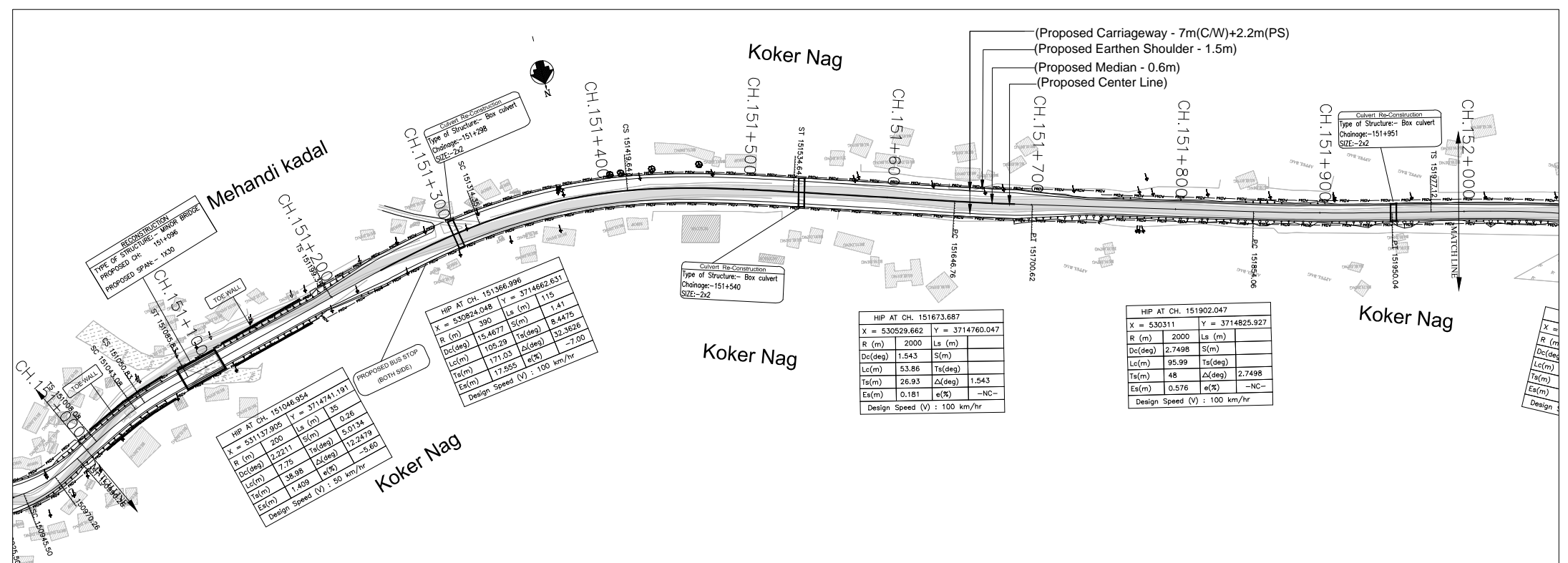
- LEGEND**
- Proposed Center Line
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 - e - Superelevation (%)
 - D - Straight Length of Horizontal Alignment
 - Lc - Length of Circular Curve

(DATUM - 1974)		
Proposed Road Level at Centerline (m)	1994.385	1994.385
Existing Ground/Road Level at Centerline (m)	1993.798	1993.798
Ground/Road Level at 10m Left Side (m)	1994.294	1994.294
Ground/Road Level at 10m Right Side (m)	1992.570	1992.570
Proposed Vertical Alignment Schematic		
Proposed Horizontal Alignment Schematic		
Superelevation/Crossfall (%)		
Chainage (Km)	150+000	151+025

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	Project	Drawing Title
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Designed: Scale :- H:-1.2500 V:-1.250	Plan & Profile (km.150+000 to km.151+000)
					Checked: Drawing No. 1564	Date OCT -2020
					Approved: Drawing No. NHIDCL/NH-244-PACK-II/P&P/ 03/R0	



LEGEND

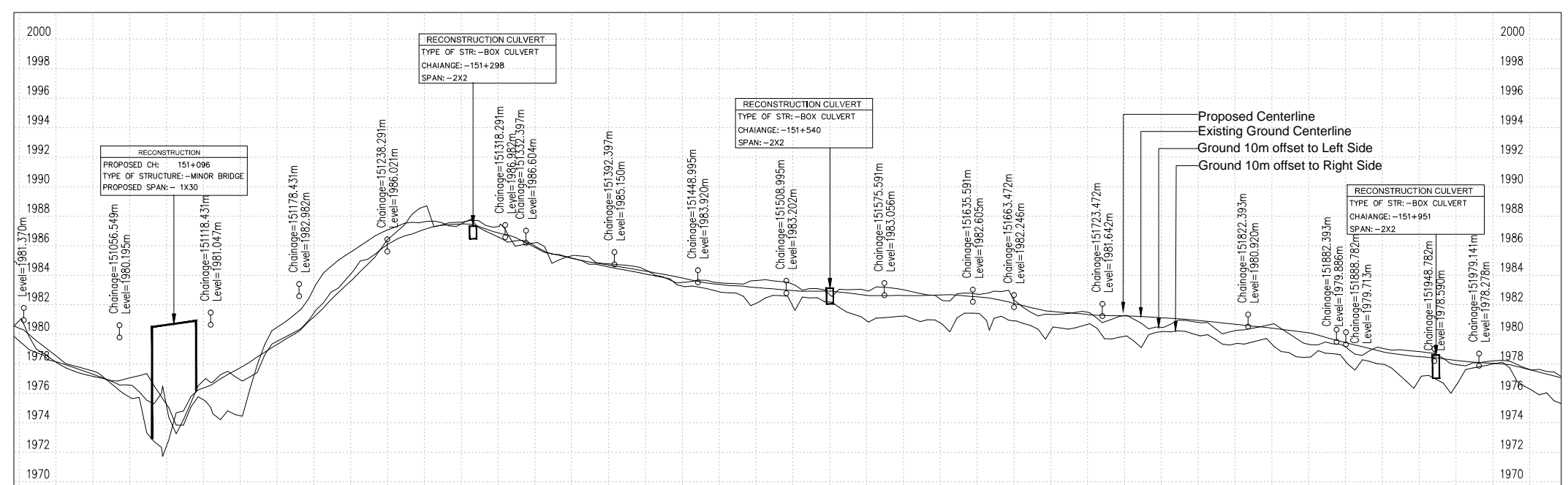
Proposed Center Line
Proposed Median
Proposed Carriageway Edge
Proposed Service Road
Proposed Toe Line
Proposed Right of Way
Existing Right of Way
Proposed Box Culvert
Proposed HP Culvert
Proposed Slab Culvert
Proposed Tunnel
Proposed Cattle Underpass
Proposed Bridge/ROB
Toe Wall
Retaining Wall / Brest Wall
Grave Yard
Gate Temporary/Permanents
GPS
Temporary Bench Mark
Religious Structures
Telephone Box
Transformer Points
Pylon
Lamp Post
Tree-T1,T2,T3,T4,T5,T6
Tube Well, Well
Hand Pump
Municipal Tap
Kilometer Stone
OFC Pillar
Petrol Pump
North Symbol
Railway Track
Existing Paved Road
Existing Unpaved Road
Telephone Line
High Tension Lines
Low Tension Line
Drain
HFL Line
Water Pipe Line
Building

PLAN

R - Radius of Curve
Dc - Degree of Curvature
Lc - Length of Circular Curve
Ts - Tangent Length
Es - Apex Distance
LS - Length of Spiral Curve
S - Shift
Δ - Deflection Angle
V - Design Speed Km/Hr
e% - Superelevation
PC - Point of Curvature
PT - Point of Tangent
HIP - Horizontal Intersection Point

L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
e - Superelevation (%)
D - Straight Length of Horizontal Alignment
Lc - Length of Circular Curve

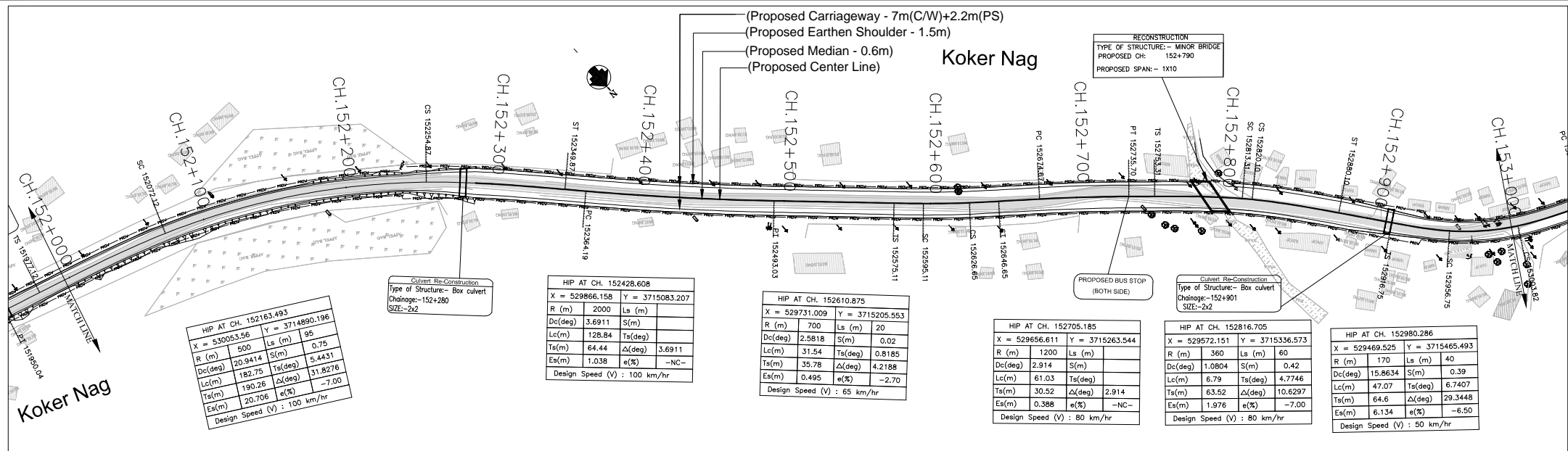


(DATUM - 1970)

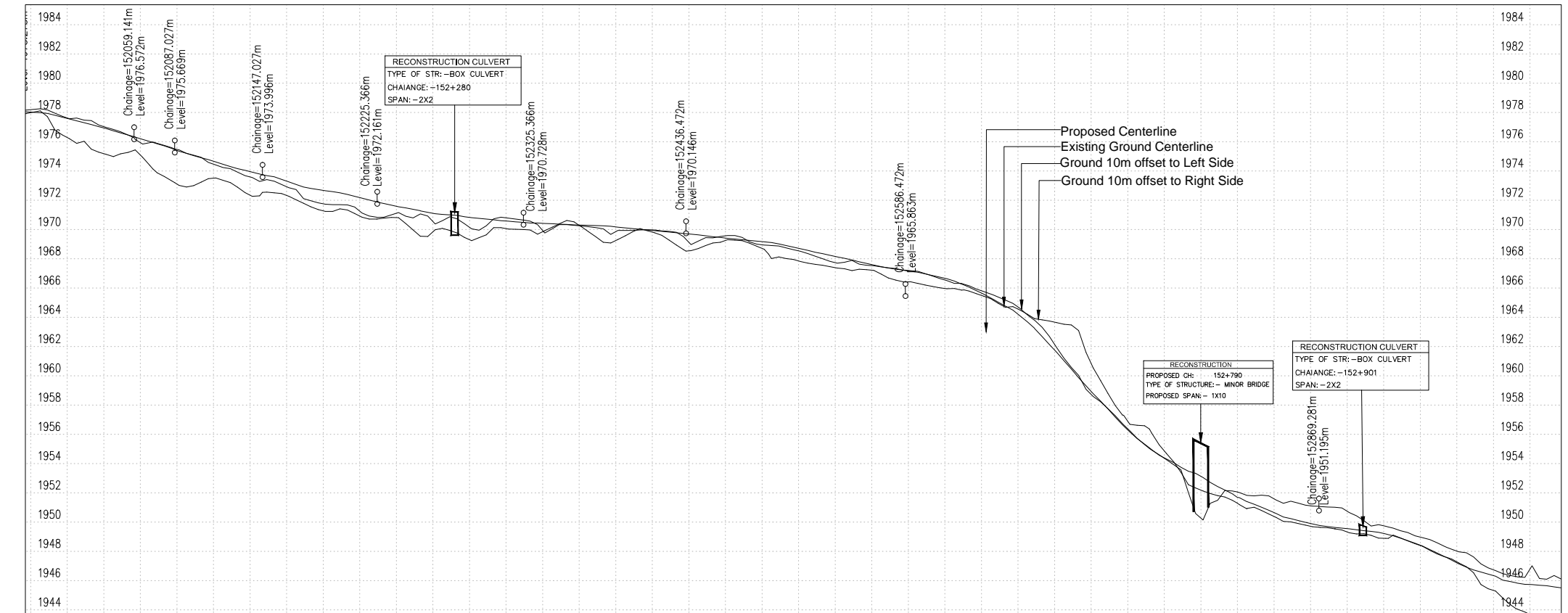
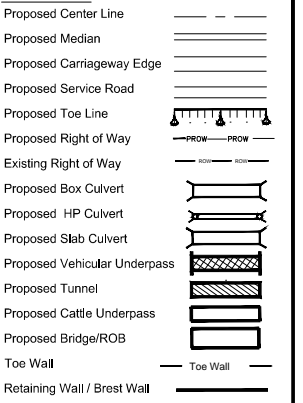
Proposed Road Level at Centerline (m)	1981.520	1981.547	1981.570	1981.593	1981.616	1981.639	1981.662	1981.685	1981.708	1981.731	1981.754	1981.777	1981.800	1981.823	1981.846	1981.869	1981.892	1981.915	1981.938	1981.961	1981.984	1982.007	1982.030	1982.053	1982.076	1982.099	1982.122	1982.145	1982.168	1982.191	1982.214	1982.237	1982.260	1982.283	1982.306	1982.329	1982.352	1982.375	1982.398	1982.421	1982.444	1982.467	1982.490	1982.513	1982.536	1982.559	1982.582	1982.605	1982.628	1982.651	1982.674	1982.697	1982.720	1982.743	1982.766	1982.789	1982.812	1982.835	1982.858	1982.881	1982.904	1982.927	1982.950	1982.973	1982.996	1983.019	1983.042	1983.065	1983.088	1983.111	1983.134	1983.157	1983.180	1983.203	1983.226	1983.249	1983.272	1983.295	1983.318	1983.341	1983.364	1983.387	1983.410	1983.433	1983.456	1983.479	1983.502	1983.525	1983.548	1983.571	1983.594	1983.617	1983.640	1983.663	1983.686	1983.709	1983.732	1983.755	1983.778	1983.801	1983.824	1983.847	1983.870	1983.893	1983.916	1983.939	1983.962	1983.985	1984.008	1984.031	1984.054	1984.077	1984.100	1984.123	1984.146	1984.169	1984.192	1984.215	1984.238	1984.261	1984.284	1984.307	1984.330	1984.353	1984.376	1984.399	1984.422	1984.445	1984.468	1984.491	1984.514	1984.537	1984.560	1984.583	1984.606	1984.629	1984.652	1984.675	1984.698	1984.721	1984.744	1984.767	1984.790	1984.813	1984.836	1984.859	1984.882	1984.905	1984.928	1984.951	1984.974	1984.997	1985.020	1985.043	1985.066	1985.089	1985.112	1985.135	1985.158	1985.181	1985.204	1985.227	1985.250	1985.273	1985.296	1985.319	1985.342	1985.365	1985.388	1985.411	1985.434	1985.457	1985.480	1985.503	1985.526	1985.549	1985.572	1985.595	1985.618	1985.641	1985.664	1985.687	1985.710	1985.733	1985.756	1985.779	1985.802	1985.825	1985.848	1985.871	1985.894	1985.917	1985.940	1985.963	1985.986	1986.009	1986.032	1986.055	1986.078	1986.101	1986.124	1986.147	1986.170	1986.193	1986.216	1986.239	1986.262	1986.285	1986.308	1986.331	1986.354	1986.377	1986.400	1986.423	1986.446	1986.469	1986.492	1986.515	1986.538	1986.561	1986.584	1986.607	1986.630	1986.653	1986.676	1986.699	1986.722	1986.745	1986.768	1986.791	1986.814	1986.837	1986.860	1986.883	1986.906	1986.929	1986.952	1986.975	1986.998	1987.021	1987.044	1987.067	1987.090	1987.113	1987.136	1987.159	1987.182	1987.205	1987.228	1987.251	1987.274	1987.297	1987.320	1987.343	1987.366	1987.389	1987.412	1987.435	1987.458	1987.481	1987.504	1987.527	1987.550	1987.573	1987.596	1987.619	1987.642	1987.665	1987.688	1987.711	1987.734	1987.757	1987.780	1987.803	1987.826	1987.849	1987.872	1987.895	1987.918	1987.941	1987.964	1987.987	1988.010	1988.033	1988.056	1988.079	1988.102	1988.125	1988.148	1988.171	1988.194	1988.217	1988.240	1988.263	1988.286	1988.309	1988.332	1988.355	1988.378	1988.401	1988.424	1988.447	1988.470	1988.493	1988.516	1988.539	1988.562	1988.585	1988.608	1988.631	1988.654	1988.677	1988.700	1988.723	1988.746	1988.769	1988.792	1988.815	1988.838	1988.861	1988.884	1988.907	1988.930	1988.953	1988.976	1988.999	1989.022	1989.045	1989.068	1989.091	1989.114	1989.137	1989.160	1989.183	1989.206	1989.229	1989.252	1989.275	1989.298	1989.321	1989.344	1989.367	1989.390	1989.413	1989.436	1989.459	1989.482	1989.505	1989.528	1989.551	1989.574	1989.597	1989.620	1989.643	1989.666	1989.689	1989.712	1989.735	1989.758	1989.781	1989.804	1989.827	1989.850	1989.873	1989.896	1989.919	1989.942	1989.965	1989.988	1990.011	1990.034	1990.057	1990.080	1990.103	1990.126	1990.149	1990.172	1990.195	1990.218	1990.241	1990.264	1990.287	1990.310	1990.333	1990.356	1990.379	1990.402	1990.425	1990.448	1990.471	1990.494	1990.517	1990.540	1990.563	1990.586	1990.609	1990.632	1990.655	1990.678	1990.701	1990.724	1990.747	1990.770	1990.793	1990.816	1990.839	1990.862	1990.885	1990.908	1990.931	1990.954	1990.977	1991.000	1991.023	1991.046	1991.069	1991.092	1991.115	1991.138	1991.161	1991.184	1991.207	1991.230	1991.253	1991.276	1991.299	1991.322	1991.345	1991.368	1991.391	1991.414	1991.437	1991.460	1991.483	1991.506	1991.529	1991.552	1991.575	1991.598	1991.621	1991.644	1991.667	1991.690	1991.713	1991.736	1991.759	1991.782	1991.805	1991.828	1991.851	1991.874	1991.897	1991.920	1991.943	1991.966	1991.989	1992.012	1992.035	1992.058	1992.081	1992.104	1992.127	1992.150	1992.173	1992.196	1992.219	1992.242	1992.265	1992.288	1992.311	1992.334	1992.357	1992.380	1992.403	1992.426	1992.449	1992.472	1992.495	1992.518	1992.541	1992.564	1992.587	1992.610	1992.633	1992.656	1992.679	1992.702	1992.725	1992.748	1992.771	1992.794	1992.817	1992.840	1992.863	1992.886	1992.909	1992.932	1992.955	1992.978	1993.001	1993.024	1993.047	1993.070	1993.093	1993.116	1993.139	1993.162	1993.185	1993.208	1993.231	1993.254	1993.277	1993.300	1993.323	1993.346	1993.369	1993.392	1993.415	1993.438	1993.461	1993.484	1993.507	1993.530	1993.553	1993.576	1993.599	1993.622	1993.645	1993.668	1993.691	1993.714	1993.737	1993.760	1993.783	1993.806	1993.829	1993.852	1993.875	1993.898	1993.921	1993.944	1993.967	1993.990	1994.013	1994.036	1994.059	1994.082	1994.105	1994.128	1994.151	1994.174	1994.197	1994.220	1994.243	1994.266	1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VAILOO

DONIPAWA

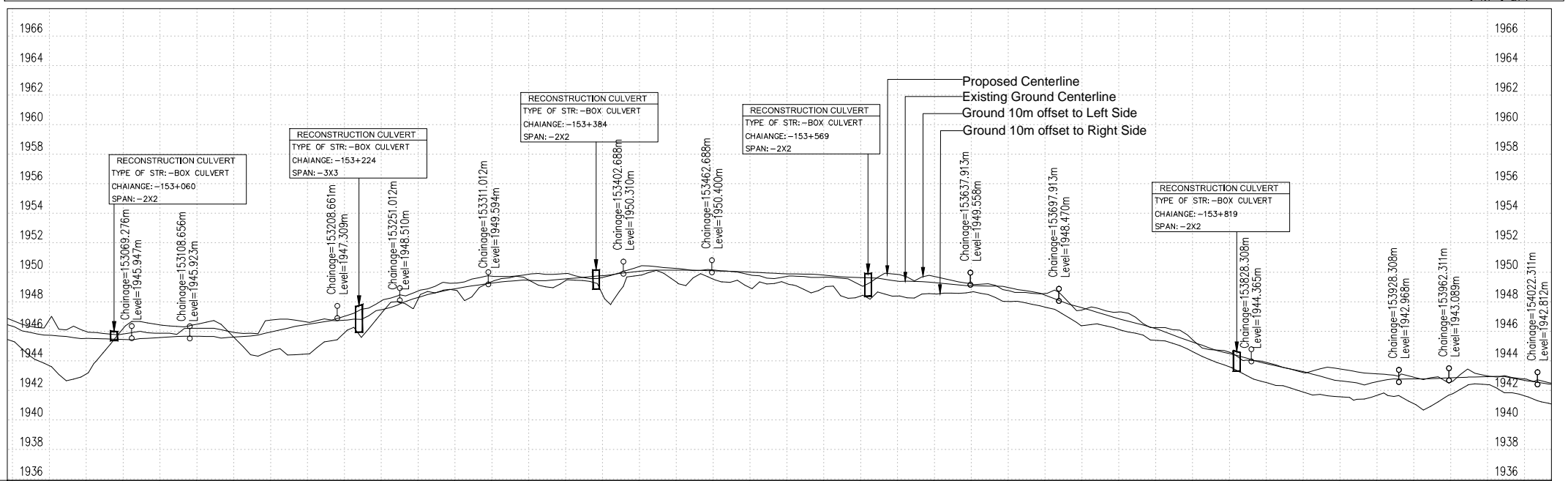
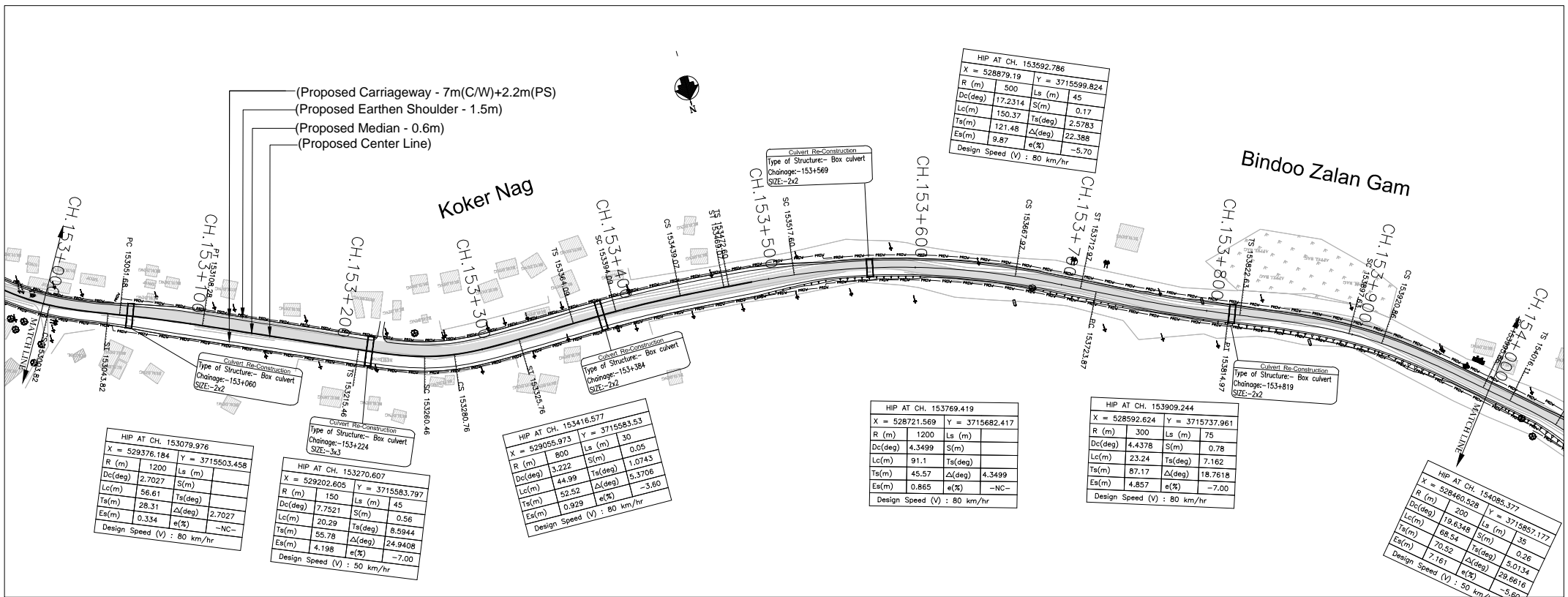


LEGEND






(DATUM - 1944)

Proposed Road Level at Centerline (m)	1978.169	1978.025	1977.761	1977.180	1976.430	1975.621	1974.864	1974.200	1973.609	1973.024	1972.438	1971.868	1971.399	1970.831	1970.266	1969.700	1969.134	1968.569	1967.992	1967.426	1966.860	1966.294	1965.728	1965.162	1964.596	1964.030	1963.464	1962.898	1962.332	1961.766	1961.200	1960.634	1960.068	1959.502	1958.936	1958.370	1957.804	1957.238	1956.672	1956.106	1955.540	1954.974	1954.408	1953.842	1953.276	1952.710	1952.144	1951.578	1951.012	1950.446	1949.880	1949.314	1948.748	1948.182	1947.616	1947.050	1946.484	1945.918	1945.352	1944.786	1944.220	1943.654	1943.088	1942.522	1941.956	1941.390	1940.824	1940.258	1939.688	1939.122	1938.556	1937.990	1937.424	1936.858	1936.292	1935.726	1935.160	1934.594	1934.028	1933.462	1932.896	1932.330	1931.764	1931.198	1930.632	1930.066	1929.500	1928.934	1928.368	1927.802	1927.236	1926.670	1926.104	1925.538	1924.972	1924.406	1923.840	1923.274	1922.708	1922.142	1921.576	1921.010	1920.444	1919.878	1919.312	1918.746	1918.180	1917.614	1917.048	1916.482	1915.916	1915.350	1914.784	1914.218	1913.652	1913.086	1912.520	1911.954	1911.388	1910.822	1910.256	1909.690	1909.124	1908.558	1907.992	1907.426	1906.860	1906.294	1905.728	1905.162	1904.596	1904.030	1903.464	1902.898	1902.332	1901.766	1901.200	1900.634	1900.068	1999.502	1998.936	1998.370	1997.804	1997.238	1996.672	1996.106	1995.540	1994.974	1994.408	1993.842	1993.276	1992.710	1992.144	1991.578	1991.012	1990.446	1989.880	1989.314	1988.748	1988.182	1987.616	1987.050	1986.484	1985.918	1985.352	1984.786	1984.220	1983.654	1983.088	1982.522	1981.956	1981.390	1980.824	1980.258	1979.688	1979.122	1978.556	1977.990	1977.424	1976.858	1976.292	1975.726	1975.160	1974.594	1974.028	1973.462	1972.896	1972.330	1971.764	1971.198	1970.632	1970.066	1969.500	1968.934	1968.368	1967.802	1967.236	1966.670	1966.104	1965.538	1964.972	1964.406	1963.840	1963.274	1962.708	1962.142	1961.576	1961.010	1960.444	1959.878	1959.312	1958.746	1958.180	1957.614	1957.048	1956.482	1955.916	1955.350	1954.784	1954.218	1953.652	1953.086	1952.520	1951.954	1951.388	1950.822	1950.256	1949.690	1949.124	1948.558	1947.992	1947.426	1946.860	1946.294	1945.728	1945.162	1944.596	1944.030	1943.464	1942.898	1942.332	1941.766	1941.200	1940.634	1940.068	1939.502	1938.936	1938.370	1937.804	1937.238	1936.672	1936.106	1935.540	1934.974	1934.408	1933.842	1933.276	1932.710	1932.144	1931.578	1931.012	1930.446	1929.880	1929.314	1928.748	1928.182	1927.616	1927.050	1926.484	1925.918	1925.352	1924.786	1924.220	1923.654	1923.088	1922.522	1921.956	1921.390	1920.824	1920.258	1919.688	1919.122	1918.556	1917.990	1917.424	1916.858	1916.292	1915.726	1915.160	1914.594	1914.028	1913.462	1912.896	1912.330	1911.764	1911.198	1910.632	1910.066	1909.500	1908.934	1908.368	1907.802	1907.236	1906.670	1906.104	1905.538	1904.972	1904.406	1903.840	1903.274	1902.708	1902.142	1901.576	1901.010	1900.444	1999.878	1999.312	1998.746	1998.180	1997.614	1997.048	1996.482	1995.916	1995.350	1994.784	1994.218	1993.652	1993.086	1992.520	1991.954	1991.388	1990.822	1990.256	1989.690	1989.124	1988.558	1987.992	1987.426	1986.860	1986.294	1985.728	1985.162	1984.596	1984.030	1983.464	1982.898	1982.332	1981.766	1981.200	1980.634	1980.068	1979.502	1978.936	1978.370	1977.804	1977.238	1976.672	1976.106	1975.540	1974.974	1974.408	1973.842	1973.276	1972.710	1972.144	1971.578	1971.012	1970.446	1969.880	1969.314	1968.748	1968.182	1967.616	1967.050	1966.484	1965.918	1965.352	1964.786	1964.220	1963.654	1963.088	1962.522	1961.956	1961.390	1960.824	1960.258	1959.688	1959.122	1958.556	1957.990	1957.424	1956.858	1956.292	1955.726	1955.160	1954.594	1954.028	1953.462	1952.896	1952.330	1951.764	1951.198	1950.632	1950.066	1949.500	1948.934	1948.368	1947.802	1947.236	1946.670	1946.104	1945.538	1944.972	1944.406	1943.840	1943.274	1942.708	1942.142	1941.576	1941.010	1940.444	1939.878	1939.312	1938.746	1938.180	1937.614	1937.048	1936.482	1935.916	1935.350	1934.784	1934.218	1933.652	1933.086	1932.520	1931.954	1931.388	1930.822	1930.256	1929.690	1929.124	1928.558	1927.992	1927.426	1926.860	1926.294	1925.728	1925.162	1924.596	1924.030	1923.464	1922.898	1922.332	1921.766	1921.200	1920.634	1920.068	1919.502	1918.936	1918.370	1917.804	1917.238	1916.672	1916.106	1915.540	1914.974	1914.408	1913.842	1913.276	1912.710	1912.144	1911.578	1911.012	1910.446	1909.880	1909.314	1908.748	1908.182	1907.616	1907.050	1906.484	1905.918	1905.352	1904.786	1904.220	1903.654	1903.088	1902.522	1901.956	1901.390	1900.824	1900.258	1999.688	1999.122	1998.556	1997.990	1997.424	1996.858	1996.292	1995.726	1995.160	1994.594	1994.028	1993.462	1992.896	1992.330	1991.764	1991.198	1990.632	1990.066	1989.500	1988.934	1988.368	1987.802	1987.236	1986.670	1986.104	1985.538	1984.972	1984.406	1983.840	1983.274	1982.708	1982.142	1981.576	1981.010	1980.444	1979.878	1979.312	1978.746	1978.180	1977.614	1977.048	1976.482	1975.916	1975.350	1974.784	1974.218	1973.652	1973.086	1972.520	1971.954	1971.388	1970.822	1970.256	1969.690	1969.124	1968.558	1967.992	1967.426	1966.860	1966.294	1965.728	1965.162	1964.596	1964.030	1963.464	1962.898	1962.332	1961.766	1961.200	1960.634	1960.068	1959.502	1958.936	1958.370	1957.804	1957.238	1956.672	1956.106	1955.540	1954.974	1954.408	1953.842	1953.276	1952.710	1952.144	1951.578	1951.012	1950.446	1949.880	1949.314	1948.748	1948.182	1947.616	1947.050	1946.484	1945.918	1945.352	1944.786	1944.220	1943.654	1943.088	1942.522	1941.956	1941.390	1940.824	1940.258	1939.688	1939.122	1938.556	1937.990	1937.424	1936.858	1936.292	1935.726	1935.160	1934.594	1934.028	1933.462	1932.896	1932.330	1931.764	1931.198	1930.632	1930.066	1929.500	1928.934	1928.368	1927.802	1927.236	1926.670	1926.104	1925.538	1924.972	1924.406	1923.840	1923.274	1922.708	1922.142	1921.576	1921.010	1920.444	1919.878	1919.312	1918.746	1918.180	1917.614	1917.048	1916.482	1915.916	1915.350	1914.784	1914.218	1913.652	1913.086	1912.520	1911.954	1911.388	1910.822	1910.256	1909.690	1909.124	1908.558	1907.992	1907.426	1906.860	1906.294	1905.728	1905.162	1904.596	1904.030	1903.464	1902.898	1902.332	1901.766	1901.200	1900.634	1900.068	1999.502	1998.936	1998.370	1997.804	1997.238	1996.672	1996.106	1995.540	1994.974	1994.408	1993.842	1993.276	1992.710	1992.144	1991.578	1991.012	1990.446	1989.880	1989.314	1988.748	1988.182	1987.616	1987.050	1986.484	1985.918	1985.352	1984.786	1984.220	1983.654	1983.088	1982.522	1981.956	1981.390	1980.824	1980.258	1979.688	1979.122	1978.556	1977.990	1977.424	1976.858	1976.292	1975.726	1975.160	1974.594	1974.028	1973.462	1972.896	1972.330	1971.764	1971.198	1970.632	1970.066	1969.500	1968.934	1968.368	1967.802	1967.236	1966.670	1966.104	1965.538	1964.972	1964.406	1963.840	1963.274	1962.708	1962.142	1961.576	1961.010	1960.444	1959.878	1959.312	1958.746	1958.180	1957.614	1957.048	1956.482	1955.916	1955.350	1954.784	1954.218	1953.652	1953.086	1952.520	1951.954	1951.388	1950.822	1950.256	1949.690	1949.124	1948.558	1947.992	1947.426	1946.860	1946.294	1945.728	1945.162	1944.596	1944.030	1943.464	1942.898	1942.332	1941.766	1941.200	1940.634	1940.068	1939.502	1938.936	1938.370	1937.804	1937.238	1936.672	1936.106	1935.540	1934.974	1934.408	1933.842	1933.276	1932.710	1932.144	1931.578	1931.012	1930.446	1929.880	1929.314	1928.748	1928.182	1927.616	1927.050	1926.484	1925.918	1925.352	1924.786	1924.220	1923.654	1923.088	1922.522	1921.956	1921.390	1920.824	1920.258	1919.688	1919.122	1918.556	1917.990	1917.424	1916.858	1916.292	1915.726	1915.160	1914.594	1914.028	1913.462	1912.896	1912.330	1911.764	1911.198	1910.632	1910.066	1909.500	1908.934	1908.368	1907.802	1907.236	1906.670	1906.104	1905.538	1904.972	1904.406	1903.840	1903.274	1902.708	1902.142	1901.576	1901.010	1900.444	1999.878	1999.312	1998.746	1998.180	1997.614	1997.048	1996.482	1995.916	1995.350	1994.784	1994.218	1993.652	1993.086	1992.520	1991.954	1991.388	1990.822	1990.256	1989.690	1989.124	1988.558	1987.992	1987.426	1986.860	1986.294	1985.728	1985.162	1984.596	1984.030	1983.464	1982.898	1982.332	1981.766	1981.200	1980.634	1980.068	1979.502	1978.936	1978.370	1977.804	1977.238	1976.672	1976.106	1975.540	1974.974	1974.408	1973.842	1973.276	1972.710	1972.144	1971.578	1971.012	1970.446	1969.880	1969.314	1968.748	1968.182	1967.616	1967.050	1966.484	1965.918	1965.352	1964.786	1964.220	1963.654	1963.088	1962.522	1961.956	1961.390	1960.824	1960.258	1959.688	1959.122	1958.556	1957.990	1957.424	1956.858	1956.292	1955.726	1955.160	1954.594	1954.028	1953.462	1952.896	1952.330	1951.764	1951.198	1950.632	1950.066	1949.500	1948.934	1948.368	1947.802
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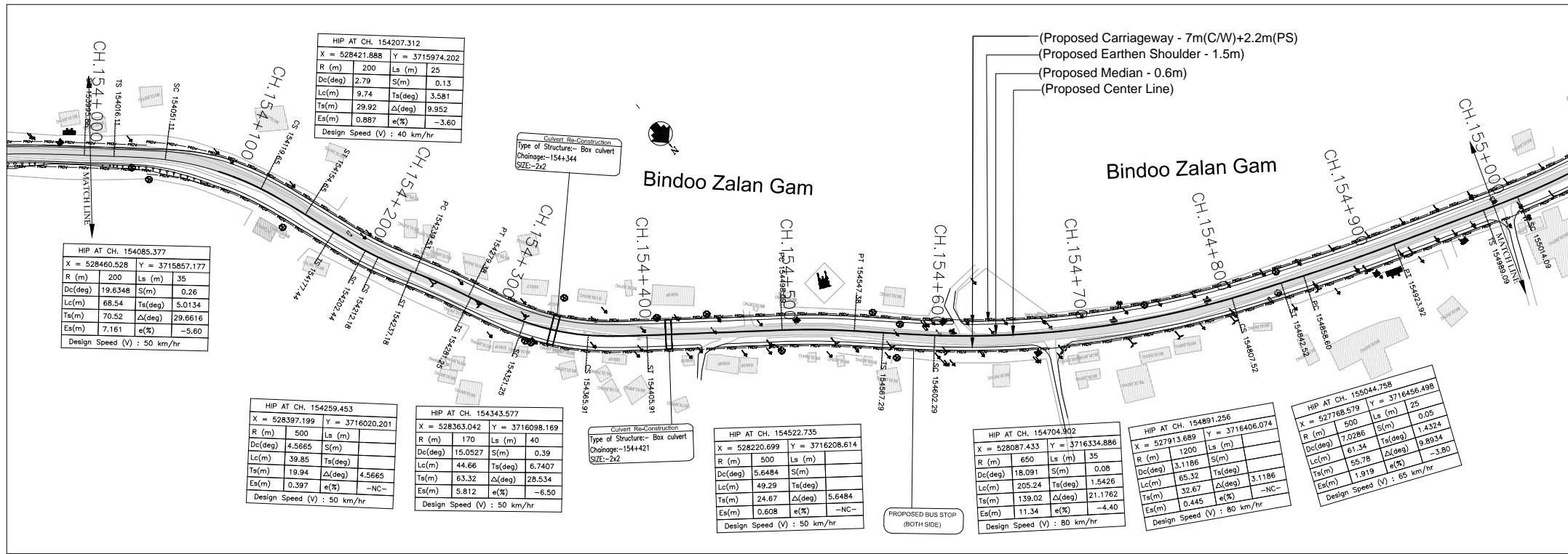


(DATUM - 1936)	1936	1936
Proposed Road Level at Centerline (m)	1946.832	1946.832
Existing Ground/Road Level at Centerline (m)	1946.47	1946.380
Ground/Road Level at 10m Left Side (m)	1946.743	1946.779
Ground/Road Level at 10m Right Side (m)	1946.952	1946.987
Proposed Vertical Alignment Schematic		
Proposed Horizontal Alignment Schematic		
Superelevation/Crossfall (%)		
Chainage (Km)	153+000	154+025

ISSUE		DATE	AMENDMENT \ ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div></div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT.2020					<div>Designed:</div> <div>Drawn:</div> <div>Checked:</div> <div>Approved:</div>	<div>Scale :-</div> <div>H:-1.2500</div> <div>V:-1.250</div>	Drawing Title	Plan & Profile (km.153+000 to km.154+000)			
									<div>Date</div> <div>OCT -2020</div>	<div>Project No.</div> <div>1564</div>	<div>Drawing No.</div> <div>NHIDCL\NH-244-PACK-II\P&P/ 06/R0</div>	

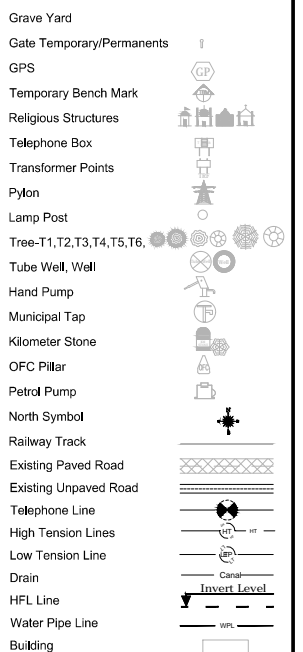
VAILOO

DONIPAWA



LEGEND

- Proposed Center Line
- Proposed Median
- Proposed Carriageway Edge
- Proposed Service Road
- Proposed Toe Line
- Proposed Right of Way
- Existing Right of Way
- Proposed Box Culvert
- Proposed HP Culvert
- Proposed Slab Culvert
- Proposed Vehicular Underpass
- Proposed Tunnel
- Proposed Cattle Underpass
- Proposed Bridge/ROB
- Toe Wall
- Retaining Wall / Breast Wall
- Grave Yard
- Gate Temporary/Permanents
- GPS
- Temporary Bench Mark
- Religious Structures
- Telephone Box
- Transformer Points
- Pylon
- Lamp Post
- Tree-T1,T2,T3,T4,T5,T6
- Tube Well, Well
- Hand Pump
- Municipal Tap
- Kilometer Stone
- OFC Pillar
- Petrol Pump
- North Symbol
- Railway Track
- Existing Paved Road
- Existing Unpaved Road
- Telephone Line
- High Tension Lines
- Low Tension Line
- Drain
- HFL Line
- Water Pipe Line
- Building



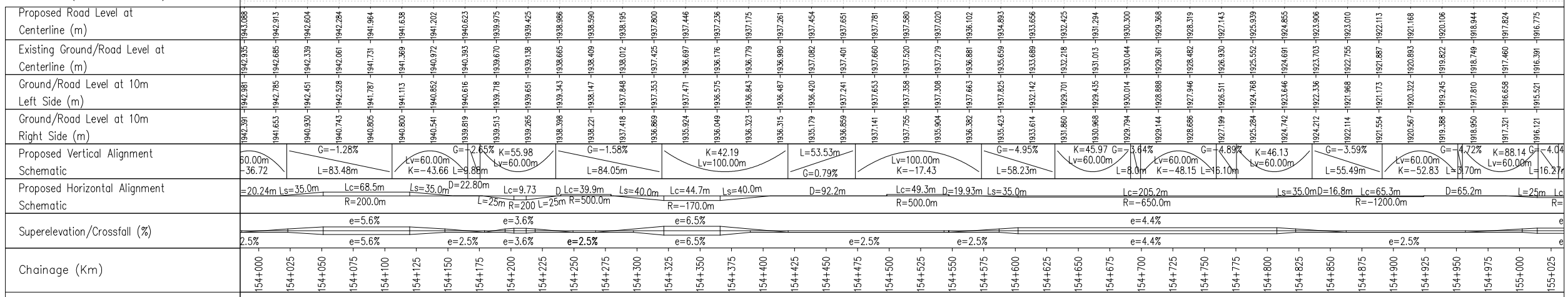
PLAN

R - Radius of Curve
Dc - Degree of Curvature
Lc - Length of Circular Curve
Ts - Tangent Length
Es - Apex Distance
LS - Length of Spiral Curve
S - Shift
Δ - Deflection Angle
V - Design Speed Km/Hr
e% - Superelevation
PC - Point of Curvature
PT - Point of Tangent
HIP - Horizontal Intersection Point

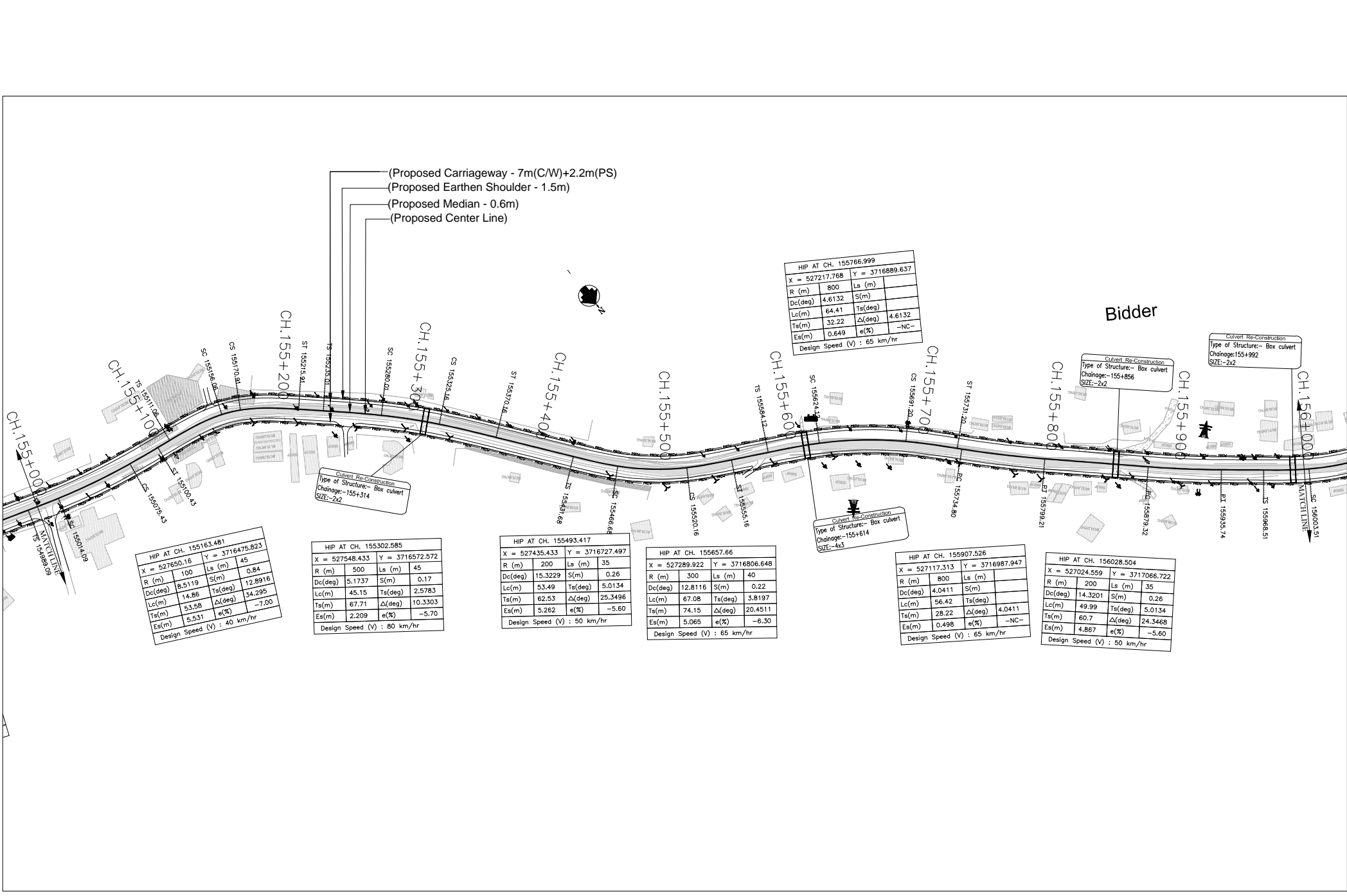
L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length & Change of Gradient (Lc(G2-G1))
e - Superelevation (%)
D - Straight Length of Horizontal Alignment
Lc - Length of Circular Curve

(DATUM - 1914)



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	FINAL DETAILED PROJECT REPORT	Project
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Scale :- H:-1:2500 V:-1:250	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
						Plan & Profile (km.154+000 to km.155+000)
						Drawing No. NHIDCLNH-244-PACK-II/P&P/ 07/R0



LEGEND

Proposed Center Line
Proposed Median
Proposed Carriageway Edge
Proposed Service Road
Proposed Toe Line
Proposed Right of Way
Existing Right of Way
Proposed Box Culvert
Proposed HP Culvert
Proposed Slab Culvert
Proposed Vehicular Underpass
Proposed Tunnel
Proposed Cattle Underpass
Proposed Bridge/ROB
Toe Wall
Retaining Wall / Brest Wall
Grave Yard
Gate Temporary/Permanents
GPS
Temporary Bench Mark
Religious Structures
Telephone Box
Transformer Points
Pylon
Lamp Post
Tree-T1,T2,T3,T4,T5,T6
Tube Well, Well
Hand Pump
Municipal Tap
Kilometer Stone
OFC Pillar
Petrol Pump
North Symbol
Railway Track
Existing Paved Road
Existing Unpaved Road
Telephone Line
High Tension Lines
Low Tension Line
Drain
HFL Line
Water Pipe Line
Building

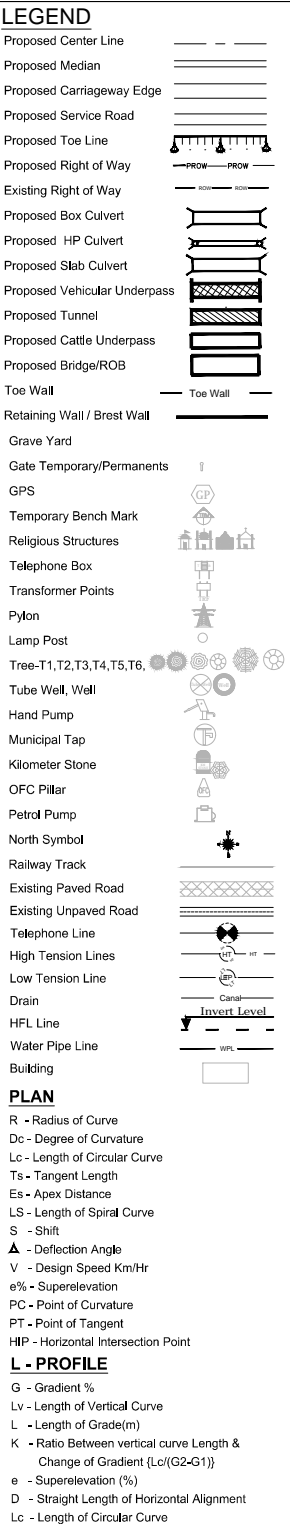
PLAN

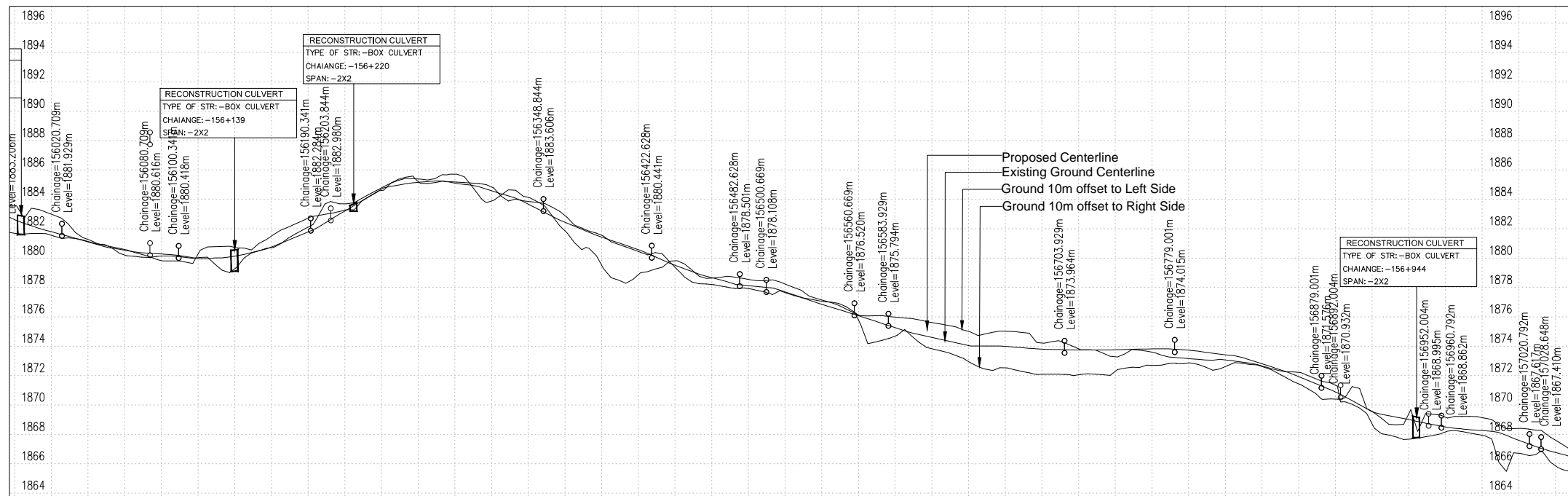
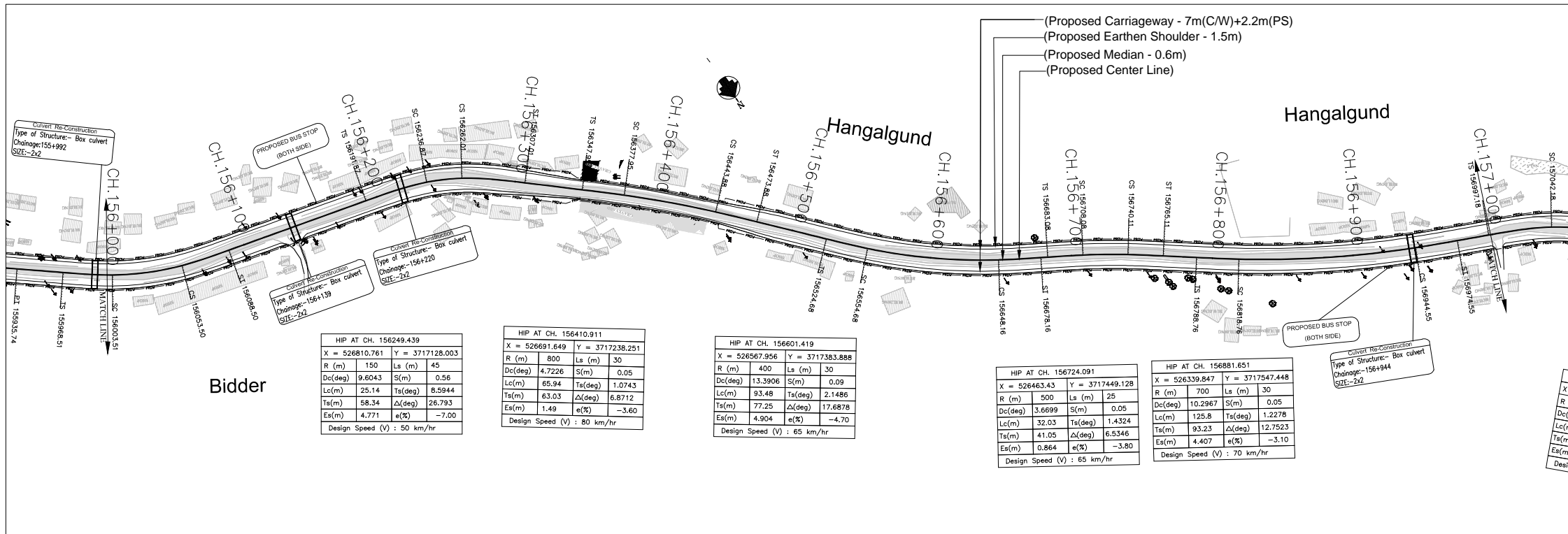
R - Radius of Curve
Dc - Degree of Curvature
Lc - Length of Circular Curve
Ts - Tangent Length
Es - Apex Distance
LS - Length of Spiral Curve
S - Shift
Δ - Deflection Angle
V - Design Speed Km/Hr
e% - Superelevation
PC - Point of Curvature
PT - Point of Tangent
HIP - Horizontal Intersection Point




L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
e - Superelevation (%)
D - Straight Length of Horizontal Alignment
Lc - Length of Circular Curve

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd. ,	Designed: _____ Drawn: _____ Checked: _____ Approved: _____	Scale :- H:-1.2500 V:-1.250	Drawing Title
							Plan & Profile (km.155+000 to km.156+000)
							Date: OCT-2020
							Project No: 1564
							Drawing No: NHIDCLNH-244-PACK-II/P&P/ 08/R0

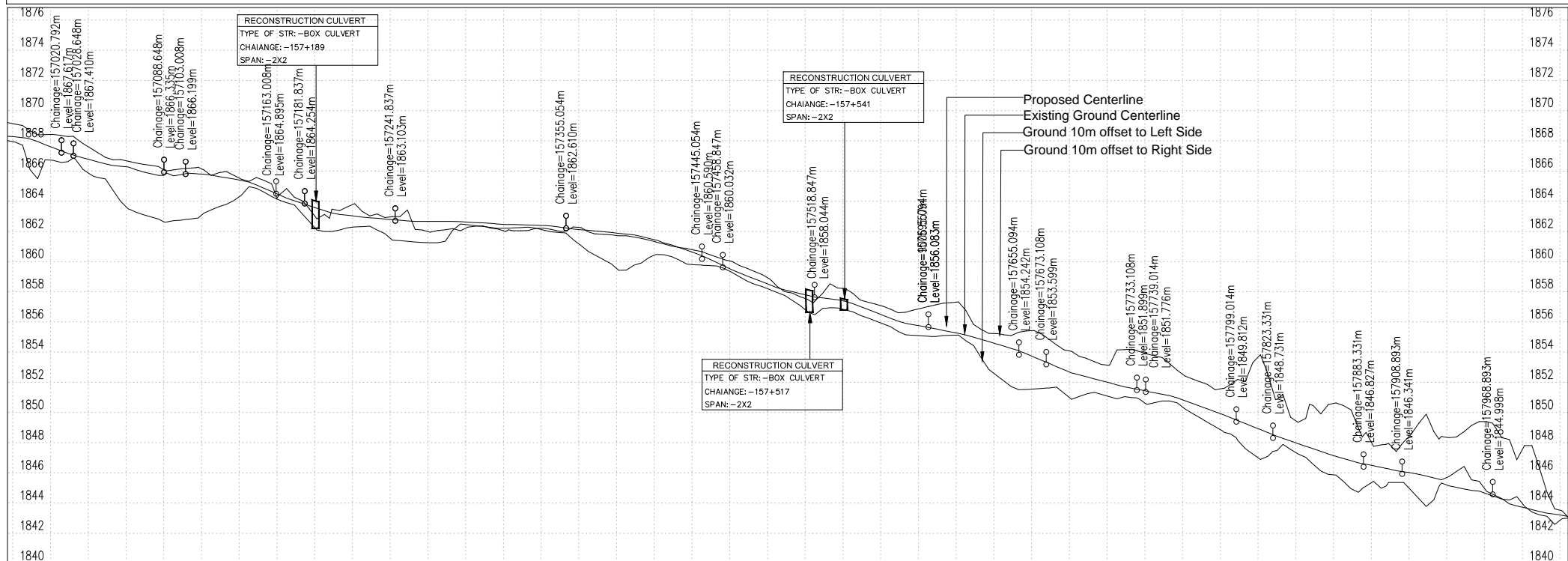
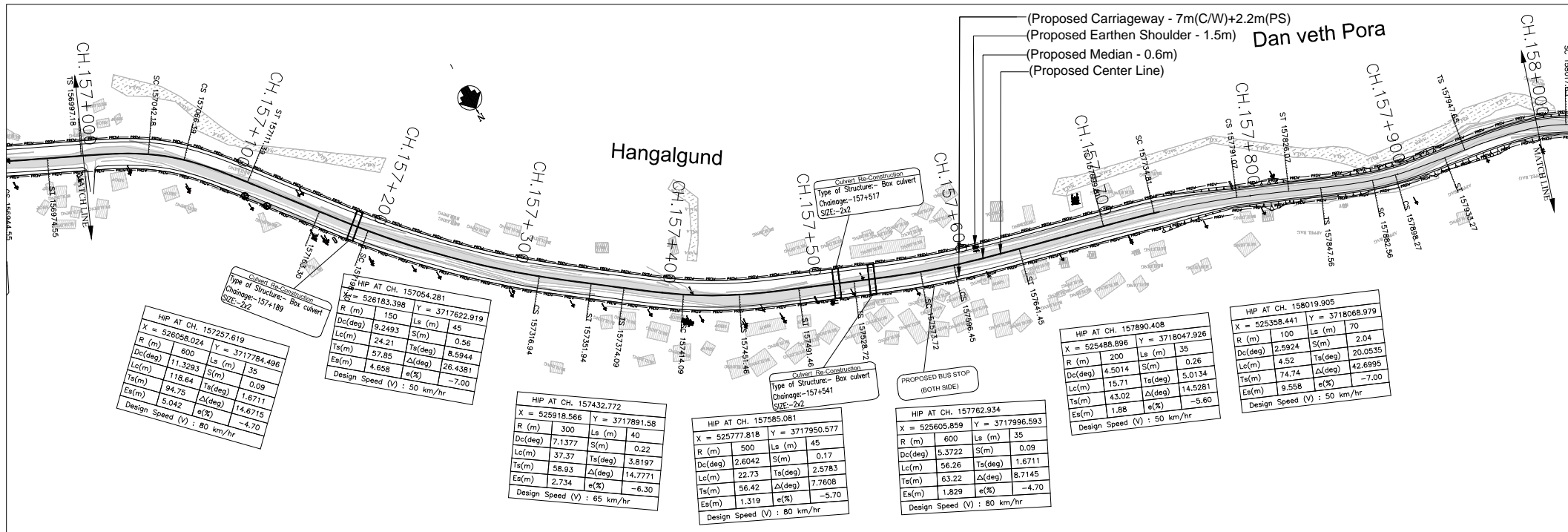
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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project						
R0	OCT.2020		<p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p> 	<p> RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</p> <p>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p> 	<p>Designed: _____ Drawn: _____ Checked: _____ Approved: _____</p> <p>Scale :- H:-1.2500 V:-1.250</p>			<p>Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation from (i) Km 44.500 to 142.000 of Chattrao Village & (ii) Km 235.00(Vailloo Village) to Km 269.00 (Khanabal) of Khellani - Kishwar - Chattrao - Khanabal Section of NH 244.</p>						
								<p>Plan & Profile (km.156+000 to km.157+000)</p>						
								<table><tr><td>Date</td><td>Project No.</td><td>Drawing No.</td></tr><tr><td>OCT -2020</td><td>1564</td><td>NHIDCLNH-244-PACK-II/P&P/ 09/R0</td></tr></table>	Date	Project No.	Drawing No.	OCT -2020	1564	NHIDCLNH-244-PACK-II/P&P/ 09/R0
Date	Project No.	Drawing No.												
OCT -2020	1564	NHIDCLNH-244-PACK-II/P&P/ 09/R0												

VAILOO

DONIPAWA



LEGEND

- Proposed Center Line
- Proposed Median
- Proposed Carriageway Edge
- Proposed Service Road
- Proposed Toe Line
- Proposed Right of Way
- Existing Right of Way
- Proposed Box Culvert
- Proposed HP Culvert
- Proposed Slab Culvert
- Proposed Vehicular Underpass
- Proposed Tunnel
- Proposed Cattle Underpass
- Proposed Bridge/ROB
- Toe Wall
- Retaining Wall / Breast Wall
- Grave Yard
- Gate Temporary/Permanents
- GPS
- Temporary Bench Mark
- Religious Structures
- Telephone Box
- Transformer Points
- Pylon
- Lamp Post
- Tree-T1,T2,T3,T4,T5,T6
- Tube Well, Wall
- Hand Pump
- Municipal Tap
- Kilometer Stone
- OFC Pillar
- Petrol Pump
- North Symbol
- Railway Track
- Existing Paved Road
- Existing Unpaved Road
- Telephone Line
- High Tension Lines
- Low Tension Line
- Drain
- HFL Line
- Water Pipe Line
- Building

PLAN

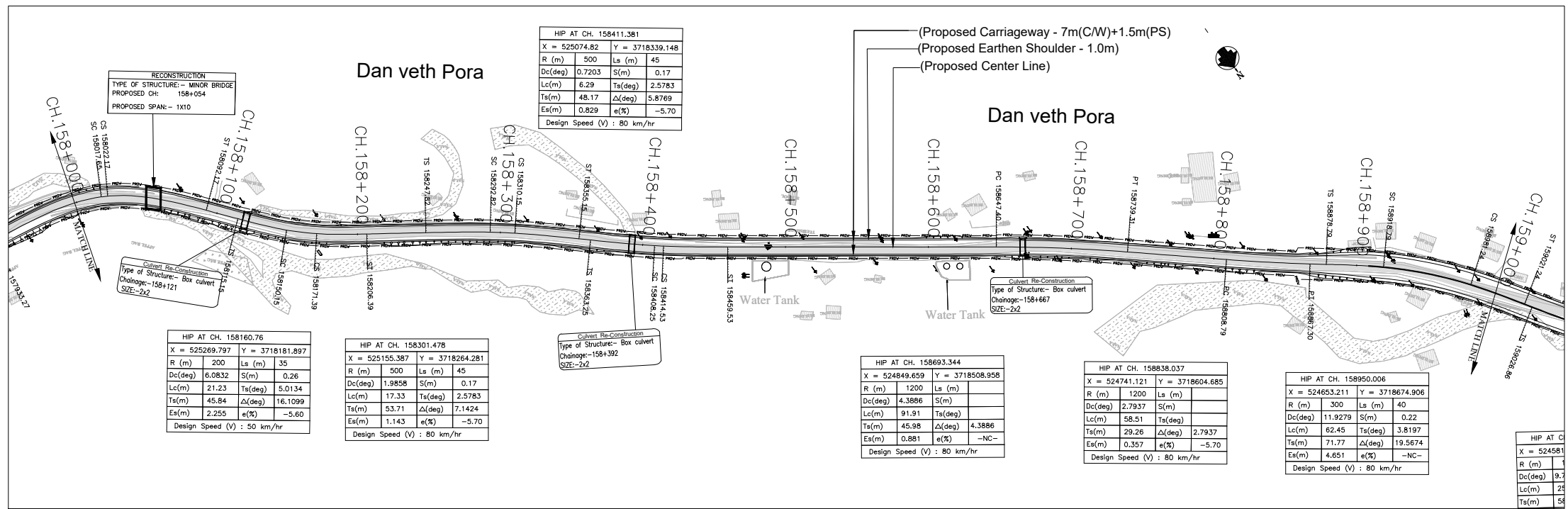
- R - Radius of Curve
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- D - Straight Length of Horizontal Alignment
- Lc - Length of Circular Curve

(DATUM - 1840)

Proposed Road Level at Centerline (m)	1868.370	1868.303	1867.803	1867.163	1866.661	1866.156	1865.652	1865.147	1864.643	1864.139	1863.635	1863.131	1862.627	1862.123	1861.619	1861.115	1860.611	1860.107	1859.603	1859.099	1858.595	1858.091	1857.587	1857.083	1856.579	1856.075	1855.571	1855.067	1854.563	1854.059	1853.555	1853.051	1852.547	1852.043	1851.539	1851.035	1850.531	1850.027	1849.523	1849.019	1848.515	1848.011	1847.507	1847.003	1846.499	1845.995	1845.491	1844.987	1844.483	1843.979	1843.475	1842.971	1842.467	1841.963	1841.459	1840.955	1840.451	1839.947	1839.443	1838.939	1838.435	1837.931	1837.427	1836.923	1836.419	1835.915	1835.411	1834.907	1834.403	1833.899	1833.395	1832.891	1832.387	1831.883	1831.379	1830.875	1830.371	1829.867	1829.363	1828.859	1828.355	1827.851	1827.347	1826.843	1826.339	1825.835	1825.331	1824.827	1824.323	1823.819	1823.315	1822.811	1822.307	1821.803	1821.299	1820.795	1820.291	1819.787	1819.283	1818.779	1818.275	1817.771	1817.267	1816.763	1816.259	1815.755	1815.251	1814.747	1814.243	1813.739	1813.235	1812.731	1812.227	1811.723	1811.219	1810.715	1810.211	1809.707	1809.203	1808.699	1808.195	1807.691	1807.187	1806.683	1806.179	1805.675	1805.171	1804.667	1804.163	1803.659	1803.155	1802.651	1802.147	1801.643	1801.139	1800.635	1800.131	1799.627	1799.123	1798.619	1798.115	1797.611	1797.107	1796.603	1796.099	1795.595	1795.091	1794.587	1794.083	1793.579	1793.075	1792.571	1792.067	1791.563	1791.059	1790.555	1790.051	1789.547	1789.043	1788.539	1788.035	1787.531	1787.027	1786.523	1786.019	1785.515	1785.011	1784.507	1784.003	1783.499	1782.995	1782.491	1781.987	1781.483	1780.979	1780.475	1779.971	1779.467	1778.963	1778.459	1777.955	1777.451	1776.947	1776.443	1775.939	1775.435	1774.931	1774.427	1773.923	1773.419	1772.915	1772.411	1771.907	1771.403	1770.899	1770.395	1769.891	1769.387	1768.883	1768.379	1767.875	1767.371	1766.867	1766.363	1765.859	1765.355	1764.851	1764.347	1763.843	1763.339	1762.835	1762.331	1761.827	1761.323	1760.819	1760.315	1759.811	1759.307	1758.803	1758.299	1757.795	1757.291	1756.787	1756.283	1755.779	1755.275	1754.771	1754.267	1753.763	1753.259	1752.755	1752.251	1751.747	1751.243	1750.739	1750.235	1749.731	1749.227	1748.723	1748.219	1747.715	1747.211	1746.707	1746.203	1745.699	1745.195	1744.691	1744.187	1743.683	1743.179	1742.675	1742.171	1741.667	1741.163	1740.659	1740.155	1739.651	1739.147	1738.643	1738.139	1737.635	1737.131	1736.627	1736.123	1735.619	1735.115	1734.611	1734.107	1733.603	1733.099	1732.595	1732.091	1731.587	1731.083	1730.579	1730.075	1729.571	1729.067	1728.563	1728.059	1727.555	1727.051	1726.547	1726.043	1725.539	1725.035	1724.531	1724.027	1723.523	1723.019	1722.515	1722.011	1721.507	1721.003	1720.499	1719.995	1719.491	1718.987	1718.483	1717.979	1717.475	1716.971	1716.467	1715.963	1715.459	1714.955	1714.451	1713.947	1713.443	1712.939	1712.435	1711.931	1711.427	1710.923	1710.419	1709.915	1709.411	1708.907	1708.403	1707.899	1707.395	1706.891	1706.387	1705.883	1705.379	1704.875	1704.371	1703.867	1703.363	1702.859	1702.355	1701.851	1701.347	1700.843	1700.339	1699.835	1699.331	1698.827	1698.323	1697.819	1697.315	1696.811	1696.307	1695.803	1695.299	1694.795	1694.291	1693.787	1693.283	1692.779	1692.275	1691.771	1691.267	1690.763	1690.259	1689.755	1689.251	1688.747	1688.243	1687.739	1687.235	1686.731	1686.227	1685.723	1685.219	1684.715	1684.211	1683.707	1683.203	1682.699	1682.195	1681.691	1681.187	1680.683	1680.179	1679.675	1679.171	1678.667	1678.163	1677.659	1677.155	1676.651	1676.147	1675.643	1675.139	1674.635	1674.131	1673.627	1673.123	1672.619	1672.115	1671.611	1671.107	1670.603	1670.099	1669.595	1669.091	1668.587	1668.083	1667.579	1667.075	1666.571	1666.067	1665.563	1665.059	1664.555	1664.051	1663.547	1663.043	1662.539	1662.035	1661.531	1661.027	1660.523	1660.019	1659.515	1659.011	1658.507	1658.003	1657.499	1656.995	1656.491	1655.987	1655.483	1654.979	1654.475	1653.971	1653.467	1652.963	1652.459	1651.955	1651.451	1650.947	1650.443	1649.939	1649.435	1648.931	1648.427	1647.923	1647.419	1646.915	1646.411	1645.907	1645.403	1644.899	1644.395	1643.891	1643.387	1642.883	1642.379	1641.875	1641.371	1640.867	1640.363	1639.859	1639.355	1638.851	1638.347	1637.843	1637.339	1636.835	1636.331	1635.827	1635.323	1634.819	1634.315	1633.811	1633.307	1632.803	1632.299	1631.795	1631.291	1630.787	1630.283	1629.779	1629.275	1628.771	1628.267	1627.763	1627.259	1626.755	1626.251	1625.747	1625.243	1624.739	1624.235	1623.731	1623.227	1622.723	1622.219	1621.715	1621.211	1620.707	1620.203	1619.699	1619.195	1618.691	1618.187	1617.683	1617.179	1616.675	1616.171	1615.667	1615.163	1614.659	1614.155	1613.651	1613.147	1612.643	1612.139	1611.635	1611.131	1610.627	1610.123	1609.619	1609.115	1608.611	1608.107	1607.603	1607.099	1606.595	1606.091	1605.587	1605.083	1604.579	1604.075	1603.571	1603.067	1602.563	1602.059	1601.555	1601.051	1600.547	1600.043	1599.539	1599.035	1598.531	1598.027	1597.523	1597.019	1596.515	1596.011	1595.507	1595.003	1594.499	1593.995	1593.491	1592.987	1592.483	1591.979	1591.475	1590.971	1590.467	1589.963	1589.459	1588.955	1588.451	1587.947	1587.443	1586.939	1586.435	1585.931	1585.427	1584.923	1584.419	1583.915	1583.411	1582.907	1582.403	1581.899	1581.395	1580.891	1580.387	1579.883	1579.379	1578.875	1578.371	1577.867	1577.363	1576.859	1576.355	1575.851	1575.347	1574.843	1574.339	1573.835	1573.331	1572.827	1572.323	1571.819	1571.315	1570.811	1570.307	1569.803	1569.299	1568.795	1568.291	1567.787	1567.283	1566.779	1566.275	1565.771	1565.267	1564.763	1564.259	1563.755	1563.251	1562.747	1562.243	1561.739	1561.235	1560.731	1560.227	1559.723	1559.219	1558.715	1558.211	1557.707	1557.203	1556.699	1556.195	1555.691	1555.187	1554.683	1554.179	1553.675	1553.171	1552.667	1552.163	1551.659	1551.155	1550.651	1550.147	1549.643	1549.139	1548.635	1548.131	1547.627	1547.123	1546.619	1546.115	1545.611	1545.107	1544.603	1544.099	1543.595	1543.091	1542.587	1542.083	1541.579	1541.075	1540.571	1540.067	1539.563	1539.059	1538.555	1538.051	1537.547	1537.043	1536.539	1536.035	1535.531	1535.027	1534.523	1534.019	1533.515	1533.011	1532.507	1532.003	1531.499	1530.995	1530.491	1529.987	1529.483	1528.979	1528.475	1527.971	1527.467	1526.963	1526.459	1525.955	1525.451	1524.947	1524.443	1523.939	1523.435	1522.931	1522.427	1521.923	1521.419	1520.915	1520.411	1519.907	1519.403	1518.899	1518.395	1517.891	1517.387	1516.883	1516.379	1515.875	1515.371	1514.867	1514.363	1513.859	1513.355	1512.851	1512.347	1511.843	1511.339	1510.835	1510.331	1509.827	1509.323	1508.819	1508.315	1507.811	1507.307	1506.803	1506.299	1505.795	1505.291	1504.787	1504.283	1503.779	1503.275	1502.771	1502.267	1501.763	1501.259	1500.755	1500.251	1499.747	1499.243	1498.739	1498.235	1497.731	1497.227	1496.723	1496.219	1495.715	1495.211	1494.707	1494.203	1493.699	1493.195	1492.691	1492.187	1491.683	1491.179	1490.675	1490.171	1489.667	1489.163	1488.659	1488.155	1487.651	1487.147	1486.643	1486.139	1485.635	1485.131	1484.627	1484.123	1483.619	1483.115	1482.611	1482.107	1481.603	1481.099	1480.595	1480.091	1479.587	1479.083	1478.579	1478.075	1477.571	1477.067	1476.563	1476.059	1475.555	1475.051	1474.547	1474.043	1473.539	1473.035	1472.531	1472.027	1471.523	1471.019	1470.515	1470.011	1469.507	1469.003	1468.499	1467.995	1467.491	1466.987	1466.483	1465.979	1465.475	1464.971	1464.467	1463.963	1463.459	1462.955	1462.451	1461.947	1461.443	1460.939	1460.435	1459.931	1459.427	1458.923	1458.419	1457.915	1457.411	1456.907	1456.403	1455.899	1455.395	1454.891	1454.387	1453.883	1453.379	1452.875	1452.371	1451.867
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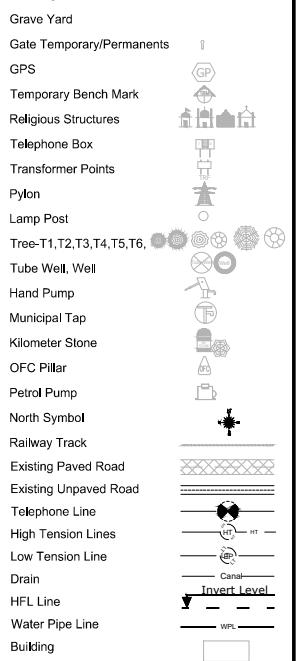
VAILOO

DONIPAWA

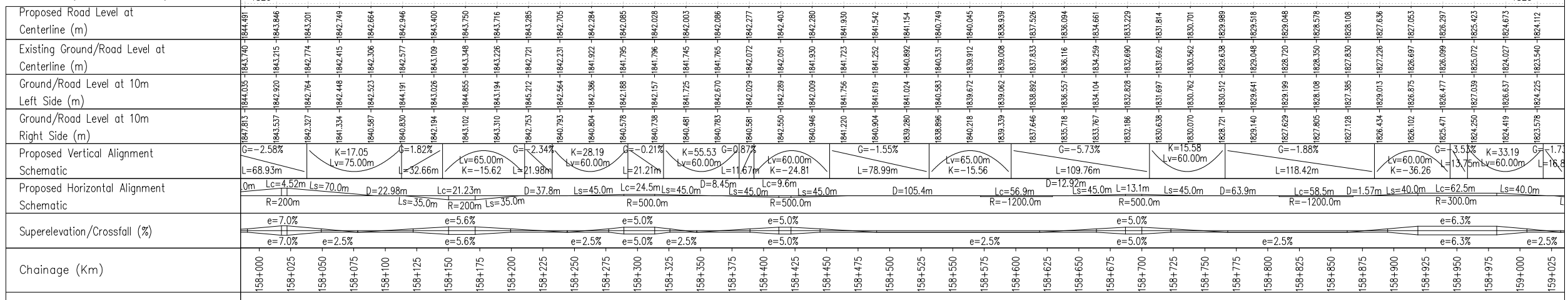


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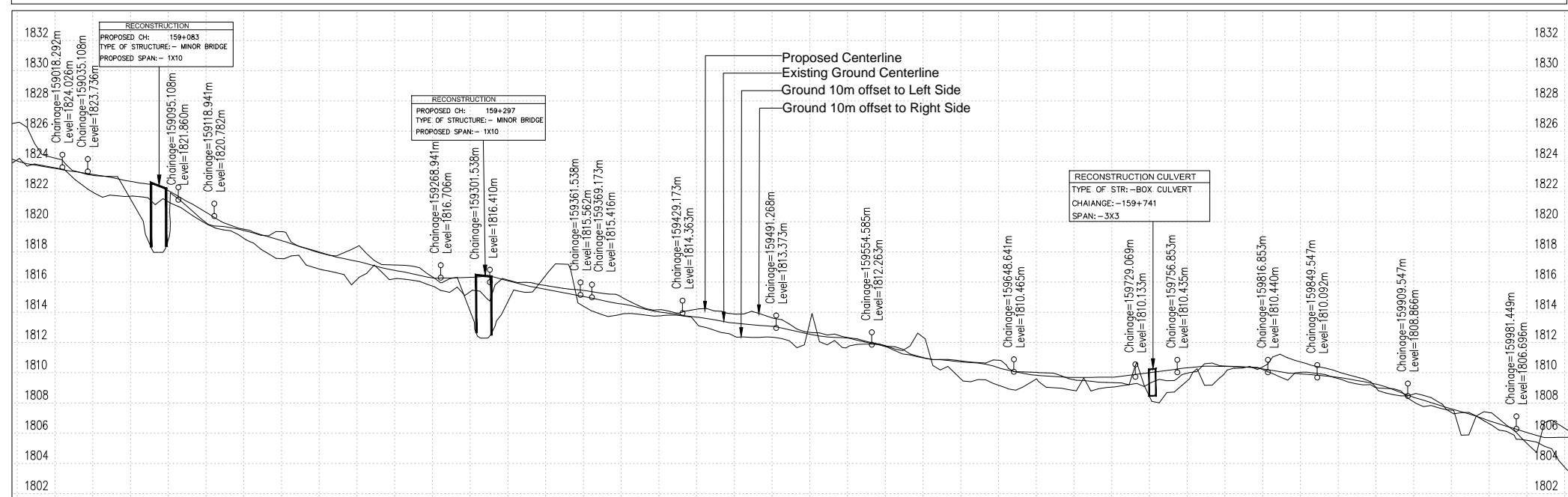
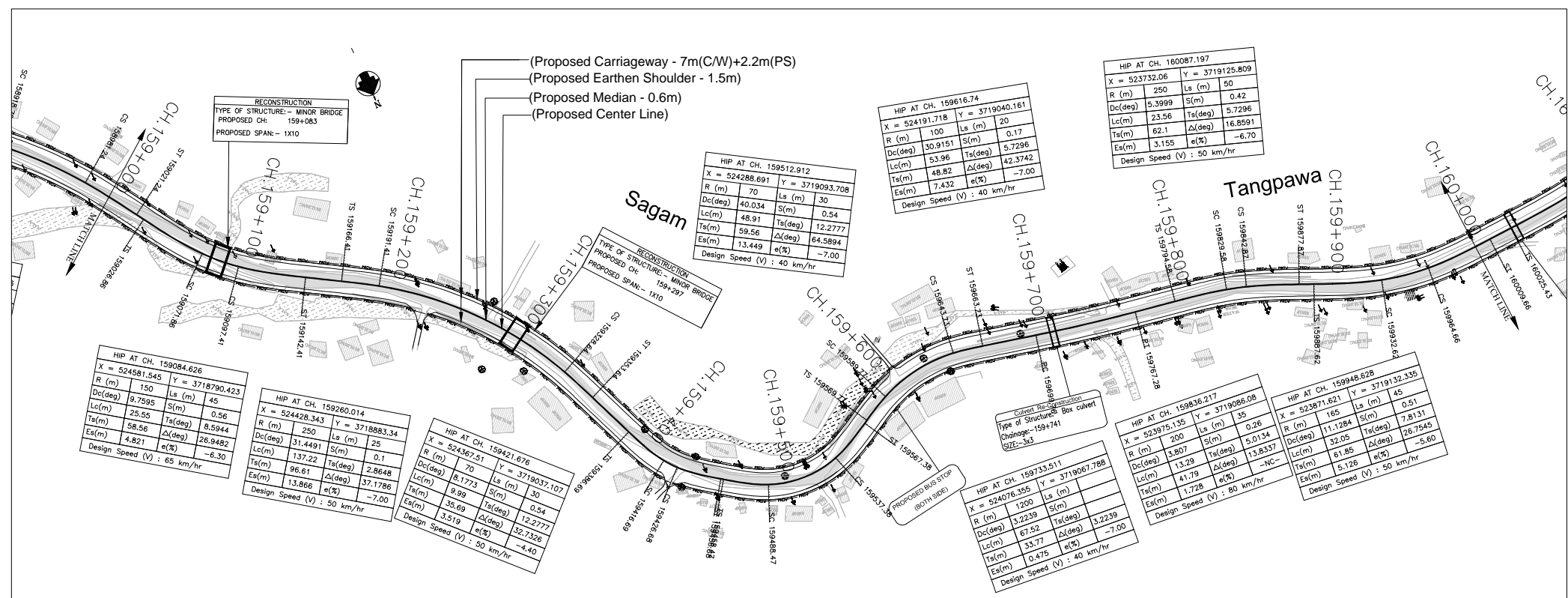
- Proposed Center Line
- Proposed Median
- Proposed Carriageway Edge
- Proposed Service Road
- Proposed Toe Line
- Proposed Right of Way
- Existing Right of Way
- Proposed Box Culvert
- Proposed HP Culvert
- Proposed Slab Culvert
- Proposed Vehicular Underpass
- Proposed Tunnel
- Proposed Cattle Underpass
- Proposed Bridge/ROB
- Toe Wall
- Retaining Wall / Breast Wall
- Grave Yard
- Gate Temporary/Permanents
- GPS
- Temporary Bench Mark
- Religious Structures
- Telephone Box
- Transformer Points
- Pylon
- Lamp Post
- Tree-T1,T2,T3,T4,T5,T6
- Tube Well
- Hand Pump
- Municipal Tap
- Kilometer Stone
- OFC Pillar
- Petrol Pump
- North Symbol
- Railway Track
- Existing Paved Road
- Existing Unpaved Road
- Telephone Line
- High Tension Lines
- Low Tension Line
- Drain
- HFL Line
- Water Pipe Line
- Building


































(DATUM - 1820)






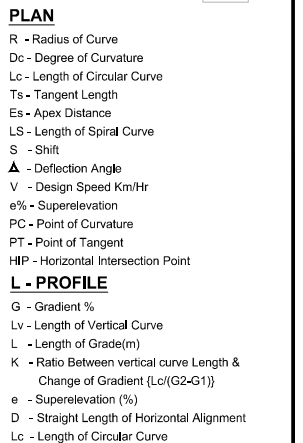
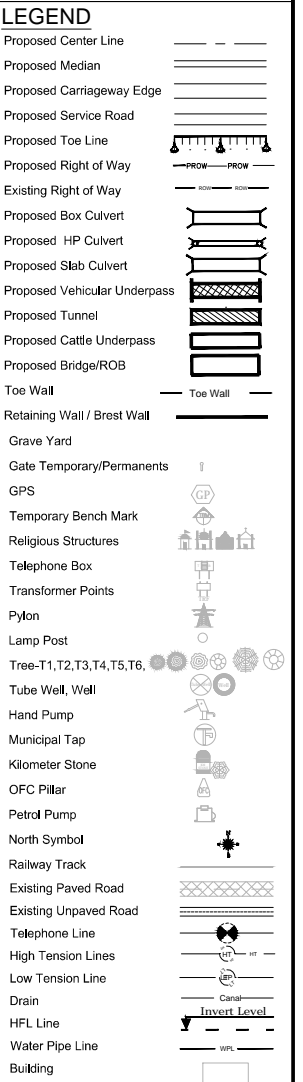
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	Project	Drawing Title
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishwar - Chattroo - Khanabal Section of NH 244.
					Scale :- H:-1.2500 V:-1.250	Plan & Profile (km.158+000 to km.159+000)
						Drawing No. NHIDCL/NH-244-PACK-I/PP/11/R0






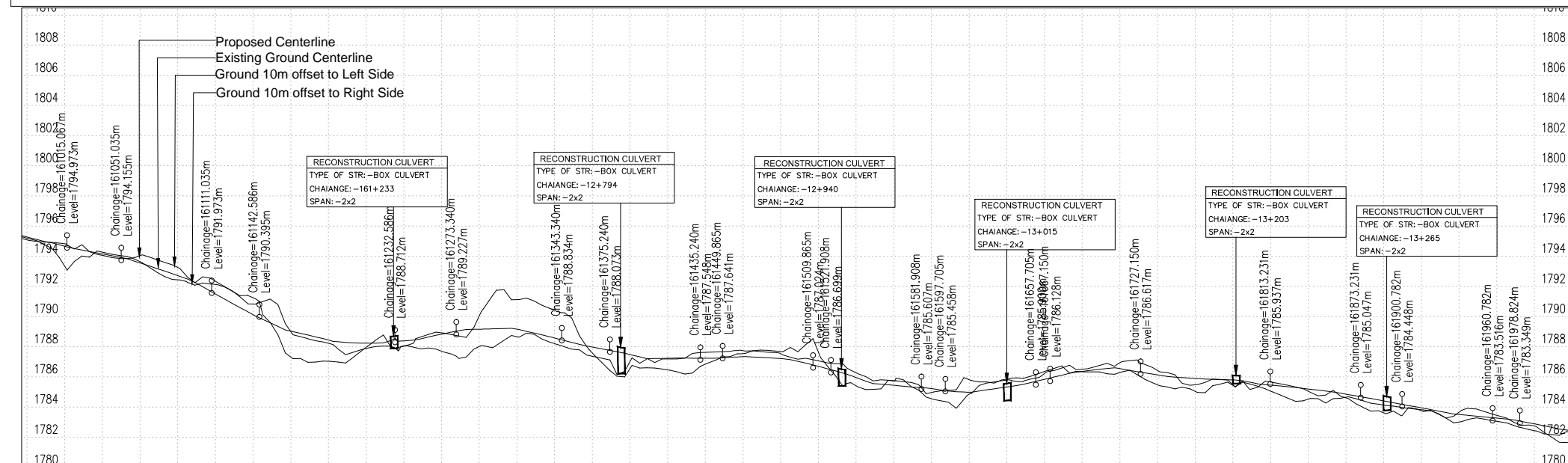
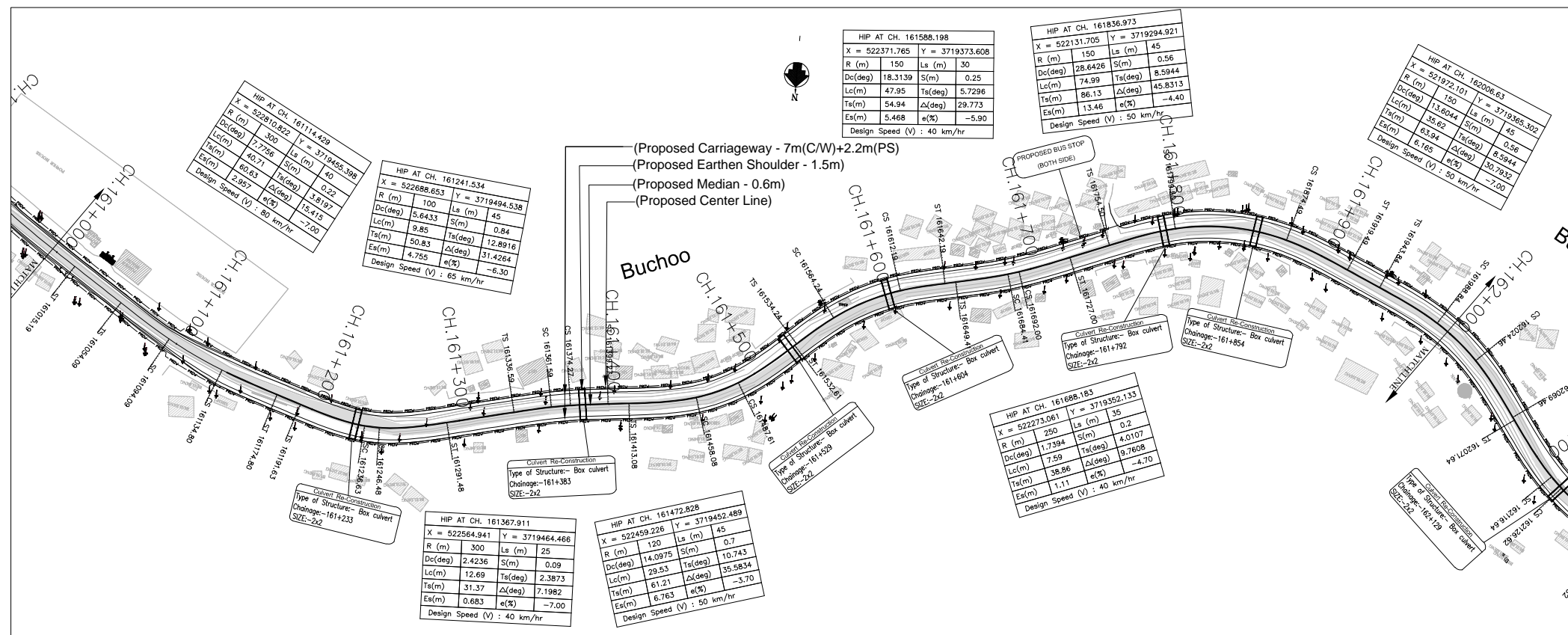
LEGEND	
Proposed Center Line	— — — — —
Proposed Median	=====
Proposed Carriageway Edge	=====
Proposed Service Road	=====
Proposed Toe Line	=====
Proposed Right of Way	=====
Existing Right of Way	=====
Proposed Box Culvert	
Proposed HP Culvert	
Proposed Slab Culvert	
Proposed Vehicular Underpass	
Proposed Tunnel	
Proposed Cattle Underpass	
Proposed Bridge/ROB	
Toe Wall	— Toe Wall —
Retaining Wall / Breast Wall	=====
Grave Yard	
Gate Temporary/Permanents	
GPS	
Temporary Bench Mark	
Religious Structures	
Telephone Box	
Transformer Points	
Pylon	
Lamp Post	
Tree-T1,T2,T3,T4,T5,T6,	
Tube Well, Well	
Hand Pump	
Municipal Tap	
Kilometer Stone	
OFC Pillar	
Petrol Pump	
North Symbol	
Railway Track	=====
Existing Paved Road	
Existing Unpaved Road	
Telephone Line	
High Tension Lines	
Low Tension Line	
Drain	
HFL Line	
Water Pipe Line	
Building	
PLAN	
R - Radius of Curve	
Dc - Degree of Curvature	
Lc - Length of Circular Curve	
Ts - Tangent Length	
Es - Apex Distance	
LS - Length of Spiral Curve	
S - Shift	
Δ - Deflection Angle	
V - Design Speed Km/Hr	
e% - Superelevation	
PC - Point of Curvature	
PT - Point of Tangent	
HP - Horizontal Intersection Point	
L - PROFILE	
G - Gradient %	
Lv - Length of Vertical Curve	
L - Ratio of Grade(m)	
K - Length Between vertical curve Length & Change of Gradient (Lc(G2-G1))	
e - Superelevation (%)	
D - Straight Length of Horizontal Alignment	
Lc - Length of Circular Curve	



Stationing	Proposed Road Level at Centerline (m)	Existing Ground/Road Level at Centerline (m)	Ground/Road Level at 10m Left Side (m)	Ground/Road Level at 10m Right Side (m)	Proposed Vertical Alignment Schematic	Proposed Horizontal Alignment Schematic	Superelevation/Crossfall (%)	Chainage (Km)
159+000	1824.027	1824.027	1824.419	1824.419				159+000
159+005	1823.540	1823.540	1823.578	1823.578				159+005
159+010	1823.139	1823.139	1822.971	1822.971				159+010
159+015	1822.674	1822.674	1822.687	1822.687				159+015
159+020	1822.273	1822.273	1822.316	1822.316				159+020
159+025	1821.826	1821.826	1821.867	1821.867				159+025
159+030	1821.428	1821.428	1821.449	1821.449				159+030
159+035	1821.033	1821.033	1821.054	1821.054				159+035
159+040	1819.511	1819.511	1819.574	1819.574				159+040
159+045	1818.991	1818.991	1818.954	1818.954				159+045
159+050	1818.503	1818.503	1818.473	1818.473				159+050
159+055	1818.003	1818.003	1818.057	1818.057				159+055
159+060	1817.516	1817.516	1817.567	1817.567				159+060
159+065	1817.026	1817.026	1817.049	1817.049				159+065
159+070	1816.538	1816.538	1816.592	1816.592				159+070
159+075	1816.048	1816.048	1816.099	1816.099				159+075
159+080	1815.558	1815.558	1815.592	1815.592				159+080
159+085	1815.068	1815.068	1815.101	1815.101				159+085
159+090	1814.578	1814.578	1814.613	1814.613				159+090
159+095	1814.088	1814.088	1814.121	1814.121				159+095
159+100	1813.598	1813.598	1813.631	1813.631				159+100
159+105	1813.108	1813.108	1813.141	1813.141				159+105

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA  NHIDCL BUILDING INFRASTRUCTURE - BUILDING THE NATION	CONSULTANT:  Rodici  MONARCH In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd. ,	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.				
R0	OCT.2020				Designed:		Scale :- H:- 1.2500 V:- 1.250		Drawing Title	Plan & Profile (km.159+000 to km.160+000)			
					Drawn:								
					Checked:								
					Approved:								
								Date:	Project No.	Drawing No.			
								OCT -2020	1564	NHIDCL/NH-244-PACK-II/P&P/ 12/R0			



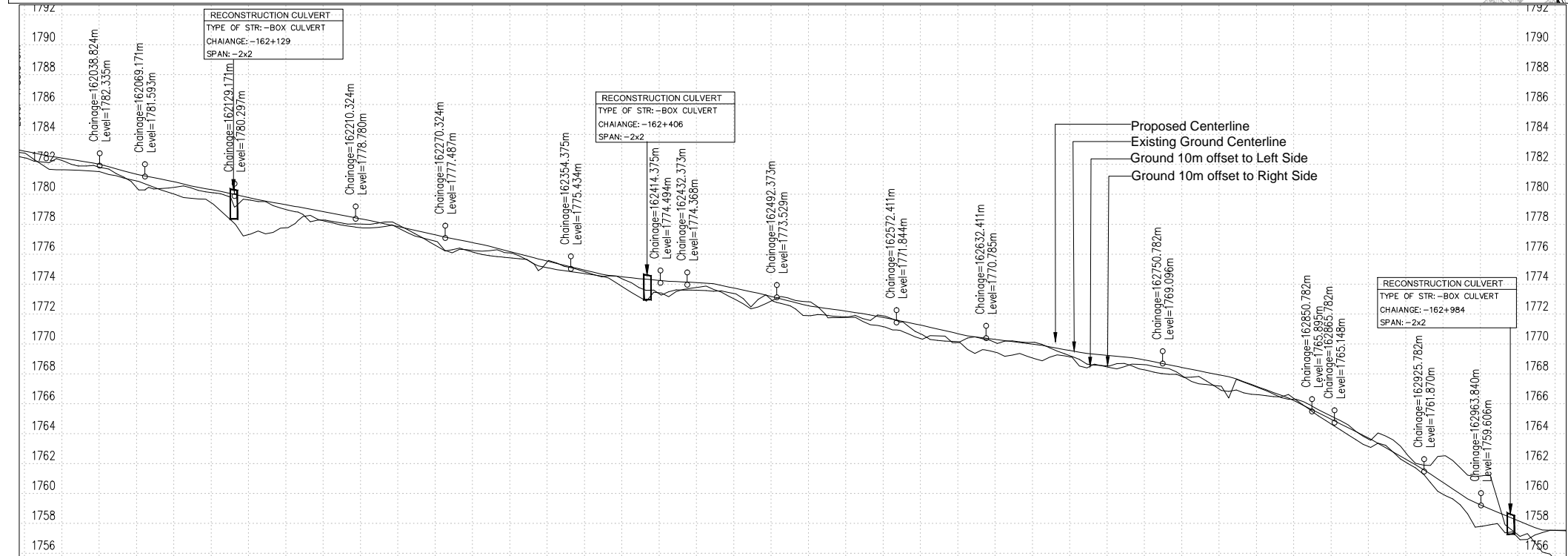
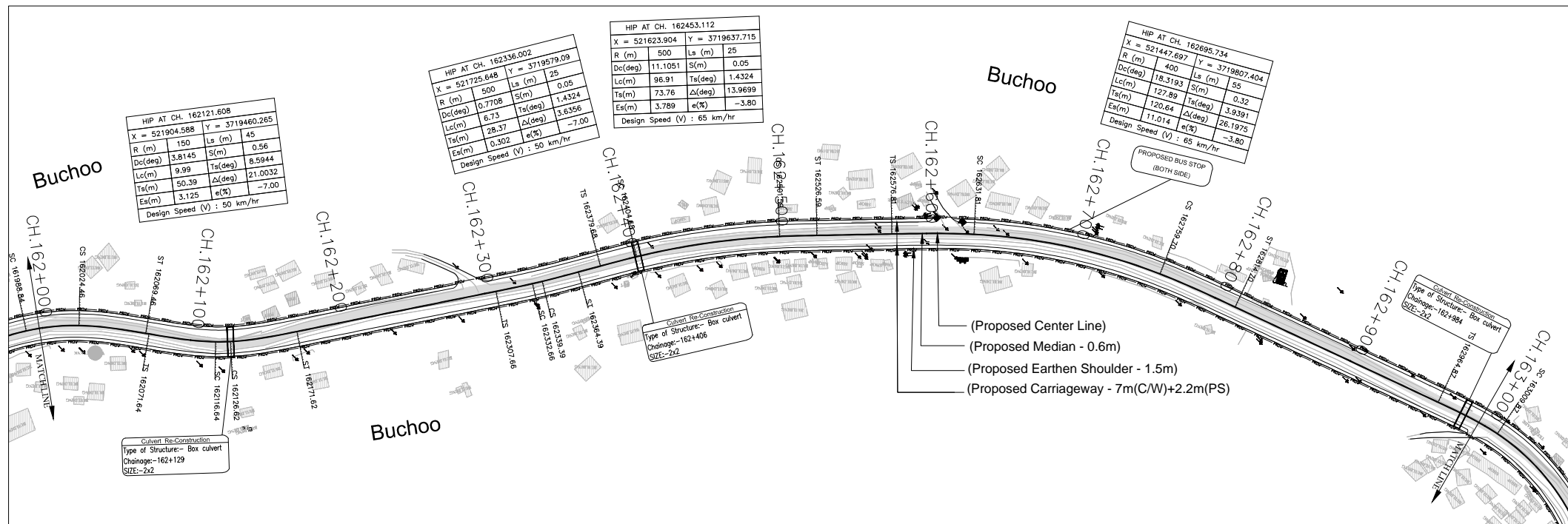
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div></div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd. ,</div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT.2020				<div>Designed:</div> <div>Drawn:</div> <div>Checked:</div> <div>Approved:</div>	<div>Scale :-</div> <div>H:-1.2500</div> <div>V:-1.250</div>		Drawing Title	Plan & Profile (km. 160+000 to km.161+000)		
									<div>Date:</div> <div>OCT -2020</div>	<div>Project No.</div> <div>1564</div>	<div>Drawing No.</div> <div>NHIDCLNH-244-PACK-II/P&P/ 13(R)</div>

[illegible]

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
RO	OCT.2020		<div><p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p></div>	<div><p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</p><p>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.</p></div>	<div>Designed: <input type="text"/></div> <div>Drawn: <input type="text"/></div> <div>Checked: <input type="text"/></div> <div>Approved: <input type="text"/></div> <div>Scale :- H:-1.2500 V:-1.250</div>			Project	<div>Plan & Profile (km.161+000 to km.162+000)</div> <div><div>Date: <input type="text"/></div><div>Project No: <input type="text"/></div><div>Drawing No: <input type="text"/></div></div> <div><div>Scale: 1:1000</div><div>Date: 24.08.2020</div><div>No. 14/BN</div></div>			
												Drawing Title

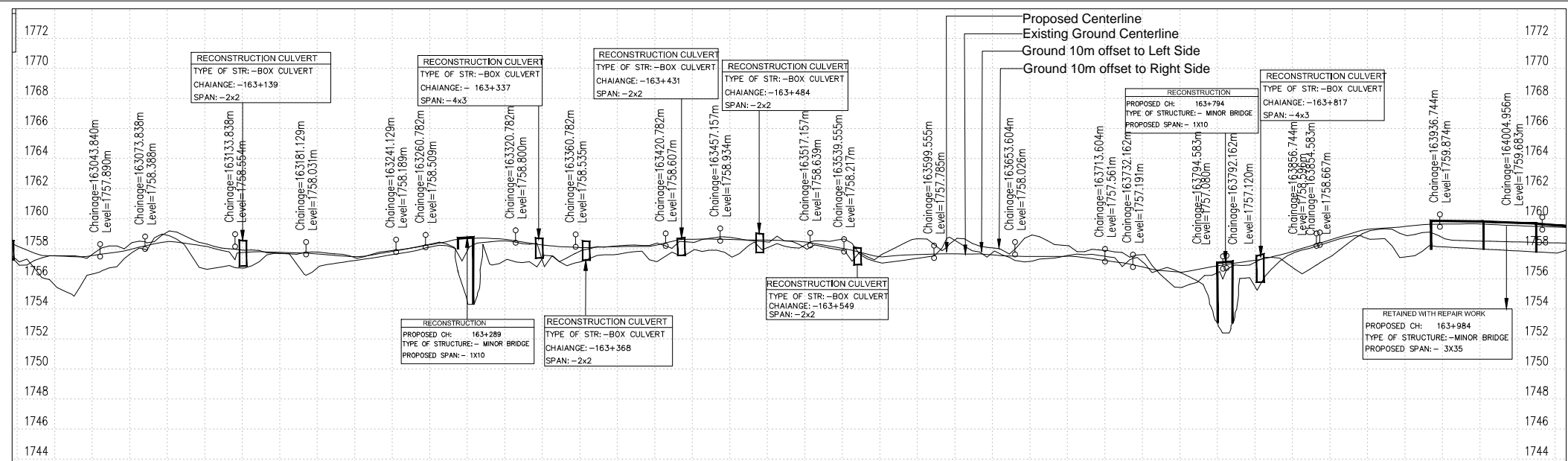
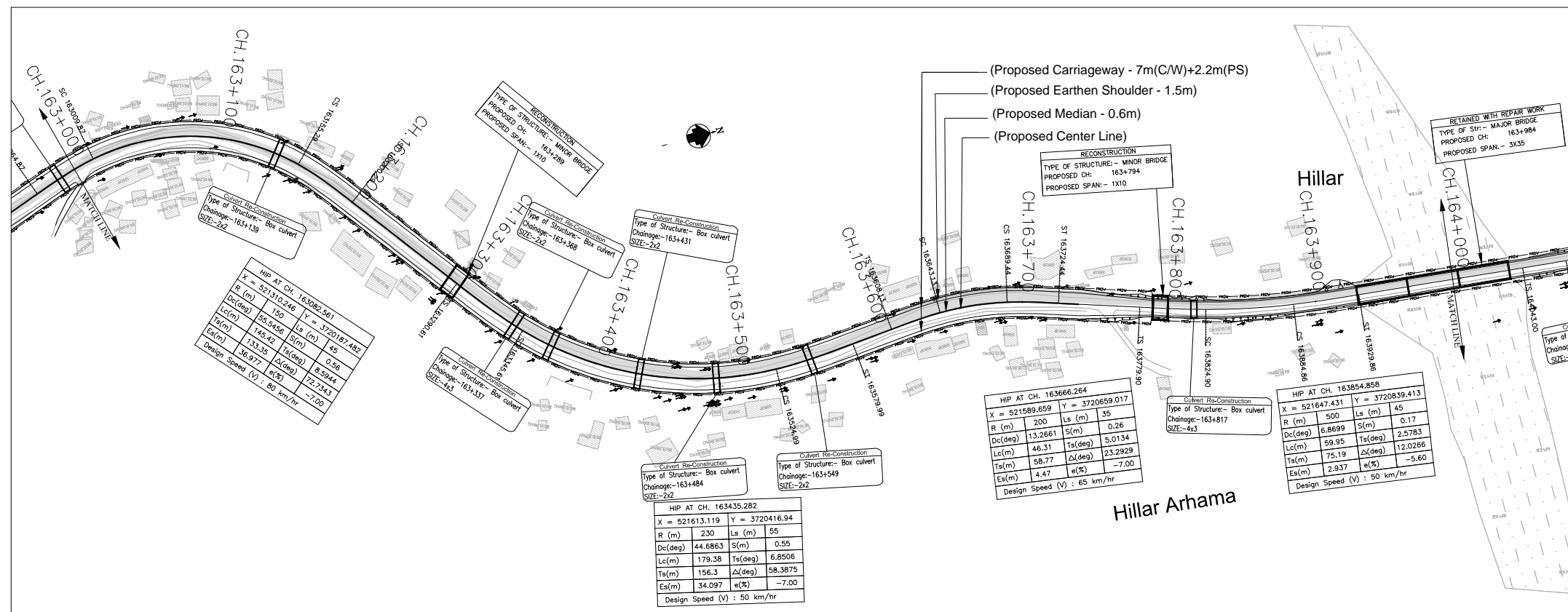
VAILOO




DONIPAWA

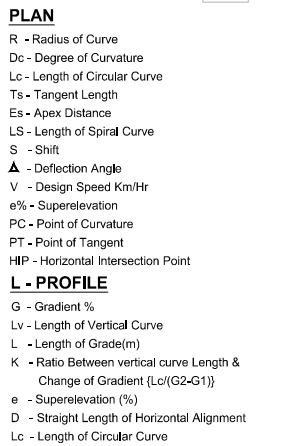
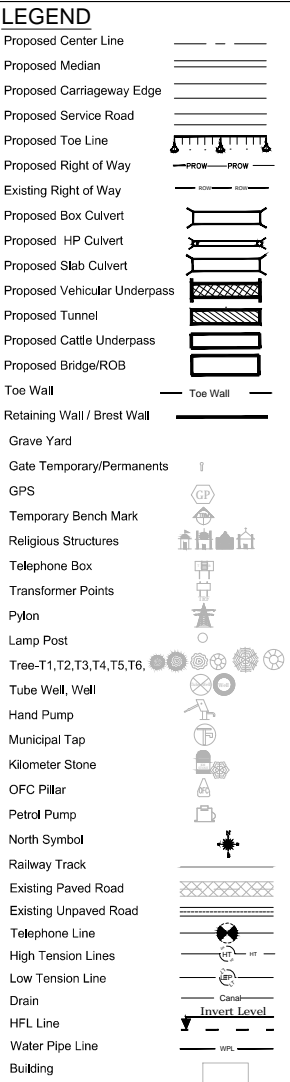


(DATUM - 1756)

Proposed Road Level at Centerline (m)	1783.247	1782.894	1782.433	1782.017	1781.535	1781.136	1780.601	1780.122	1779.796	1779.431	1779.031	1787.719	1778.214	1777.856	1777.487	1777.112	1776.732	1776.348	1775.960	1775.568	1775.172	1774.772	1774.368	1773.959	1773.546	1773.129	1772.708	1772.283	1771.854	1771.421	1770.984	1770.543	1770.098	1769.649	1769.196	1768.739	1768.278	1767.813	1767.344	1766.871	1766.394	1765.913	1765.428	1764.939	1764.446	1763.946	1763.441	1762.933	1762.422	1761.908	1761.391	1760.871	1760.348	1759.822	1759.291	1758.756	1758.218	1757.677	1757.133	1756.586	1756.036	1755.483	1754.927	1754.368	1753.806	1753.241	1752.673	1752.102	1751.528	1750.951	1750.372	1749.790	1749.204	1748.615	1748.023	1747.428	1746.830	1746.229	1745.625	1745.018	1744.409	1743.797	1743.182	1742.564	1741.943	1741.319	1740.692	1740.063	1739.431	1738.796	1738.159	1737.519	1736.876	1736.231	1735.583	1734.933	1734.280	1733.624	1732.965	1732.304	1731.641	1730.976	1730.309	1729.640	1728.969	1728.296	1727.621	1726.945	1726.267	1725.588	1724.907	1724.224	1723.539	1722.853	1722.165	1721.476	1720.786	1720.094	1719.400	1718.705	1718.009	1717.312	1716.614	1715.915	1715.215	1714.514	1713.812	1713.109	1712.405	1711.700	1711.000	1710.300	1709.600	1708.900	1708.200	1707.500	1706.800	1706.100	1705.400	1704.700	1704.000	1703.300	1702.600	1701.900	1701.200	1700.500	1699.800	1699.100	1698.400	1697.700	1697.000	1696.300	1695.600	1694.900	1694.200	1693.500	1692.800	1692.100	1691.400	1690.700	1690.000	1689.300	1688.600	1687.900	1687.200	1686.500	1685.800	1685.100	1684.400	1683.700	1683.000	1682.300	1681.600	1680.900	1680.200	1679.500	1678.800	1678.100	1677.400	1676.700	1676.000	1675.300	1674.600	1673.900	1673.200	1672.500	1671.800	1671.100	1670.400	1669.700	1669.000	1668.300	1667.600	1666.900	1666.200	1665.500	1664.800	1664.100	1663.400	1662.700	1662.000	1661.300	1660.600	1659.900	1659.200	1658.500	1657.800	1657.100	1656.400	1655.700	1655.000	1654.300	1653.600	1652.900	1652.200	1651.500	1650.800	1650.100	1649.400	1648.700	1648.000	1647.300	1646.600	1645.900	1645.200	1644.500	1643.800	1643.100	1642.400	1641.700	1641.000	1640.300	1639.600	1638.900	1638.200	1637.500	1636.800	1636.100	1635.400	1634.700	1634.000	1633.300	1632.600	1631.900	1631.200	1630.500	1629.800	1629.100	1628.400	1627.700	1627.000	1626.300	1625.600	1624.900	1624.200	1623.500	1622.800	1622.100	1621.400	1620.700	1620.000	1619.300	1618.600	1617.900	1617.200	1616.500	1615.800	1615.100	1614.400	1613.700	1613.000	1612.300	1611.600	1610.900	1610.200	1609.500	1608.800	1608.100	1607.400	1606.700	1606.000	1605.300	1604.600	1603.900	1603.200	1602.500	1601.800	1601.100	1600.400	1599.700	1599.000	1598.300	1597.600	1596.900	1596.200	1595.500	1594.800	1594.100	1593.400	1592.700	1592.000	1591.300	1590.600	1589.900	1589.200	1588.500	1587.800	1587.100	1586.400	1585.700	1585.000	1584.300	1583.600	1582.900	1582.200	1581.500	1580.800	1580.100	1579.400	1578.700	1578.000	1577.300	1576.600	1575.900	1575.200	1574.500	1573.800	1573.100	1572.400	1571.700	1571.000	1570.300	1569.600	1568.900	1568.200	1567.500	1566.800	1566.100	1565.400	1564.700	1564.000	1563.300	1562.600	1561.900	1561.200	1560.500	1559.800	1559.100	1558.400	1557.700	1557.000	1556.300	1555.600	1554.900	1554.200	1553.500	1552.800	1552.100	1551.400	1550.700	1550.000	1549.300	1548.600	1547.900	1547.200	1546.500	1545.800	1545.100	1544.400	1543.700	1543.000	1542.300	1541.600	1540.900	1540.200	1539.500	1538.800	1538.100	1537.400	1536.700	1536.000	1535.300	1534.600	1533.900	1533.200	1532.500	1531.800	1531.100	1530.400	1529.700	1529.000	1528.300	1527.600	1526.900	1526.200	1525.500	1524.800	1524.100	1523.400	1522.700	1522.000	1521.300	1520.600	1519.900	1519.200	1518.500	1517.800	1517.100	1516.400	1515.700	1515.000	1514.300	1513.600	1512.900	1512.200	1511.500	1510.800	1510.100	1509.400	1508.700	1508.000	1507.300	1506.600	1505.900	1505.200	1504.500	1503.800	1503.100	1502.400	1501.700	1501.000	1500.300	1499.600	1498.900	1498.200	1497.500	1496.800	1496.100	1495.400	1494.700	1494.000	1493.300	1492.600	1491.900	1491.200	1490.500	1489.800	1489.100	1488.400	1487.700	1487.000	1486.300	1485.600	1484.900	1484.200	1483.500	1482.800	1482.100	1481.400	1480.700	1480.000	1479.300	1478.600	1477.900	1477.200	1476.500	1475.800	1475.100	1474.400	1473.700	1473.000	1472.300	1471.600	1470.900	1470.200	1469.500	1468.800	1468.100	1467.400	1466.700	1466.000	1465.300	1464.600	1463.900	1463.200	1462.500	1461.800	1461.100	1460.400	1459.700	1459.000	1458.300	1457.600	1456.900	1456.200	1455.500	1454.800	1454.100	1453.400	1452.700	1452.000	1451.300	1450.600	1449.900	1449.200	1448.500	1447.800	1447.100	1446.400	1445.700	1445.000	1444.300	1443.600	1442.900	1442.200	1441.500	1440.800	1440.100	1439.400	1438.700	1438.000	1437.300	1436.600	1435.900	1435.200	1434.500	1433.800	1433.100	1432.400	1431.700	1431.000	1430.300	1429.600	1428.900	1428.200	1427.500	1426.800	1426.100	1425.400	1424.700	1424.000	1423.300	1422.600	1421.900	1421.200	1420.500	1419.800	1419.100	1418.400	1417.700	1417.000	1416.300	1415.600	1414.900	1414.200	1413.500	1412.800	1412.100	1411.400	1410.700	1410.000	1409.300	1408.600	1407.900	1407.200	1406.500	1405.800	1405.100	1404.400	1403.700	1403.000	1402.300	1401.600	1400.900	1400.200	1399.500	1398.800	1398.100	1397.400	1396.700	1396.000	1395.300	1394.600	1393.900	1393.200	1392.500	1391.800	1391.100	1390.400	1389.700	1389.000	1388.300	1387.600	1386.900	1386.200	1385.500	1384.800	1384.100	1383.400	1382.700	1382.000	1381.300	1380.600	1379.900	1379.200	1378.500	1377.800	1377.100	1376.400	1375.700	1375.000	1374.300	1373.600	1372.900	1372.200	1371.500	1370.800	1370.100	1369.400	1368.700	1368.000	1367.300	1366.600	1365.900	1365.200	1364.500	1363.800	1363.100	1362.400	1361.700	1361.000	1360.300	1359.600	1358.900	1358.200	1357.500	1356.800	1356.100	1355.400	1354.700	1354.000	1353.300	1352.600	1351.900	1351.200	1350.500	1349.800	1349.100	1348.400	1347.700	1347.000	1346.300	1345.600	1344.900	1344.200	1343.500	1342.800	1342.100	1341.400	1340.700	1340.000	1339.300	1338.600	1337.900	1337.200	1336.500	1335.800	1335.100	1334.400	1333.700	1333.000	1332.300	1331.600	1330.900	1330.200	1329.500	1328.800	1328.100	1327.400	1326.700	1326.000	1325.300	1324.600	1323.900	1323.200	1322.500	1321.800	1321.100	1320.400	1319.700	1319.000	1318.300	1317.600	1316.900	1316.200	1315.500	1314.800	1314.100	1313.400	1312.700	1312.000	1311.300	1310.600	1309.900	1309.200	1308.500	1307.800	1307.100	1306.400	1305.700	1305.000	1304.300	1303.600	1302.900	1302.200	1301.500	1300.800	1300.100	1299.400	1298.700	1298.000	1297.300	1296.600	1295.900	1295.200	1294.500	1293.800	1293.100	1292.400	1291.700	1291.000	1290.300	1289.600	1288.900	1288.200	1287.500	1286.800	1286.100	1285.400	1284.700	1284.000	1283.300	1282.600	1281.900	1281.200	1280.500	1279.800	1279.100	1278.400	1277.700	1277.000	1276.300	1275.600	1274.900	1274.200	1273.500	1272.800	1272.100	1271.400	1270.700	1270.000	1269.300	1268.600	1267.900	1267.200	1266.500	1265.800	1265.100	1264.400	1263.700	1263.000	1262.300	1261.600	1260.900	1260.200	1259.500	1258.800	1258.100	1257.400	1256.700	1256.000	1255.300	1254.600	1253.900	1253.200	1252.500	1251.800	1251.100	1250.400	1249.700	1249.000	1248.300	1247.600	1246.900	1246.200	1245.500	1244.800	1244.100	1243.400	1242.700	1242.000	1241.300	1240.600	1239.900	1239.200	1238.500	1237.800	1237.100	1236.400	1235.700	1235.000	1234.300	1233.600	1232.900	1232.200	1231.500	1230.800	1230.100	1229.400	1228.700	1228.000	1227.300	1226.600	1225.900	1225.200	1224.500	1223.800	1223.100	1222.400	1221.700	1221.000	1220.300	1219.600	1218.900	1218.200	1217.500	1216.800	1216.100	1215.400	1214.700	1214.000	1213.300	1212.600	1211.900	1211.200	1210.500	1209.800	1209.100	1208.400	1207.700	1207.000	1206.300	1205.600	1204.900	1204.200	1203.500	1202.800	1202.100	1201.400	1200.700	1200.000	1199.300	1198.600	1197.900	1197.200	1196.500	1195.800	1195.100	1194.400	1193.700	1193.000	1192.300	1191.600	1
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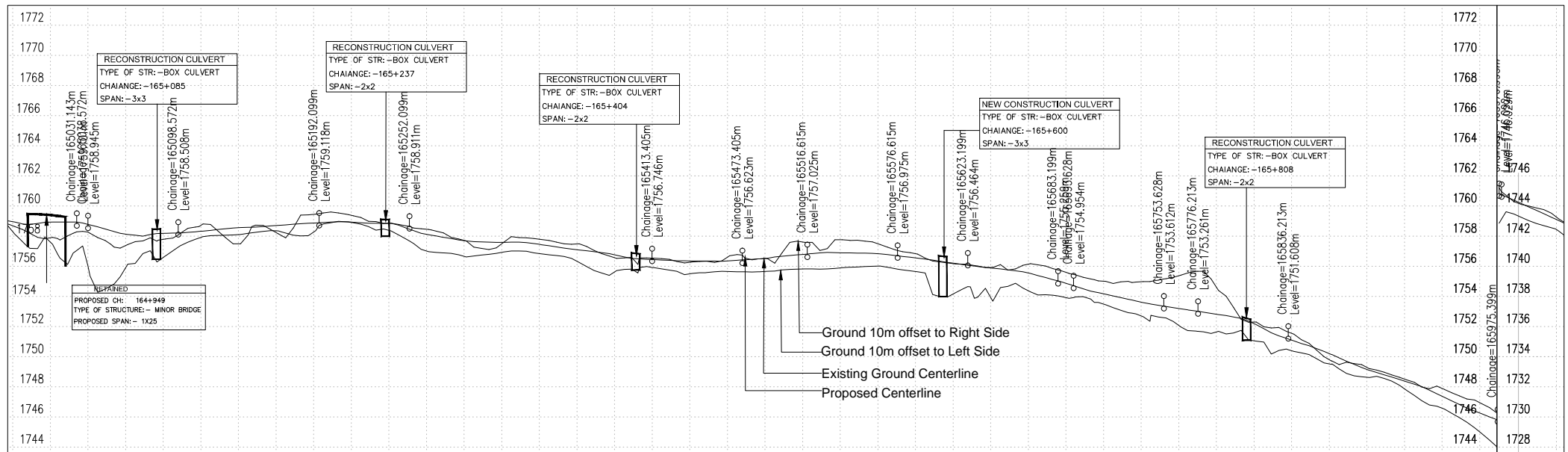
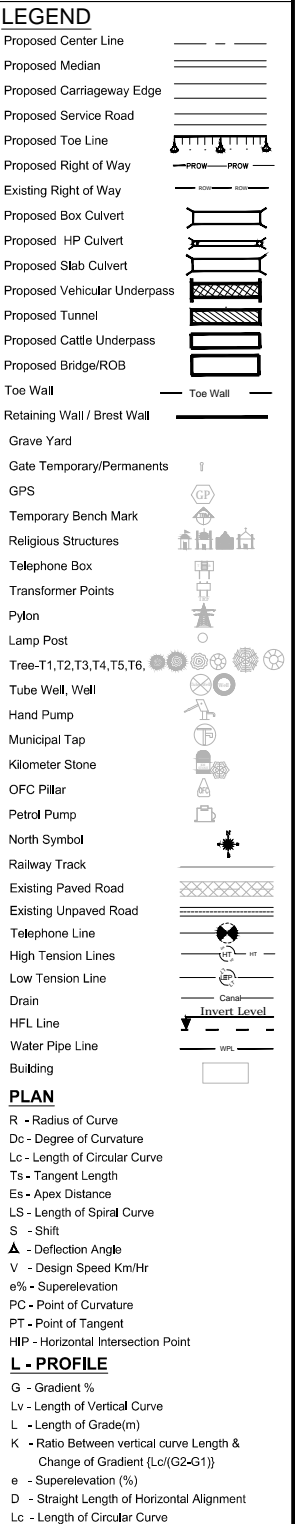
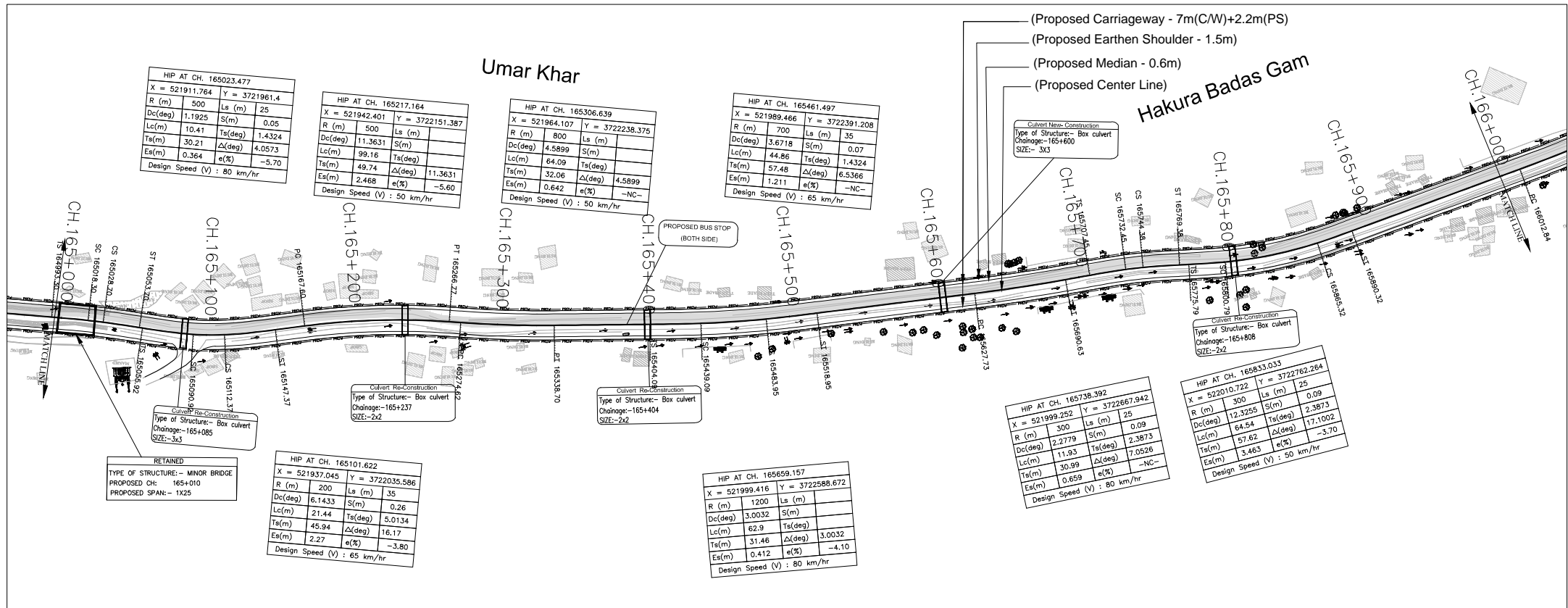
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div></div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroop Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT.2020				<div>Designed:</div> <div>Drawn:</div> <div>Checked:</div> <div>Approved:</div>	Scale :-		Drawing Title	Plan & Profile (km.163+000 to km.164+000)		
					Date				Project No.	Drawing No.	
					OCT - 2020				1564	NHIDCL/NH-244-PACK-II/P&P/ 16/R0	



L - PROFILE

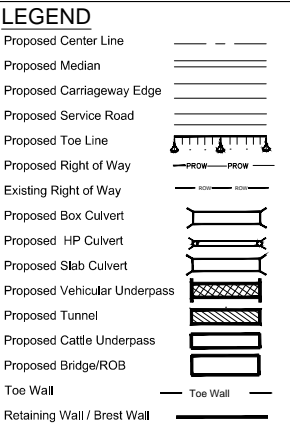
G - Gradient %
 Lv - Length of Vertical Curve
 L - Length of Grade(m)
 K - Ratio Between vertical curve Length &
 Change of Gradient $\{Lc\{(G2-G1)\}$
 e - Superelevation (%)
 d - Straight Length of Horizontal Alignment
 Lc - Length of Circular Curve

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khealani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khealani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT.2020		<div><div><div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div><div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div><div>GOVERNMENT OF INDIA</div></div><div></div></div>	<div></div> <div></div> <div><div>RODIC CONSULTANTS PVT. LTD.</div><div>1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</div><div>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</div></div>	<div>Designed: <div></div></div> <div>Drawn: <div></div></div> <div>Checked: <div></div></div> <div>Approved: <div></div></div> <div>Scale :-<div>H:-1.2500</div><div>V:-1.2500</div></div>			Project			
							Drawing Title	Plan & Profile (km.164+000 to km.165+000)			
								Date	Project No.	Drawing No.	
								OCT_2020	1564	NHIDCL/NH-244-PACK-II/P&P/ 17/R0	






(DATUM - 1744)

Proposed Road Level at Centerline (m)	1758.945 1758.944 1758.943 1758.942 1758.941 1758.940 1758.939 1758.938 1758.937 1758.936 1758.935 1758.934 1758.933 1758.932 1758.931 1758.930 1758.929 1758.928 1758.927 1758.926 1758.925 1758.924 1758.923 1758.922 1758.921 1758.920 1758.919 1758.918 1758.917 1758.916 1758.915 1758.914 1758.913 1758.912 1758.911 1758.910 1758.909 1758.908 1758.907 1758.906 1758.905 1758.904 1758.903 1758.902 1758.901 1758.900 1758.899 1758.898 1758.897 1758.896 1758.895 1758.894 1758.893 1758.892 1758.891 1758.890 1758.889 1758.888 1758.887 1758.886 1758.885 1758.884 1758.883 1758.882 1758.881 1758.880 1758.879 1758.878 1758.877 1758.876 1758.875 1758.874 1758.873 1758.872 1758.871 1758.870 1758.869 1758.868 1758.867 1758.866 1758.865 1758.864 1758.863 1758.862 1758.861 1758.860 1758.859 1758.858 1758.857 1758.856 1758.855 1758.854 1758.853 1758.852 1758.851 1758.850 1758.849 1758.848 1758.847 1758.846 1758.845 1758.844 1758.843 1758.842 1758.841 1758.840 1758.839 1758.838 1758.837 1758.836 1758.835 1758.834 1758.833 1758.832 1758.831 1758.830 1758.829 1758.828 1758.827 1758.826 1758.825 1758.824 1758.823 1758.822 1758.821 1758.820 1758.819 1758.818 1758.817 1758.816 1758.815 1758.814 1758.813 1758.812 1758.811 1758.810 1758.809 1758.808 1758.807 1758.806 1758.805 1758.804 1758.803 1758.802 1758.801 1758.800 1757.999 1757.998 1757.997 1757.996 1757.995 1757.994 1757.993 1757.992 1757.991 1757.990 1757.989 1757.988 1757.987 1757.986 1757.985 1757.984 1757.983 1757.982 1757.981 1757.980 1757.979 1757.978 1757.977 1757.976 1757.975 1757.974 1757.973 1757.972 1757.971 1757.970 1757.969 1757.968 1757.967 1757.966 1757.965 1757.964 1757.963 1757.962 1757.961 1757.960 1757.959 1757.958 1757.957 1757.956 1757.955 1757.954 1757.953 1757.952 1757.951 1757.950 1757.949 1757.948 1757.947 1757.946 1757.945 1757.944 1757.943 1757.942 1757.941 1757.940 1757.939 1757.938 1757.937 1757.936 1757.935 1757.934 1757.933 1757.932 1757.931 1757.930 1757.929 1757.928 1757.927 1757.926 1757.925 1757.924 1757.923 1757.922 1757.921 1757.920 1757.919 1757.918 1757.917 1757.916 1757.915 1757.914 1757.913 1757.912 1757.911 1757.910 1757.909 1757.908 1757.907 1757.906 1757.905 1757.904 1757.903 1757.902 1757.901 1757.900 1757.899 1757.898 1757.897 1757.896 1757.895 1757.894 1757.893 1757.892 1757.891 1757.890 1757.889 1757.888 1757.887 1757.886 1757.885 1757.884 1757.883 1757.882 1757.881 1757.880 1757.879 1757.878 1757.877 1757.876 1757.875 1757.874 1757.873 1757.872 1757.871 1757.870 1757.869 1757.868 1757.867 1757.866 1757.865 1757.864 1757.863 1757.862 1757.861 1757.860 1757.859 1757.858 1757.857 1757.856 1757.855 1757.854 1757.853 1757.852 1757.851 1757.850 1757.849 1757.848 1757.847 1757.846 1757.845 1757.844 1757.843 1757.842 1757.841 1757.840 1757.839 1757.838 1757.837 1757.836 1757.835 1757.834 1757.833 1757.832 1757.831 1757.830 1757.829 1757.828 1757.827 1757.826 1757.825 1757.824 1757.823 1757.822 1757.821 1757.820 1757.819 1757.818 1757.817 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1757.039 1757.038 1757.037 1757.036 1757.035 1757.034 1757.033 1757.032 1757.031 1757.030 1757.029 1757.028 1757.027 1757.026 1757.025 1757.024 1757.023 1757.022 1757.021 1757.020 1757.019 1757.018 1757.017 1757.016 1757.015 1757.014 1757.013 1757.012 1757.011 1757.010 1757.009 1757.008 1757.007 1757.006 1757.005 1757.004 1757.003 1757.002 1757.001 1757.000 1756.999 1756.998 1756.997 1756.996 1756.995 1756.994 1756.993 1756.992 1756.991 1756.990 1756.989 1756.988 1756.987 1756.986 1756.985 1756.984 1756.983 1756.982 1756.981 1756.980 1756.979 1756.978 1756.977 1756.976 1756.975 1756.974 1756.973 1756.972 1756.971 1756.970 1756.969 1756.968 1756.967 1756.966 1756.965 1756.964 1756.963 1756.962 1756.961 1756.960 1756.959 1756.958 1756.957 1756.956 1756.955 1756.954 1756.953 1756.952 1756.951 1756.950 1756.949 1756.948 1756.947 1756.946 1756.945 1756.944 1756.943 1756.942 1756.941 1756.940 1756.939 1756.938 1756.937 1756.936 1756.935 1756.934 1756.933 1756.932 1756.931 1756.930 1756.929 1756.928 1756.927 1756.926 1756.925 1756.924 1756.923 1756.922 1756.921 1756.920 1756.919 1756.918 1756.917 1756.916 1756.915 1756.914 1756.913 1756.912 1756.911 1756.910 																													
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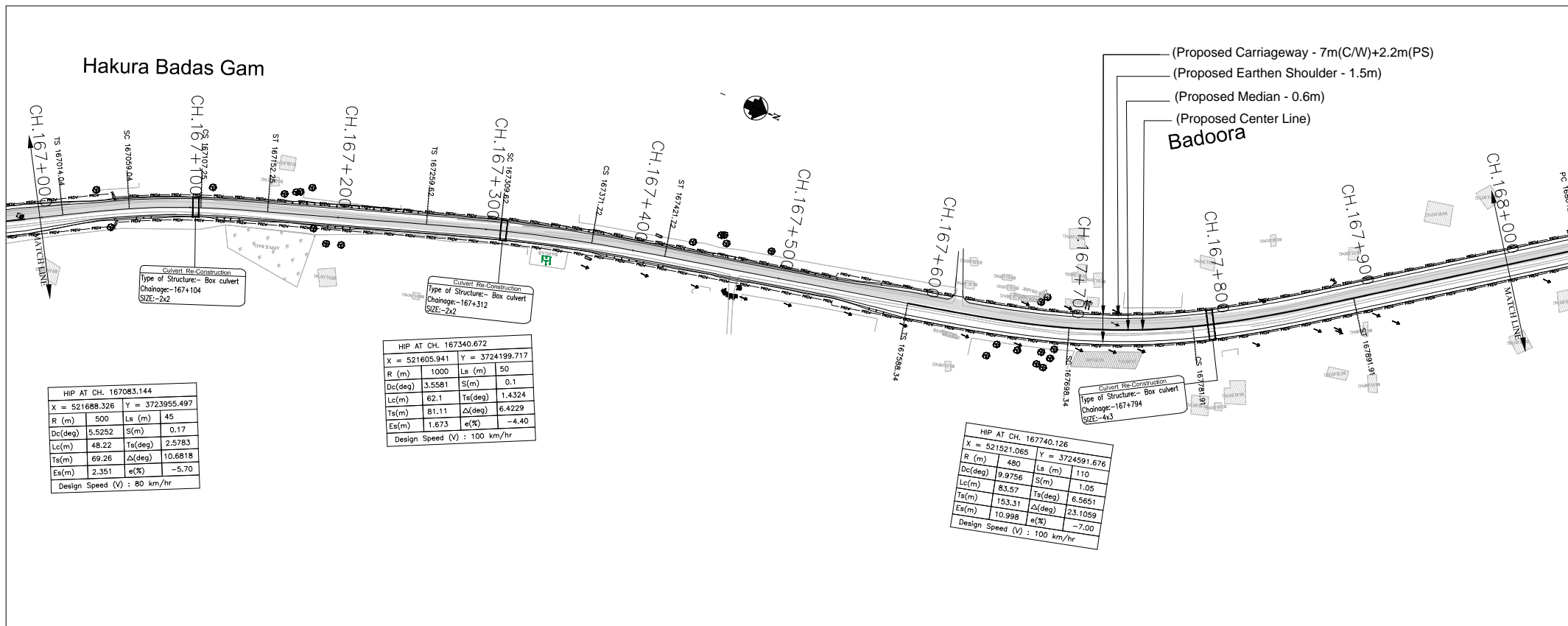
L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length &
Change of Gradient $\{L_c / \{G_2 - G_1\}\}$
e - Superelevation (%)
d - Straight Length of Horizontal Alignment
Lc - Length of Circular Curve

ISSUE		DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.								
RO		OCT.2020		<div><p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p></div>	<div><p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</p><p>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p></div>	<div>Designed: <input type="text"/></div> <div>Drawn: <input type="text"/></div> <div>Checked: <input type="text"/></div> <div>Approved: <input type="text"/></div> <div>Scale :- H:-1.2500 V:-1.250</div>			Drawing Title	<div>Plan & Profile (km.166+000 to km.167+000)</div> <table><tr><td>Date</td><td>Project No.</td><td>Drawing No.</td></tr><tr><td>OCT -2020</td><td>1564</td><td>NHIDCL/NH-244-PACK-II/P&P/ 19/RO</td></tr></table>			Date	Project No.	Drawing No.	OCT -2020	1564	NHIDCL/NH-244-PACK-II/P&P/ 19/RO
Date	Project No.	Drawing No.																
OCT -2020	1564	NHIDCL/NH-244-PACK-II/P&P/ 19/RO																

VAILOO

DONIPAWA



HIP AT CH. 167083.144

X = 521688.326	Y = 3723955.497
R (m) 500	Ls (m) 45
Dc(deg) 5.5252	S(m) 0.17
Lc(m) 48.22	Ts(deg) 2.5783
Ts(m) 69.26	Δ(deg) 10.6818
Es(m) 2.351	e(%) -5.70

Design Speed (V) : 80 km/hr

HIP AT CH. 167340.672

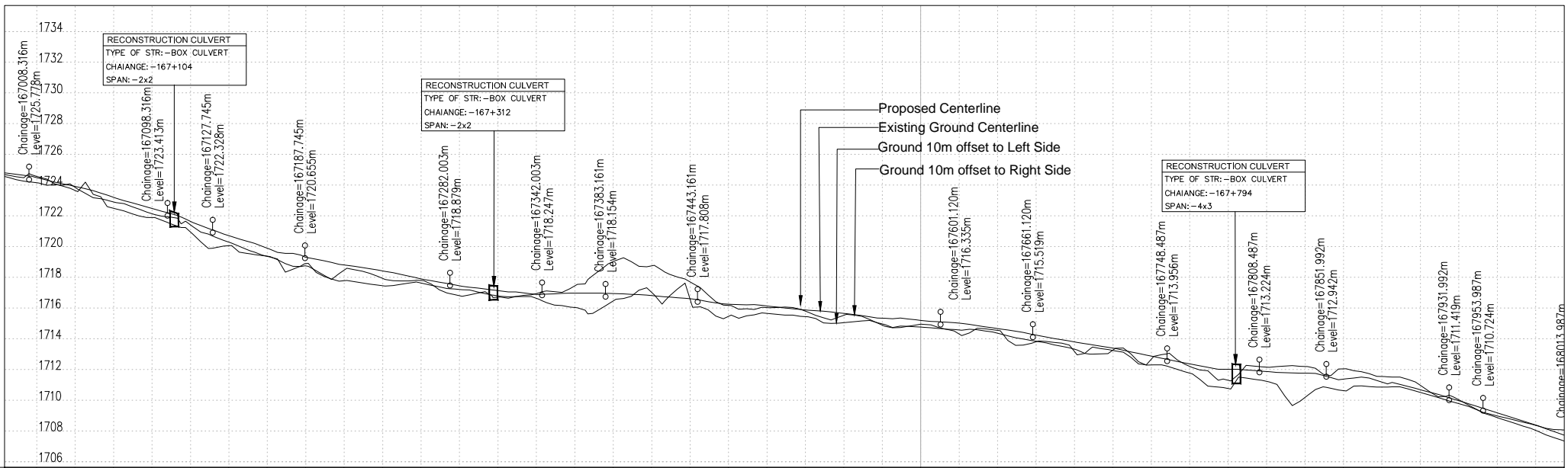
X = 521605.941	Y = 3724199.717
R (m) 1000	Ls (m) 50
Dc(deg) 3.5581	S(m) 0.1
Lc(m) 62.1	Ts(deg) 1.4324
Ts(m) 81.11	Δ(deg) 6.4229
Es(m) 1.673	e(%) -4.40

Design Speed (V) : 100 km/hr

HIP AT CH. 167740.126

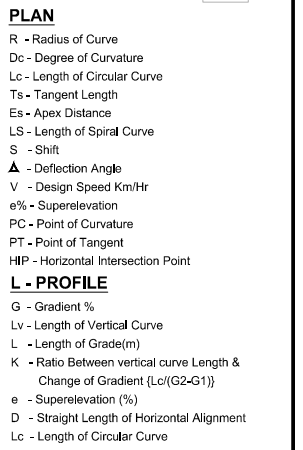
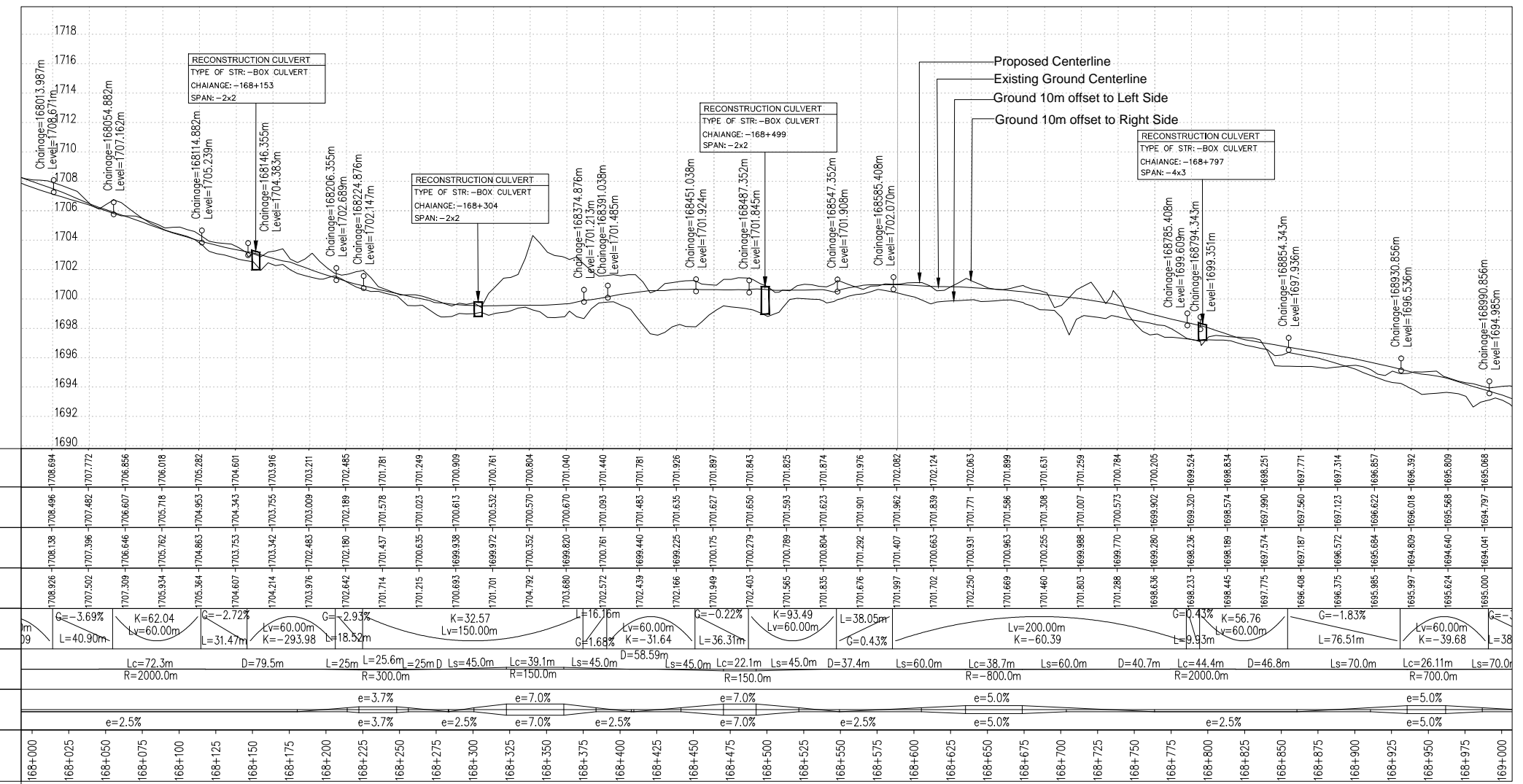
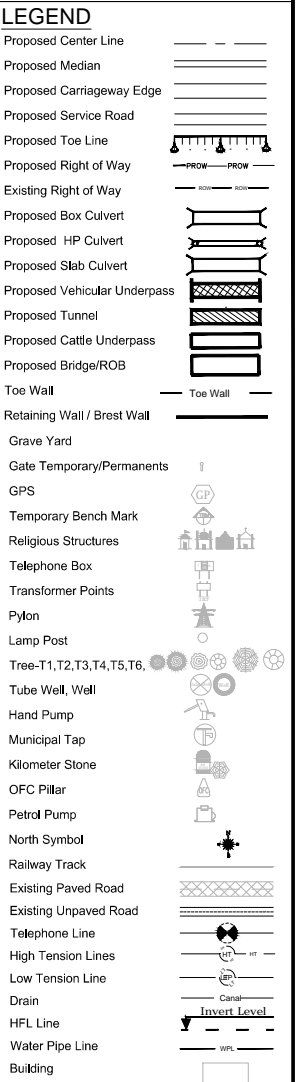
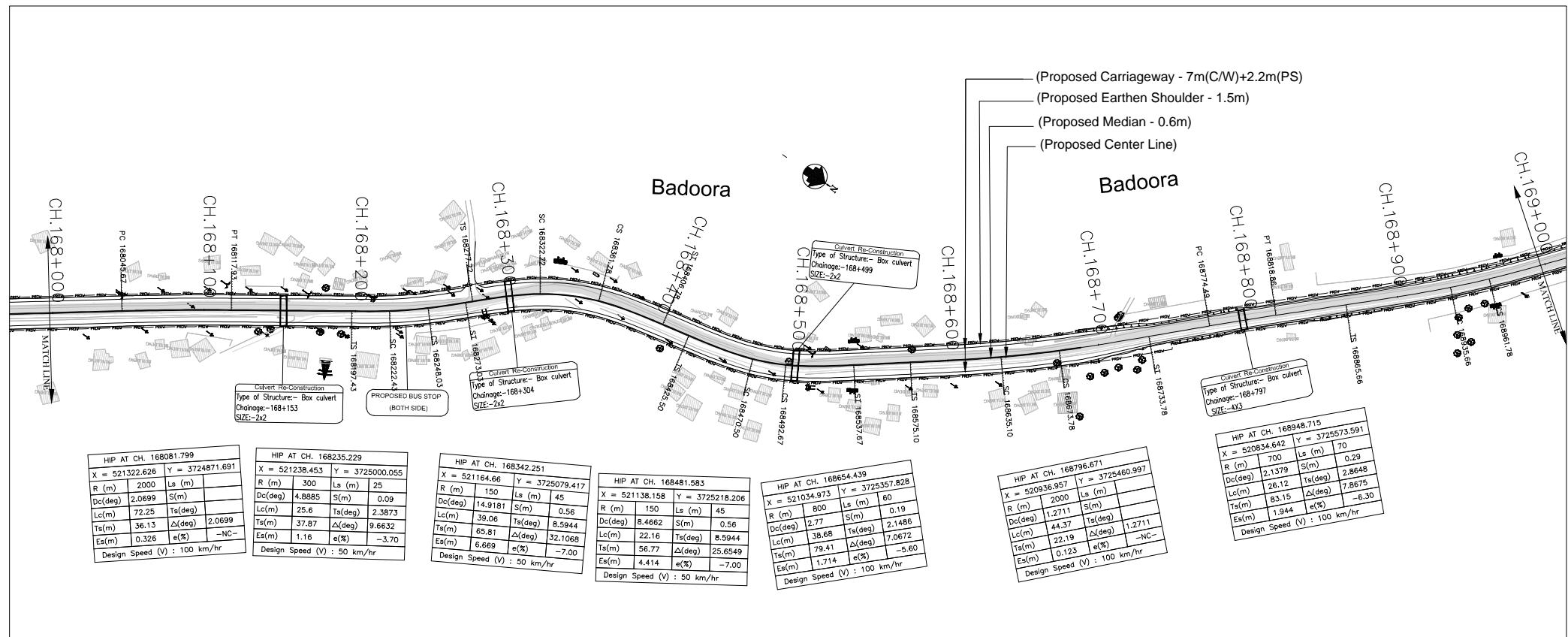
X = 521521.085	Y = 3724591.676
R (m) 480	Ls (m) 110
Dc(deg) 9.9756	S(m) 1.05
Lc(m) 83.57	Ts(deg) 6.5651
Ts(m) 153.31	Δ(deg) 23.1059
Es(m) 10.998	e(%) -7.00

Design Speed (V) : 100 km/hr

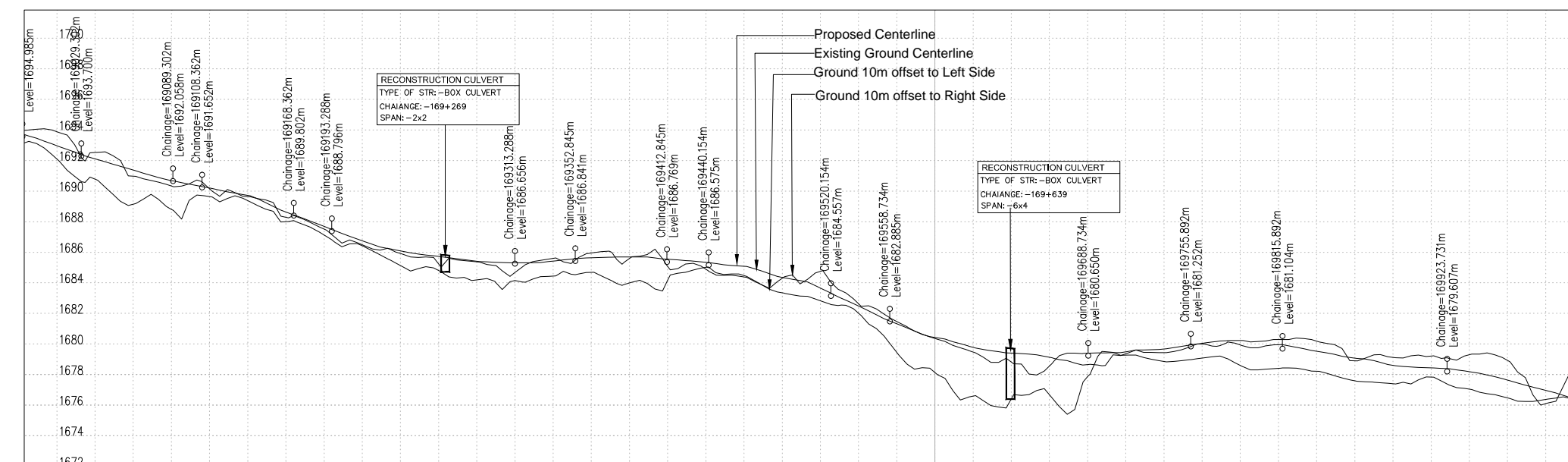
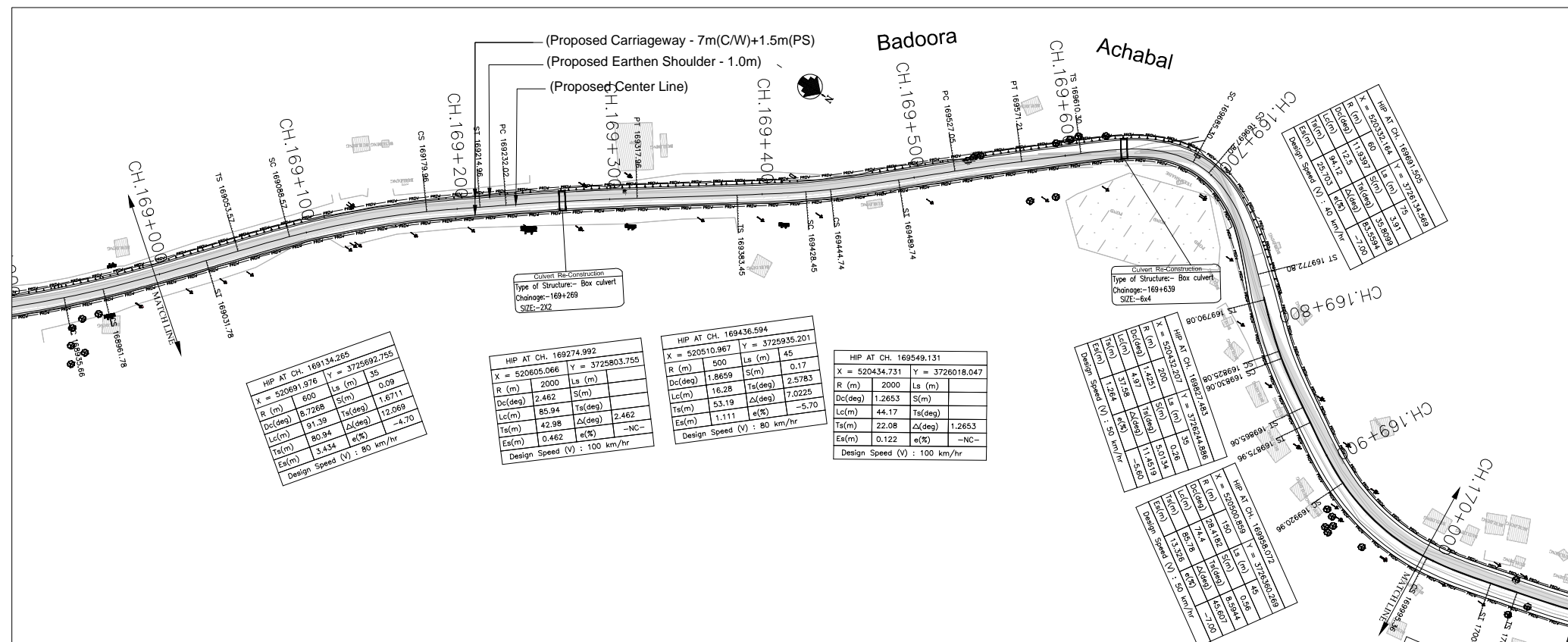


(DATUM - 1722)




Proposed Road Level at Centerline (m)	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697	1725.564	1725.147	1725.697	1725.484	1725.697
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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	Project	Drawing Title
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Designed: _____ Drawn: _____ Checked: _____ Approved: _____	Scale :- H:-1.2500 V:-1.250
						Plan & Profile (km.168+000 to km.169+000)
						Date: OCT -2020 Project No: 1564 Drawing No: NHIDCL/NH-244-PACK-II/P&P/ 21/R0

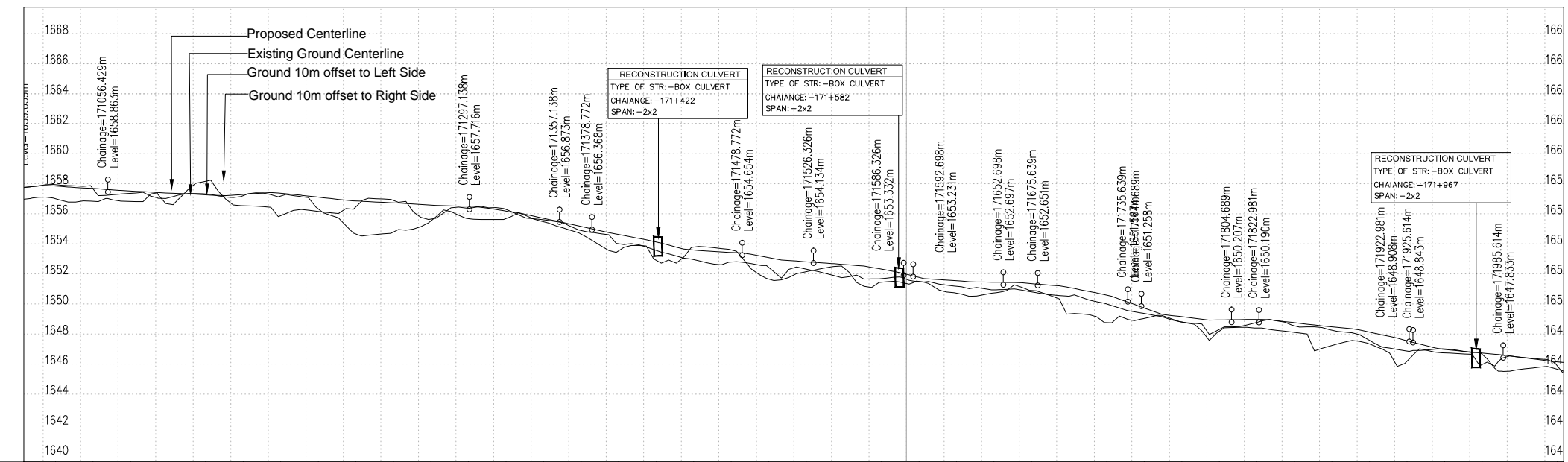
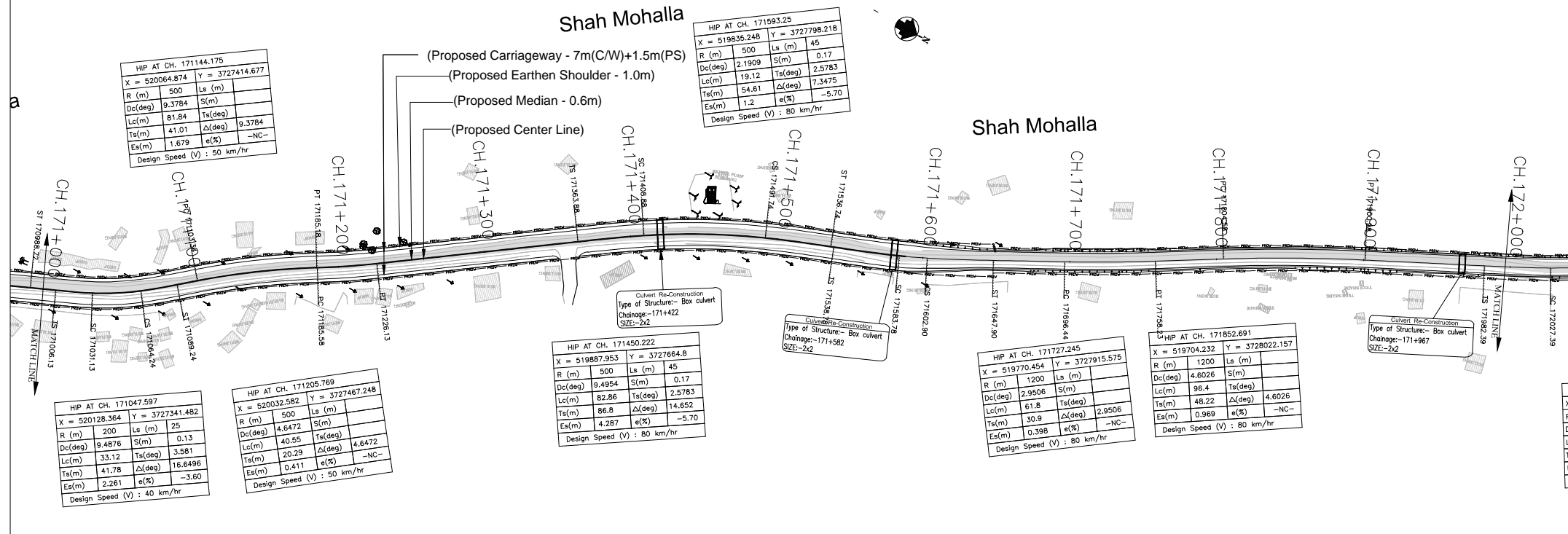


(DATUM - 1672)	1672
Proposed Road Level at Centerline (m)	1694.231 1693.985 1694.231 1693.406 1693.106 1692.579 1692.079 1691.542 1690.871 1690.001 1689.630 1688.996 1688.063 1687.359 1686.890 1686.656 1686.656 1686.713 1686.880 1686.884 1686.765 1686.588 1686.288 1685.707 1684.942 1683.793 1682.689 1681.778 1681.118 1680.709 1680.552 1680.446 1680.670 1681.094 1681.308 1681.342 1681.438 1681.793 1681.446 1680.096 1679.751 1679.380 1678.679 1677.972 1678.235
Existing Ground/Road Level at Centerline (m)	1694.882 1693.092 1693.843 1692.020 1692.371 1691.690 1691.195 1690.659 1690.374 1690.715 1689.963 1689.630 1688.996 1688.576 1687.435 1687.086 1686.829 1686.725 1686.690 1686.366 1685.195 1685.413 1686.656 1685.672 1685.157 1686.310 1686.656 1686.596 1685.427 1686.420 1686.773 1686.947 1685.710 1686.635 1686.880 1686.679 1684.999 1686.693 1686.884 1686.067 1685.167 1686.538 1686.765 1686.086 1686.049 1686.343 1686.588 1685.379 1685.470 1686.080 1686.288 1685.317 1684.345 1685.350 1685.707 1685.899 1683.827 1684.659 1684.942 1683.001 1683.045 1683.482 1683.793 1682.474 1680.447 1682.320 1682.689 1681.426 1679.133 1681.362 1681.778 1680.786 1677.728 1680.474 1681.118 1680.409 1677.354 1679.706 1680.709 1680.130 1677.683 1679.541 1680.552 1679.657 1676.881 1680.401 1680.646 1680.362 1680.267 1680.461 1680.670 1680.660 1679.851 1680.437 1681.094 1681.041 1680.078 1681.034 1681.308 1681.229 1679.592 1680.941 1681.342 1681.291 1679.413 1680.972 1681.138 1681.187 1679.240 1680.525 1680.793 1679.890 1678.590 1680.061 1680.446 1680.123 1678.397 1679.584 1680.096 1680.227 1678.872 1679.435 1679.751 1680.312 1678.054 1679.189 1679.380 1679.330 1677.476 1678.638 1678.679 1677.139 1677.369 1677.972 1678.235
Ground/Road Level at 10m Left Side (m)	
Ground/Road Level at 10m Right Side (m)	
Proposed Vertical Alignment Schematic	
Proposed Horizontal Alignment Schematic	
Superelevation/Crossfall (%)	
Chainage (Km)	169+000 169+025 169+050 169+075 169+100 169+125 169+150 169+175 169+200 169+225 169+250 169+275 169+300 169+325 169+350 169+375 169+400 169+425 169+450 169+475 169+500 169+525 169+550 169+575 169+600 169+625 169+650 169+675 169+700 169+725 169+750 169+775 169+800 169+825 169+850 169+875 169+900 169+925 169+950 169+975 170+000



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroop Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.							
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)	Designed: <table><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr></table> Scale :- H:-1.2500 V:-1.250							Drawing Title	Plan & Profile (km.169+000 to km.170+000)			
			 NHIDCL BUILDING INFRASTRUCTURE - BUILDING THE NATION	 In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,						<table><tr><td>Date</td><td>Project No.</td><td>Drawing No.</td></tr><tr><td>OCT - 2020</td><td>1564</td><td>NHIDCL/NH-244-PACK-II/P&P/ 22/R0</td></tr></table>	Date	Project No.	Drawing No.	OCT - 2020	1564	NHIDCL/NH-244-PACK-II/P&P/ 22/R0
Date	Project No.	Drawing No.														
OCT - 2020	1564	NHIDCL/NH-244-PACK-II/P&P/ 22/R0														

[illegible]

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.	
R0	OCT.2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: <input type="text"/> Drawn: <input type="text"/> Checked: <input type="text"/>	Scale :- H:-1:2500 V:-1:250.	Drawing Title			
										<table><tr><td colspan="3">Plan & Profile (km.170+000 to km.171+000)</td></tr><tr><td>Date.</td><td>Project No.</td><td>Drawing No.</td></tr></table>
Plan & Profile (km.170+000 to km.171+000)										
Date.	Project No.	Drawing No.								



Proposed Road Level at Centerline (m)	1658.012	1658.890	1658.939	1658.830	1658.711	1658.592	1658.473	1658.353	1658.234	1658.115	1657.996	1657.877	1657.758	1657.639	1657.520	1657.401	1657.282	1657.163	1657.044	1656.925	1656.806	1656.687	1656.568	1656.449	1656.330	1656.211	1656.092	1655.973	1655.854	1655.735	1655.616	1655.497	1655.378	1655.259	1655.140	1655.021	1654.902	1654.783	1654.664	1654.545	1654.426	1654.307	1654.188	1654.069	1653.950	1653.831	1653.712	1653.593	1653.474	1653.355	1653.236	1653.117	1652.998	1652.879	1652.760	1652.641	1652.522	1652.403	1652.284	1652.165	1652.046	1651.927	1651.808	1651.689	1651.570	1651.451	1651.332	1651.213	1651.094	1650.975	1650.856	1650.737	1650.618	1650.499	1650.380	1650.261	1650.142	1650.023	1649.904	1649.785	1649.666	1649.547	1649.428	1649.309	1649.190	1649.071	1648.952	1648.833	1648.714	1648.595	1648.476	1648.357	1648.238	1648.119	1647.999	1647.880	1647.761	1647.642	1647.523	1647.404	1647.285	1647.166	1647.047	1646.928	1646.809	1646.690	1646.571	1646.452	1646.333	1646.214	1646.095	1645.976	1645.857	1645.738	1645.619	1645.500	1645.381	1645.262	1645.143	1645.024	1644.905	1644.786	1644.667	1644.548	1644.429	1644.310	1644.191	1644.072	1643.953	1643.834	1643.715	1643.596	1643.477	1643.358	1643.239	1643.120	1643.001	1642.882	1642.763	1642.644	1642.525	1642.406	1642.287	1642.168	1642.049	1641.930	1641.811	1641.692	1641.573	1641.454	1641.335	1641.216	1641.097	1640.978	1640.859	1640.740	1640.621	1640.502	1640.383	1640.264	1640.145	1640.026	1639.907	1639.788	1639.669	1639.550	1639.431	1639.312	1639.193	1639.074	1638.955	1638.836	1638.717	1638.598	1638.479	1638.360	1638.241	1638.122	1638.003	1637.884	1637.765	1637.646	1637.527	1637.408	1637.289	1637.170	1637.051	1636.932	1636.813	1636.694	1636.575	1636.456	1636.337	1636.218	1636.099	1635.980	1635.861	1635.742	1635.623	1635.504	1635.385	1635.266	1635.147	1635.028	1634.909	1634.790	1634.671	1634.552	1634.433	1634.314	1634.195	1634.076	1633.957	1633.838	1633.719	1633.600	1633.481	1633.362	1633.243	1633.124	1633.005	1632.886	1632.767	1632.648	1632.529	1632.410	1632.291	1632.172	1632.053	1631.934	1631.815	1631.696	1631.577	1631.458	1631.339	1631.220	1631.101	1630.982	1630.863	1630.744	1630.625	1630.506	1630.387	1630.268	1630.149	1630.030	1629.911	1629.792	1629.673	1629.554	1629.435	1629.316	1629.197	1629.078	1628.959	1628.840	1628.721	1628.602	1628.483	1628.364	1628.245	1628.126	1628.007	1627.888	1627.769	1627.650	1627.531	1627.412	1627.293	1627.174	1627.055	1626.936	1626.817	1626.698	1626.579	1626.460	1626.341	1626.222	1626.103	1625.984	1625.865	1625.746	1625.627	1625.508	1625.389	1625.270	1625.151	1625.032	1624.913	1624.794	1624.675	1624.556	1624.437	1624.318	1624.199	1624.080	1623.961	1623.842	1623.723	1623.604	1623.485	1623.366	1623.247	1623.128	1623.009	1622.890	1622.771	1622.652	1622.533	1622.414	1622.295	1622.176	1622.057	16
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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.50 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.						
R0	OCT.2020		<div><div></div><div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div></div>	<div><div></div><div>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</div></div>	<div><div>Designed: <div></div></div><div>Drawn: <div></div></div><div>Checked: <div></div></div><div>Approved: <div></div></div></div> <div>Scale :-<div>H:- 1.2500 V:- 1.250</div></div>			Drawing Title	<div>Plan & Profile (km.171+000 to km.172+000)</div> <table><tr><td>Date.</td><td>Project No.</td><td>Drawing No.</td></tr><tr><td>OCT -2020</td><td>1564</td><td>NHIDCL/NH-244-PACK-II(P&P/ 24R0</td></tr></table>	Date.	Project No.	Drawing No.	OCT -2020	1564	NHIDCL/NH-244-PACK-II(P&P/ 24R0
Date.	Project No.	Drawing No.													
OCT -2020	1564	NHIDCL/NH-244-PACK-II(P&P/ 24R0													



Proposed Road Level at Centerline (m)
Existing Ground/Road Level at Centerline (m)
Ground/Road Level at 10m Left Side (m)
Ground/Road Level at 10m Right Side (m)
Proposed Vertical Alignment Schematic
Proposed Horizontal Alignment Schematic
Superelevation/Crossfall (%)
Chainage (Km)



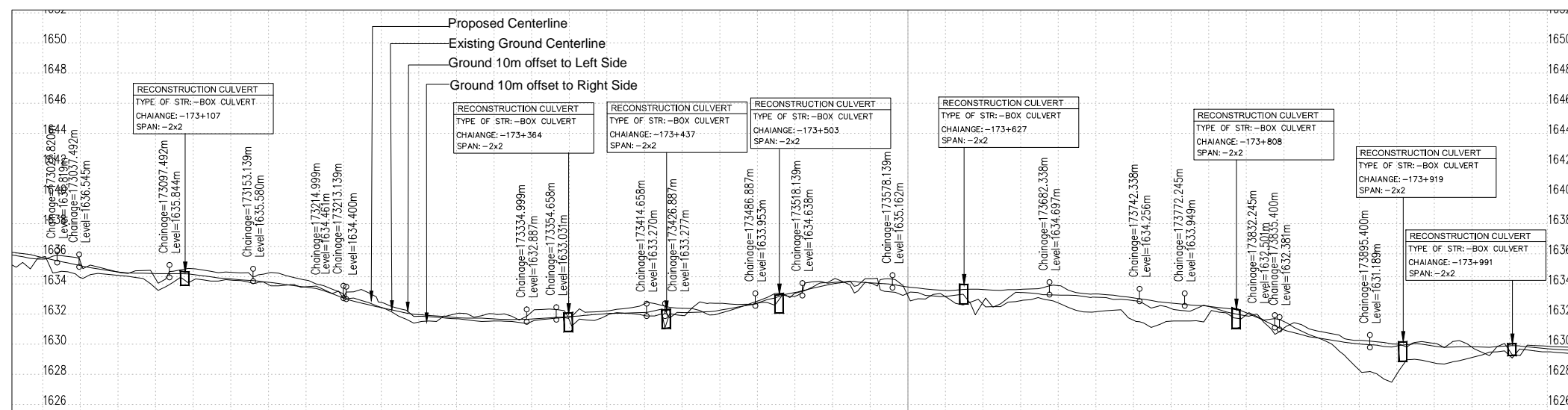
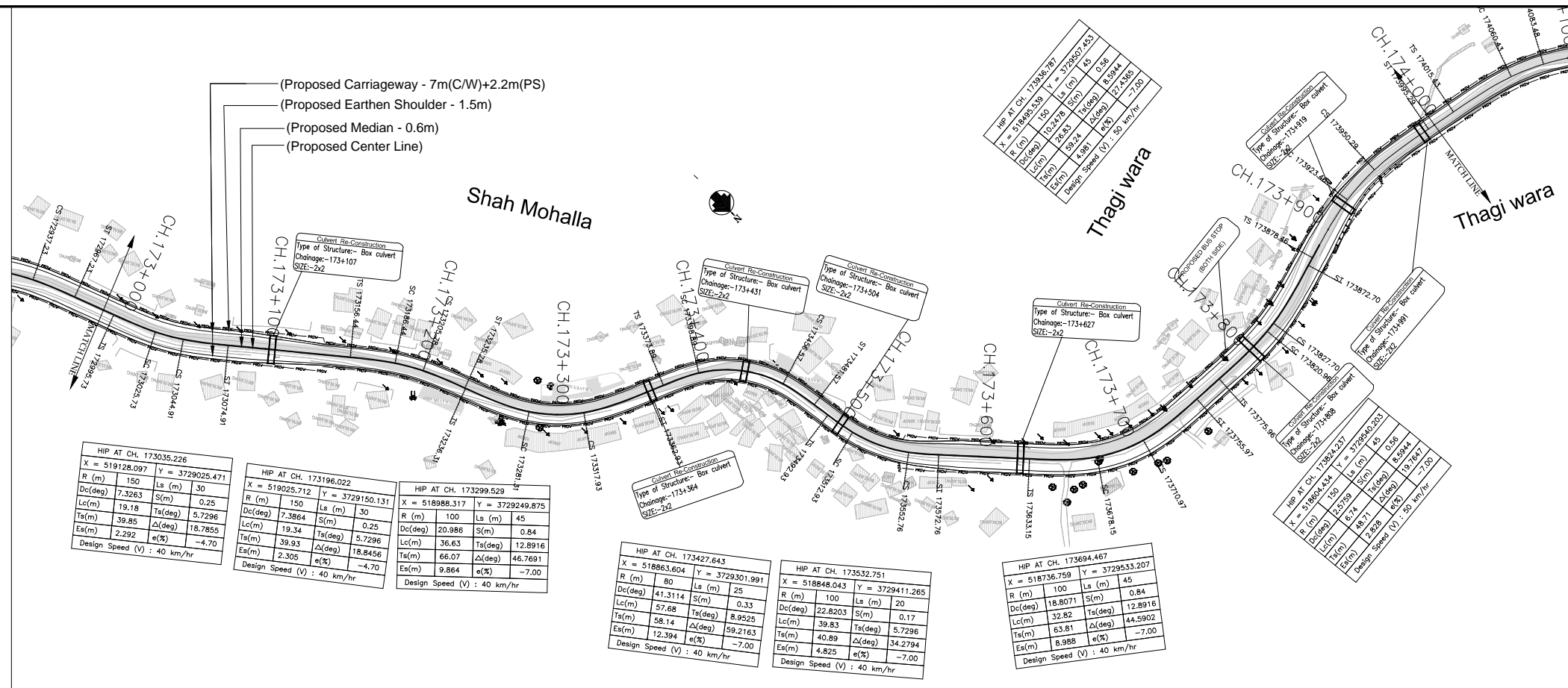
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Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.

Plan & Profile (km.172+000 to km.173+000)		
Date	Project No.	Drawing No.
OCT -2020	1564	NHIDCL/NH-244-PACK-II(P&P/ 25/R0




VAILOO

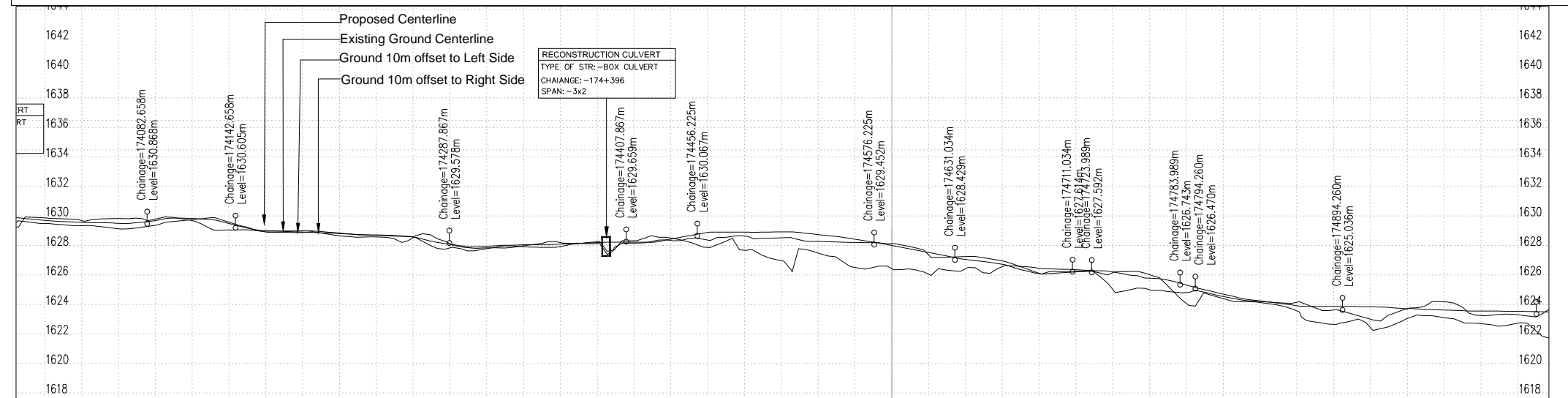
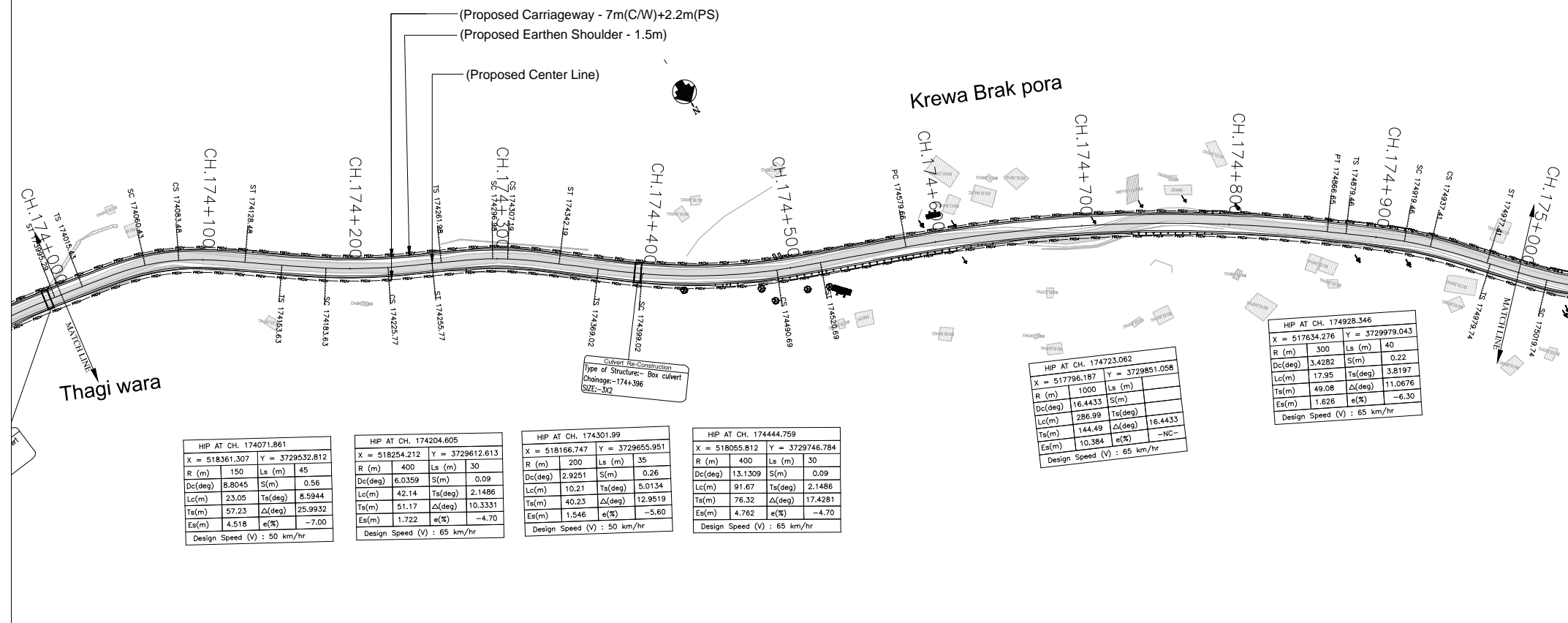
DONIPAWA






(DATUM - 1626)

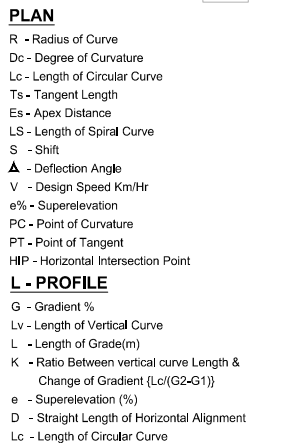
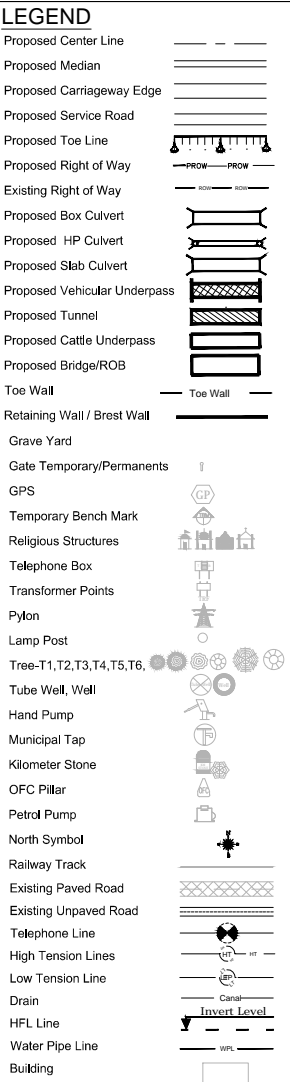
Proposed Road Level at Centerline (m)																								
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Ground/Road Level at 10m Left Side (m)																								
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Proposed Vertical Alignment Schematic																								
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Superelevation/Crossfall (%)																								
Chainage (Km)																								




ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div></div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroop Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT.2020								
					<div>Designed:</div> <div>Drawn:</div> <div>Checked:</div> <div>Approved:</div>	<div>Scale :-</div> <div>H:- 1.2500</div> <div>V:- 1.250</div>	Drawing Title	<div>Plan & Profile</div> <div>(km.173+000 to km.174+000)</div>	
			<div>Date</div> <div>OCT - 2020</div>	<div>Project No.</div> <div>1564</div>	<div>Drawing No.</div> <div>NHIDCL/NH-244-PACK-II/P&P/ 26R0</div>				



Proposed Road Level at Centerline (m)																								
Existing Ground/Road Level at Centerline (m)																								
Ground/Road Level at 10m Left Side (m)																								
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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div></div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroop Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT.2020				<div>Designed:</div> <div>Drawn:</div> <div>Checked:</div> <div>Approved:</div>	Scale :-	<div>H:-1.2500</div> <div>V:- 1.250</div>	Drawing Title	<div>Plan & Profile</div> <div>(km.174+000 to km.175+000)</div>
					<div>Date</div> <div>OCT -2020</div>				<div>Project No.</div> <div>1564</div>



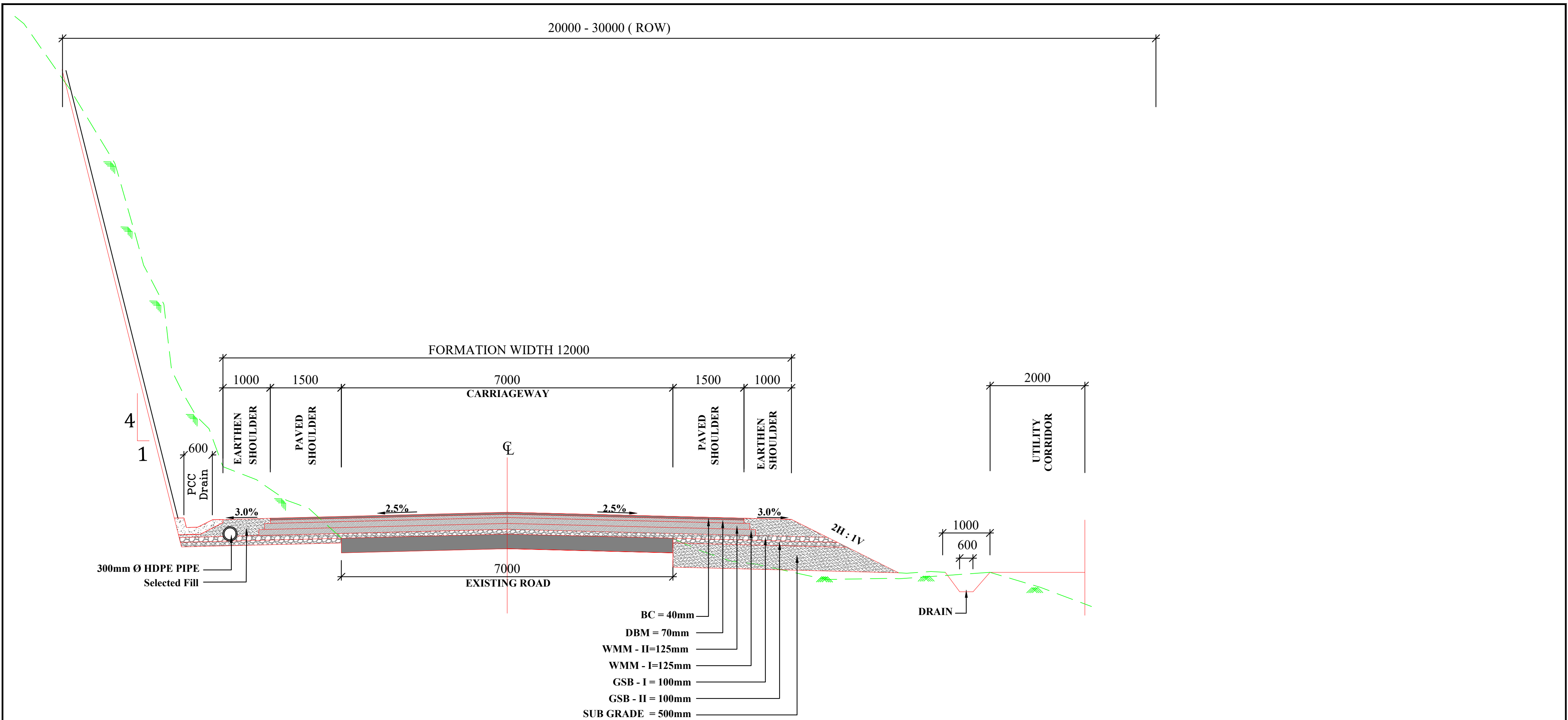
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd. ,</div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT.2020								
					<div>Designed: <div></div></div> <div>Drawn: <div></div></div> <div>Checked: <div></div></div> <div>Approved: <div></div></div>	<div>Scale :-</div> <div>H:-1.2500</div> <div>V:-1.250</div>	Drawing Title	<div>Plan & Profile</div> <div>(km.175+000 to km.176+000)</div> <div><div>Date: <div></div></div><div>Project No. <div></div></div><div>Drawing No. <div></div></div></div> <div><div>OCT -2020</div><div>1564</div><div>NHIDCL/NH-244-PACK-II/P&P/ 28/R0</div></div>	



Proposed Road Level at Centerline (m)	-164.359	-163.900	-163.610	-163.227	-163.160	-163.459	-163.297	-163.091	-162.861	-162.670	-162.525	-162.397	-162.268	-162.140	-162.011	-161.883	-161.731	-162.172	-162.617	-163.256	-163.888	-164.249	-164.321	-164.299		
Existing Ground/Road Level at Centerline (m)	-164.066	-163.617	-163.325	-163.189	-163.085	-162.986	-162.866	-162.552	-162.335	-162.196	-162.026	-161.851	-161.659	-161.504	-161.354	-161.167	-161.031	-160.942	-162.278	-162.963	-163.515	-163.873	-164.033	-164.299		
Ground/Road Level at 10m Left Side (m)	-163.888	-163.543	-163.227	-163.136	-163.090	-162.986	-162.866	-162.451	-162.192	-162.087	-161.957	-161.651	-161.599	-161.191	-161.319	-161.141	-161.031	-160.942	-162.574	-163.349	-163.778	-163.985	-164.161	-164.033		
Ground/Road Level at 10m Right Side (m)	-163.410	-162.991	-162.727	-162.630	-162.588	-162.451	-162.364	-162.070	-161.982	-161.863	-161.988	-161.651	-161.599	-161.191	-161.594	-161.340	-161.141	-161.031	-160.942	-162.449	-163.349	-163.778	-163.985	-164.161		
Proposed Vertical Alignment Schematic																										
Proposed Horizontal Alignment Schematic																										
Superelevation/Crossfall (%)																										
Chainage (Km)	176+000	176+025	176+050	176+075	176+100	176+125	176+150	176+175	176+200	176+225	176+250	176+275	176+300	176+325	176+350	176+375	176+400	176+425	176+450	176+475	176+500	176+525				

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project			Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT					
					Designed: Drawn: Checked: Approved:	Scale :- H:-1.2500 V:-1.250		Drawing Title	Plan & Profile (km.176+000 to km.176+532)	
								Date: OCT -2020	Project No: 1564	Drawing No. NHIDCL/NH-244-PACK-II/P&P/ 29/R0

TYPICAL CROSS SECTION

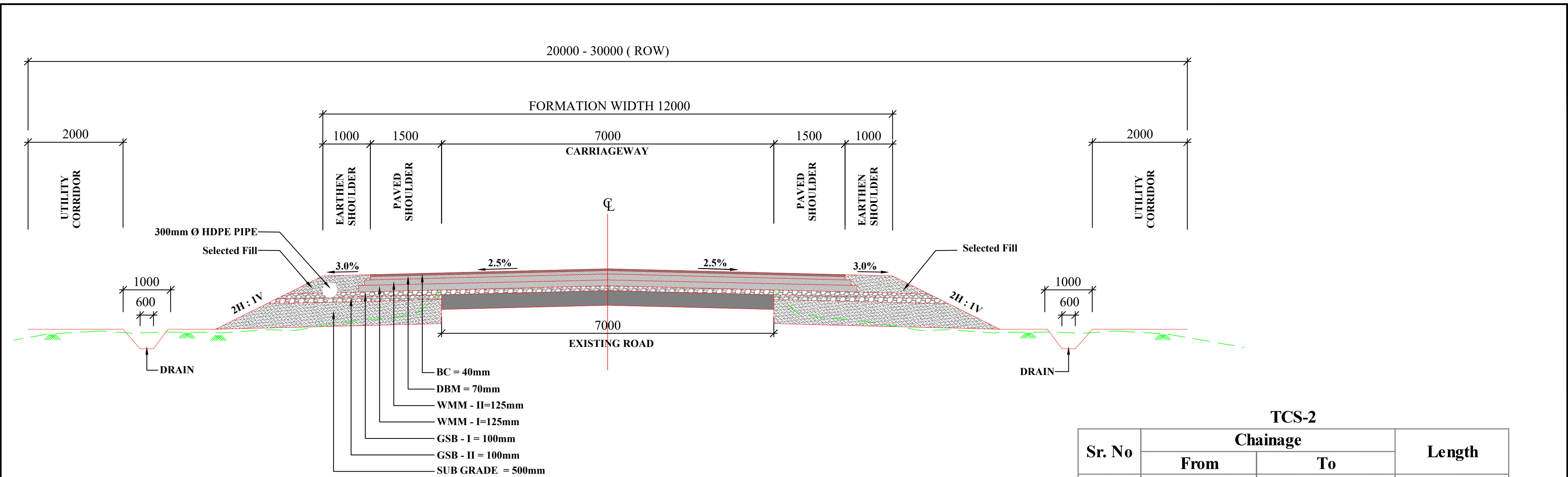


**TCS-I TYPICAL CROSS SECTION FOR 2 LANE CARRIAGEWAY WITH
PAVED SHOULDER IN ROLLING/MOUNTAINOUS TERRAIN WITH LEFT SIDE CUT (RURAL SECTION)**

TCS-1			
Sr. No	Chainage		Length
	From	To	
1	148+589	148+790	201.46
Total Length			201.46

- NOTE :-
- 1.All Dimension are in millimeters except otherwise specified
 - 2.Breast wall Shall be provided where height of cut is greater than 3m.
 - 3.Width of U/C is Varring between 0.5 to 2 mm with in Available EROW
 - 4.Toe wall Shall be provided where height of embankment is less than3m.& greater than 1m.

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project			
R0	NOV.2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div> <div> BUILDING INFRASTRUCTURE - BUILDING THE NATION</div>	<div> Rodric</div> <div> MONARCH Surveyors and Engineers</div>	In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,		Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
					<div>Designed: <input type="text"/></div> <div>Drawn: <input type="text"/></div> <div>Checked: <input type="text"/></div> <div>Approved: <input type="text"/></div>	Scale NTS	Drawing Title	TYPICAL CROSS SECTION		
								Date: OCT-2020	Project No: 1564	Drawing No: NHIDCL/NH-244/VAILOO-DONIPAWA/TCS/01/R0



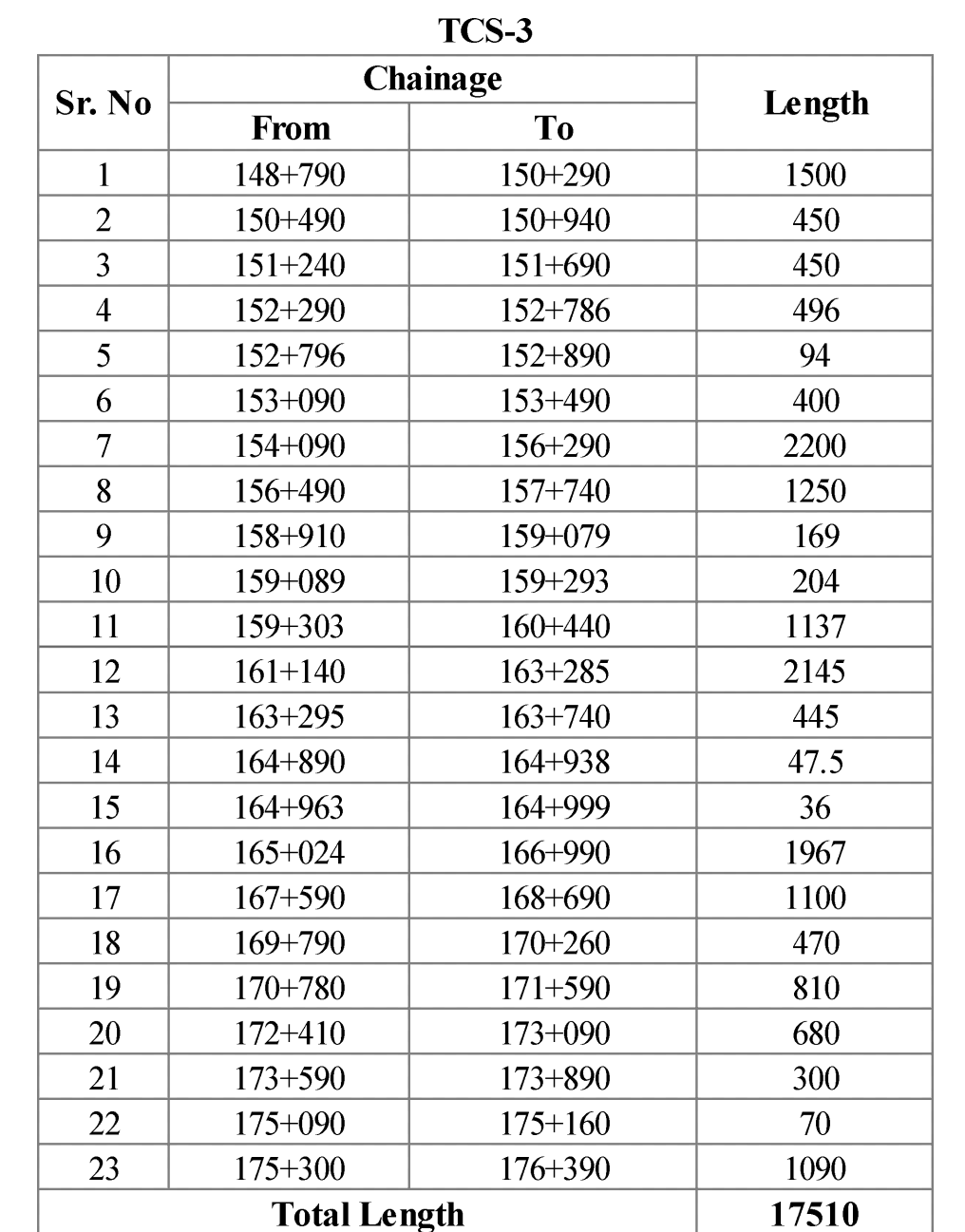
TCS-2 TYPICAL CROSS SECTION FOR 2 LANE CARRIAGEWAY WITH PAVED SHOULDER IN ROLLING/MOUNTAINOUS TERRAIN (RECONSTRUCTION)

TCS-2			
Sr. No	Chainage		Length
	From	To	
1	150+940	151+082	142.00
2	151+112	151+240	128.00
3	151+690	152+290	600.00
4	153+490	154+090	600.00
5	157+740	158+050	310.00
6	158+060	158+910	850.00
7	160+440	161+140	700.00
8	163+740	163+790	50.00
9	163+800	163+933	132.50
10	164+038	164+115	77.50
11	164+125	164+385	259.80
12	164+409	164+710	300.45
13	164+750	164+829	78.65
14	164+839	164+890	51.00
15	166+990	167+590	600.00
16	168+690	169+790	1100.00
17	171+590	172+410	820.00
18	173+890	175+090	1200.00
19	176+390	176+532	142.04
Total Length			8141.94

NOTE :-

- 1.All Dimension are in millimeters except otherwise specified
- 2.Breast wall Shall be provided where height of cut is greater than 3m.
- 3.Width of U/C is Varring between 0.5 to 2 mm with in Available EROW
- 4.Toe wall Shall be provided where height of embankment is less than3m.& greater than 1m.

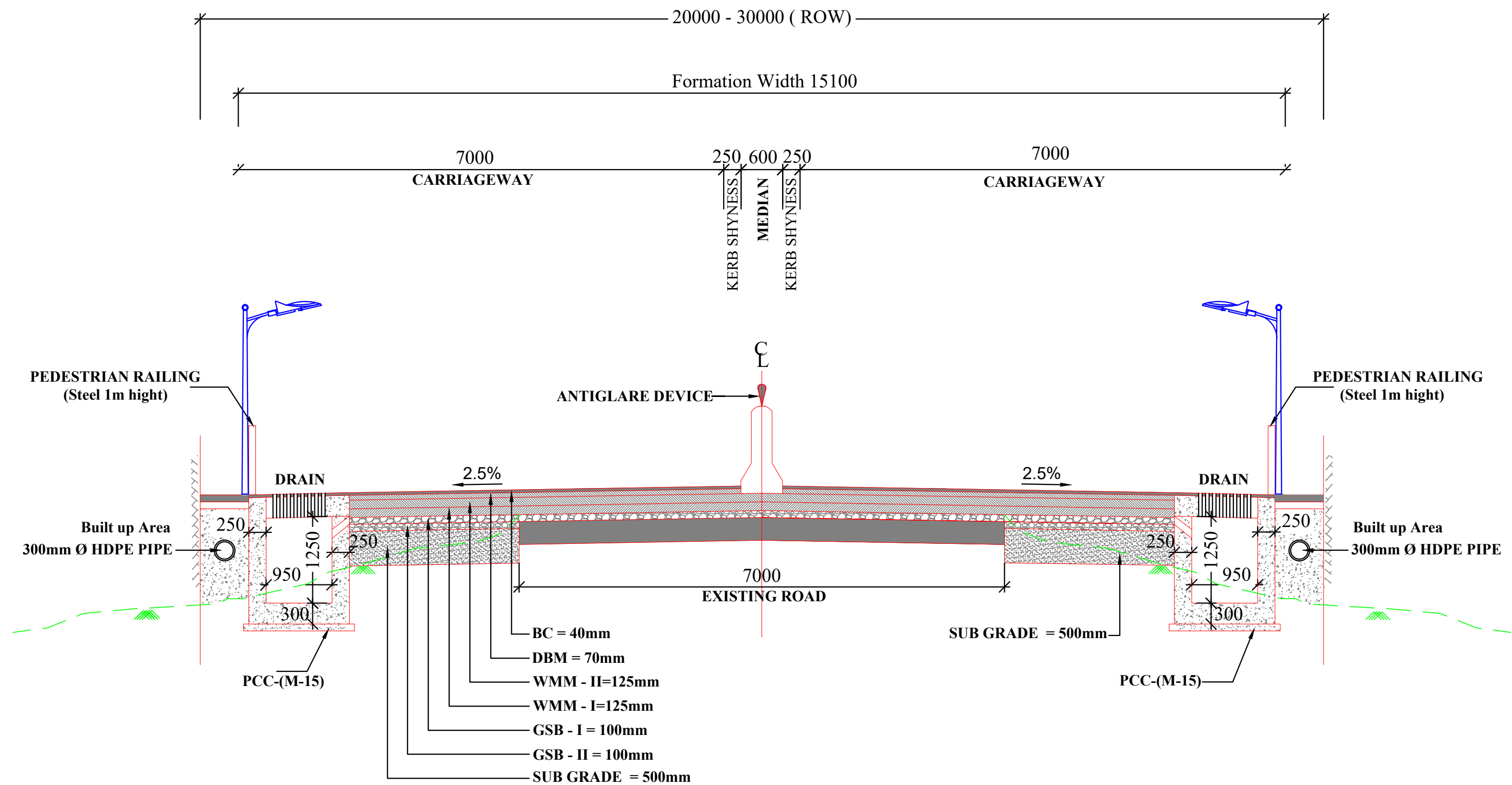
REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	NOV.2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div> <div></div>	<div> RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd., </div>	Designed: <div></div>		Scale NTS	Drawing Title	TYPICAL CROSS SECTION		
					Checked: <div></div>			Date: <div></div>	Project No: <div></div>	Drawing No: <div></div>	
					Approved: <div></div>			OCT-2020	1564	NHIDCL/NH-244/VAILOO-DONIPAWA/TCS/02/R0	



NOTE :-

- 1.All Dimension are in millimeters except otherwise specified
- 2.Breast wall Shall be provided where height of cut is greater than 3m.
- 3.Width of U/C is Varring between 0.5 to 2 mm with in Available EROW
- 4.Toe wall Shall be provided where height of embankment is less than 3m. & greater than 1m.

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div>Monarch Surveyors and Engineering</div> <div>Consultants Pvt. Ltd.,</div> <div></div>	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.				
R0	NOV.2020				Designed: <div></div>		Scale	NTS	Drawing Title	TYPICAL CROSS SECTION		
					Drawn: <div></div>	Date: <div></div>				Project No. <div></div>	Drawing No. <div></div>	
			Checked: <div></div>	OCT-2020	1564	NHIDCL/NH-244/VAILOO-DONIPAWA/TCS/03/R0						
			Approved: <div></div>									



TCS - 4 TYPICAL CROSS SECTION FOR 4 LANE DIVIDED CARRIAGEWAY IN ROLLING/ MOUNTAINOUS TERRAIN(URBAN SECTION WITHOUT FOOTPATH RECONSTRUCTION)

TCS-4

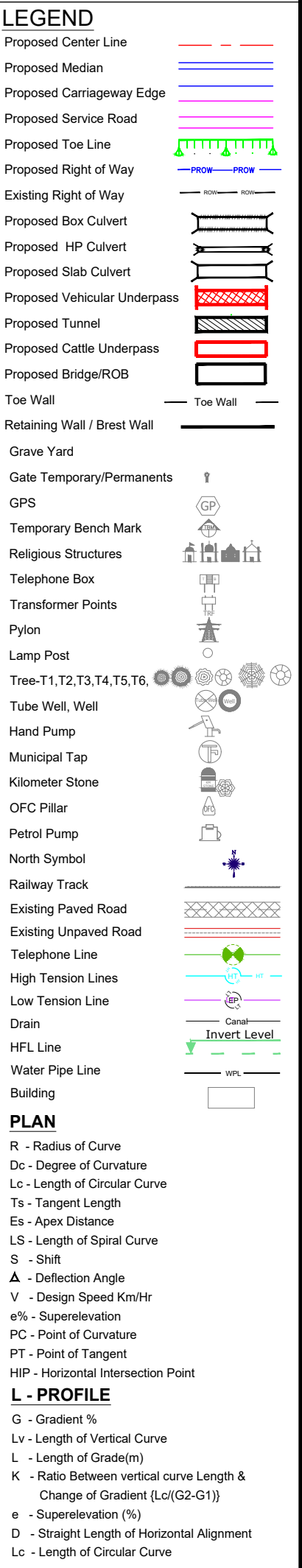
Sr. No	Chainage		Length
	From	To	
1	150+290	150+490	200
2	152+890	153+090	200
3	156+290	156+490	200
4	170+260	170+450	190
5	170+460	170+780	320
6	173+090	173+590	500
7	175+160	175+300	140
Total Length			1750




NOTE :-

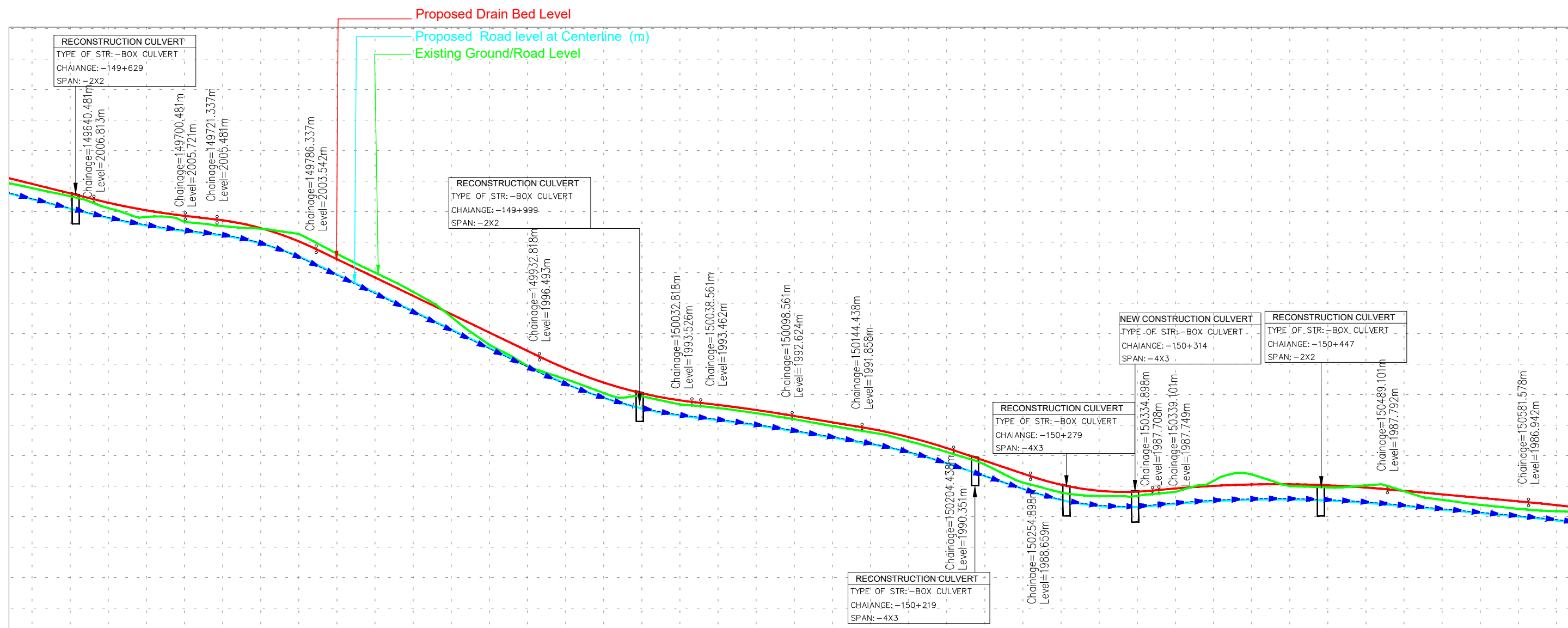
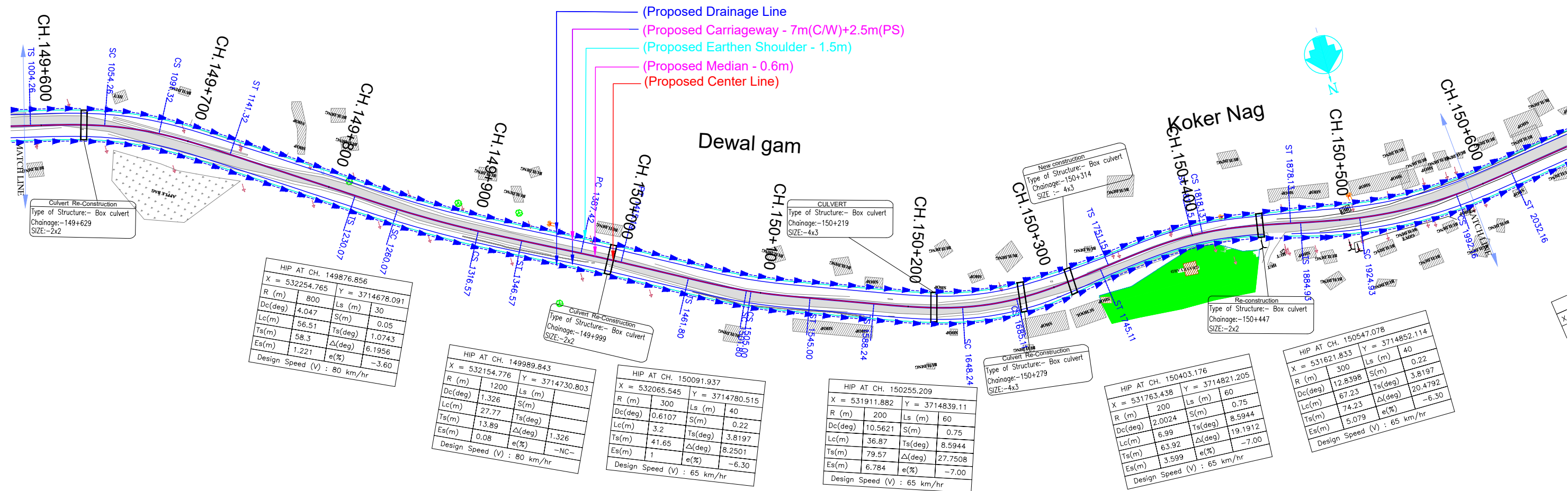
- 1.All Dimension are in millimeters except otherwise specified
- 2.Breast wall Shall be provided where height of cut is greater than 3m.
- 3.Width of U/C is Varring between 0.5 to 2 mm with in Available EROW
- 4.Toe wall Shall be provided where height of embankment is less than3m.& greater than 1m.

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	NOV.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT			Drawing Title
					Designed:	Scale		
					Drawn:	NTS		
					Checked:			
					Approved:			
			TYPICAL CROSS SECTION			Date:	Project No.	Drawing No.
						OCT-2020	1564	NHIDCL/NH-244/VAILOO-DONIPAWA/TCS/04/R0

**DRAINAGE FLOW DIRECTION
PLAN & PROFILE**

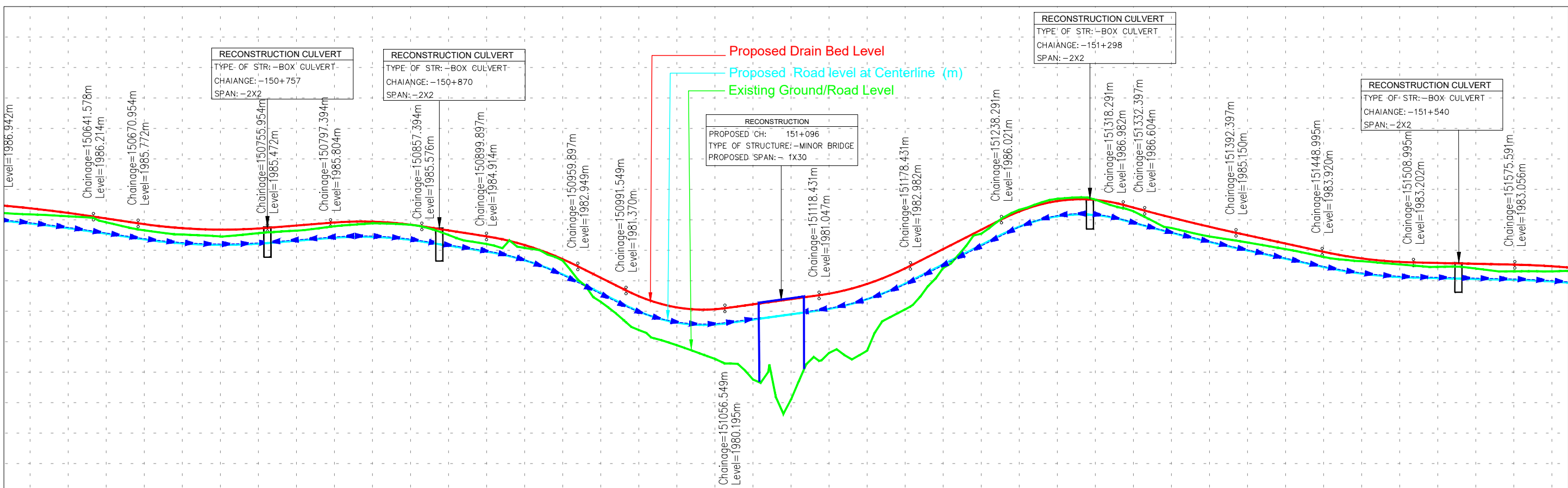
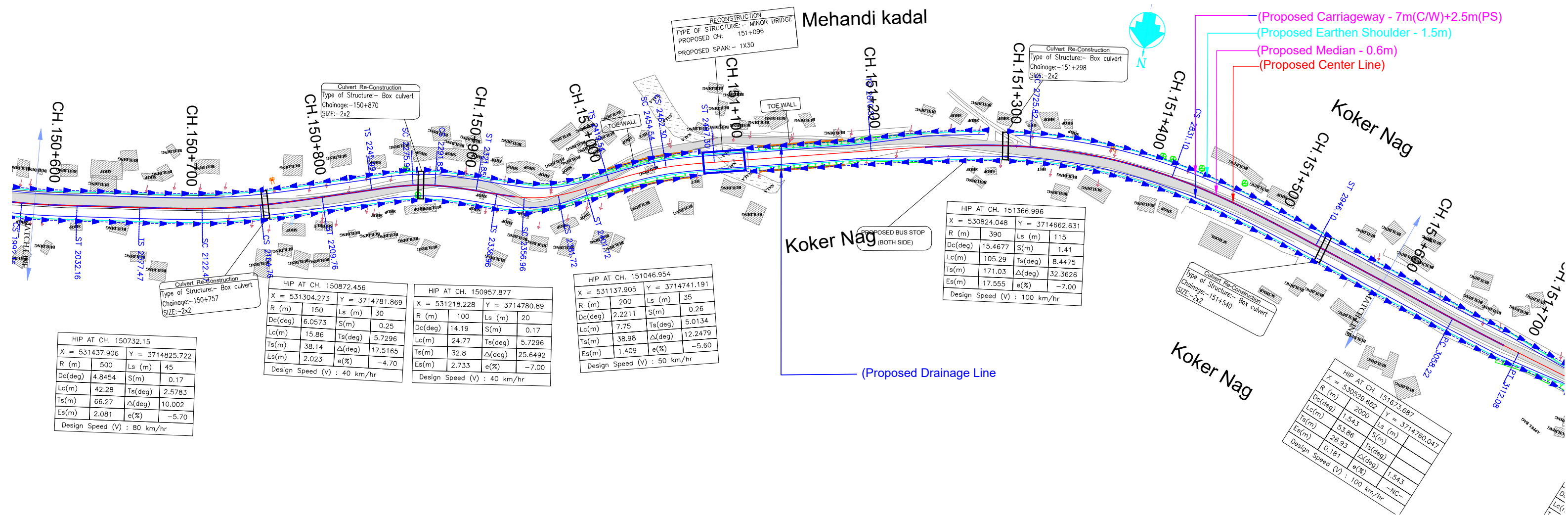





ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 nd lane with paved shoulder from (i) Km 44.500 viad Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
R0	Nov.2020		<div><p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p></div>	<div><p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</p><p>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.</p></div>	Designed: <input type="text"/>	Scale :- H:- 1.2500 V:- 1.250		Drawing Title	DRAINAGE PLAN & PROFILE (km.0+000 to km.1+000)			

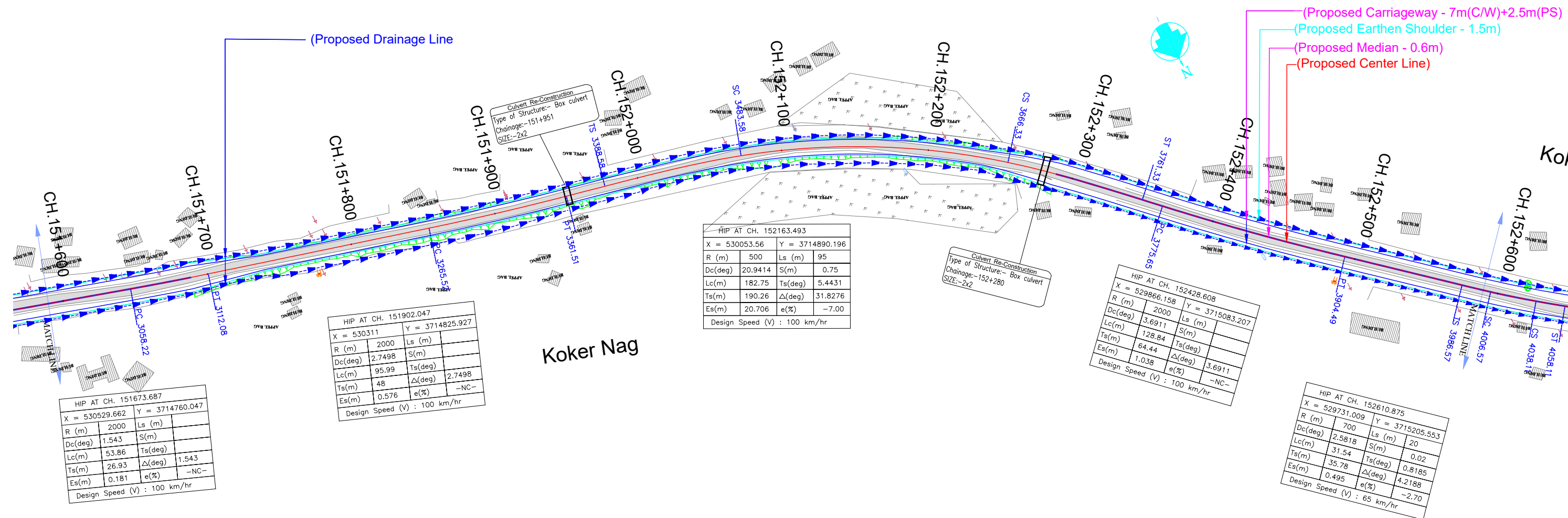


(DATUM - 1984)

Propose Drain Bed Level (m)	-2006.820	-2006.195	-2005.567	-2005.087	-2004.727	-2004.435	-2004.181	-2003.919	-2003.651	-2003.381	-2003.111	-2002.841	-2002.571	-2002.301	-2002.031	-2001.761	-2001.491	-2001.221	-2000.951	-2000.681	-2000.411	-2000.141	-1999.871	-1999.601	-1999.331	-1999.061	-1998.791	-1998.521	-1998.251	-1997.981	-1997.711	-1997.441	-1997.171	-1996.901	-1996.631	-1996.361	-1996.091	-1995.821	-1995.551	-1995.281	-1995.011	-1994.741	-1994.471	-1994.201	-1993.931	-1993.661	-1993.391	-1993.121	-1992.851	-1992.581	-1992.311	-1992.041	-1991.771	-1991.501	-1991.231	-1990.961	-1990.691	-1990.421	-1990.151	-1989.881	-1989.611	-1989.341	-1989.071	-1988.801	-1988.531	-1988.261	-1987.991	-1987.721	-1987.451	-1987.181	-1986.911	-1986.641	-1986.371	-1986.101	-1985.831	-1985.561	-1985.291	-1985.021	-1984.751	-1984.481	-1984.211	-1983.941	-1983.671	-1983.401	-1983.131	-1982.861	-1982.591	-1982.321	-1982.051	-1981.781	-1981.511	-1981.241	-1980.971	-1980.701	-1980.431	-1980.161	-1979.891	-1979.621	-1979.351	-1979.081	-1978.811	-1978.541	-1978.271	-1978.001	-1977.731	-1977.461	-1977.191	-1976.921	-1976.651	-1976.381	-1976.111	-1975.841	-1975.571	-1975.301	-1975.031	-1974.761	-1974.491	-1974.221	-1973.951	-1973.681	-1973.411	-1973.141	-1972.871	-1972.601	-1972.331	-1972.061	-1971.791	-1971.521	-1971.251	-1970.981	-1970.711	-1970.441	-1970.171	-1969.901	-1969.631	-1969.361	-1969.091	-1968.821	-1968.551	-1968.281	-1968.011	-1967.741	-1967.471	-1967.201	-1966.931	-1966.661	-1966.391	-1966.121	-1965.851	-1965.581	-1965.311	-1965.041	-1964.771	-1964.501	-1964.231	-1963.961	-1963.691	-1963.421	-1963.151	-1962.881	-1962.611	-1962.341	-1962.071	-1961.801	-1961.531	-1961.261	-1960.991	-1960.721	-1960.451	-1960.181	-1959.911	-1959.641	-1959.371	-1959.101	-1958.831	-1958.561	-1958.291	-1958.021	-1957.751	-1957.481	-1957.211	-1956.941	-1956.671	-1956.401	-1956.131	-1955.861	-1955.591	-1955.321	-1955.051	-1954.781	-1954.511	-1954.241	-1953.971	-1953.701	-1953.431	-1953.161	-1952.891	-1952.621	-1952.351	-1952.081	-1951.811	-1951.541	-1951.271	-1951.001	-1950.731	-1950.461	-1950.191	-1949.921	-1949.651	-1949.381	-1949.111	-1948.841	-1948.571	-1948.301	-1948.031	-1947.761	-1947.491	-1947.221	-1946.951	-1946.681	-1946.411	-1946.141	-1945.871	-1945.601	-1945.331	-1945.061	-1944.791	-1944.521	-1944.251	-1943.981	-1943.711	-1943.441	-1943.171	-1942.901	-1942.631	-1942.361	-1942.091	-1941.821	-1941.551	-1941.281	-1941.011	-1940.741	-1940.471	-1940.201	-1939.931	-1939.661	-1939.391	-1939.121	-1938.851	-1938.581	-1938.311	-1938.041	-1937.771	-1937.501	-1937.231	-1936.961	-1936.691	-1936.421	-1936.151	-1935.881	-1935.611	-1935.341	-1935.071	-1934.801	-1934.531	-1934.261	-1933.991	-1933.721	-1933.451	-1933.181	-1932.911	-1932.641	-1932.371	-1932.101	-1931.831	-1931.561	-1931.291	-1931.021	-1930.751	-1930.481	-1930.211	-1929.941	-1929.671	-1929.401	-1929.131	-1928.861	-1928.591	-1928.321	-1928.051	-1927.781	-1927.511	-1927.241	-1926.971	-1926.701	-1926.431	-1926.161	-1925.891	-1925.621	-1925.351	-1925.081	-1924.811	-1924.541	-1924.271	-1924.001	-1923.731	-1923.461	-1923.191	-1922.921	-1922.651	-1922.381	-1922.111	-1921.841	-1921.571	-1921.301	-1921.031	-1920.761	-1920.491	-1920.221	-1919.951	-1919.681	-1919.411	-1919.141	-1918.871	-1918.601	-1918.331	-1918.061	-1917.791	-1917.521	-1917.251	-1916.981	-1916.711	-1916.441	-1916.171	-1915.901	-1915.631	-1915.361	-1915.091	-1914.821	-1914.551	-1914.281	-1914.011	-1913.741	-1913.471	-1913.201	-1912.931	-1912.661	-1912.391	-1912.121	-1911.851	-1911.581	-1911.311	-1911.041	-1910.771	-1910.501	-1910.231	-1909.961	-1909.691	-1909.421	-1909.151	-1908.881	-1908.611	-1908.341	-1908.071	-1907.801	-1907.531	-1907.261	-1906.991	-1906.721	-1906.451	-1906.181	-1905.911	-1905.641	-1905.371	-1905.101	-1904.831	-1904.561	-1904.291	-1904.021	-1903.751	-1903.481	-1903.211	-1902.941	-1902.671	-1902.401	-1902.131	-1901.861	-1901.591	-1901.321	-1901.051	-1900.781	-1900.511	-1900.241	-1900.000	-1899.731	-1899.461	-1899.191	-1898.921	-1898.651	-1898.381	-1898.111	-1897.841	-1897.571	-1897.301	-1897.031	-1896.761	-1896.491	-1896.221	-1895.951	-1895.681	-1895.411	-1895.141	-1894.871	-1894.601	-1894.331	-1894.061	-1893.791	-1893.521	-1893.251	-1892.981	-1892.711	-1892.441	-1892.171	-1891.901	-1891.631	-1891.361	-1891.091	-1890.821	-1890.551	-1890.281	-1890.011	-1889.741	-1889.471	-1889.201	-1888.931	-1888.661	-1888.391	-1888.121	-1887.851	-1887.581	-1887.311	-1887.041	-1886.771	-1886.501	-1886.231	-1885.961	-1885.691	-1885.421	-1885.151	-1884.881	-1884.611	-1884.341	-1884.071	-1883.801	-1883.531	-1883.261	-1882.991	-1882.721	-1882.451	-1882.181	-1881.911	-1881.641	-1881.371	-1881.101	-1880.831	-1880.561	-1880.291	-1880.021	-1879.751	-1879.481	-1879.211	-1878.941	-1878.671	-1878.401	-1878.131	-1877.861	-1877.591	-1877.321	-1877.051	-1876.781	-1876.511	-1876.241	-1875.971	-1875.701	-1875.431	-1875.161	-1874.891	-1874.621	-1874.351	-1874.081	-1873.811	-1873.541	-1873.271	-1873.001	-1872.731	-1872.461	-1872.191	-1871.921	-1871.651	-1871.381	-1871.111	-1870.841	-1870.571	-1870.301	-1870.031	-1869.761	-1869.491	-1869.221	-1868.951	-1868.681	-1868.411	-1868.141	-1867.871	-1867.601	-1867.331	-1867.061	-1866.791	-1866.521	-1866.251	-1865.981	-1865.711	-1865.441	-1865.171	-1864.901	-1864.631	-1864.361	-1864.091	-1863.821	-1863.551	-1863.281	-1863.011	-1862.741	-1862.471	-1862.201	-1861.931	-1861.661	-1861.391	-1861.121	-1860.851	-1860.581	-1860.311	-1860.041	-1859.771	-1859.501	-1859.231	-1858.961	-1858.691	-1858.421	-1858.151	-1857.881	-1857.611	-1857.341	-1857.071	-1856.801	-1856.531	-1856.261	-1855.991	-1855.721	-1855.451	-1855.181	-1854.911	-1854.641	-1854.371	-1854.101	-1853.831	-1853.561	-1853.291	-1853.021	-1852.751	-1852.481	-1852.211	-1851.941	-1851.671	-1851.401	-1851.131	-1850.861	-1850.591	-1850.321	-1850.051	-1849.781	-1849.511	-1849.241	-1848.971	-1848.701	-1848.431	-1848.161	-1847.891	-1847.621	-1847.351	-1847.081	-1846.811	-1846.541	-1846.271	-1846.001	-1845.731	-1845.461	-1845.191	-1844.921	-1844.651	-1844.381	-1844.111	-1843.841	-1843.571	-1843.301	-1843.031	-1842.761	-1842.491	-1842.221	-1841.951	-1841.681	-1841.411	-1841.141	-1840.871	-1840.601	-1840.331	-1840.061	-1839.791	-1839.521	-1839.251	-1838.981	-1838.711	-1838.441	-1838.171	-1837.901	-1837.631	-1837.361	-1837.091	-1836.821	-1836.551	-1836.281	-1836.011	-1835.741	-1835.471	-1835.201	-1834.931	-1834.661	-1834.391	-1834.121	-1833.851	-1833.581	-1833.311	-1833.041	-1832.771	-1832.501	-1832.231	-1831.961	-1831.691	-1831.421	-1831.151	-1830.881	-1830.611	-1830.341	-1830.071	-1829.801	-1829.531	-1829.261	-1828.991	-1828.721	-1828.451	-1828.181	-1827.911	-1827.641	-1827.371	-1827.101	-1826.831	-1826.561	-1826.291	-1826.021	-1825.751	-1825.481	-1825.211	-1824.941	-1824.671	-1824.401	-1824.131	-1823.861	-1823.591	-1823.321	-1823.051	-1822.781	-1822.511	-1822.241	-1821.971	-1821.701	-1821.431	-1821.161	-1820.891	-1820.621	-1820.351	-1820.081	-1819.811	-1819.541	-1819.271	-1819.001	-1818.731	-1818.461	-1818.191	-1817.921	-1817.651	-1817.381	-1817.111	-1816.841	-1816.571	-1816.301	-1816.031	-1815.761	-1815.491	-1815.221	-1814.951	-1814.681	-1814.411	-1814.141	-1813.871	-1813.601	-1813.331	-1813.061	-1812.791	-1812.521	-1812.251	-1811.981	-1811.711	-1811.441	-1811.171	-1810.901	-1810.631	-1810.361	-1810.091	-1809.821	-1809.551	-1809.281	-1809.011	-1808.741	-1808.471	-1808.201	-1807.931	-1807.661	-1807.391	-1807.121	-1806.851	-1806.581	-1806.311	-1806.041	-1805.771	-1805.501	-1805.231	-1804.961	-1804.691	-1804.421	-1804.151	-1803.881	-1803.611	-1803.341	-1803.071	-1802.801	-1802.531	-1802.261	-1801.991	-1801.721	-1801.451	-1801.181	-1800.911	-1800.641	-1800.371	-1800.101	-1799.831	-1799.561	-1799.291	-1799.021	-1798.751	-1798.481	-1798.211	-1797.941	-1797.671	-1797.401	-1797.131	-1796.861	-1796.591	-1796.321	-1796.051	-1795.781	-1795.511	-1795.241	-1794.971	-1794.701	-1794.431	-1794.161	-1793.891	-1793.621	-1793.351	-1793.081	-1792.811	-1792.541	-1792.271	-1792.001	-1791.731	-1791.461	-1791.191	-1790.921	-1790.651	-1790.381	-1790.111	-1789.841	-1789.571	-1789.301	-1789.031	-1788.761	-1788.491	-1788.221	-1787.951	-1787.681	-1787.411	-1787.141	-1786.871	-1786.601	-1786.331	-1786.061	-1785.791	-1785.521	-1785.251	-1784.981	-1784.711	-1784.441	-1784.171	-1783.901	-1783.631	-1783.361	-1783.091	-1782.821	-1782.551	-1782.281	-1782.011	-1781.741	-1781.471	-1781.201	-1780.931	-1780.661	-1780.391	-1780.121	-1779.851	-1779.581	-1779.311	-1779.041	-1778.771	-1778.501	-1778.231	-1777.961	-1777.691	-1777.421	-1777.151	-1776.881	-1776.611	-1776.341	-1776.071	-1775.801	-1775.531	-1775.261	-1774.991	-1774.721	-1774.451	-1774.181	-1773.911	-1773.641	-1773.371	-1773.101	-1772.831	-1772.561	-1772.291	-1772.021	-1771.751	-1771.481	-1771.211	-1770.941	-1770.671	-1770.401	-1770.131	-1769.861	-1769.591	-1769.321	-1769.051	-1768.781	-1768.511	-1768.241	-1767.971	-1767.701	-1767.431	-1767.161	-1766.891	-1766.621	-1766.351	-1766.081	-1765.811	-1765.541	-1765.271	-1765.001	-1764.731	-1764.461	-1764.191	-1763.921	-1763.651	-1763.381	-1763.111	-1762.841	-1762.571	-1762.301	-1762.031	-1761.761	-1761.491	-1761.221	-1760.951	-1760.681	-1760.411	-1760.141	-1759.871	-1759.601	-1759.331	-1759.061	-1758.791	-1758.521	-1758.251	-1757.981	-1757.711	-1757.441	-1757.171	-1756.901</
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[illegible]

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project		
R0	Nov.2020		<div><p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p></div>	<div><p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p></div>	<div>Designed: <input type="text"/></div> <div>Drawn: <input type="text"/></div> <div>Checked: <input type="text"/></div> <div>Approved: <input type="text"/></div> <div>Scale :- H:-1.2500 V:-1.250</div>		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Valloo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.	
					Drawing Title			DRAINAGE PLAN & PROFILE (km.2+000 to km.3+000)	
					Date: <input type="text"/> Project No: <input type="text"/> Drawing No: <input type="text"/>			SEP-2020 1564 NHIDCL/NH-244/PA/CK-III/P&P/03/R0	



LEGEND

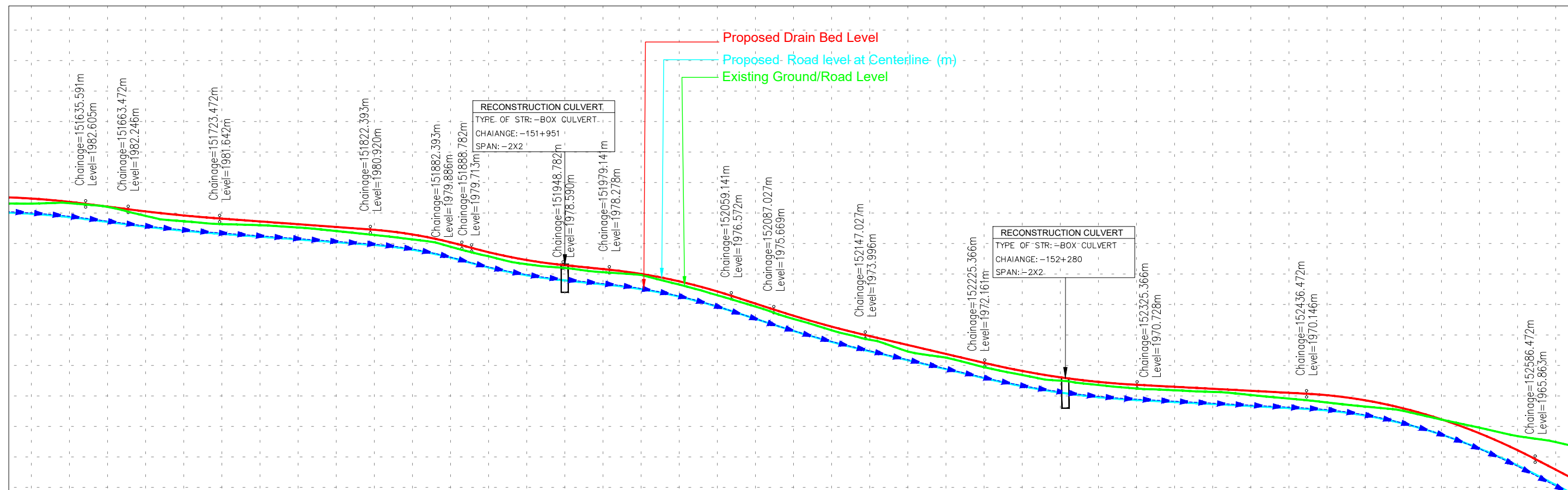
Proposed Center Line	
Proposed Median	
Proposed Carriageway Edge	
Proposed Service Road	
Proposed Toe Line	
Proposed Right of Way	
Existing Right of Way	
Proposed Box Culvert	
Proposed HP Culvert	
Proposed Slab Culvert	
Proposed Vehicular Underpass	
Proposed Tunnel	
Proposed Cattle Underpass	
Proposed Bridge/ROB	
Toe Wall	
Retaining Wall / Breast Wall	
Grave Yard	
Gate Temporary/Permanents	
GPS	
Temporary Bench Mark	
Religious Structures	
Telephone Box	
Transformer Points	
Pylon	
Lamp Post	
Tree-T1,T2,T3,T4,T5,T6	
Tube Well, Well	
Hand Pump	
Municipal Tap	
Kilometer Stone	
OFC Pillar	
Petrol Pump	
North Symbol	
Railway Track	
Existing Paved Road	
Existing Unpaved Road	
Telephone Line	
High Tension Lines	
Low Tension Line	
Drain	
HFL Line	
Water Pipe Line	
Building	

PLAN

R - Radius of Curve
Dc - Degree of Curvature
Lc - Length of Circular Curve
Ts - Tangent Length
Es - Apex Distance
LS - Length of Spiral Curve
S - Shift
Δ - Deflection Angle
V - Design Speed Km/Hr
e% - Superelevation
PC - Point of Curvature
PT - Point of Tangent
HIP - Horizontal Intersection Point

L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
e - Superelevation (%)
D - Straight Length of Horizontal Alignment
Lc - Length of Circular Curve



(DATUM - 1962)

Propose Drain Bed Level (m)	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></d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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT

NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
(MINISTRY OF ROAD TRANSPORT & HIGHWAY)
GOVERNMENT OF INDIA



CONSULTANT:



RODIC CONSULTANTS PVT. LTD.
1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)
In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

FINAL DETAILED PROJECT REPORT

Designed:

Drawn:

Checked:

Approved:

Scale :-

H:-1.2500

V:-1.250

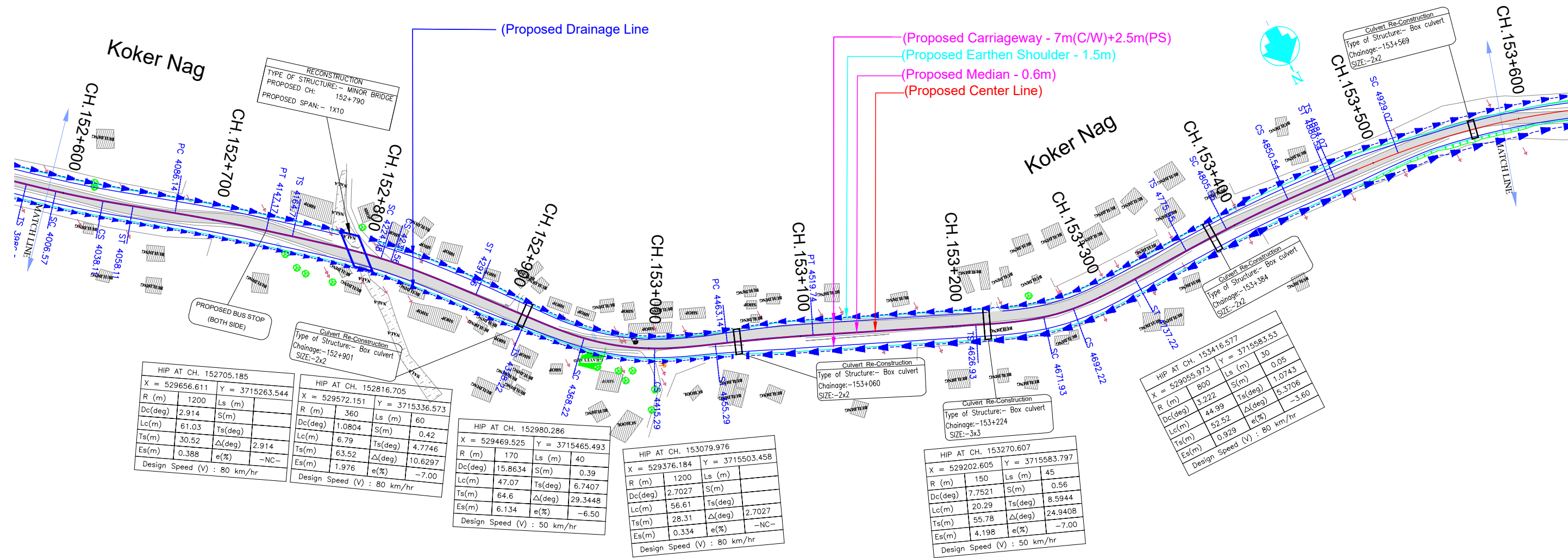
Project

Drawing Title

Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khealani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khealani - Kishtwar - Chattroo - Khanabal Section of NH 244.

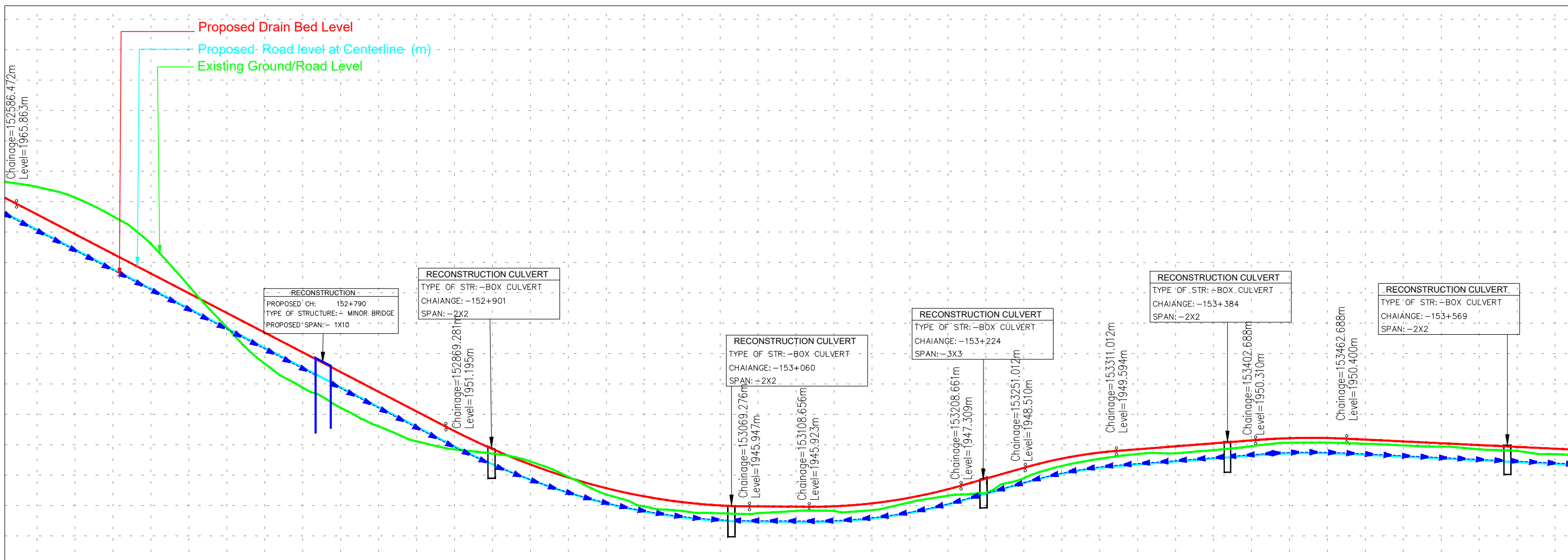
DRAINAGE PLAN & PROFILE
(km.3+000 to km.4+000)

Date:	Project No.	Drawing No.
SEP-2020	1564	NHIDCL/NH-244-PACK-I/IF&P/04/R0



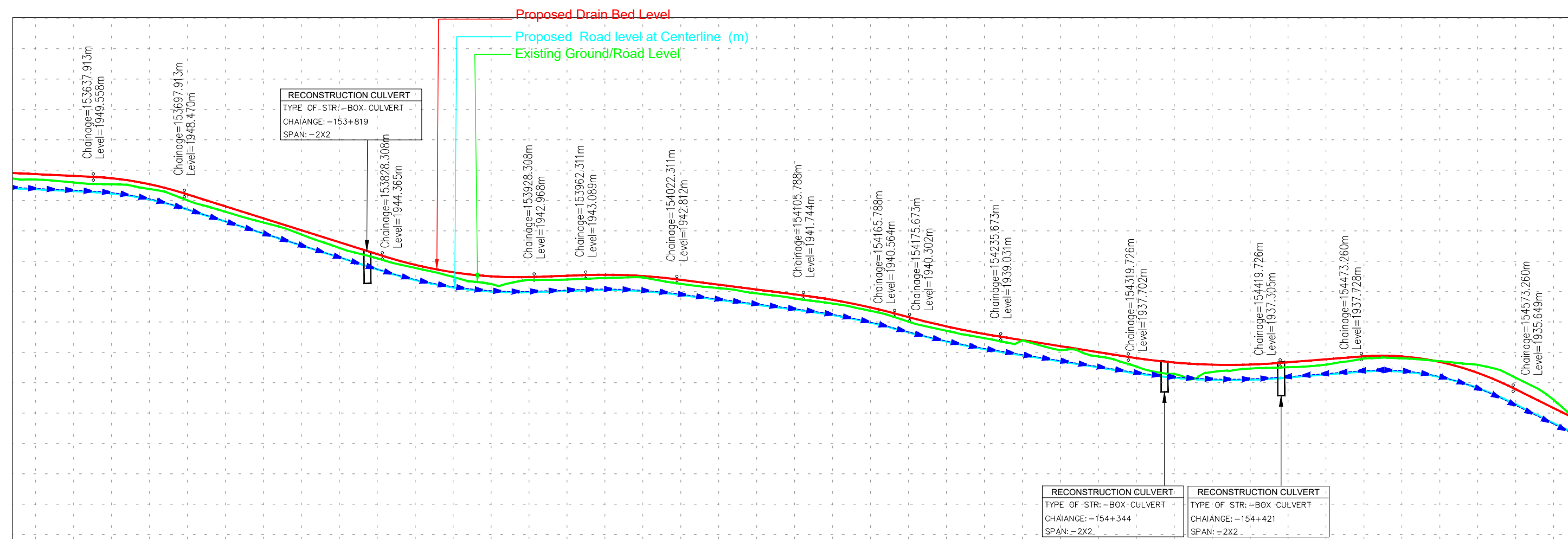
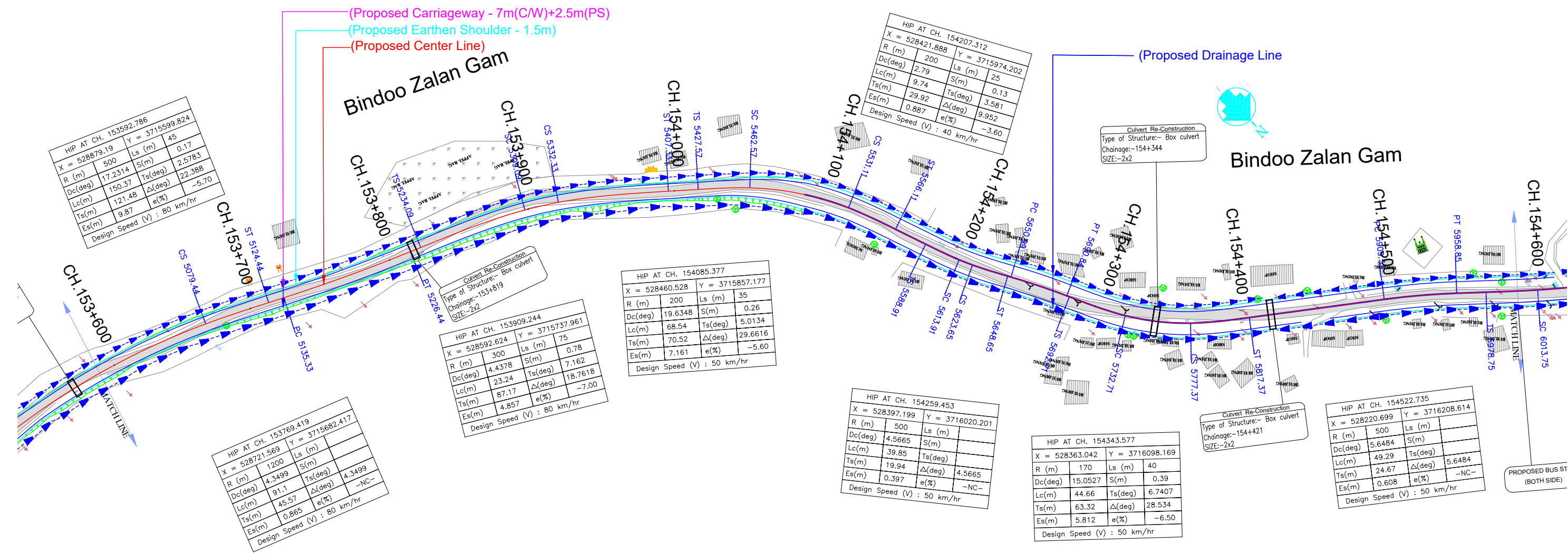
LEGEND

Proposed Center Line	---
Proposed Median	---
Proposed Carriageway Edge	---
Proposed Service Road	---
Proposed Toe Line	---
Proposed Right of Way	---
Existing Right of Way	---
Proposed Box Culvert	---
Proposed HP Culvert	---
Proposed Slab Culvert	---
Proposed Vehicular Underpass	---
Proposed Tunnel	---
Proposed Cattle Underpass	---
Proposed Bridge/ROB	---
Toe Wall	---
Retaining Wall / Breast Wall	---
Grave Yard	---
Gate Temporary/Permanents	---
GPS	---
Temporary Bench Mark	---
Religious Structures	---
Telephone Box	---
Transformer Points	---
Pylon	---
Lamp Post	---
Tree-T1,T2,T3,T4,T5,T6	---
Tube Well, Well	---
Hand Pump	---
Municipal Tap	---
Kilometer Stone	---
OFC Pillar	---
Petrol Pump	---
North Symbol	---
Railway Track	---
Existing Paved Road	---
Existing Unpaved Road	---
Telephone Line	---
High Tension Lines	---
Low Tension Line	---
Drain	---
HFL Line	---
Water Pipe Line	---
Building	---



(DATUM - 1942)

Propose Drain Bed Level (m)	-1964.151	-1963.855	-1963.568	-1963.271	-1962.975	-1962.678	-1962.382	-1962.085	-1961.788	-1961.492	-1961.195	-1960.898	-1960.601	-1960.304	-1959.999	-1959.699	-1959.399	-1959.099	-1958.799	-1958.499	-1958.199	-1957.899	-1957.599	-1957.299	-1956.999	-1956.699	-1956.399	-1956.099	-1955.799	-1955.499	-1955.199	-1954.899	-1954.599	-1954.299	-1953.999	-1953.699	-1953.399	-1953.099	-1952.799	-1952.499	-1952.199	-1951.899	-1951.599	-1951.299	-1950.999	-1950.699	-1950.399	-1950.099	-1949.799	-1949.499	-1949.199	-1948.899	-1948.599	-1948.299	-1947.999	-1947.699	-1947.399	-1947.099	-1946.799	-1946.499	-1946.199	-1945.899	-1945.599	-1945.299	-1944.999	-1944.699	-1944.399	-1944.099	-1943.799	-1943.499	-1943.199	-1942.899	-1942.599	-1942.299	-1941.999	-1941.699	-1941.399	-1941.099	-1940.799	-1940.499	-1940.199	-1939.899	-1939.599	-1939.299	-1938.999	-1938.699	-1938.399	-1938.099	-1937.799	-1937.499	-1937.199	-1936.899	-1936.599	-1936.299	-1935.999	-1935.699	-1935.399	-1935.099	-1934.799	-1934.499	-1934.199	-1933.899	-1933.599	-1933.299	-1932.999	-1932.699	-1932.399	-1932.099	-1931.799	-1931.499	-1931.199	-1930.899	-1930.599	-1930.299	-1929.999	-1929.699	-1929.399	-1929.099	-1928.799	-1928.499	-1928.199	-1927.899	-1927.599	-1927.299	-1926.999	-1926.699	-1926.399	-1926.099	-1925.799	-1925.499	-1925.199	-1924.899	-1924.599	-1924.299	-1923.999	-1923.699	-1923.399	-1923.099	-1922.799	-1922.499	-1922.199	-1921.899	-1921.599	-1921.299	-1920.999	-1920.699	-1920.399	-1920.099	-1919.799	-1919.499	-1919.199	-1918.899	-1918.599	-1918.299	-1917.999	-1917.699	-1917.399	-1917.099	-1916.799	-1916.499	-1916.199	-1915.899	-1915.599	-1915.299	-1914.999	-1914.699	-1914.399	-1914.099	-1913.799	-1913.499	-1913.199	-1912.899	-1912.599	-1912.299	-1911.999	-1911.699	-1911.399	-1911.099	-1910.799	-1910.499	-1910.199	-1909.899	-1909.599	-1909.299	-1908.999	-1908.699	-1908.399	-1908.099	-1907.799	-1907.499	-1907.199	-1906.899	-1906.599	-1906.299	-1905.999	-1905.699	-1905.399	-1905.099	-1904.799	-1904.499	-1904.199	-1903.899	-1903.599	-1903.299	-1902.999	-1902.699	-1902.399	-1902.099	-1901.799	-1901.499	-1901.199	-1900.899	-1900.599	-1900.299	-1900.099	-1899.799	-1899.499	-1899.199	-1898.899	-1898.599	-1898.299	-1897.999	-1897.699	-1897.399	-1897.099	-1896.799	-1896.499	-1896.199	-1895.899	-1895.599	-1895.299	-1894.999	-1894.699	-1894.399	-1894.099	-1893.799	-1893.499	-1893.199	-1892.899	-1892.599	-1892.299	-1891.999	-1891.699	-1891.399	-1891.099	-1890.799	-1890.499	-1890.199	-1889.899	-1889.599	-1889.299	-1888.999	-1888.699	-1888.399	-1888.099	-1887.799	-1887.499	-1887.199	-1886.899	-1886.599	-1886.299	-1885.999	-1885.699	-1885.399	-1885.099	-1884.799	-1884.499	-1884.199	-1883.899	-1883.599	-1883.299	-1882.999	-1882.699	-1882.399	-1882.099	-1881.799	-1881.499	-1881.199	-1880.899	-1880.599	-1880.299	-1879.999	-1879.699	-1879.399	-1879.099	-1878.799	-1878.499	-1878.199	-1877.899	-1877.599	-1877.299	-1876.999	-1876.699	-1876.399	-1876.099	-1875.799	-1875.499	-1875.199	-1874.899	-1874.599	-1874.299	-1873.999	-1873.699	-1873.399	-1873.099	-1872.799	-1872.499	-1872.199	-1871.899	-1871.599	-1871.299	-1870.999	-1870.699	-1870.399	-1870.099	-1869.799	-1869.499	-1869.199	-1868.899	-1868.599	-1868.299	-1867.999	-1867.699	-1867.399	-1867.099	-1866.799	-1866.499	-1866.199	-1865.899	-1865.599	-1865.299	-1864.999	-1864.699	-1864.399	-1864.099	-1863.799	-1863.499	-1863.199	-1862.899	-1862.599	-1862.299	-1861.999	-1861.699	-1861.399	-1861.099	-1860.799	-1860.499	-1860.199	-1859.899	-1859.599	-1859.299	-1858.999	-1858.699	-1858.399	-1858.099	-1857.799	-1857.499	-1857.199	-1856.899	-1856.599	-1856.299	-1855.999	-1855.699	-1855.399	-1855.099	-1854.799	-1854.499	-1854.199	-1853.899	-1853.599	-1853.299	-1852.999	-1852.699	-1852.399	-1852.099	-1851.799	-1851.499	-1851.199	-1850.899	-1850.599	-1850.299	-1849.999	-1849.699	-1849.399	-1849.099	-1848.799	-1848.499	-1848.199	-1847.899	-1847.599	-1847.299	-1846.999	-1846.699	-1846.399	-1846.099	-1845.799	-1845.499	-1845.199	-1844.899	-1844.599	-1844.299	-1843.999	-1843.699	-1843.399	-1843.099	-1842.799	-1842.499	-1842.199	-1841.899	-1841.599	-1841.299	-1840.999	-1840.699	-1840.399	-1840.099	-1839.799	-1839.499	-1839.199	-1838.899	-1838.599	-1838.299	-1837.999	-1837.699	-1837.399	-1837.099	-1836.799	-1836.499	-1836.199	-1835.899	-1835.599	-1835.299	-1834.999	-1834.699	-1834.399	-1834.099	-1833.799	-1833.499	-1833.199	-1832.899	-1832.599	-1832.299	-1831.999	-1831.699	-1831.399	-1831.099	-1830.799	-1830.499	-1830.199	-1829.899	-1829.599	-1829.299	-1828.999	-1828.699	-1828.399	-1828.099	-1827.799	-1827.499	-1827.199	-1826.899	-1826.599	-1826.299	-1825.999	-1825.699	-1825.399	-1825.099	-1824.799	-1824.499	-1824.199	-1823.899	-1823.599	-1823.299	-1822.999	-1822.699	-1822.399	-1822.099	-1821.799	-1821.499	-1821.199	-1820.899	-1820.599	-1820.299	-1819.999	-1819.699	-1819.399	-1819.099	-1818.799	-1818.499	-1818.199	-1817.899	-1817.599	-1817.299	-1816.999	-1816.699	-1816.399	-1816.099	-1815.799	-1815.499	-1815.199	-1814.899	-1814.599	-1814.299	-1813.999	-1813.699	-1813.399	-1813.099	-1812.799	-1812.499	-1812.199	-1811.899	-1811.599	-1811.299	-1810.999	-1810.699	-1810.399	-1810.099	-1809.799	-1809.499	-1809.199	-1808.899	-1808.599	-1808.299	-1807.999	-1807.699	-1807.399	-1807.099	-1806.799	-1806.499	-1806.199	-1805.899	-1805.599	-1805.299	-1804.999	-1804.699	-1804.399	-1804.099	-1803.799	-1803.499	-1803.199	-1802.899	-1802.599	-1802.299	-1801.999	-1801.699	-1801.399	-1801.099	-1800.799	-1800.499	-1800.199	-1799.899	-1799.599	-1799.299	-1798.999	-1798.699	-1798.399	-1798.099	-1797.799	-1797.499	-1797.199	-1796.899	-1796.599	-1796.299	-1795.999	-1795.699	-1795.399	-1795.099	-1794.799	-1794.499	-1794.199	-1793.899	-1793.599	-1793.299	-1792.999	-1792.699	-1792.399	-1792.099	-1791.799	-1791.499	-1791.199	-1790.899	-1790.599	-1790.299	-1789.999	-1789.699	-1789.399	-1789.099	-1788.799	-1788.499	-1788.199	-1787.899	-1787.599	-1787.299	-1786.999	-1786.699	-1786.399	-1786.099	-1785.799	-1785.499	-1785.199	-1784.899	-1784.599	-1784.299	-1783.999	-1783.699	-1783.399	-1783.099	-1782.799	-1782.499	-1782.199	-1781.899	-1781.599	-1781.299	-1780.999	-1780.699	-1780.399	-1780.099	-1779.799	-1779.499	-1779.199	-1778.899	-1778.599	-1778.299	-1777.999	-1777.699	-1777.399	-1777.099	-1776.799	-1776.499	-1776.199	-1775.899	-1775.599	-1775.299	-1774.999	-1774.699	-1774.399	-1774.099	-1773.799	-1773.499	-1773.199	-1772.899	-1772.599	-1772.299	-1771.999	-1771.699	-1771.399	-1771.099	-1770.799	-1770.499	-1770.199	-1769.899	-1769.599	-1769.299	-1768.999	-1768.699	-1768.399	-1768.099	-1767.799	-1767.499	-1767.199	-1766.899	-1766.599	-1766.299	-1765.999	-1765.699	-1765.399	-1765.099	-1764.799	-1764.499	-1764.199	-1763.899	-1763.599	-1763.299	-1762.999	-1762.699	-1762.399	-1762.099	-1761.799	-1761.499	-1761.199	-1760.899	-1760.599	-1760.299	-1759.999	-1759.699	-1759.399	-1759.099	-1758.799	-1758.499	-1758.199	-1757.899	-1757.599	-1757.299	-1756.999	-1756.699	-1756.399	-1756.099	-1755.799	-1755.499	-1755.199	-1754.899	-1754.599	-1754.299	-1753.999	-1753.699	-1753.399	-1753.099	-1752.799	-1752.499	-1752.199	-1751.899	-1751.599	-1751.299	-1750.999	-1750.699	-1750.399	-1750.099	-1749.799	-1749.499	-1749.199	-1748.899	-1748.599	-1748.299	-1747.999	-1747.699	-1747.399	-1747.099	-1746.799	-1746.499	-1746.199	-1745.899	-1745.599	-1745.299	-1744.999	-1744.699	-1744.399	-1744.099	-1743.799	-1743.499	-1743.199	-1742.899	-1742.599	-1742.299	-1741.999	-1741.699	-1741.399	-1741.099	-1740.799	-1740.499	-1740.199	-1739.899	-1739.599	-1739.299	-1738.999	-1738.699	-1738.399	-1738.099	-1737.799	-1737.499	-1737.199	-1736.899	-1736.599	-1736.299	-1735.999	-1735.699	-1735.399	-1735.099	-1734.799	-1734.499	-1734.199	-1733.899	-1733.599	-1733.299	-1732.999	-1732.699	-1732.399	-1732.099	-1731.799	-1731.499	-1731.199	-1730.899	-1730.599	-1730.299	-1729.999	-1729.699	-1729.399	-1729.099	-1728.799	-1728.499	-1728.199	-1727.899	-1727.599	-1727.299	-1726.999	-1726.699	-1726.399	-1726.099	-1725.799	-1725.499	-1725.199	-1724.899	-1724.599	-1724.299	-1723.999	-1723.699	-1723.399	-1723.099	-1722.799	-1722.499	-1722.199	-1721.899	-1721.599	-1721.299	-1720.999	-1720.699	-1720.399	-1720.099	-1719.799	-1719.499	-1719.199	-1718.899	-1718.599	-1718.299	-1717.999	-1717.699	-1717.399	-1717.099	-1716.799	-1716.499	-1716.199	-1715.899	-1715.599	-1715.299	-1714.999	-1714.699	-1714.399	-1714.099	-1713.799	-1713.499	-1713.199	-1712.899	-1712.599	-1712.299	-1711.999
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(DATUM - 1930)

Propose Drain Bed Level (m)																				
Proposed Road Level at Centerline (m)																				
Existing Ground/Road Level at Centerline (m)																				
Proposed Vertical Alignment Schematic																				
Proposed Horizontal Alignment Schematic																				
Chainage (Km)																				

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT

NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

(MINISTRY OF ROAD TRANSPORT & HIGHWAY)

GOVERNMENT OF INDIA

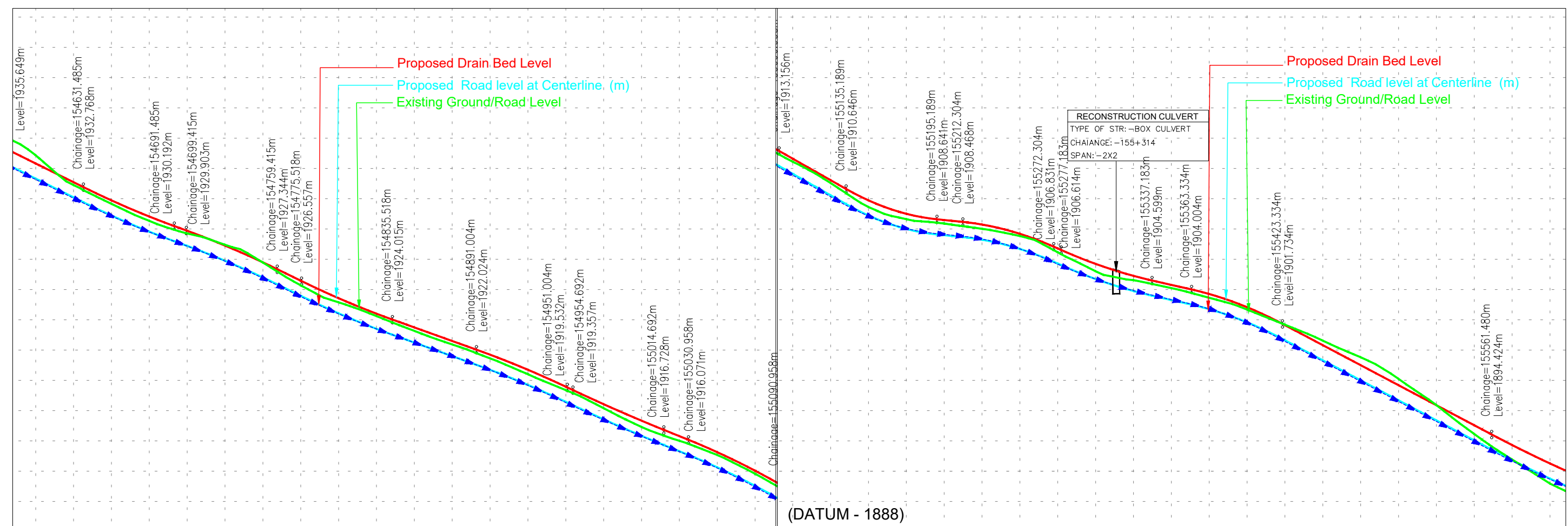
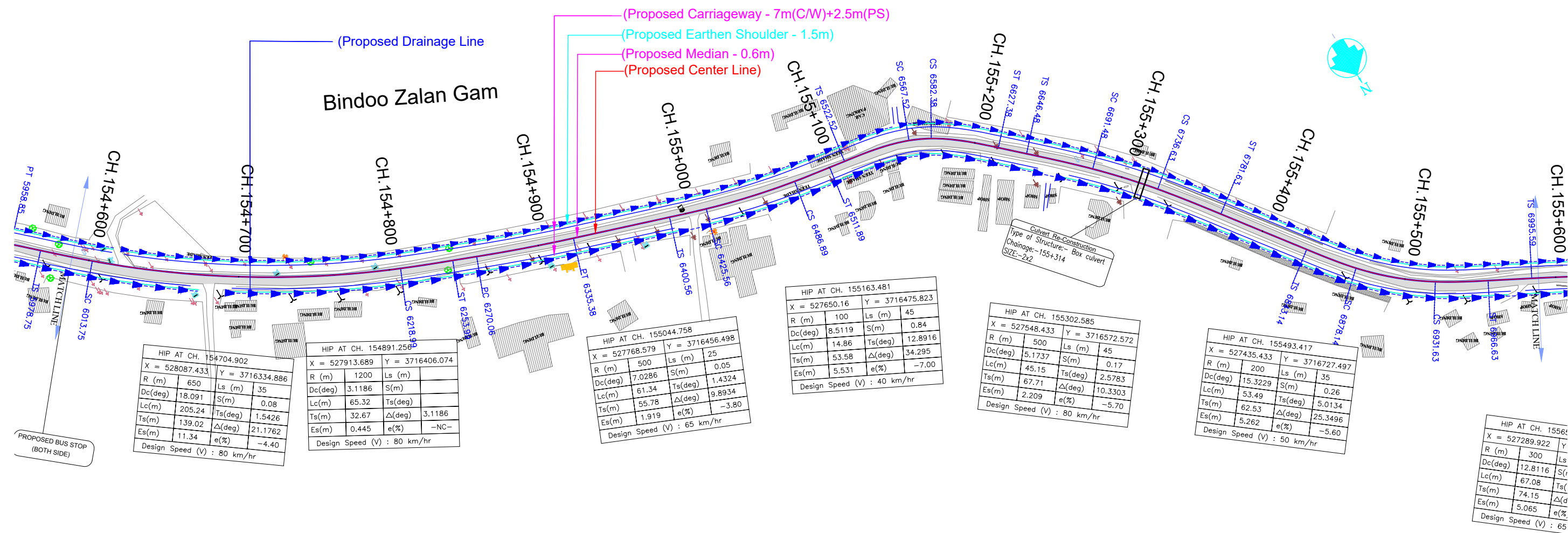
The logo of NHIDCL (National Highway & Infrastructure Development Corporation Limited) features a stylized bridge or highway structure in blue and white, with the acronym 'NHIDCL' in large, bold, blue letters. Below the acronym, the tagline 'BUILDING INFRASTRUCTURE. BUILDING THE NATION' is written in smaller blue capital letters.

CONSULTANT: **RODIC CONSULTANTS PVT. LTD.**
 1, JAI SINGH MARG (FIRST FLOOR), YMCA
 CULTURAL CENTRE BUILDING
 NEW DELHI - 110001 (INDIA)




In Association with
**Monarch Surveyors and Engineering
 Consultants Pvt. Ltd.**

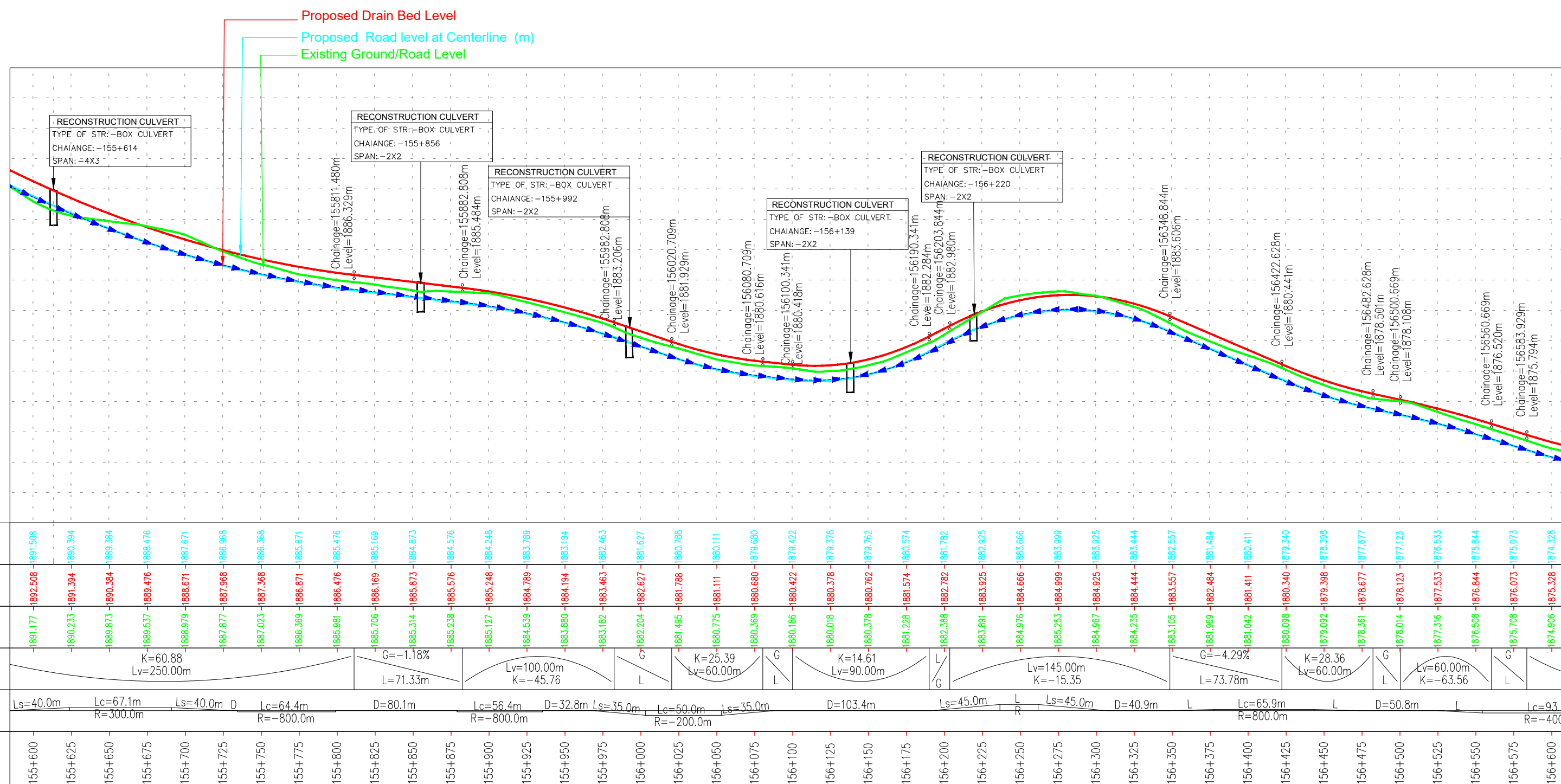
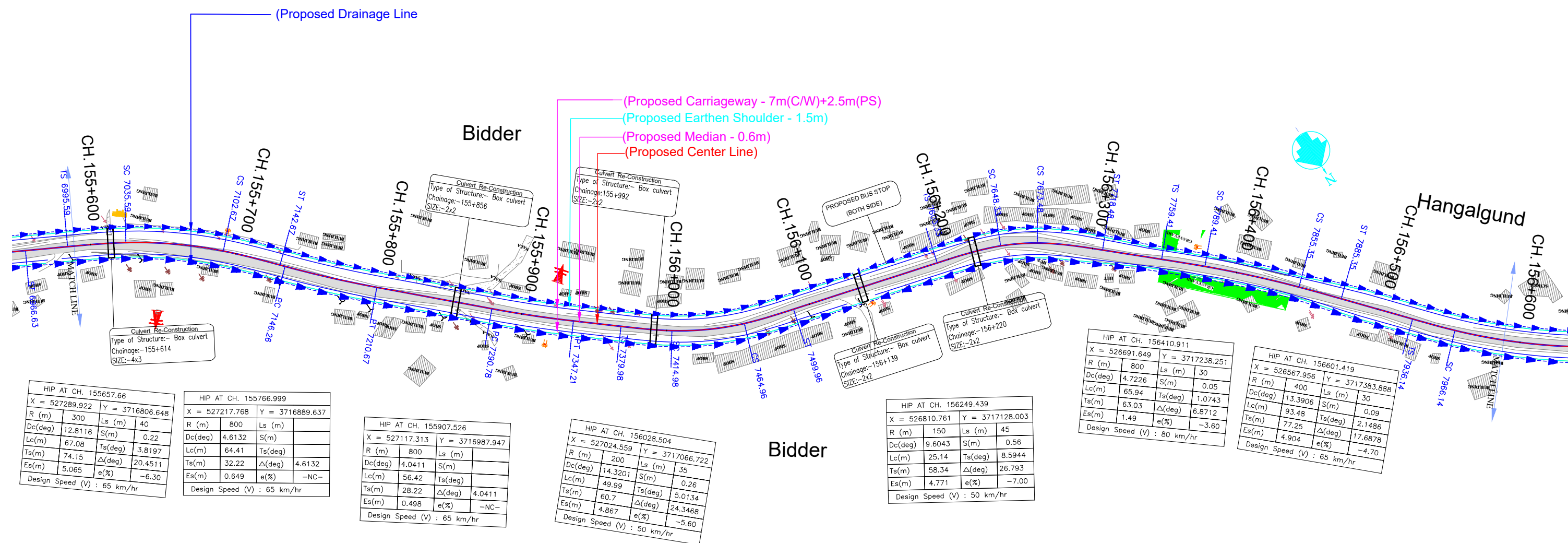
<u>FINAL DETAILED PROJECT REPORT</u>			
Designed:		Scale :- H:- 1.2500 V:- 1.250	
Drawn:			
Checked:			
Approved:			



Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (I) Km 44.500 of Khealani to Km 142.00 of Chattroo Village & (II) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khealani- Kishtwar - Chattroo - Khanabal Section of NH 244.		
Drawing Title	<u>DRAINAGE PLAN & PROFILE</u> (km.5+000 to km.6+000)		
	Date	Project No.	Drawing No.
	SEP-2020	1564	NHDC/L/NH-244-PACK-I/UP&P/06/0/R

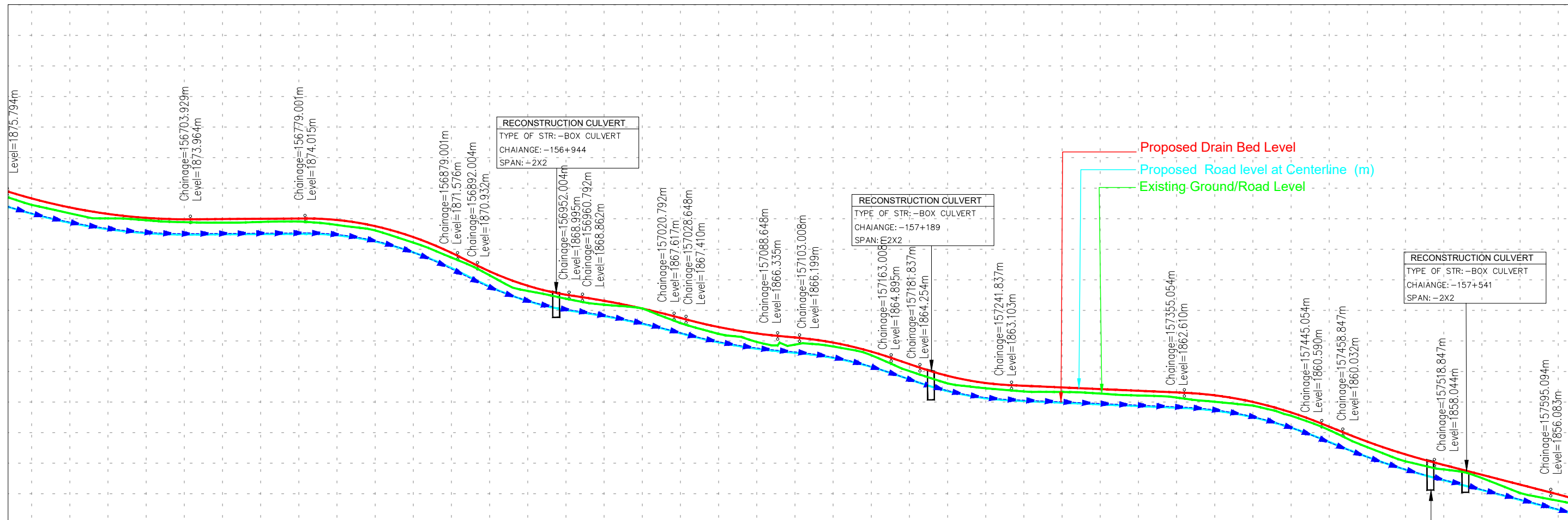
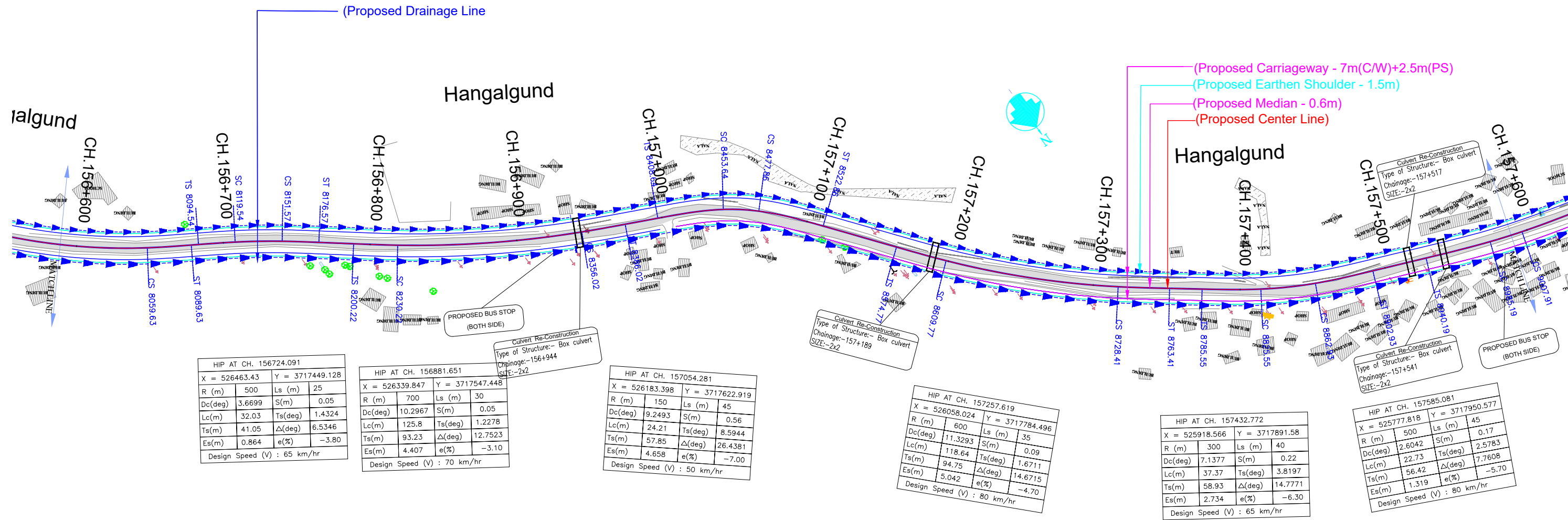


Propose Drain Bed Level (m)																												
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Chainage (Km)																												

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 265.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.					
R0	Nov.2020		 <p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p>	 <p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p> 	Designed:		Scale :- H:-1.2500 V:-1.250	Drawing Title						
					Drawn:									
					Checked:									
					Approved:									
								<p>DRAINAGE PLAN & PROFILE (km.6+000 to km.7+000)</p> <table><tr><td>Date</td><td>Project No</td><td>Drawing No</td></tr><tr><td>SEP-2020</td><td>1564</td><td>NHIDCL/NH-244-PACK-I/PSR/07/R0</td></tr></table>	Date	Project No	Drawing No	SEP-2020	1564	NHIDCL/NH-244-PACK-I/PSR/07/R0
Date	Project No	Drawing No												
SEP-2020	1564	NHIDCL/NH-244-PACK-I/PSR/07/R0												






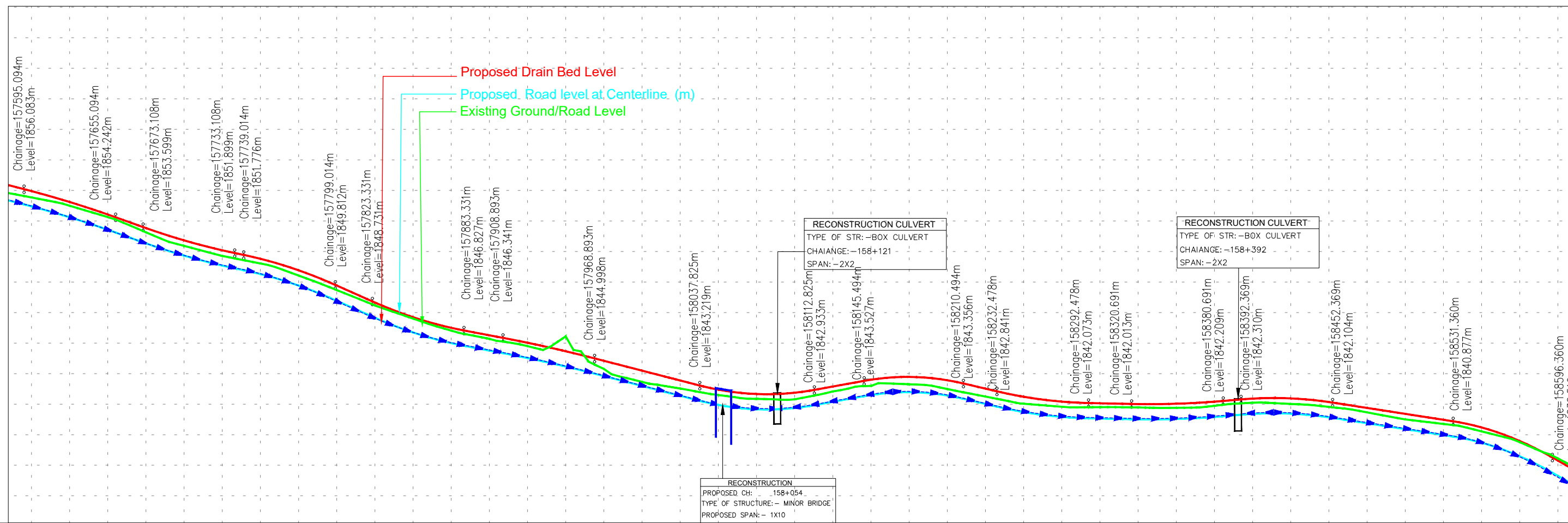
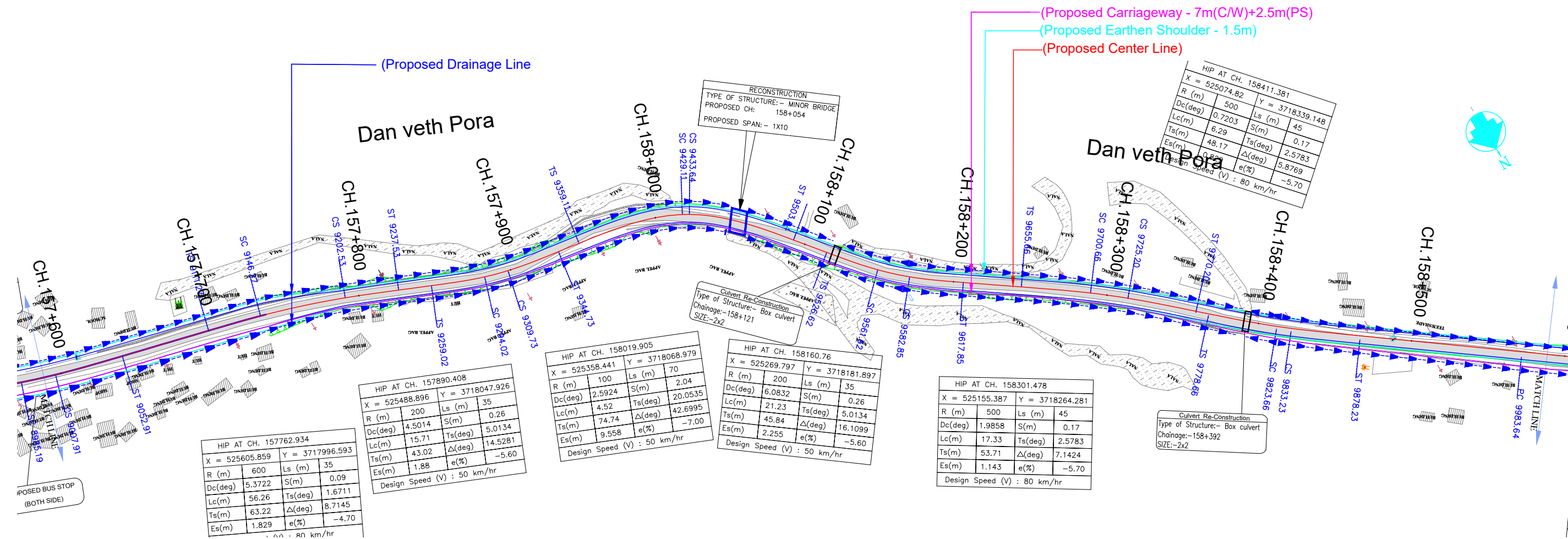
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project		
R0	Nov.2020		<div><p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p></div>	<div><p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</p><p>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p></div>	<div><div><div>Designed: <input type="text"/></div><div>Drawn: <input type="text"/></div><div>Checked: <input type="text"/></div><div>Approved: <input type="text"/></div></div><div>Scale :- H:-1.2500 V:-1.250</div></div>		Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
							Drawing Title	DRAINAGE PLAN & PROFILE (Km.7+000 to km.8+000)	
							Date	Project No.	Drawing No.
							SEP-2020	1564	NHIDCL/NH-244-PACK-1/P&P/08/R0



(DATUM - 1854)

[illegible]

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project
R0	Nov-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with  Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: _____ Drawn: _____ Checked: _____ Approved: _____ Scale :- H:-1.2500 V:-1.250			Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.503 of Khellani to Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Drawing Title			DRAINAGE PLAN & PROFILE (km.8+000 to km.9+000)
					Date			Project No.
					SEP-2020			1564
					Drawing No.			NHIDCL/NH-244-PACK-I/FP&P/ 09/R0



(DATUM - 1834)

Propose Drain Bed Level (m)	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	1854.955	
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LEGEND

Proposed Center Line	
Proposed Median	
Proposed Carriageway Edge	
Proposed Service Road	
Proposed Toe Line	
Proposed Right of Way	
Existing Right of Way	
Proposed Box Culvert	
Proposed HP Culvert	
Proposed Slab Culvert	
Proposed Vehicular Underpass	
Proposed Tunnel	
Proposed Cattle Underpass	
Proposed Bridge/ROB	
Toe Wall	
Retaining Wall / Breast Wall	
Grave Yard	
Gate Temporary/Permanents	
GPS	
Temporary Bench Mark	
Religious Structures	
Telephone Box	
Transformer Points	
Pylon	
Lamp Post	
Tree-T1,T2,T3,T4,T5,T6	
Tube Well, Well	
Hand Pump	
Municipal Tap	
Kilometer Stone	
OFC Pillar	
Petrol Pump	
North Symbol	
Railway Track	
Existing Paved Road	
Existing Unpaved Road	
Telephone Line	
High Tension Lines	
Low Tension Line	
Drain	
HFL Line	
Water Pipe Line	
Building	

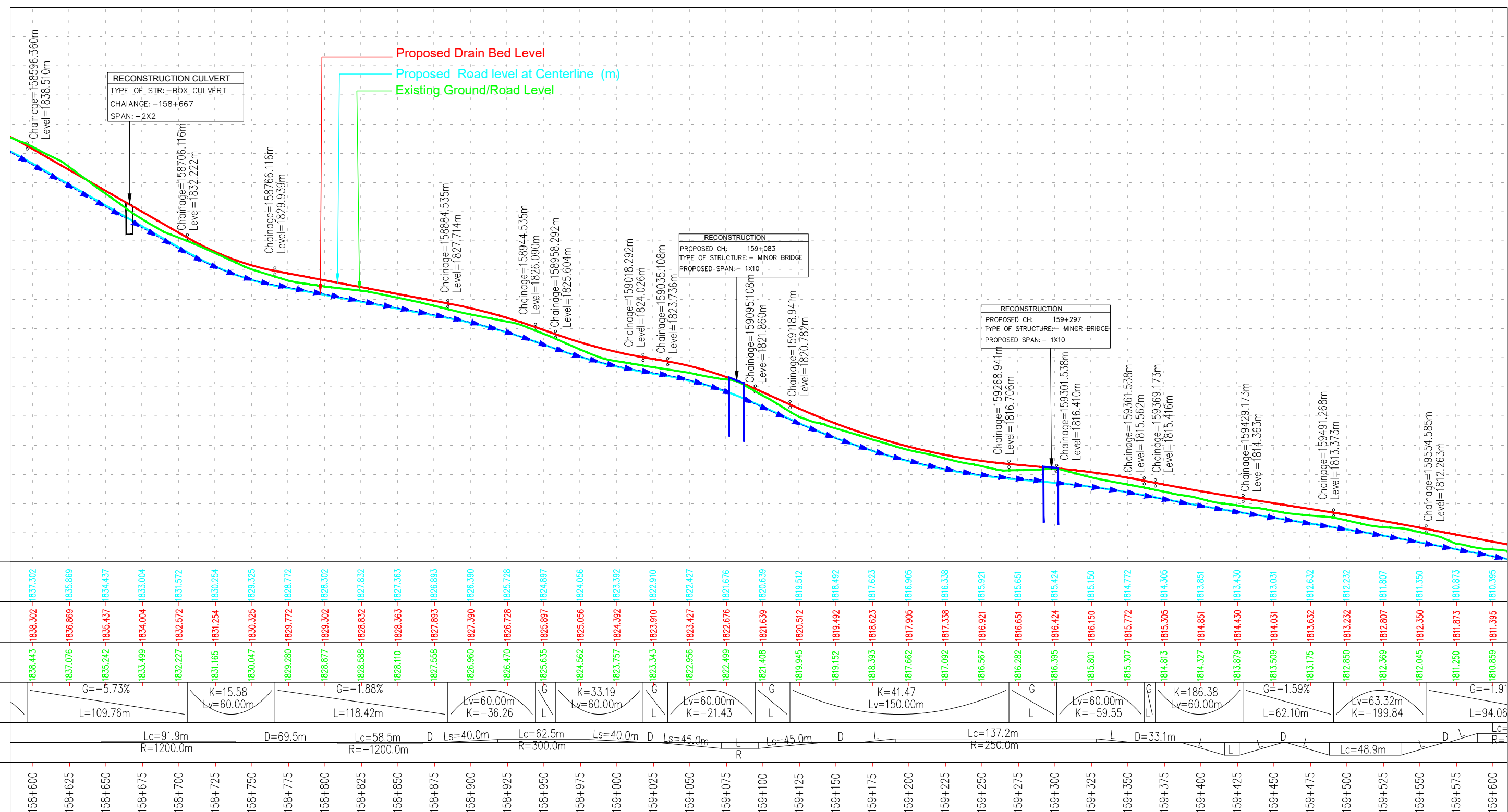
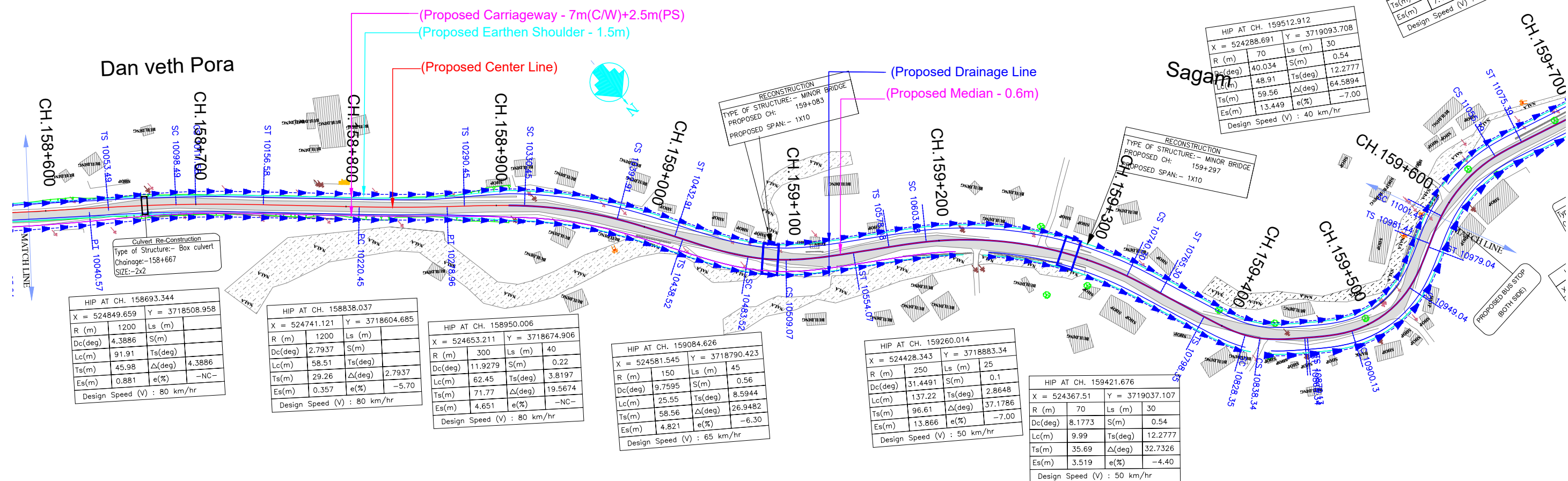
PLAN

R - Radius of Curve
Dc - Degree of Curvature
Lc - Length of Circular Curve
Ts - Tangent Length
Es - Apex Distance
Ls - Length of Spiral Curve
S - Shift
Δ - Deflection Angle
V - Design Speed Km/Hr
e% - Superelevation
PC - Point of Curvature
PT - Point of Tangent
HIP - Horizontal Intersection Point

L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
e - Superelevation (%)
D - Straight Length of Horizontal Alignment
Lc - Length of Circular Curve

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khehali to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khehali - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	Nov.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: Drawn: Checked: Approved:	Scale :- H:-1.2500 V:-1.250	Drawing Title
			DRAWING PLAN & PROFILE (Km.9+000 to km.10+000)		Date: SEP-2020	Project No: 1564	Drawing No: NHIDCL/NH-244-PACK-II/P&P/10/R0



LEGEND

Proposed Center Line	
Proposed Median	
Proposed Carriageway Edge	
Proposed Service Road	
Proposed Toe Line	
Proposed Right of Way	
Existing Right of Way	
Proposed Box Culvert	
Proposed HP Culvert	
Proposed Slab Culvert	
Proposed Vehicular Underpass	
Proposed Tunnel	
Proposed Cattle Underpass	
Proposed Bridge/ROB	
Toe Wall	
Retaining Wall / Breast Wall	
Grave Yard	
Gate Temporary/Permanents	
GPS	
Temporary Bench Mark	
Religious Structures	
Telephone Box	
Transformer Points	
Pylon	
Lamp Post	
Tree-T1,T2,T3,T4,T5,T6	
Tube Well, Well	
Hand Pump	
Municipal Tap	
Kilometer Stone	
OFC Pillar	
Petrol Pump	
North Symbol	
Railway Track	
Existing Paved Road	
Existing Unpaved Road	
Telephone Line	
High Tension Lines	
Low Tension Line	
Drain	
HFL Line	
Water Pipe Line	
Building	

PLAN

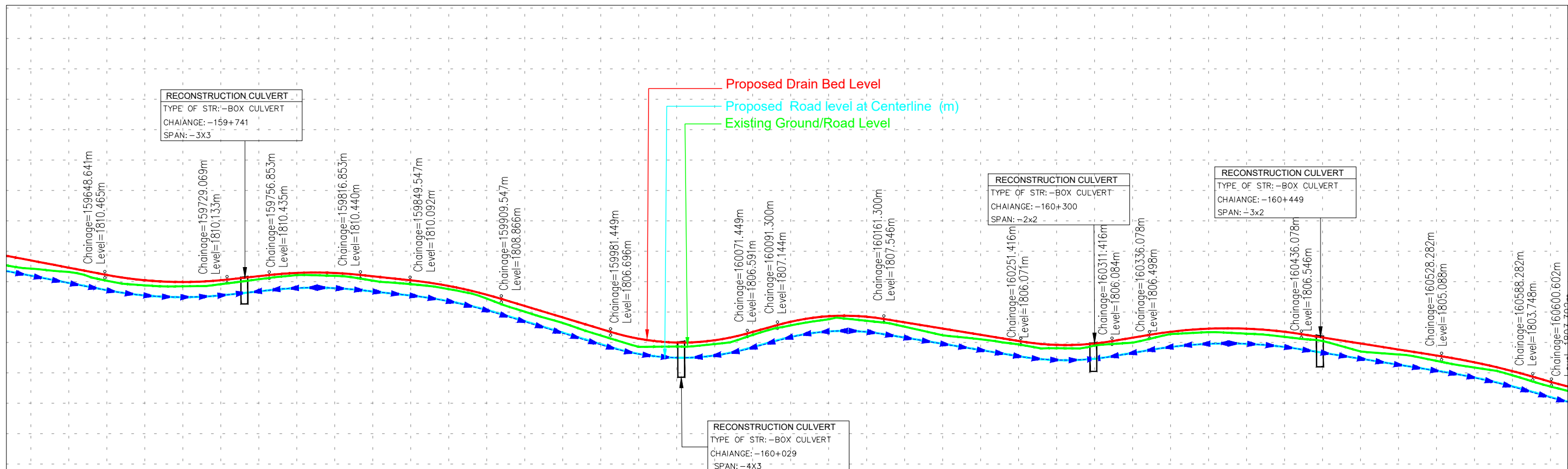
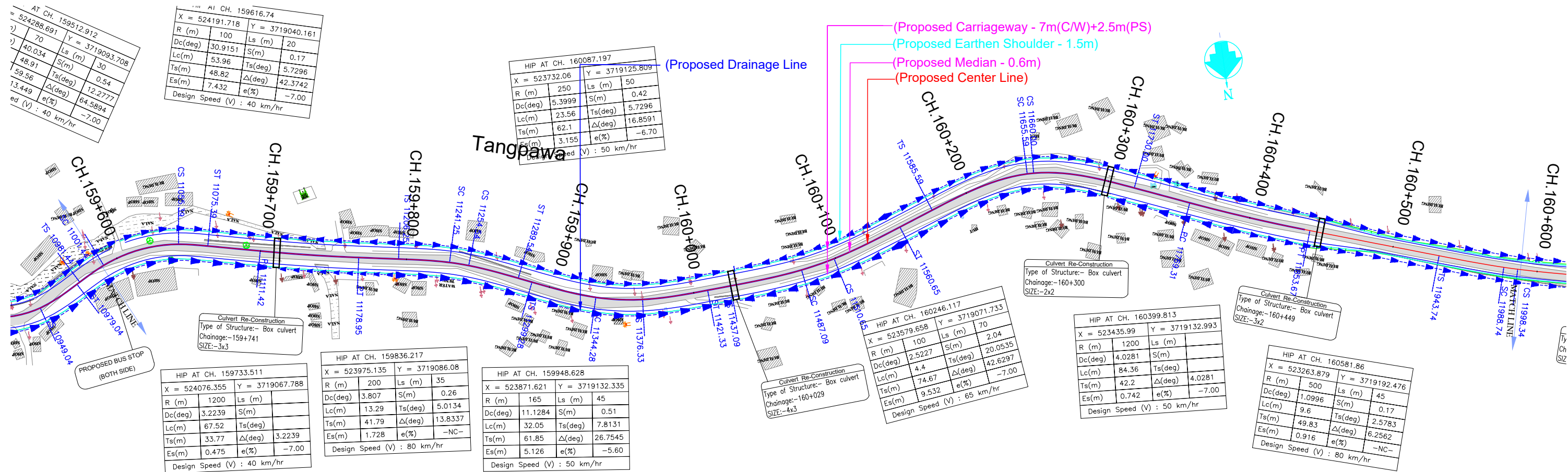
R - Radius of Curve
Dc - Degree of Curvature
Lc - Length of Circular Curve
Ts - Tangent Length
S - Shift
Δ - Deflection Angle
V - Design Speed Km/Hr
e% - Superelevation
PC - Point of Curvature
PT - Point of Tangent
HIP - Horizontal Intersection Point

L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
e - Superelevation (%)
D - Straight Length of Horizontal Alignment
Lc - Length of Circular Curve




(DATUM - 1810)

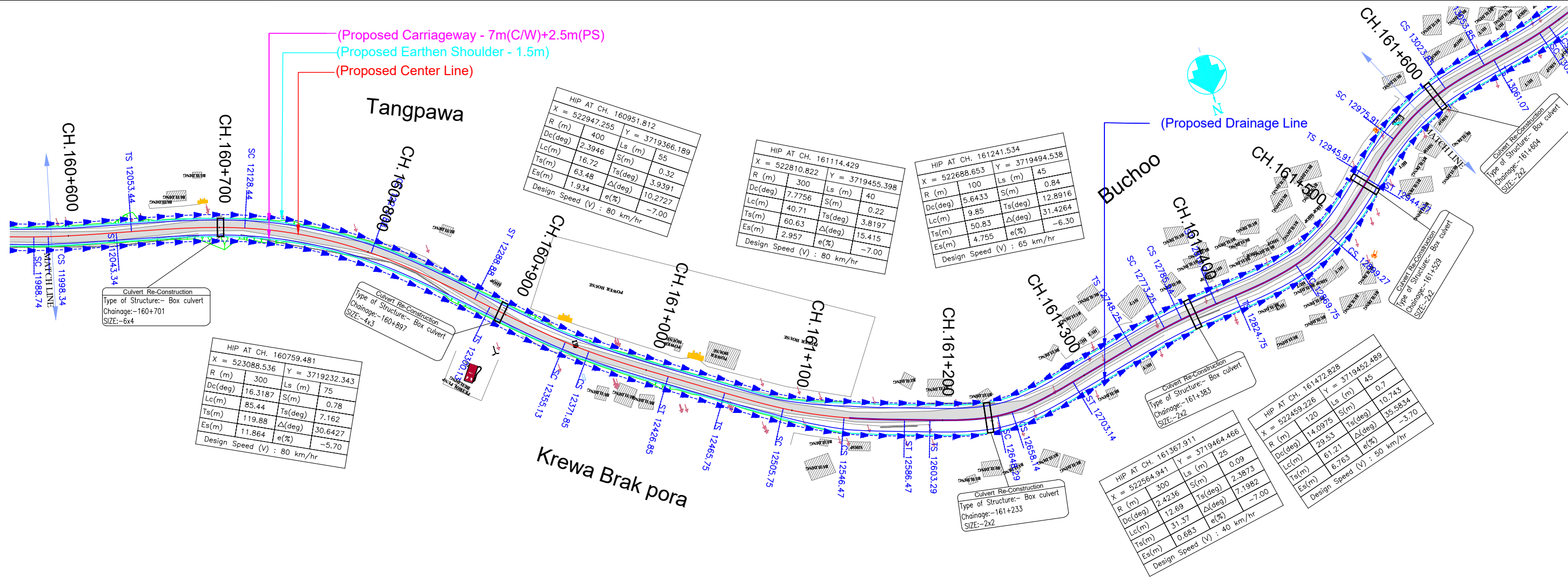
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project
R0	Nov.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: Drawn: Checked: Approved:	Scale :- H:-1.2500 V:-1.250
						Drawing Title
						Consistency Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
						DRAINAGE PLAN & PROFILE (Km.10+000 to km.11+000)
						Date: SEP-2020
						Project No: 1564
						Drawing No: NHIDCLNH-244-PACK-IUP&P/11/R0



(DATUM -1800)

[illegible]

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.00 to Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	Nov.2020		<p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</p> <p>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</p> <p>GOVERNMENT OF INDIA</p> 	 <p>RODIC CONSULTANTS PVT. LTD.</p> <p>1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING</p> <p>NEW DELHI - 110001 (INDIA)</p> <p>In Association with</p>  <p>Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p>	Designed: <input type="text"/>	Scale :- H:-1.2500 V:-1.250		Drawing Title	DRAINAGE PLAN & PROFILE (km.11+000 to km.12+000)		
			Date	Project No.	Drawing No.						
			SEP-2020	1564	NHIDCL/NH-244-PACK-II/P&P/12/R0						



LEGEND

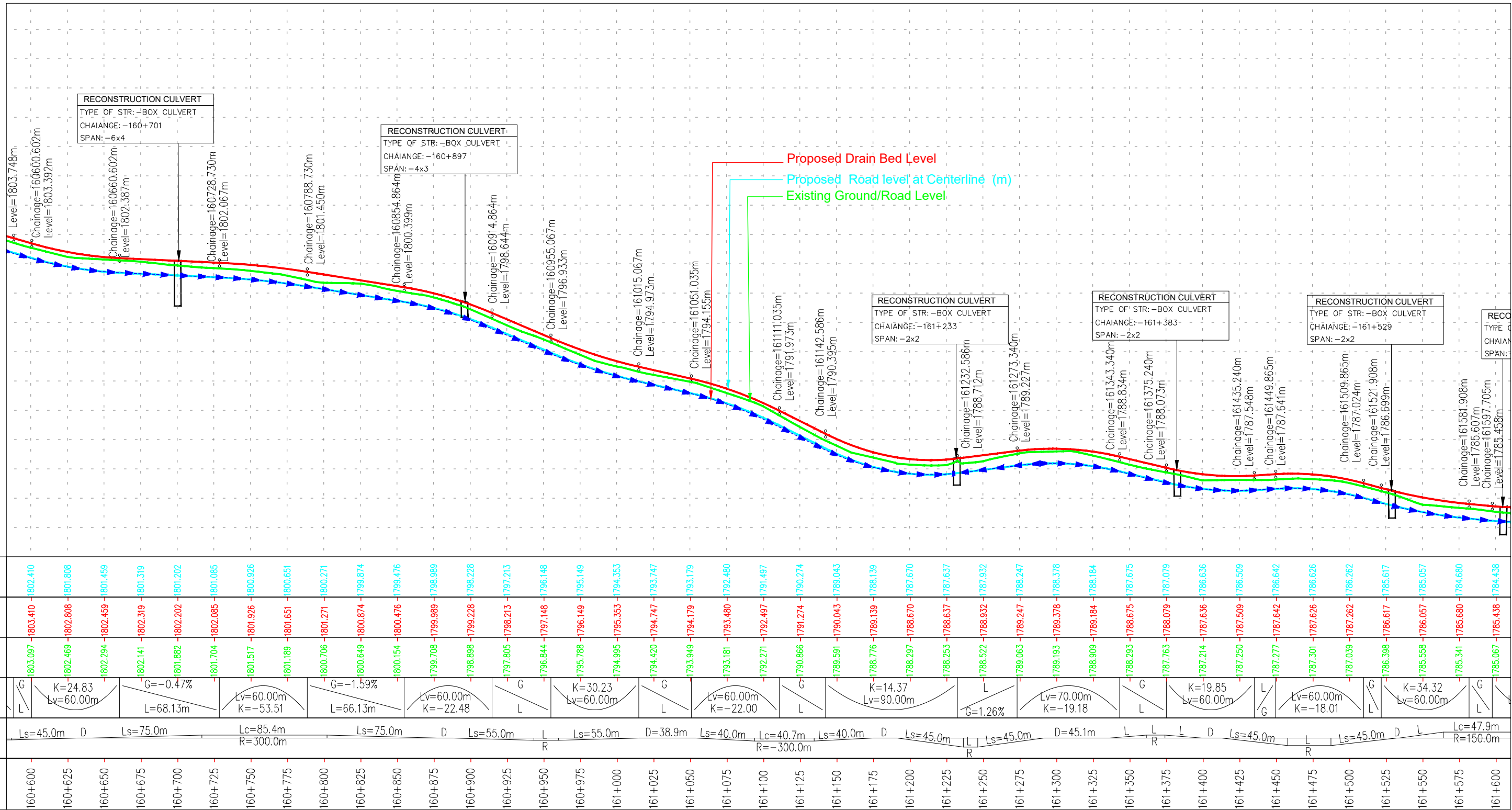
- Proposed Center Line
- Proposed Median
- Proposed Carriageway Edge
- Proposed Service Road
- Proposed Toe Line
- Proposed Right of Way
- Existing Right of Way
- Proposed Box Culvert
- Proposed HP Culvert
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- Proposed Vehicular Underpass
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- Grave Yard
- Gate Temporary/Permanents
- GPS
- Temporary Bench Mark
- Religious Structures
- Telephone Box
- Transformer Points
- Pylon
- Lamp Post
- Tree-T1,T2,T3,T4,T5,T6
- Tube Well, Well
- Hand Pump
- Municipal Tap
- Kilometer Stone
- OFC Pillar
- Petrol Pump
- North Symbol
- Railway Track
- Existing Paved Road
- Existing Unpaved Road
- Telephone Line
- High Tension Lines
- Low Tension Line
- Drain
- HFL Line
- Water Pipe Line
- Building

PLAN

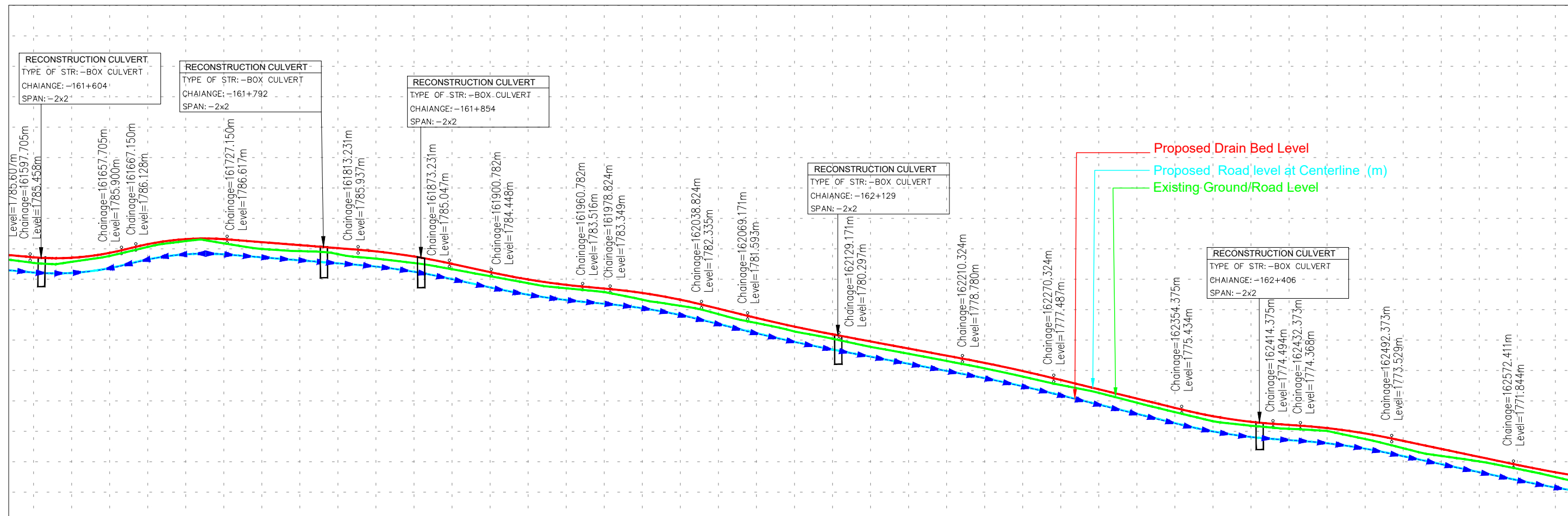
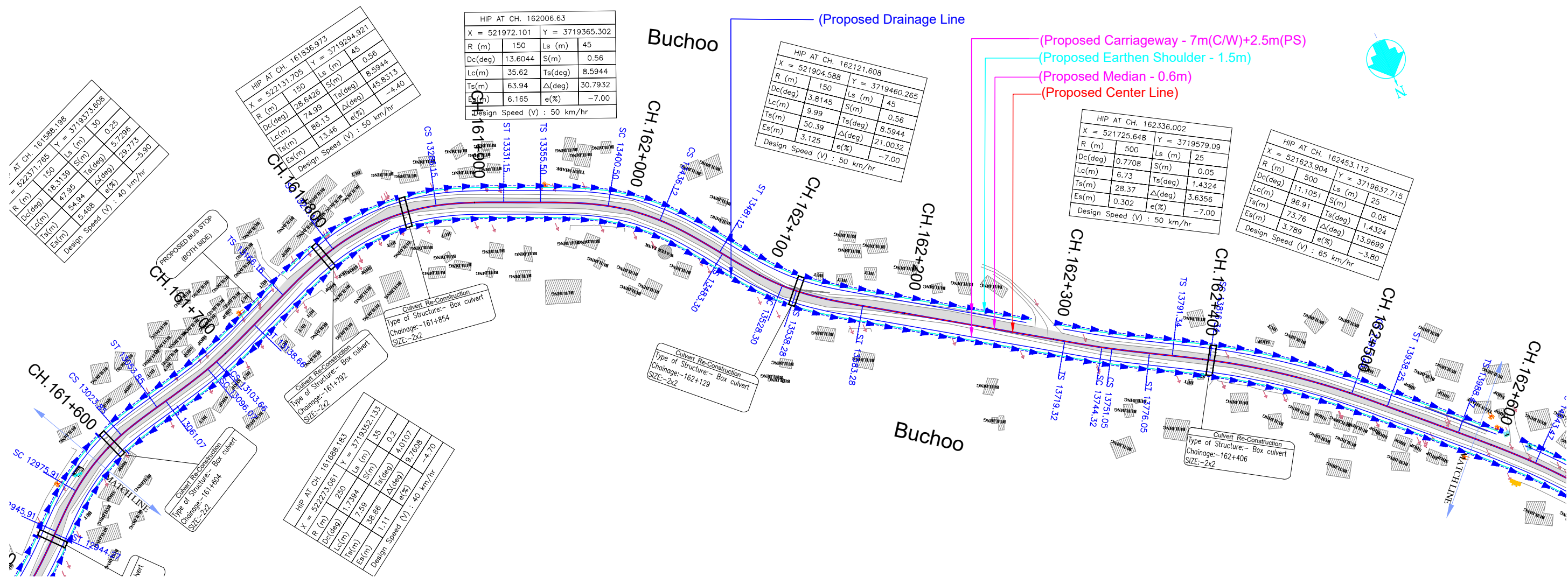
- R - Radius of Curve
- Dc - Degree of Curvature
- Lc - Length of Circular Curve
- Ts - Tangent Length
- ES - Apex Distance
- LS - Length of Spiral Curve
- S - Shift
- Δ - Deflection Angle
- V - Design Speed Km/Hr
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- PC - Point of Curvature
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L - PROFILE

- G - Gradient %
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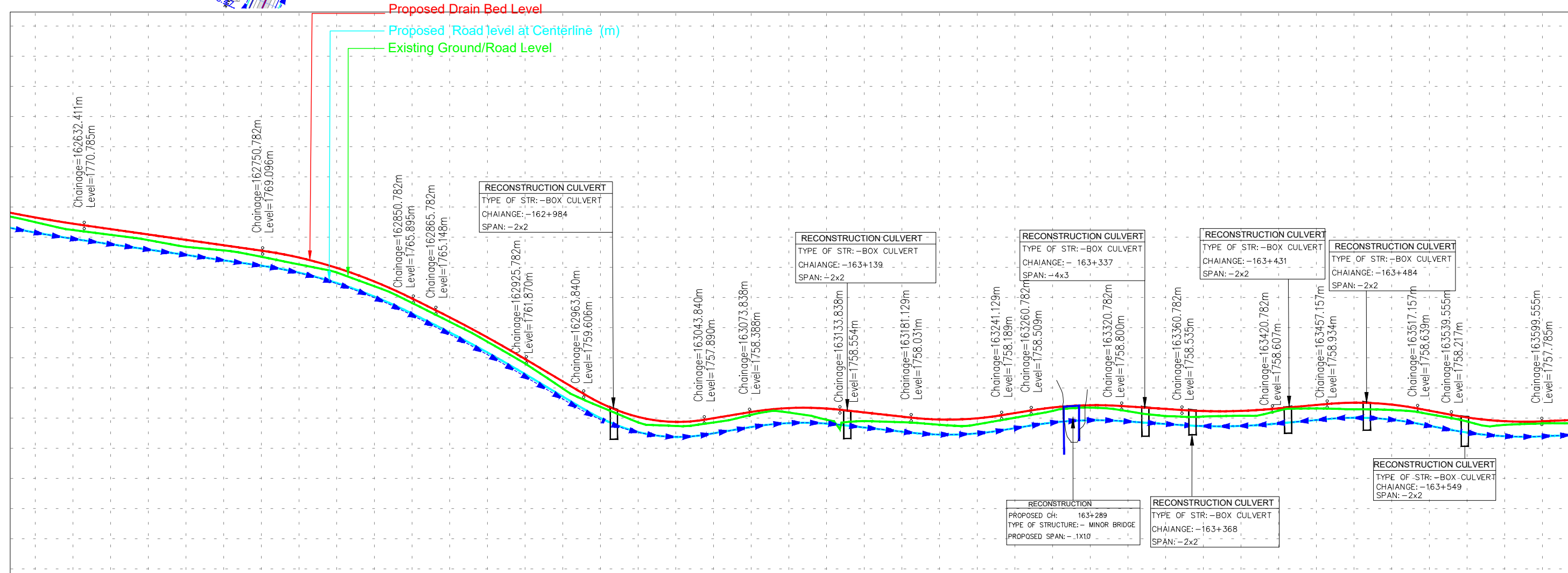
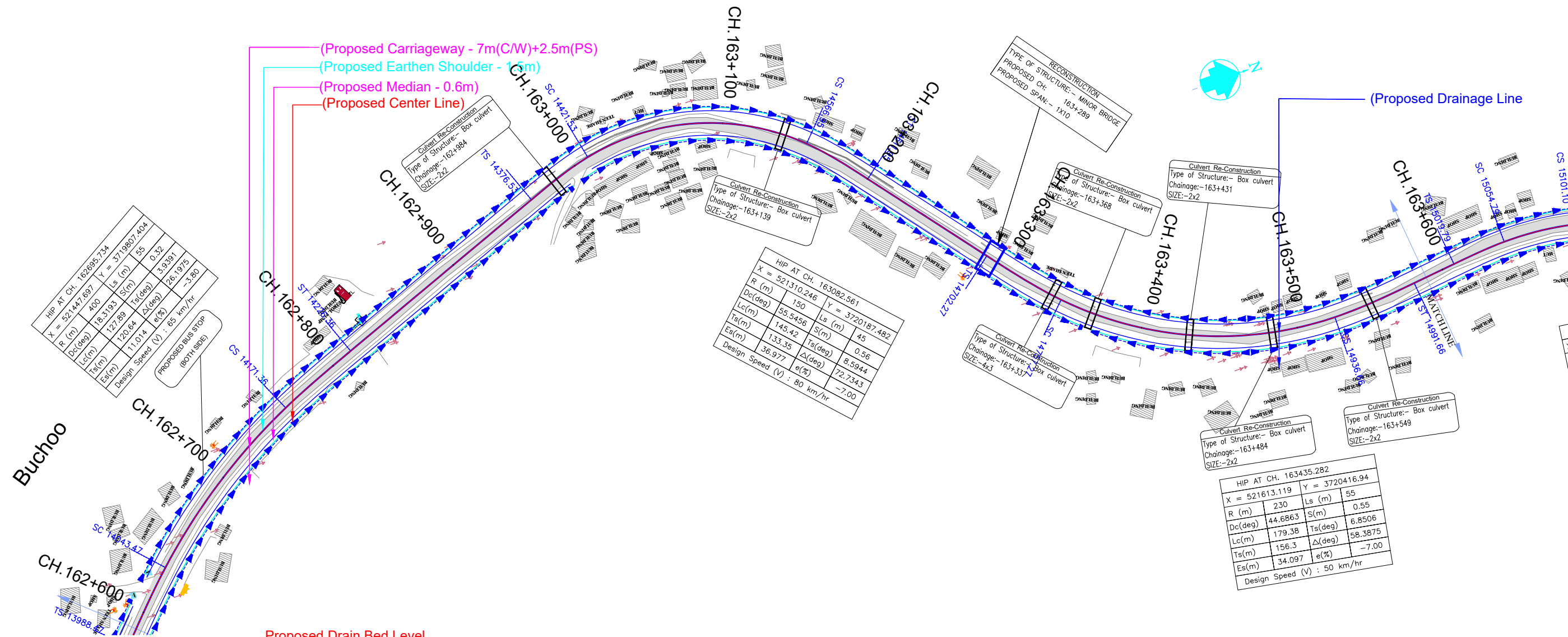
ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	Nov.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: Drawn: Checked: Approved:	Scale :- H:-1.2500 V:-1.250	Drawing Title
					DRAINAGE PLAN & PROFILE (km.12+000 to km.13+000)		
					Date: SEP-2020	Project No: 1564	Drawing No: NHIDCL/NH-244-PACK-I/FP/13/R0



(DATUM - 1766)

Propose Drain Bed Level (m)																												
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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT				Project	
R0	Nov.2020		<p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p> 	<p> RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</p> <p>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p> 					Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.	
					Designed: <input type="text"/>	Scale :- H:- 1.2500 V:- 1.250		Drawing Title	DRAINAGE PLAN & PROFILE (km.13+000 to km.14+000)	
				Drawn: <input type="text"/>						
				Checked: <input type="text"/>						
				Approved: <input type="text"/>						
								Date: <input type="text"/>	Project No: <input type="text"/>	Drawing No: <input type="text"/>
								SEP-2020	1564	NHIDCLNH-244-PACK-II/P&P/14/R0



Propose Drain Bed Level (m)		-1770.307	-1770.307	-1769.894	-1769.534	-1769.177	-1768.821	-1768.464	-1768.107	-1767.750	-1767.393	-1767.036	-1766.679	-1766.322	-1765.965	-1765.608	-1765.251	-1764.894	-1764.537	-1764.180	-1763.823	-1763.466	-1763.109	-1762.752	-1762.395	-1762.038	-1761.681	-1761.324	-1760.967	-1760.610	-1760.253	-1759.896	-1759.539	-1759.182	-1758.825	-1758.468	-1758.111	-1757.754	-1757.397	-1757.040	-1756.683	-1756.326	-1755.969	-1755.612	-1755.255	-1754.898	-1754.541	-1754.184	-1753.827	-1753.470	-1753.113	-1752.756	-1752.399	-1752.042	-1751.685	-1751.328	-1750.971	-1750.614	-1750.257	-1749.900	-1749.543	-1749.186	-1748.829	-1748.472	-1748.115	-1747.758	-1747.401	-1747.044	-1746.687	-1746.330	-1745.973	-1745.616	-1745.259	-1744.902	-1744.545	-1744.188	-1743.831	-1743.474	-1743.117	-1742.760	-1742.403	-1742.046	-1741.689	-1741.332	-1740.975	-1740.618	-1740.261	-1739.904	-1739.547	-1739.190	-1738.833	-1738.476	-1738.119	-1737.762	-1737.405	-1737.048	-1736.691	-1736.334	-1735.977	-1735.620	-1735.263	-1734.906	-1734.549	-1734.192	-1733.835	-1733.478	-1733.121	-1732.764	-1732.407	-1732.050	-1731.693	-1731.336	-1730.979	-1730.622	-1730.265	-1729.908	-1729.551	-1729.194	-1728.837	-1728.480	-1728.123	-1727.766	-1727.409	-1727.052	-1726.695	-1726.338	-1725.981	-1725.624	-1725.267	-1724.910	-1724.553	-1724.196	-1723.839	-1723.482	-1723.125	-1722.768	-1722.411	-1722.054	-1721.697	-1721.340	-1720.983	-1720.626	-1720.269	-1719.912	-1719.555	-1719.198	-1718.841	-1718.484	-1718.127	-1717.770	-1717.413	-1717.056	-1716.699	-1716.342	-1715.985	-1715.628	-1715.271	-1714.914	-1714.557	-1714.200	-1713.843	-1713.486	-1713.129	-1712.772	-1712.415	-1712.058	-1711.701	-1711.344	-1710.987	-1710.630	-1710.273	-1709.916	-1709.559	-1709.202	-1708.845	-1708.488	-1708.131	-1707.774	-1707.417	-1707.060	-1706.703	-1706.346	-1705.989	-1705.632	-1705.275	-1704.918	-1704.561	-1704.204	-1703.847	-1703.490	-1703.133	-1702.776	-1702.419	-1702.062	-1701.705	-1701.348	-1700.991	-1700.634	-1700.277	-1699.920	-1699.563	-1699.206	-1698.849	-1698.492	-1698.135	-1697.778	-1697.421	-1697.064	-1696.707	-1696.350	-1695.993	-1695.636	-1695.279	-1694.922	-1694.565	-1694.208	-1693.851	-1693.494	-1693.137	-1692.780	-1692.423	-1692.066	-1691.709	-1691.352	-1690.995	-1690.638	-1690.281	-1689.924	-1689.567	-1689.210	-1688.853	-1688.496	-1688.139	-1687.782	-1687.425	-1687.068	-1686.711	-1686.354	-1685.997	-1685.640	-1685.283	-1684.926	-1684.569	-1684.212	-1683.855	-1683.498	-1683.141	-1682.784	-1682.427	-1682.070	-1681.713	-1681.356	-1680.999	-1680.642	-1680.285	-1679.928	-1679.571	-1679.214	-1678.857	-1678.500	-1678.143	-1677.786	-1677.429	-1677.072	-1676.715	-1676.358	-1676.001	-1675.644	-1675.287	-1674.930	-1674.573	-1674.216	-1673.859	-1673.502	-1673.145	-1672.788	-1672.431	-1672.074	-1671.717	-1671.360	-1671.003	-1670.646	-1670.289	-1669.932	-1669.575	-1669.218	-1668.861	-1668.504	-1668.147	-1667.790	-1667.433	-1667.076	-1666.719	-1666.362	-1666.005	-1665.648	-1665.291	-1664.934	-1664.577	-1664.220	-1663.863	-1663.506	-1663.149	-1662.792	-1662.435	-1662.078	-1661.721	-1661.364	-1661.007	-1660.650	-1660.293	-1659.936	-1659.579	-1659.222	-
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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT


NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

(MINISTRY OF ROAD TRANSPORT & HIGHWAY)

GOVERNMENT OF INDIA


The logo of the National Highway Infrastructure Development Corporation Limited (NHAI) is located at the bottom left of the page. It features a stylized bridge structure with the letters 'NHAI' in a large, bold, blue font. Below the letters, the text 'BUILDING INFRASTRUCTURE SHAPING THE NATION' is written in a smaller, blue, sans-serif font.

CONSULTANT:



RODIE CONSULTANTS PVT. LTD.
 1, JAI SINGH MARG (FIRST FLOOR), YMCA
 CULTURAL CENTRE BUILDING
 NEW DELHI - 110001 (INDIA)

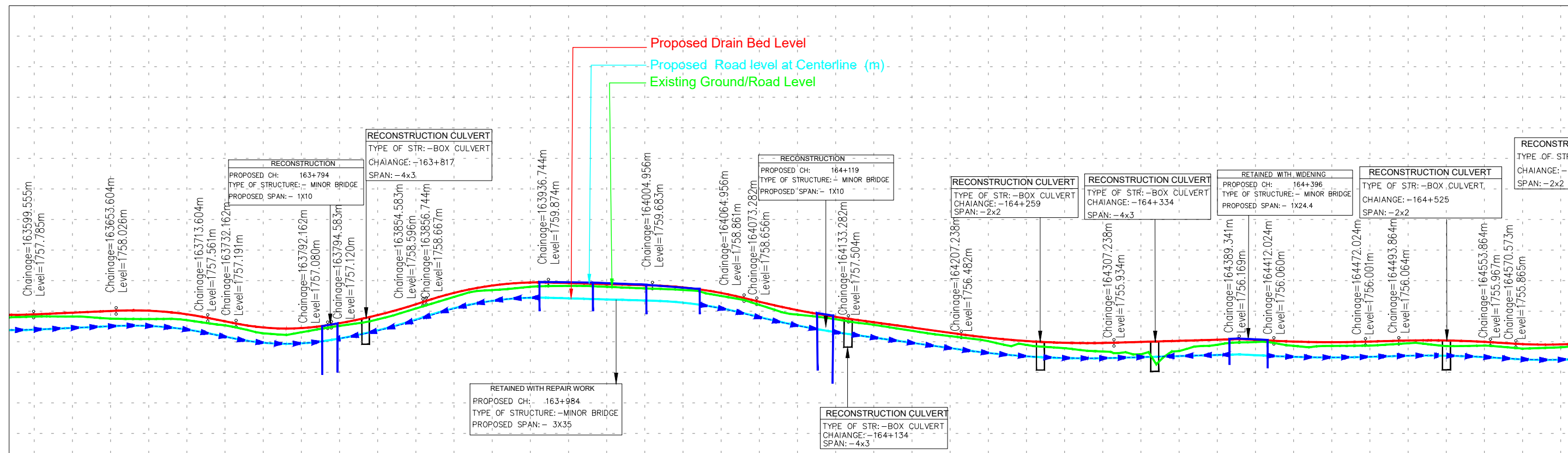
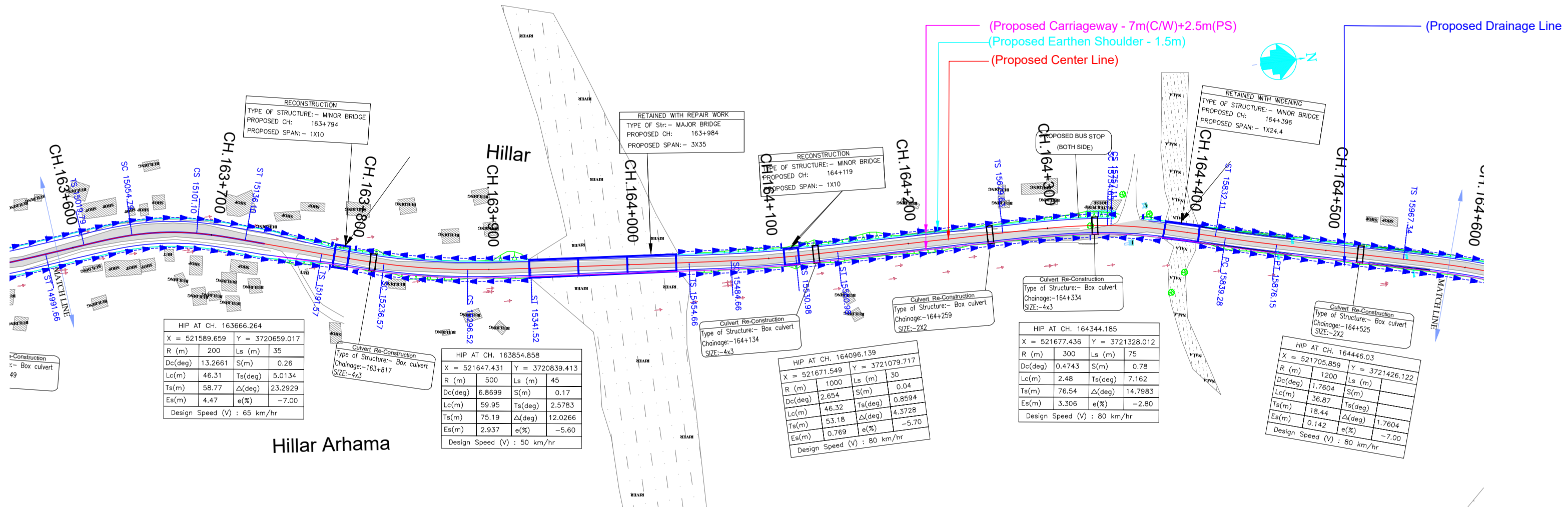
In Association with



**Monarch Surveyors and Engineering
 Consultants Pvt. Ltd.,**

FINAL DETAILED PROJECT REPORT				Project
Designed:		Scale :- H:-1.2500 V:-1.250		Drawing Title
Drawn:				
Checked:				
Approved:				

<p>Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Kheilani to Km 142.00 of Chattrao Village & (ii) Km 235.00 (Valloio Village) to Km 269.00 (Khanabal) of Kheilani - Kishtwar - Chattrao - Khanabal Section of NH 244.</p>			
<p align="center"><u>DRAINAGE PLAN & PROFILE</u> (km.14+000 to km.15+000)</p>			
Date	Project No.	Drawing No.	
SEP-2020	1504	NHIDCL/NH-244-PACK-I/FP&P/15/R0	



Propose Drain Bed Level (m)																				
Proposed Road Level at Centerline (m)																				
Existing Ground/Road Level at Centerline (m)																				
Proposed Vertical Alignment Schematic																				
Proposed Horizontal Alignment Schematic																				
Chainage (Km)																				

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT
NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
(MINISTRY OF ROAD TRANSPORT & HIGHWAY)
GOVERNMENT OF INDIA



CONSULTANT:



RODIC CONSULTANTS PVT. LTD.
1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)

In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

FINAL DETAILED PROJECT REPORT

Designed:
Drawn:
Checked:
Approved:

Scale :-
H:-1.2500
V:-1.250

Project	
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Drawing Title

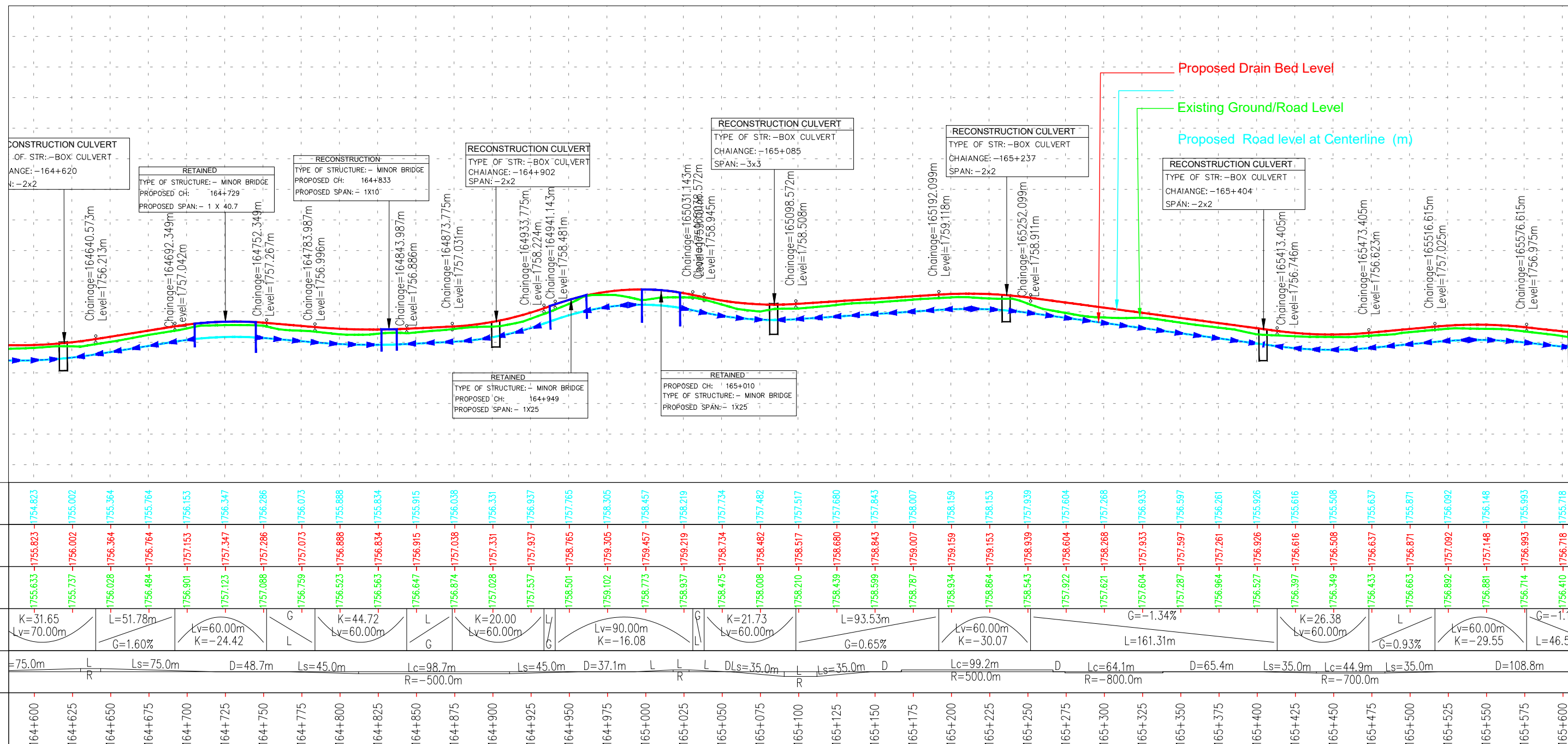
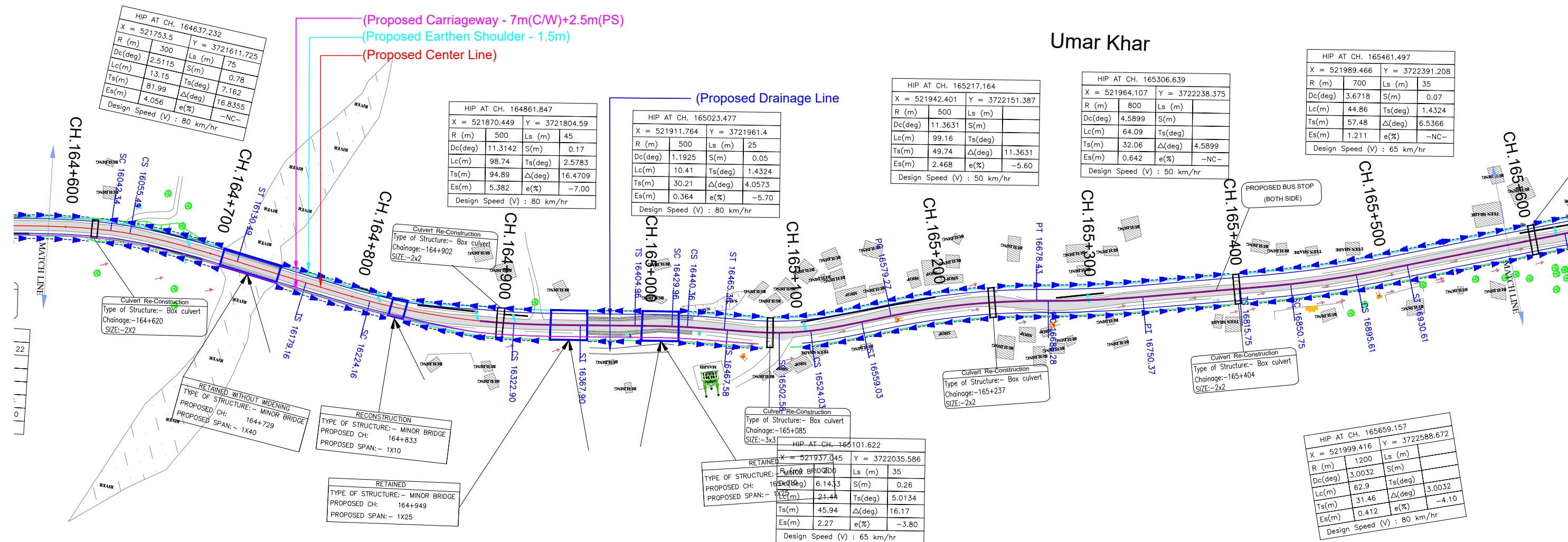
Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.

DRAINAGE PLAN & PROFILE
(km.15+000 to km.16+000)

Date.
SEP-2020

Project No.
1564

Drawing No.
NH-244-PACK-II/F



LEGEND

Proposed Center Line	---
Proposed Median	---
Proposed Carriageway Edge	---
Proposed Service Road	---
Proposed Toe Line	---
Proposed Right of Way	---
Existing Right of Way	---
Proposed Box Culvert	---
Proposed HP Culvert	---
Proposed Slab Culvert	---
Proposed Vehicular Underpass	---
Proposed Tunnel	---
Proposed Cattle Underpass	---
Proposed Bridge/ROB	---
Toe Wall	---
Retaining Wall / Breast Wall	---
Grave Yard	---
Gate Temporary/Permanents	---
GPS	---
Temporary Bench Mark	---
Religious Structures	---
Telephone Box	---
Transformer Points	---
Pylon	---
Lamp Post	---
Tree-T1,T2,T3,T4,T5,T6	---
Tube Well, Well	---
Hand Pump	---
Municipal Tap	---
Kilometer Stone	---
OFC Pillar	---
Petrol Pump	---
North Symbol	---
Railway Track	---
Existing Paved Road	---
Existing Unpaved Road	---
Telephone Line	---
High Tension Lines	---
Low Tension Line	---
Drain	---
HFL Line	---
Water Pipe Line	---
Building	---

PLAN

R	- Radius of Curve
Dc	- Degree of Curvature
Lc	- Length of Circular Curve
Ts	- Tangent Length
Es	- Apex Distance
LS	- Length of Spiral Curve
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ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT
NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
(MINISTRY OF ROAD TRANSPORT & HIGHWAY)
GOVERNMENT OF INDIA

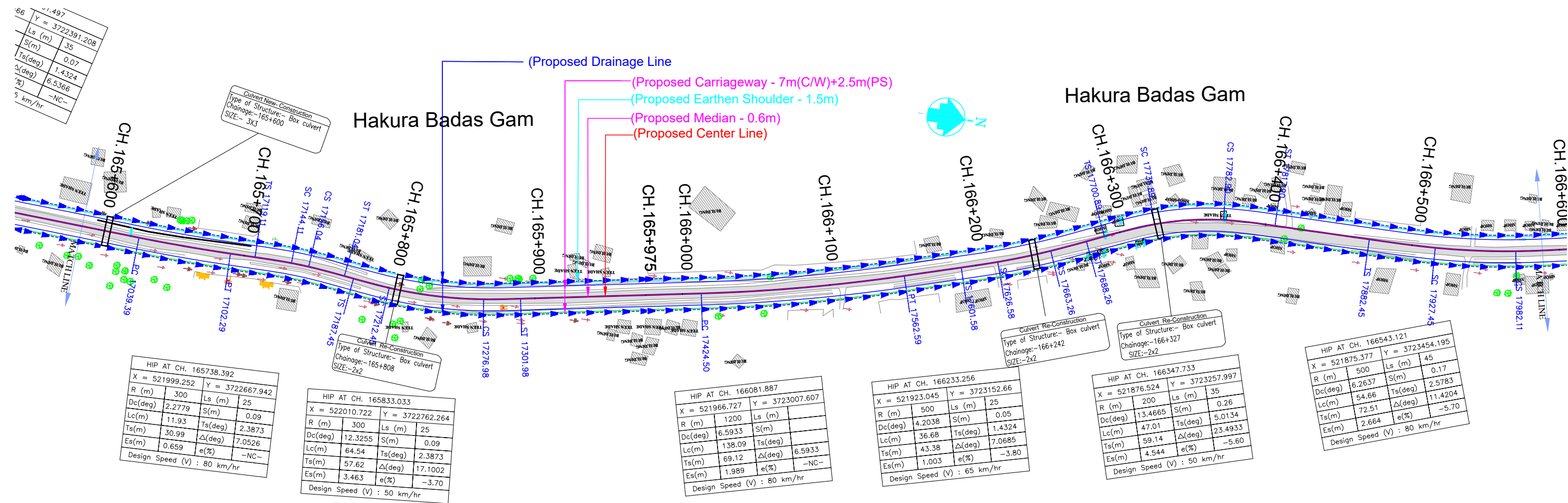
CONSULTANT:
RODIC CONSULTANTS PVT. LTD.
1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)
In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

FINAL DETAILED PROJECT REPORT
Designed:
Drawn:
Checked:
Approved:

Scale :-
H:-1.2500
V:-1.250

Project
Drawing Title

Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
<div>DRAINAGE PLAN & PROFILE (km.16+000 to km.17+000)</div>		
Date SEP-2020	Project No. 1564	Drawing No. NHIDCL/NH-244-P&P/II/P&P/17/R0



LEGEND

Proposed Center Line	---
Proposed Median	---
Proposed Carriageway Edge	---
Proposed Service Road	---
Proposed Toe Line	---
Proposed Right of Way	---
Existing Right of Way	---
Proposed Box Culvert	---
Proposed HP Culvert	---
Proposed Slab Culvert	---
Proposed Vehicular Underpass	---
Proposed Tunnel	---
Proposed Cattle Underpass	---
Proposed Bridge/ROB	---
Toe Wall	---
Retaining Wall / Breast Wall	---
Grave Yard	---
Gate Temporary/Permanents	---
GPS	---
Temporary Bench Mark	---
Religious Structures	---
Telephone Box	---
Transformer Points	---
Pylon	---
Lamp Post	---
Tree-T1,T2,T3,T4,T5,T6	---
Tube Well, Well	---
Hand Pump	---
Municipal Tap	---
Kilometer Stone	---
OFC Pillar	---
Petrol Pump	---
North Symbol	---
Railway Track	---
Existing Paved Road	---
Existing Unpaved Road	---
Telephone Line	---
High Tension Lines	---
Low Tension Line	---
Drain	---
HFL Line	---
Water Pipe Line	---
Building	---

PLAN

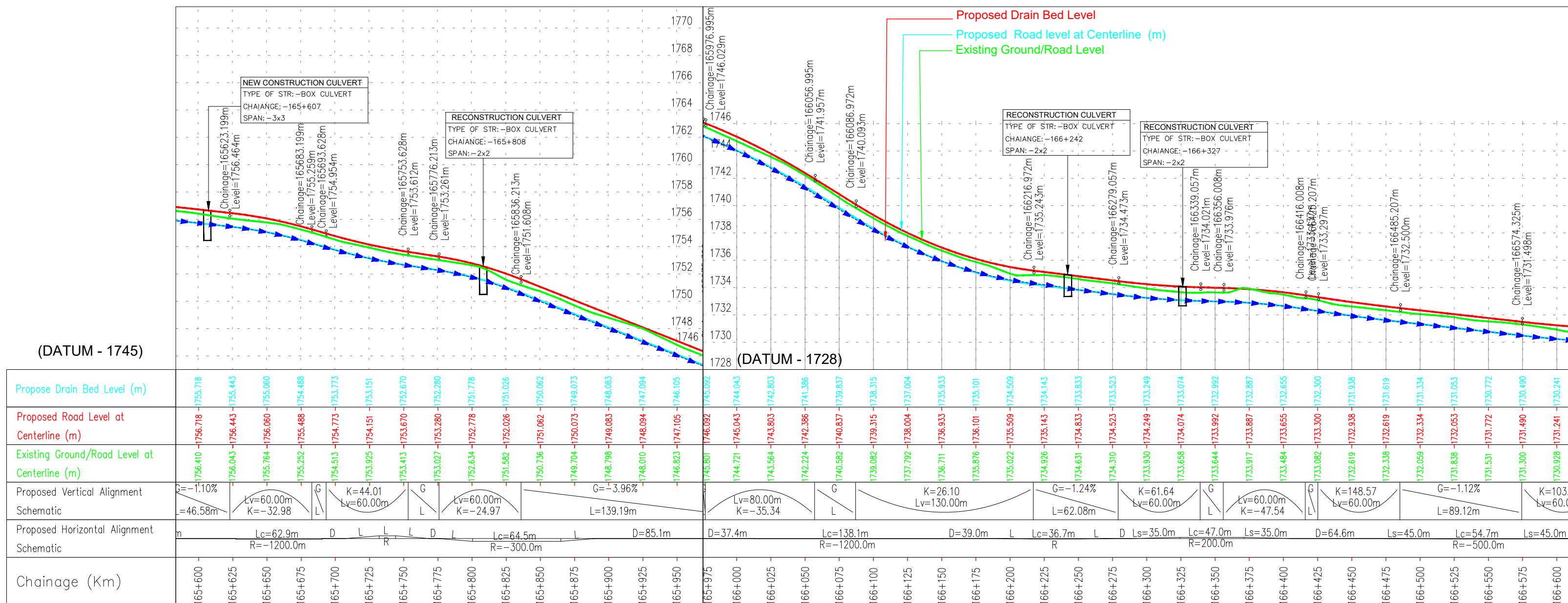
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Dc - Degree of Curvature
Lc - Length of Circular Curve
Ts - Tangent Length
ES - Apex Distance
LS - Length of Spiral Curve
S - Shift
Δ - Deflection Angle
V - Design Speed Km/Hr
e% - Superelevation
PC - Point of Curvature
PT - Point of Tangent
HIP - Horizontal Intersection Point

L - PROFILE

G - Gradient %
Lv - Length of Vertical Curve
L - Length of Grade(m)
K - Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
e - Superelevation (%)
D - Straight Length of Horizontal Alignment
Lc - Length of Circular Curve

(DATUM - 1745)

(DATUM - 1728)



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT

NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
(MINISTRY OF ROAD TRANSPORT & HIGHWAY)
GOVERNMENT OF INDIA



CONSULTANT:



RODICI CONSULTANTS PVT. LTD.

1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)

In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

FINAL DETAILED PROJECT REPORT

Designed:

Drawn:

Checked:

Approved:

Scale :-

H:-1.2500

V:-1.250

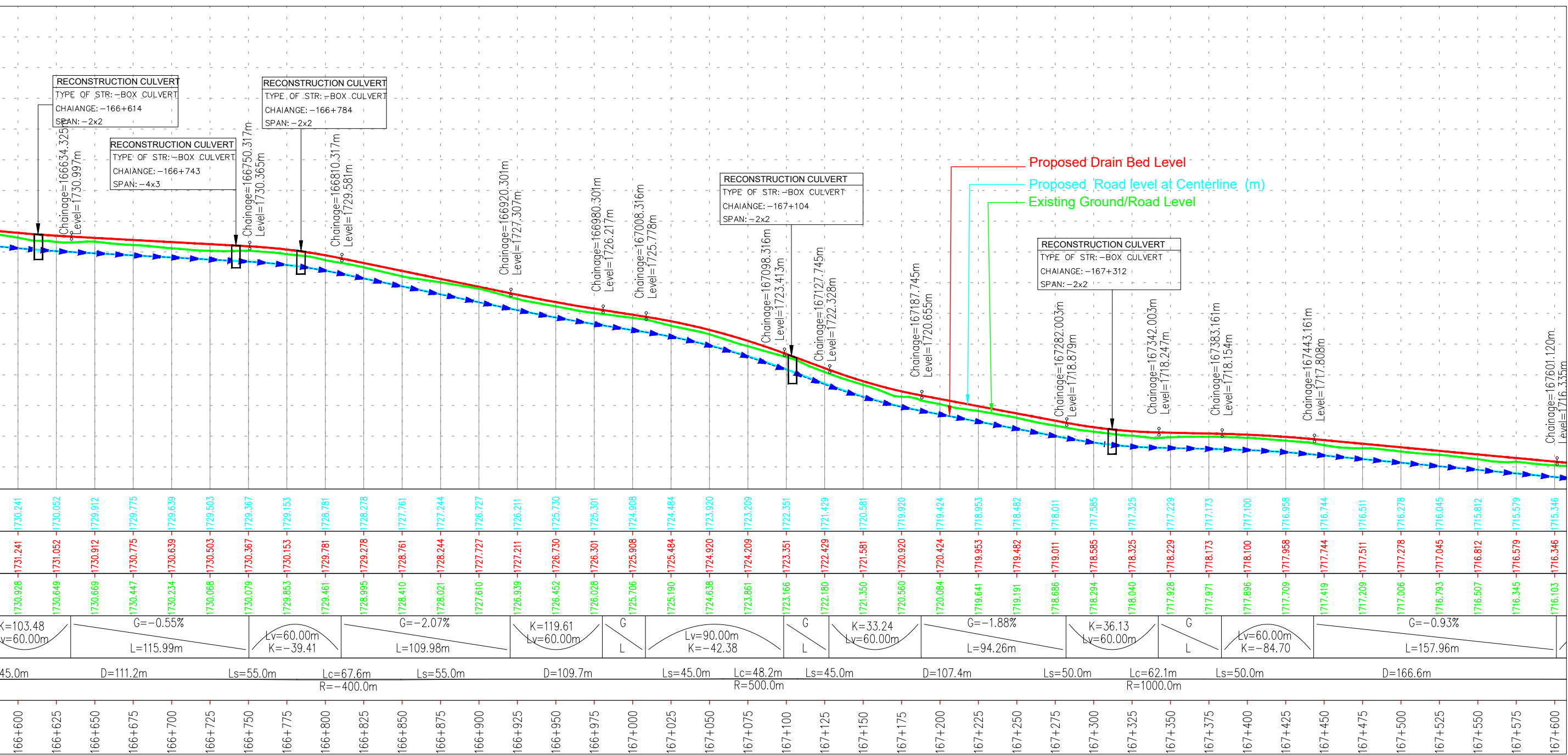
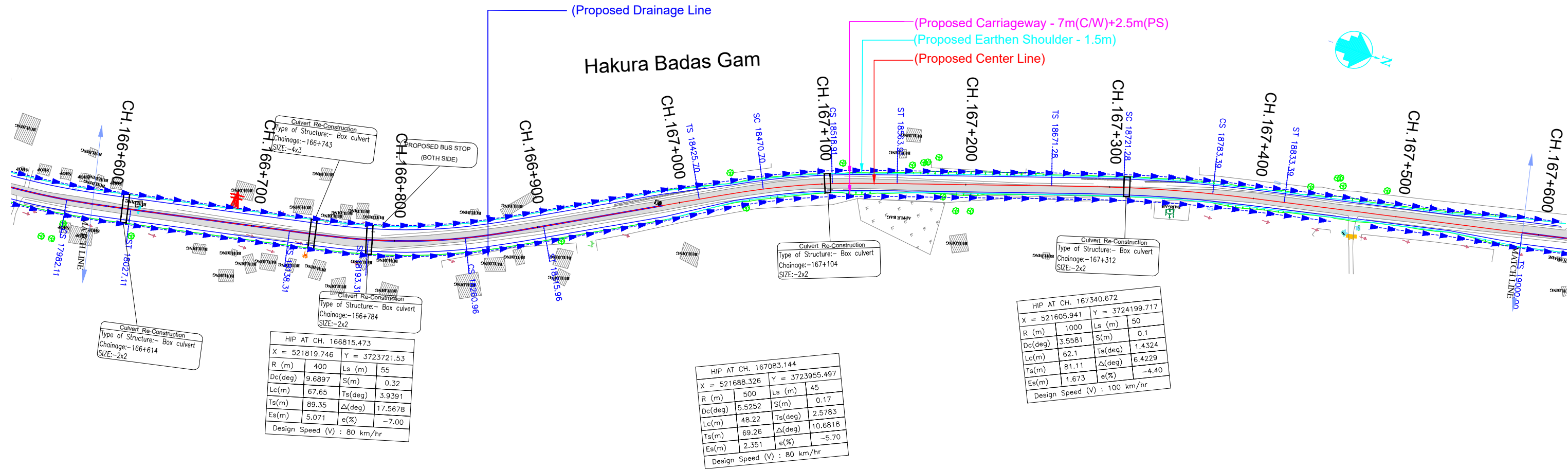
Project

Drawing Title

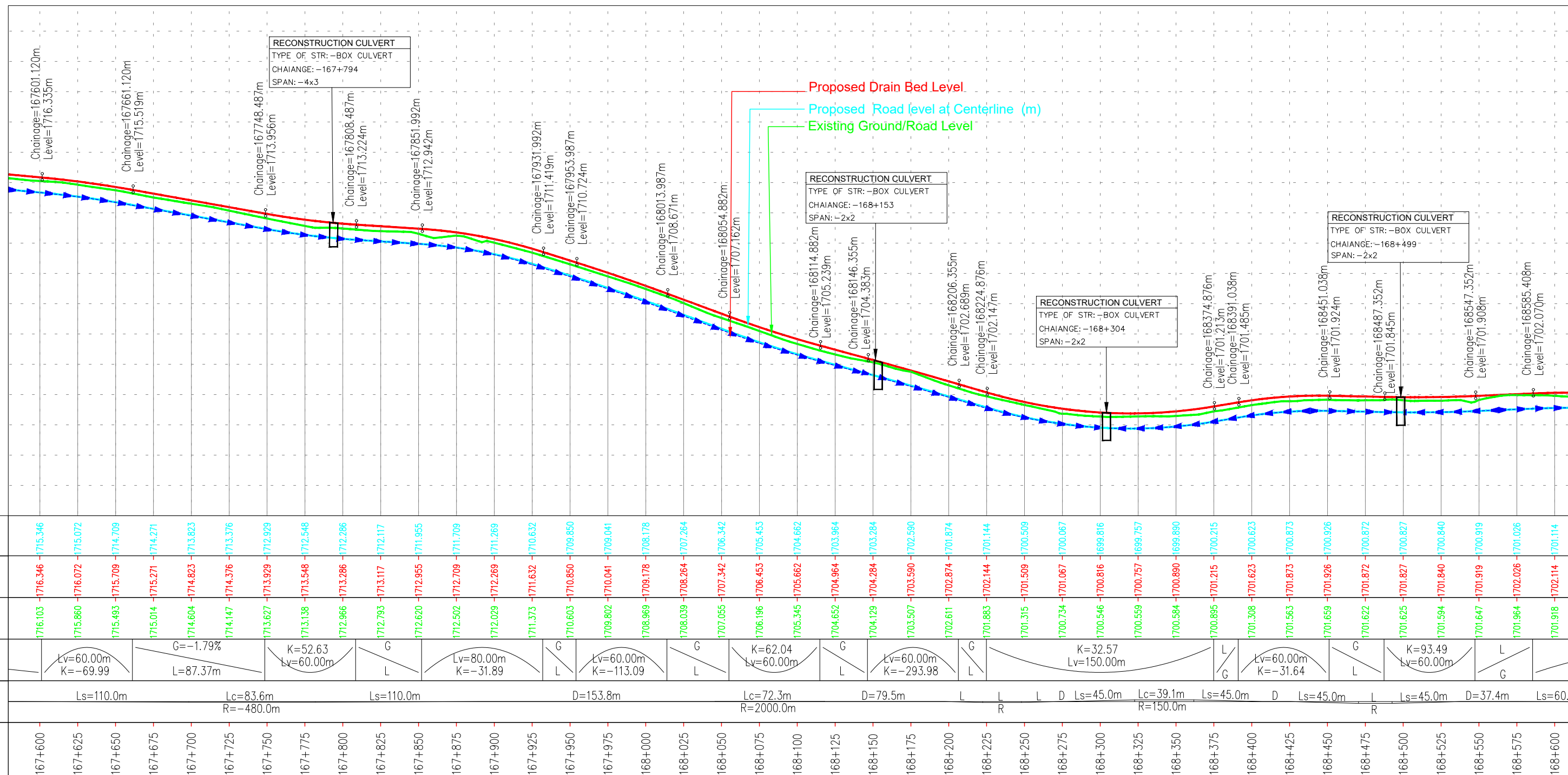
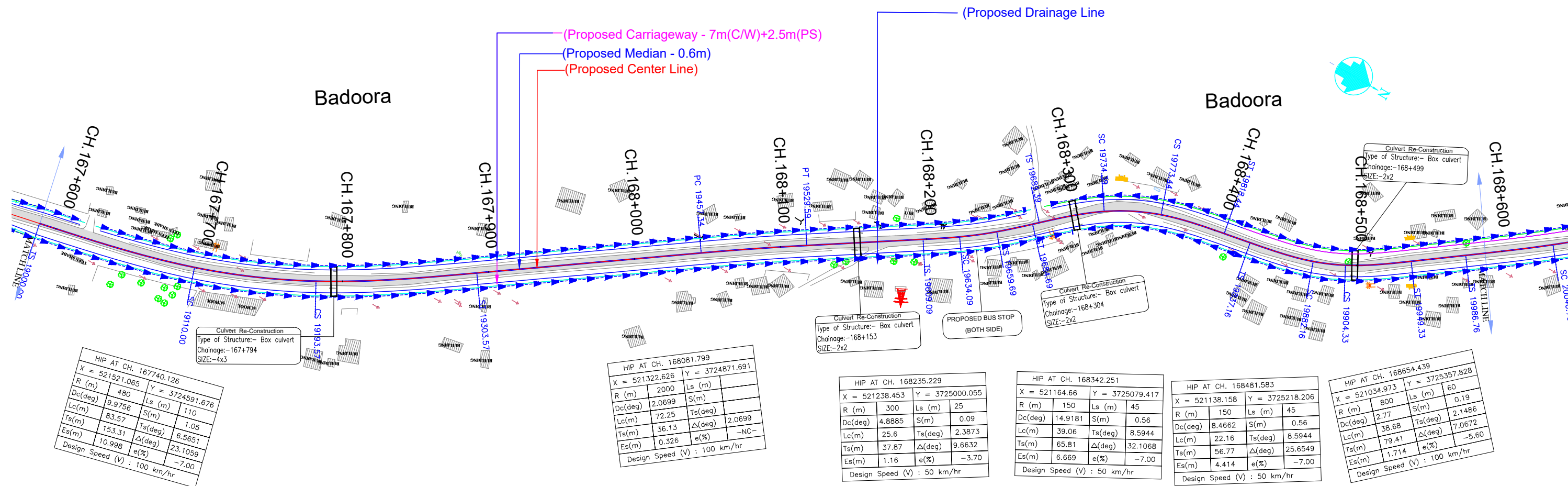
Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.

DRAINAGE PLAN & PROFILE
(Km.17+000 to km.18+000)




Date	Project No.	Drawing No.
SEP-2020	1564	NHIDCL/NH-244-PACK-IUP&P18/R0

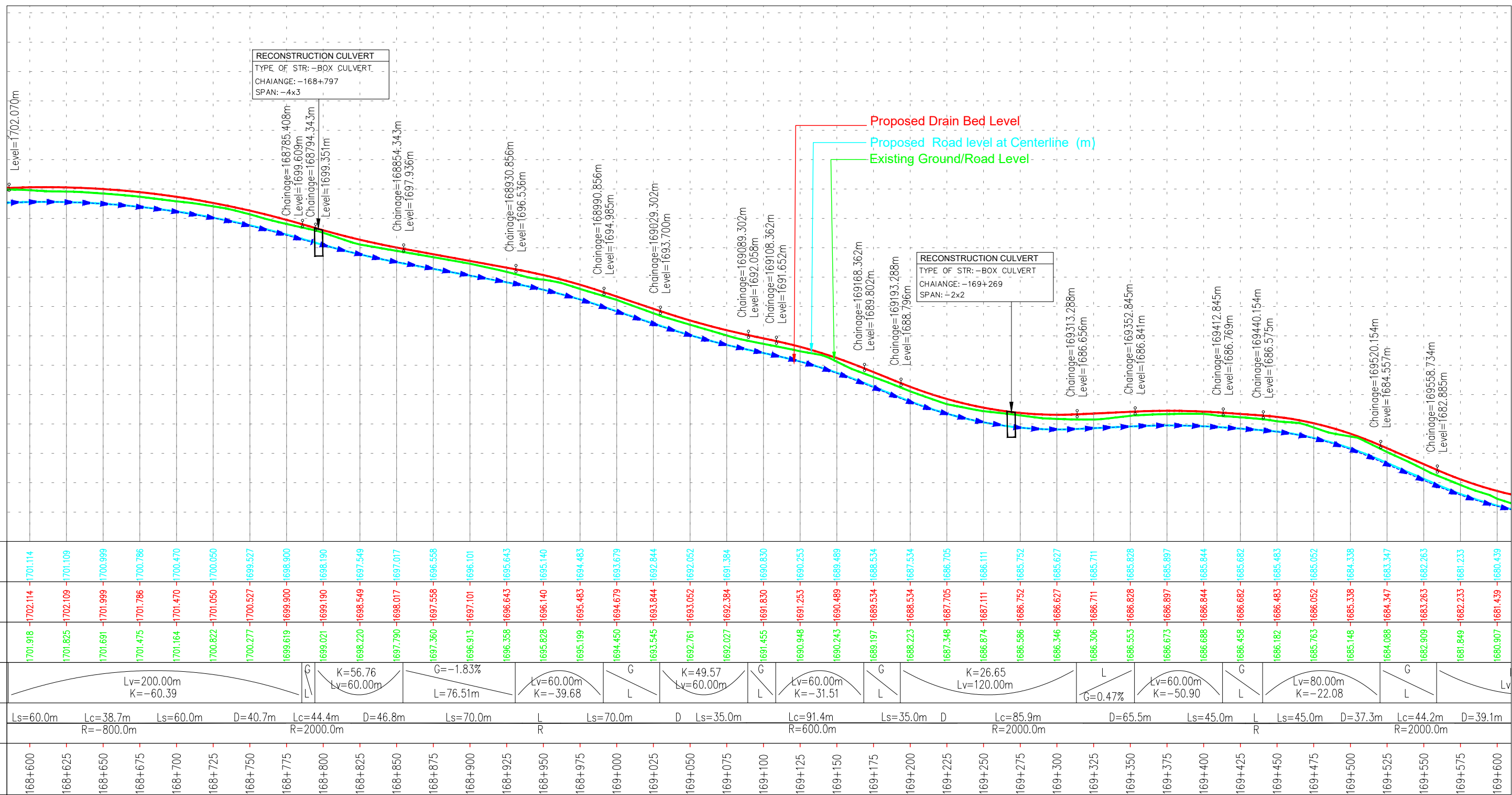
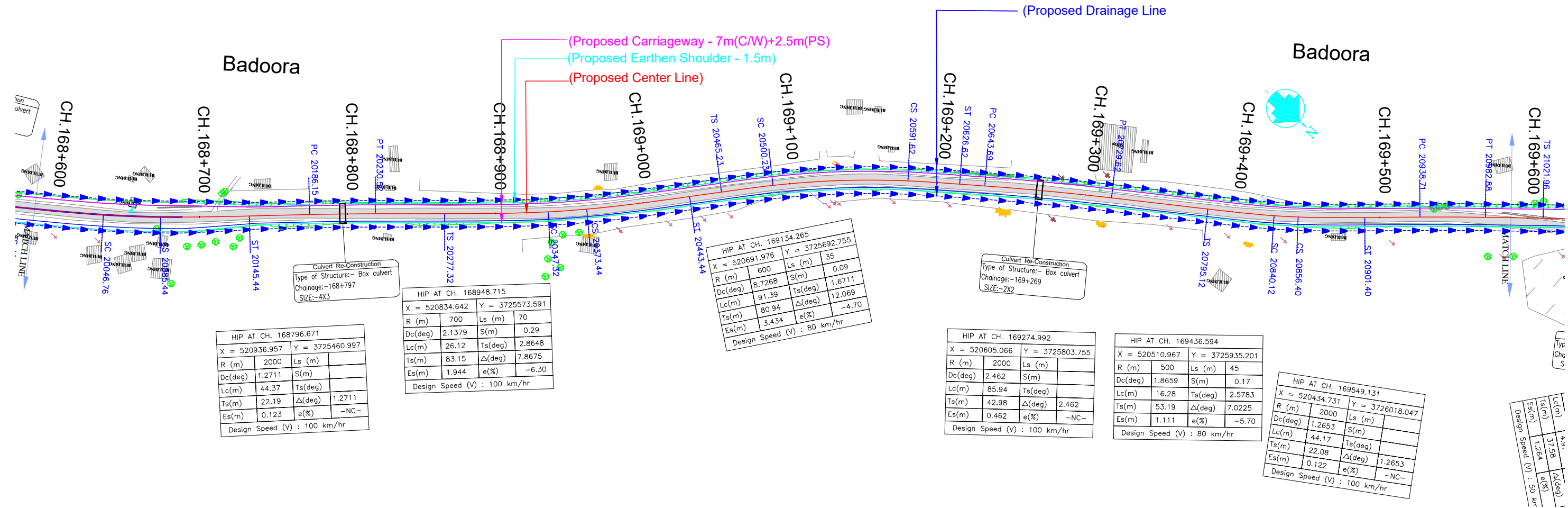


ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project
R0	Nov.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: Drawn: Checked: Approved:	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khealani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khealani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Scale :- H:-1.2500 V:-1.250	Drawing Title
						DRAINAGE PLAN & PROFILE (Km.18+000 to Km.19+000)
						Date: SEP-2020
						Project No. 1564
						Drawing No. NHIDCLNH-244-PACK-IUP&P19/R0



Proposed Drain Bed Level (m)	1716.346	1715.072	1714.709	1714.421	1713.623	1713.376	1712.929	1712.548	1712.286	1712.117	1711.955	1711.709	1711.269	1710.632	1710.850	1709.850	1709.041	1708.178	1707.264	1706.342	1705.453	1704.662	1703.964	1703.284	1702.590	1701.874	1701.144	1700.509	1700.067	1699.816	1699.757	1699.890	1700.215	1700.623	1700.873	1700.926	1700.872	1700.827	1700.840	1700.919	1700.926	1701.026	1701.114
Proposed Road Level at Centerline (m)	1716.346	1716.072	1715.709	1715.421	1714.623	1714.376	1713.929	1713.548	1713.286	1713.117	1712.955	1712.709	1712.269	1711.632	1710.850	1709.850	1709.041	1708.178	1707.264	1706.342	1705.453	1704.662	1703.964	1703.284	1702.590	1701.874	1701.144	1700.509	1700.067	1699.816	1699.757	1699.890	1700.215	1700.623	1700.873	1700.926	1700.872	1700.827	1700.840	1700.919	1700.926	1701.026	1701.114
Existing Ground/Road Level at Centerline (m)	1716.103	1715.860	1715.493	1715.014	1714.604	1714.147	1713.627	1713.138	1712.966	1712.793	1712.620	1712.502	1712.029	1711.373	1710.603	1709.802	1708.969	1708.038	1707.055	1706.196	1705.345	1704.652	1704.129	1703.507	1702.611	1701.683	1700.315	1700.734	1700.546	1700.559	1700.584	1700.895	1701.306	1701.563	1701.659	1701.622	1701.625	1701.594	1701.647	1701.964	1701.918	1701.918	
Proposed Vertical Alignment Schematic																																											
Proposed Horizontal Alignment Schematic																																											
Chainage (Km)	167+600	167+625	167+650	167+675	167+700	167+725	167+750	167+775	167+800	167+825	167+850	167+875	167+900	167+925	167+950	167+975	168+000	168+025	168+050	168+075	168+100	168+125	168+150	168+175	168+200	168+225	168+250	168+275	168+300	168+325	168+350	168+375	168+400	168+425	168+450	168+475	168+500	168+525	168+550	168+575	168+600		

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project
R0	Nov.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,			Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Valoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
						Designed: <input type="text"/> Drawn: <input type="text"/> Checked: <input type="text"/> Approved: <input type="text"/>	Scale :- H:- 1.2500 V:- 1.250	Drawing Title DRAINAGE PLAN & PROFILE (km.19+000 to km.20+000)
						Date: <input type="text"/> SEP-2020	Project No: <input type="text"/> 1564	Drawing No: <input type="text"/> NHIDCLNH-244-PACK-I/FP&P/20/R0



LEGEND

Proposed Center Line	---
Proposed Median	---
Proposed Carriageway Edge	---
Proposed Service Road	---
Proposed Toe Line	---
Proposed Right of Way	---
Existing Right of Way	---
Proposed Box Culvert	---
Proposed HP Culvert	---
Proposed Slab Culvert	---
Proposed Vehicular Underpass	---
Proposed Tunnel	---
Proposed Cattle Underpass	---
Proposed Bridge/ROB	---
Toe Wall	---
Retaining Wall / Breast Wall	---
Grave Yard	---
Gate Temporary/Permanents	---
GPS	---
Temporary Bench Mark	---
Religious Structures	---
Telephone Box	---
Transformer Points	---
Pylon	---
Lamp Post	---
Tree-T1,T2,T3,T4,T5,T6	---
Tube Well, Well	---
Hand Pump	---
Municipal Tap	---
Kilometer Stone	---
OFC Pillar	---
Petrol Pump	---
North Symbol	---
Railway Track	---
Existing Paved Road	---
Existing Unpaved Road	---
Telephone Line	---
High Tension Lines	---
Low Tension Line	---
Drain	---
HFL Line	---
Water Pipe Line	---
Building	---

PLAN

R	- Radius of Curve
Dc	- Degree of Curvature
Lc	- Length of Circular Curve
Ts	- Tangent Length
Es	- Apex Distance
LS	- Length of Spiral Curve
S	- Shift
Δ	- Deflection Angle
V	- Design Speed Km/Hr
e%	- Superelevation
PC	- Point of Curvature
PT	- Point of Tangent
HIP	- Horizontal Intersection Point

L - PROFILE

G	- Gradient %
Lv	- Length of Vertical Curve
L	- Length of Grade(m)
K	- Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
e	- Superelevation (%)
D	- Straight Length of Horizontal Alignment
Lc	- Length of Circular Curve

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT

NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
(MINISTRY OF ROAD TRANSPORT & HIGHWAY)
GOVERNMENT OF INDIA



CONSULTANT:



RODIC CONSULTANTS PVT. LTD.

1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)

In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

FINAL DETAILED PROJECT REPORT

Designed:

Drawn:

Checked:

Approved:

Scale :-

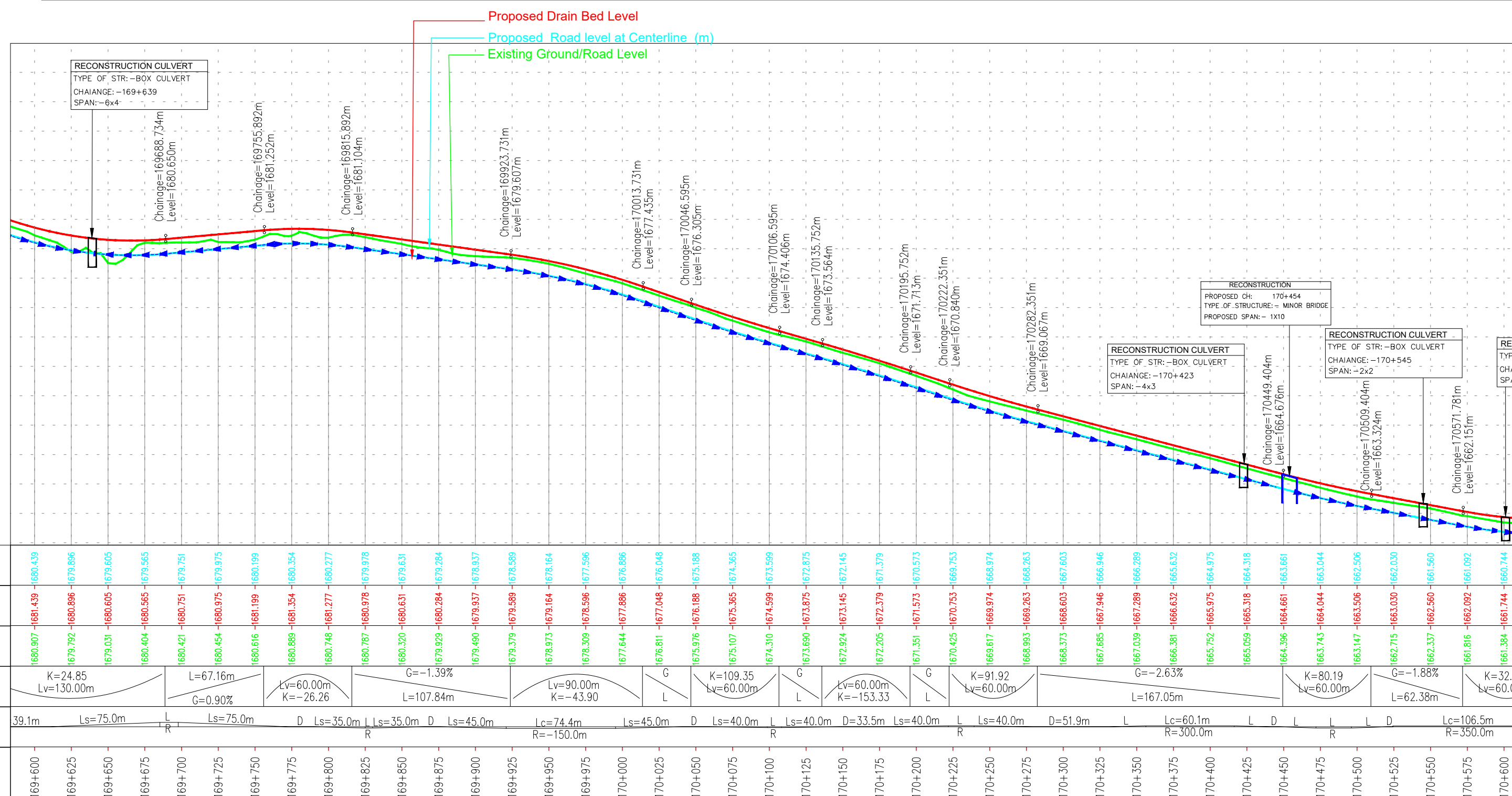
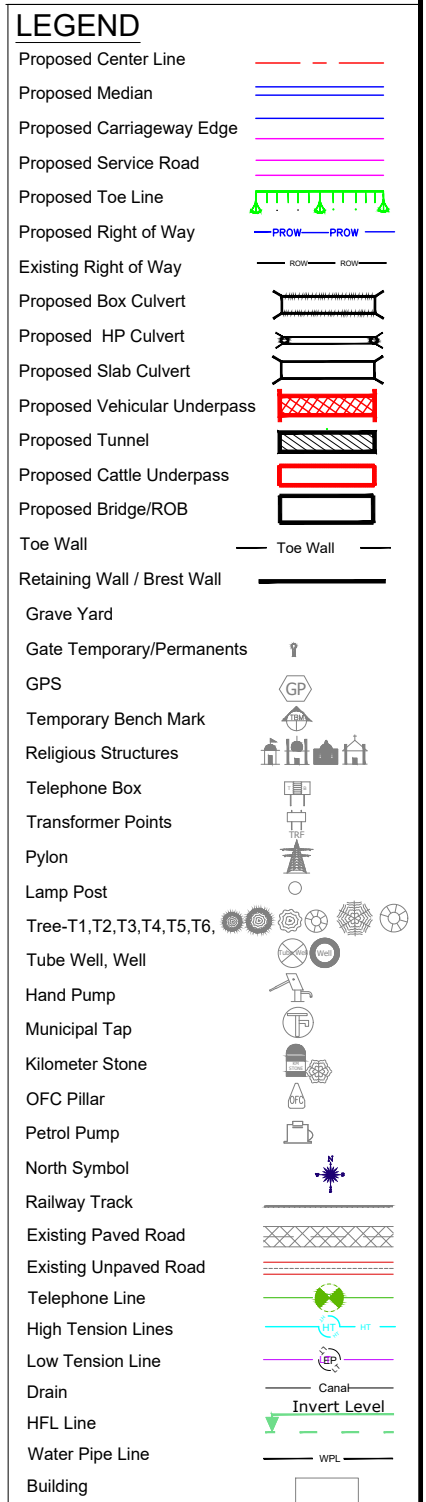
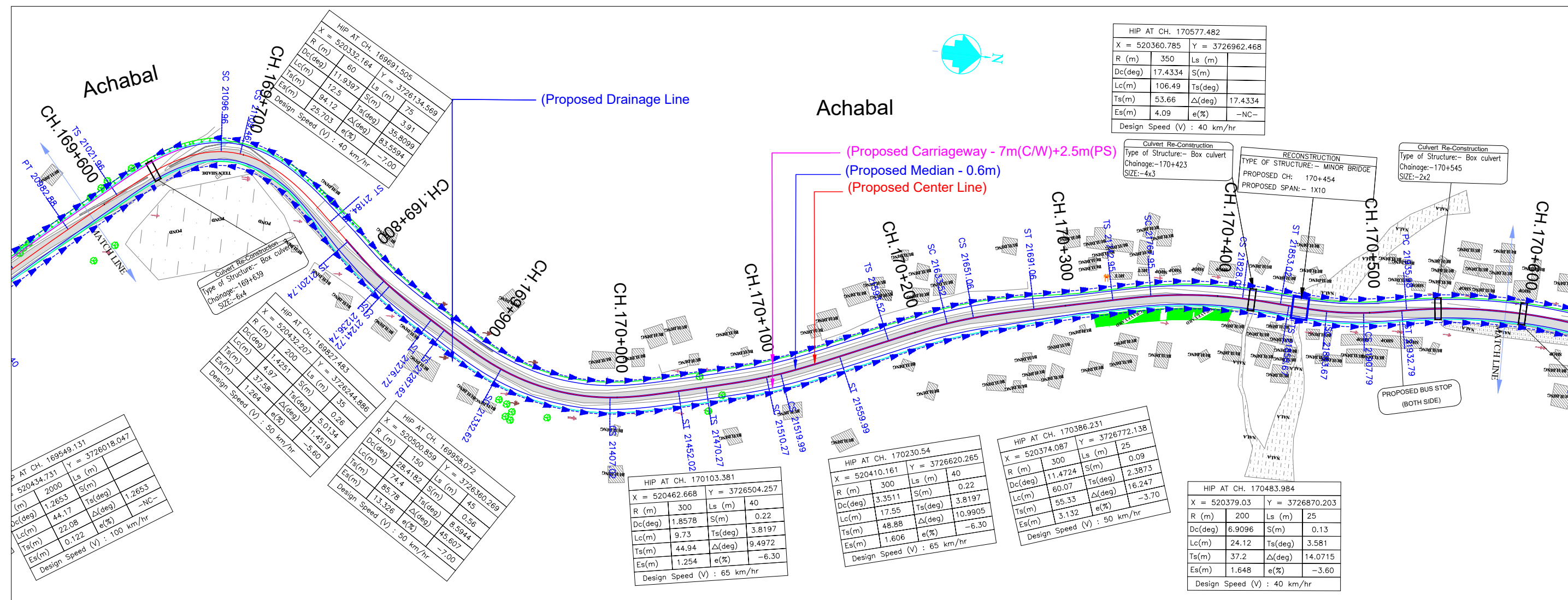
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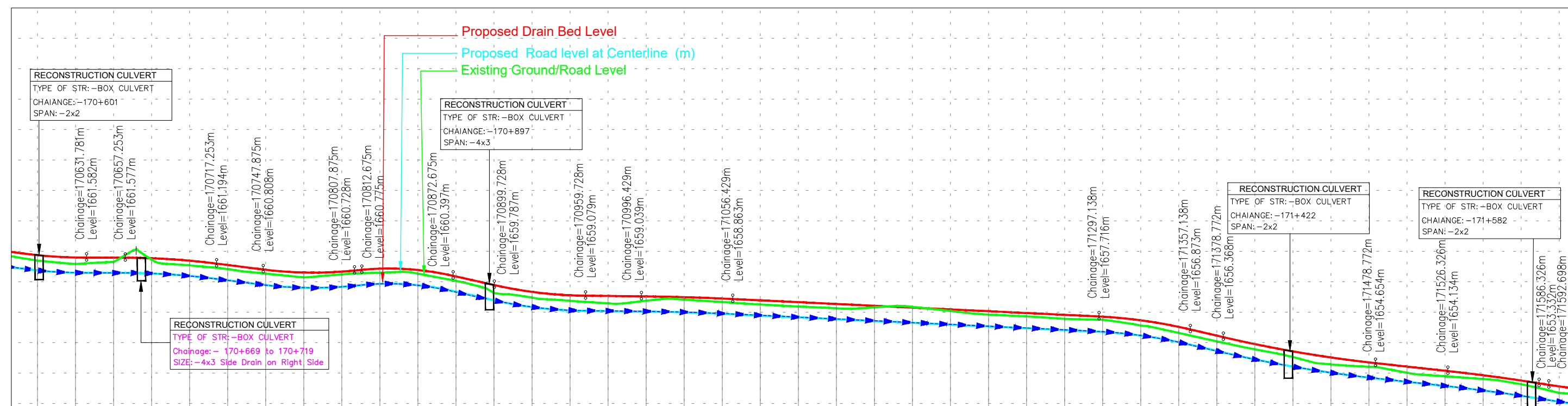
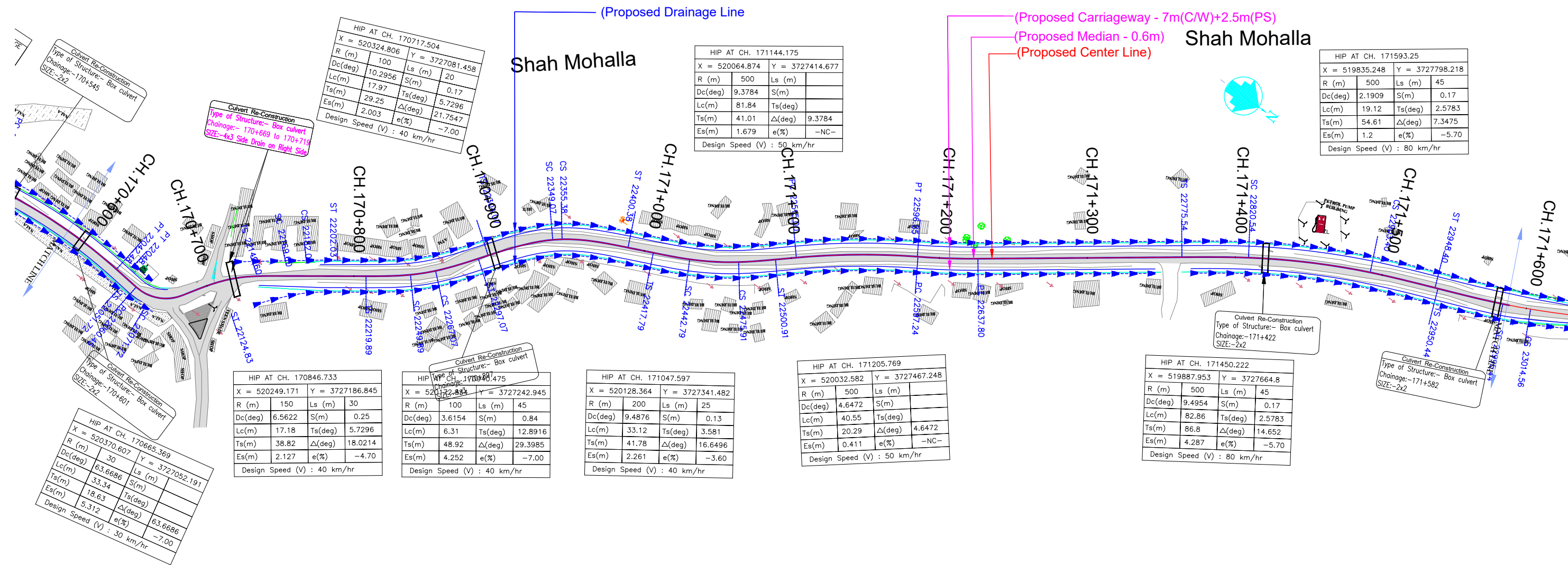
Project

Drawing Title




Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khealani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khealani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
DRAINAGE PLAN & PROFILE (km.20+000 to km.21+000)		
Date:	Project No.	Drawing No.
SEP-2020	1564	NHIDCL/NH-244-PACK-I/IF&P/21/R0

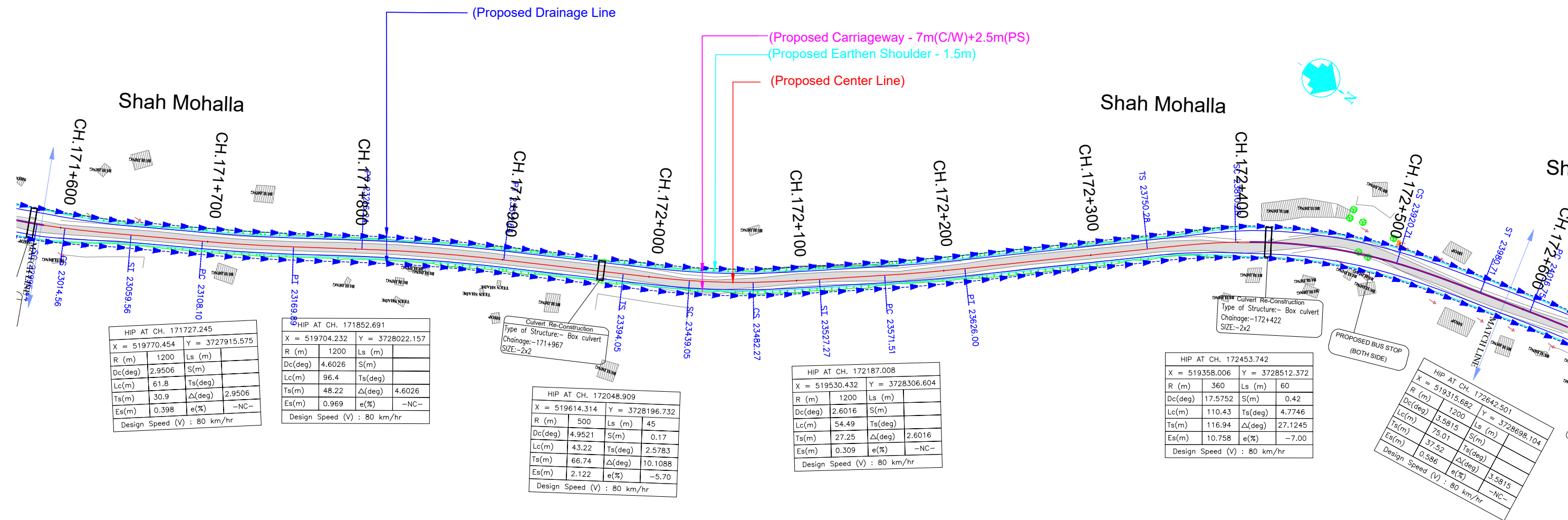


ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Valloo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	Nov.2020		<div><p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p></div>	<div><p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p></div>	Designed: <div></div>	Scale :- H:-1.2500 V:-1.250	Drawing Title	DRAINAGE PLAN & PROFILE (km.21+000 to km.22+000)			
			Date: <div></div>	Project No: <div></div>	Drawing No: <div></div>						
			SEP-2020	1564	NHIDCL/NH-244-PACK-I/PSR/22/R0						
			Approved: <div></div>								



(DATUM - 1644)	
Propose Drain Bed Level (m)	
Proposed Road Level at Centerline (m)	
Existing Ground/Road Level at Centerline (m)	
Proposed Vertical Alignment Schematic	
Proposed Horizontal Alignment Schematic	
Chainage (Km)	

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 265.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	Nov.2020		 <p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p>	 <p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p> 	Designed:		Scale :- H:- 1.2500 V:- 1.250	Drawing Title	
					Drawn:				
					Checked:				
					Approved:				



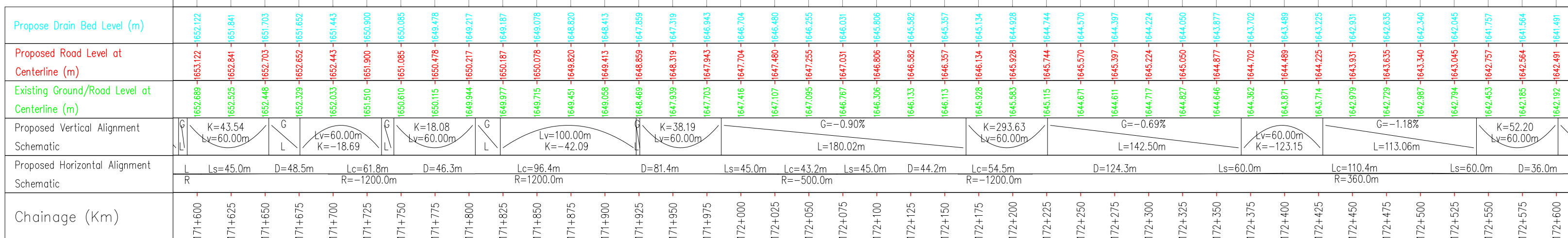
LEGEND

Proposed Center Line	
Proposed Median	
Proposed Carriageway Edge	
Proposed Service Road	
Proposed Toe Line	
Proposed Right of Way	
Existing Right of Way	
Proposed Box Culvert	
Proposed HP Culvert	
Proposed Slab Culvert	
Proposed Vehicular Underpass	
Proposed Tunnel	
Proposed Cattle Underpass	
Proposed Bridge/ROB	
Toe Wall	
Retaining Wall / Breast Wall	
Grave Yard	
Gate Temporary/Permanents	
GPS	
Temporary Bench Mark	
Religious Structures	
Telephone Box	
Transformer Points	
Pylon	
Lamp Post	
Tree-T1,T2,T3,T4,T5,T6	
Tube Well, Well	
Hand Pump	
Municipal Tap	
Kilometer Stone	
OFC Pillar	
Petrol Pump	
North Symbol	
Railway Track	
Existing Paved Road	
Existing Unpaved Road	
Telephone Line	
High Tension Lines	
Low Tension Line	
Drain	
HFL Line	
Water Pipe Line	
Building	

PLAN

R	- Radius of Curve
Dc	- Degree of Curvature
Lc	- Length of Circular Curve
Ts	- Tangent Length
Es	- Apex Distance
LS	- Length of Spiral Curve
S	- Shift
Δ	- Deflection Angle
V	- Design Speed Km/Hr
e%	- Superelevation
PC	- Point of Curvature
PT	- Point of Tangent
HIP	- Horizontal Intersection Point
L - PROFILE	
G	- Gradient %
Lv	- Length of Vertical Curve
L	- Length of Grade(m)
K	- Ratio Between vertical curve Length & Change of Gradient (Lv/(G2-G1))
e	- Superelevation (%)
D	- Straight Length of Horizontal Alignment
Lc	- Length of Circular Curve

(DATUM - 1637)



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT

NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
(MINISTRY OF ROAD TRANSPORT & HIGHWAY)
GOVERNMENT OF INDIA



CONSULTANT:



RODIC CONSULTANTS PVT. LTD.
1, JAI SINGH MARG (FIRST FLOOR), YMCA
CULTURAL CENTRE BUILDING
NEW DELHI - 110001 (INDIA)
In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

FINAL DETAILED PROJECT REPORT

Designed:

Drawn:

Checked:

Approved:

Scale :-

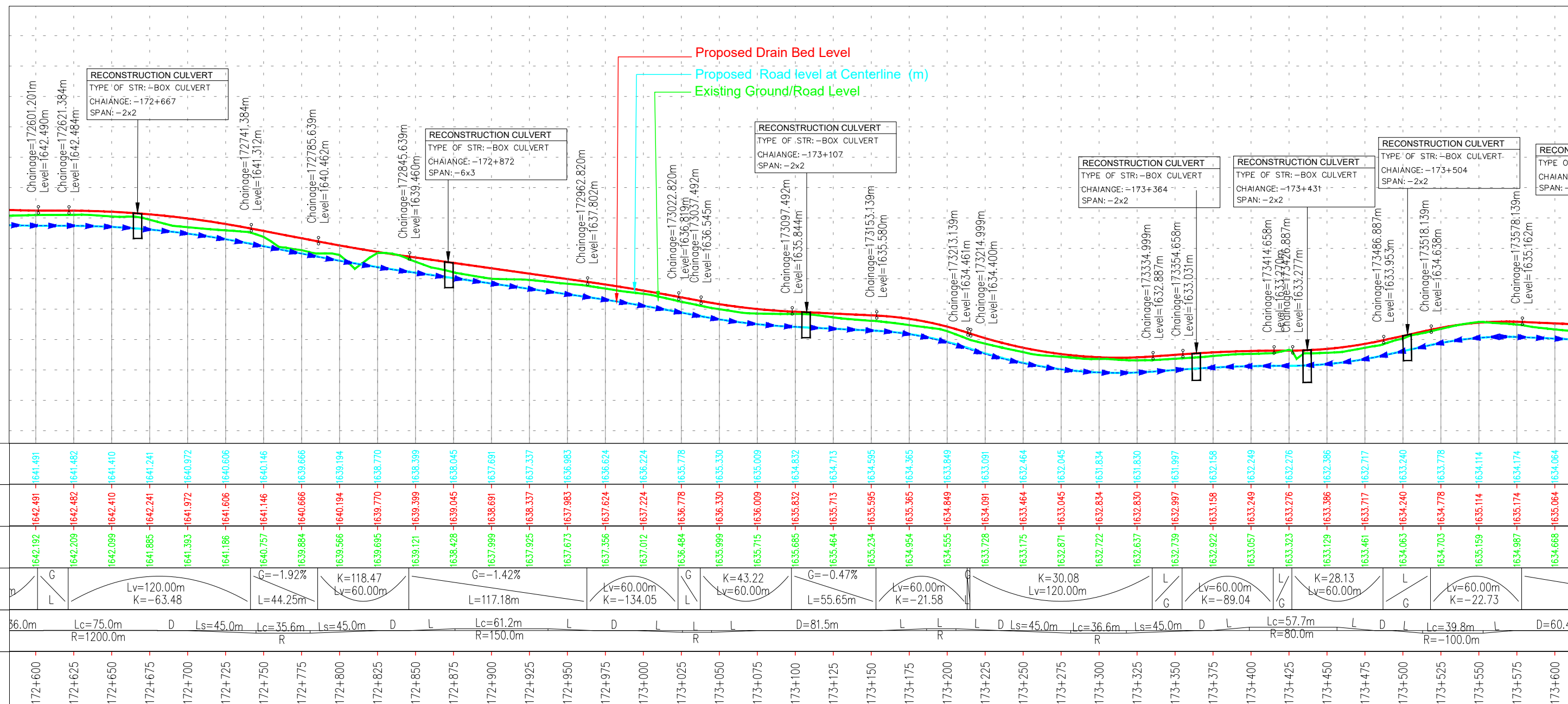
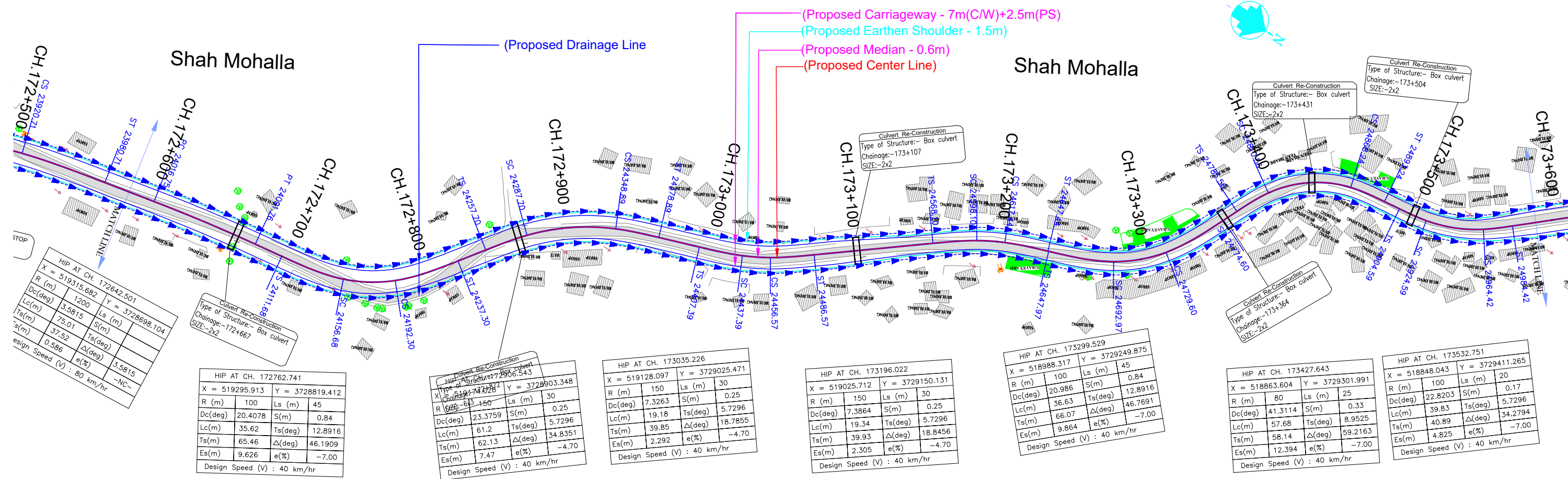
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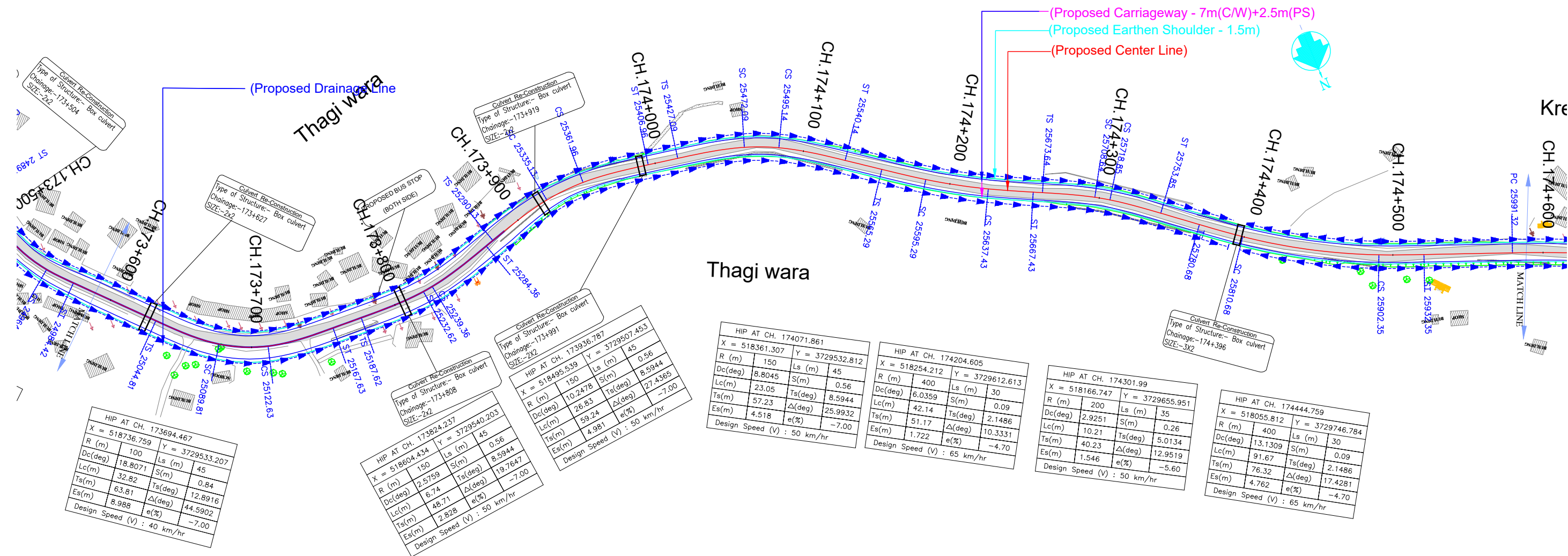
Project

Drawing Title

Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khealani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khealani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
DRAINAGE PLAN & PROFILE (km.23+000 to km.24+000)		
Date: SEP-2020	Project No. 1564	Drawing No. NHIDCL/NH-244-PACK-I/IF&P/24/R0



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project		
R0	Nov.2020		<div><p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p></div>	<div><p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</p><p>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</p></div>	Designed: <div></div>	Scale :- H:-1.2500 V:-1.250	Drawing Title	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khehali to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khehali - Kishtwar - Chattroo - Khanabal Section of NH 244.		
DRAINAGE PLAN & PROFILE (km.24+000 to km.25+000)										
Date		Project No.		Drawing No.						
SEP-2020		1564		NHIDCL/NH-244-PACK-I/IF&P/25/R0						



LEGEND

- Proposed Center Line
- Proposed Median
- Proposed Carriageway Edge
- Proposed Service Road
- Proposed Toe Line
- Proposed Right of Way
- Existing Right of Way
- Proposed Box Culvert
- Proposed HP Culvert
- Proposed Slab Culvert
- Proposed Vehicular Underpass
- Proposed Tunnel
- Proposed Cattle Underpass
- Proposed Bridge/ROB
- Toe Wall
- Retaining Wall / Breast Wall
- Grave Yard
- Gate Temporary/Permanents
- GPS
- Temporary Bench Mark
- Religious Structures
- Telephone Box
- Transformer Points
- Pylon
- Lamp Post
- Tree-T1,T2,T3,T4,T5,T6
- Tube Well, Well
- Hand Pump
- Municipal Tap
- Kilometer Stone
- OFC Pillar
- Petrol Pump
- North Symbol
- Railway Track
- Existing Paved Road
- Existing Unpaved Road
- Telephone Line
- High Tension Lines
- Low Tension Line
- Drain
- HFL Line
- Water Pipe Line
- Building

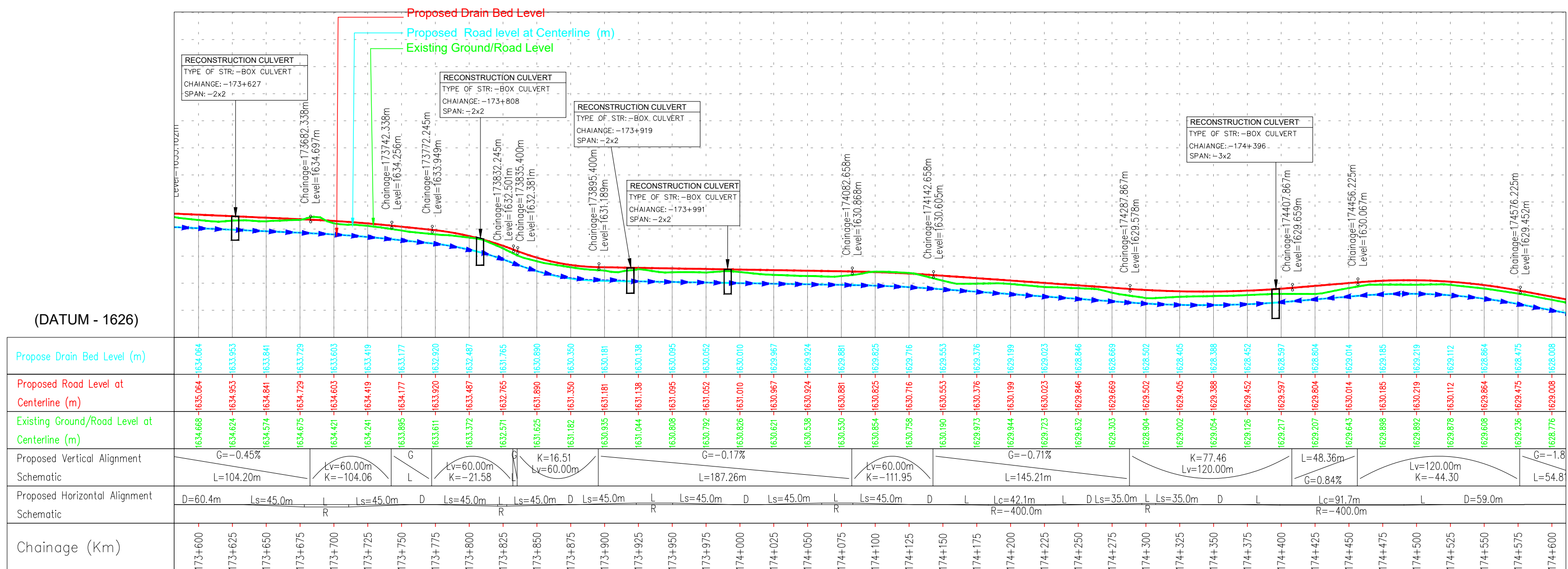
PLAN




- R - Radius of Curve
- Dc - Degree of Curvature
- Lc - Length of Circular Curve
- Ts - Tangent Length
- Es - Apex Distance
- LS - Length of Spiral Curve
- S - Shift
- Δ - Deflection Angle
- V - Design Speed Km/Hr
- e% - Superelevation
- PC - Point of Curvature
- PT - Point of Tangent
- HIP - Horizontal Intersection Point

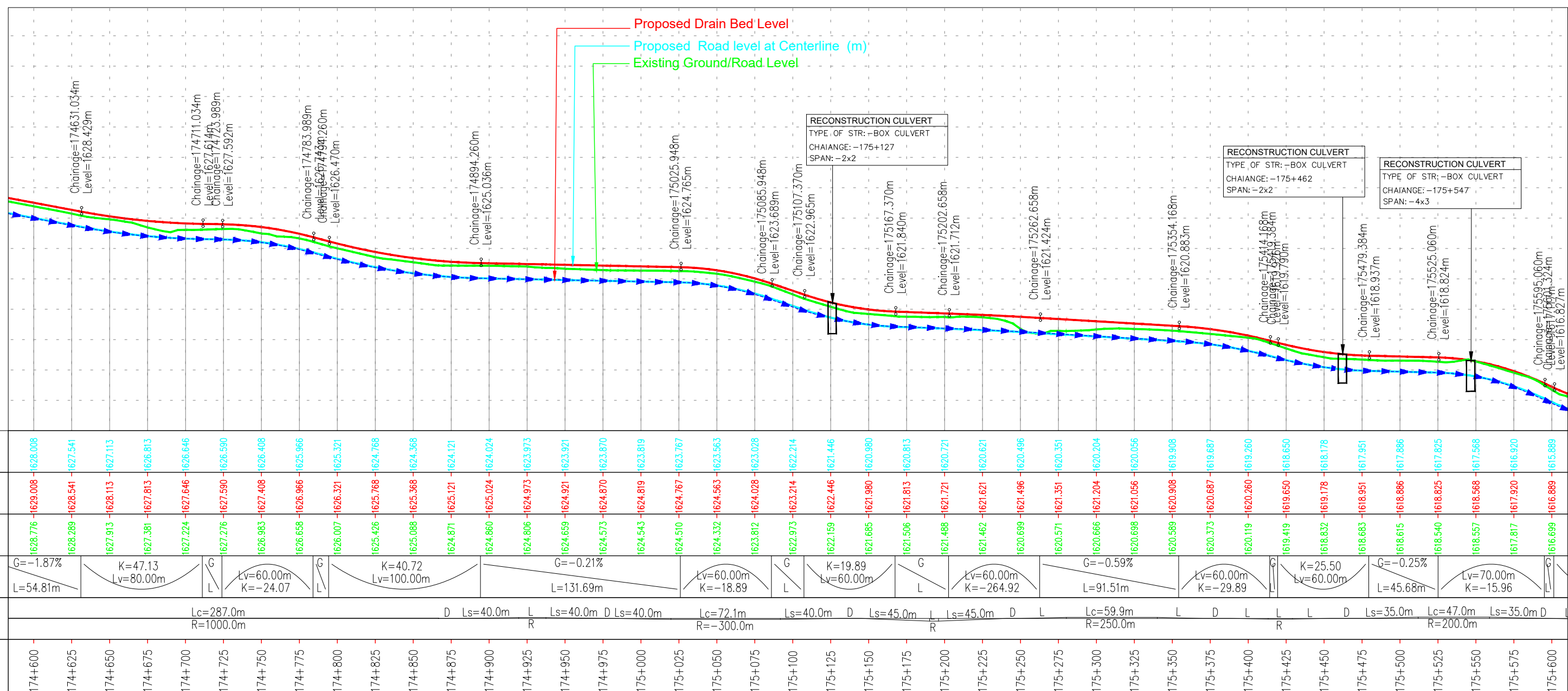
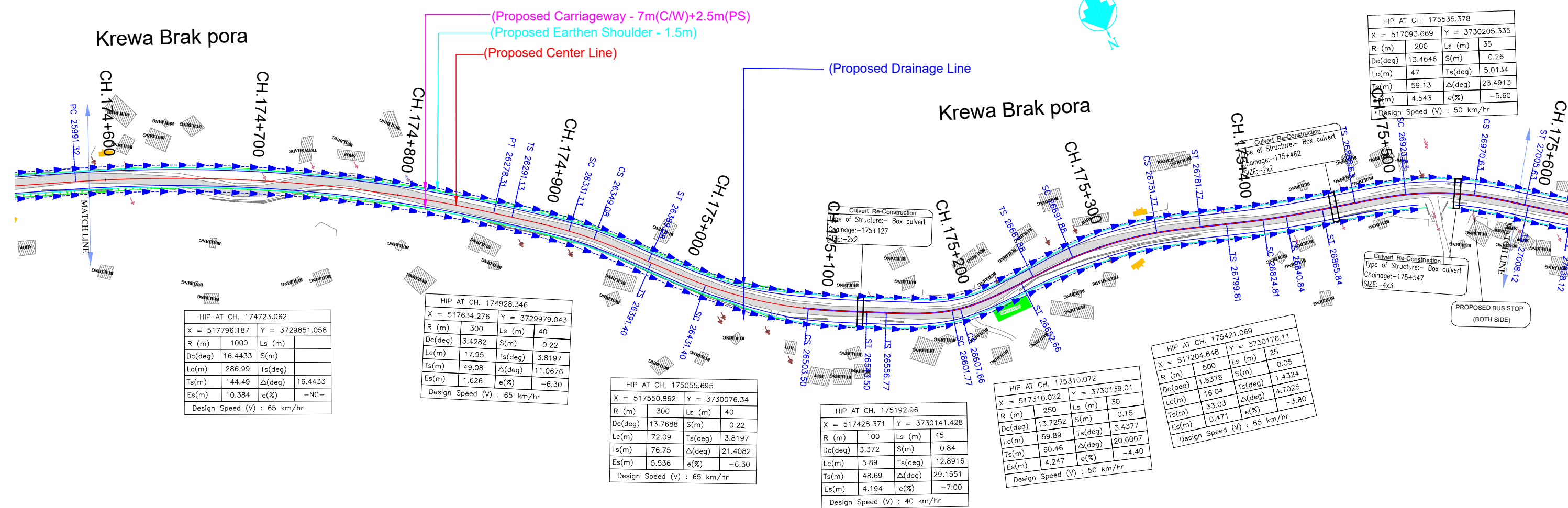
L - PROFILE

- G - Gradient %
- Lv - Length of Vertical Curve
- L - Length of Grade(m)
- K - Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
- e - Superelevation (%)
- D - Straight Length of Horizontal Alignment
- Lc - Length of Circular Curve

(DATUM - 1626)



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - kishtwar - Chattroo - Khanabal Section of NH 244.	
R0	Nov.2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)  In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed:		Scale :- H:-1.2500 V:-1.250	Drawing Title		DRAINAGE PLAN & PROFILE (km.25+000 to km.26+000)
					Drawn:					
					Checked:					
					Approved:					



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION
R0	Nov.2020	

CLIENT

NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
(MINISTRY OF ROAD TRANSPORT & HIGHWAY)
GOVERNMENT OF INDIA



The logo of the National Highway and Infrastructure Development Corporation (NHAI) is located at the bottom left of the page. It features a stylized blue and white graphic of a bridge or highway structure, with the letters 'NHAI' in large, bold, blue font. Below the graphic, the text 'BUILDING INFRASTRUCTURE - ENLIVENING THE NATION' is written in a smaller, blue, sans-serif font.

CONSULTANT:

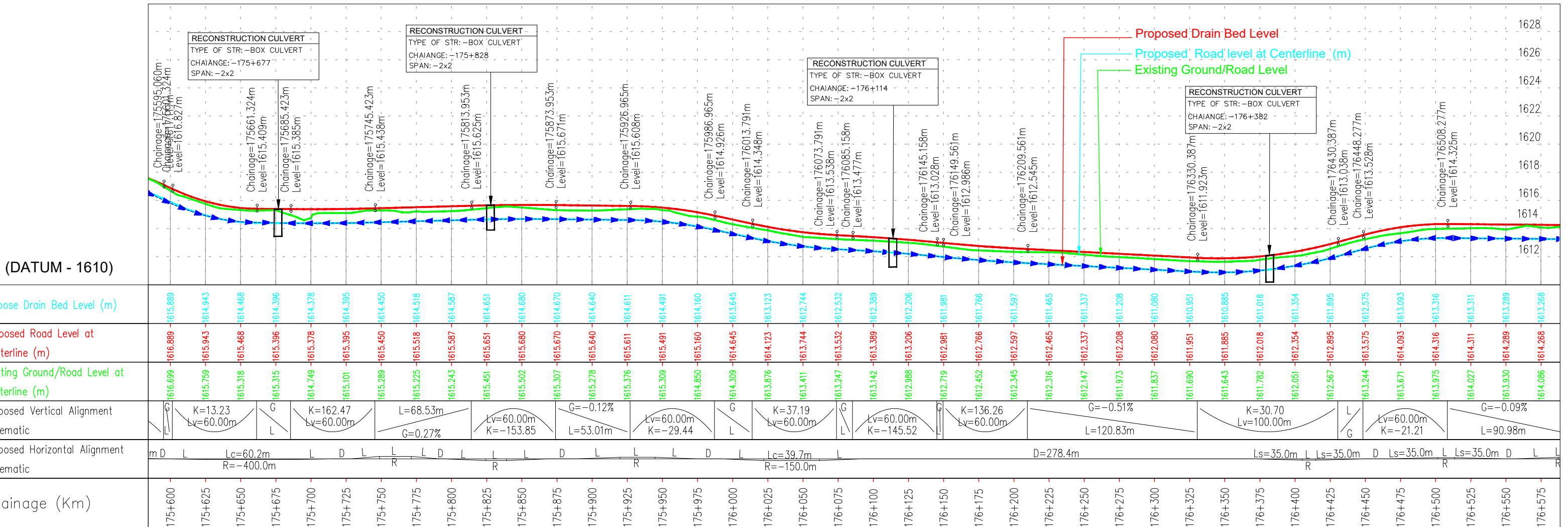
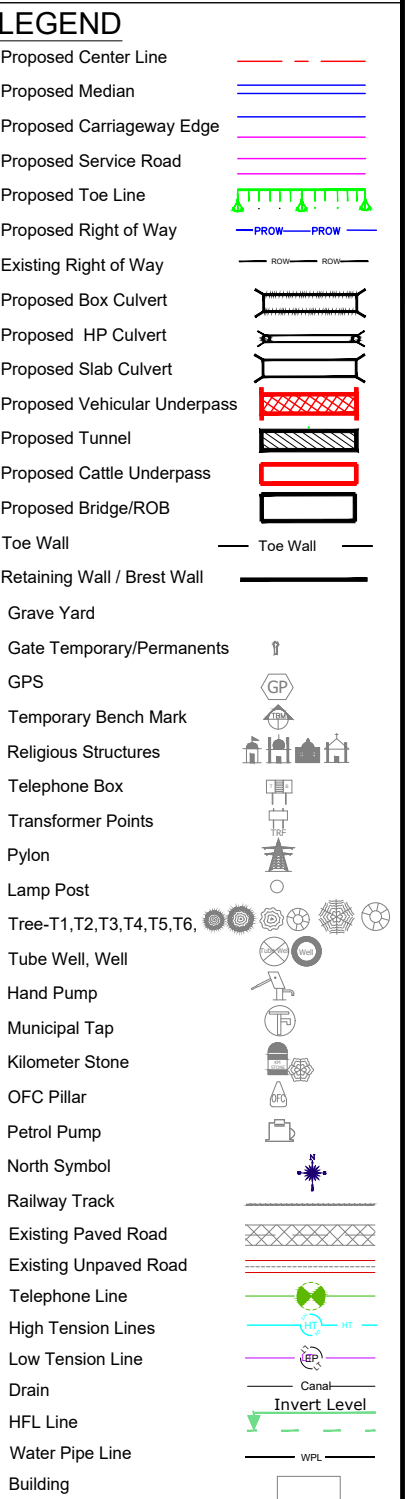
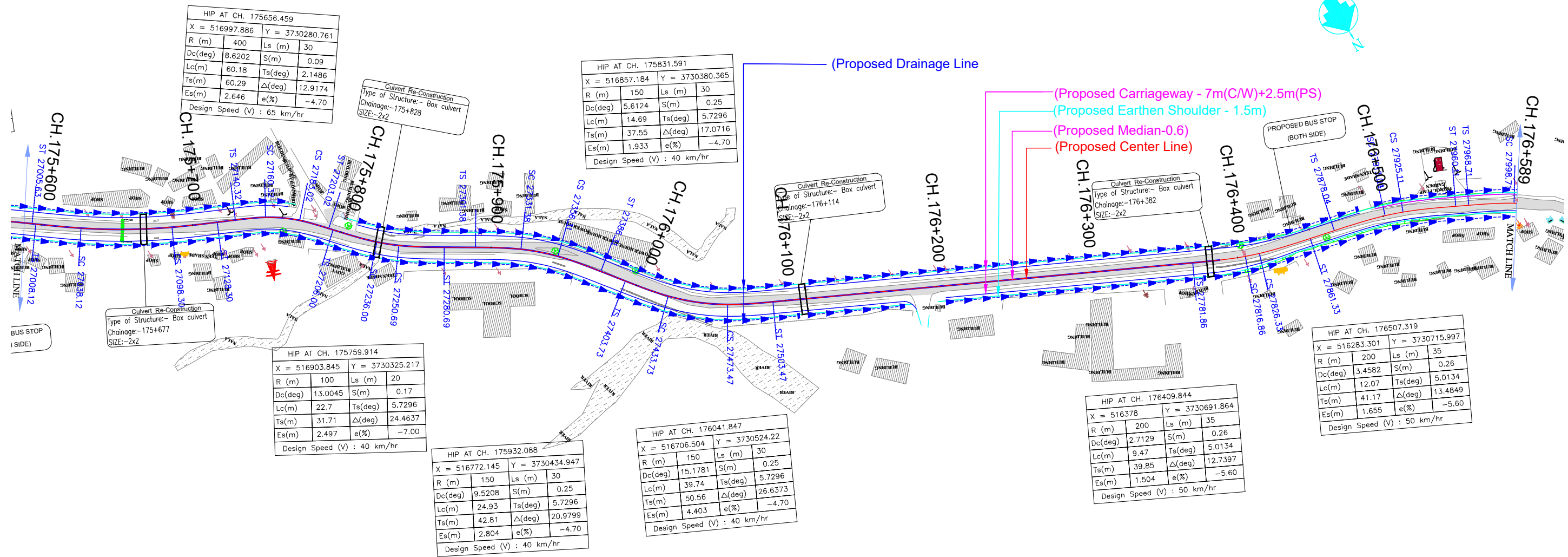


RODIC CONSULTANTS PVT. LTD.
 1, JAI SINGH MARG (FIRST FLOOR), YMCA
 CULTURAL CENTRE BUILDING
 NEW DELHI - 110001 (INDIA)

In Association with
Monarch Surveyors and Engineering
Consultants Pvt. Ltd.,

<h2 style="text-align: center;"><u>FINAL DETAILED PROJECT REPORT</u></h2>		
Designed:		Scale :- H:-1.2500 V:-1.250
Drawn:		
Checked:		
Approved:		

Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation of 2 lane with paved shoulder from of (i) Km 44.500 of Khehali to Km 142.000 of Chattrou Village & (ii) Km 235.000(Vailoo Village) to Km 269.000 (Khanabal) of Khehali - Kishtwar - Chattrou - Khanabal Section of NH 244.		
Drawing Title	DRAINAGE PLAN & PROFILE (km.26+000 to km.27+000)		
Date	Project No.	Drawing No.	
SEP-2020	1564	NHIDC/NH-244-PACK-II/P&P/27/R0	



PLAN

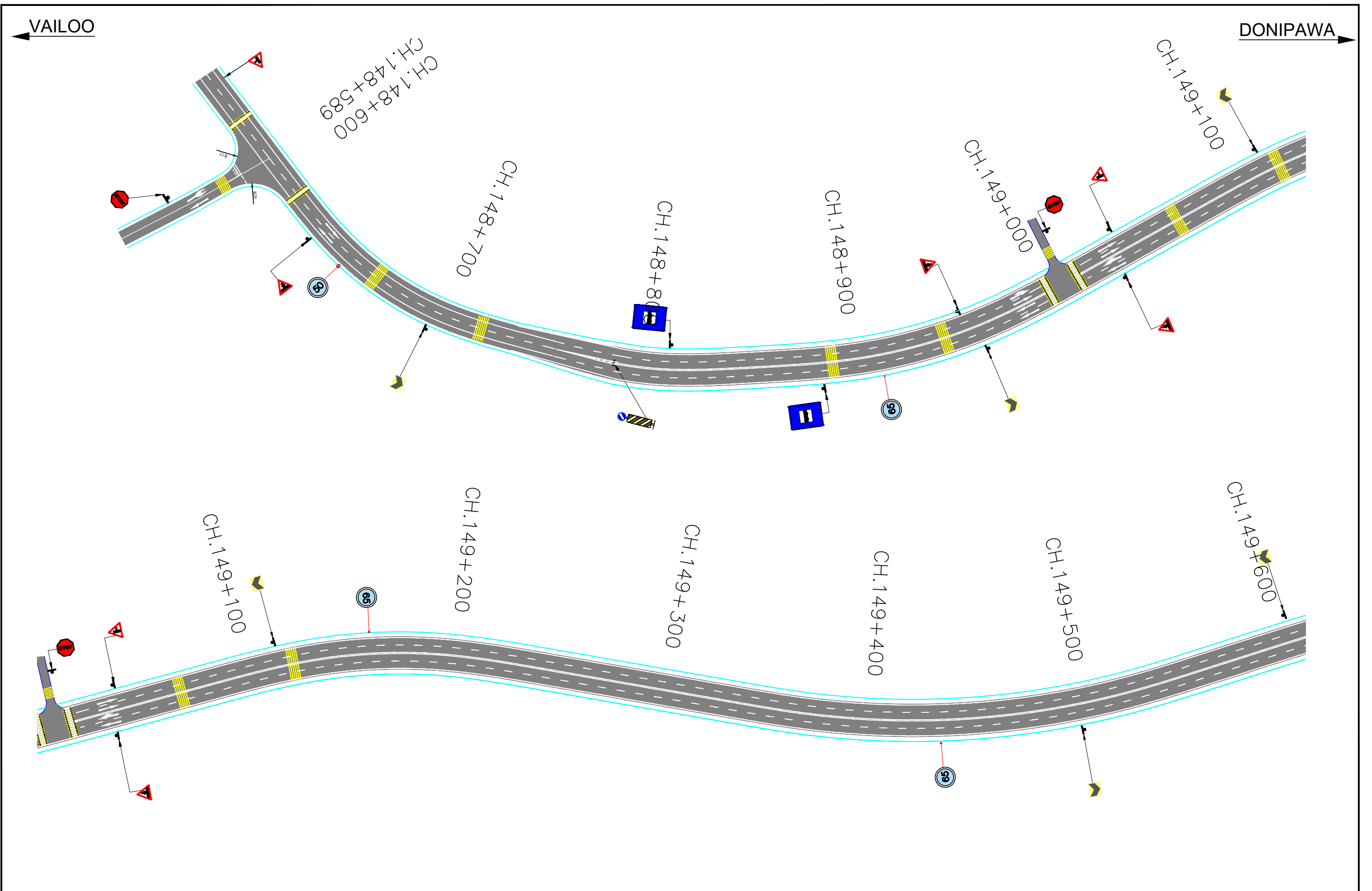
R - Radius of Curve
 Dc - Degree of Curvature
 Lc - Length of Circular Curve
 Ts - Tangent Length
 Es - Apex Distance
 Ls - Length of Spiral Curve
 S - Shift
 Δ - Deflection Angle
 V - Design Speed Km/Hr
 e% - Superelevation
 PC - Point of Curvature
 PT - Point of Tangent
 HIP - Horizontal Intersection Point

L - PROFILE

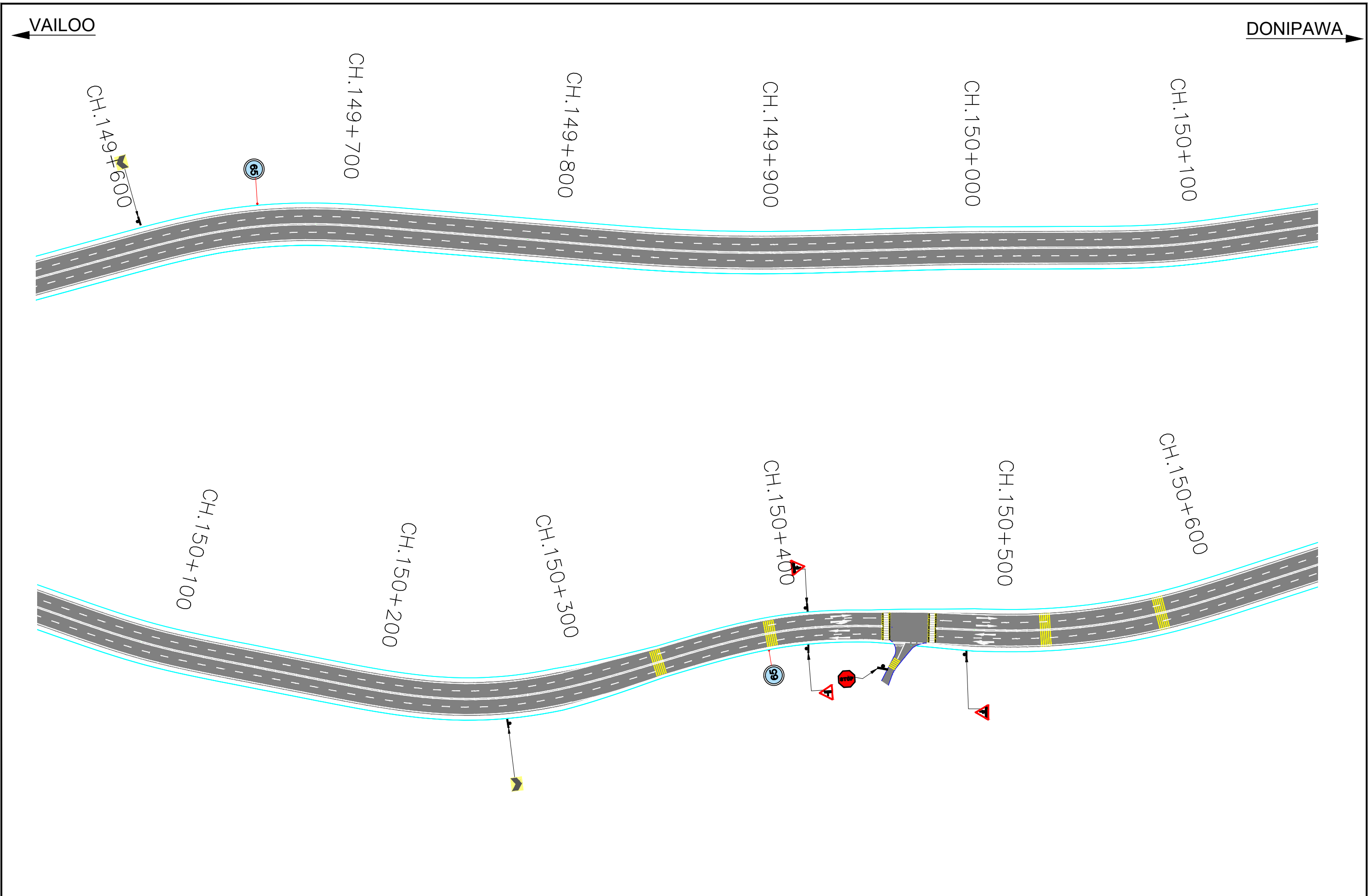
G - Gradient %
 Lv - Length of Vertical Curve
 L - Length of Grade(m)
 K - Ratio Between vertical curve Length & Change of Gradient (Lc/(G2-G1))
 e - Superelevation (%)
 D - Straight Length of Horizontal Alignment
 Lc - Length of Circular Curve

ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title
R0	Nov.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Drainage Plan & Profile (km.27+000 to km.28+000)
					Designed: _____ Drawn: _____ Checked: _____ Approved: _____	Scale :- H:-1.2500 V:-1.250
						Project No. 1564 Date: SEP-2020 Drawing No. NHIDCL/NH-244-PACK-I/UP&P/ 28/R0

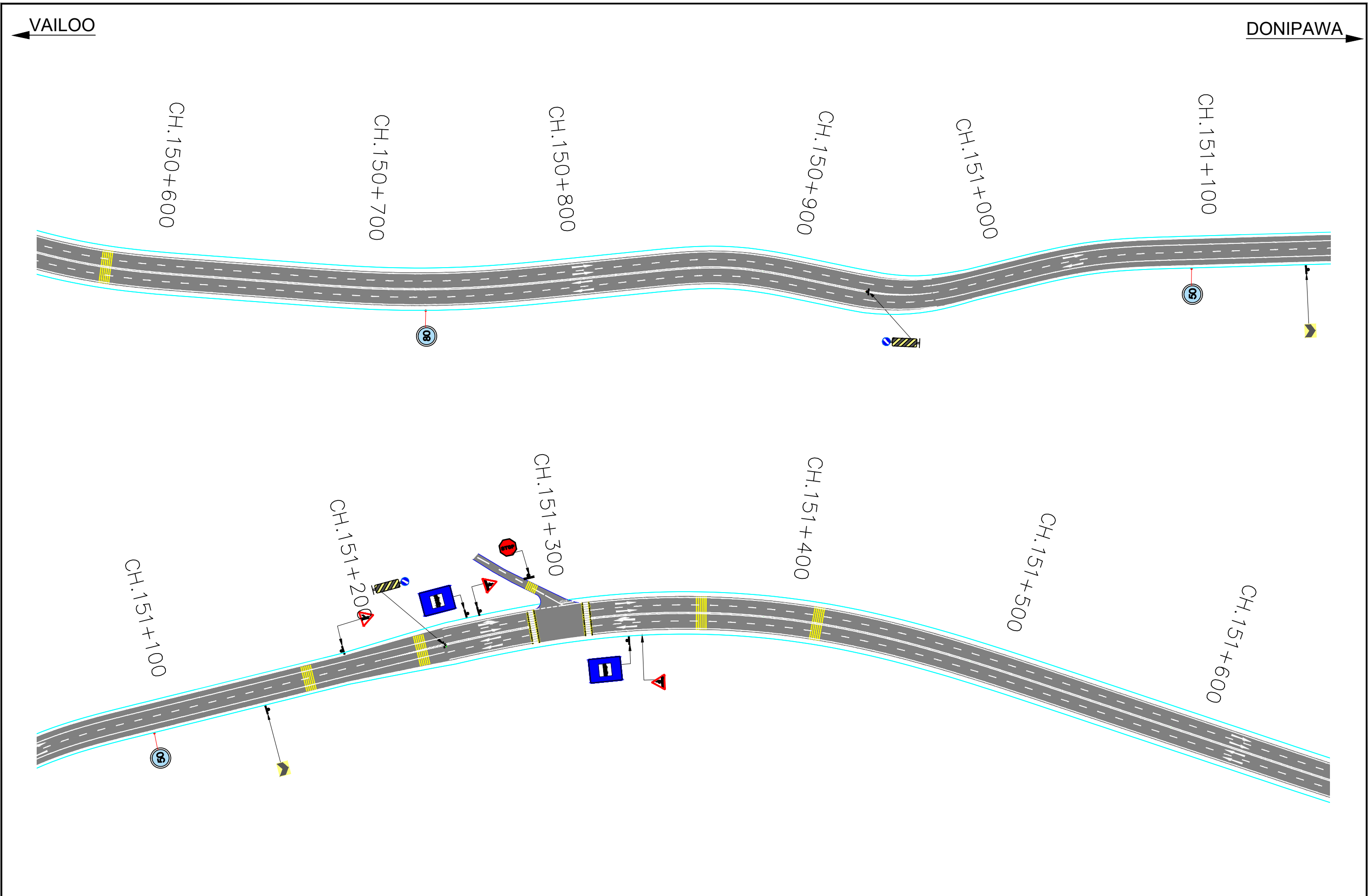
TRAFFIC SIGNAGE AND ROAD MARKING PLAN



Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed:	Scale	1:1500	Drawing Title	TRAFFIC SIGNAGE AND ROAD MARKING PLAN	
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					Checked:				OCT-2020	1564
					Approved:				Drawing No. NHIDCL/NH-244-PACK-II/TMP/01	



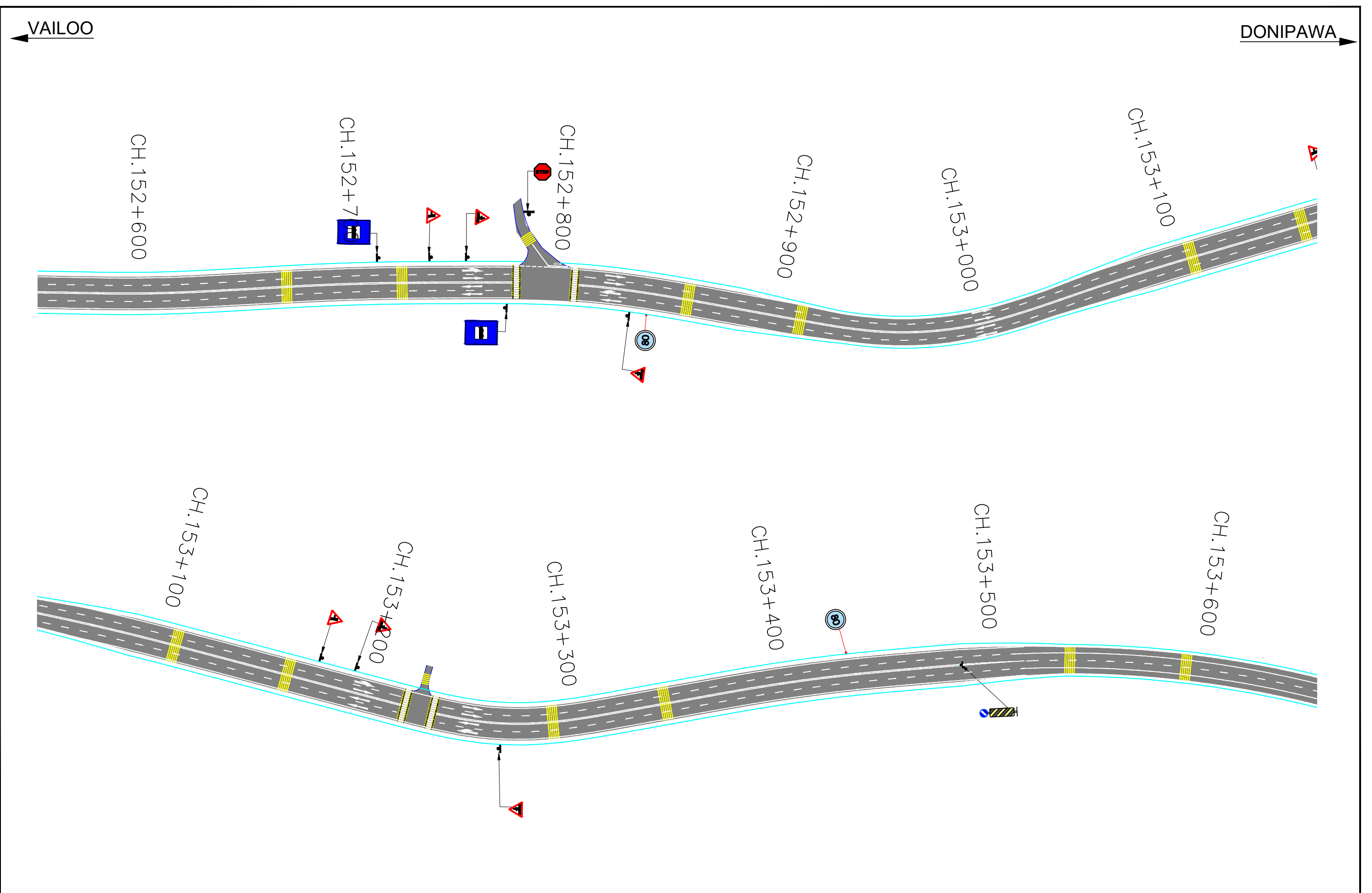
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed:	Scale	1:1500	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
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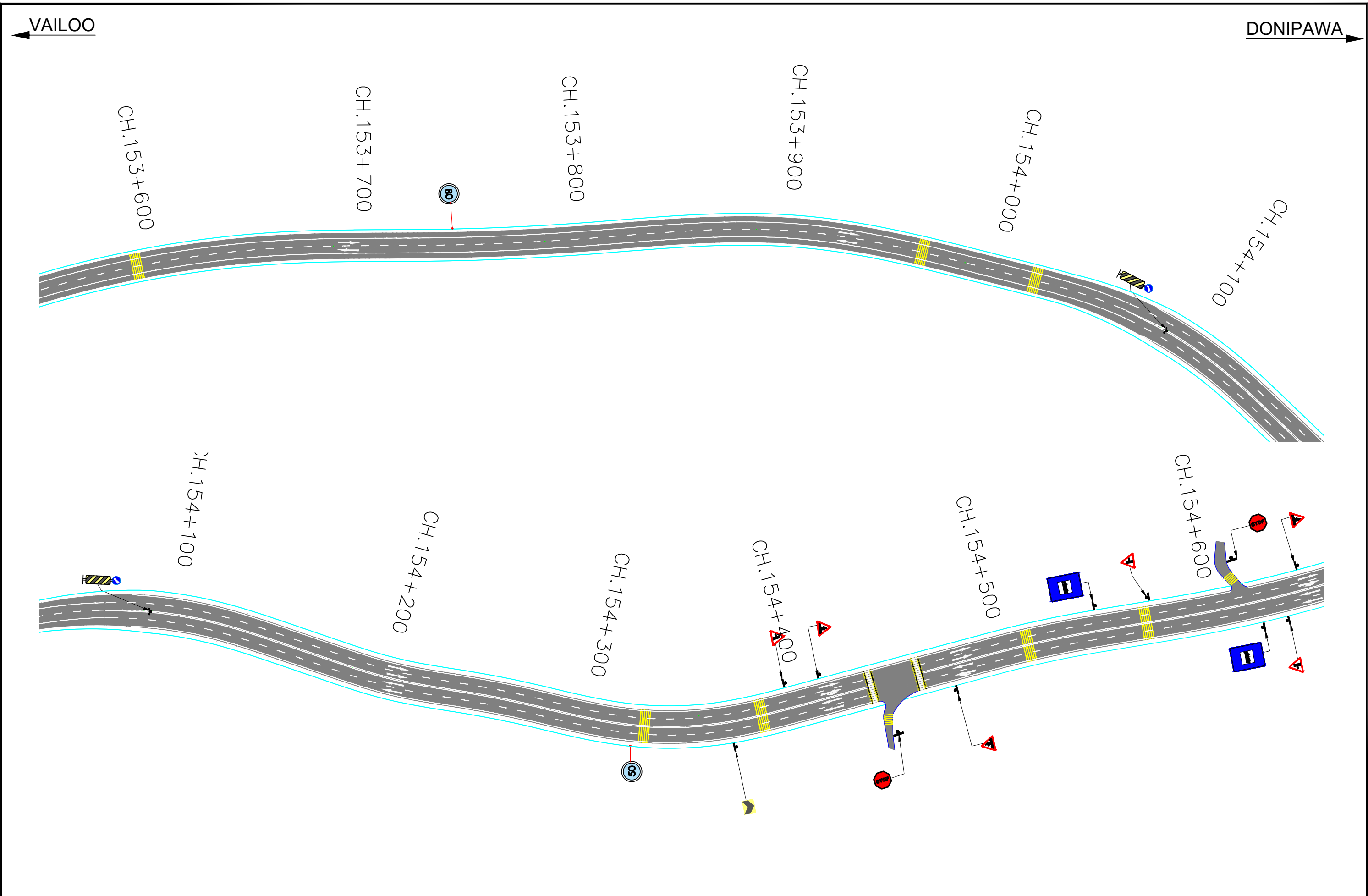
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R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Designed:	Scale	Drawing Title	TRAFFIC SIGNAGE AND ROAD MARKING PLAN
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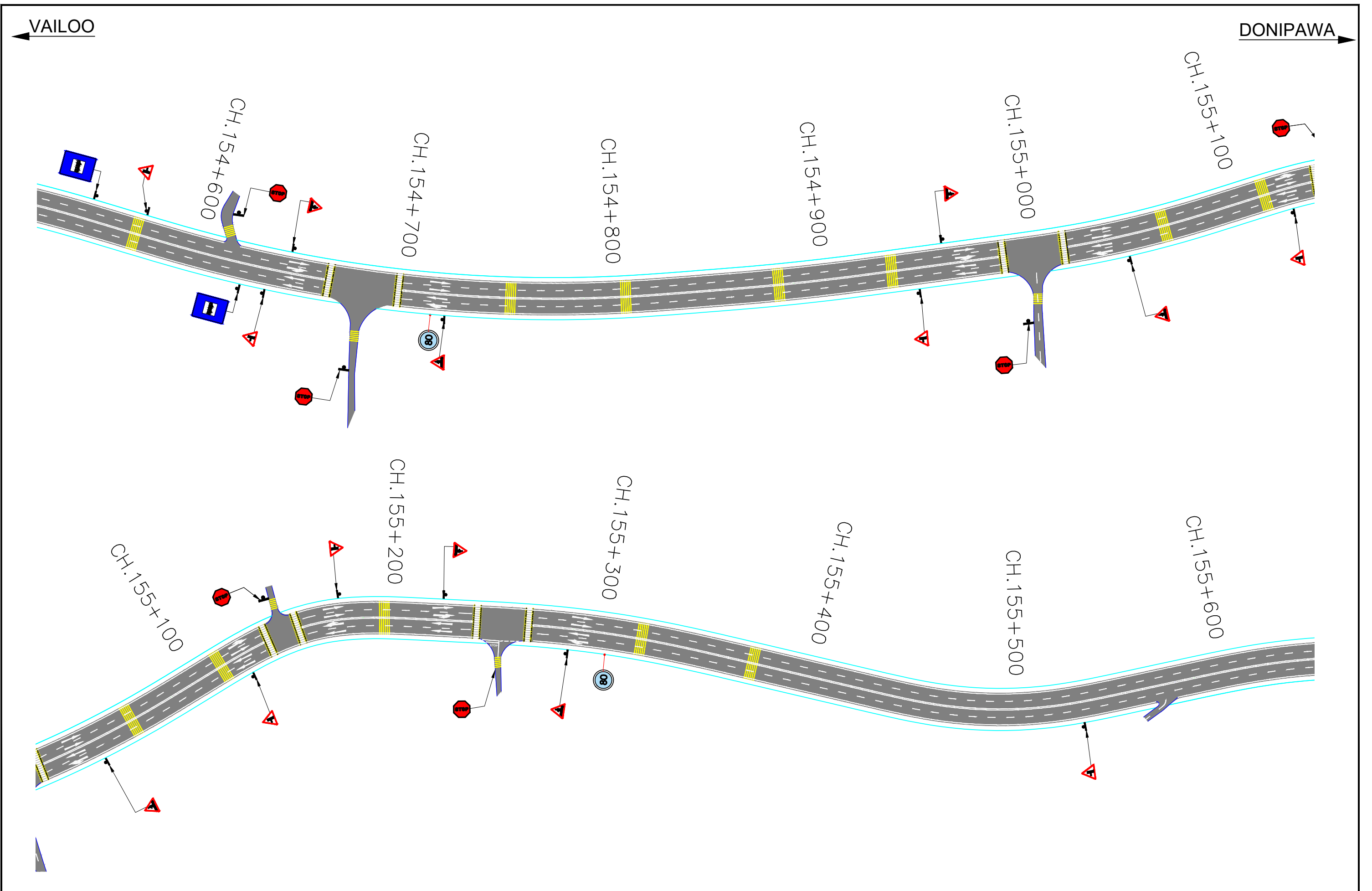
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R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
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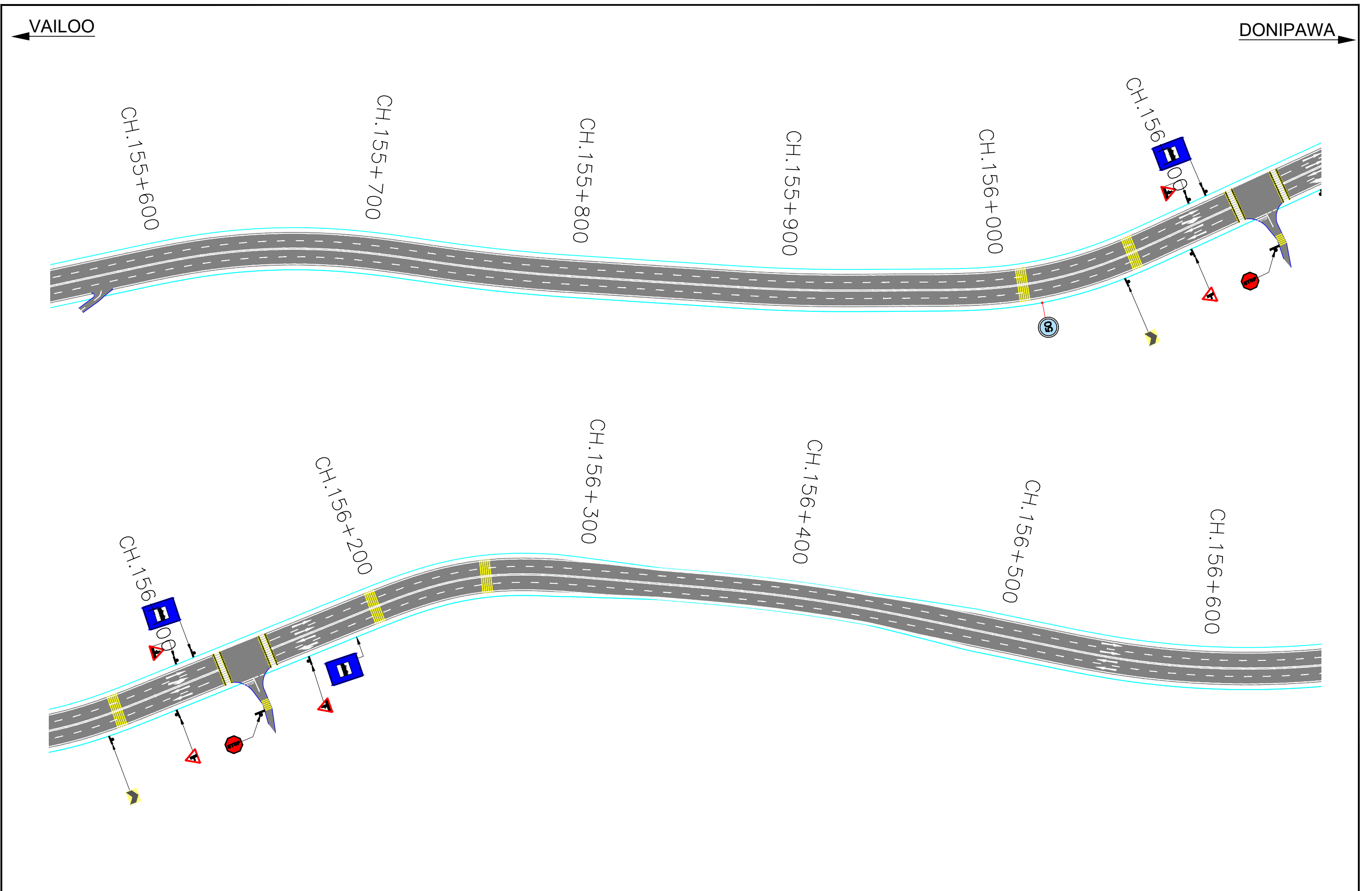
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R0	NOV-2020		 <p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p>	  <p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</p>	Designed: <input type="text"/>	Scale	1:1500	Drawing Title	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
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									OCT-2020	1584	NHIDCL/NH-244-BACKJUMP-05



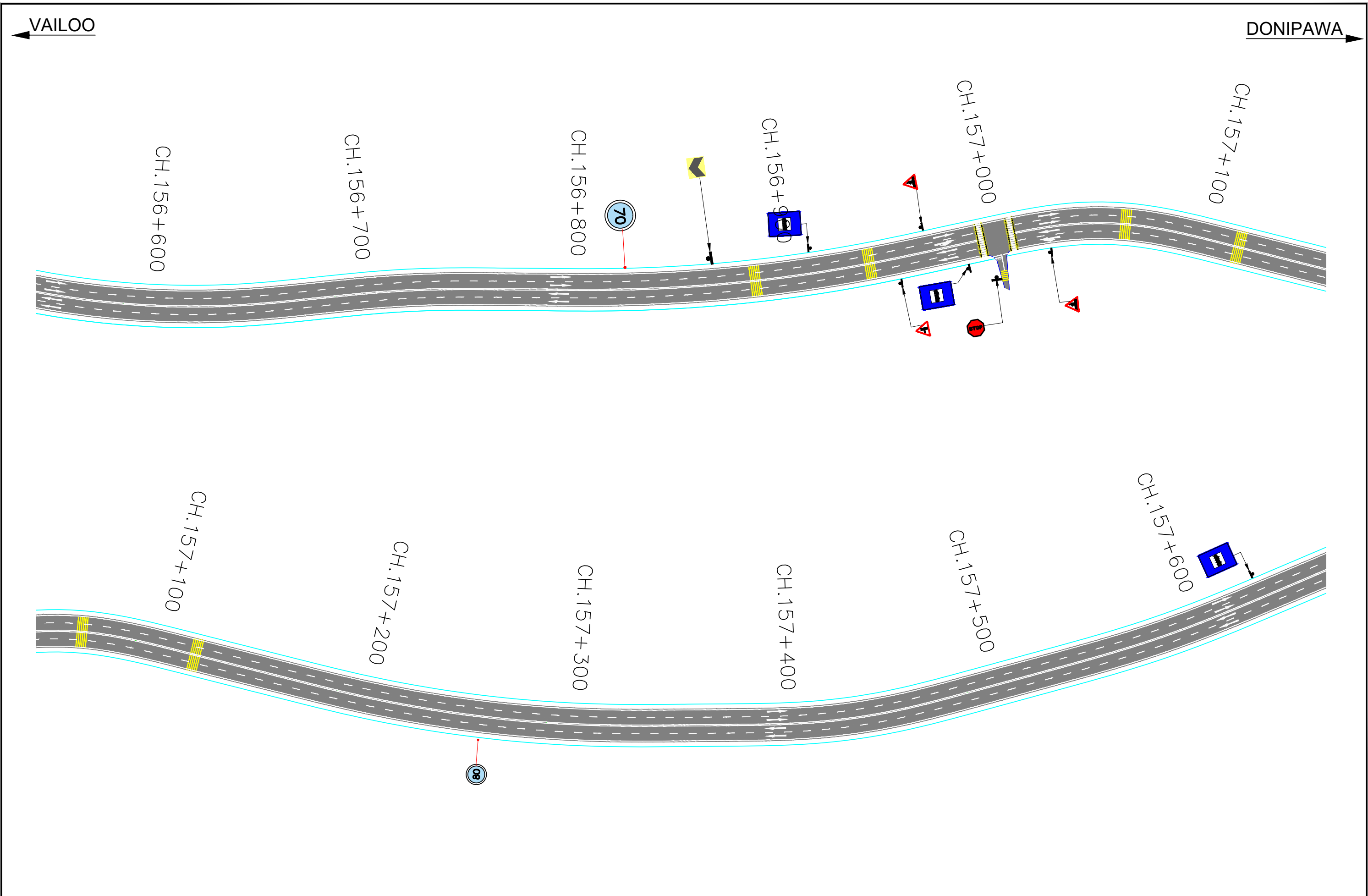
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project
R0	NOV-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	1:1500			Pre-Construction Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
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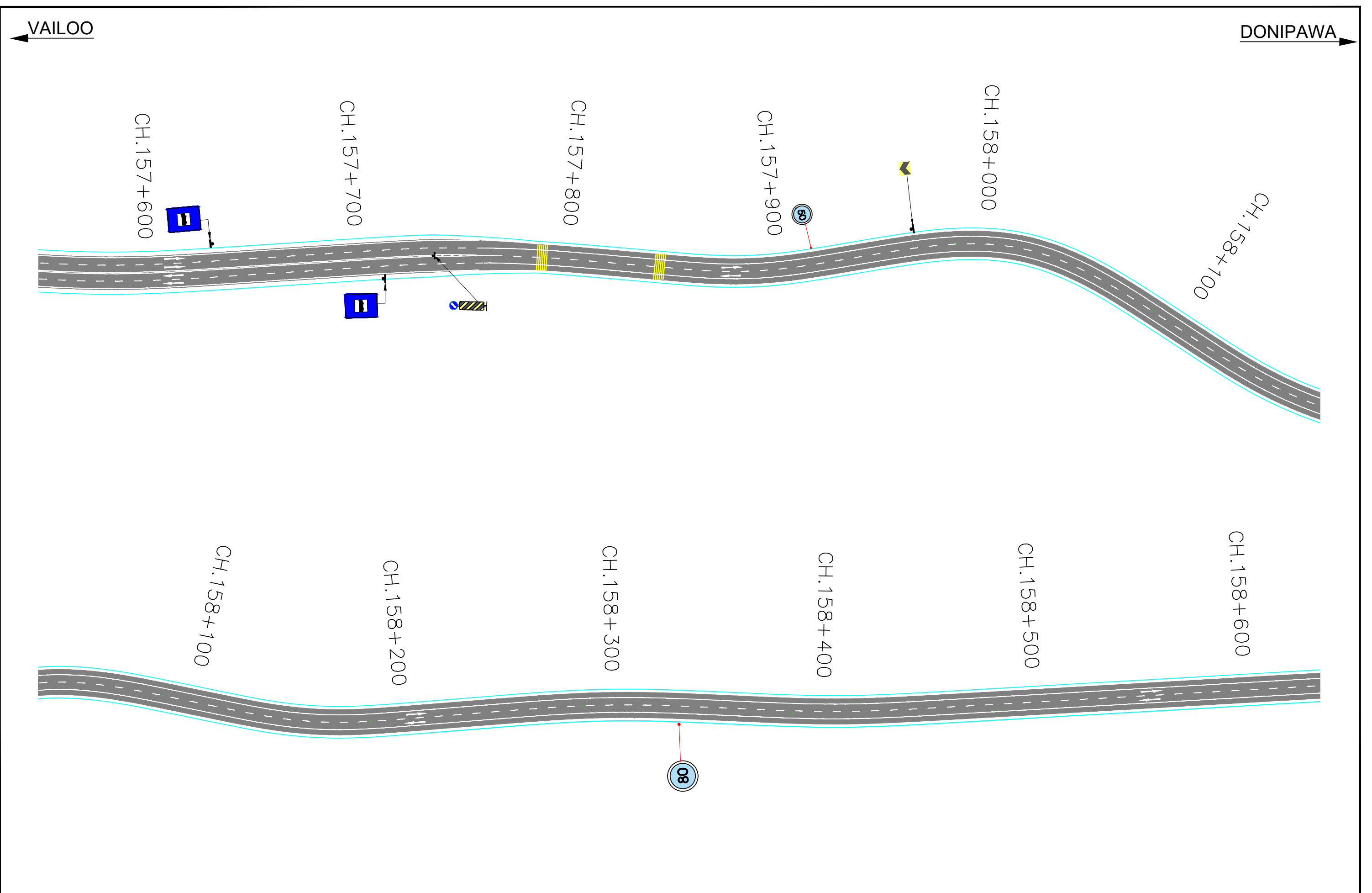
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R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed:	Scale	1:1500	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
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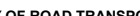




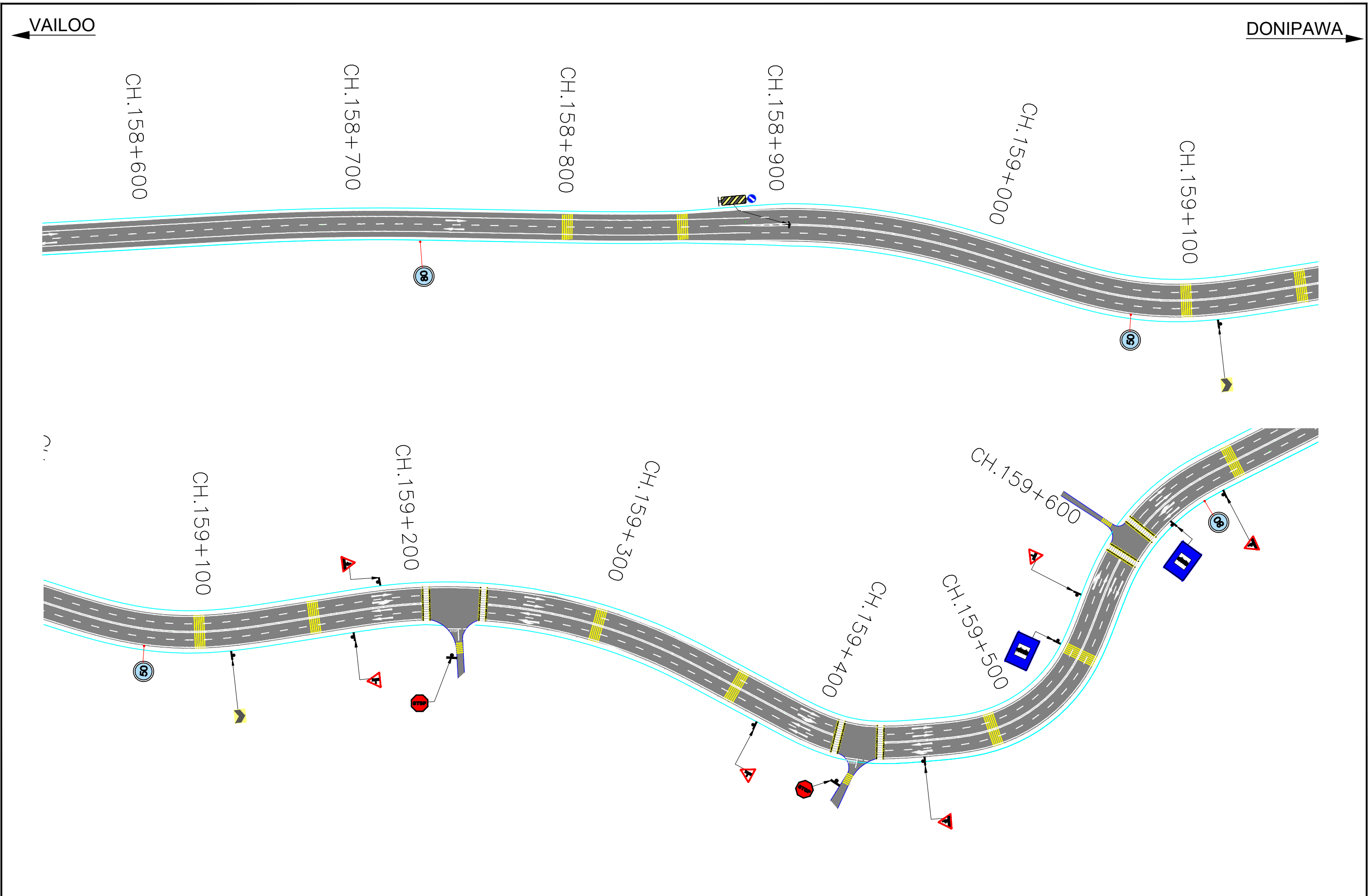
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R0	NOV-2020											
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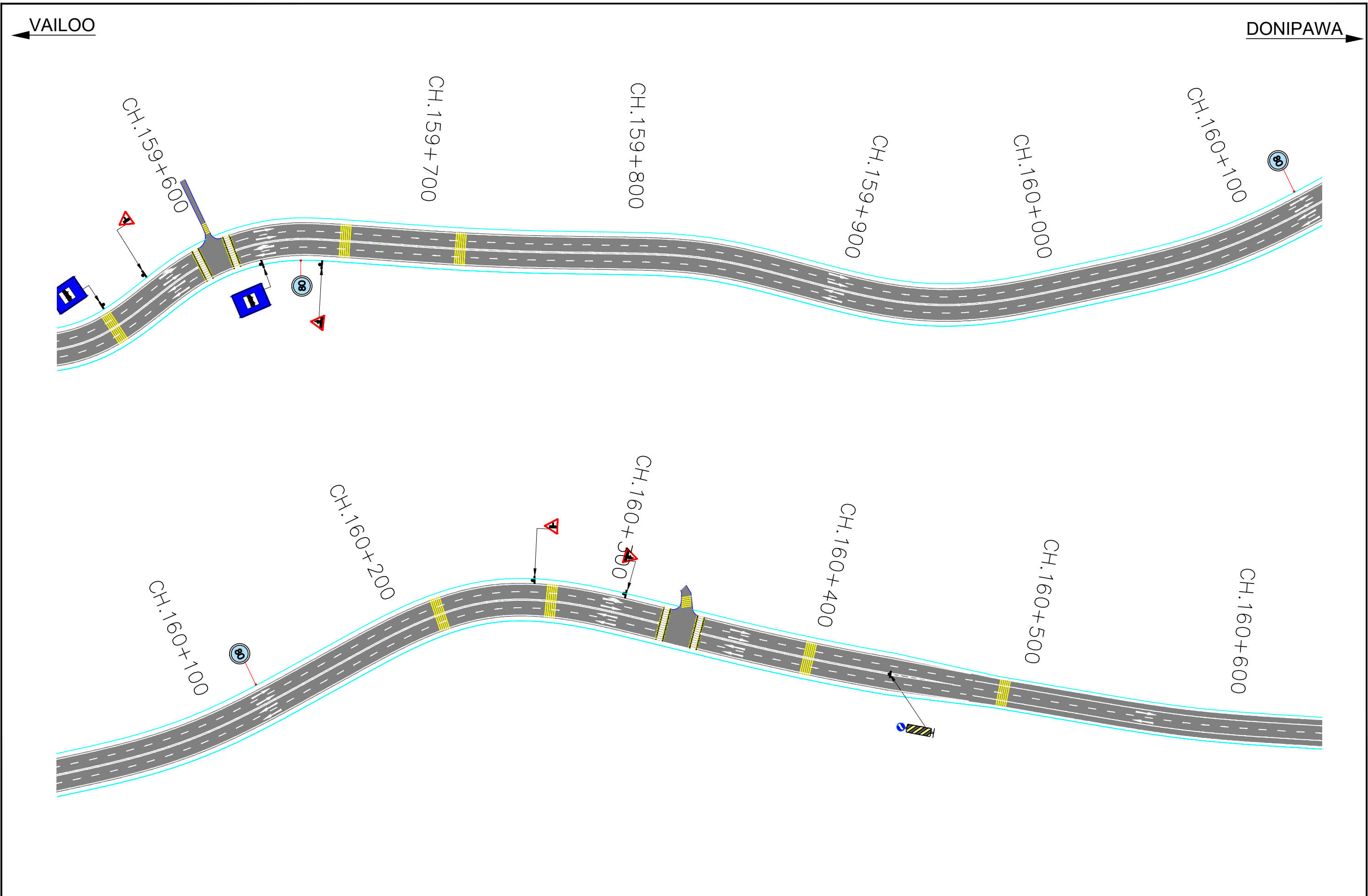
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Project		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
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Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44-500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.					
R0	NOV-2020		 <p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p>	  <p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</p>	Designed: <table><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr></table> Scale 1:1500						Drawing Title	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
Date:		Project No.		Drawing No.										
OCT-2020		1584		NHIDCL/NH-244-BACKJUMP /1/1										



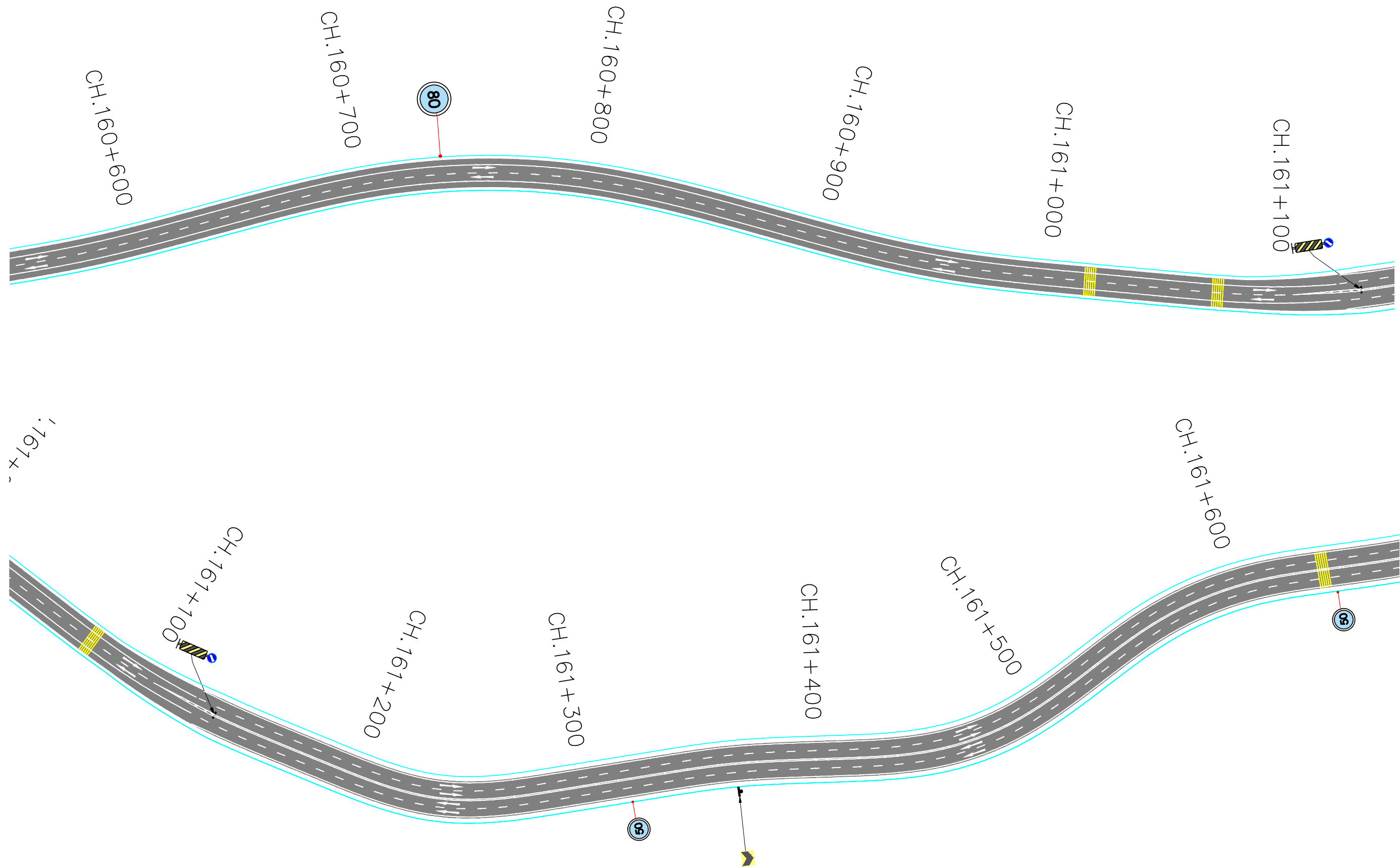
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Date		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
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						NHIDCL/NH-244-PACK-II/TMP 111		





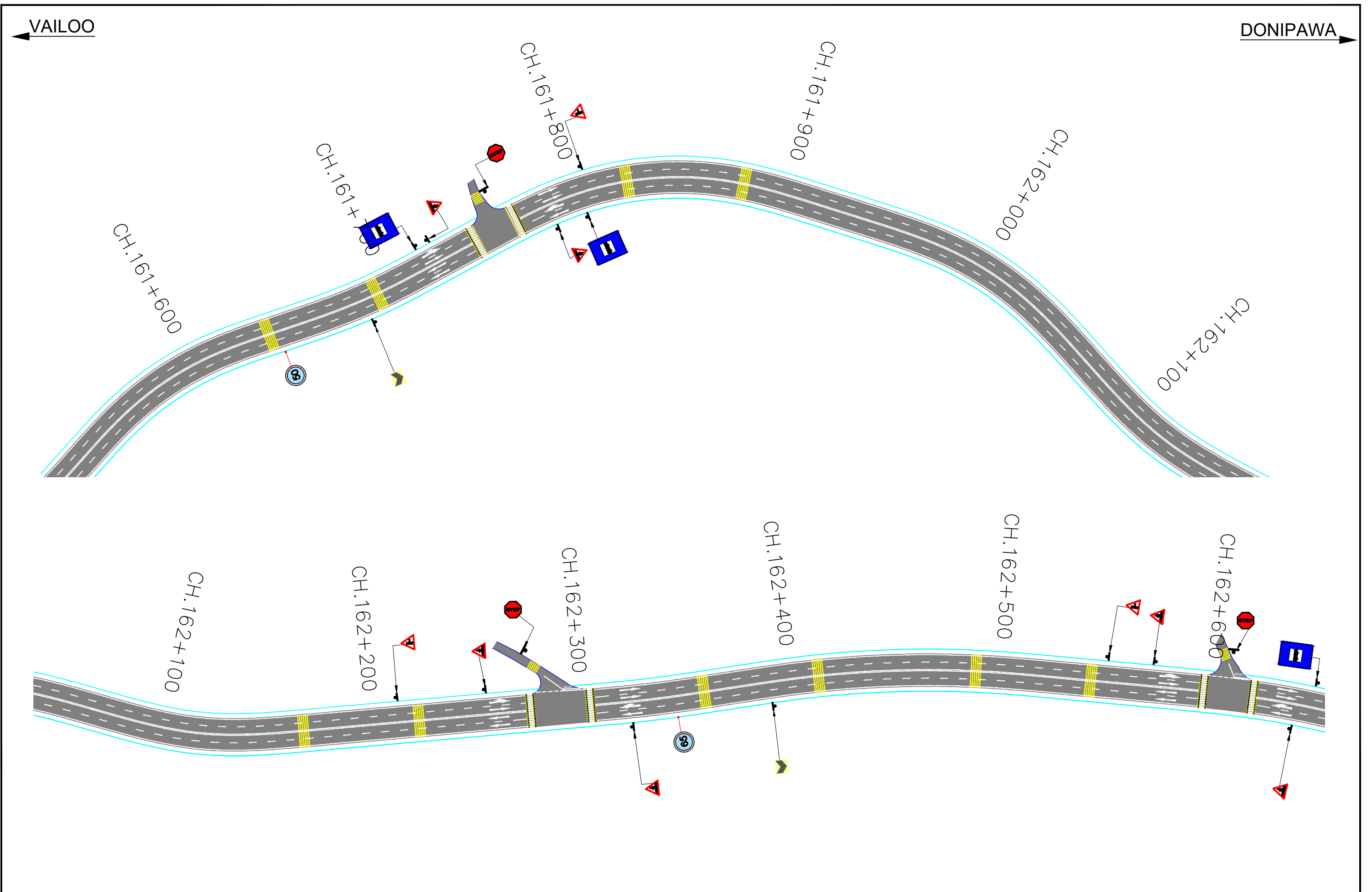
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R0	NOV-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed: <div></div> Scale 1:1500 Drawn: <div></div> Checked: <div></div> Approved: <div></div>			Pre-Construction Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
								Drawing Title
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VAILOO

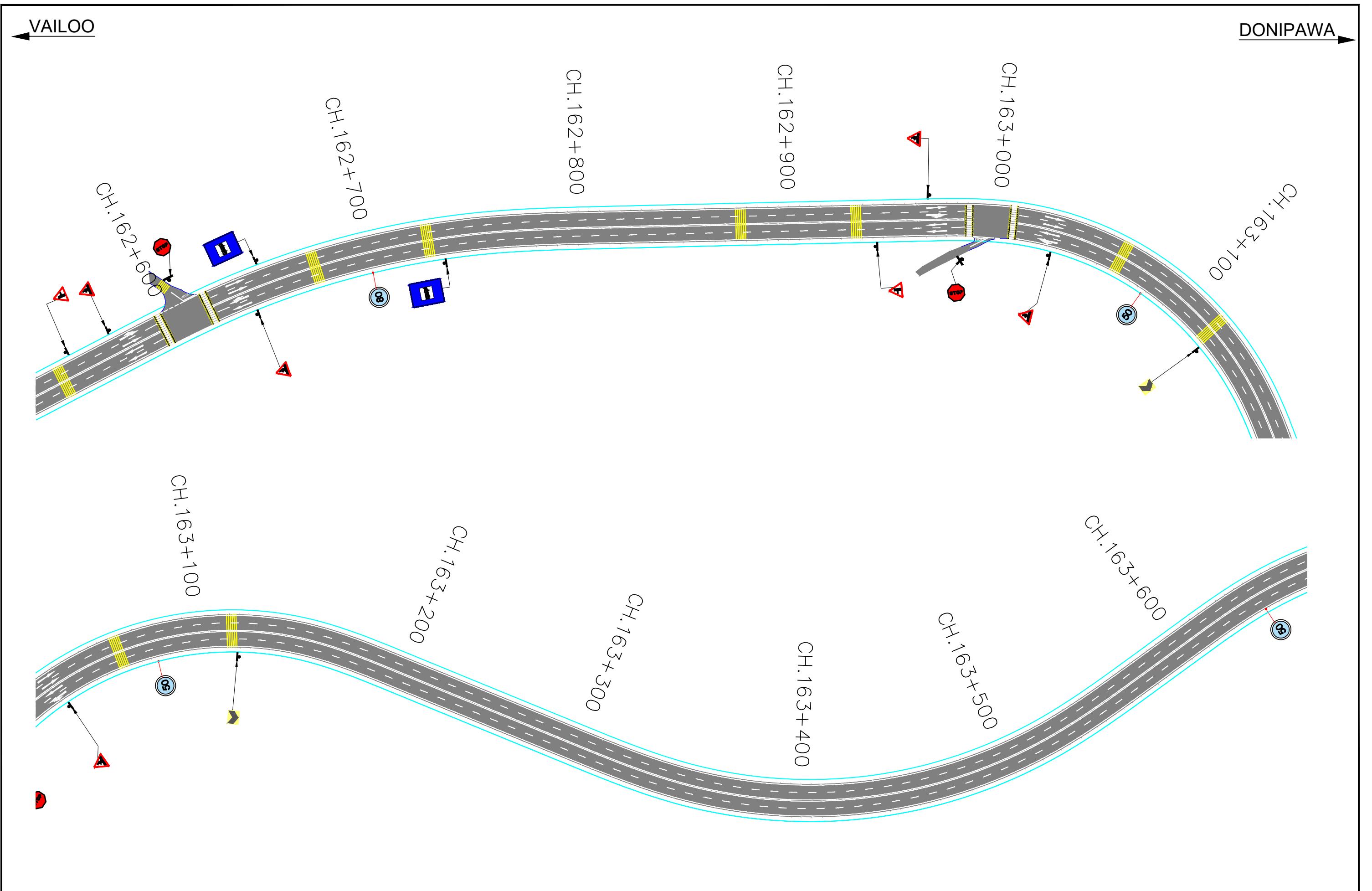
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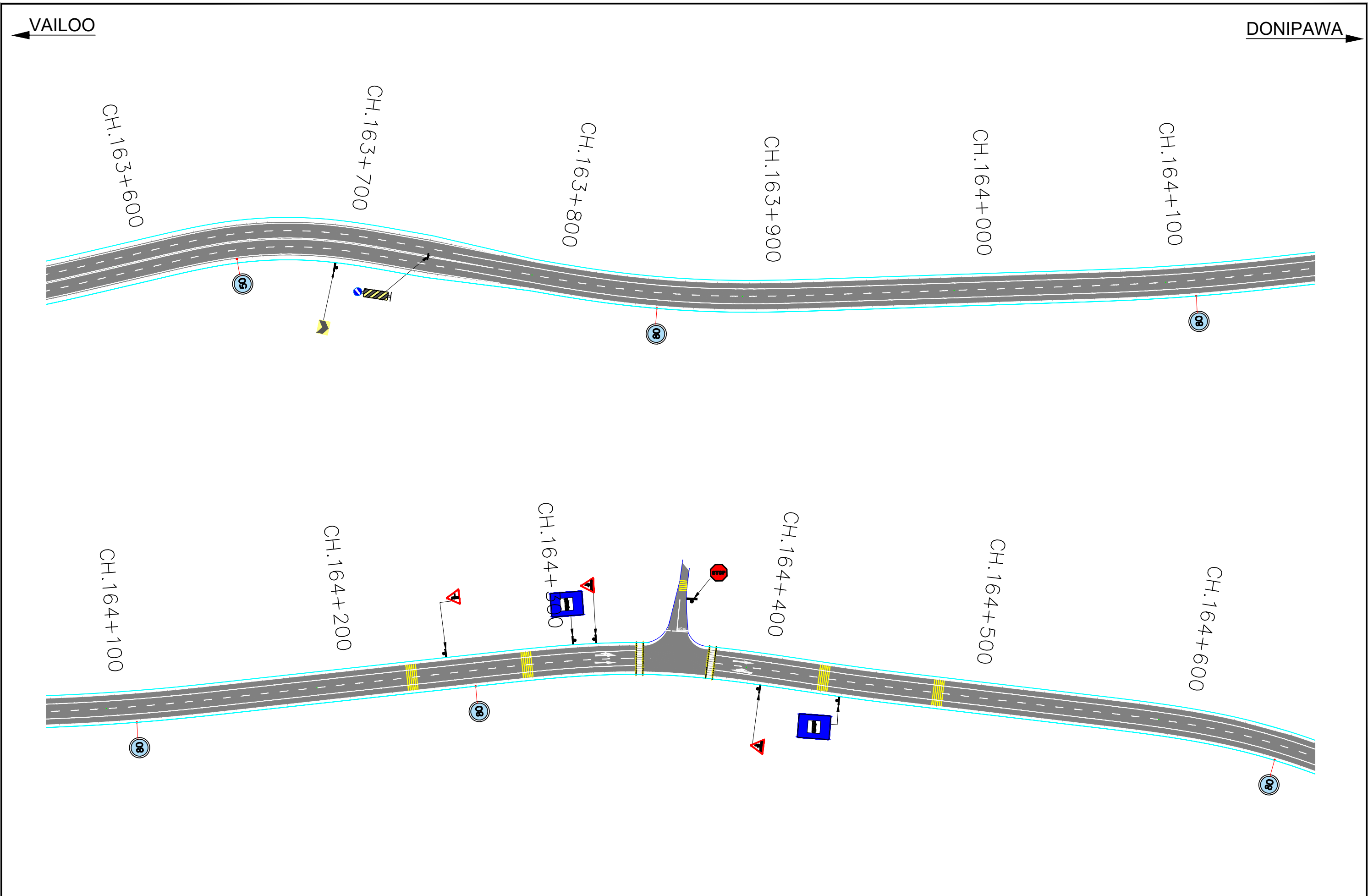
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R0	NOV-2020		<p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</p> <p>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</p> <p>GOVERNMENT OF INDIA</p> 	<p>RODIC CONSULTANTS PVT. LTD.</p> <p>1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</p> <p>JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</p> 	<p>Designed: _____</p> <p>Scale: 1:1500</p> <p>Drawn: _____</p> <p>Checked: _____</p> <p>Approved: _____</p>	<p>Drawing Title</p> <p>TRAFFIC SIGNAGE AND ROAD MARKING PLAN</p> <table><tr><td>Date:</td><td>Project No.</td><td>Drawing No.</td></tr><tr><td>OCT-2020</td><td>1584</td><td>NHIDCL /NH-244-BACK/J/IMP /13</td></tr></table>	Date:	Project No.	Drawing No.	OCT-2020	1584	NHIDCL /NH-244-BACK/J/IMP /13
Date:	Project No.	Drawing No.										
OCT-2020	1584	NHIDCL /NH-244-BACK/J/IMP /13										



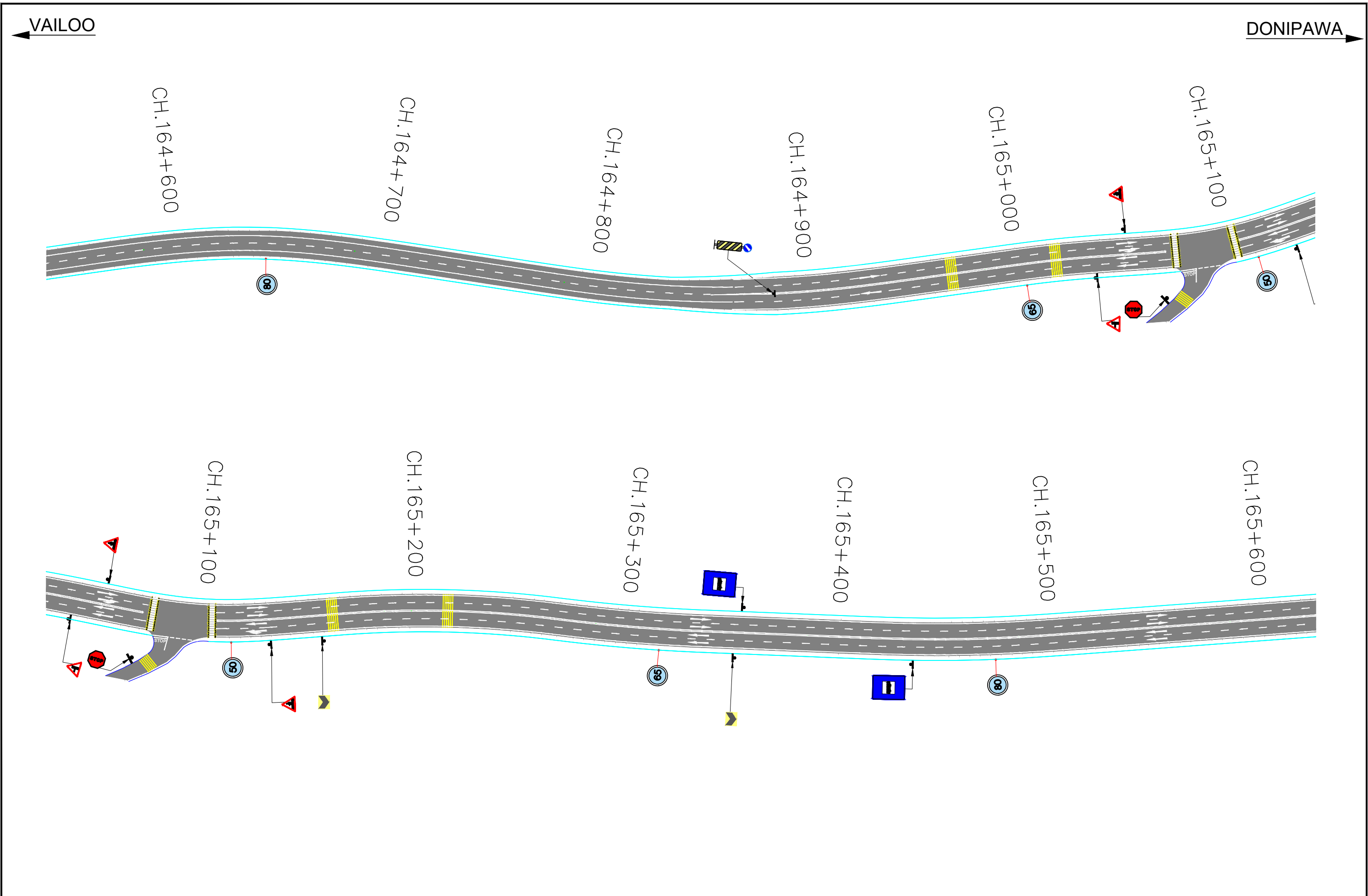
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	NOV-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed:		Scale 1:1500	Drawing Title	TRAFFIC SIGNAGE AND ROAD MARKING PLAN
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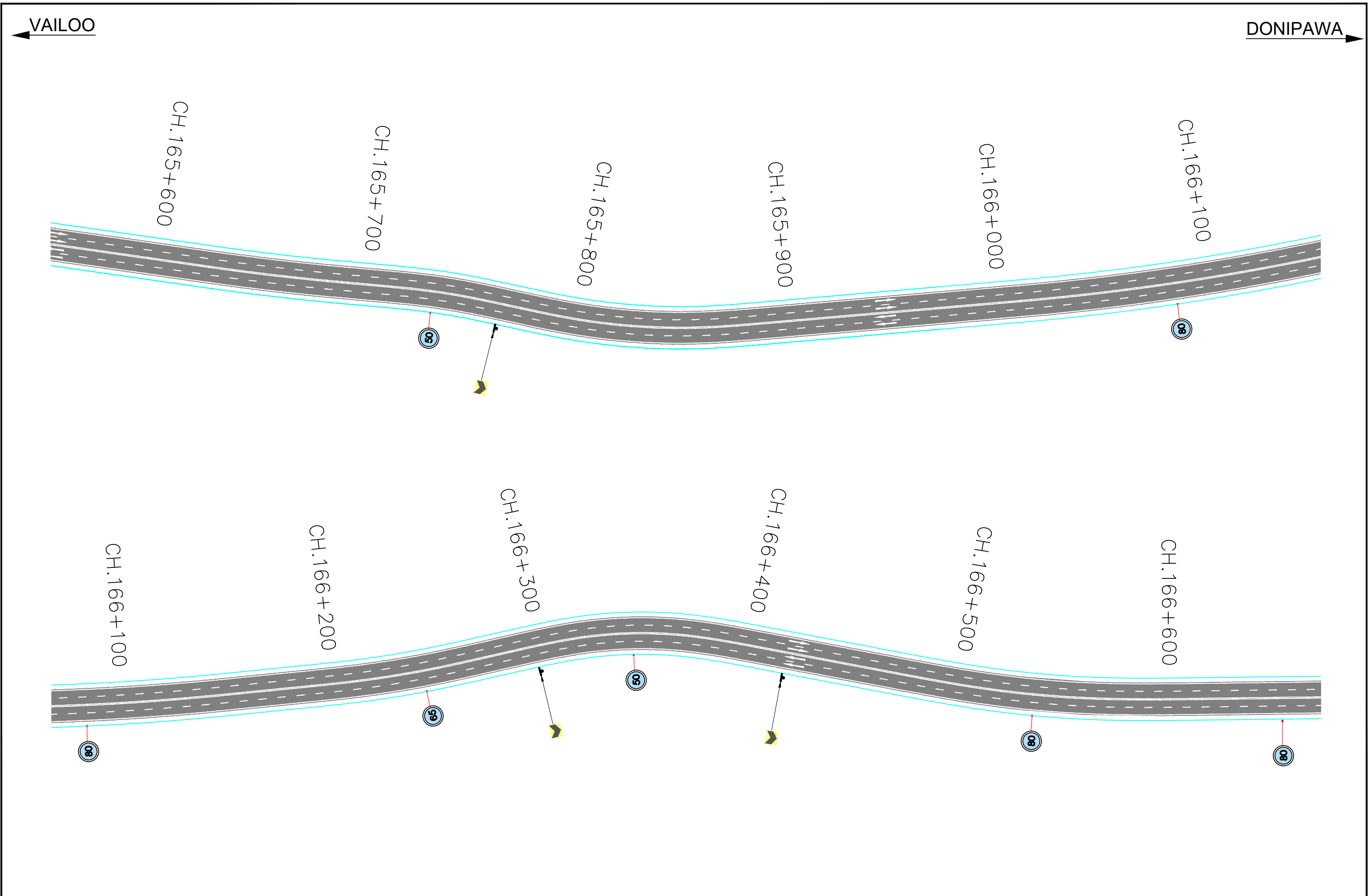
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed:	Scale	1:1500	Drawing Title	TRAFFIC SIGNAGE AND ROAD MARKING PLAN	
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					Checked:				OCT-2020	1564
					Approved:				NHIDCL/NH-244-PACK-II/TMP 15	



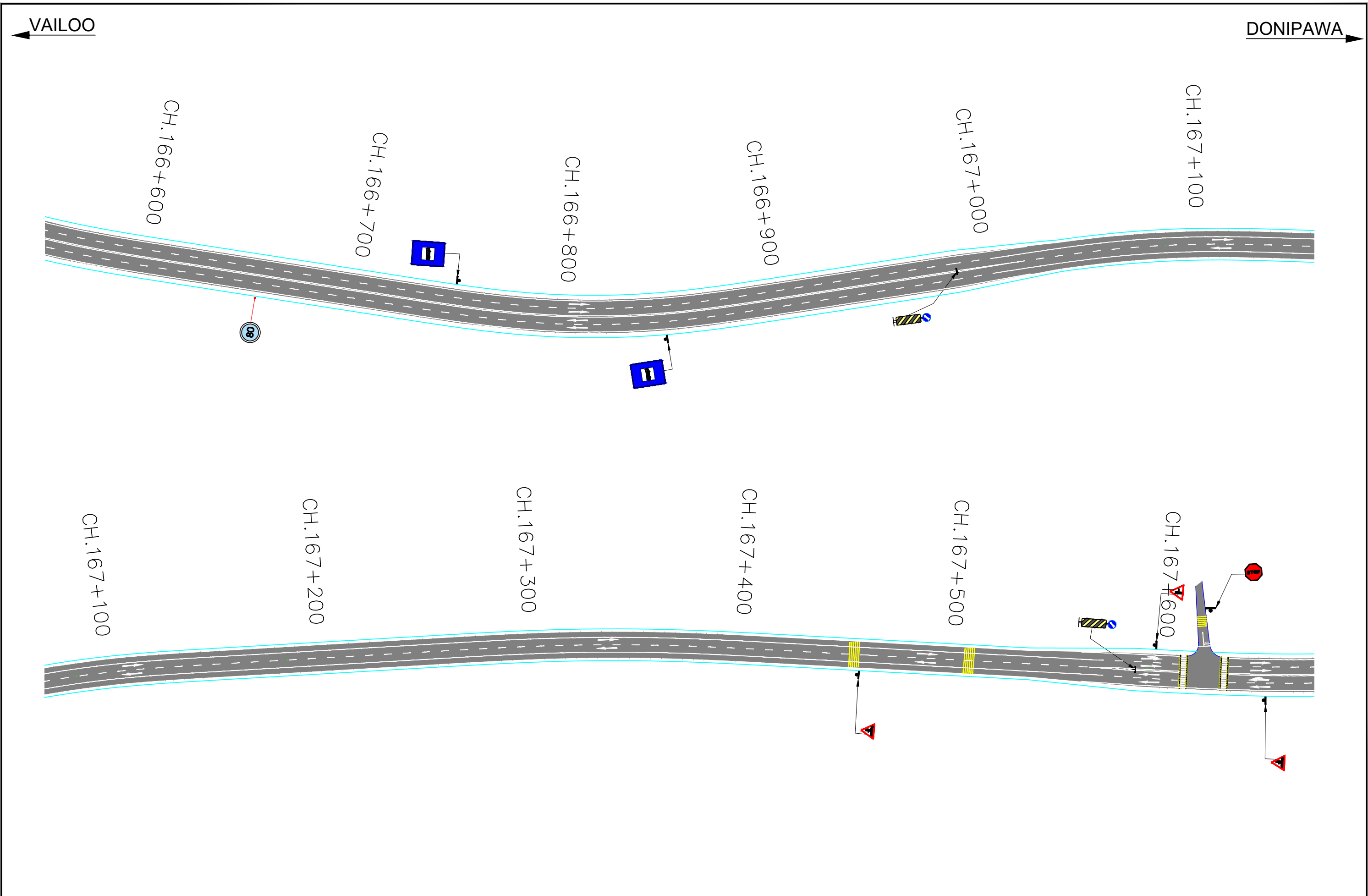
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	
R0	NOV-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed: <div>Scale</div> <div>1:1500</div>			Drawing Title	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
									
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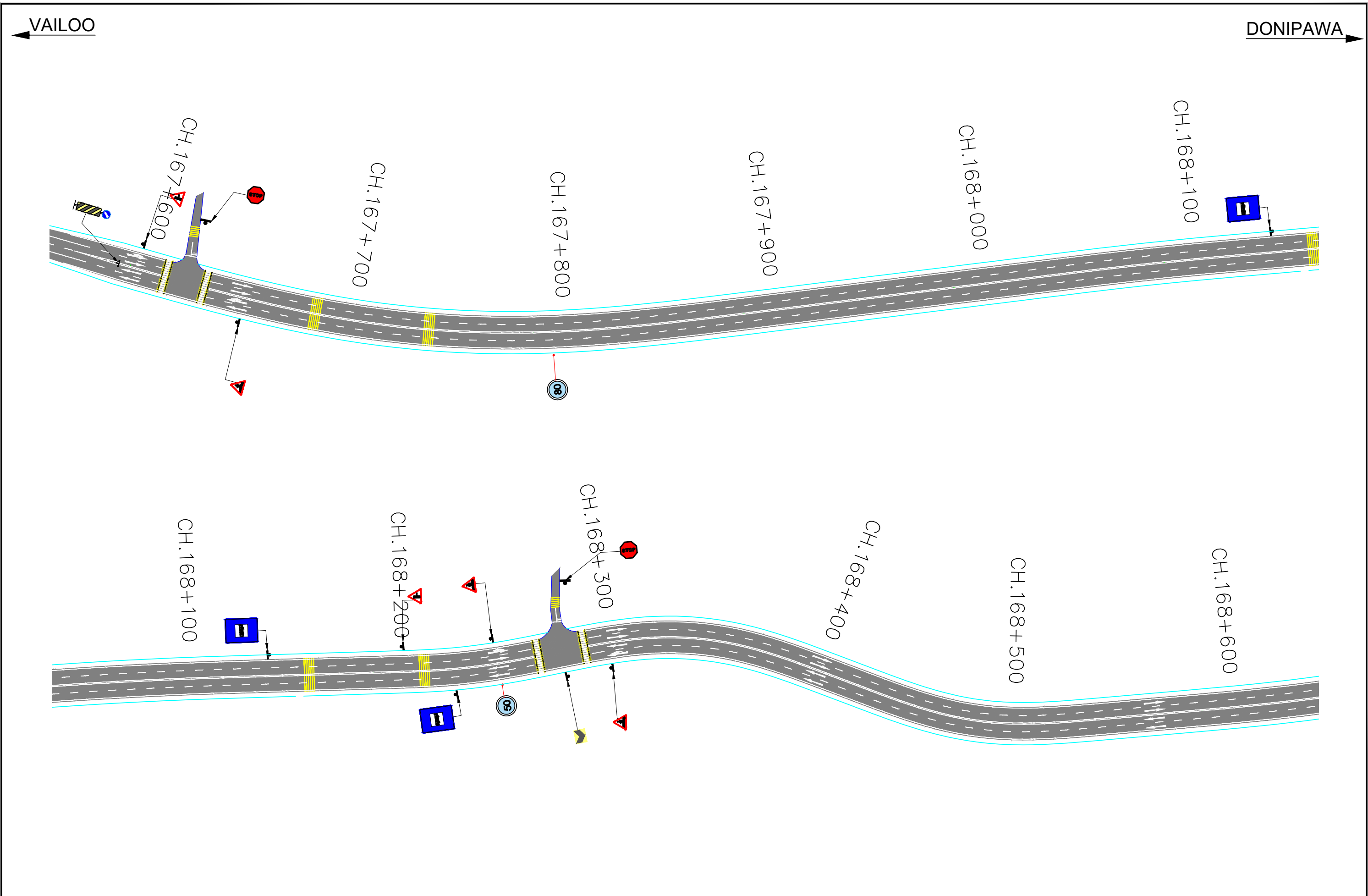
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
						Drawing Title	Date	Project No.
							OCT-2020	1564
								NHIDCL/NH-244-PACK-II/TMP
								17



Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed:	Scale	1:1500	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
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					Approved:			OCT-2020	1564	NHIDCL/NH-244-PACK-II/TMP /18



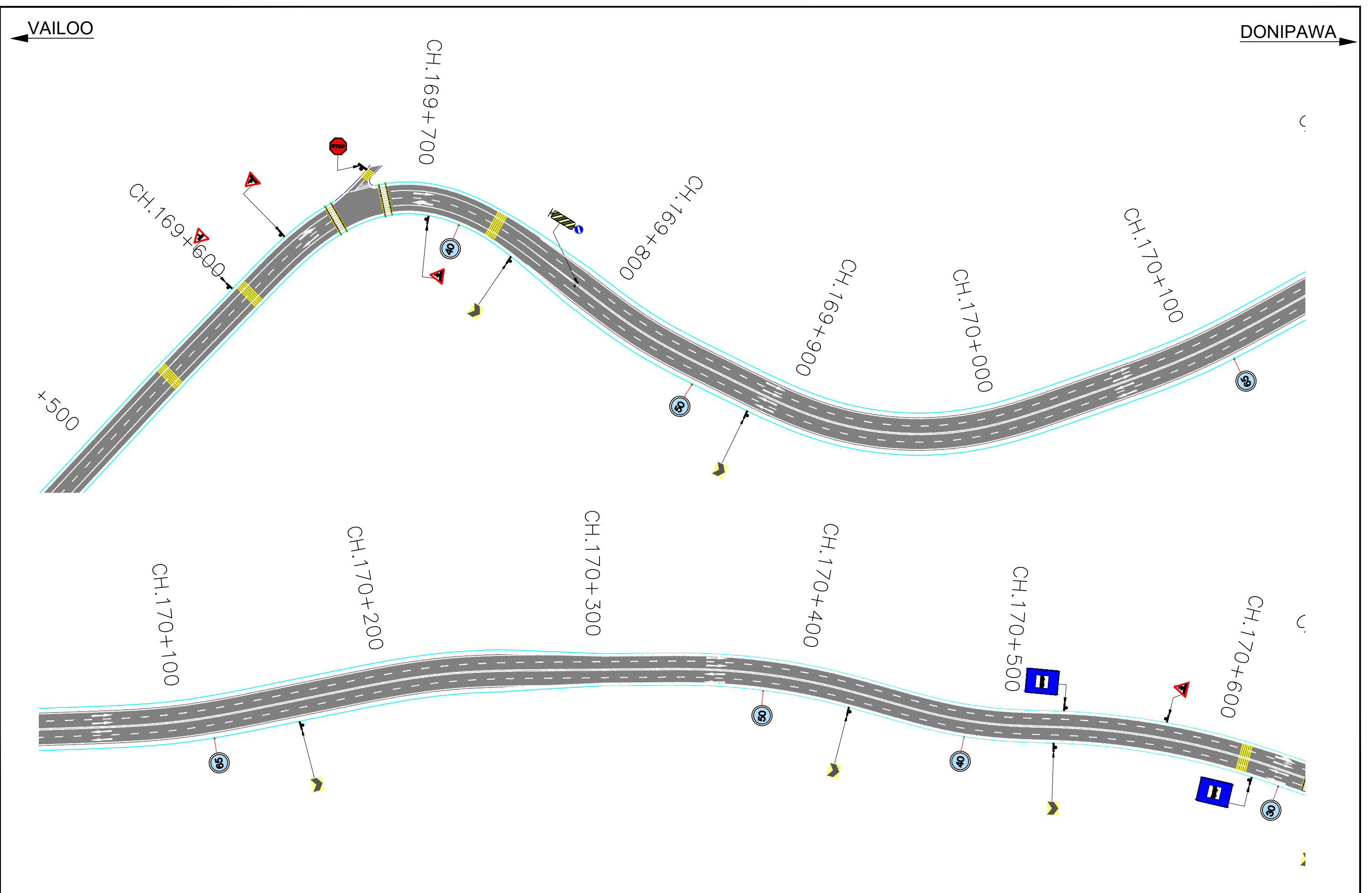
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed:	Scale	1:1500	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
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								Date:	Project No.	Drawing No.
								OCT-2020	1564	NHIDCL/NH-244-PACK-II/TMP /19






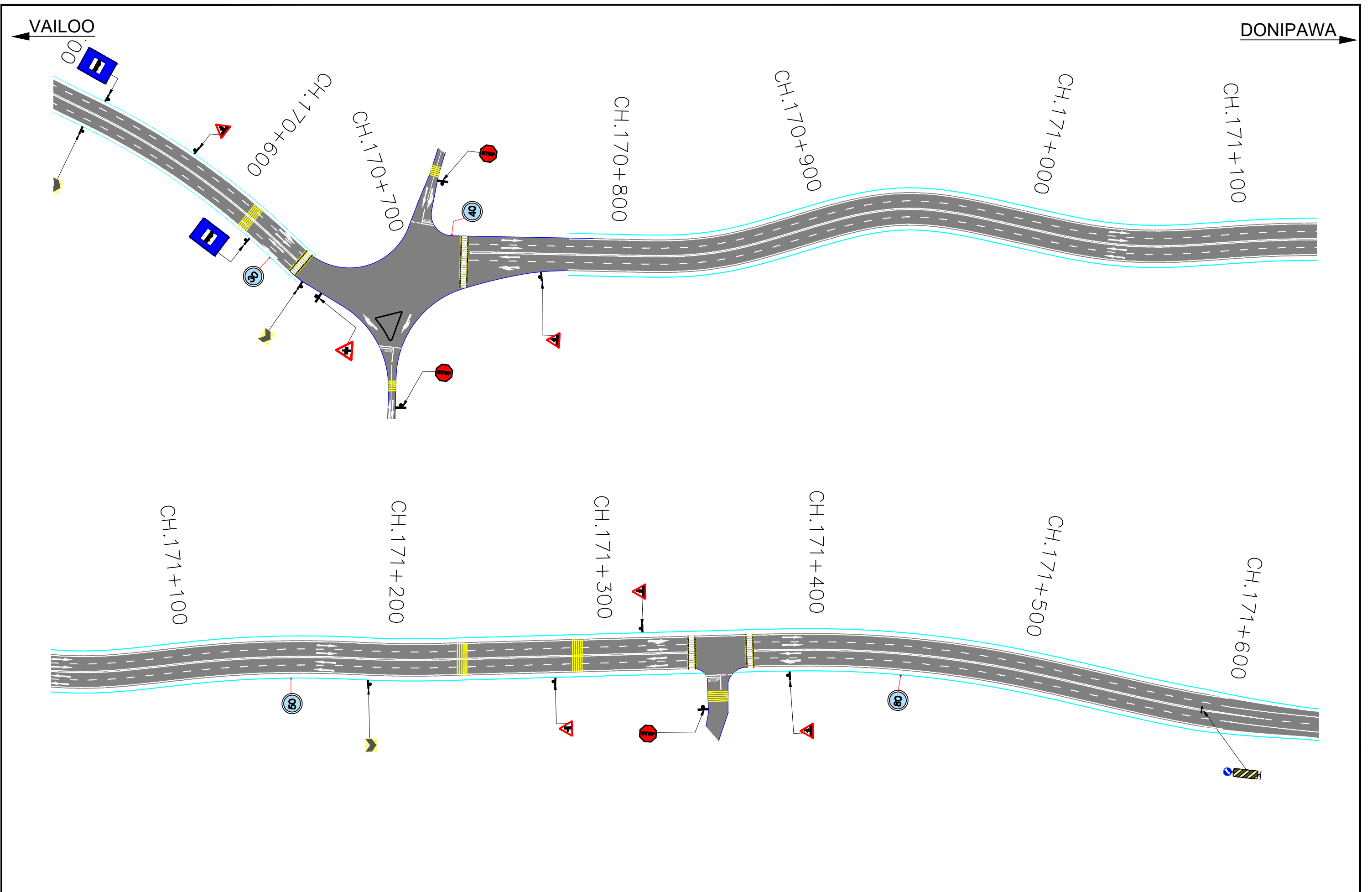
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed:	Scale	Drawing Title	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
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					Checked:			OCT-2020	1564	NHIDCL/NH-244-PACK-II/TMP /20
					Approved:					



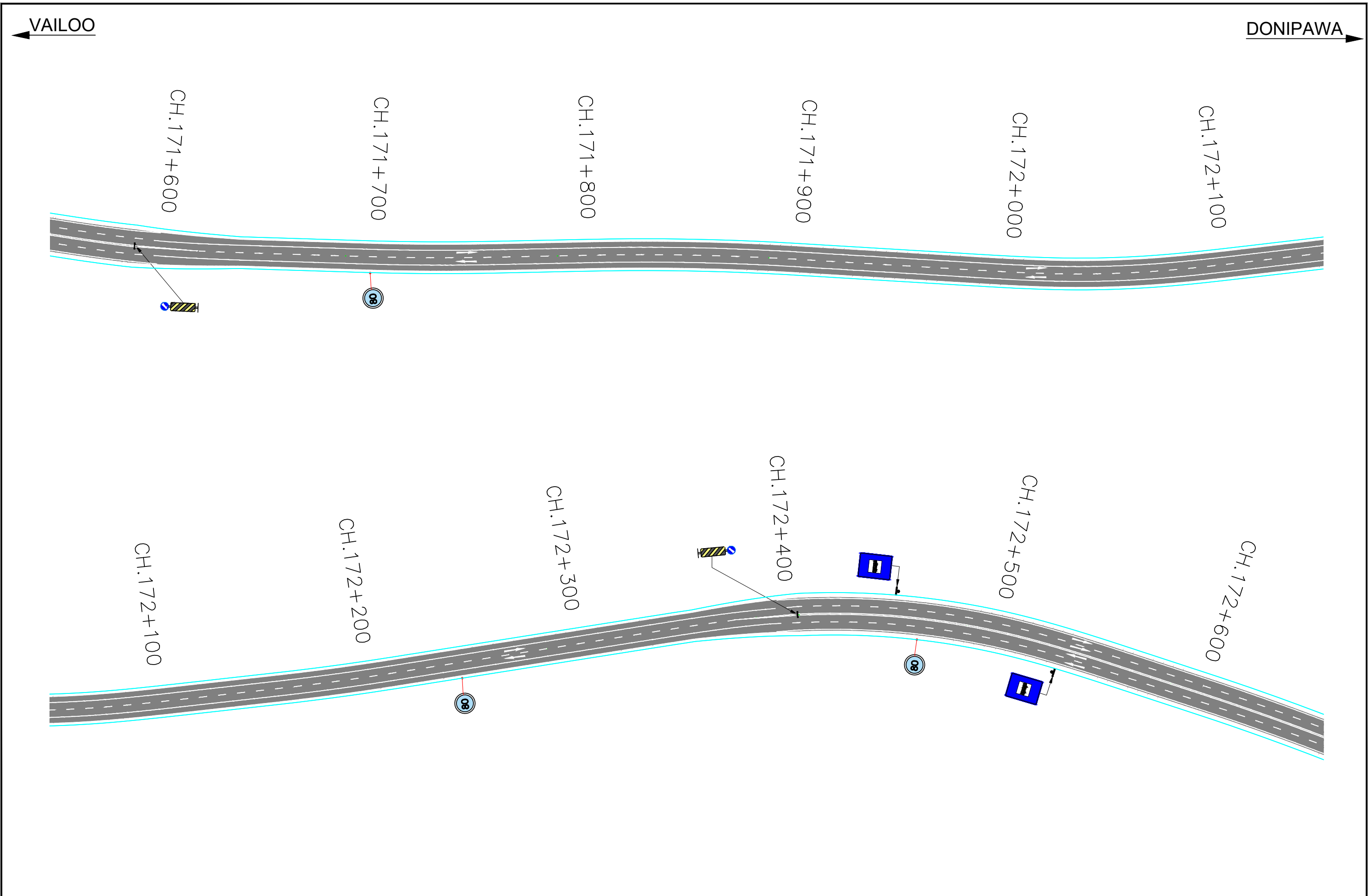
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project
R0	NOV-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	1:1500			Pre-Construction Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
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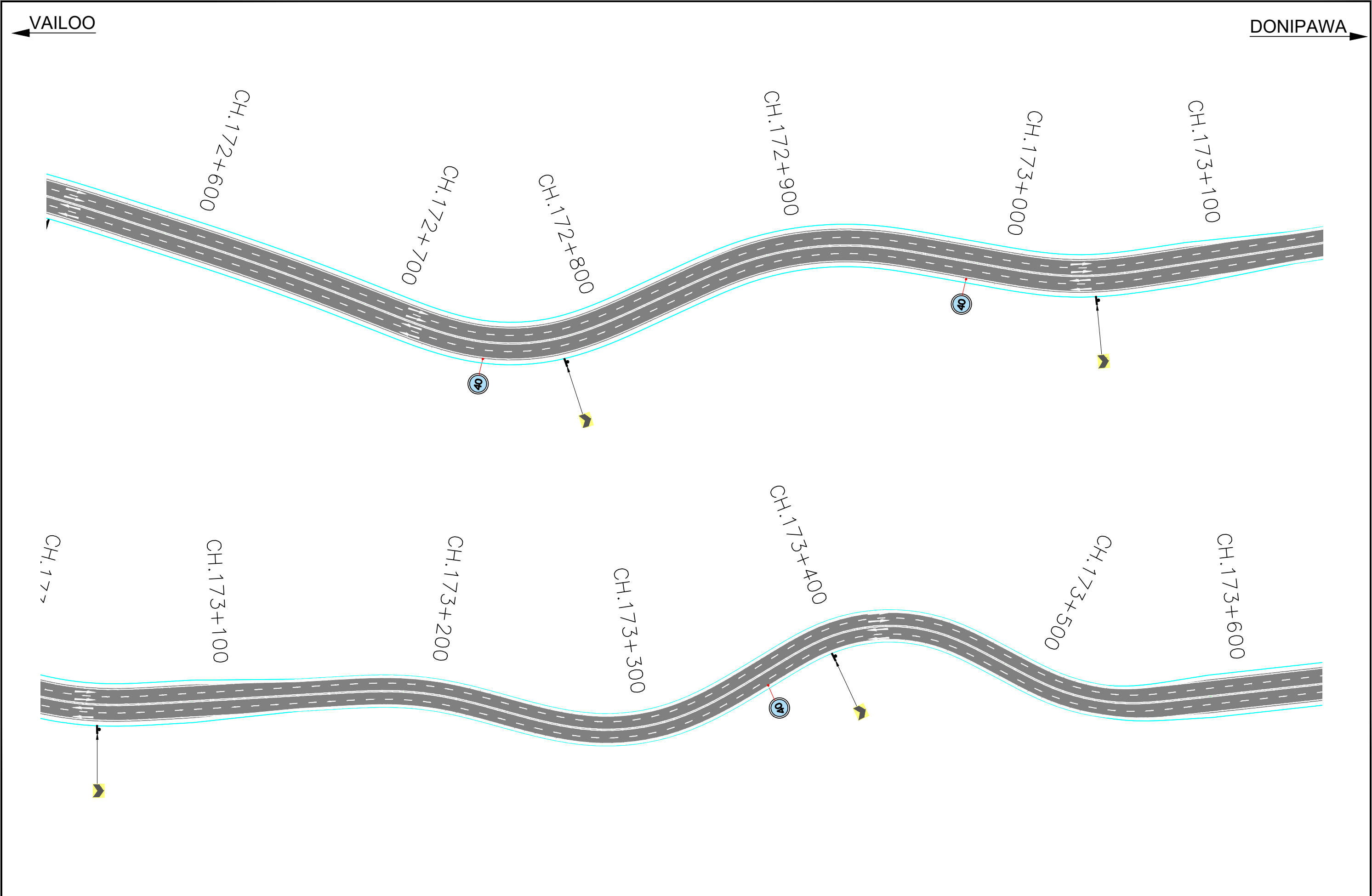
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44-500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
R0	NOV-2020		 <p>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</p>	  <p>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</p>	<div>Designed: <input type="text"/></div> <div>Drawn: <input type="text"/></div> <div>Checked: <input type="text"/></div> <div>Approved: <input type="text"/></div> <div>Scale 1:1500</div>			Drawing Title	TRAFFIC SIGNAGE AND ROAD MARKING PLAN			
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OCT-2020									1584		NHIDCL/NH-244-BACKJUMP /72	



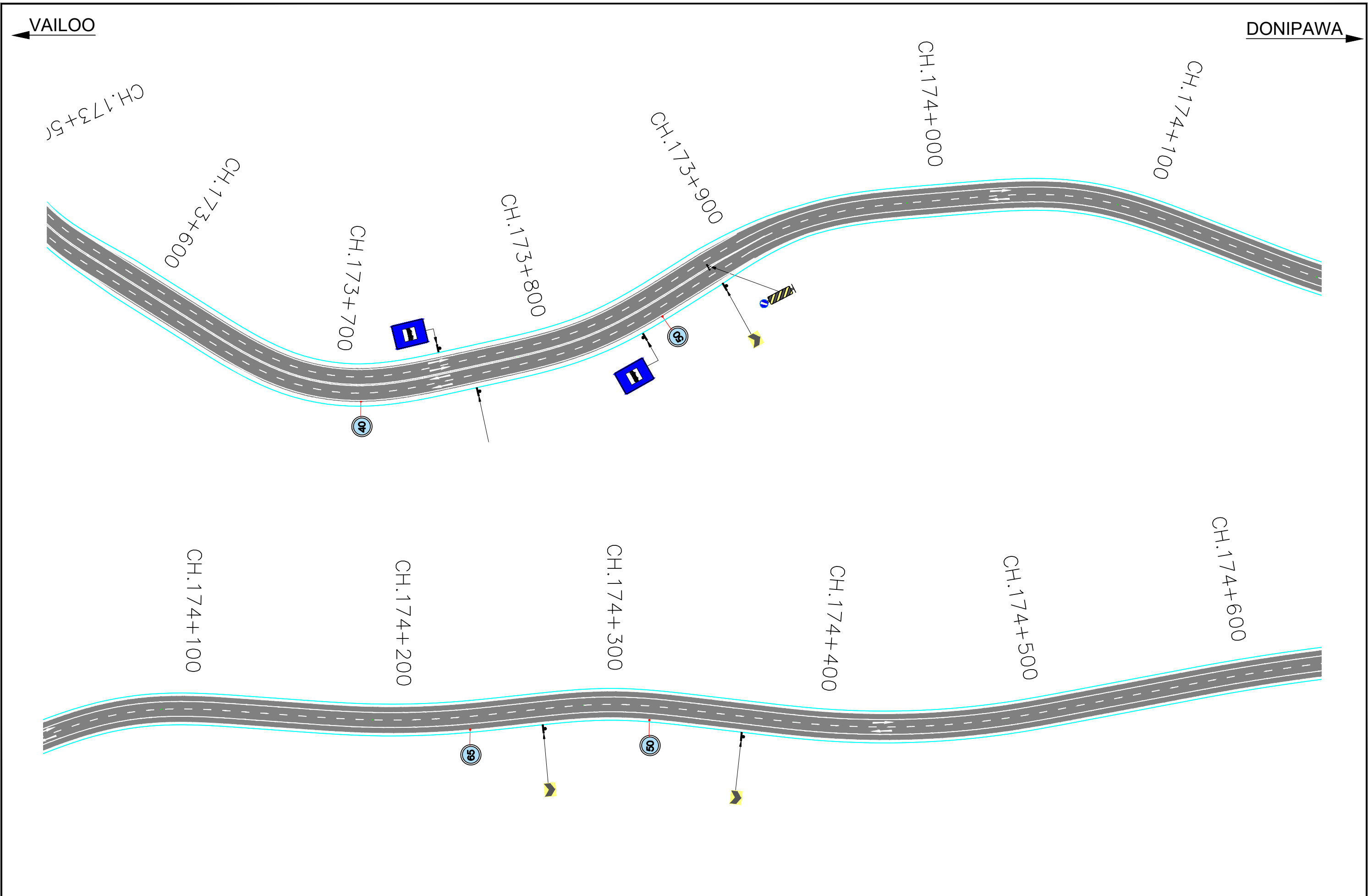
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
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					Checked:				OCT -2020	1564	NHIDCL/NH-244-PACK-II/TMP	23
					Approved:							



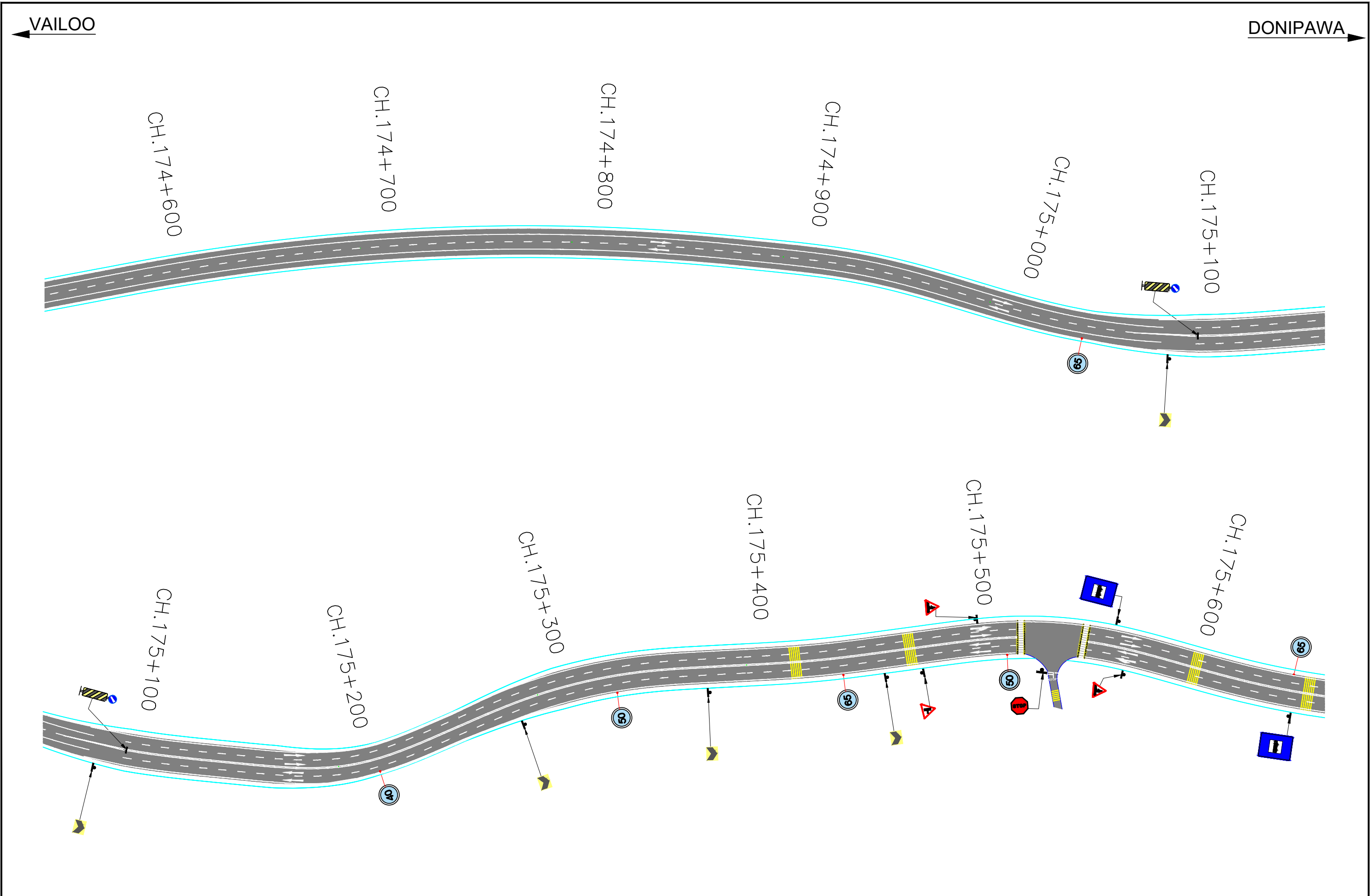
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					Checked:				OCT -2020	1564
					Approved:				Drawing No. NHIDCL/NH-244-PACK-II/TMP /24	



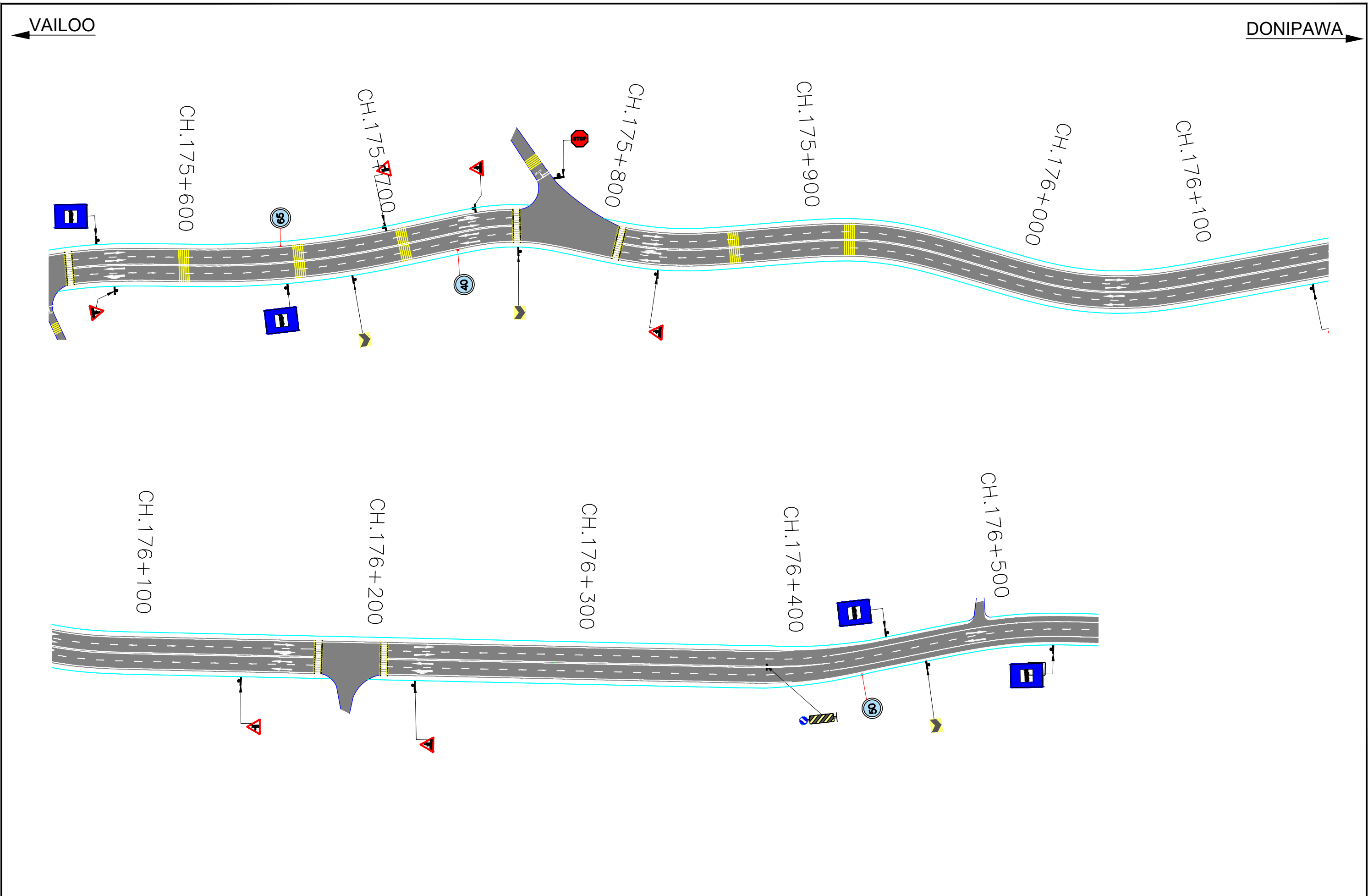
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project			
R0	NOV-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	1:1500			Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
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					OCT -2020			1564		NHIDCL/NH-244-PACK-II/TMP /25	



Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT				Project		
R0	NOV-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.					Pre-Construction Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
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								Date:	Project No.	Drawing No.	
								OCT -2020	1564	NHIDCL/NH-244-PACK-II/TMP /26	



Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project
R0	NOV-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed: <div>Scale</div> Drawn: <div>1:1500</div> Checked: <div></div> Approved: <div></div>			Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
								Drawing Title
					Date:	Project No.	Drawing No.	
					OCT -2020	1564	NHIDCL/NH-244-PACK-II/TMP /27	



Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	TRAFFIC SIGNAGE AND ROAD MARKING PLAN		
R0	NOV-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
						Drawing Title	Date	Drawing No.
							OCT-2020	1564
								NHIDCL/NH-244-PACK-II/TMP 28

STRUCTURES

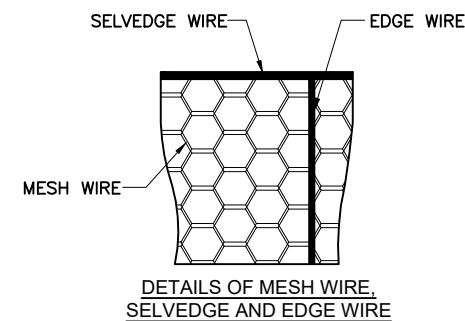
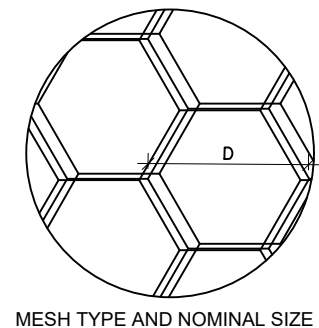
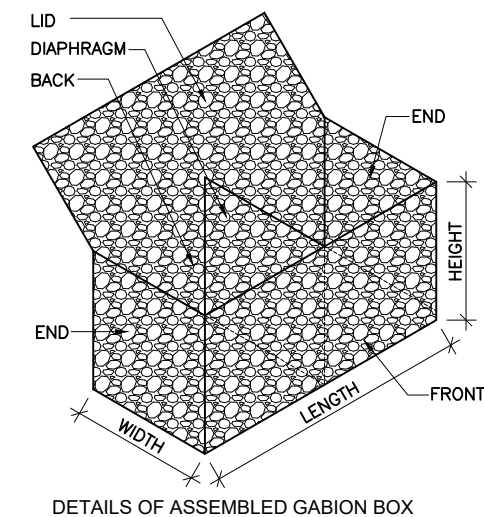
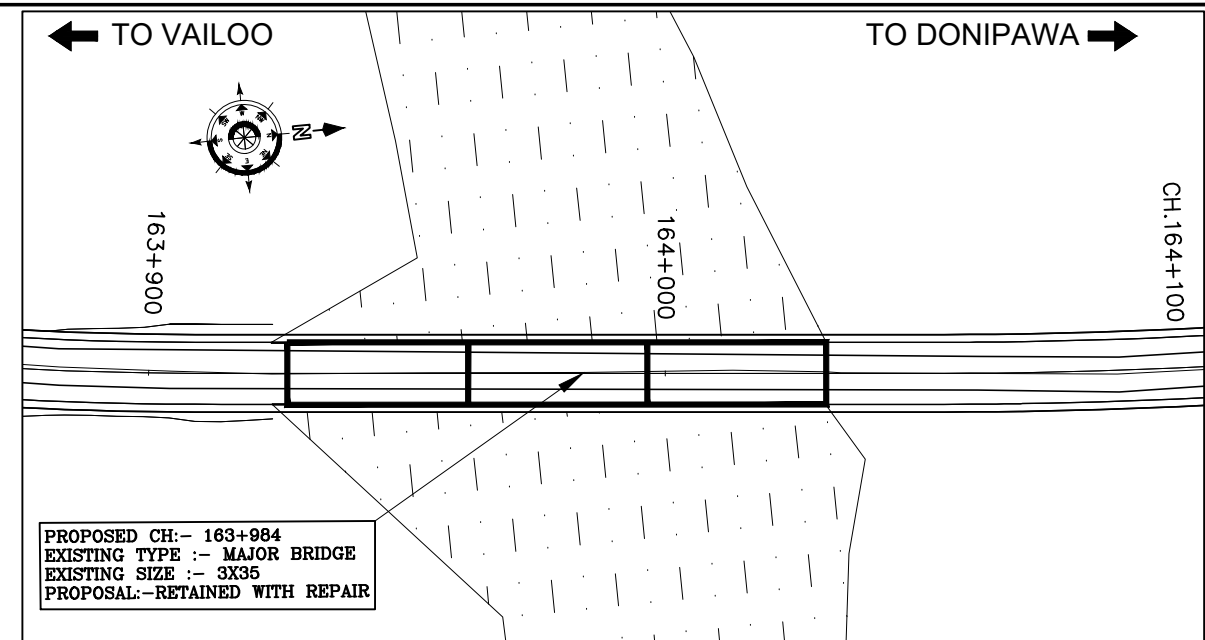
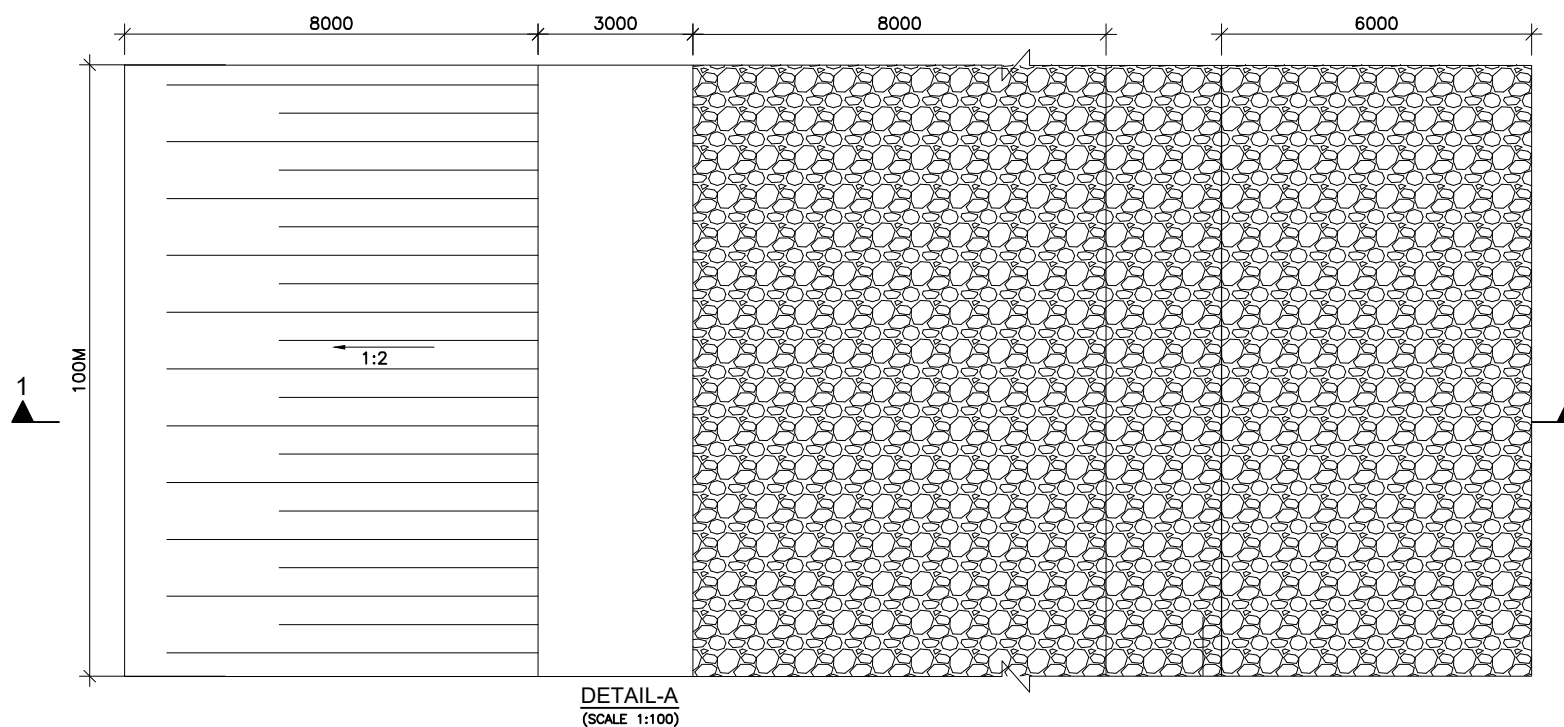
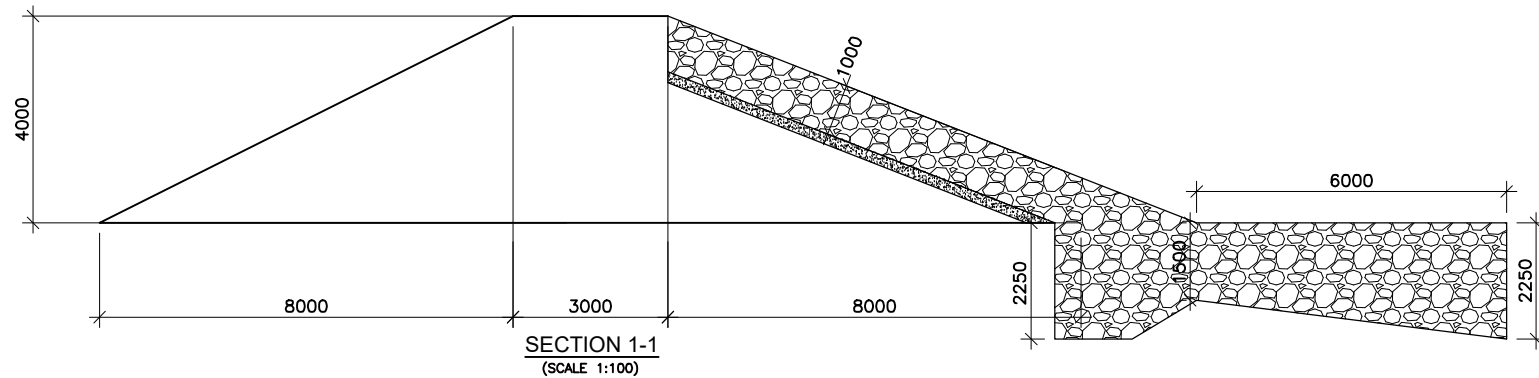
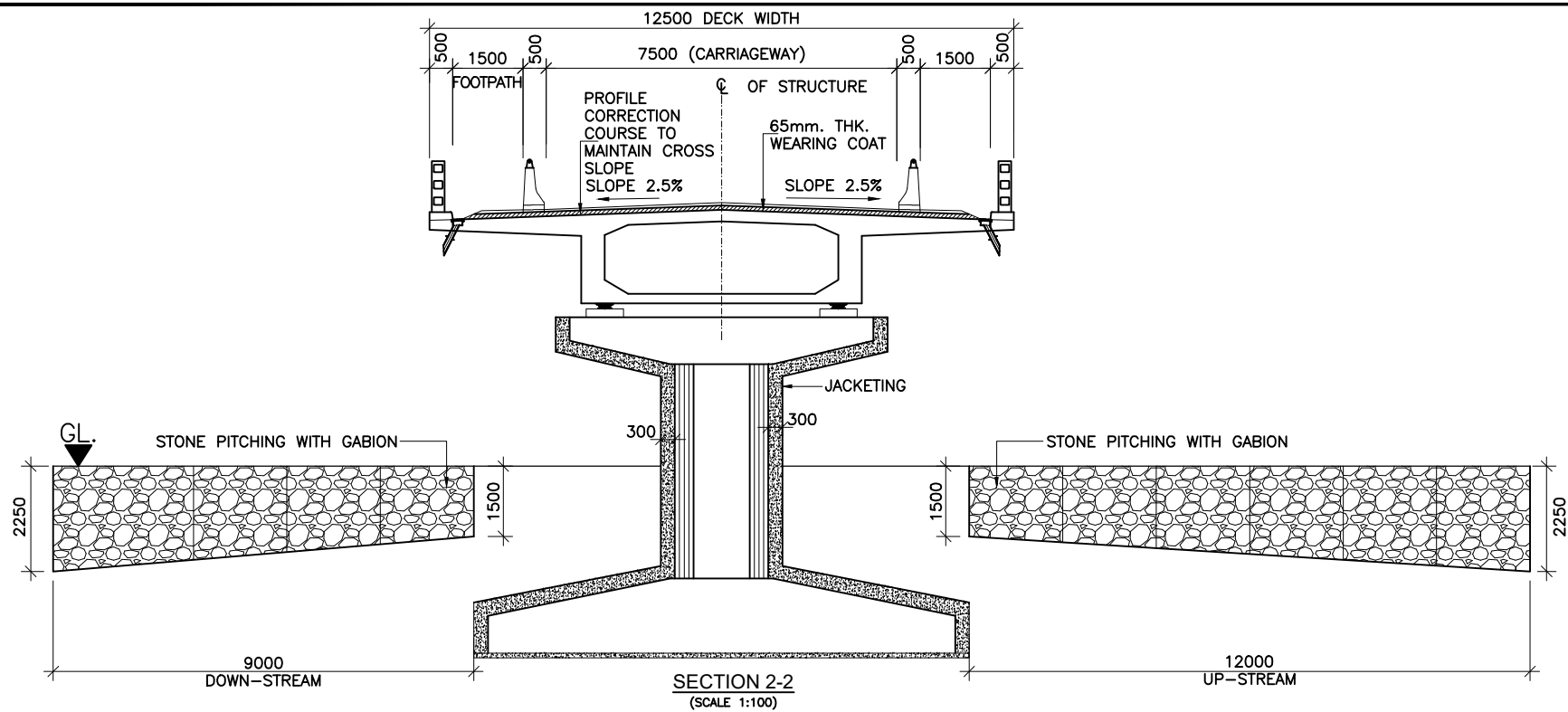
DRAWING INDEX

Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.

DRAWING OF STRUCTURES

SL. No.	DRAWING TITLE	DRAWING NO.	DATE OF ISSUE OF DRAWINGS	REVISION STATUS & DATE
A.	MAJOR BRIDGES			
1	GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE AT CH. 163+984	NHIDCL/NH-244/VAILOO-DONIPAWA/MJB/163+984/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/MJB/163+984/02/R0	Nov-20	R0
B.	MINOR BRIDGES			
1	GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 151+096	NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/151+096/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/151+096/02/R0	Nov-20	R0
2	GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 152+790	NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/152+790/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/152+790/02/R0	Nov-20	R0
3	GENERAL ARRANGEMENT DRAWING FOR 1X10m MINOR BRIDGES (TYPE-1)	NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/TYPE-1/01/R0	Nov-20	R0
4	GENERAL ARRANGEMENT DRAWING FOR 1X10m MINOR BRIDGES (TYPE-2)	NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/TYPE-2/01/R0	Nov-20	R0
5	GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH.164+949	NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/164+949/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/164+949/02/R0	Nov-20	R0
6	GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH.165+010	NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/165+010/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/165+010/02/R0	Nov-20	R0
C.	CULVERTS			
1	GENERAL ARRANGEMENT DRAWING FOR TYPICAL SINGLE CELL BOX CULVERT (TYPE-1)	NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-1/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-1/02/R0	Nov-20	R0
2	GENERAL ARRANGEMENT DRAWING FOR TYPICAL SINGLE CELL BOX CULVERT (TYPE-2)	NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-2/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-2/02/R0	Nov-20	R0
3	GENERAL ARRANGEMENT DRAWING FOR TYPICAL SINGLE CELL BOX CULVERT (TYPE-3)	NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-3/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-3/02/R0	Nov-20	R0
4	GENERAL ARRANGEMENT DRAWING FOR TYPICAL SINGLE CELL BOX CULVERT (TYPE-4)	NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-4/01/R0	Nov-20	R0
		NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-4/02/R0	Nov-20	R0
D.	MISCELLANEOUS			
1	DETAILS OF APPROACH SLAB	NHIDCL/NH-244/VAILOO-DONIPAWA/MISC/01/R0	Nov-20	R0
2	DETAILS OF DRAINAGE SPOUT & WEARING COAT	NHIDCL/NH-244/VAILOO-DONIPAWA/MISC/02/R0	Nov-20	R0
3	DIMENSIONAL & REINFORCEMENT DETAILS OF CRASH BARRIER	NHIDCL/NH-244/VAILOO-DONIPAWA/MISC/03/R0	Nov-20	R0
4	DETAILS OF FILLER TYPE EXPANSION JOINT	NHIDCL/NH-244/VAILOO-DONIPAWA/MISC/04/R0	Nov-20	R0
5	DIMENSIONAL AND REINFORCEMENT DETAILS OF RCC RETAINING WALL	NHIDCL/NH-244/VAILOO-DONIPAWA/MISC/05/R0	Nov-20	R0

MAJOR BRIDGES

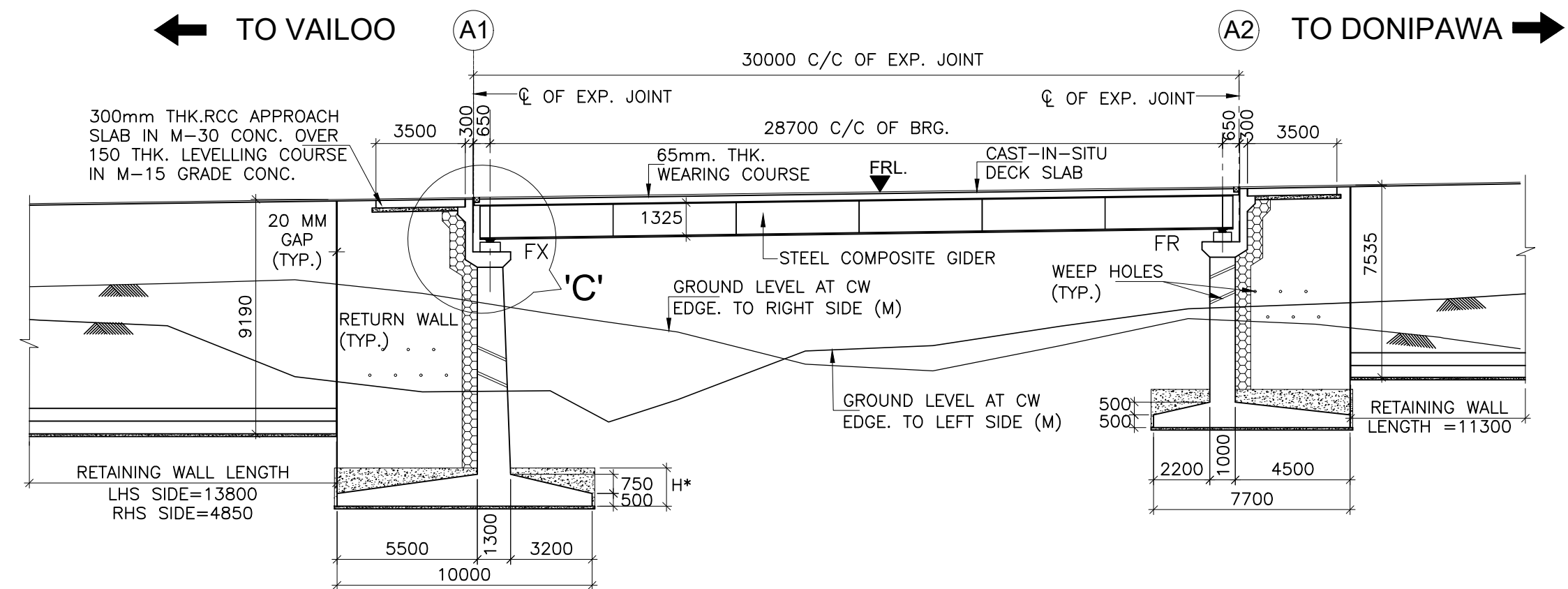


NOTES:-

- DISCHARGE HAS BEEN CALCULATED AS 1804.238 M³/S.
- SCOUR DEPTH CALCULATED FOR ABUTMENT AND PIER IS 7.87 M AND 12.39 M FROM THE H.F.L. RESPECTIVELY.
- SILT FACTOR (K_{sf}) HAS BEEN TAKEN AS 5.57 BASED UPON THE SOIL TYPE AND AS PER CL. 703.2.2 IRC:78 2014.
- BOULDER SIZE SHALL NOT BE LESS THAN 500 KG & 1560 KG FOR SLOPE PITCHING AND LAUNCHING APRON RESPECTIVELY, IF BOULDER SIZE NOT AVAILABLE WIRE CRATE CAN BE USED, HOWEVER NO STONE WEIGHING LESS THAN 40 KG SHALL BE USED.
- MECHANICALLY WOVEN, DOUBLE -TWISTED HEXAGONAL WIRE MESH GABIAN SHALL BE USED FOR FILLING OF STONE AS PER SPECIFICATIONS GIVEN IN IRC:SP:116-2018 .
- WIRE OF THE MESH SHALL BE GALVANIZED WITH COATING OF ZINC ALUMINUM ALLOY LIKE ZINC 90% AND ALUMINUM 10% AS PER SPECIFICATION GIVEN IN CL.4.1 OF IRC:SP:116-2018 .
- ROCKS FOR FILLING THE GABION SHALL BE AS PER SPECIFICATION GIVEN IN CL.4.2 OF IRC:SP:116-2018.
- THE PROTECTING BOULDER FOR PIER SHALL BE LAID AS MUCH AS POSSIBLE BELOW GROUND LEVEL

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project
R0	NOV - 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: AK Drawn: KS Checked: RKS Approved: BPS	Scale AS SHOWN
						Drawing Title GENERAL ARRANGEMENT DRAWING FOR MAJOR BRIDGE (HILLAR BRIDGE) AT CH. 163+984
						Drawing.No. NHIDCL/NH-244/VAILOO-DONIPAWA/ MJB/163+984/02/R0

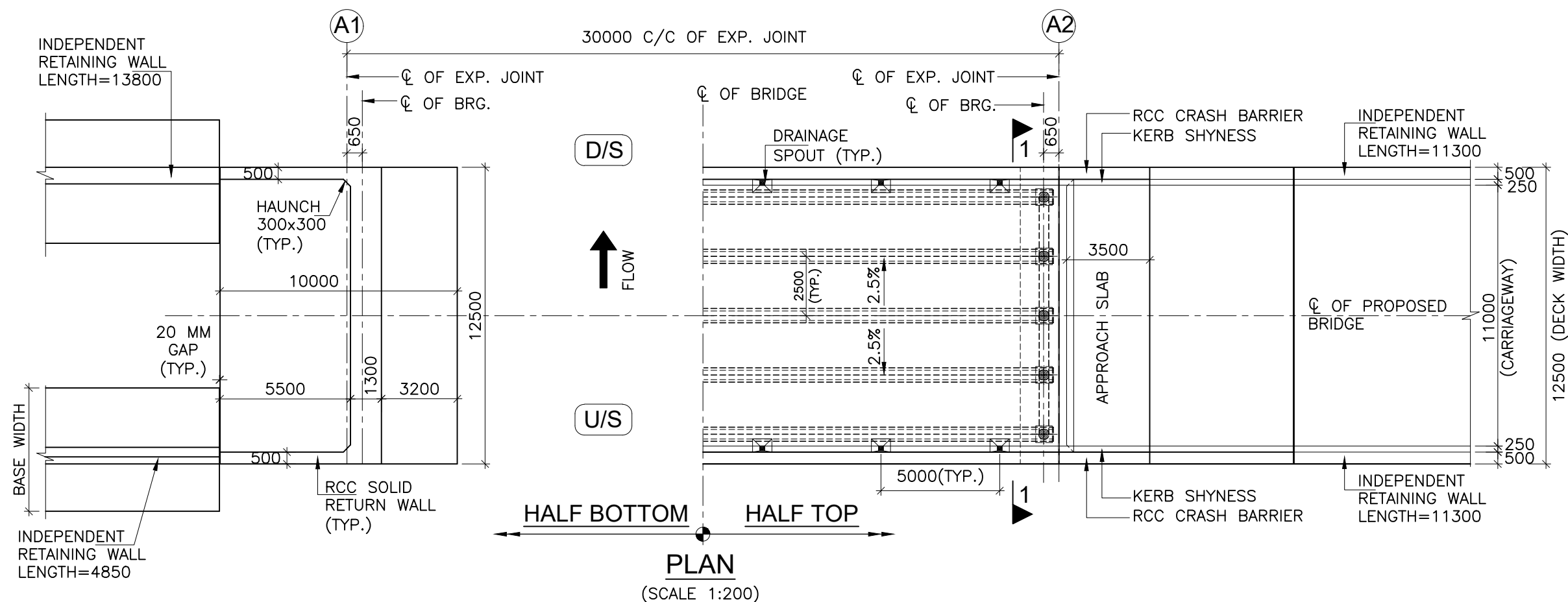
MINOR BRIDGES



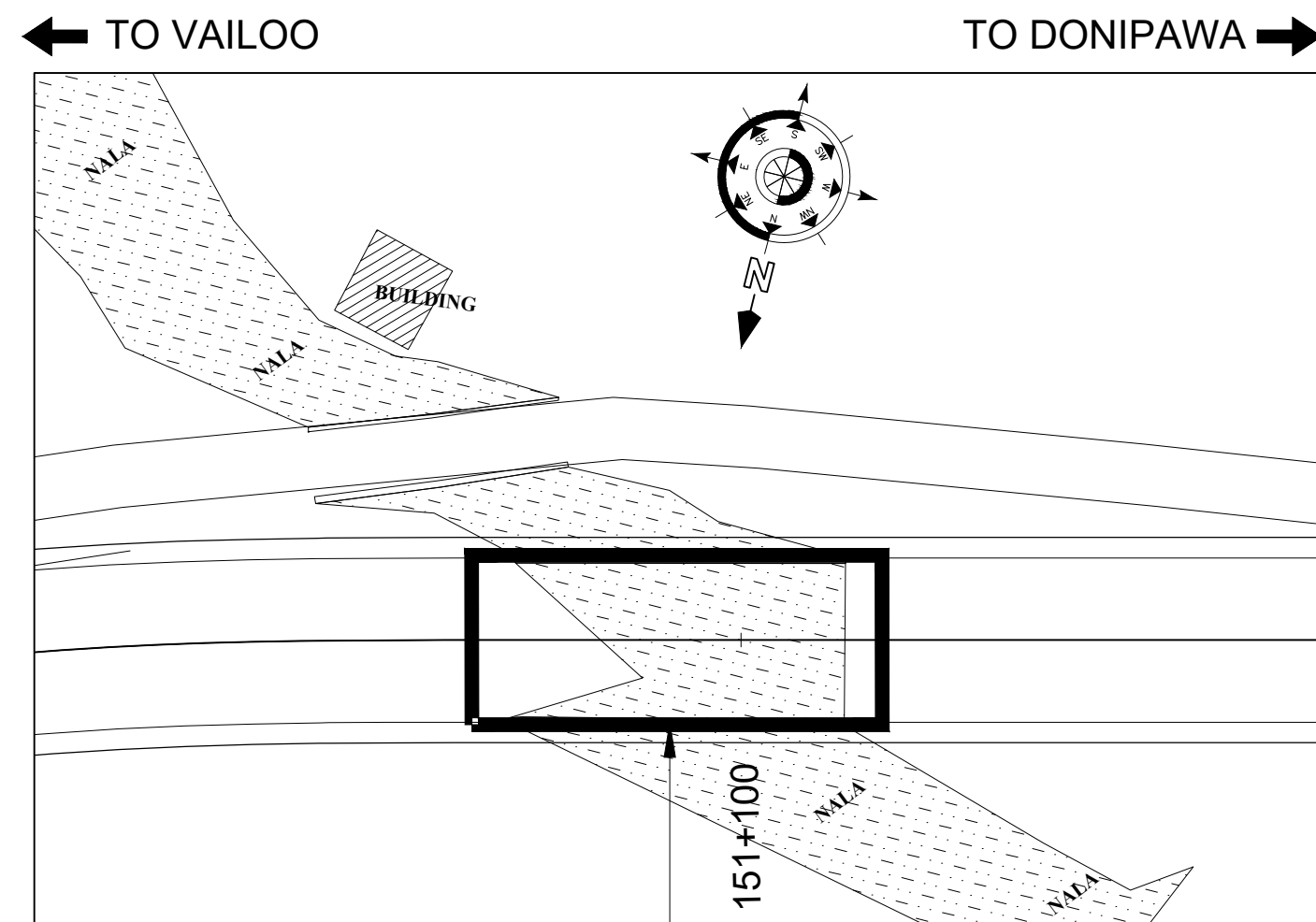
H* =600mm(MIN.) IN MODERATELY STRONG ROCK
1500mm(MIN.) IN MODERATELY WEAK ROCK

SECTIONAL ELEVATION OF PROPOSED BRIDGE
(SCALE 1:200)

DECK LEVEL (m)	1980.517	1980.930
LOWEST GROUND LEVEL (m)	1972.670	1975.703
FOUNDING LEVEL (m)	1969.500	1971.500
CHAINAGE (m)	151+081	151+111

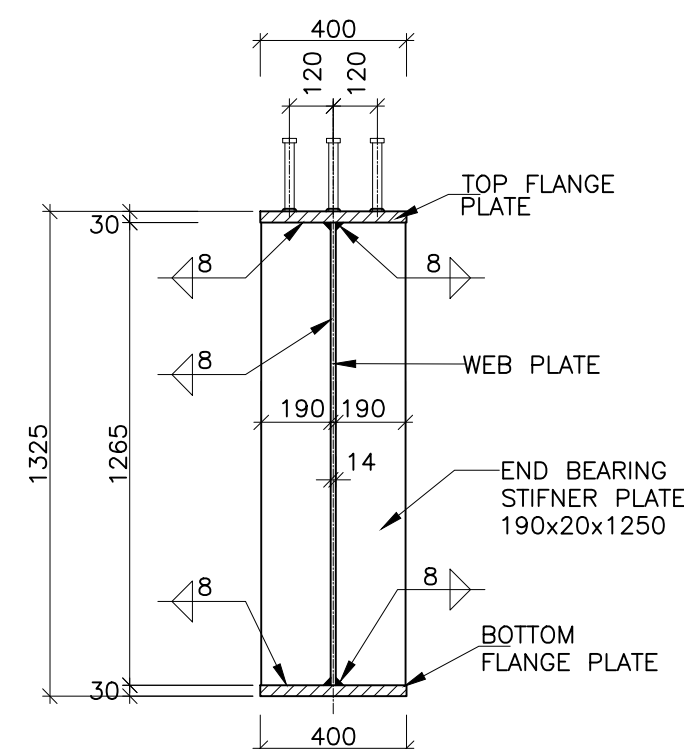


PLAN
(SCALE 1:200)

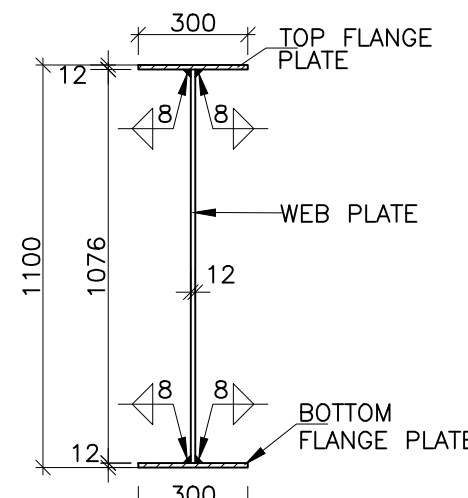


KEY PLAN

PROPOSED CH:- 151+096
PROPOSED TYPE :- MINOR BRIDGE
PROPOSED SIZE :- 1X30
PROPOSAL:- RE-CONSTRUCTION



MAIN GIRDER DETAIL
(SCALE 1:20)

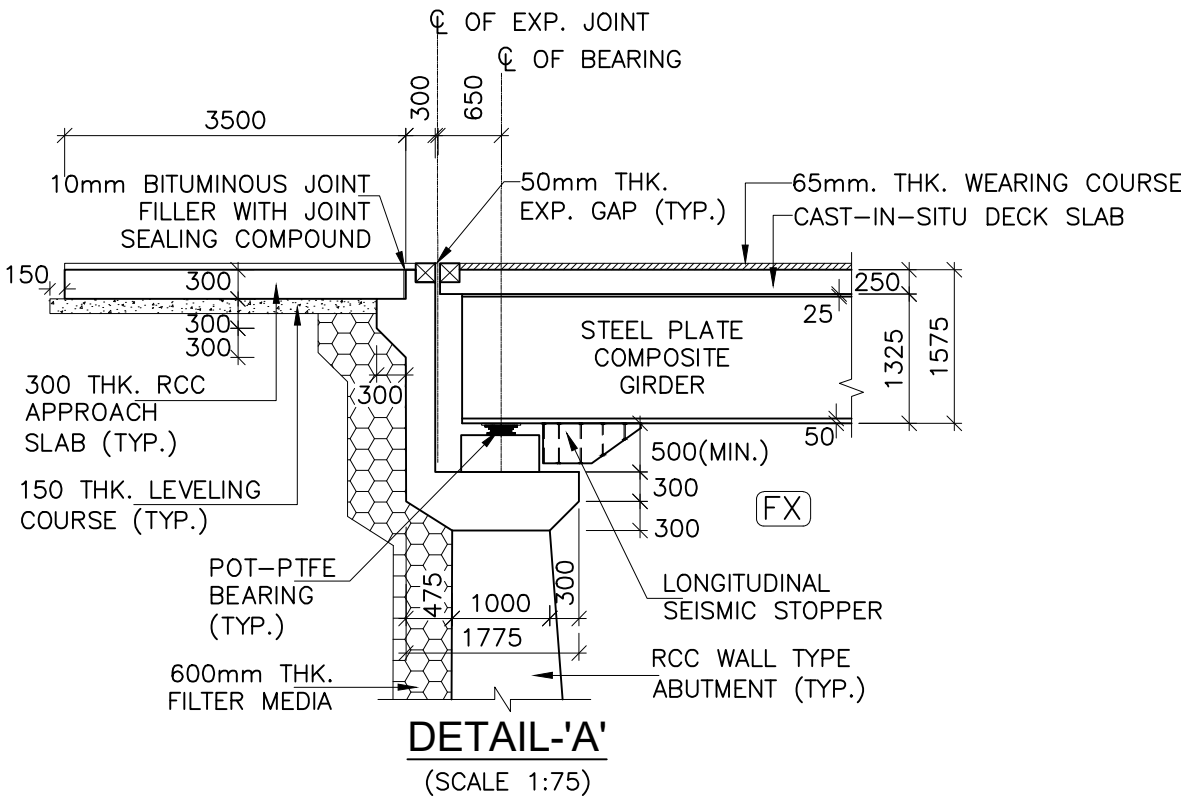
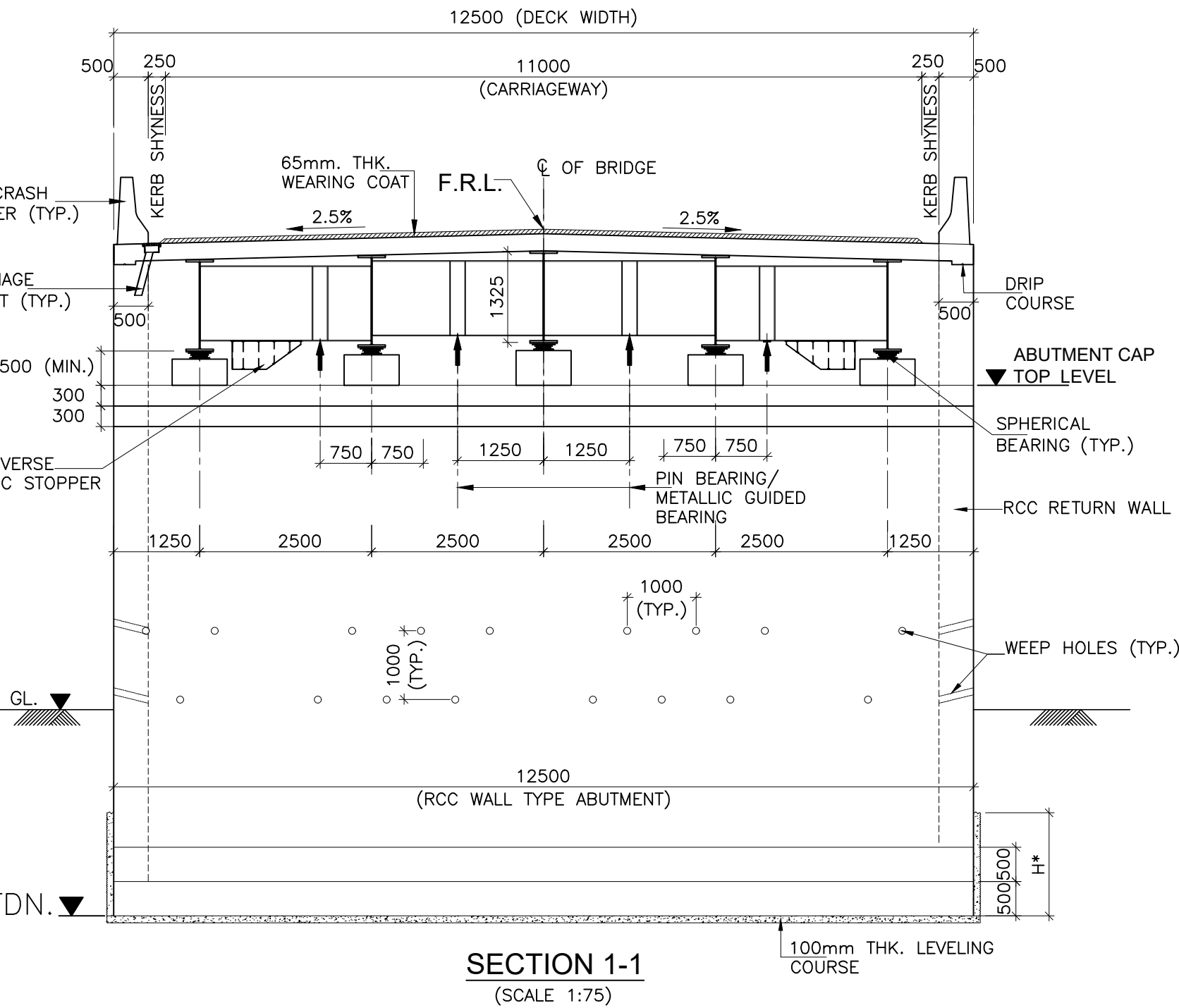


CROSS GIRDER DETAIL
(SCALE 1:20)

LEGENDS:-

FRL.	: FORMATION LEVEL
H.F.L.	: HIGH FLOOD LEVEL
CL	: CENTER LINE
EXP.	: EXPANSION
FX	: FIXED BEARING
FR	: FREE BEARING
LVL.	: LEVEL
TYP.	: TYPICAL
THK.	: THICKNESS
D/S	: DOWNSTREAM
U/S	: UPSTREAM
G.L.	: GROUND LEVEL
L.B.L.	: LOWEST BED LEVEL
FDN.	: FOUNDING LEVEL

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	Project	Drawing Title
R0	NOV - 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
					Designed: PK Drawn: KS Checked: RKS Approved: MK	AS SHOWN
						Drawing Title
						Drawing.No.



NOTE:-

- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
- THE BRIDGE IS DESIGNED FOR GOVERNING CASE OF FOLLOWING
 - ONE LANE OF IRC CLASS 70R + ONE LANE OF IRC CLASS A.
 - THREE LANE OF IRC CLASS A
 - IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GVW=385 Tonnes)
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150MM CUBES AS FOLLOWS :-

RCC CAST-IN-SITU DECK SLAB	-40 MPA
ABUTMENT, ABUTMENT CAP, DIRT WALL & FOUNDATION	-35 MPA
RCC CRASH BARRIER	-40 MPA
RCC APPROACH SLAB	-30 MPA
LEVELING COURSE UNDER APPROACH SLAB	-15 MPA
LEVELING COURSE UNDER FOUNDATION	-10 MPA
PEDESTAL & SEISMIC RESTRAINER	-45 MPA
- THE REINFORCING BARS SHALL BE OF THERMO MECHANICAL TREATED HYSD (GRADE DESIGNATION FE-500D) CONFORMING TO IS:1786 STANDARDS.
- CLEAR COVER TO OUTER MOST STEEL SHALL BE AS UNDER:-
 - FOR SUPER STRUCTURE -50MM
 - FOR FOUNDATION -75MM
 - FOR SUBSTRUCTURE:
 - EARTH FACE -75MM
 - NON EARTH FACE -50MM
- 65MM THK. WEARING COURSE COMPRISING OF 40MM THK. ASPHALTIC CONCRETE OVER LAID WITH 25MM THK. MASTIC ASPHALT SHALL BE PROVIDED AS PER SECTION 500 OF MORTH SPECIFICATIONS.
- STRUCTURAL STEEL SHALL BE E450 (FOR MAIN GIRDER) AND E350 (FOR OTHER MEMBERS) (GRADE-B) CONFIRMING TO IS : 2062-2011.
- SPHERICAL BEARINGS SHALL BE DESIGNED AS PER PROVISION OF IRC : 83 (PART-IV 2014).
- STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER PROVISION OF SP-69.
- BACK FILLING BEHIND ABUTMENT SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX:6 OF IRC:78-2014 HAVING PROPERTIES $C=0$, $\phi \geq 35^\circ$, $\Delta=22.5^\circ$ & $\gamma_D = 20 \text{ KN/M}^3$
- 100MM DIA WEEP HOLES AT 1000MM C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN VERTICAL WALLS OF THE ABUTMENT SHAFT AND RETURN WALL FROM 150MM ABOVE G.L IN ONE OR TWO LAYERS AT A SLOPE OF 1 VERTICAL TO 20 HORIZONTAL TOWARDS THE DRAINING FACE.
- WATER TO BE USED IN CONCRETING & CURING SHALL CONFORM TO CLAUSE 18.8.4(4) IRC : 112:2011.
- SAFE BEARING CAPACITY ASSUMED IN DESIGN AT PROPOSED FOUNDING LEVEL IS 40 T/M^2 . THIS SHALL BE ASCERTAINED BEFORE EXECUTION OF WORK AT SITE.
- THE BRIDGE IS DESIGNED FOR SEISMIC ZONE-V
- MODERATE CONDITION OF EXPOSURE SHALL BE CONSIDERED IN DESIGN.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT HIGHWAY DRAWING. FRL & CAMBER, SUPER ELEVATION AT PARTICULAR LOCATION SHALL BE VERIFIED WITH THE HIGHWAY DRAWINGS.
- THE MINIMUM EMBEDMENT OF THE FOUNDATIONS INTO THE ROCK BELOW SHALL BE AS FOLLOWS:

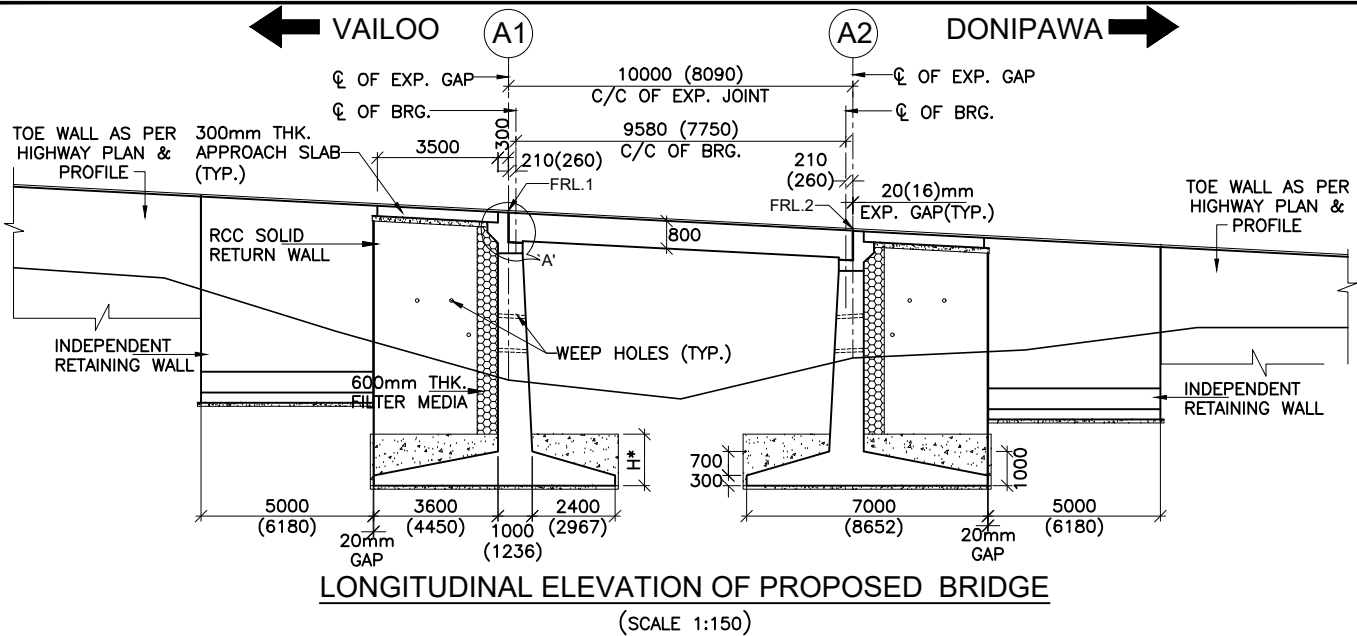
FOR ROCKS OF MODERATELY STRONG	- 0.6M
FOR ROCKS OF MODERATELY WEAK	- 1.5M
- SURFACE PREPARATION BY SAND BLASTING EXCEPT AT CONNECTIONS USING HSFG BOLTS WHERE SURFACE HAS TO BE PREPARED SEPARATELY (SEE NOTE 6 OF GENERAL NOTES OF THIS DRAWING).
- TWO COATS OF ZINC CHROMATE RED OXIDE PRIMER CONFORM TO IS : 2074.
- TWO FINISHING COATS OF ALUMINUM PAINT CONFORM TO IS : 2339 OVER PRIMER COATS.
- ALL PROTECTIVE SURFACE COATING SHALL CONFORM TO IRC : 24-2010.

REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	
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					Designed: PK Drawn: KS Checked: RKS Approved: MK	Drawing Title GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 151+096
					Scale AS SHOWN	Drawing.No. NHIDCL/NH-244/VAILOO-DONIPAWA/ MNB/151+096/02/R0

LEGEND:

F.R.L. : FINISHED ROAD LEVEL
H.F.L. : HIGH FLOOD LEVEL
CL : CENTER LINE
LVL. : LEVEL
TYP. : TYPICAL
THK. : THICKNESS
D/S : DOWNSTREAM
U/S : UPSTREAM
C/C : CENTER TO CENTER
G.L. : GROUND LEVEL
LBL. : LOWEST BED LEVEL
MIN. : MINIMUM
FDN. : FOUNDING LEVEL
EXP. : EXPANSION
BRG. : BEARING
M.S.L. : MAXIMUM SCOUR LEVEL
L.H.S. : LEFT HAND SIDE
R.H.S. : RIGHT HAND SIDE

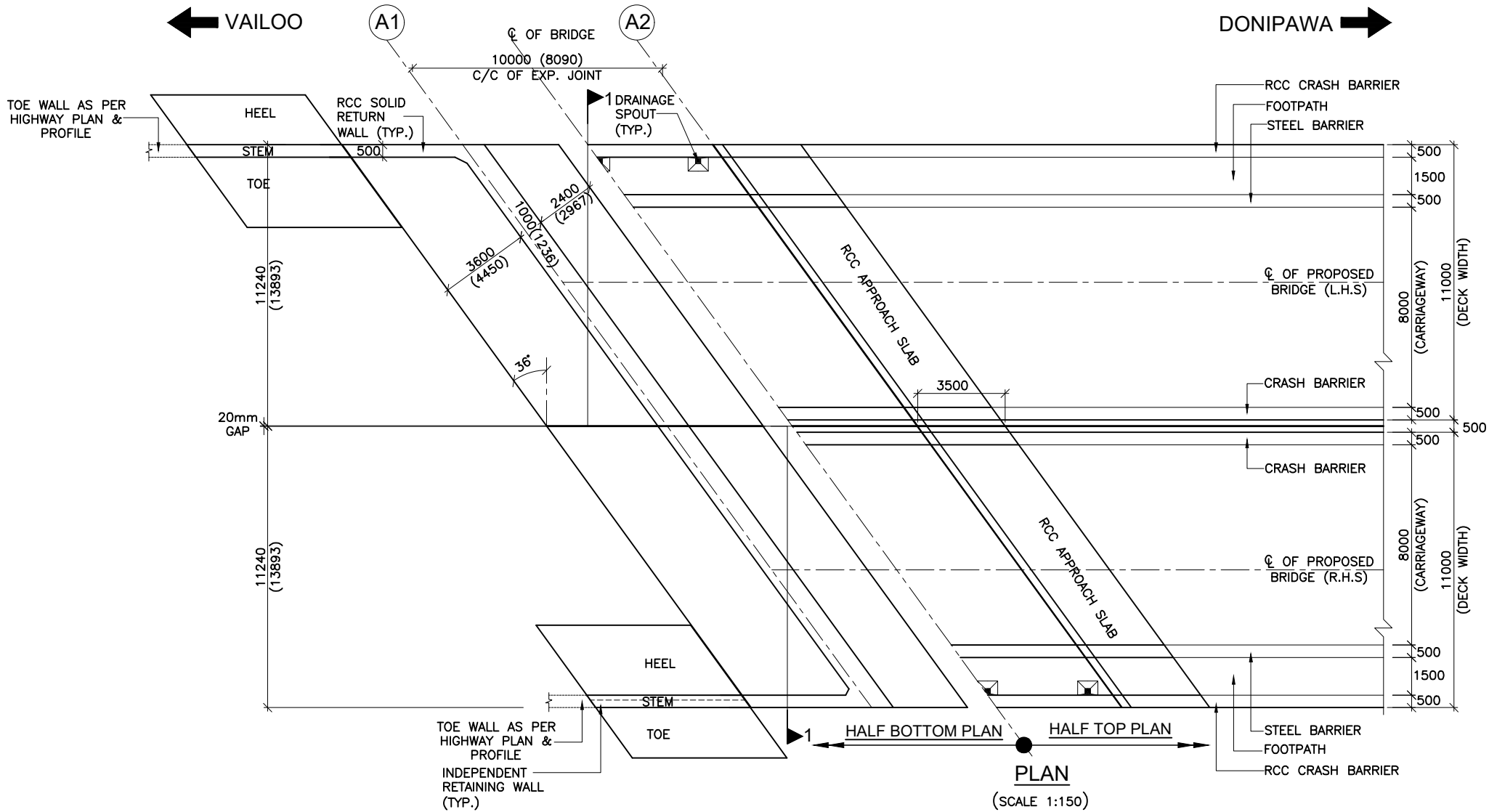
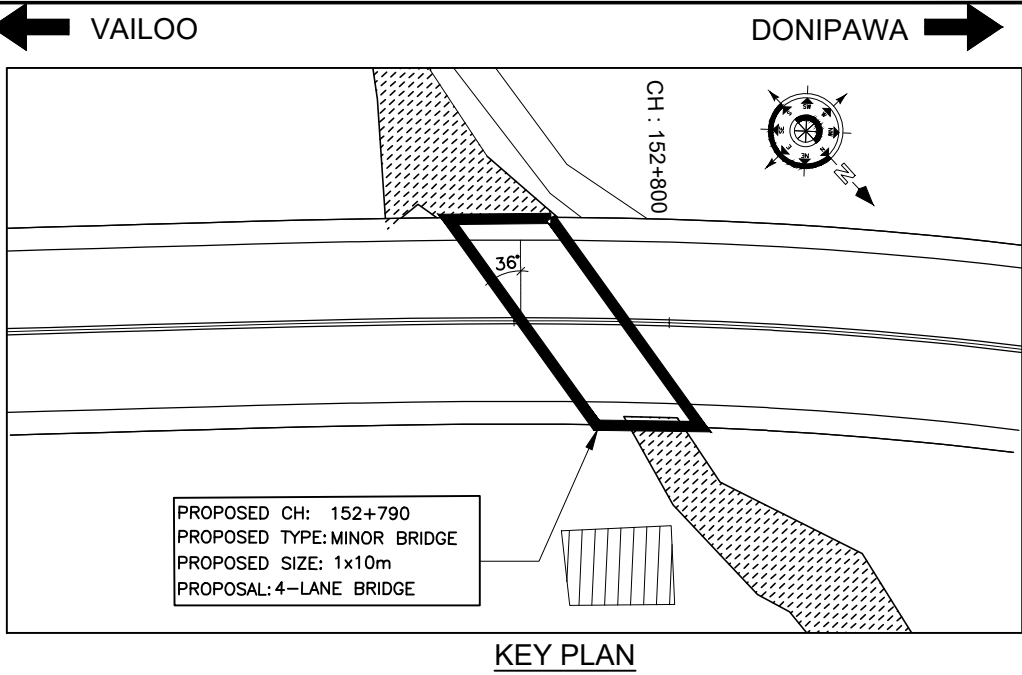
* DIMENSIONS SHOWN IN THE BRACKETS () ARE SQUARE DIMENSIONS.



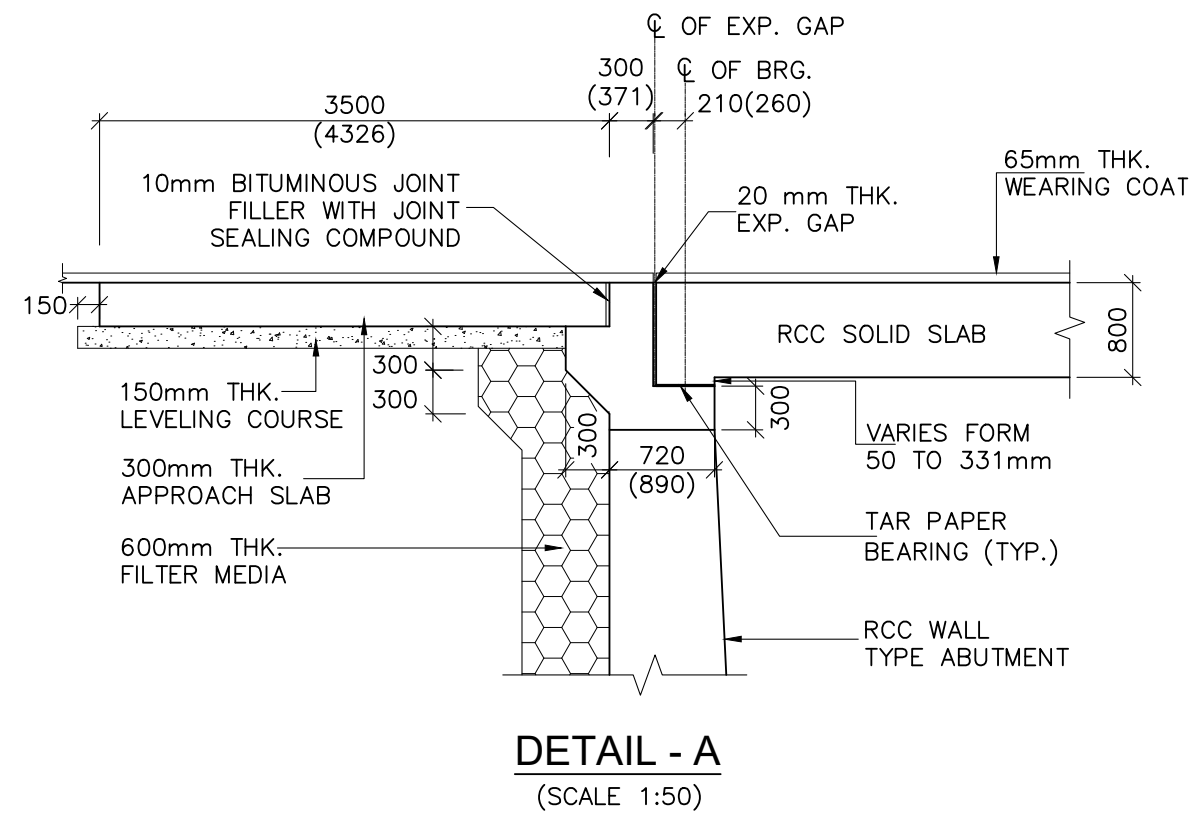
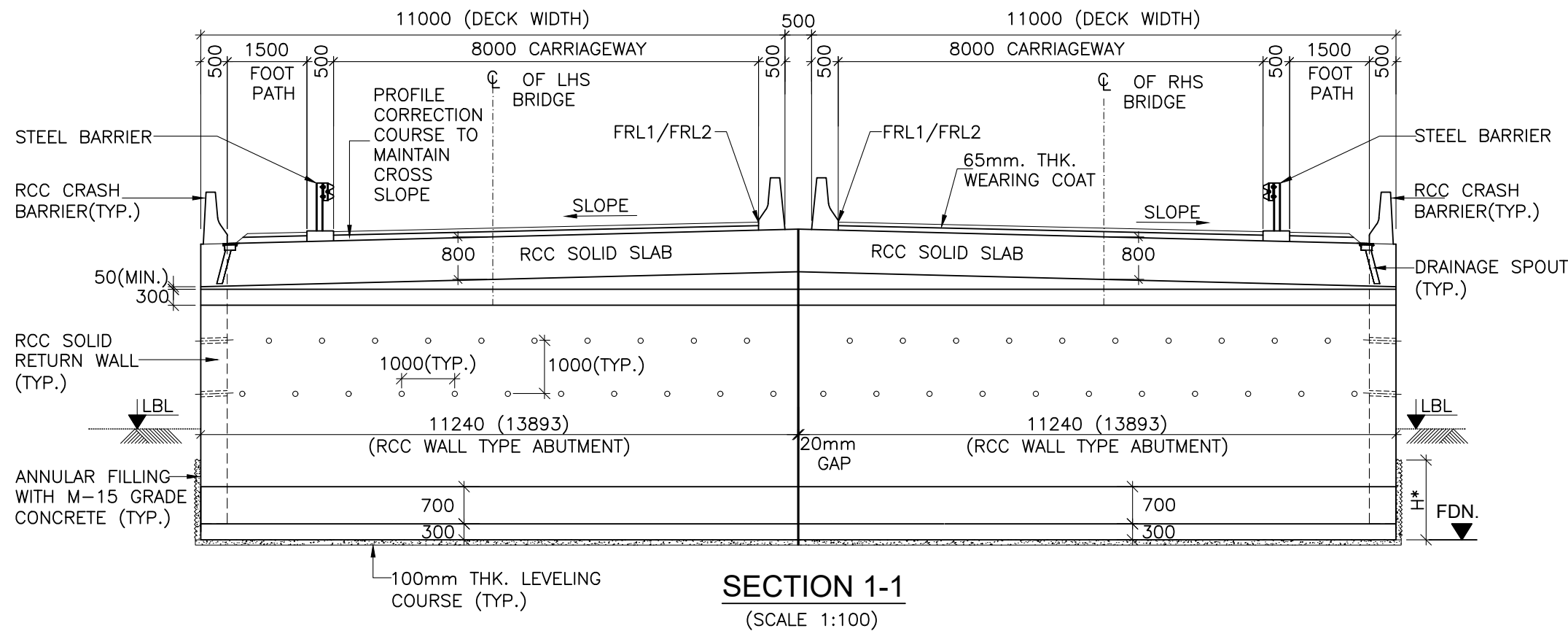
H* =600mm(MIN.) IN MODERATELY STRONG ROCK
1500mm(MIN.) IN MODERATELY WEAK ROCK

FINISHED ROAD LVL (m)	1955.575	1955.312	1955.050
GROUND LVL (m)	1950.651		1951.293
FOUNDING LVL. (m)	1947.575		1947.575
OFFSET (m)	(-)-5.000	0.000	5.000

CHAINAGE AT 0+000 IS 152+790



REVISION	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	Project	Drawing Title
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					AS SHOWN	GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 152+790
						NHIDCL/NH-244/VAILOO-DONIPAWA/ MNB/152+790/01/R0

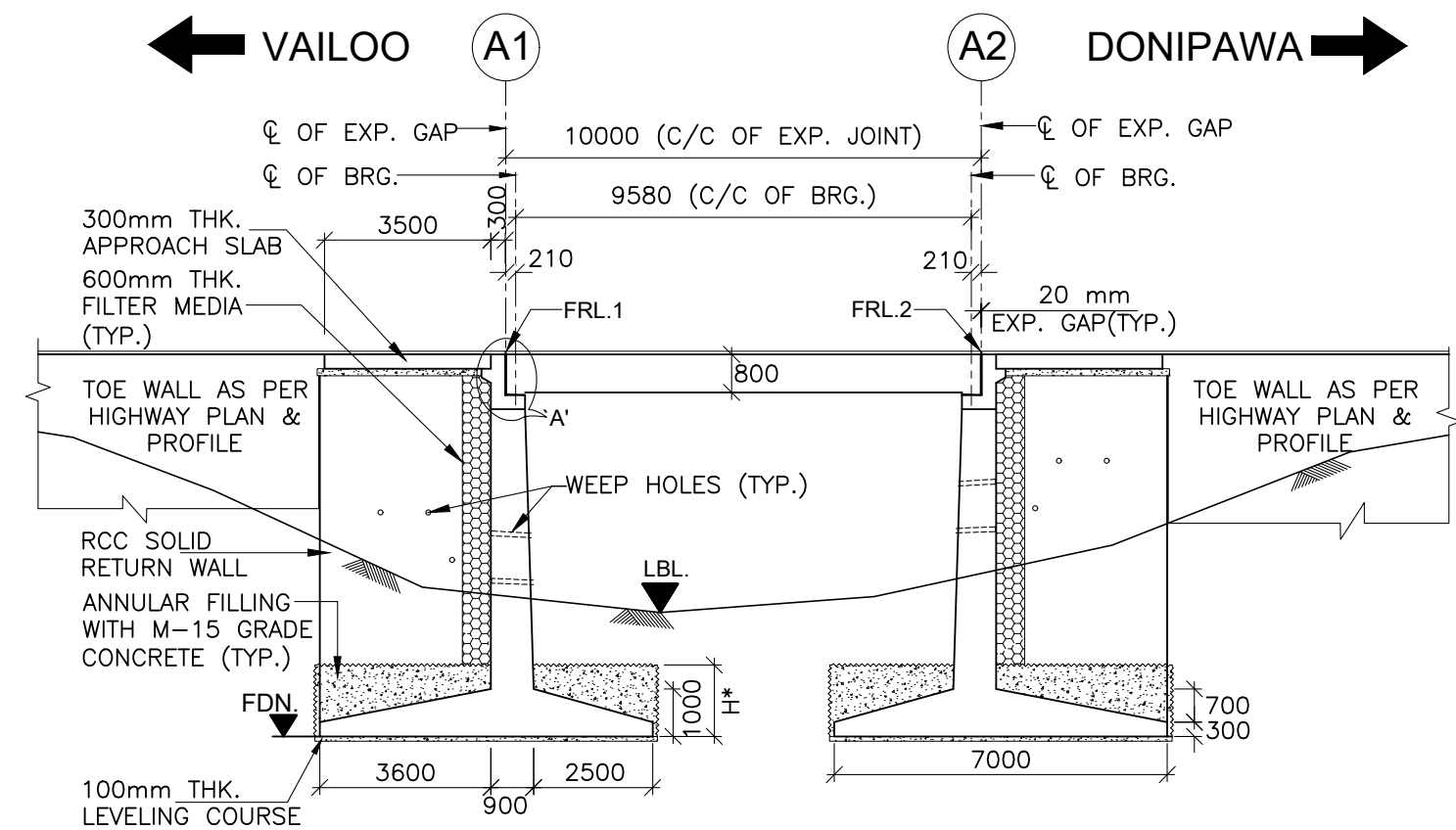


- NOTES:-**
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
 - DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
 - (i) EACH CARRIAGEWAY IS DESIGNED FOR ONE LANE OF IRC CLASS 70R+ONE LANE IRC CLASS A OR 3 LANES OF IRC CLASS A LOADING WHICHEVER GOVERNS.
 - (ii) EACH CARRIAGEWAY IS ALSO DESIGNED FOR IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GVW=385 Tonnes).
 - Moderate condition of exposure has been considered in design.
 - Concrete shall be design mix with a minimum 28 days characteristic strength on 150mm cube as follows:

a. Leveling course (under foundation)	- M10
b. Leveling course (under approach slab)	- M15
c. Foundation	- M35
d. Substructure	- M35
e. Superstructure	- M35
f. Return/Retaining Wall	- M35
g. Crash Barrier/RCC Railing	- M40
h. Approach Slab	- M30
 - Untensioned reinforcement shall be thermo mechanically treated, (TMT) high yield strength deformed bars of grade designation Fe-500D conforming to IS: 1786.
 - Tar paper bearings shall be provided as per MORT&H specification
 - Filler type expansion joints shall be provided as per provision of SP:-69
 - 65mm thick wearing coat comprising of 40mm thick asphaltic concrete over laid with 25mm thick mastic asphalt shall be provided as per section 500 of MORT&H.
 - 100mm dia weep holes at 1000mm C/C horizontally and vertically shall be provided in one or two layers above lowest water level in vertical walls of abutment, return/retaining walls.
 - Water to be used in concreting and curing shall confirm to clause 18.4.5 of IRC:112-2011.
 - Back filling behind abutment shall consist of selected earth conforming to Appendix:6 of IRC:78-2014 having properties $C=0$, $\phi \geq 30^\circ$, $\delta=20^\circ$ & $\gamma_d = 20 \text{ KN/m}^3$.
 - Minimum clear cover to outer most reinforcement shall be as under:-

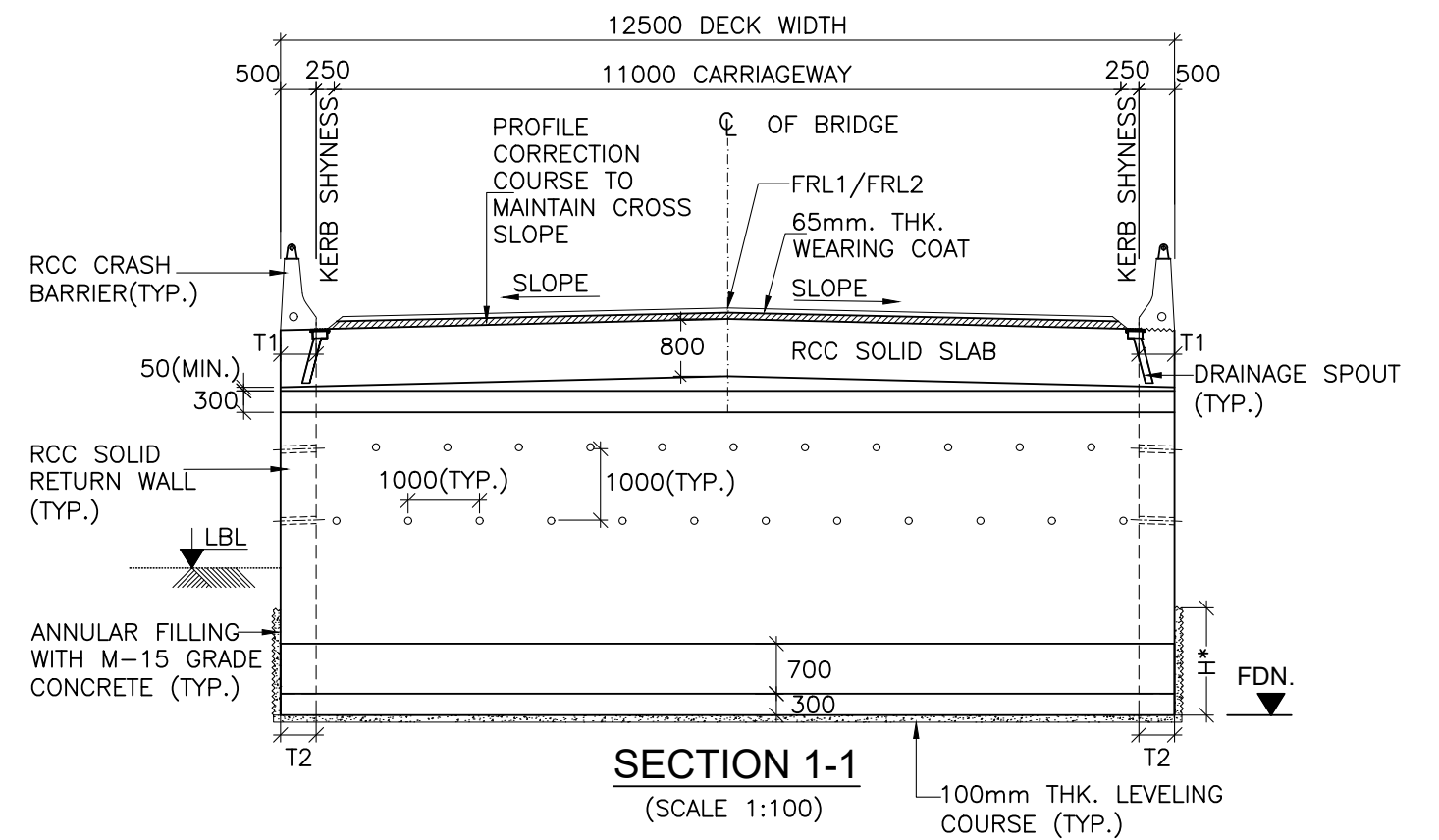
a. Superstructure	- 40mm
b. Substructure (Earth face)	- 75mm
c. Substructure (Not earth face)	- 50mm
d. Foundation	- 75mm
 - The bridge is designed for provision of seismic zone-V as per clause 219 of IRC:6:2017.
 - Safe bearing capacity considered in design at proposed founding level is 25 t/m^2 . This shall be ascertained before execution at site.
 - This drawing should be read in conjunction with relevant highway plan and profile drawings.
 - All chainages, FRL, GL shall be confirmed at site prior to execution.
 - For approach slab, drainage spouts, crash barrier, protection work and retaining wall details refer separate drawings.
 - Dimensions shown in the brackets () are square dimensions.

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					Drawing Title	GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 152+790
					Drawing.No.	NHIDCL/NH-244/VAILOO-DONIPAWA/ MNB/152+790/02/R0

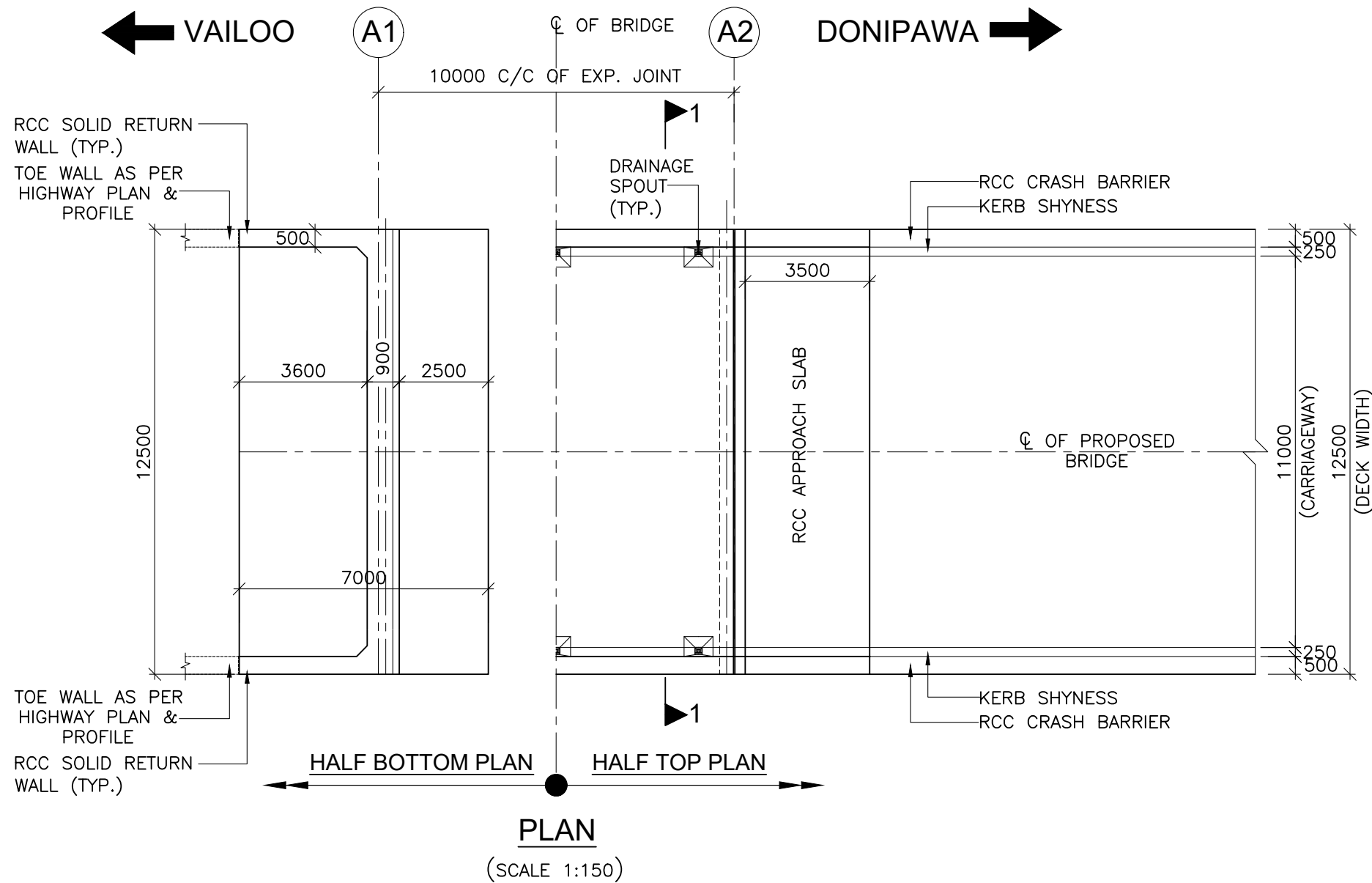


LONGITUDINAL ELEVATION OF PROPOSED BRIDGE
(SCALE 1:150)

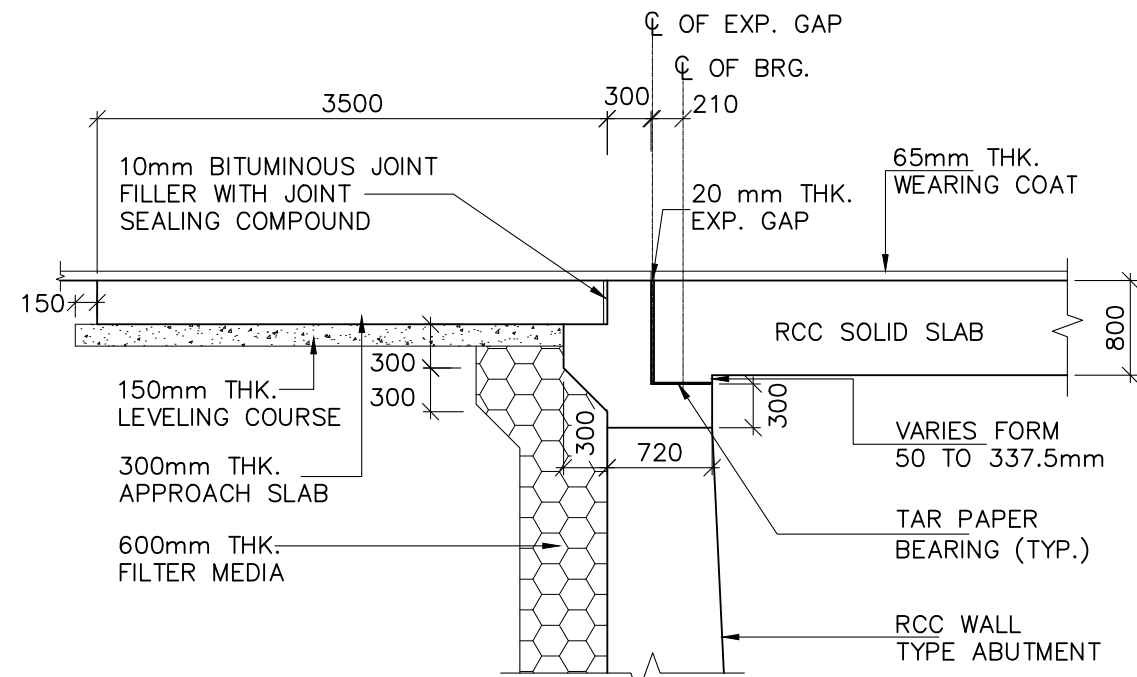
LEGEND:	
F.R.L	: FINISHED ROAD LEVEL
H.F.L	: HIGH FLOOD LEVEL
CL	: CENTER LINE
LVL	: LEVEL
TYP	: TYPICAL
THK	: THICKNESS
D/S	: DOWNSTREAM
U/S	: UPSTREAM
C/C	: CENTER TO CENTER
G.L	: GROUND LEVEL
LBL	: LOWEST BED LEVEL
MIN	: MINIMUM
FDN	: FOUNDING LEVEL
EXP	: EXPANSION
BRG	: BEARING
M.S.L	: MAXIMUM SCOUR LEVEL
L.H.S	: LEFT HAND SIDE
R.H.S	: RIGHT HAND SIDE



SECTION 1-1
(SCALE 1:100)



PLAN
(SCALE 1:150)



DETAIL - A
(SCALE 1:50)

H* =600mm(MIN.) IN MODERATELY STRONG ROCK
1500mm(MIN.) IN MODERATELY WEAK ROCK

TABLE SHOWING LEVELS AND OTHER DETAILS
OF 1X10m MINOR BRIDGES

SL.No.	PROPOSED CHAINAGE (km)	LEVELS (m)			
		FORMATION LEVEL (FRL1)	FORMATION LEVEL (FRL2)	LOWEST BED LEVEL (LBL)	FOUNDING LEVEL (FDN)
1	158+054	1842.971	1842.807	1839.102	1836.102
2	163+794	1757.028	1757.189	1752.415	1749.415
3	164+119	1757.809	1757.645	1753.162	1750.162
4	164+833	1756.837	1756.863	1753.275	1750.275
5	170+454	1664.704	1664.446	1661.386	1658.386

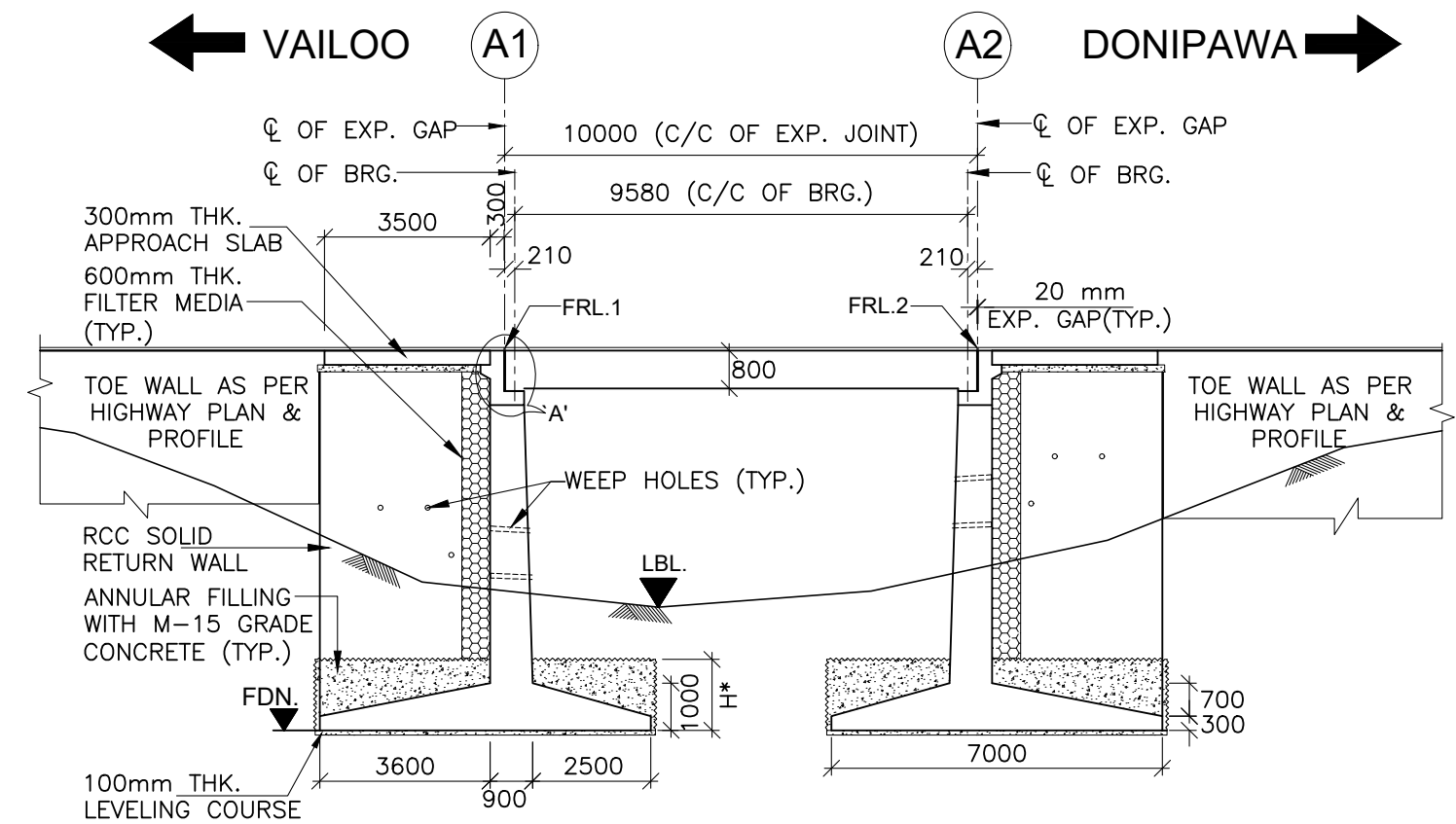
NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- THE BRIDGE IS DESIGNED FOR GOVERNING CASE OF FOLLOWING
 - ONE LANE OF IRC CLASS 70R + ONE LANE OF IRC CLASS A.
 - THREE LANE OF IRC CLASS A
 - IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GVW=385 Tonnes)
- MODERATE CONDITION OF EXPOSURE HAS BEEN CONSIDERED IN DESIGN.
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBE AS FOLLOWS:

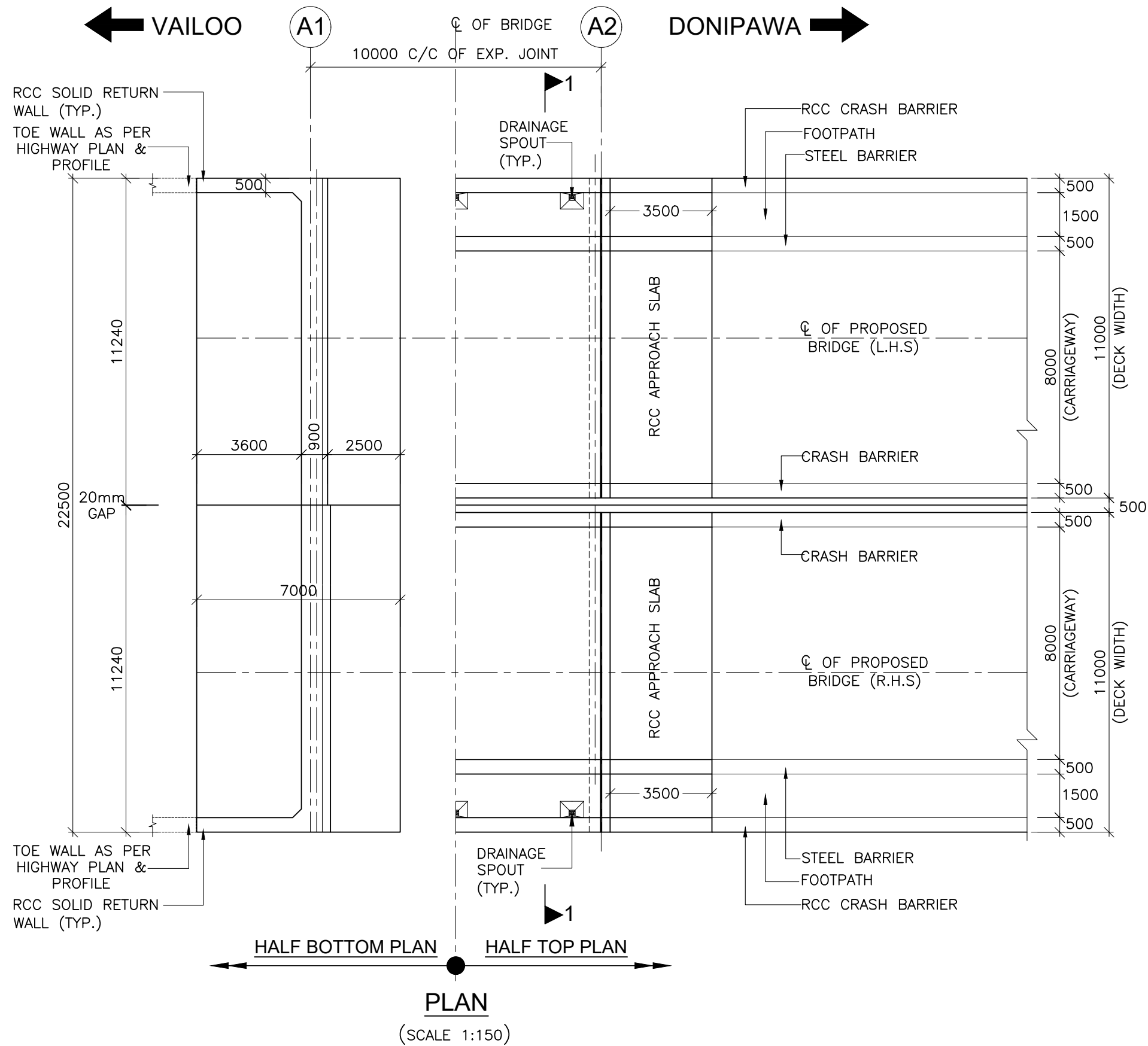
a. LEVELING COURSE (UNDER FOUNDATION)	- M10
b. LEVELING COURSE (UNDER APPROACH SLAB)	- M15
c. FOUNDATION	- M35
d. SUBSTRUCTURE	- M35
e. SUPERSTRUCTURE	- M35
f. RETURN/RETAINING WALL	- M35
g. CRASH BARRIER/RCC RAILING	- M40
h. APPROACH SLAB	- M30
- UNTENSIONED REINFORCEMENT SHALL BE THERMO MECHANICALLY TREATED, (TMT) HIGH YIELD STRENGTH DEFORMED BARS OF GRADE DESIGNATION Fe-500D CONFORMING TO IS: 1786.
- TAR PAPER BEARINGS SHALL BE PROVIDED AS PER MORT&H SPECIFICATION
- FILLER TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER PROVISION OF SP:-69
- 65mm THICK WEARING COAT COMPRISING OF 40mm THICK ASPHALTIC CONCRETE OVER LAID WITH 25mm THICK MASTIC ASPHALT SHALL BE PROVIDED AS PER SECTION 500 OF MORT&H.
- 100mm DIA WEEP HOLES AT 1000mm C/C HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN ONE OR TWO LAYERS ABOVE LOWEST WATER LEVEL IN VERTICAL WALLS OF ABUTMENT, RETURN/RETAINING WALLS.
- WATER TO BE USED IN CONCRETING AND CURING SHALL CONFIRM TO CLAUSE 18.4.5 OF IRC:112-2011.
- BACK FILLING BEHIND ABUTMENT SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX:6 OF IRC:78-2014 HAVING PROPERTIES C=0, $\phi \geq 30^\circ$, $\delta = 20^\circ$ & $y_d = 20 \text{ kN/m}^2$.
- MINIMUM CLEAR COVER TO OUTER MOST REINFORCEMENT SHALL BE AS UNDER:-

a. SUPERSTRUCTURE	- 40mm
b. SUBSTRUCTURE (EARTH FACE)	- 75mm
c. SUBSTRUCTURE (NOT EARTH FACE)	- 50mm
d. FOUNDATION	- 75mm
- THE BRIDGE IS DESIGNED FOR PROVISION OF SEISMIC ZONE-V AS PER CLAUSE 219 OF IRC:6:2017.
- SAFE BEARING CAPACITY CONSIDERED IN DESIGN AT PROPOSED FOUNDING LEVEL IS 25 t/m^2 . THIS SHALL BE ASCERTAINED BEFORE EXECUTION AT SITE.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT HIGHWAY PLAN AND PROFILE DRAWINGS.
- ALL CHAINAGES, FRL, GL SHALL BE CONFIRMED AT SITE PRIOR TO EXECUTION.

REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44,500 to Km 142,000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
				Designed: AK Drawn: KS Checked: VT Approved: MK	Drawing Title GENERAL ARRANGEMENT DRAWING FOR 1X10m MINOR BRIDGES (TYPE-1)
				Scale AS SHOWN	Drawing.No. NHIDCL/NH-244/VAILOO-DONIPAWA/ MNB/TYPE-1/01/R1



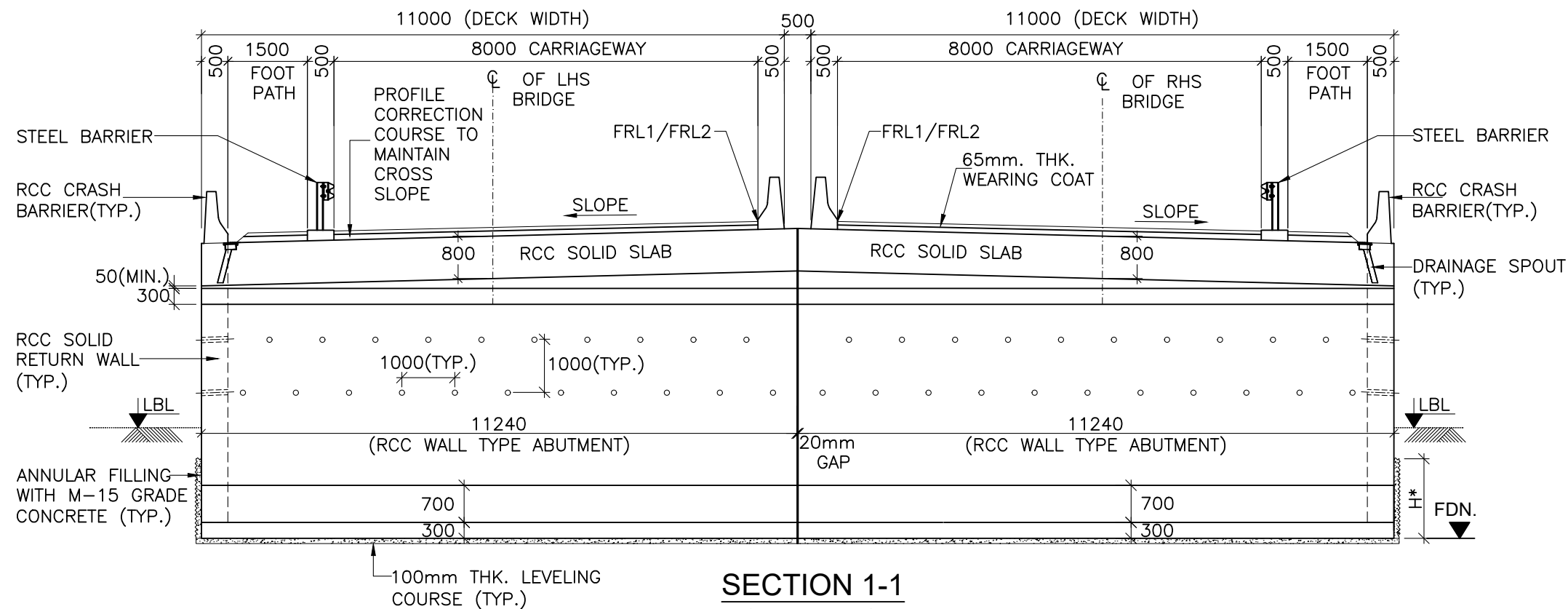
LONGITUDINAL ELEVATION OF PROPOSED BRIDGE
(SCALE 1:150)



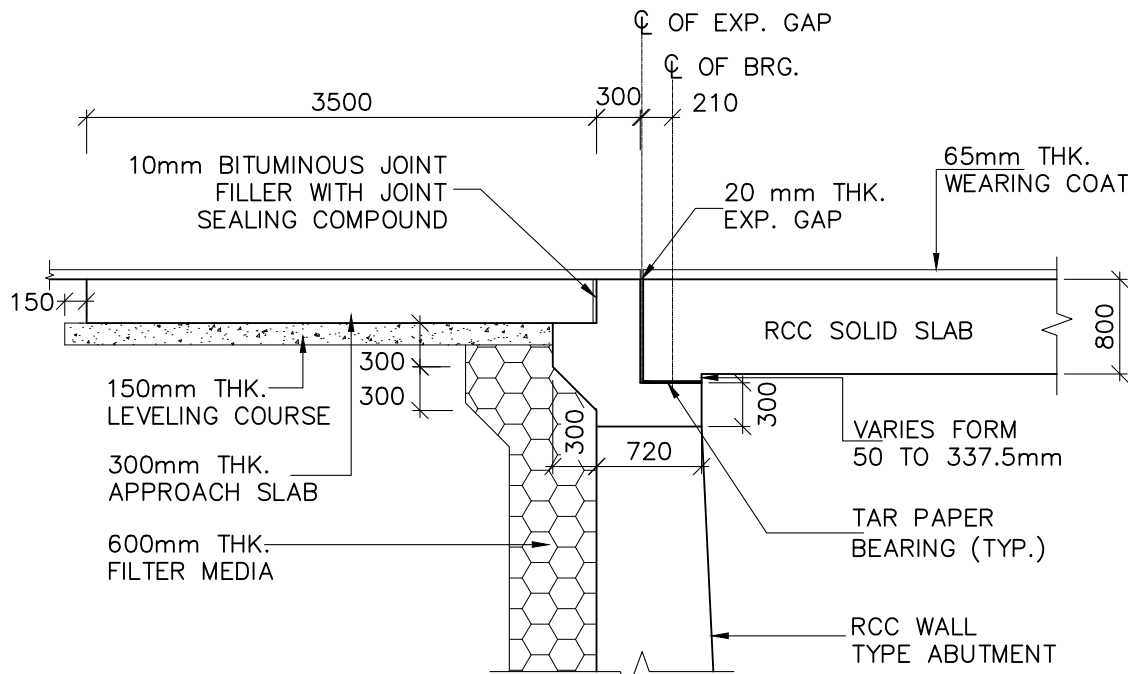
PLAN
(SCALE 1:150)

LEGEND:

F.R.L	:	FINISHED ROAD LEVEL
H.F.L	:	HIGH FLOOD LEVEL
CL	:	CENTER LINE
LVL.	:	LEVEL
TYP.	:	TYPICAL
THK.	:	THICKNESS
D/S	:	DOWNSTREAM
U/S	:	UPSTREAM
C/C	:	CENTER TO CENTER
G.L	:	GROUND LEVEL
LBL.	:	LOWEST BED LEVEL
MIN.	:	MINIMUM
FDN.	:	FOUNDING LEVEL
EXP.	:	EXPANSION
BRG.	:	BEARING
M.S.L	:	MAXIMUM SCOUR LEVEL
L.H.S	:	LEFT HAND SIDE
R.H.S	:	RIGHT HAND SIDE



SECTION 1-1
(SCALE 1:100)



DETAIL - A
(SCALE 1:50)

H* =600mm(MIN.) IN MODERATELY STRONG ROCK
1500mm(MIN.) IN MODERATELY WEAK ROCK

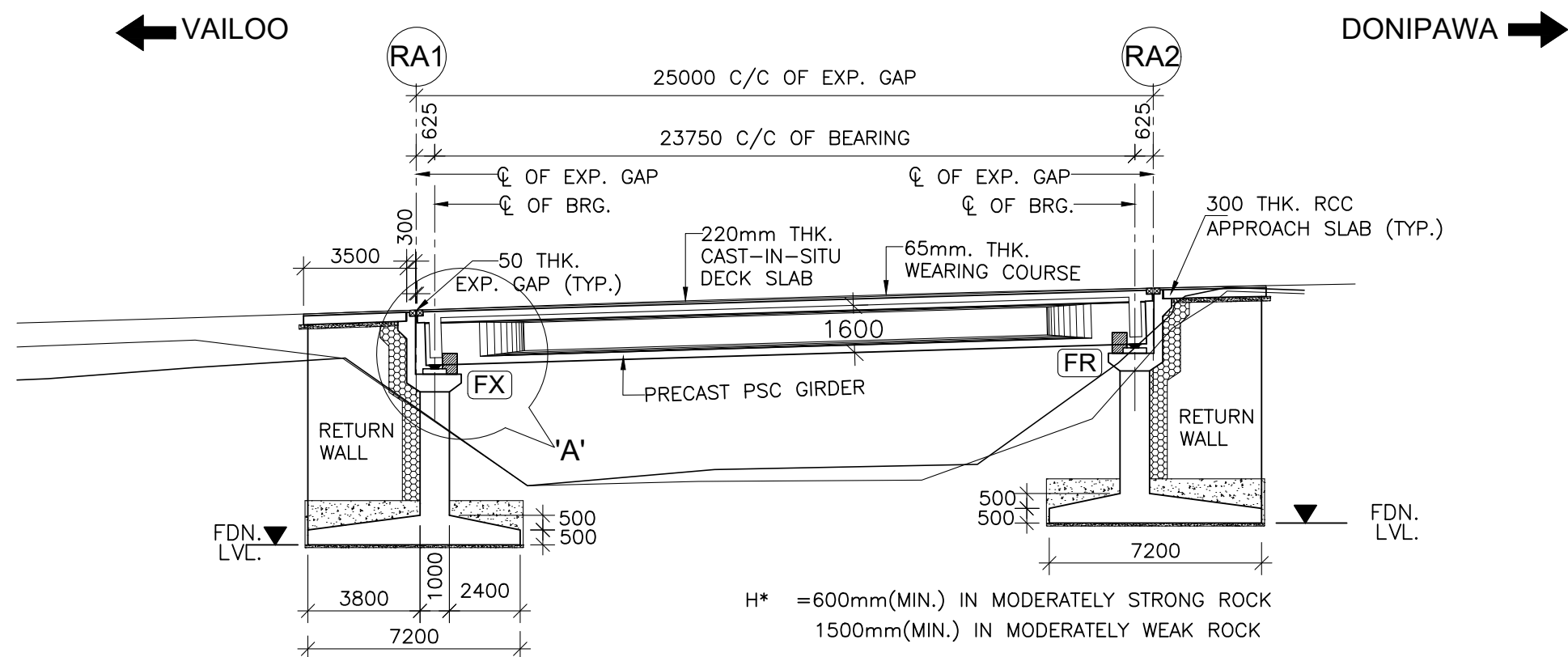
TABLE SHOWING LEVELS AND OTHER DETAILS
OF 1X10m MINOR BRIDGES

SL.No.	PROPOSED CHAINAGE (km)	LEVELS (m)			
		FORMATION LEVEL (FRL1)	FORMATION LEVEL (FRL2)	LOWEST BED LEVEL (LBL)	FOUNDING LEVEL (FDN)
1	159+083	1822.540	1822.146	1818.677	1815.677
2	159+297	1816.499	1816.409	1812.251	1809.251
3	163+289	1758.782	1758.838	1754.900	1751.900

NOTES:-

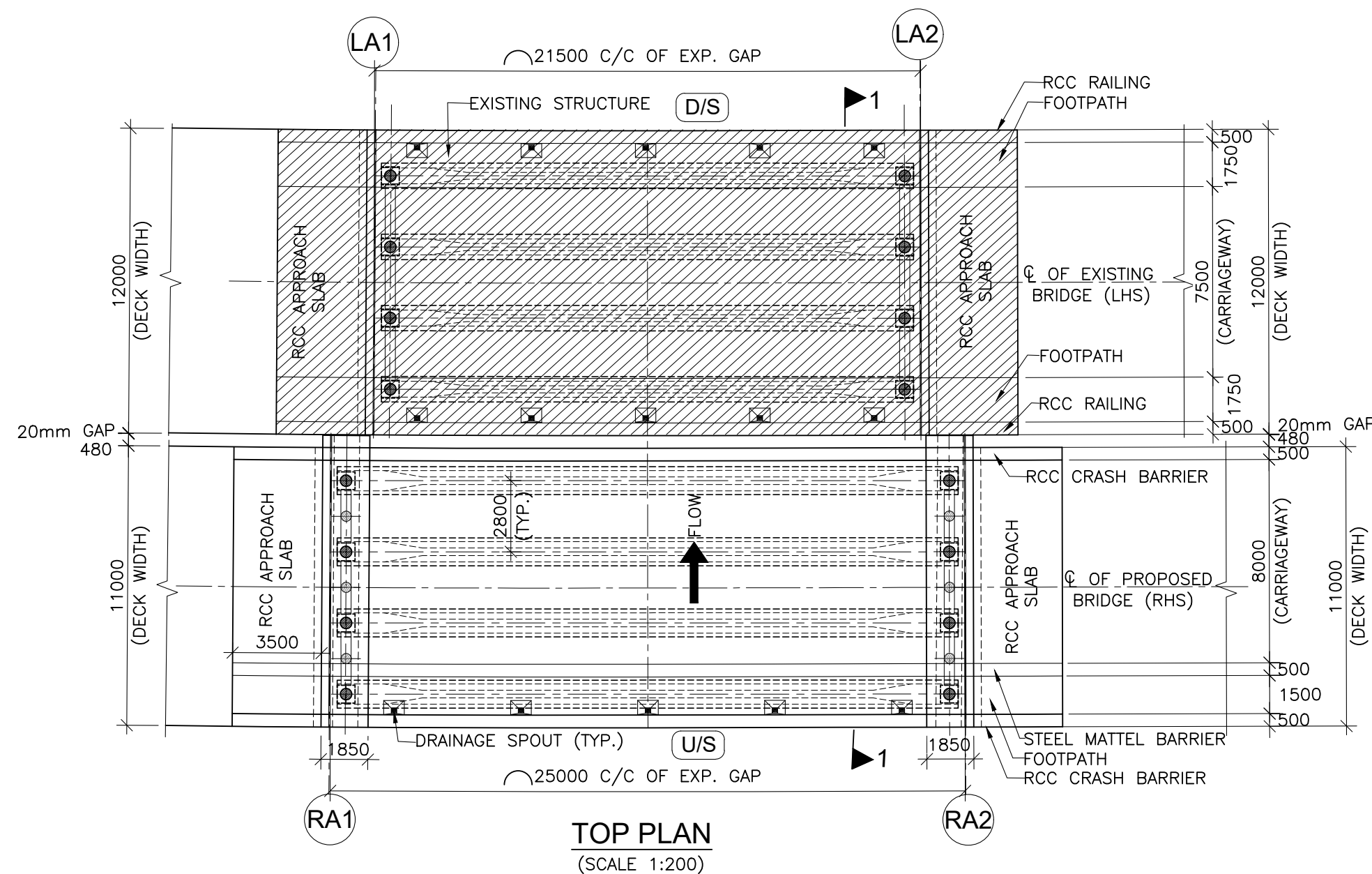
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS ARE NOT TO BE SCALED ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- (i) EACH CARRIAGEWAY IS DESIGNED FOR ONE LANE OF IRC CLASS 70R+ONE LANE IRC CLASS A OR 3 LANES OF IRC CLASS A LOADING WHICHEVER GOVERNS.
- (ii) EACH CARRIAGEWAY IS ALSO DESIGNED FOR IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GVW=385 Tonnes).
- MODERATE CONDITION OF EXPOSURE HAS BEEN CONSIDERED IN DESIGN.
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBE AS FOLLOWS:
 - LEVELING COURSE (UNDER FOUNDATION) - M10
 - LEVELING COURSE (UNDER APPROACH SLAB) - M15
 - FOUNDATION - M35
 - SUBSTRUCTURE - M35
 - SUPERSTRUCTURE - M35
 - RETURN/RETAINING WALL - M35
 - CRASH BARRIER/RCC RAILING - M40
 - APPROACH SLAB - M30
- UNTENSIONED REINFORCEMENT SHALL BE THERMO MECHANICALLY TREATED, (TMT) HIGH YIELD STRENGTH DEFORMED BARS OF GRADE DESIGNATION Fe-500D CONFORMING TO IS: 1786.
- TAR PAPER BEARINGS SHALL BE PROVIDED AS PER MORT&H SPECIFICATION
- FILLER TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER PROVISION OF SP:-69
- 65mm THICK WEARING COAT COMPRISING OF 40mm THICK ASPHALTIC CONCRETE OVER LAID WITH 25mm THICK MASTIC ASPHALT SHALL BE PROVIDED AS PER SECTION 500 OF MORT&H.
- 100mm DIA WEEP HOLES AT 1000mm C/C HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN ONE OR TWO LAYERS ABOVE LOWEST WATER LEVEL IN VERTICAL WALLS OF ABUTMENT, RETURN/RETAINING WALLS.
- WATER TO BE USED IN CONCRETING AND CURING SHALL CONFIRM TO CLAUSE 18.4.5 OF IRC:112-2011.
- BACK FILLING BEHIND ABUTMENT SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX:6 OF IRC:78-2014 HAVING PROPERTIES C=0, $\phi \geq 30^\circ$, $\delta = 20^\circ$ & $\gamma_d = 20 \text{ KN/m}^3$.
- MINIMUM CLEAR COVER TO OUTER MOST REINFORCEMENT SHALL BE AS UNDER:-
 - SUPERSTRUCTURE - 40mm
 - SUBSTRUCTURE (EARTH FACE) - 75mm
 - SUBSTRUCTURE (NOT EARTH FACE) - 50mm
 - FOUNDATION - 75mm
- THE BRIDGE IS DESIGNED FOR PROVISION OF SEISMIC ZONE-V AS PER CLAUSE 219 OF IRC:6:2017.
- SAFE BEARING CAPACITY CONSIDERED IN DESIGN AT PROPOSED FOUNDING LEVEL IS 25 t/m^2 . THIS SHALL BE ASCERTAINED BEFORE EXECUTION AT SITE.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RELEVANT HIGHWAY PLAN AND PROFILE DRAWINGS.
- ALL CHAINAGES, FRL, GL SHALL BE CONFIRMED AT SITE PRIOR TO EXECUTION.
- FOR APPROACH SLAB, DRAINAGE SPOUTS, CRASH BARRIER, PROTECTION WORK AND RETAINING WALL DETAILS REFER SEPARATE DRAWINGS.

REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44,500 to Km 142,000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khelani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
				Designed: PK Drawn: KS Checked: VT Approved: MK	Drawing Title Drawing.No.
				Scale AS SHOWN	GENERAL ARRANGEMENT DRAWING FOR 1X10m MINOR BRIDGES (TYPE-2) NHIDCL/NH-244/VAILOO-DONIPAWA/ MNB/TYPE-2/01/R0

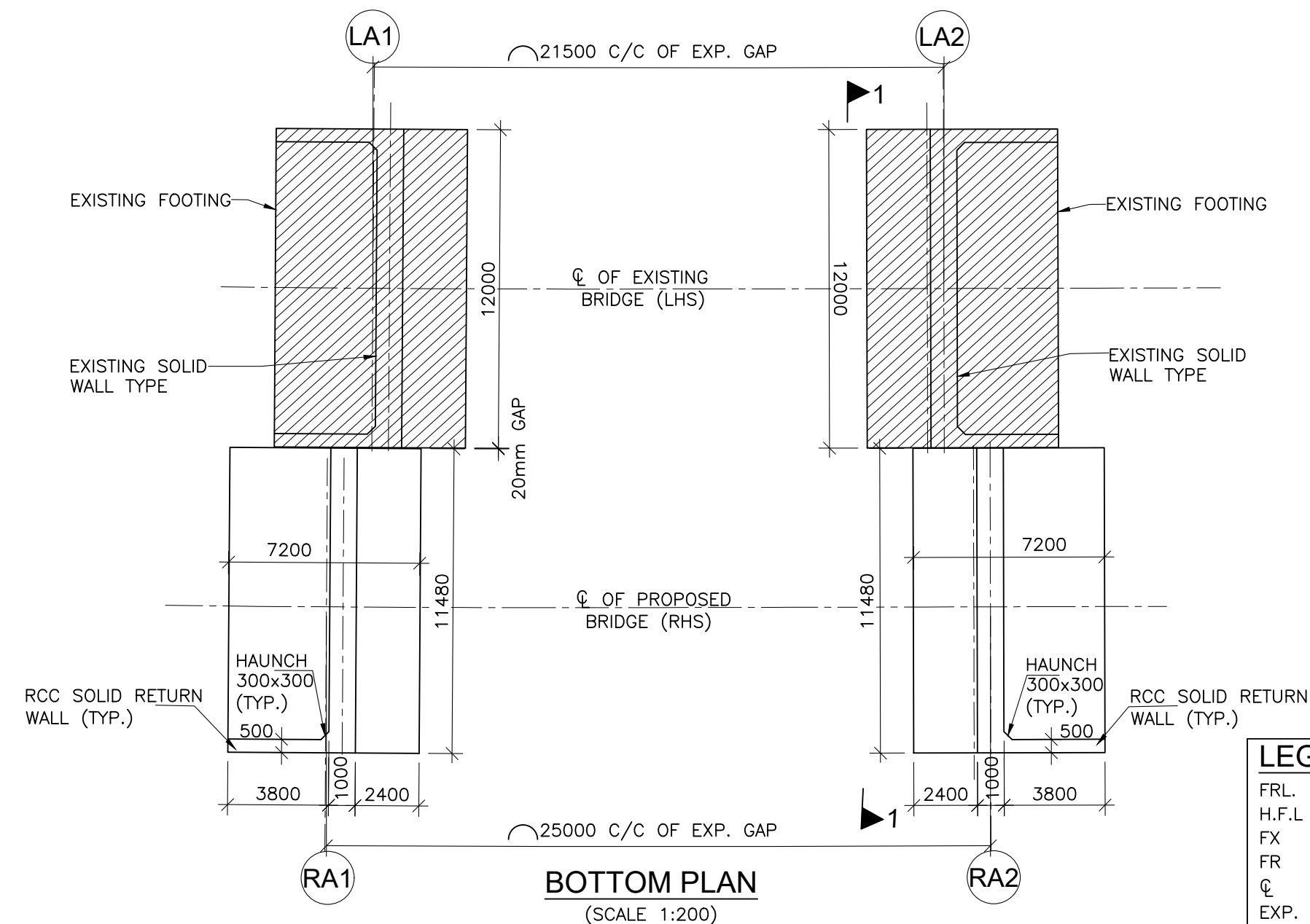


FORMATION LEVEL (m)	1758.308	1759.053
LOWEST GROUND LEVEL (m)	1754.950	1756.960
FOUNDING LEVEL (m)	1750.345	1751.090
CHAINAGE (Km)	164+936.5	164+949
		164+961.5

LONGITUDINAL ELEVATION OF PROPOSED BRIDGE (RHS)
(SCALE 1:200)



TOP PLAN
(SCALE 1:200)



BOTTOM PLAN
(SCALE 1:200)

LEGEND:

FRL.	: FORMATION LEVEL
H.F.L.	: HIGH FLOOD LEVEL
FX	: FIXED BEARING
FR	: FREE BEARING
CL	: CENTER LINE
EXP.	: EXPANSION
THK.	: THICKNESS
TYP.	: TYPICAL
LVL.	: LEVEL
GL.	: GROUND LEVEL
LBL.	: LOWEST BED LEVEL
FDN.	: FOUNDING LEVEL
RHS	: RIGHT HAND SIDE
LHS	: LEFT HAND SIDE
D/S	: DOWNSTREAM
U/S	: UPSTREAM
EXISTING STRUCTURE:	




REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.	GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 164+949
			 	Drawing.No.	NHIDCL/NH-244/VAILOO-DONIPAWA/ MNB/164+949/01/R0
			Designed: HB Drawn: AH Checked: VT Approved: MK	Scale	AS SHOWN



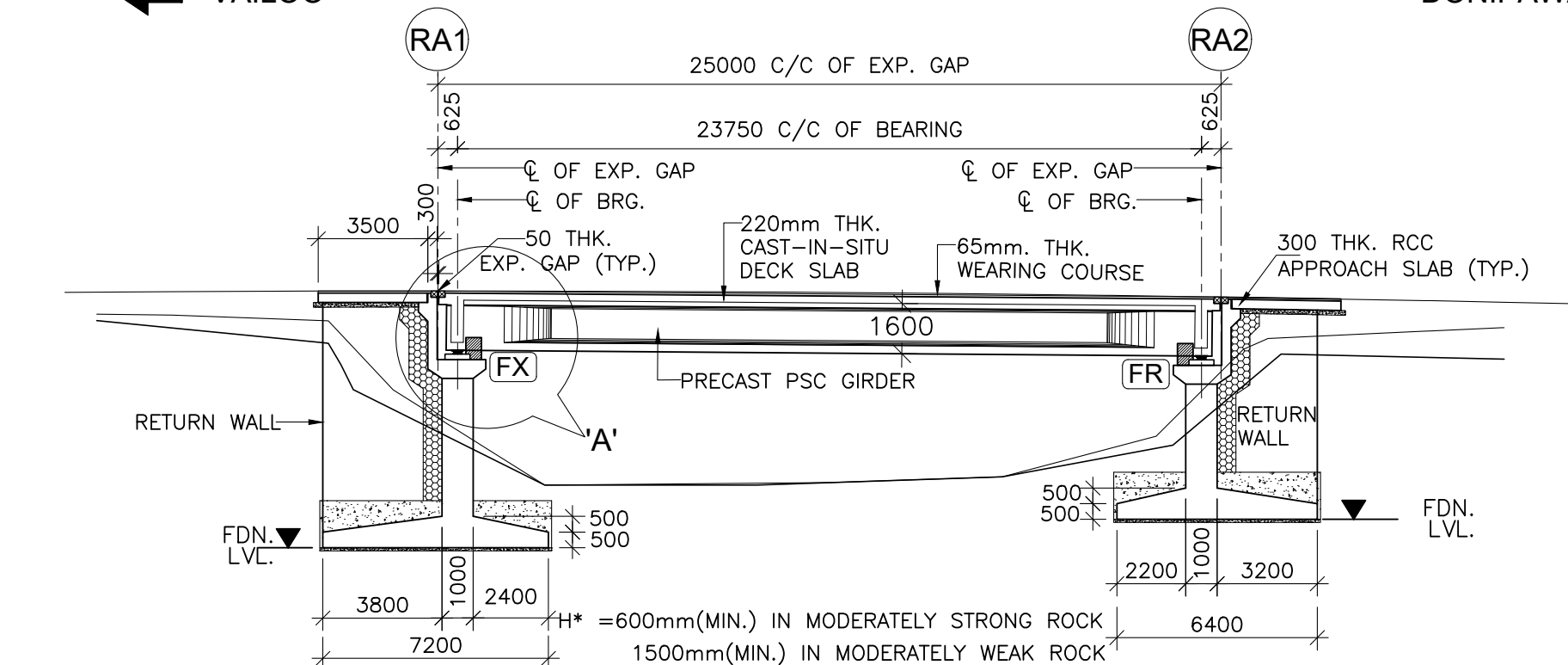
- NOTES:-**
1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
 2. i) EACH CARRIAGEWAY OF THE PROPOSED BRIDGE IS TO BE DESIGNED FOR ONE LANE OF IRC CLASS 70R + ONE LANE OF IRC CLASS A OR 3 LANES OF IRC CLASS A LOADING GOVERNS.
ii) THIS BRIDGE IS ALSO TO BE DESIGNED FOR IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GVW=385 Tonnes)
 3. CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES AS FOLLOWS :-

PSC GIRDER	-45 MPa
RCC CAST-IN-SITU DECK SLAB	-40 MPa
ABUTMENT, ABUTMENT CAP, DIRT WALL, & FOUNDATION	-35 MPa
RCC CRASH BARRIER	-40 MPa
RCC APPROACH SLAB	-30 MPa
LEVELING COURSE UNDER APPROACH SLAB	-15 MPa
LEVELING COURSE UNDER FOUNDATION	-10 MPa
PEDESTAL/STOPPER	-45 MPa
 4. THE REINFORCING BARS SHALL BE OF THERMO MECHANICALLY TREATED/CORROSION RESISTANT STEEL (TMT/CRS) (GRADE DESIGNATION Fe-500D) CONFORMING TO IS:1786 STANDARDS.
 5. CLEAR COVER TO OUTER MOST STEEL SHALL BE AS UNDER:-
 - a) FOR SUPER STRUCTURE -50mm
 - b) FOR FOUNDATION -75mm
 - c) FOR SUBSTRUCTURE:
 - i) EARTH FACE -75mm
 - ii) NON EARTH FACE -50mm
 6. 65mm THK. WEARING COURSE COMPRISING OF 40mm THK. ASPHALTIC CONCRETE OVER LAID WITH 25mm THK. MASTIC ASPHALT SHALL BE PROVIDED AS PER SECTION 500 OF MORTH SPECIFICATIONS.
 7. SPHERICAL BEARINGS SHALL BE DESIGNED AS PER PROVISION OF IRC : 83 (PART-IV 2014).
 8. STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER PROVISION OF SP-69.
 9. BACK FILLING BEHIND ABUTMENT SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX:6 OF IRC:78-2014 HAVING PROPERTIES
 $C=0$, $\phi \geq 35^\circ$, $\delta=22.5^\circ$ & $\gamma_d = 20 \text{ KN/m}^3$
 10. 100mm DIA WEEP HOLES AT 1000mm C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN VERTICAL WALLS OF THE ABUTMENT SHAFT AND RETURN WALL FROM 150mm ABOVE G.L IN ONE OR TWO LAYERS AT A SLOPE OF 1 VERTICAL TO 20 HORIZONTAL TOWARDS THE DRAINING FACE.
 11. WATER TO BE USED IN CONCRETING & CURING SHALL CONFORM TO CLAUSE 18.8.4(4) IRC : 112:2011.
 12. SAFE BEARING CAPACITY CONSIDERED IN DESIGN AT PROPOSED FOUNDING LEVEL IS 35 t/m^2 . THIS SHALL BE ASCERTAINED BEFORE EXECUTION OF WORK AT SITE.
 13. THE BRIDGE IS DESIGNED FOR SEISMIC ZONE-V
 14. MODERATE CONDITION OF EXPOSURE SHALL BE CONSIDERED IN DESIGN.
 15. THE MINIMUM EMBEDMENT OF THE FOUNDATIONS INTO THE ROCK BELOW SHALL BE AS FOLLOWS:

FOR ROCKS OF MODERATELY STRONG	- 0.6M
FOR ROCKS OF MODERATELY WEAK	- 1.5M
 16. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT HIGHWAY DRAWING. FRL & CAMBER, SUPER ELEVATION AT PARTICULAR LOCATION SHALL BE VERIFIED WITH THE HIGHWAY DRAWINGS.
 17. RCC RETAINING WALL SHALL BE PROVIDED UPTO 4M HEIGHT ABOVE GROUND LEVEL. BELOW 4M HEIGHT, PCC TOE WALL SHALL BE PROVIDED.
 18. PEDESTAL BEARING SHALL BE PLACED BETWEEN TRUE HORIZONTAL SURFACES.

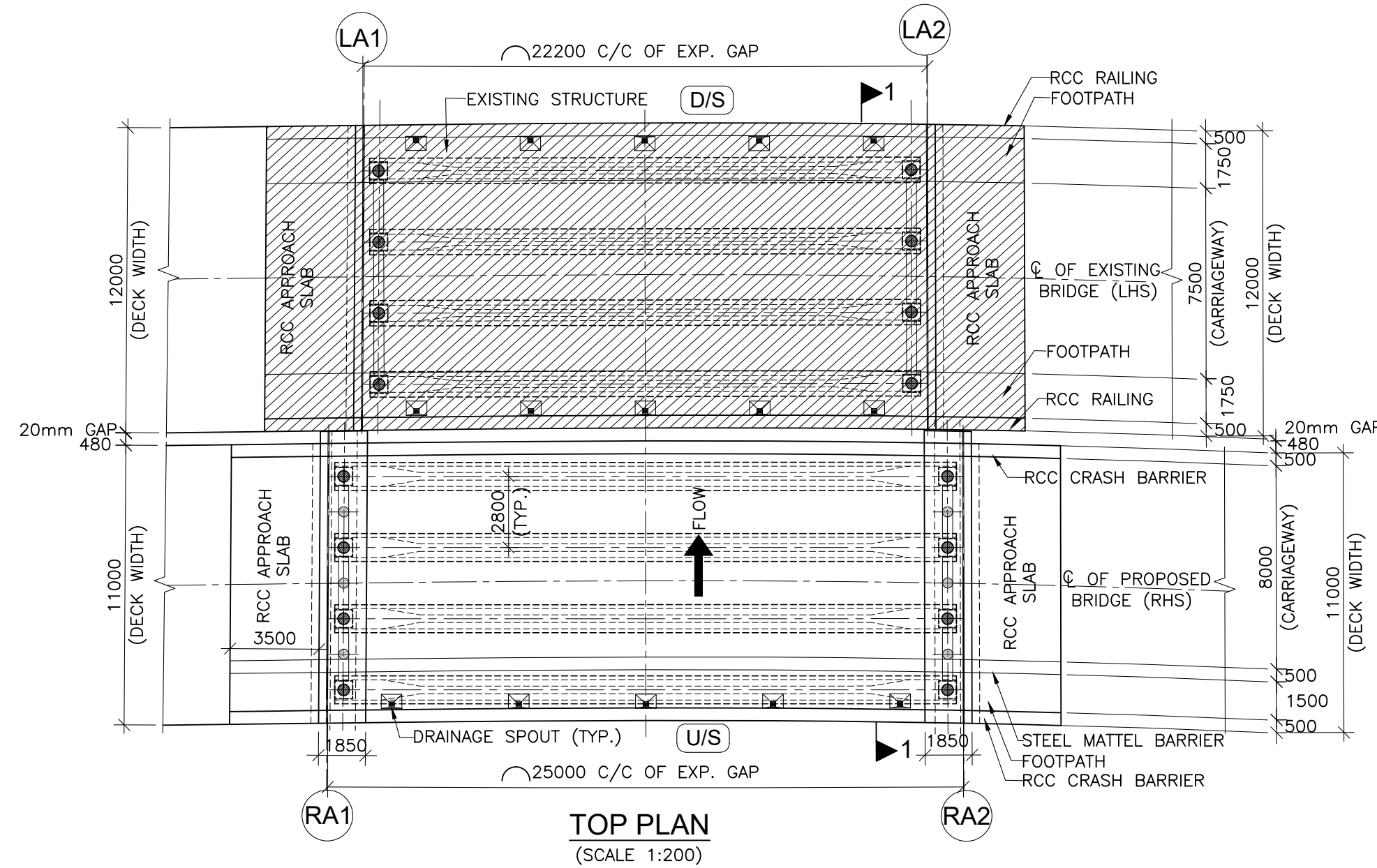
REVISION		AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khealani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
R0	NOV - 2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	  In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: HB Drawn: AH Checked: VT Approved: MK	Scale AS SHOWN	Drawing Title GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 164+949	Drawing No. NHIDCL/NH-244/VAILOO-DONIPAWA/MNB/164+949/02/R0

← VAILOO → DONIPAWA →

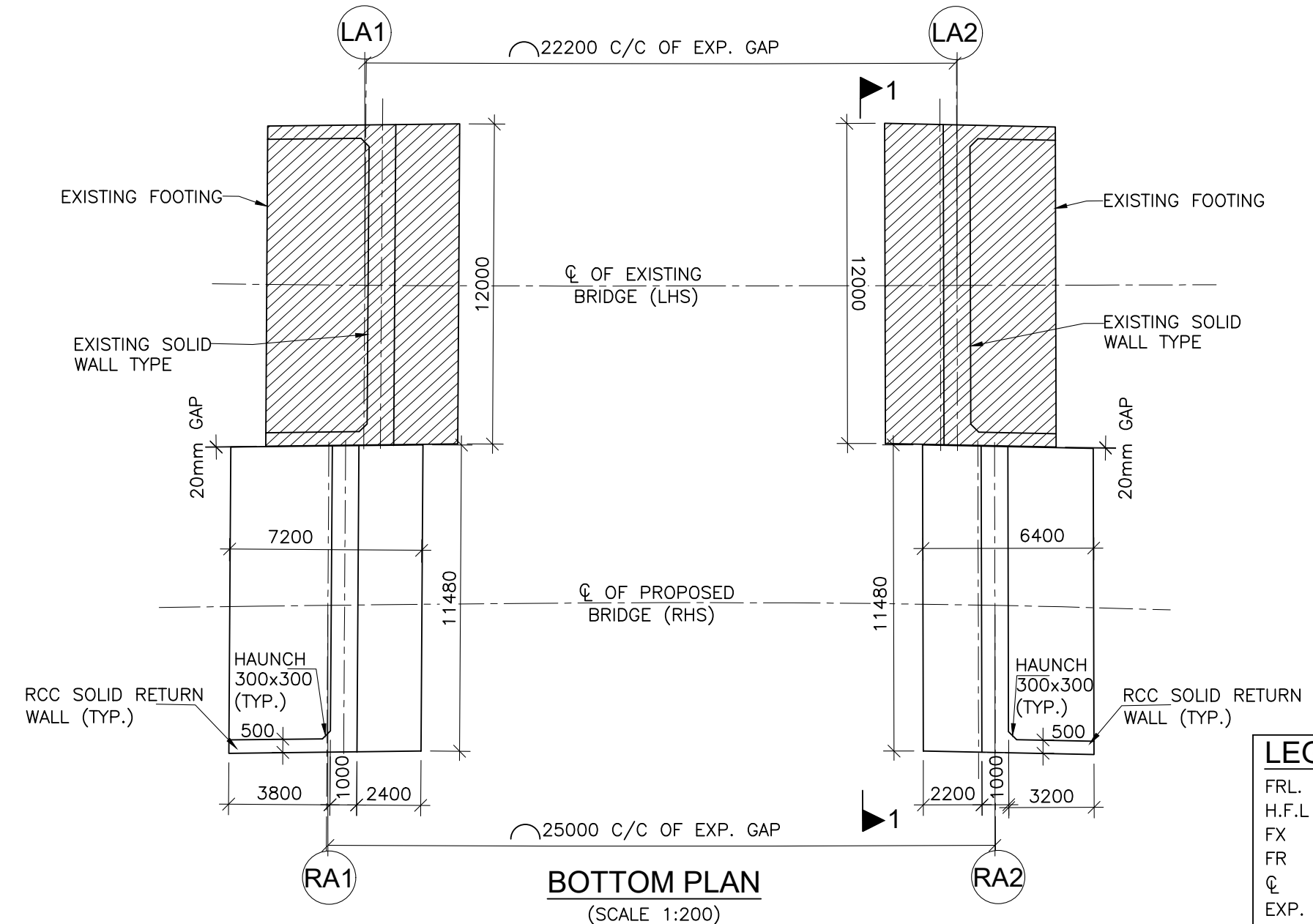


FORMATION LEVEL (m)	1759.459	1759.264
LOWEST GROUND LEVEL (m)	1754.962	1755.834
FOUNDING LEVEL (m)	1751.265	1752.170
CHAINAGE (Km)	164+997.5	165+010

LONGITUDINAL ELEVATION OF PROPOSED BRIDGE (RHS)
(SCALE 1:200)



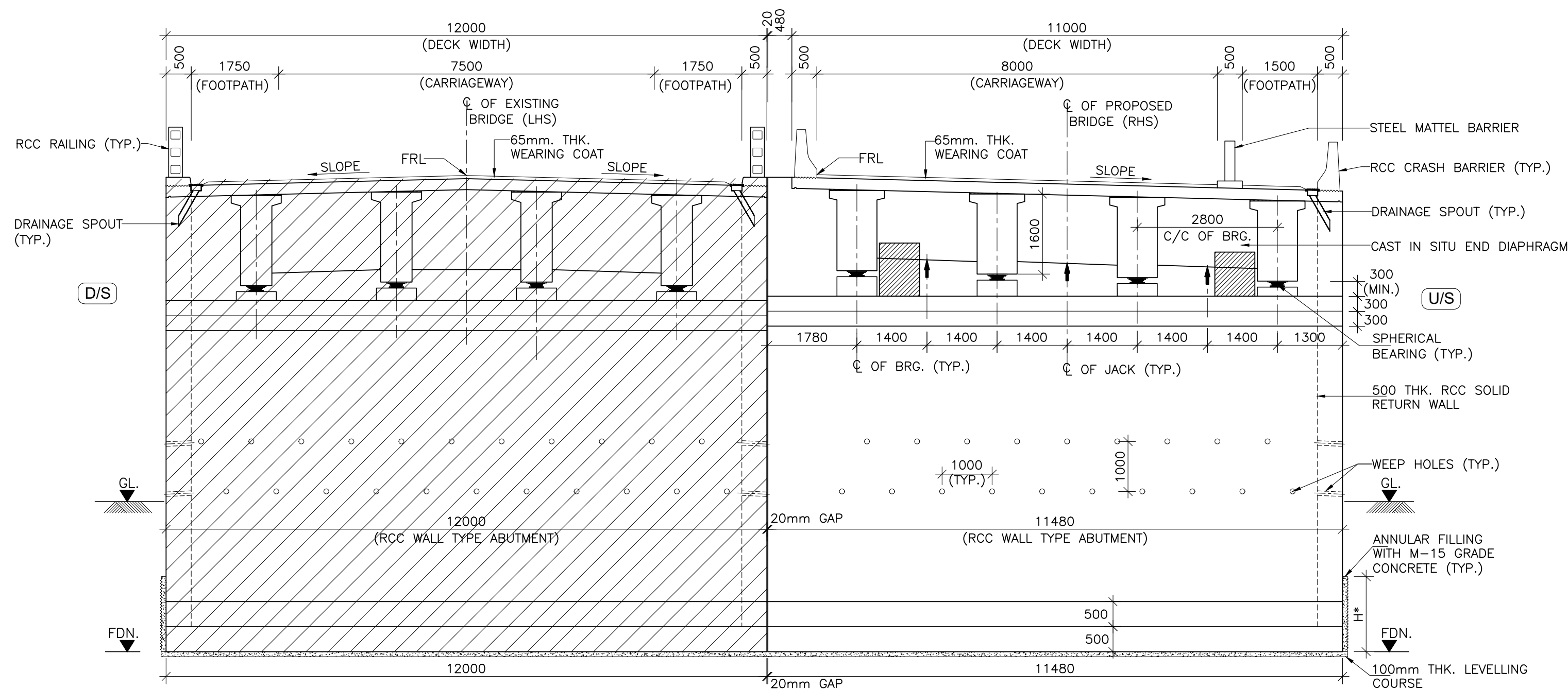
TOP PLAN
(SCALE 1:200)



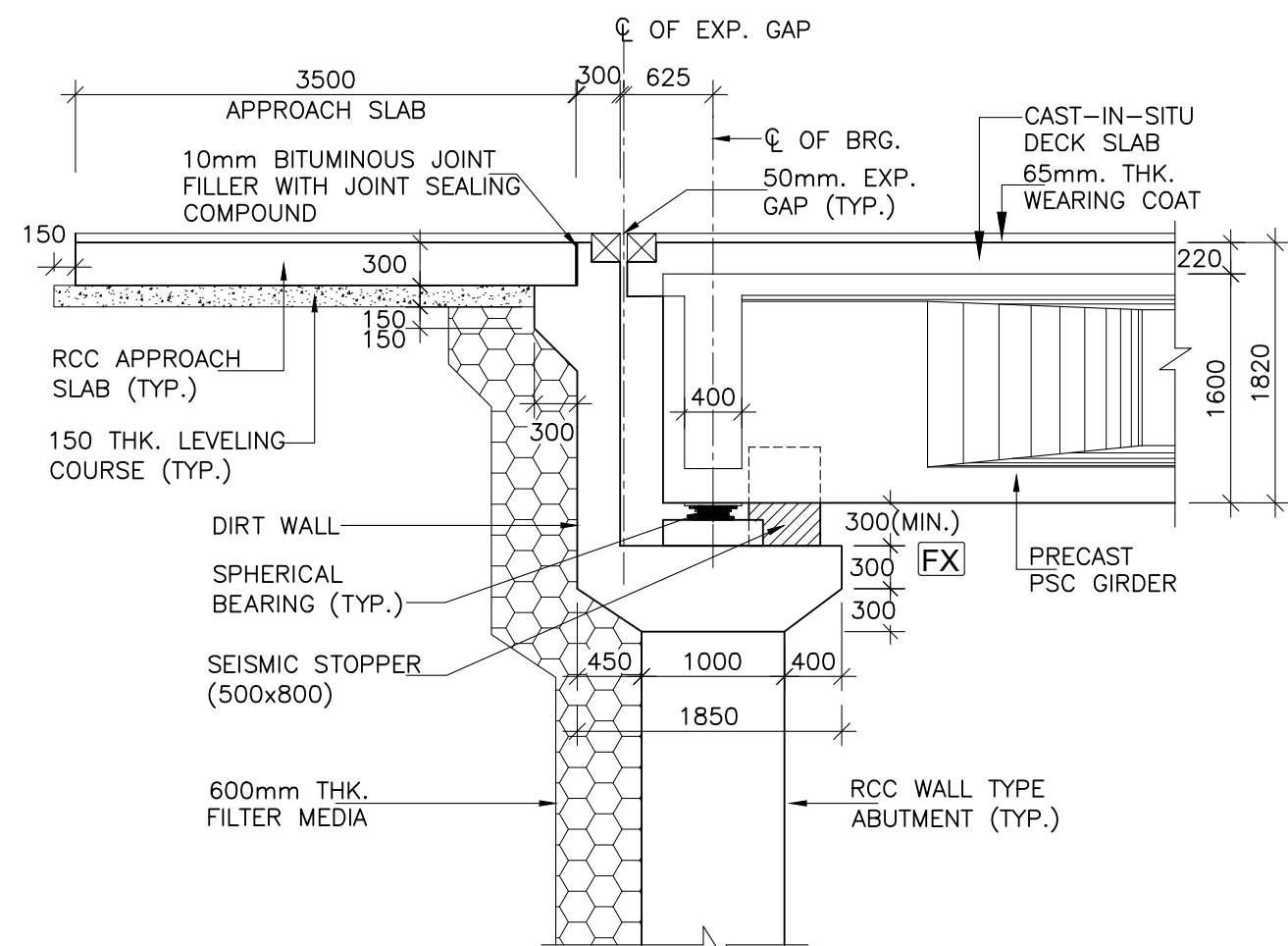
BOTTOM PLAN
(SCALE 1:200)

LEGEND:	
FRL.	: FORMATION LEVEL
H.F.L.	: HIGH FLOOD LEVEL
FX	: FIXED BEARING
FR	: FREE BEARING
CL	: CENTER LINE
EXP.	: EXPANSION
THK.	: THICKNESS
TYP.	: TYPICAL
LVL.	: LEVEL
GL.	: GROUND LEVEL
LBL.	: LOWEST BED LEVEL
FDN.	: FOUNDING LEVEL
RHS	: RIGHT HAND SIDE
LHS	: LEFT HAND SIDE
D/S	: DOWNSTREAM
U/S	: UPSTREAM
EXISTING STRUCTURE:	

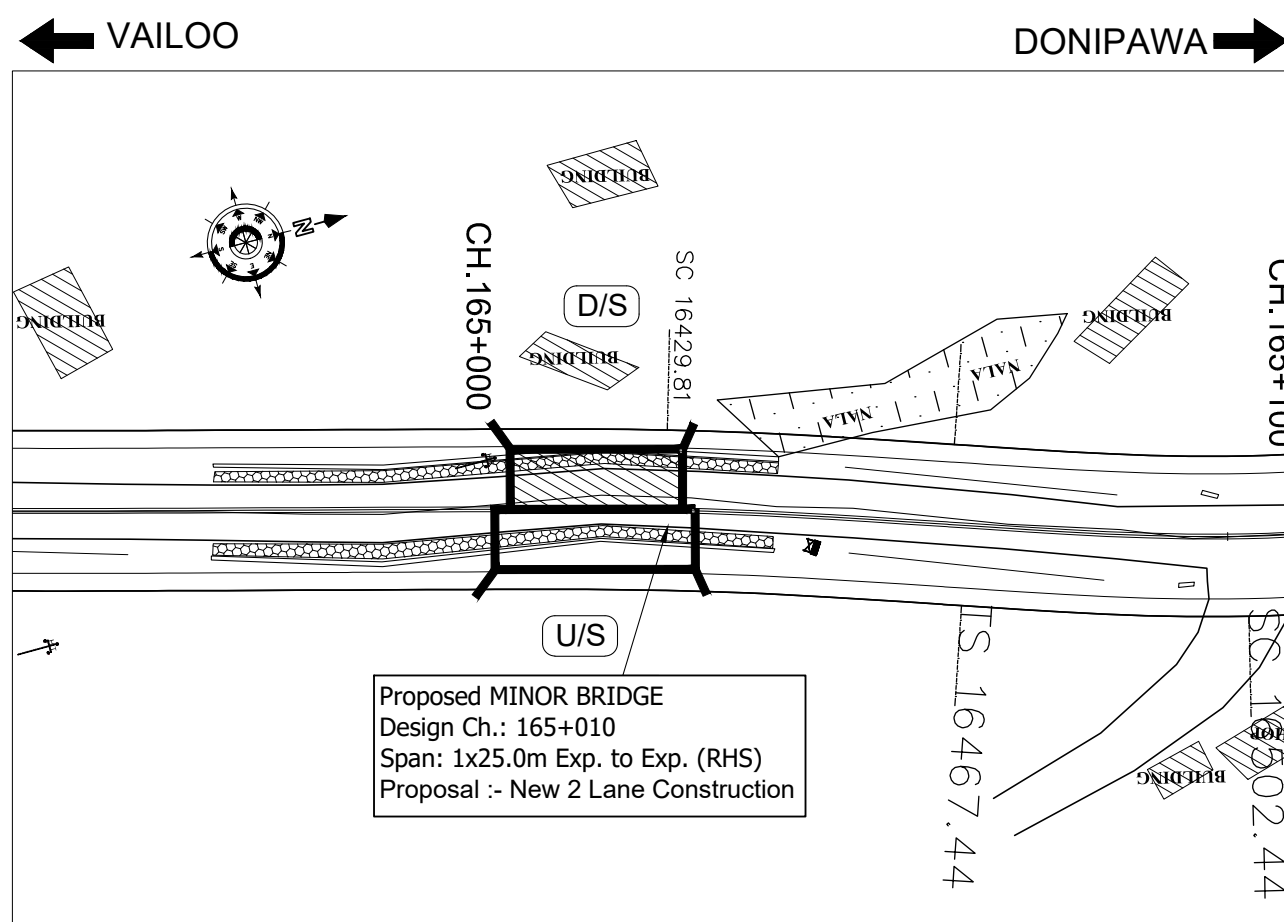
REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Final Detailed Project Report	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
			 	Designed: HB Drawn: AH Checked: VT Approved: MK	Drawing No. NHIDCL/NH-244/VAILOO-DONIPAWA/ MNB/165+010/01/R0



SECTION 1-1
(SCALE 1:75)



DETAIL- 'A'
(SCALE 1:50)



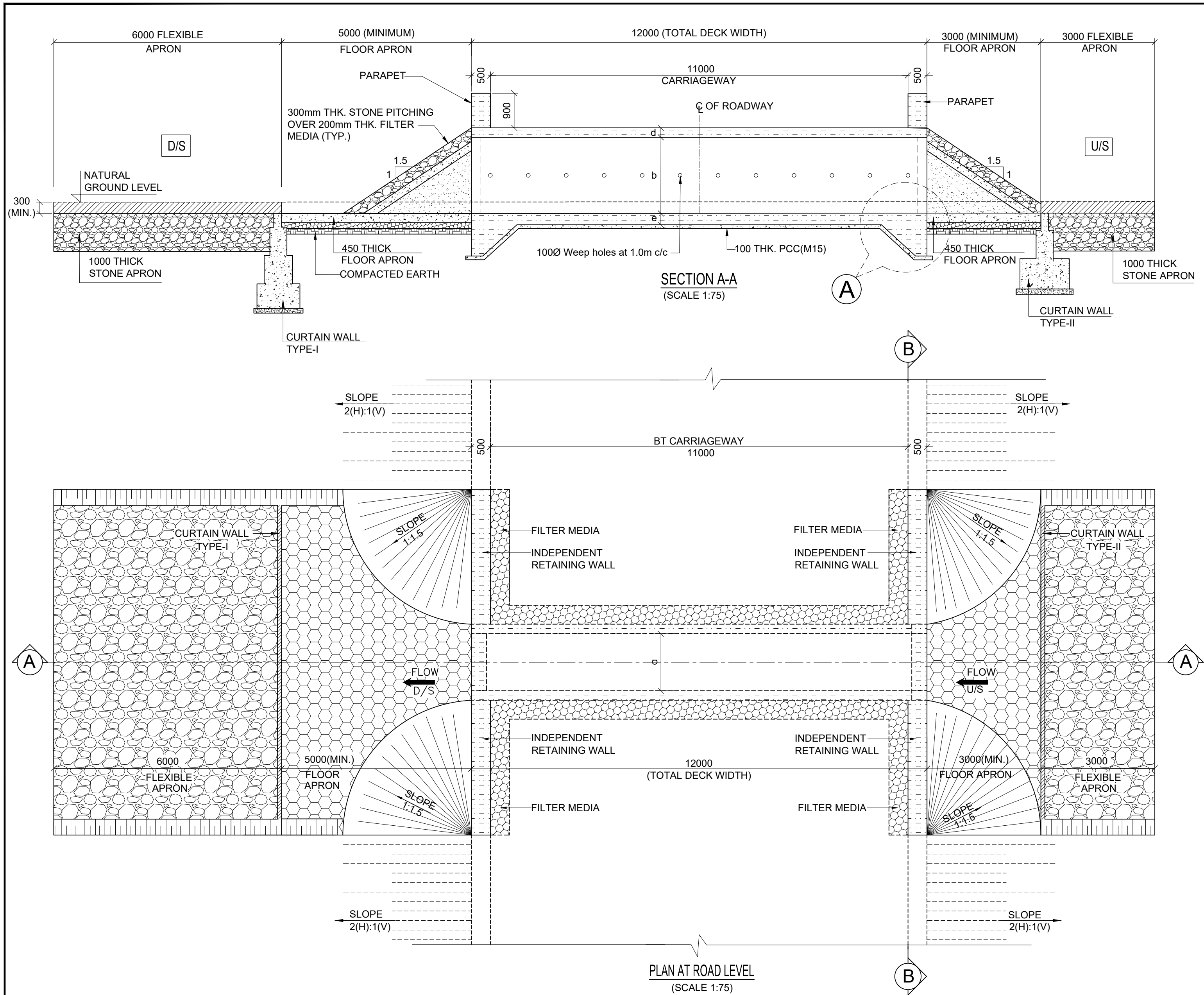
KEY PLAN
(SCALE 1:1000)

NOTES:-

- ALL DIMENSIONS ARE IN mm AND LEVELS IN METERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSIONS SHALL BE SCALED.
- i) EACH CARRIAGEWAY OF THE PROPOSED BRIDGE IS TO BE DESIGNED FOR ONE LANE OF IRC CLASS 70R + ONE LANE OF IRC CLASS A OR 3 LANES OF IRC CLASS A LOADING GOVERNS.
ii) THIS BRIDGE IS ALSO TO BE DESIGNED FOR IRC CLASS SV LOADING: SPECIAL MULTI AXLE HYDRAULIC TRAILER VEHICLE (PRIME MOVER WITH 20 AXLE TRAILER-GVW=385 Tonnes)
- CONCRETE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES AS FOLLOWS :-
PSC GIRDER -45 MPa
RCC CAST-IN-SITU DECK SLAB -40 MPa
ABUTMENT, ABUTMENT CAP, DIRT WALL, & FOUNDATION -35 MPa
RCC CRASH BARRIER -40 MPa
RCC APPROACH SLAB -30 MPa
LEVELING COURSE UNDER APPROACH SLAB -15 MPa
LEVELING COURSE UNDER FOUNDATION -10 MPa
PEDESTAL/STOPPER -45 MPa
- THE REINFORCING BARS SHALL BE OF THERMO MECHANICALLY TREATED/CORROSION RESISTANT STEEL (TMT/CRS) (GRADE DESIGNATION Fe-500D) CONFORMING TO IS:1786 STANDARDS.
- CLEAR COVER TO OUTER MOST STEEL SHALL BE AS UNDER:-
a) FOR SUPER STRUCTURE -50mm
b) FOR FOUNDATION -75mm
c) FOR SUBSTRUCTURE:
i) EARTH FACE -75mm ii) NON EARTH FACE -50mm
- 65mm THK. WEARING COURSE COMPRISING OF 40mm THK. ASPHALTIC CONCRETE OVER LAID WITH 25mm THK. MASTIC ASPHALT SHALL BE PROVIDED AS PER SECTION 500 OF MORTH SPECIFICATIONS.
- SPHERICAL BEARINGS SHALL BE DESIGNED AS PER PROVISION OF IRC : 83 (PART-IV 2014).
- STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER PROVISION OF SP-69.
- BACK FILLING BEHIND ABUTMENT SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX:6 OF IRC:78-2014 HAVING PROPERTIES
 $C=0$, $\phi \geq 35^\circ$, $\delta=22.5^\circ$ & $y_d = 20 \text{ KN/m}^3$
- 100mm DIA WEEP HOLES AT 1000mm C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN STAGGERED MANNER IN VERTICAL WALLS OF THE ABUTMENT SHAFT AND RETURN WALL FROM 150mm ABOVE G.L IN ONE OR TWO LAYERS AT A SLOPE OF 1 VERTICAL TO 20 HORIZONTAL TOWARDS THE DRAINING FACE.
- WATER TO BE USED IN CONCRETING & CURING SHALL CONFORM TO CLAUSE 18.8.4(4) IRC : 112:2011.
- SAFE BEARING CAPACITY CONSIDERED IN DESIGN AT PROPOSED FOUNDING LEVEL IS 35 t/m². THIS SHALL BE ASCERTAINED BEFORE EXECUTION OF WORK AT SITE.
- THE BRIDGE IS DESIGNED FOR SEISMIC ZONE-V
- MODERATE CONDITION OF EXPOSURE SHALL BE CONSIDERED IN DESIGN.
- THE MINIMUM EMBEDMENT OF THE FOUNDATIONS INTO THE ROCK BELOW SHALL BE AS FOLLOWS:
FOR ROCKS OF MODERATELY STRONG - 0.6M
FOR ROCKS OF MODERATELY WEAK - 1.5M
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT HIGHWAY DRAWING. FRL & CAMBER, SUPER ELEVATION AT PARTICULAR LOCATION SHALL BE VERIFIED WITH THE HIGHWAY DRAWINGS.
- RCC RETAINING WALL SHALL BE PROVIDED UPTO 4M HEIGHT ABOVE GROUND LEVEL. BELOW 4M HEIGHT, PCC TOE WALL SHALL BE PROVIDED.
- PEDESTAL BEARING SHALL BE PLACED BETWEEN TRUE HORIZONTAL SURFACES.

REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	Project	Drawing Title
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.	GENERAL ARRANGEMENT DRAWING FOR MINOR BRIDGE AT CH. 165+010
				Drawing.No.	NHIDCL/NH-244/VAILOO-DONIPAWA/ MNB/165+010/02/R0

CULVERTS



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, AND LEVELS ARE IN METERS, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DRAWING SHALL BE SCALED.
 2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN & PROFILE AND OTHER RELEVANT DRAWINGS.
 3. PROTECTION WORKS SHOWN ARE INDICATIVE ONLY. THESE SHALL BE VERIFIED AND NECESSARY MODIFICATIONS TO BE CARRIED OUT AS PER SITE CONDITION.
 4. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANULAR FILLS WITH LAYERS NOT EXCEEDING 300MM
 5. GRADE OF CONCRETE FOR VARIOUS COMPONENTS ARE MENTIONED IN GENERAL NOTES.
 6. MINIMUM NET BEARING CAPACITY REQUIRED FOR SOIL IS $10T/M^2$
 7. RETURN WALL TYPE (CANTILEVER,PCC OR RCC) SHALL BE FINALISED ON SITE IN CONSULTATION WITH AUTHORITY ENGINEER.
 8. WEEP HOLES AND FLITTER MEDIA SHALL NOT BE CONSIDERED UP TO 3M HEIGHT OF CULVERTS.
- 'DK' IS DEPTH OF KEY AT BASE SLAB.
- | | |
|----------------------------|---------------|
| 9. FOR BASE SLAB THICKNESS | VALUE OF 'DK' |
| UPTO 900mm | 1200mm. |
| GREATER THAN 900mm | e+300mm |
- e = BASE SLAB THICKNESS

REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
				Designed: AK Drawn: KS Checked: VT Approved: MK	Drawing Title GENERAL ARRANGEMENT DRAWING FOR SINGLE CELL BOX CULVERT (TYPE-1)
				Scale AS SHOWN	Drawing.No. NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-1/01/R0

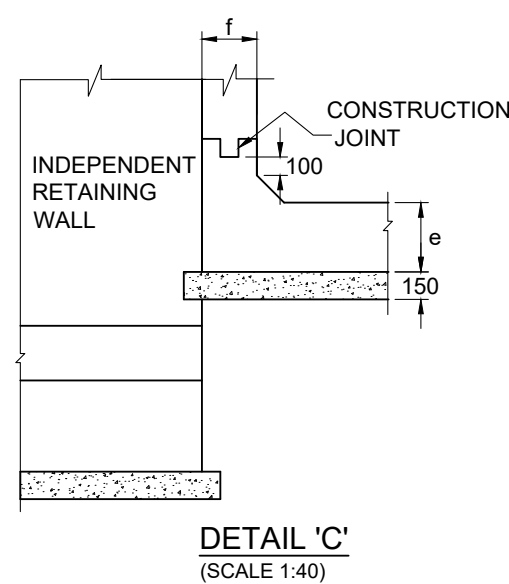
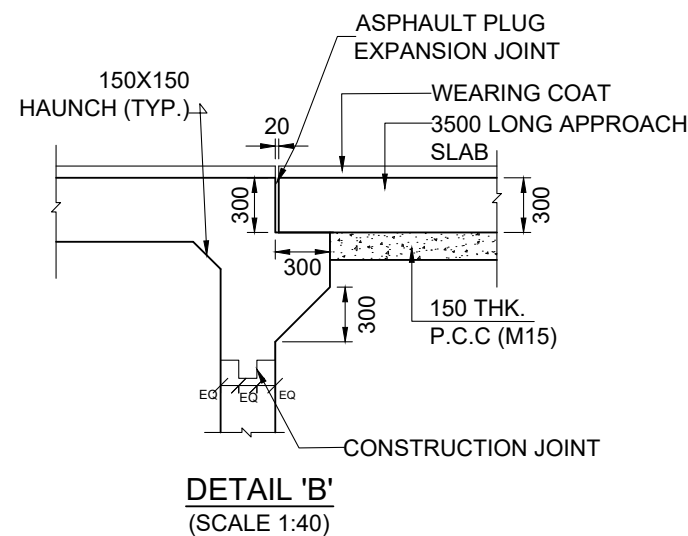
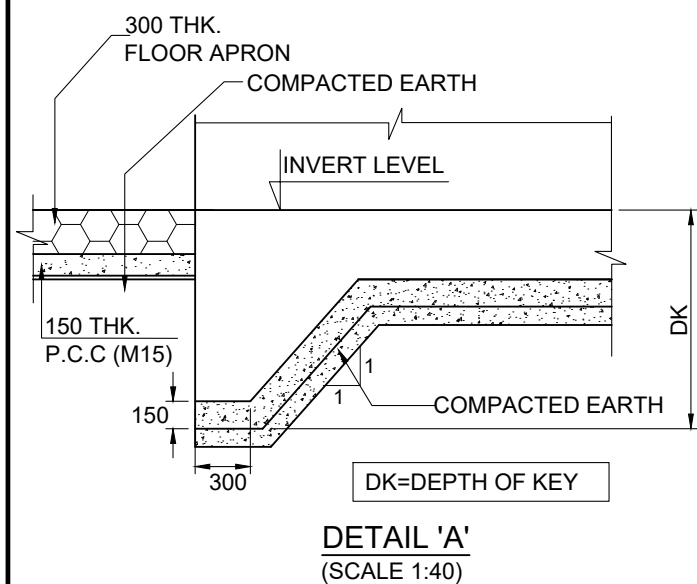
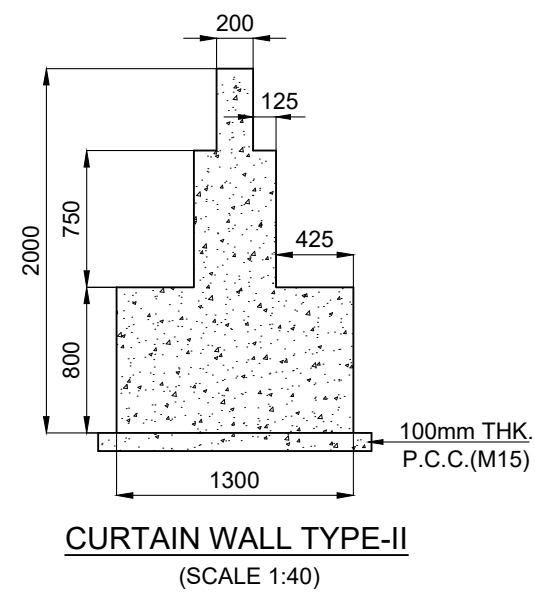
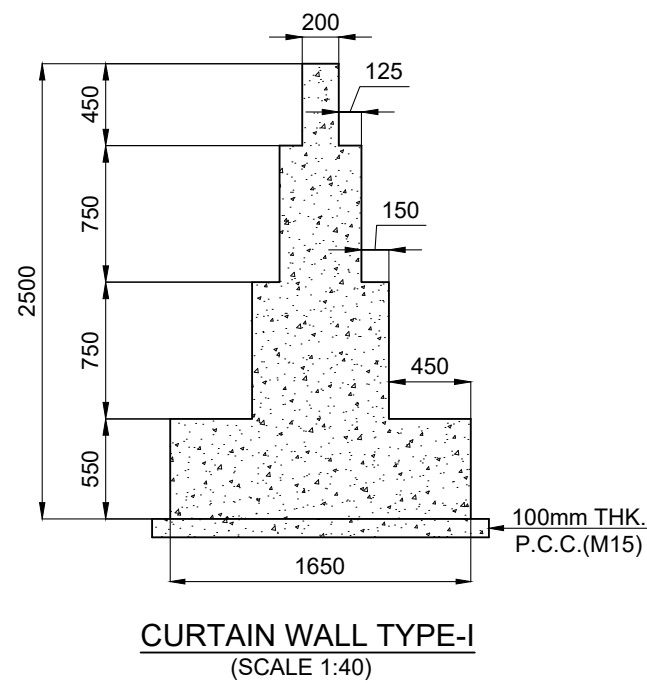
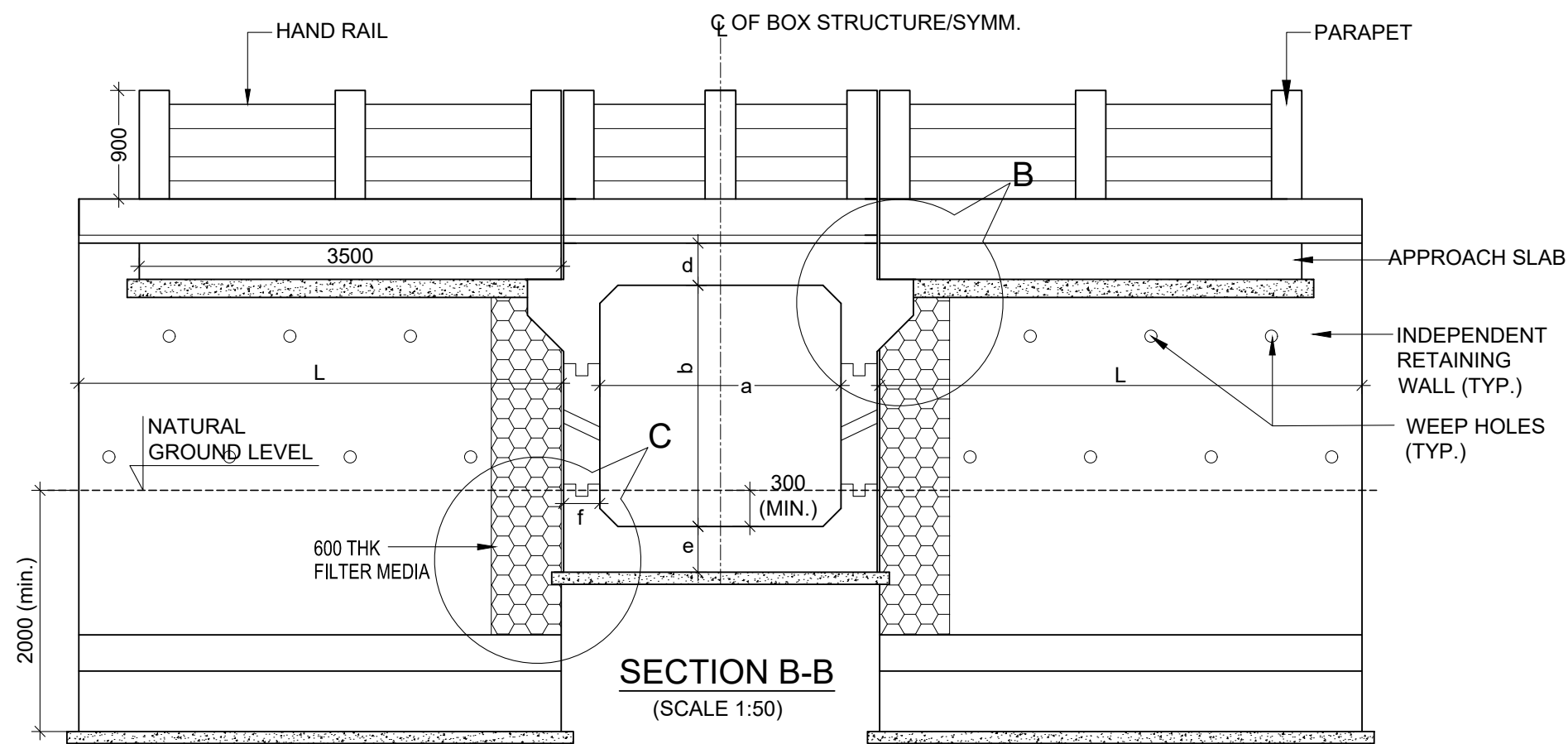
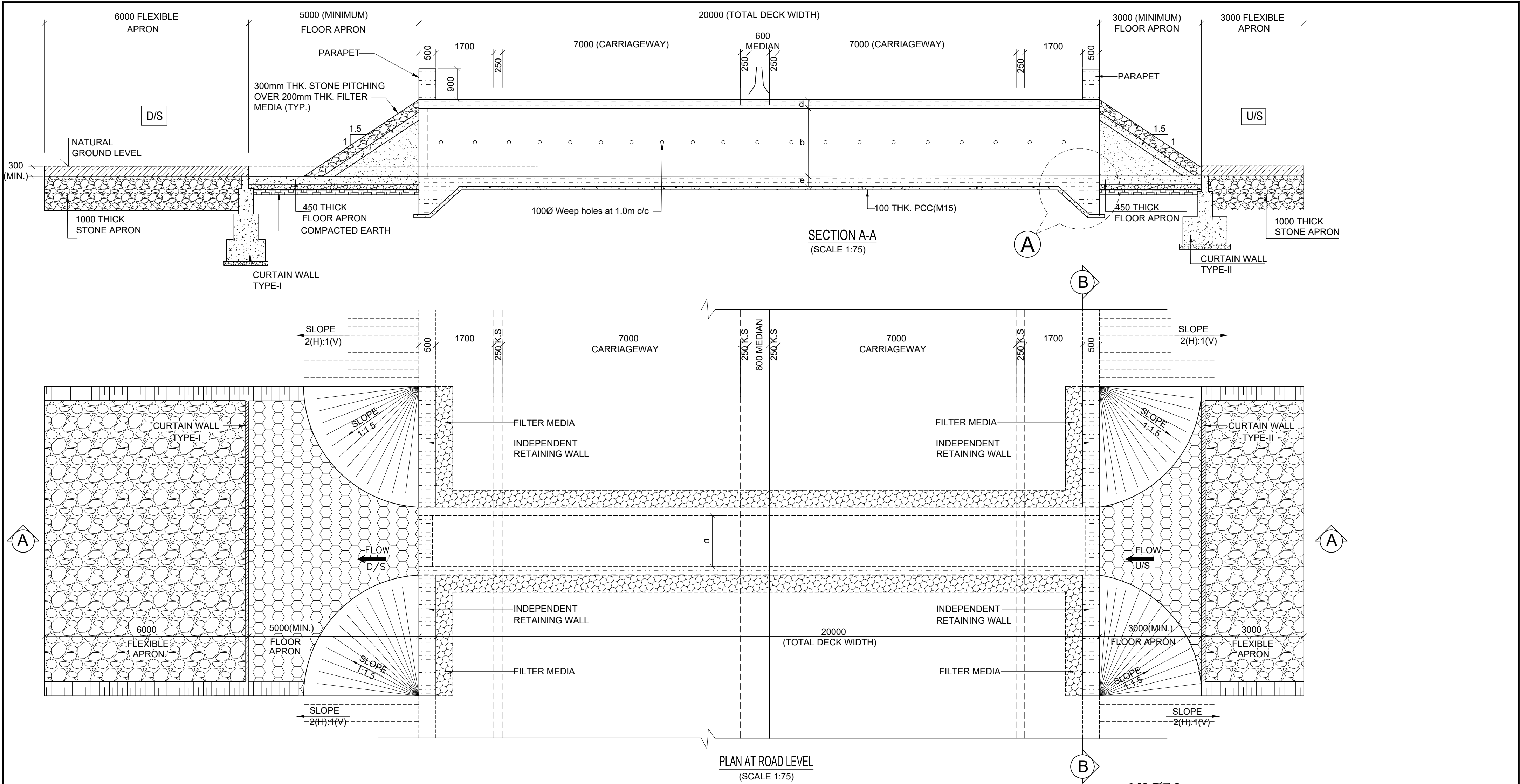


TABLE SHOWING SALIENT DIMENSIONS

PROPOSED CHAINAGE	BOX CELL DESIGNATION Nc/ab/Ec	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	L (mm)
148+654	1/22/0	2000	2000	-	225	250	250	3500
151+951	1/22/0	2000	2000	-	225	250	250	3500
152+280	1/22/0	2000	2000	-	225	250	250	3500
153+569	1/22/0	2000	2000	-	225	250	250	3500
153+819	1/22/0	2000	2000	-	225	250	250	3500
158+121	1/22/0	2000	2000	-	225	250	250	3500
158+392	1/22/0	2000	2000	-	225	250	250	3500
158+667	1/22/0	2000	2000	-	225	250	250	3500
160+449	1/32/0	3000	2000	-	275	300	275	3500
160+701	1/64/0	6000	4000	-	500	600	500	6000
160+897	1/43/0	4000	3000	-	350	400	375	4500
163+817	1/43/0	4000	3000	-	350	400	375	4500
164+134	1/43/0	4000	3000	-	350	400	375	4500
164+259	1/22/0	2000	2000	-	225	250	250	3500
164+334	1/43/0	4000	3000	-	350	400	375	4500
164+525	1/22/0	2000	2000	-	225	250	250	3500
164+620	1/22/0	2000	2000	-	225	250	250	3500
167+104	1/22/0	2000	2000	-	225	250	250	3500
167+312	1/22/0	2000	2000	-	225	250	250	3500
168+797	1/43/0	4000	3000	-	350	400	375	4500
169+269	1/22/0	2000	2000	-	225	250	250	3500
169+639	1/64/0	6000	4000	-	500	600	500	6000
171+967	1/22/0	2000	2000	-	225	250	250	3500
173+919	1/22/0	2000	2000	-	225	250	250	3500
173+991	1/22/0	2000	2000	-	225	250	250	3500
174+396	1/32/0	3000	2000	-	275	300	275	3500

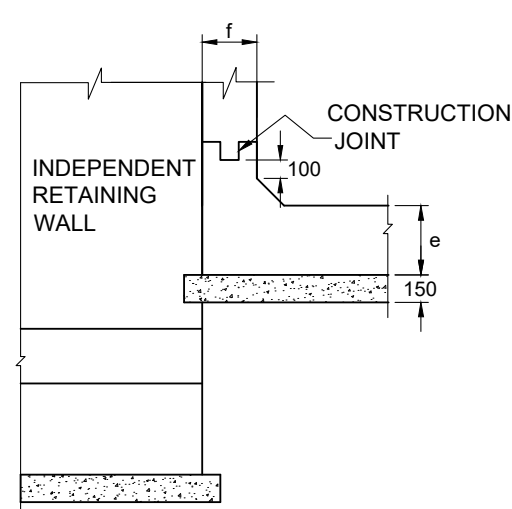
REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: AK Drawn: KS Checked: VT Approved: MK	Scale AS SHOWN	Drawing Title GENERAL ARRANGEMENT DRAWING FOR SINGLE CELL BOX CULVERT (TYPE-1)
						Drawing.No. NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-1/02/R0



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, AND LEVELS ARE IN METERS, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DRAWING SHALL BE SCALED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN & PROFILE AND OTHER RELEVANT DRAWINGS.
3. PROTECTION WORKS SHOWN ARE INDICATIVE ONLY. THESE SHALL BE VERIFIED AND NECESSARY MODIFICATIONS TO BE CARRIED OUT AS PER SITE CONDITION.
4. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANULAR FILLS WITH LAYERS NOT EXCEEDING 300MM
5. DESIGN, DIMENSION AND REINFORCEMENT DETAILING TO BE FOLLOWED FROM MINISTRY PUBLICATION "STANDARD DRAWING FOR BOX CELL CULVERT".
6. GRADE OF CONCRETE FOR VARIOUS COMPONENTS ARE MENTIONED IN GENERAL NOTES.
7. MINIMUM NET BEARING CAPACITY REQUIRED FOR SOIL IS 15T/M²
8. RETURN WALL TYPE(CANTILEVER,PCC OR RCC) SHALL BE FINALISED ON SITE IN CONSULTATION WITH AUTHORITY ENGINEER.

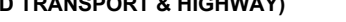

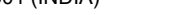
REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: PK Drawn: KS Checked: VT Approved: MK	Drawing Title Drawing.No.	GENERAL ARRANGEMENT DRAWING FOR SINGLE CELL BOX CULVERT (TYPE-2) NHIDCL/NH-244/VAILOO-DONIPAWA/ CUL/TYPE-2/01/R0

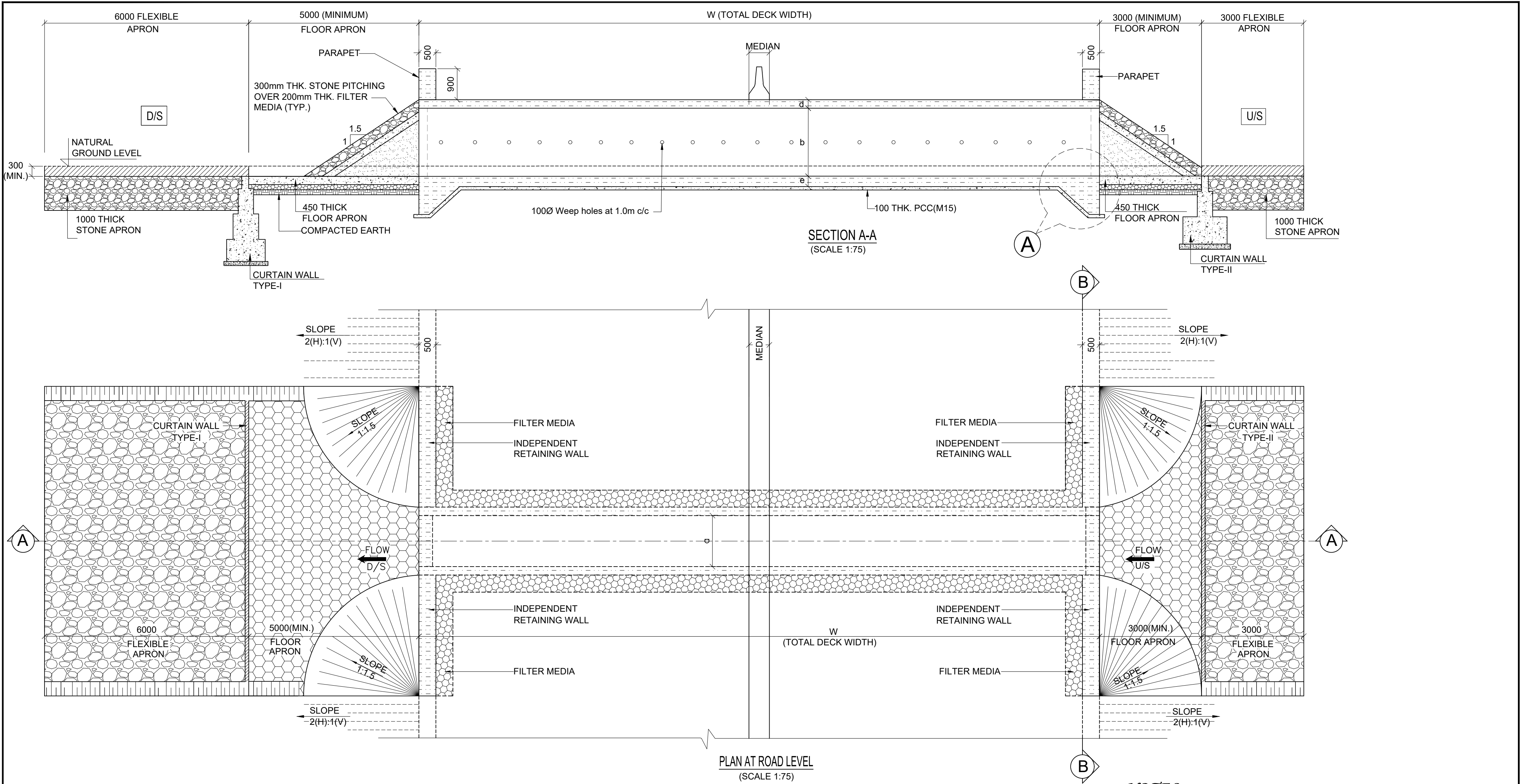


DETAIL 'C'

(SCALE 1:40)

PROPOSED CHAINAGE	BOX CELL DESIGNATION Nc/ab/Ec	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	L (mm)
163+139	1/22/0	2000	2000	-	225	250	250	3500
163+337	1/43/0	4000	3000	-	350	400	375	4500
163+368	1/22/0	2000	2000	-	225	250	250	3500
163+431	1/22/0	2000	2000	-	225	250	250	3500
163+484	1/22/0	2000	2000	-	225	250	250	3500
163+549	1/22/0	2000	2000	-	225	250	250	3500
164+902	1/22/0	2000	2000	-	225	250	250	3500
165+085	1/33/0	3000	3000	-	275	300	275	4500
165+237	1/22/0	2000	2000	-	225	250	250	3500
165+404	1/22/0	2000	2000	-	225	250	250	3500
165+607	1/33/0	3000	3000	-	275	300	275	4500
165+808	1/22/0	2000	2000	-	225	250	250	3500
166+242	1/22/0	2000	2000	-	225	250	250	3500
166+327	1/22/0	2000	2000	-	225	250	250	3500
166+614	1/22/0	2000	2000	-	225	250	250	3500
166+743	1/43/0	4000	3000	-	350	400	375	4500
166+784	1/22/0	2000	2000	-	225	250	250	3500
167+794	1/43/0	4000	3000	-	350	400	375	4500
168+153	1/22/0	2000	2000	-	225	250	250	3500
168+304	1/22/0	2000	2000	-	225	250	250	3500
168+449	1/22/0	2000	2000	-	225	250	250	3500
171+422	1/22/0	2000	2000	-	225	250	250	3500
171+582	1/22/0	2000	2000	-	225	250	250	3500
172+422	1/22/0	2000	2000	-	225	250	250	3500
172+667	1/22/0	2000	2000	-	225	250	250	3500
172+872	1/63/0	6000	3000	-	425	500	450	4500
173+627	1/22/0	2000	2000	-	225	250	250	3500
173+808	1/22/0	2000	2000	-	225	250	250	3500
175+127	1/22/0	2000	2000	-	225	250	250	3500
175+462	1/22/0	2000	2000	-	225	250	250	3500
175+547	1/43/0	4000	3000	-	350	400	375	4500
175+677	1/22/0	2000	2000	-	225	250	250	3500
175+828	1/22/0	2000	2000	-	225	250	250	3500
176+414	1/22/0	2000	2000	-	225	250	250	3500
176+382	1/22/0	2000	2000	-	225	250	250	3500

REVISION		AMENDMENT \ ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>In Association with</div> <div>Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</div>	FINAL DETAILED PROJECT REPORT		Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
R0	NOV - 2020						Designed: PK	Scale
					Drawn: KS	AS SHOWN	Drawing.No.	
			Checked: VT					
			Approved: MK					



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS, AND LEVELS ARE IN METERS, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DRAWING SHALL BE SCALED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN & PROFILE AND OTHER RELEVANT DRAWINGS.
3. PROTECTION WORKS SHOWN ARE INDICATIVE ONLY. THESE SHALL BE VERIFIED AND NECESSARY MODIFICATIONS TO BE CARRIED OUT AS PER SITE CONDITION.
4. SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANULAR FILLS WITH LAYERS NOT EXCEEDING 300MM
5. DESIGN, DIMENSION AND REINFORCEMENT DETAILING TO BE FOLLOWED FROM MINISTRY PUBLICATION "STANDARD DRAWING FOR BOX CELL CULVERT".
6. GRADE OF CONCRETE FOR VARIOUS COMPONENTS ARE MENTIONED IN GENERAL NOTES.
7. MINIMUM NET BEARING CAPACITY REQUIRED FOR SOIL IS 15T/M²
8. RETURN WALL TYPE(CANTILEVER,PCC OR RCC) SHALL BE FINALISED ON SITE IN CONSULTATION WITH AUTHORITY ENGINEER.

REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: PK Drawn: KS Checked: VT Approved: MK Scale AS SHOWN	Drawing Title	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
					Drawing No.	NHIDCL/NH-244/VAILOO-DONIPAWA/ CUL/TYPE-3/01/R0

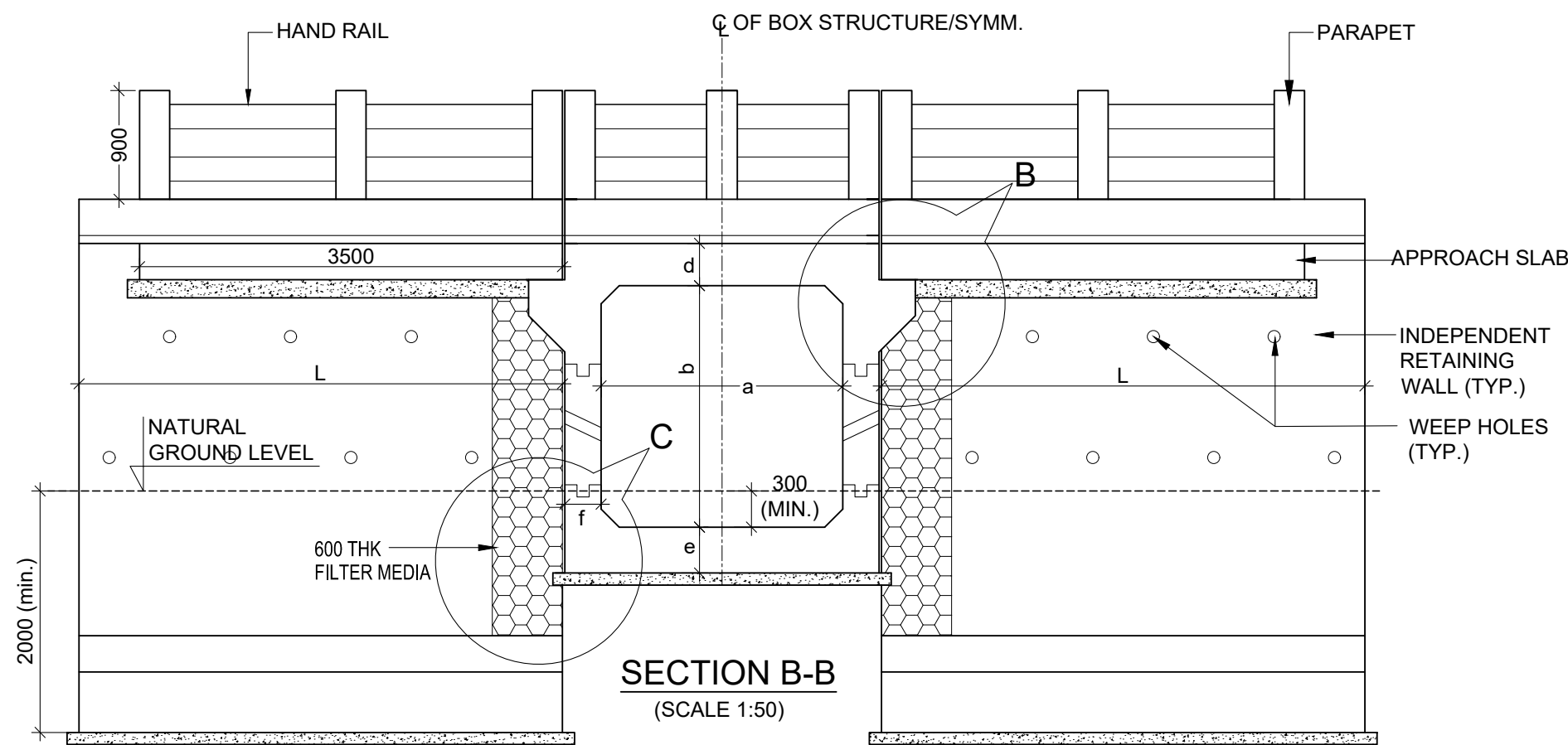
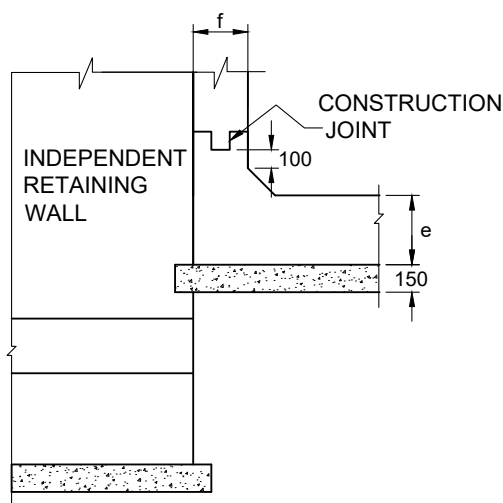
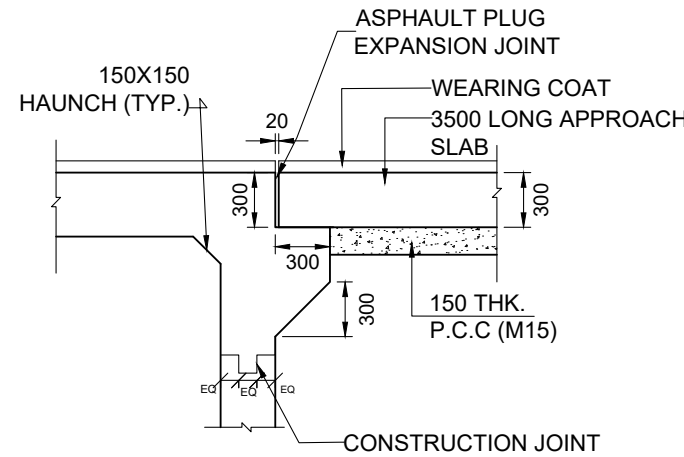
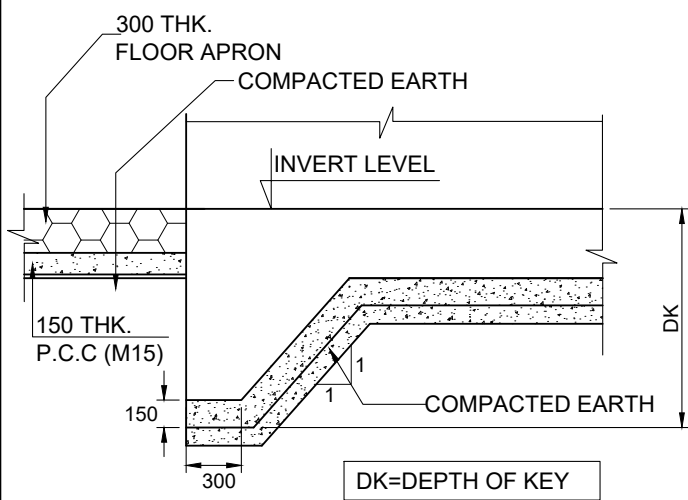
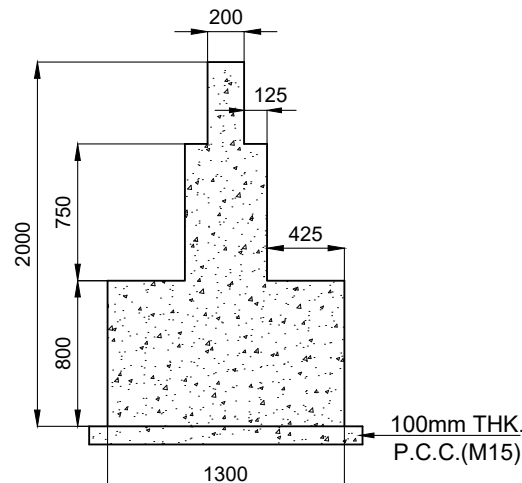
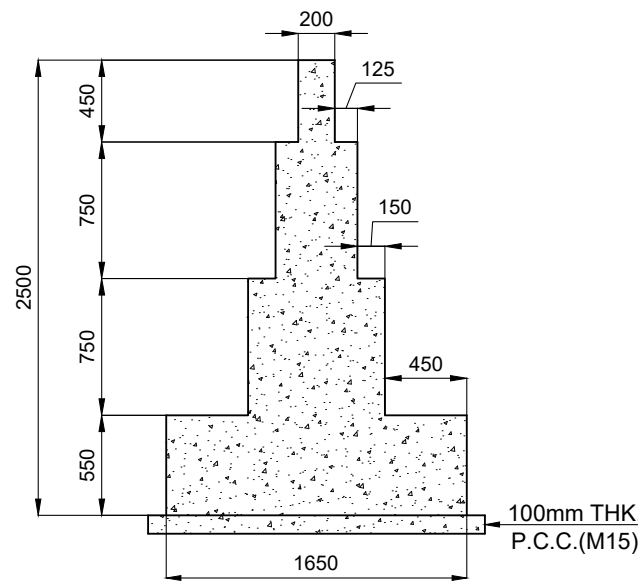



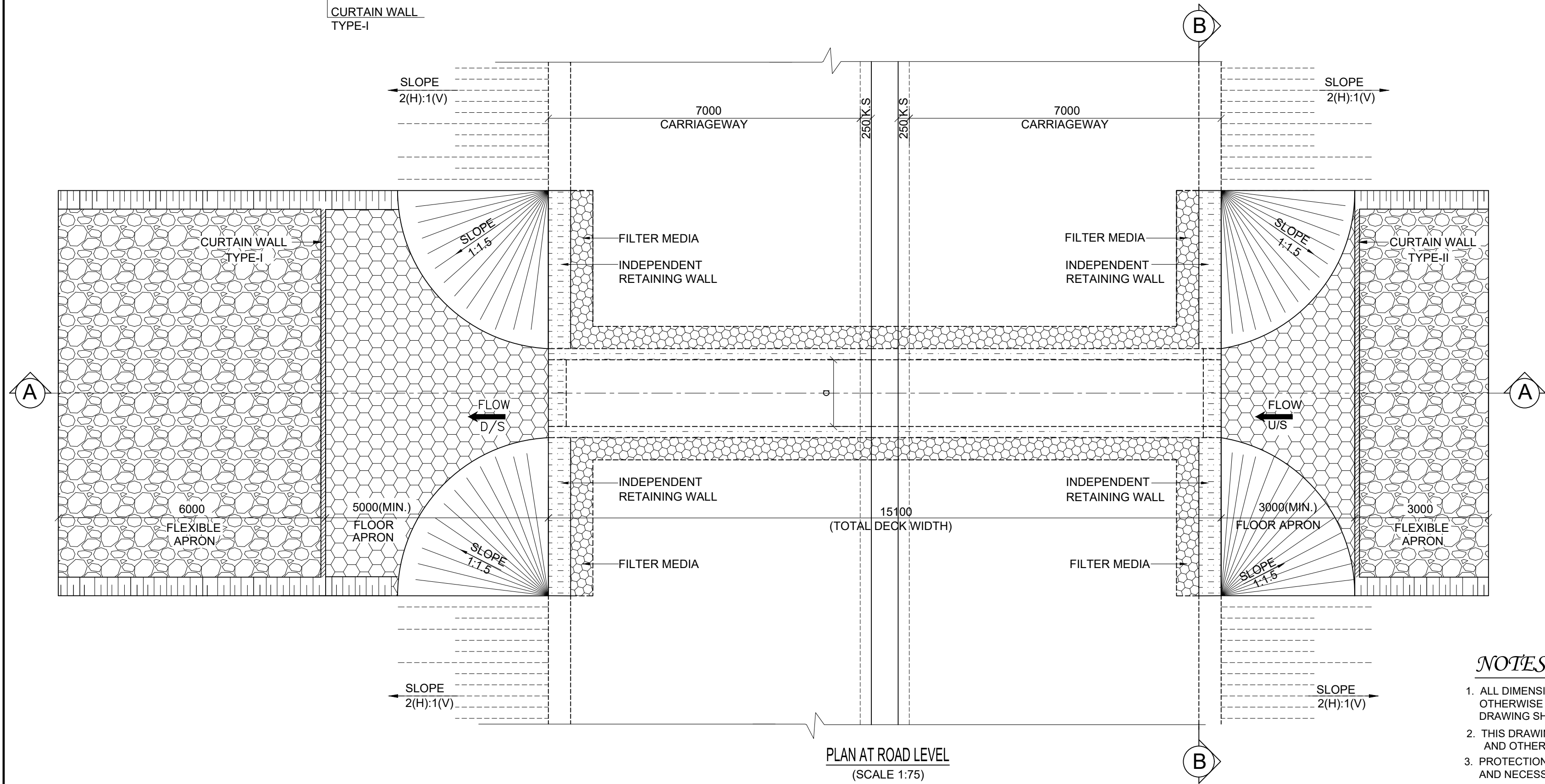
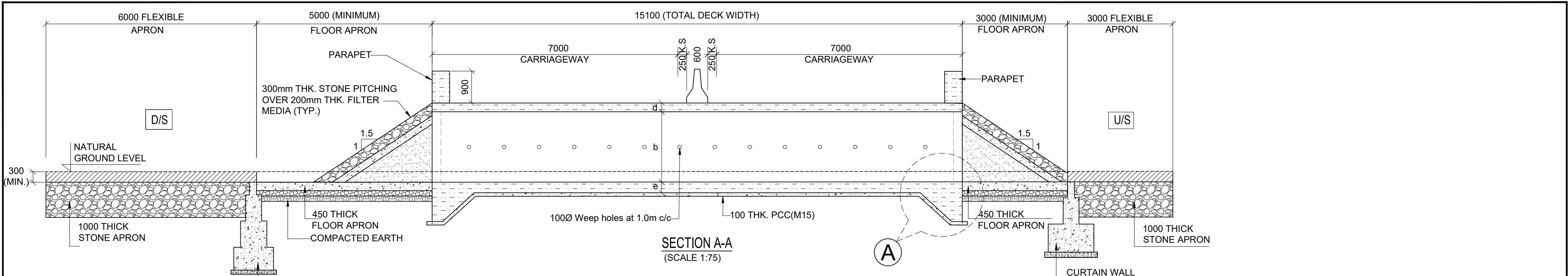


TABLE SHOWING SALIENT DIMENSIONS

PROPOSED CHAINAGE	BOX CELL DESIGNATION Nc/ab/Ec	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	L (mm)	DECK WIDTH (W) (mm)	Skew Angle
170+897	1/43/0	4000	3000	-	500	600	500	4500	30000	48°



REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT		Project
R0	NOV - 2020	<div><div></div><div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div></div>	<div><div></div><div>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)</div></div> <div><div></div><div>In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,</div></div>	Designed: PK Drawn: KS Checked: VT Approved: MK		Scale AS SHOWN
				Project		Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
				Drawing Title		GENERAL ARRANGEMENT DRAWING FOR SINGLE CELL BOX CULVERT (TYPE-3)
				Drawing.No.		NHIDCL/NH-244/VAILOO-DONIPAWA/ CUL/TYPE-3/02/R0



NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS, AND LEVELS ARE IN METERS, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DRAWING SHALL BE SCALED.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN & PROFILE AND OTHER RELEVANT DRAWINGS.
- PROTECTION WORKS SHOWN ARE INDICATIVE ONLY. THESE SHALL BE VERIFIED AND NECESSARY MODIFICATIONS TO BE CARRIED OUT AS PER SITE CONDITION.
- SOFT AND LOOSE PATCHES IN THE BEARING AREA ARE TO BE REPLACED BY COMPACTED GRANULAR FILLS WITH LAYERS NOT EXCEEDING 300MM
- DESIGN, DIMENSION AND REINFORCEMENT DETAILING TO BE FOLLOWED FROM MINISTRY PUBLICATION "STANDARD DRAWING FOR BOX CELL CULVERT".
- GRADE OF CONCRETE FOR VARIOUS COMPONENTS ARE MENTIONED IN GENERAL NOTES.
- MINIMUM NET BEARING CAPACITY REQUIRED FOR SOIL IS 15 T/M^2
- RETURN WALL TYPE(CANTILEVER,PCC OR RCC) SHALL BE FINALISED ON SITE IN CONSULTATION WITH AUTHORITY ENGINEER.

REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: PK Drawn: KS Checked: VT Approved: MK Scale AS SHOWN	Drawing Title Drawing.No.	GENERAL ARRANGEMENT DRAWING FOR SINGLE CELL BOX CULVERT (TYPE-4) NHIDCL/NH-244/VAILOO-DONIPAWA/ CUL/TYPE-4/01/R0

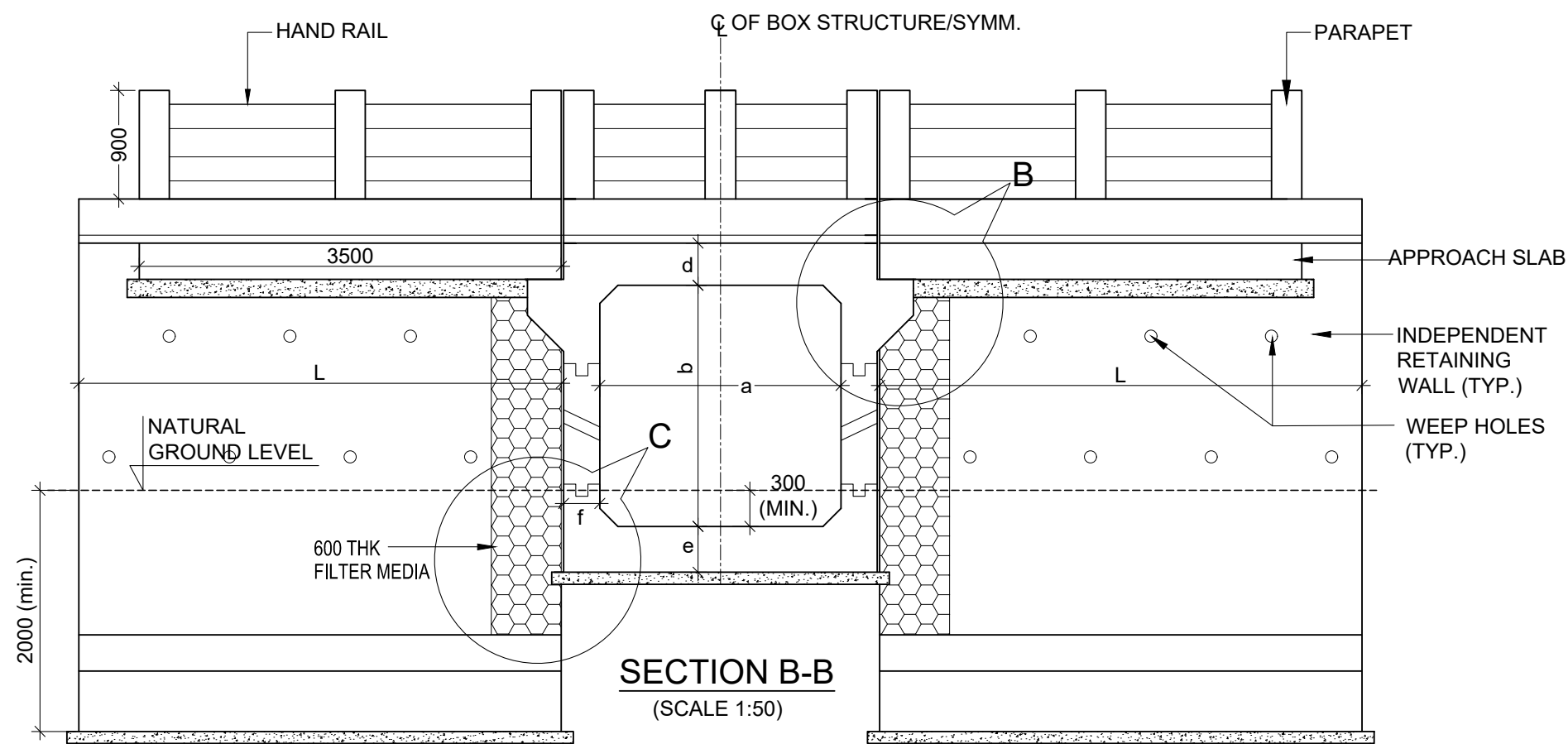
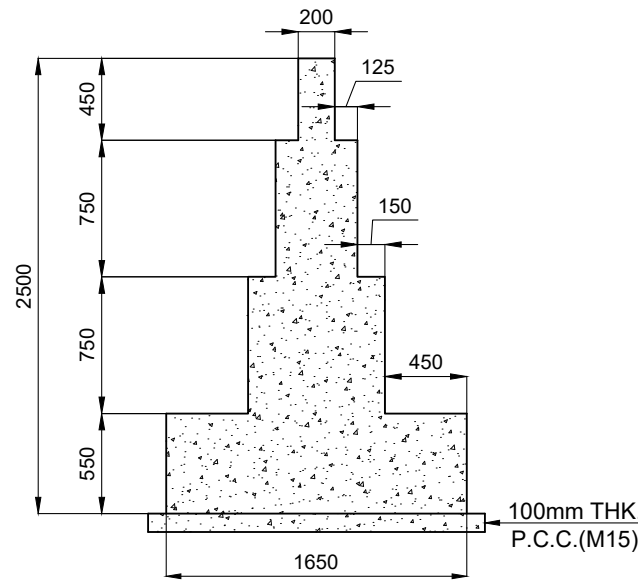
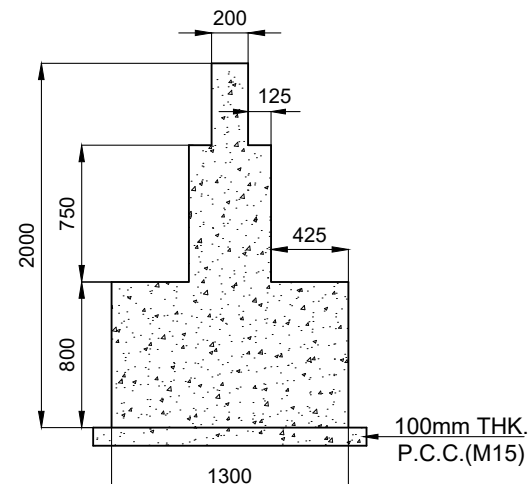


TABLE SHOWING SALIENT DIMENSIONS

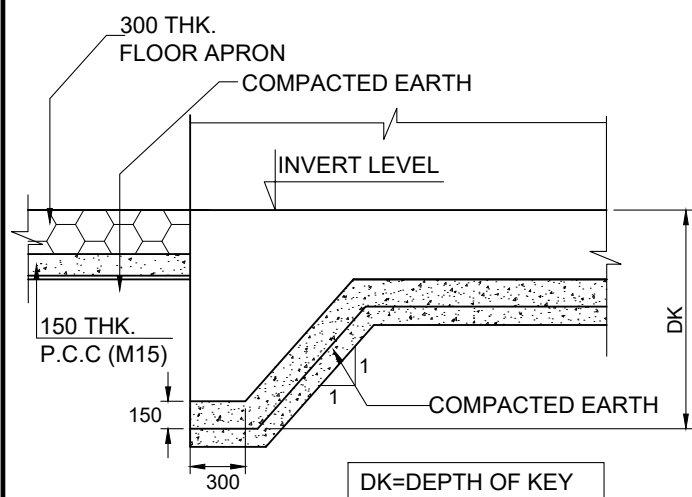
PROPOSED CHAINAGE	BOX CELL DESIGNATION Nc/ab/Ec	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	L (mm)
150+314	1/43/0	4000	3000	-	350	400	375	4500
150+447	1/22/0	2000	2000	-	225	250	250	3500
152+901	1/22/0	2000	2000	-	225	250	250	3500
153+060	1/22/0	2000	2000	-	225	250	250	3500
170+423	1/43/0	4000	3000	-	350	400	375	4500
170+545	1/22/0	2000	2000	-	225	250	250	3500
170+601	1/22/0	2000	2000	-	225	250	250	3500
173+107	1/22/0	2000	2000	-	225	250	250	3500
173+364	1/22/0	2000	2000	-	225	250	250	3500
173+431	1/22/0	2000	2000	-	225	250	250	3500
173+504	1/22/0	2000	2000	-	225	250	250	3500



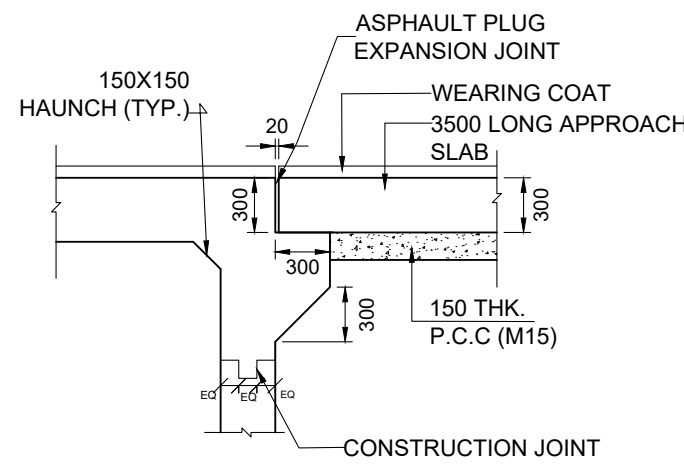
CURTAIN WALL TYPE-I
(SCALE 1:40)



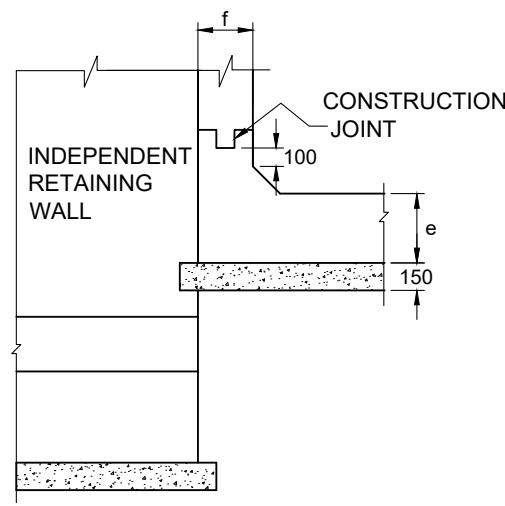
CURTAIN WALL TYPE-II
(SCALE 1:40)



DETAIL 'A'
(SCALE 1:40)



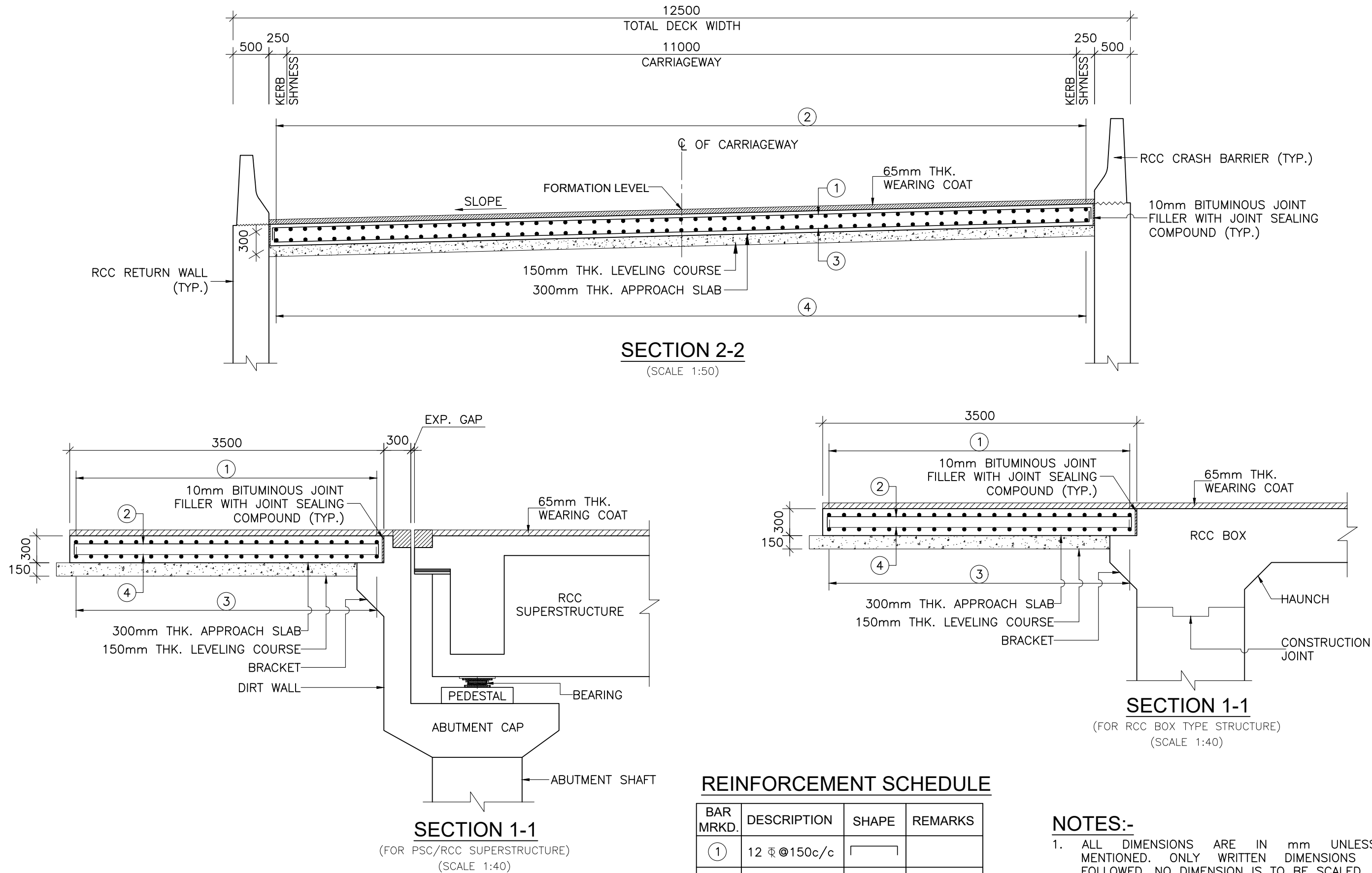
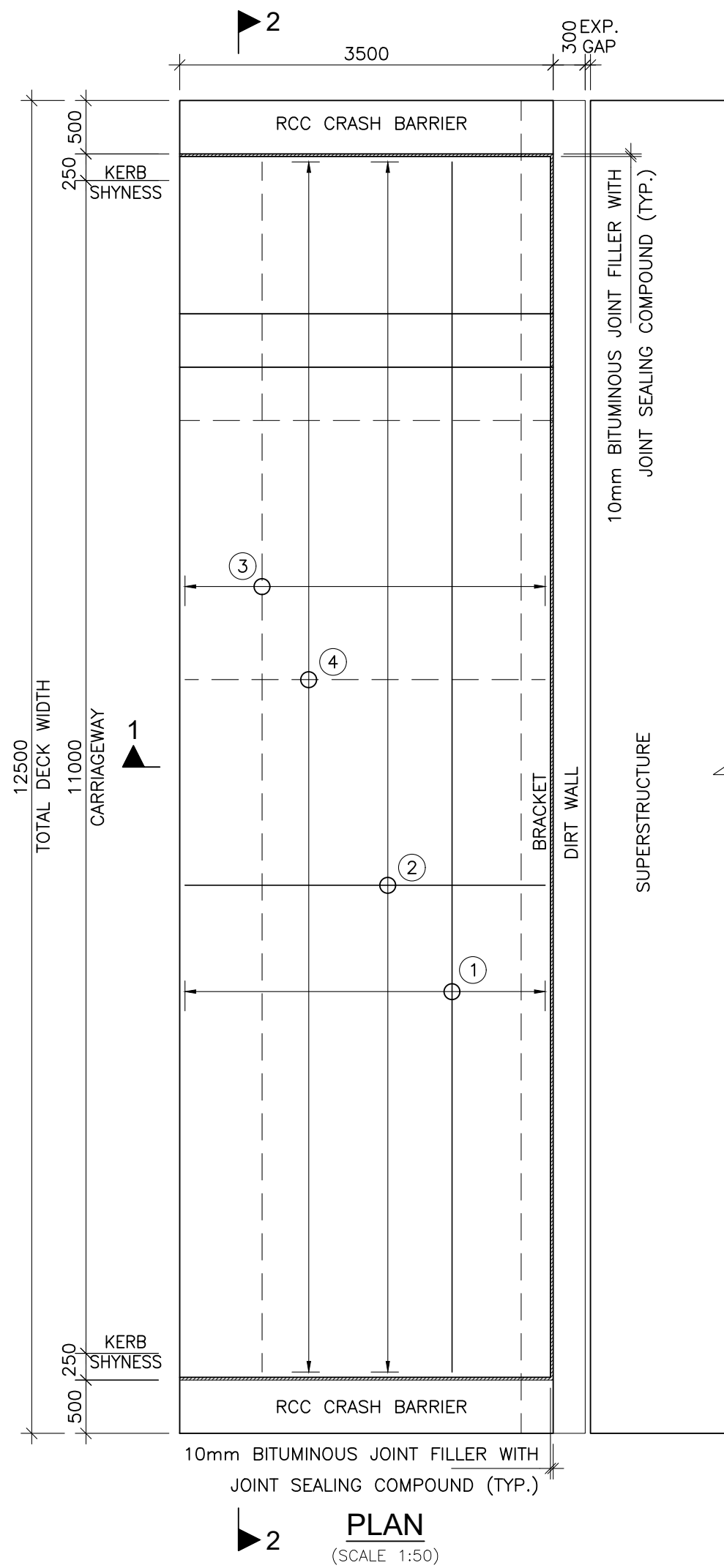
DETAIL 'B'
(SCALE 1:40)



DETAIL 'C'
(SCALE 1:40)

REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattoo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattoo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: PK Drawn: KS Checked: VT Approved: MK	Scale AS SHOWN	Drawing Title GENERAL ARRANGEMENT DRAWING FOR SINGLE CELL BOX CULVERT (TYPE-4)
						Drawing.No. NHIDCL/NH-244/VAILOO-DONIPAWA/CUL/TYPE-4/02/R0

MISCELLANEOUS



REINFORCEMENT SCHEDULE

BAR MRKD.	DESCRIPTION	SHAPE	REMARKS
①	12 Φ @150c/c		
②	12 Φ @150c/c		
③	12 Φ @150c/c		
④	12 Φ @150c/c		

NOTES:-

- ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION IS TO BE SCALED.
- CONCRETE GRADE SHALL BE DESIGN MIX WITH A MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES AS FOLLOWS :-
 - APPROACH SLAB - 30 MPa
 - LEVELING COURSE - 15 MPa
- THE REINFORCING BARS SHALL BE OF THERMO MECHANICALLY TREATED/CORROSION RESISTANT STEEL (TMT-CRS) (GRADE DESIGNATION Fe-500D) CONFORMING TO IS:1786 STANDARDS.
- CLEAR COVER TO OUTER MOST STEEL SHALL BE AS 50mm.
- 65mm THK. WEARING COURSE COMPRISING OF 40mm THK. ASPHALTIC CONCRETE OVER LAID WITH 25mm THK. MASTIC ASPHALT SHALL BE PROVIDED AS PER SECTION 500 OF MORTH SPECIFICATIONS.
- FILLING BEHIND THE ABUTMENT AND PROPER COMPACTION OF THE EMBANKMENT BELOW THE APPROACH SLAB SHOULD BE CARRIED OUT BY THE CONTRACTOR WITH SELECTED MATERIAL AS PER THE SPECIFICATIONS GIVEN IN APPENDIX:6 OF IRC:78 (2014). HAVING SOIL PARAMETERS AS MENTIONED IN RESPECTIVE GADS OF BRIDGES.
- FOR REINFORCEMENT DETAILS OF RCC BRACKET SUPPORTING APPROACH SLAB REFER SEPARATE ABUTMENT DRAWINGS.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT DRAWING OF THE RESPECTIVE BRIDGES.

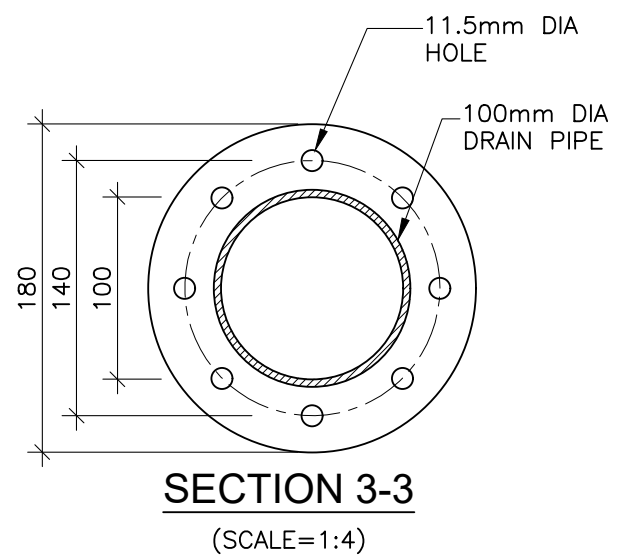
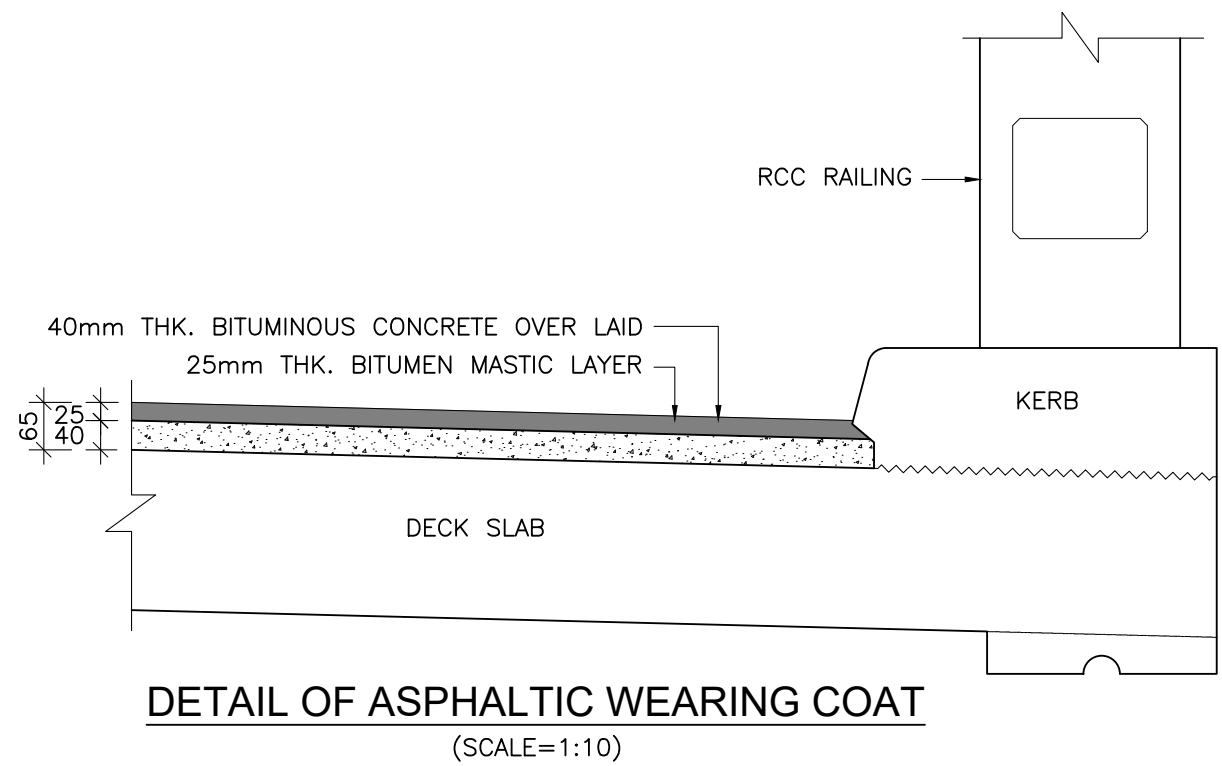
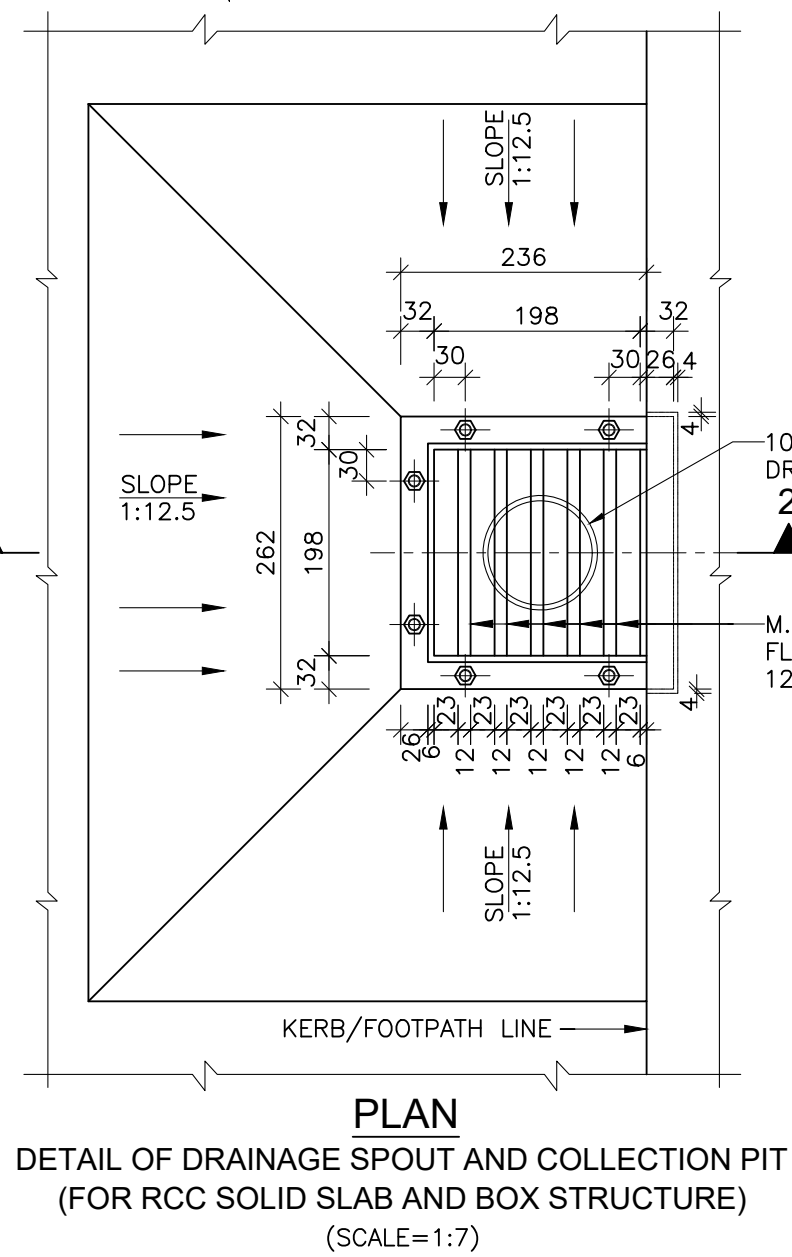
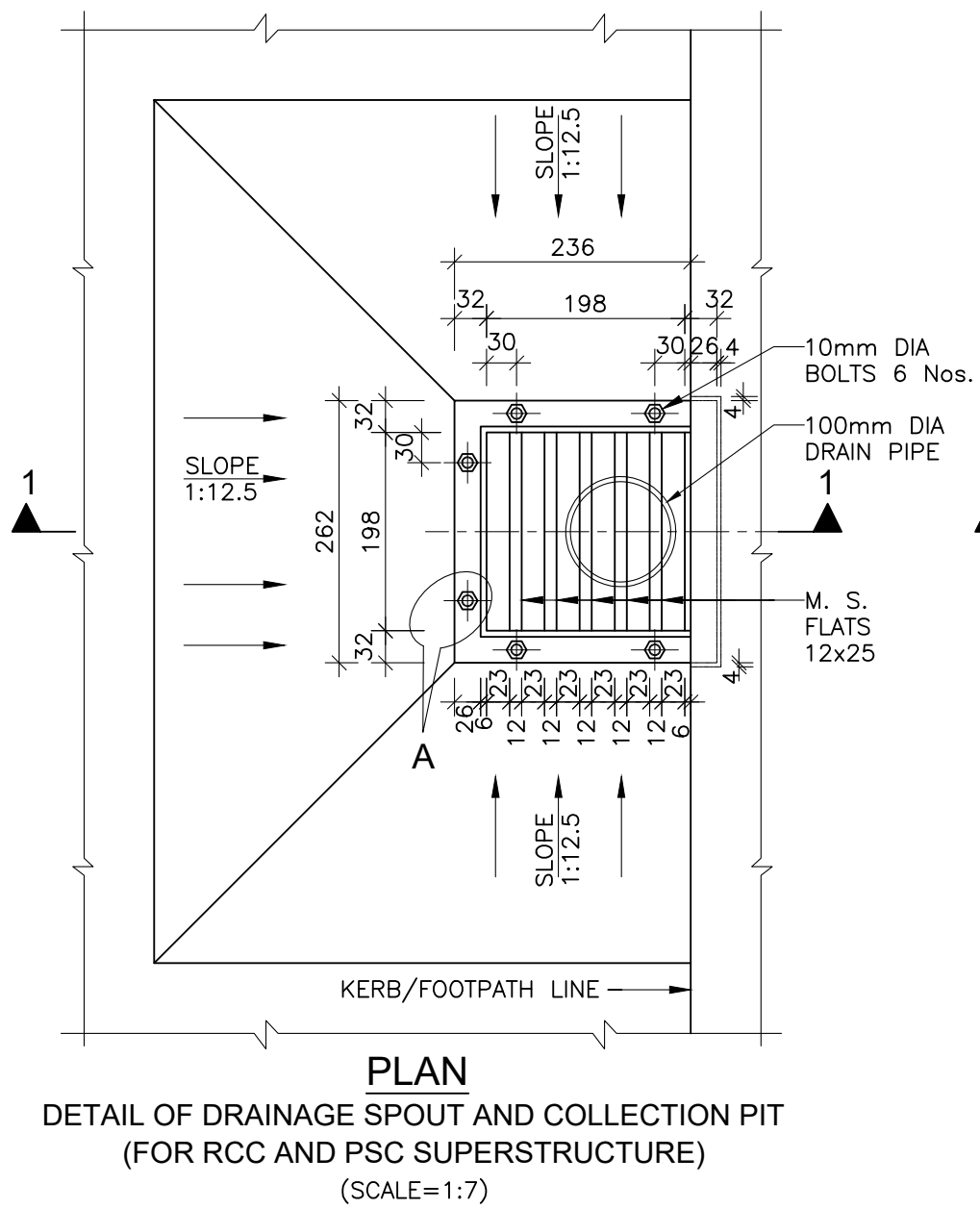
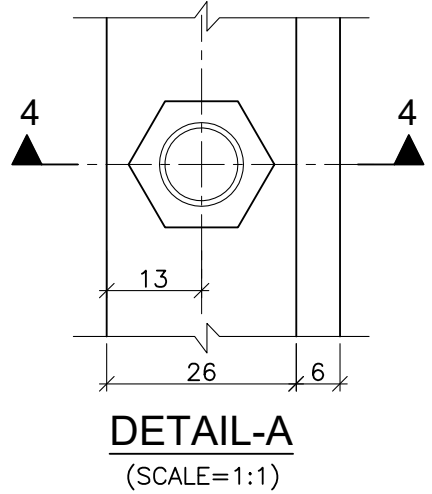
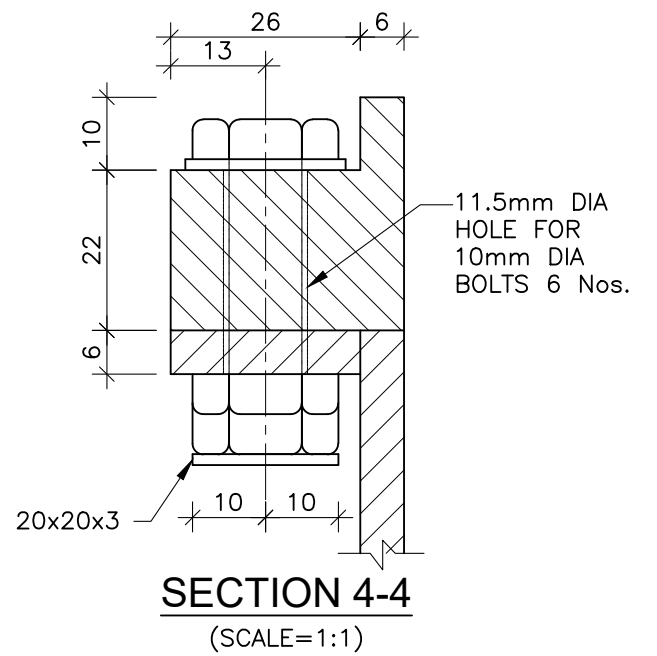
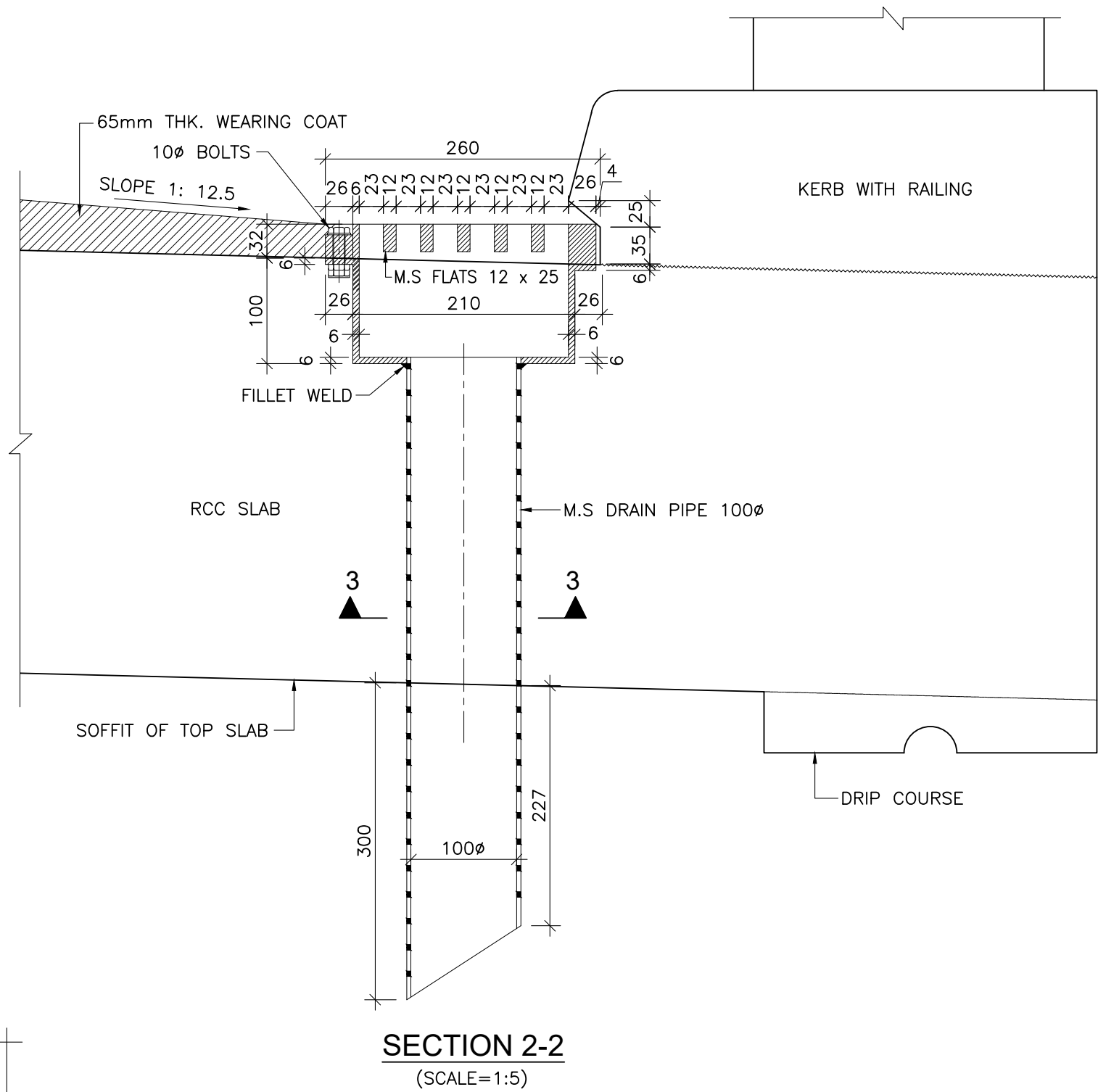
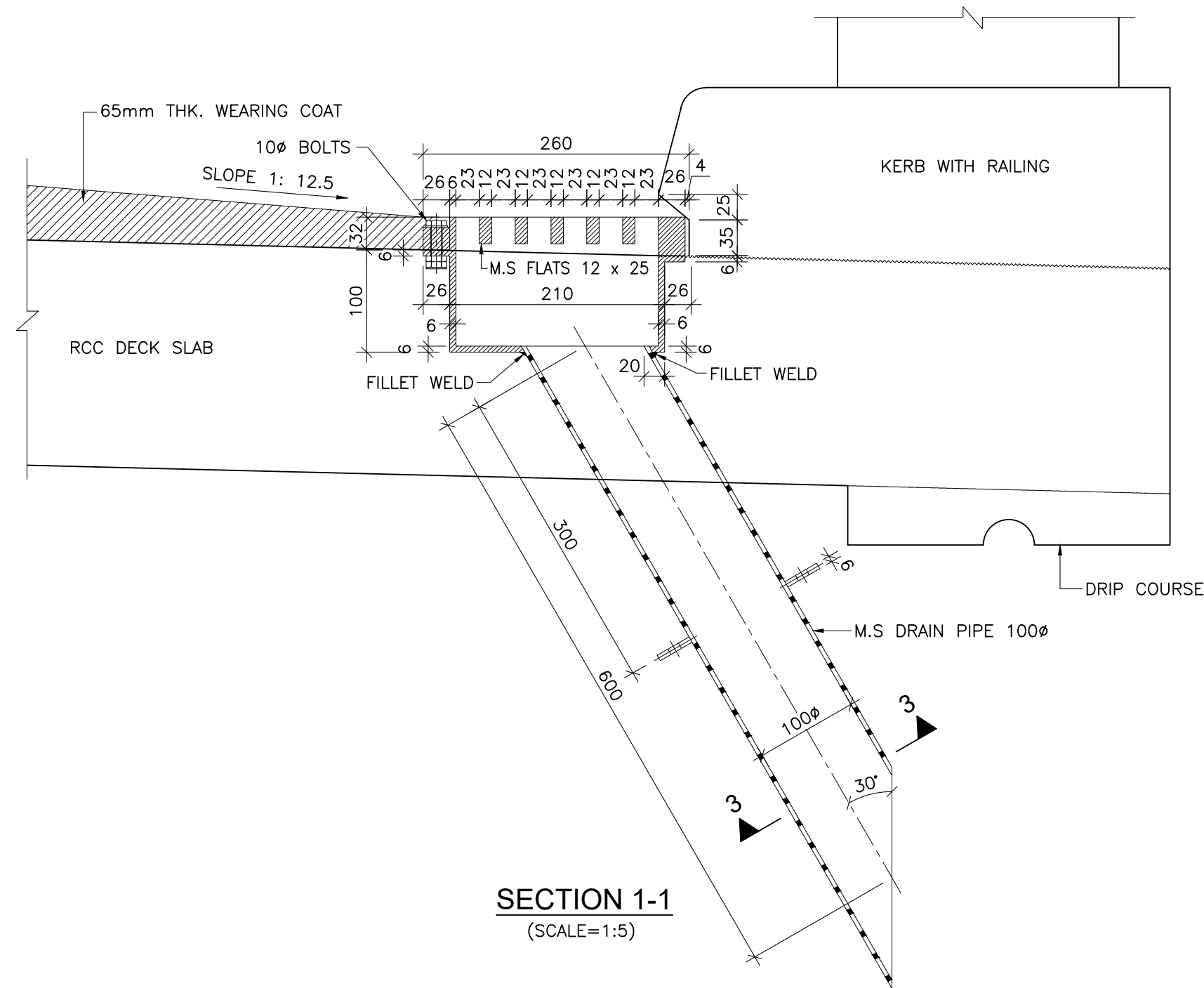
LEGEND:




BOTTOM REINF. - - - - -
TOP REINF. REINF. _____

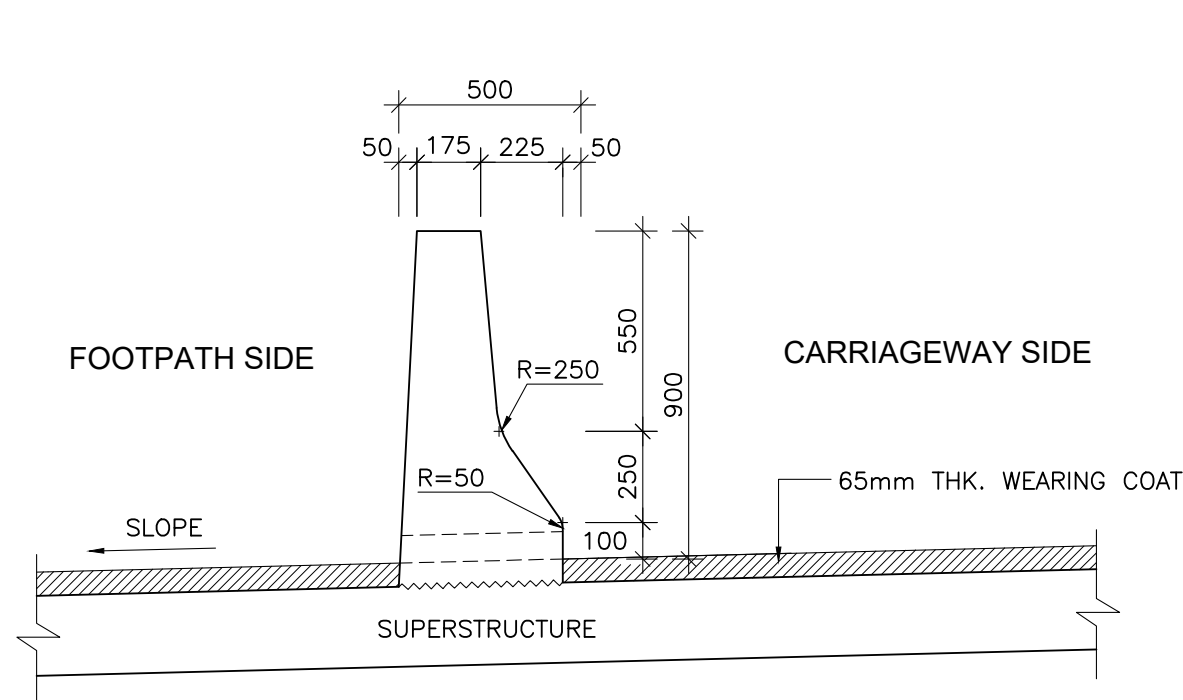
REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: AV Drawn: KS Checked: VT Approved: MK	Scale AS SHOWN	Drawing Title DETAILS OF APPROACH SLAB (FOR 12.5m DECK WIDTH)
						Drawing No. NHIDCL/NH-244/VAILOO-DONIPAWA/ MISC/01/R0

NOTES:-

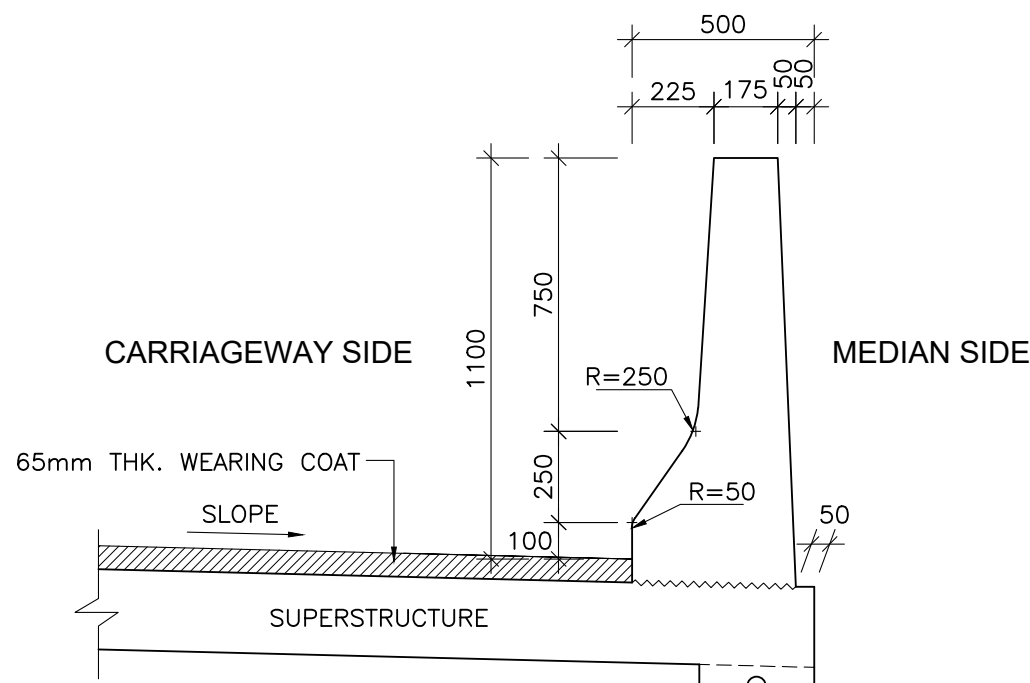
1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION IS TO BE SCALED.
2. DRAINAGE SPOUT AND COLLECTION PIT ASSEMBLY SHALL BE FABRICATED FROM MILD STEEL AND AFTER FABRICATION THE COMPLETE ASSEMBLY EXCEPT GRATING MILD STEEL AND AFTER FABRICATION THE COMPLETE ASSEMBLY EXCEPT GRATING SHALL BE GIVEN A HOT DIPPED GALVANISED COATING.
3. SPACING OF DRAINAGE SPOUT SHALL NOT EXCEED 5.0m C/C.
4. 65mm THK. WEARING COAT COMPRISING OF 40mm THK. ASPHALTIC CONCRETE OVER LAID WITH 25mm THK. MASTIC ASPHALT SHALL BE PROVIDED AS PER SECTION 500 OF MORTH SPECIFICATIONS.
5. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT DRAWING OF THE RESPECTIVE BRIDGES.



REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
			 	Designed: AV Drawn: KS Checked: VT Approved: MK	Drawing Title DETAILS OF DRAINAGE SPOUT AND WEARING COAT
				Scale AS SHOWN	Drawing No. NHIDCL/NH-244/VAILOO-DONIPAWA/ MISC/02/R0



**DIMENSIONAL DETAILS OF
INTERMEDIATE CRASH BARRIER**
(SCALE 1:20)



**DIMENSIONAL DETAILS OF
OUTER CRASH BARRIER**
(SCALE 1:20)

NOTES:-

- ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION IS TO BE SCALED.
 - THE CRASH BARRIER DESIGN HAS BEEN ADOPTED AS PER CLAUSE 115.4.1 OF IRC:5-1998.
 - THE CONCRETE GRADE SHALL BE M40.
 - THE REINFORCING BARS SHALL BE OF THERMO MECHANICALLY TREATED/CORROSION RESISTANT STEEL (TMT-CRS) (GRADE DESIGNATION Fe-500D) CONFORMING TO IS:1786 STANDARDS. CLEAR COVER TO OUTERMOST STEEL IS 50mm.
 - DOWEL BARS OF THE CRASH BARRIER SHALL BE PROPERLY ANCHORED INTO THE DECK SLAB.
 - SUITABLE REFLECTIVE (LUMINOUS) DEVICES SHALL BE PROVIDED ON THE TRAFFIC FACE OF THE BARRIER AT SUITABLE INTERVAL TO ENSURE ADEQUATE VISIBILITY DURING NIGHT AND FOGGY CONDITIONS.
 - LAPPING OF REINFORCEMENT SHALL BE AVOIDED AS FAR AS POSSIBLE. IN CASE LAPPING OF BARS BECOMES UNAVOIDABLE, MINIMUM LAP LENGTH OF REINFORCEMENT BARS SHALL BE CALCULATED AS eFOLLOW WITH MAXIMUM ALLOWABLE LAPPING (p) OF 50% ONLY.
(IRC:112-2011) (CLAUSE:15.2.5.1)

$$\text{LAP LENGTH } l_s = \alpha l \cdot l_{bnet}$$

$$\alpha l = 1.0 \text{ FOR } p\% \leq 25\%$$

$$\alpha l = 1.15 \text{ FOR } 25\% < p\% \leq 33\%$$

$$\alpha l = 1.4 \text{ FOR } 33\% < p\% \leq 50\%$$
- IN THE CASE OF BUNDLED BARS

$$\text{LAP LENGTH} = 1.3 \times l_s \text{ (CLAUSE:15.2.7.3)}$$
 (IRC:112-2011) (CLAUSE:15.2.3.3)

$$\text{DEVELOPMENT LENGTH (} l_{bnet} \text{)}$$

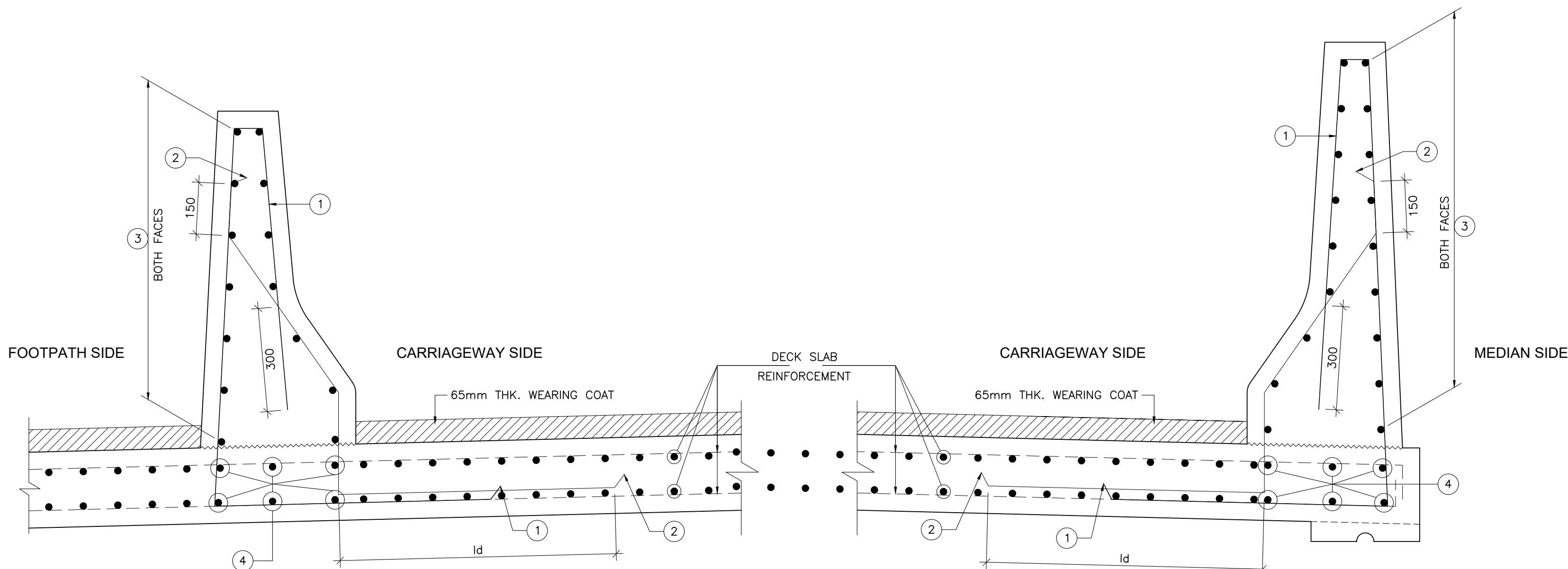
$$l_{bnet} = \alpha \cdot l_b \quad (\alpha = 1.0)$$

$$l_b = k \phi$$

$$k = 40 \text{ FOR M30 (Fe500D)}$$

$$k = 36 \text{ FOR M35 (Fe500D)}$$

$$k = 34 \text{ FOR M40 (Fe500D)}$$
 FOR UNFAVORABLE BOND CONDITION THE l_b SHOULD BE MULTIPLIED BY FACTOR OF 1.43.
 FOR $\phi > 32\text{mm}$ l_b SHOULD BE INCREASED BY MULTIPLYING FACTOR $(\frac{100}{132 \phi})$
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT DRAWING OF THE RESPECTIVE BRIDGES.



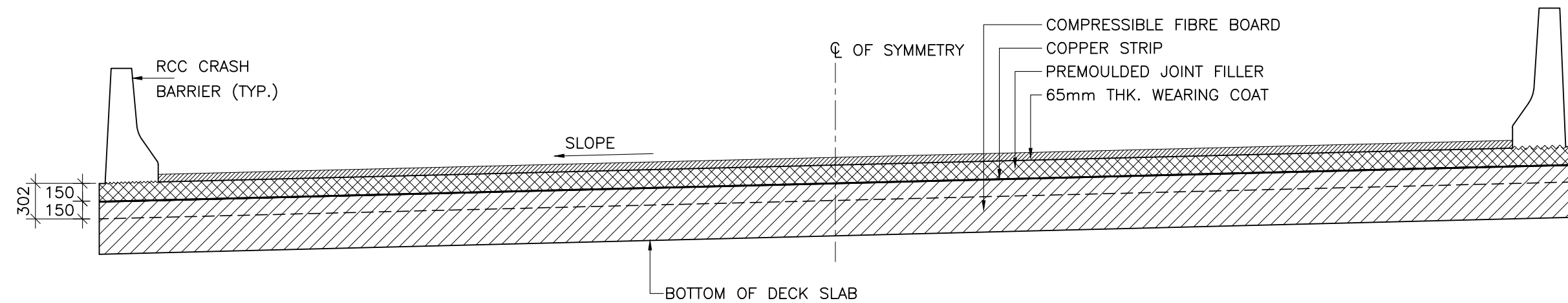
REINFORCEMENT DETAILS OF INTERMEDIATE CRASH BARRIER
(SCALE 1:10)

REINFORCEMENT DETAILS OF OUTER CRASH BARRIER
(SCALE 1:10)

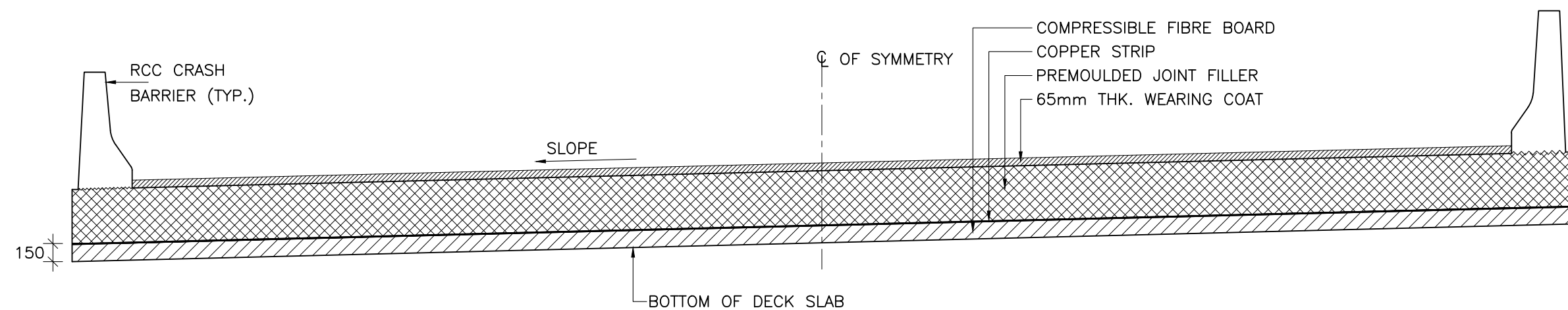
REINFORCEMENT SCHEDULE

BAR MRKD.	DESCRIPTION	SHAPE	REMARKS
①	16 Φ 150c/c		
②	16 Φ 150c/c		
③	12 Φ 150c/c		
④	16 Φ - 3 Nos.		

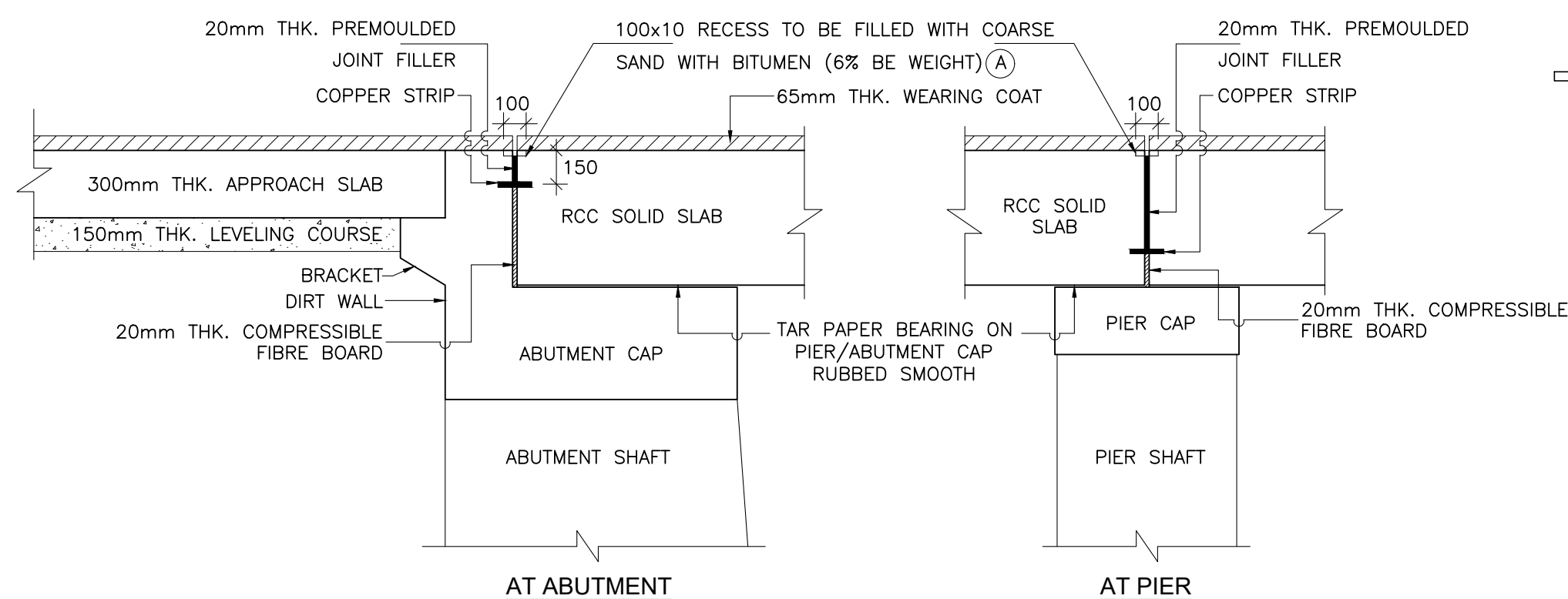
REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT	FINAL DETAILED PROJECT REPORT	Project
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Designed: AV Drawn: KS Checked: VT Approved: MK	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
				Scale AS SHOWN	Drawing Title DIMENSIONAL AND REINFORCEMENT DETAILS OF CRASH BARRIER
					Drawing.No. NHIDCL/NH-244/VAILOO-DONIPAWA/ MISC/03/R0



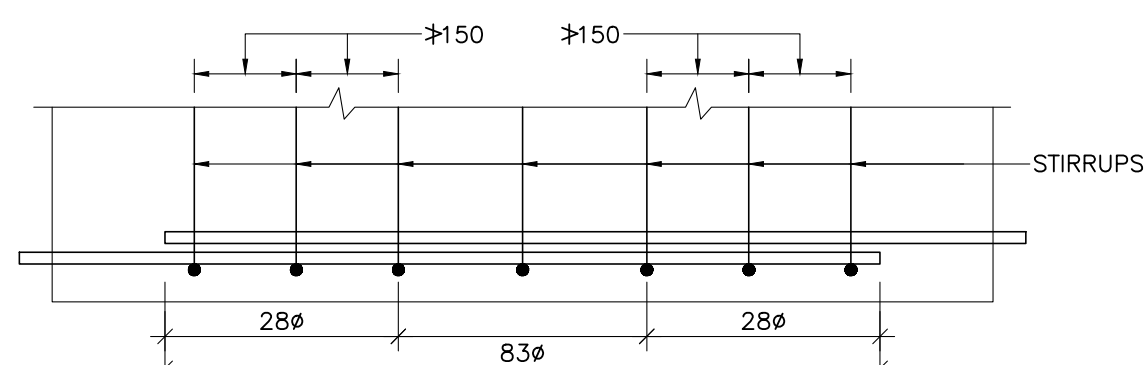
LAYOUT OF COPPER STRIP AT ABUTMENT LOCATION
(SCALE 1:40)



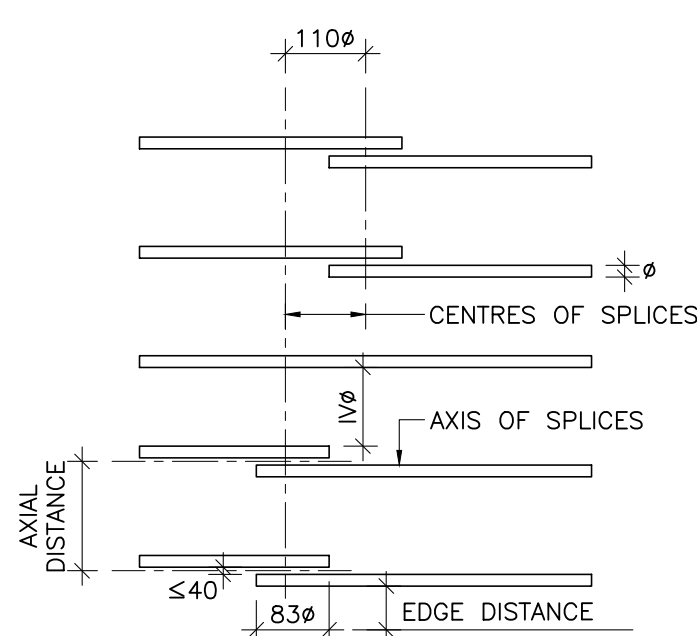
LAYOUT OF COPPER STRIP AT PIER LOCATION
(SCALE 1:40)



DETAILS OF EXPANSION JOINT
(SCALE 1:25)



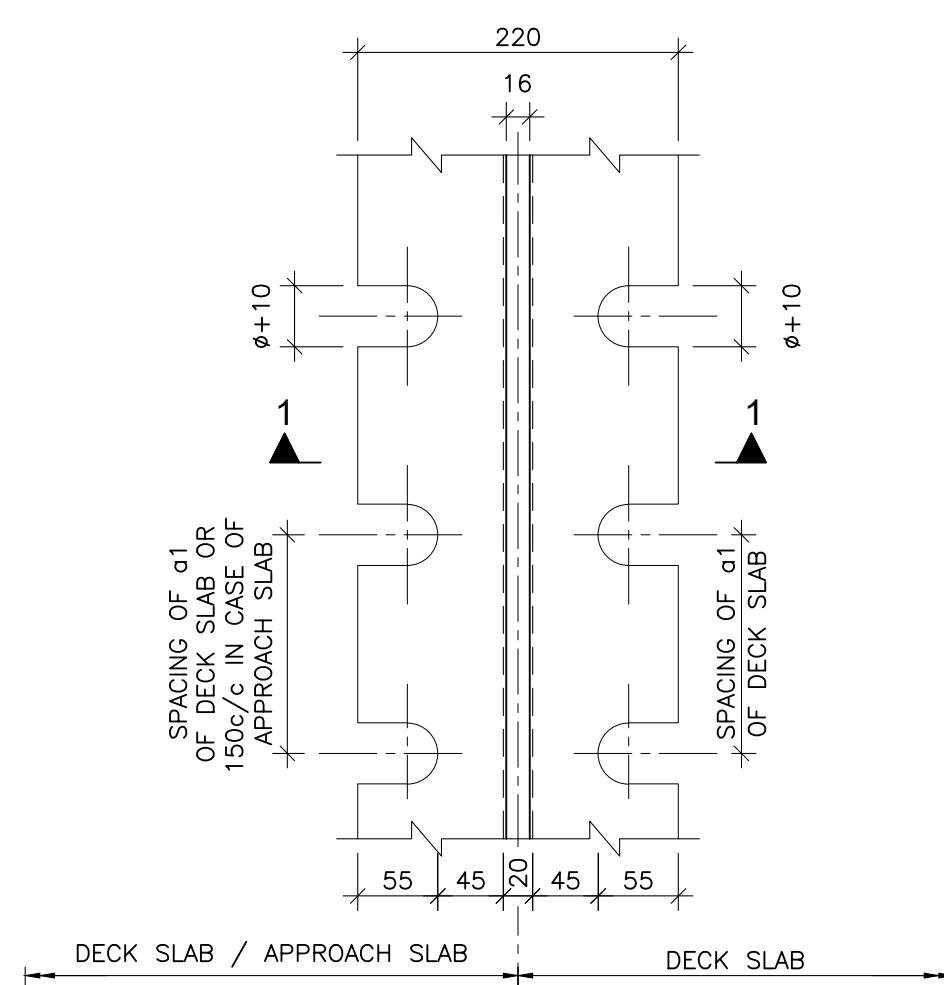
TRANSVERSE REINFORCEMENT AT LAP
SPLICES IN KERBS
(SCALE 1:25)



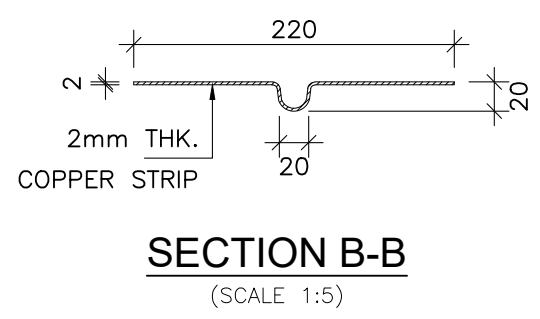
LAP SPLICES OF BARS IN TENSION
(SCALE 1:10)

NOTES:-

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION IS TO BE SCALED.
2. SPLICING OF MAIN LONGITUDINAL BARS IN DECK SLAB SHALL BE AVOIDED AS FAR AS PRACTICABLE. IN CASE THE SPLICING OF BARS BECOMES UNAVOIDABLE, THE ARRANGEMENT SHALL BE AS SHOWN IN THE DRAWING.
3. AREA OF BARS SPLICED AT ANY SECTION SHALL NOT EXCEED 50% OF THE TOTAL AREA OF THE BARS PROVIDED AT THE SECTION..
4. JOINT FILLER SHALL CONFORM TO I.S.1838. PRODUCTS WITH I.S.I. CERTIFICATION MARK SHALL ONLY BE USED..
5. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE GENERAL ARRANGEMENT DRAWING OF THE RESPECTIVE BRIDGES.



DETAIL OF COPPER STRIP
(SCALE 1:5)



SECTION B-B
(SCALE 1:5)

REVISION	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	
R0	NOV - 2020	NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing pre-construction services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 to Km 142.000 of Chattroo Village & (ii) Km 235.00 (Vailoo Village to Km 269.00 (Khanabal) of Khellani- Kishtwar- Chattroo- Khanabal Section of NH 244 in the state of Jammu & Kashmir.
				Designed: AV Drawn: KS Checked: VT Approved: MK	Drawing Title DETAILS OF EXPANSION JOINT
				Scale AS SHOWN	Drawing.No. NHIDCL/NH-244/VAILOO-DONIPAWA/MIISC/04/R0

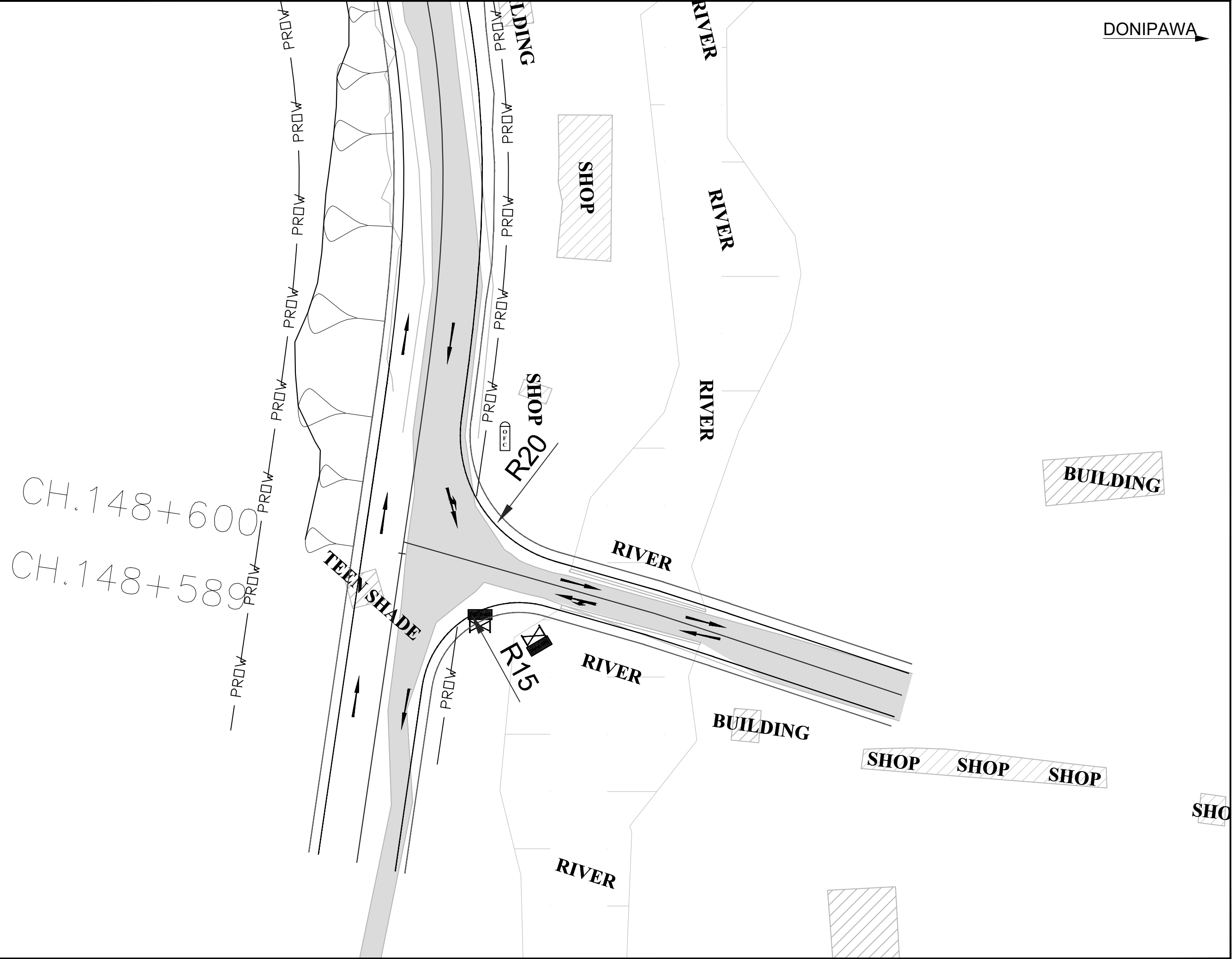
STANDARD DRAWING

FINAL DETAILED PROJECT REPORT

Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & **(ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal)** of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244

S.NO.	MAJOR JUNCTION	
1.	MAJOR JUNCTION	NHIDCL/NH244-PKG-II/JUN/01 to 02 /R0
	MINOR JUNCTION	
2.	STANDARD DRAWINGS MINOR JUNCTION	NHIDCL/NH244-PKG-II/JUN/01/R0
	ROAD SIGNS	
3.	STANDARD DRAWINGS TYPICAL DETAIL OF CAUTIONARY WARNING SIGNS	NHIDCL/NH244-PKG-II/RS/01/R0
4.	STANDARD DRAWINGS TYPICAL DETAIL OF MANDATORY REGULATORY SIGNS	NHIDCL/NH244-PKG-II/RS/02/R0
5.	STANDARD DRAWINGS TYPICAL DETAIL OF CAUTIONARY SIGNS & WARNING SIGNS	NHIDCL/NH244-PKG-II/RS/03/R0
	ROAD MARKING	
7	STANDARD DRAWINGS TYPICAL DETAILS DETAILS OF ISLAND & KERB MARKING	NHIDCL/NH244-PKG-II/RM/01/R0
8.	STANDARD TYPICAL DETAILS OF DIRECTIONAL SIGNS	NHIDCL/NH244-PKG-II/RM/02/R0
9.	STANDARD DRAWINGS TYPICAL DETAIL OF F ROUTE MARKING (CHEVRON MARKING)	NHIDCL/NH244-PKG-II/RM/03/R0
	ROAD FURNITURE	
10.	STANDARD DRAWINGS TYPICAL DETAIL FOR BOUNDARY STONE & GUARD POST	NHIDCL/NH244-PKG-II/RF/01/R0
11.	STANDARD DRAWINGS TYPICAL DETAILS FOR 200 m 1 KM. & KM. POST	NHIDCL/NH244-PKG-II/RF/02/R0
	MISCELLANEOUS DRAWINGS	
12.	STANDARD DRAWINGS TYPICAL DETAILS OVER HEAD GANTRY SIGNS	NHIDCL/NH244-PKG-II/OHG/01/R0
13.	STANDARD DRAWINGS DRAIN SUPERELEVATION	NHIDCL/NH244-PKG-II/DR/02/R0
14.	STANDARD DRAWINGS TYPICAL DETAILS TOE WALL	NHIDCL/NH244-PKG-II/TW/02/R0

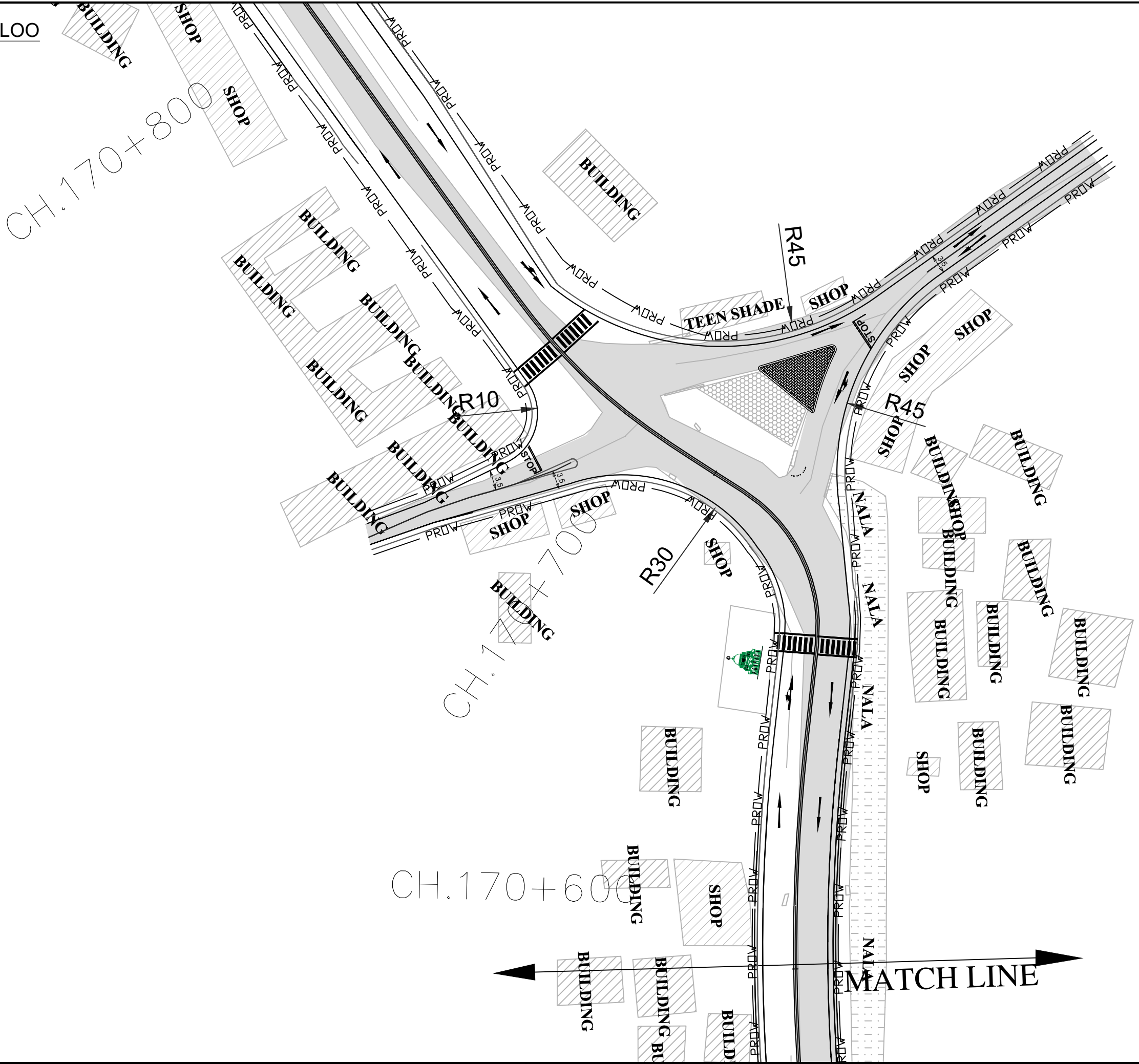
MAJOR JUNCTION






ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Junction (CH:- 148+589)		
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	Scale :- NTS	Drawing Title	Date:	Project No.	Drawing No.
							OCT.2020	1564	NHIDCLNH-244-PACK-II/JUN/01/R0

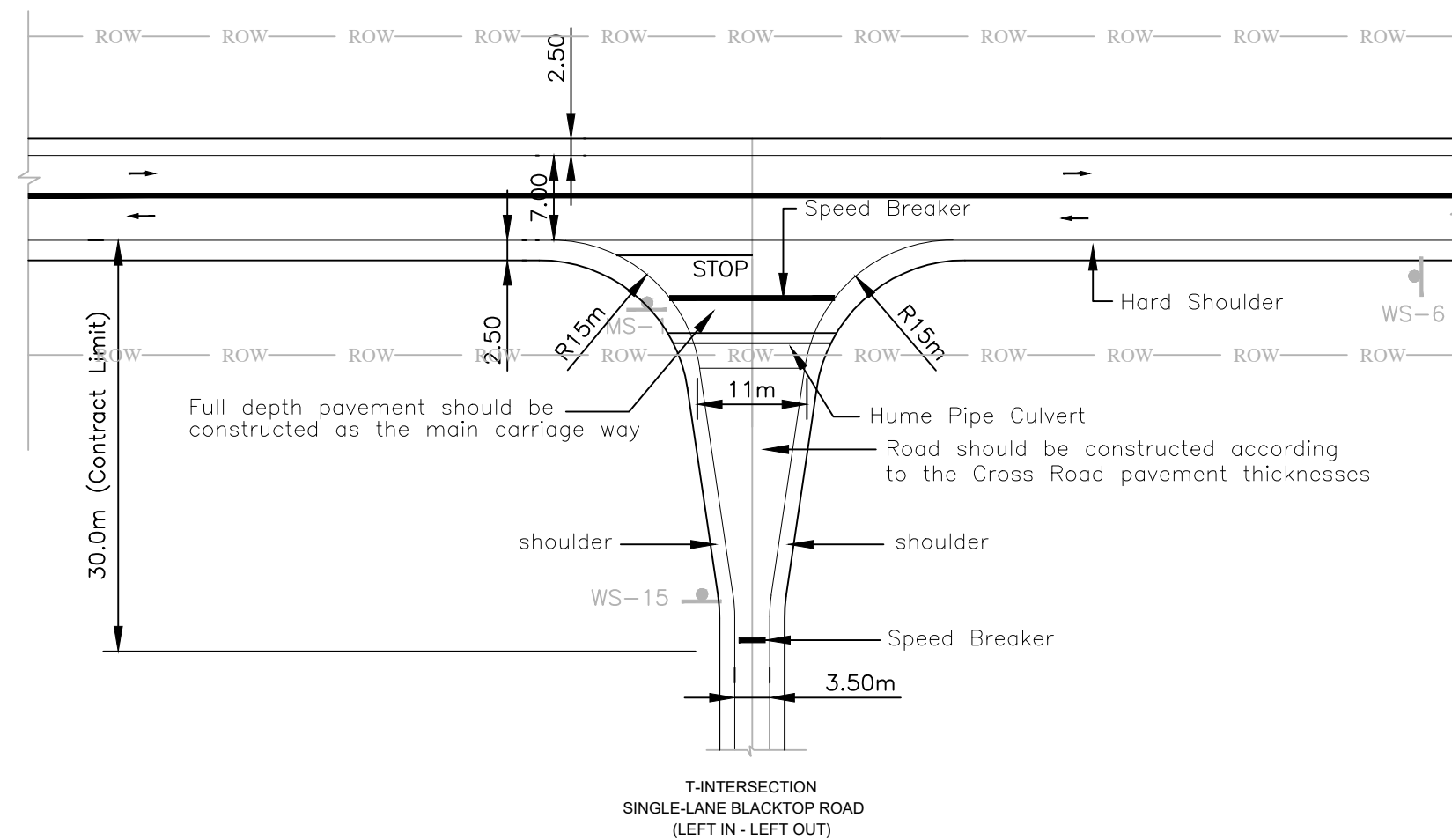
← VAILLOO

DONIPAWA →



ISSUE	DATE	AMENDMENT \ ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title
R0	OCT.2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) In Association with Monarch Surveyors and Engineering Consultants Pvt. Ltd.,	FINAL DETAILED PROJECT REPORT	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
				 	Designed: <input type="text"/> Drawn: <input type="text"/> Checked: <input type="text"/> Approved: <input type="text"/>	Junction (CH:- 170+700) Date: <input type="text"/> Project No: <input type="text"/> Drawing No: <input type="text"/>
					Scale :- NTS	NHIDCL/NH-244-PACK-III/JUN/02/R0

MINOR JUNCTION



CAUTIONARY / WARNING SIGNS

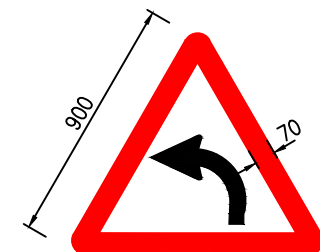


Fig.15.01
LEFT HAND CURVE

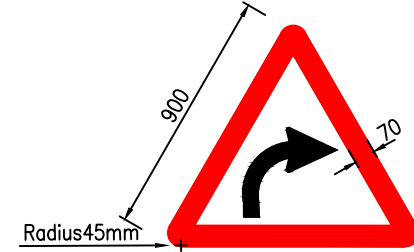


Fig.15.02
RIGHT HAND CURVE

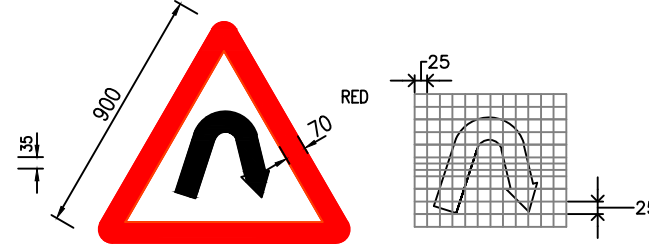


Fig.15.03
RIGHT HAIR PIN BEND

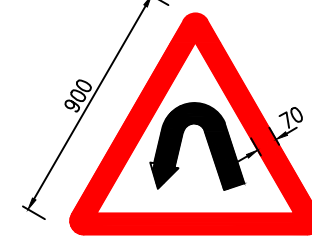


Fig.15.04
LEFT HAIR PIN BEND

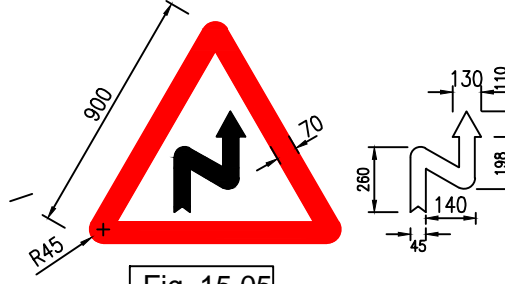


Fig.15.05
RIGHT REVERSE BEND



Fig.15.06
LEFT REVERSE BEND

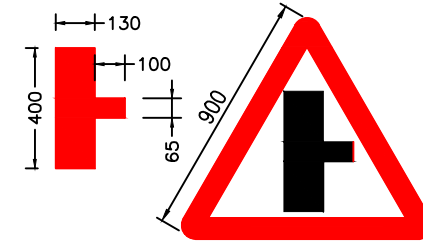


Fig.15.09
Side Road Right

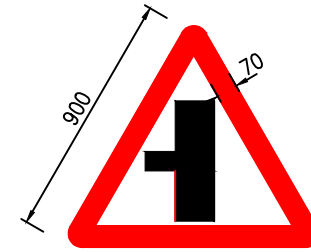


Fig.15.10
Side Road Left

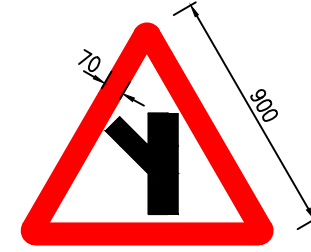


Fig.15.11
Y-Intersection

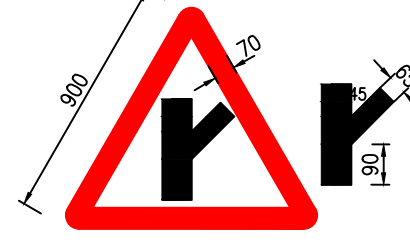


Fig.15.12
Y-Intersection

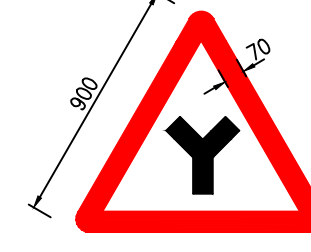


Fig.15.13
Y-Intersection

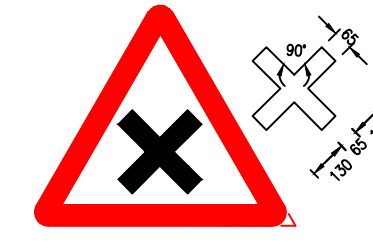


Fig.15.14
CROSS ROAD

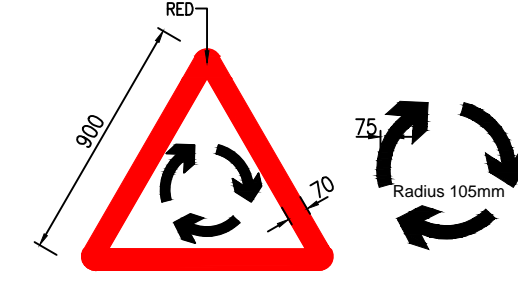


Fig.15.15
ROUND ABOUT

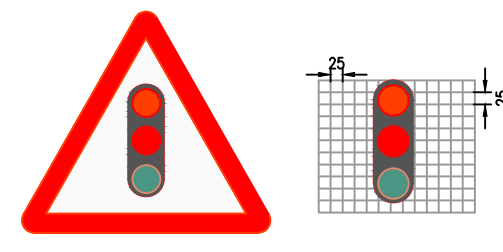


Fig.15.16
TRAFFIC SIGNALS

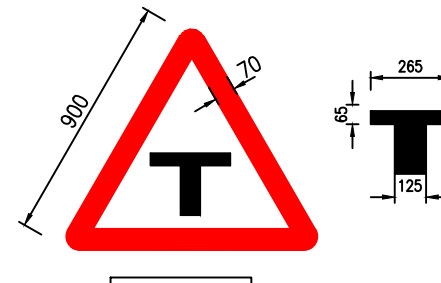


Fig.15.17
T-INTERSECTION

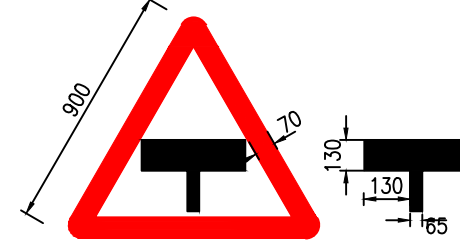


Fig.15.18
T-INTERSECTION MAJOR ROAD AHEAD

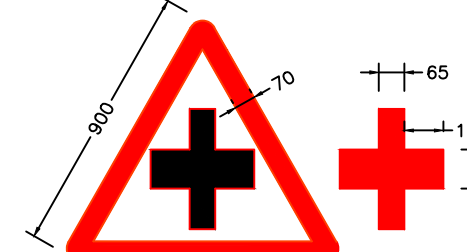


Fig.15.19
MAJOR ROAD AHEAD

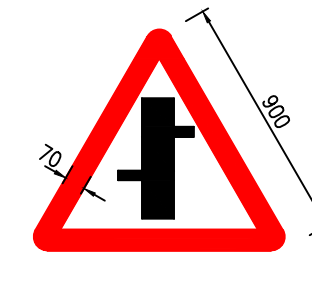


Fig.15.20
STAGGERED INTERSECTION

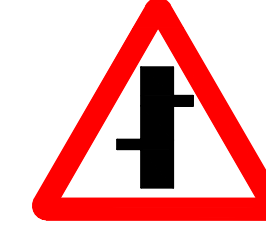


Fig.15.21
STAGGERED INTERSECTION

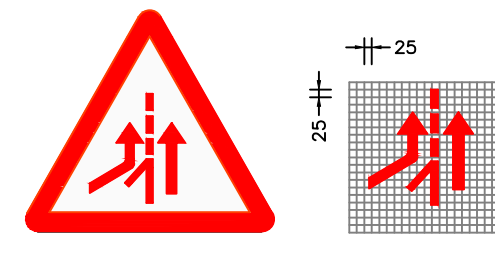


Fig.15.22
MERGING TRAFFIC AHEAD
(From Left)

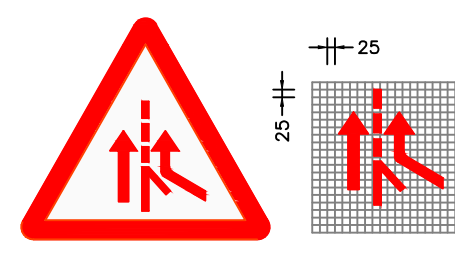


Fig.15.22
MERGING TRAFFIC AHEAD
(From Right)

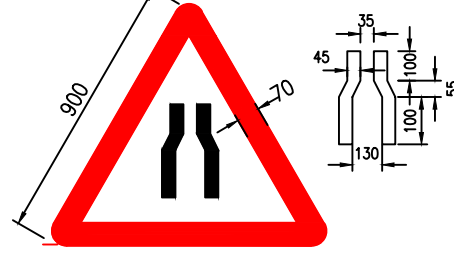


Fig.15.23
NARROW ROAD AHEAD

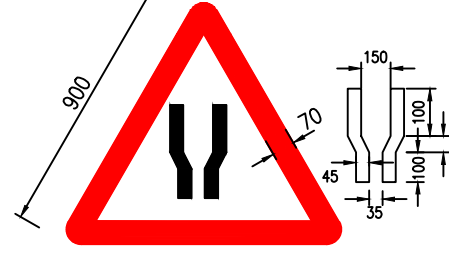


Fig.15.24
ROAD WIDENS

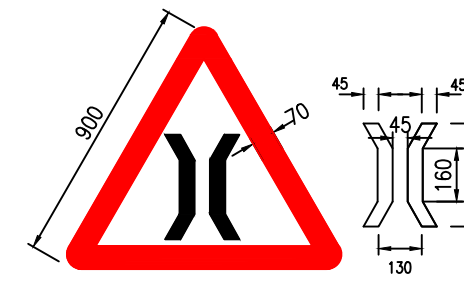


Fig.15.25
NARROW BRIDGE

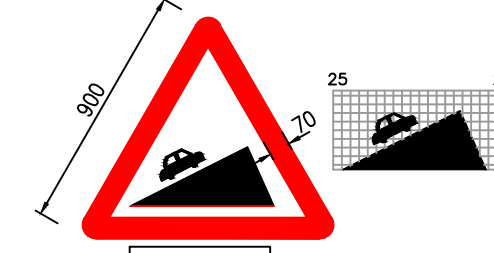


Fig.15.26
SPEED ASCENT

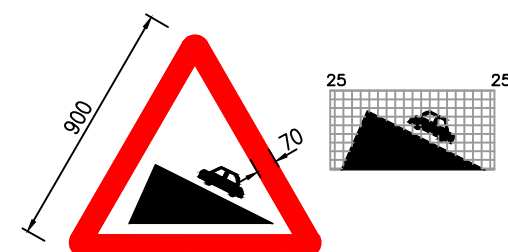


Fig.15.27
SPEED ASCENT

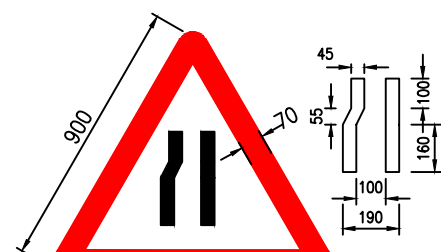


Fig.15.28
REDUCED CARRIAGEWAY

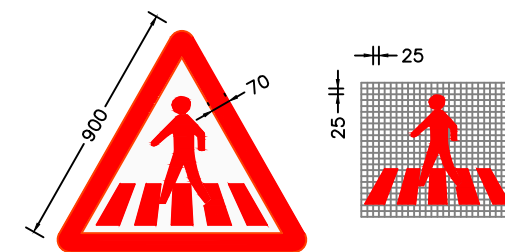


Fig.15.33
PEDESTRIAN CROSSING

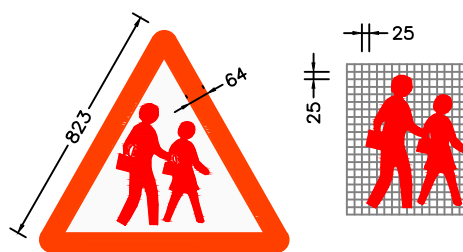


Fig.15.34
SCHOOL AHEAD

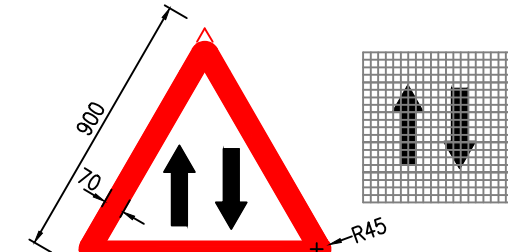


Fig.15.36
TWO WAY OPERATION

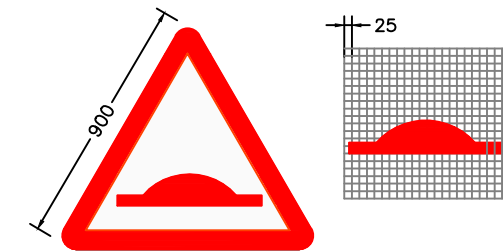


Fig.15.49
SPEED BREAKER

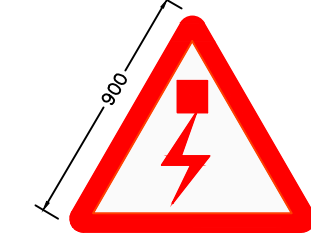
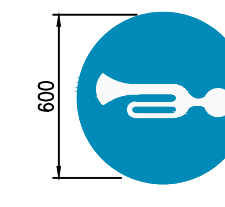
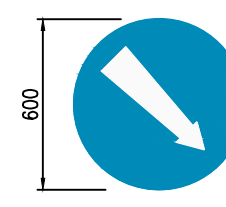
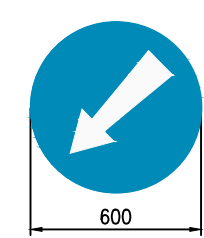
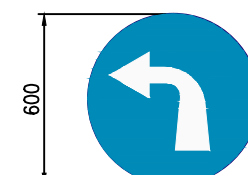
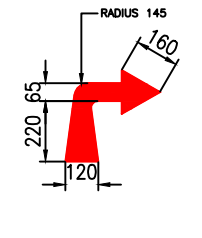
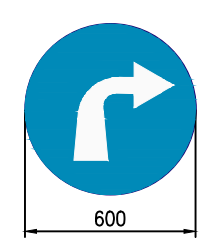
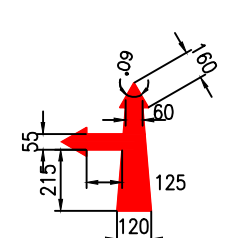
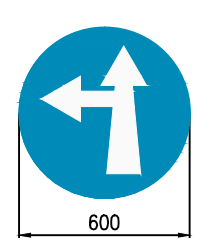
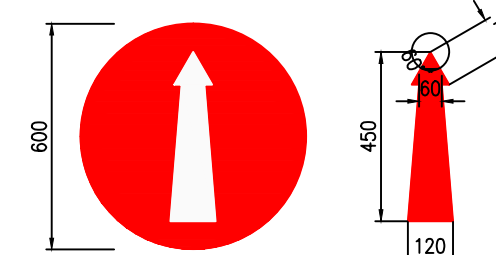
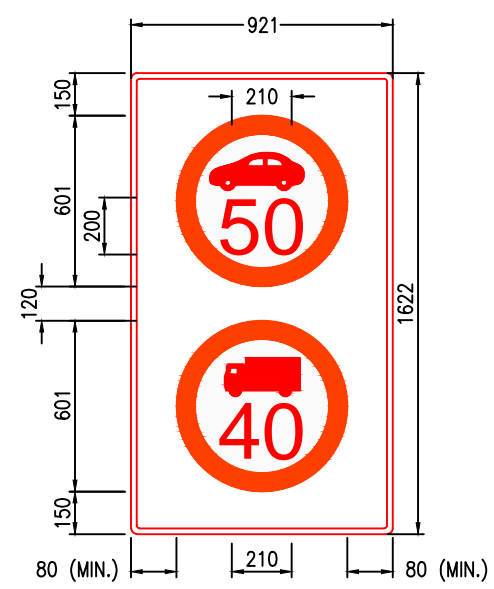
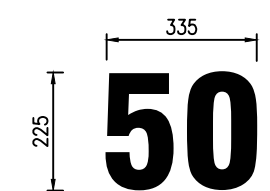
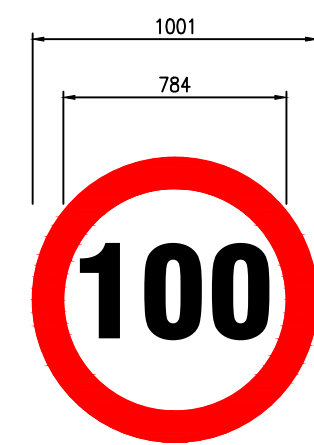
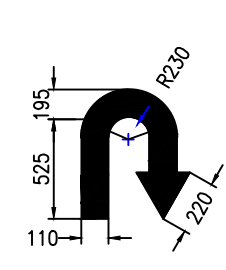
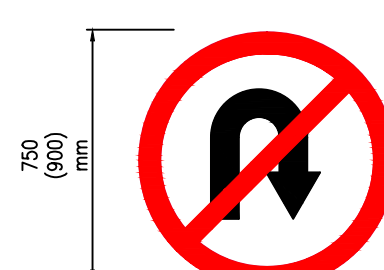
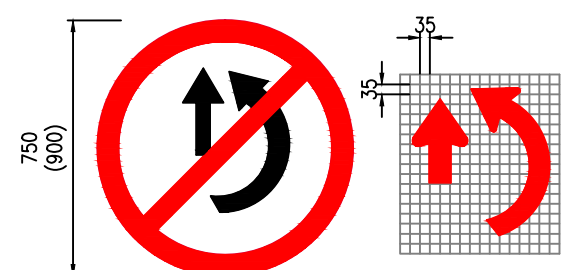
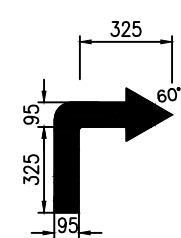
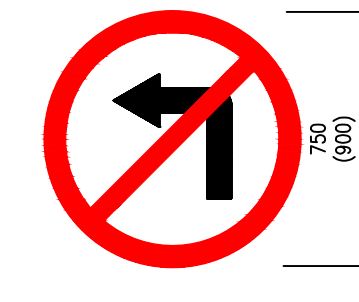
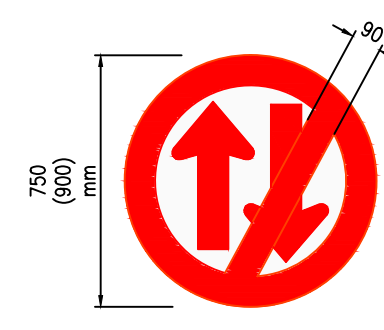
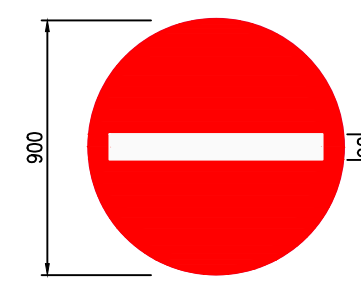
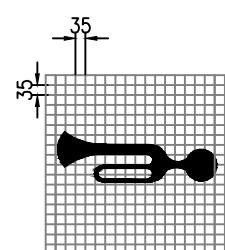
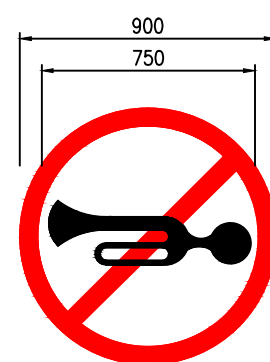
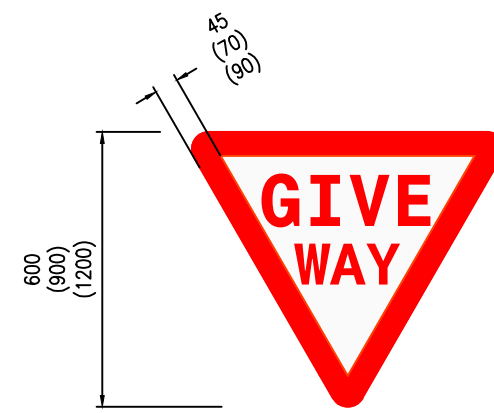
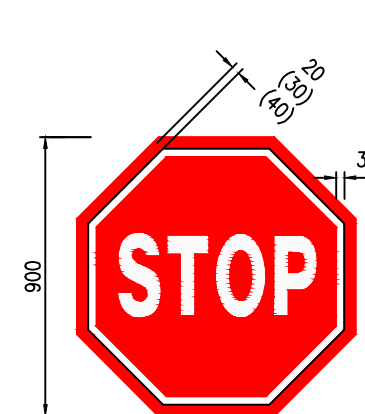




Fig.15.57
Overhead Cables

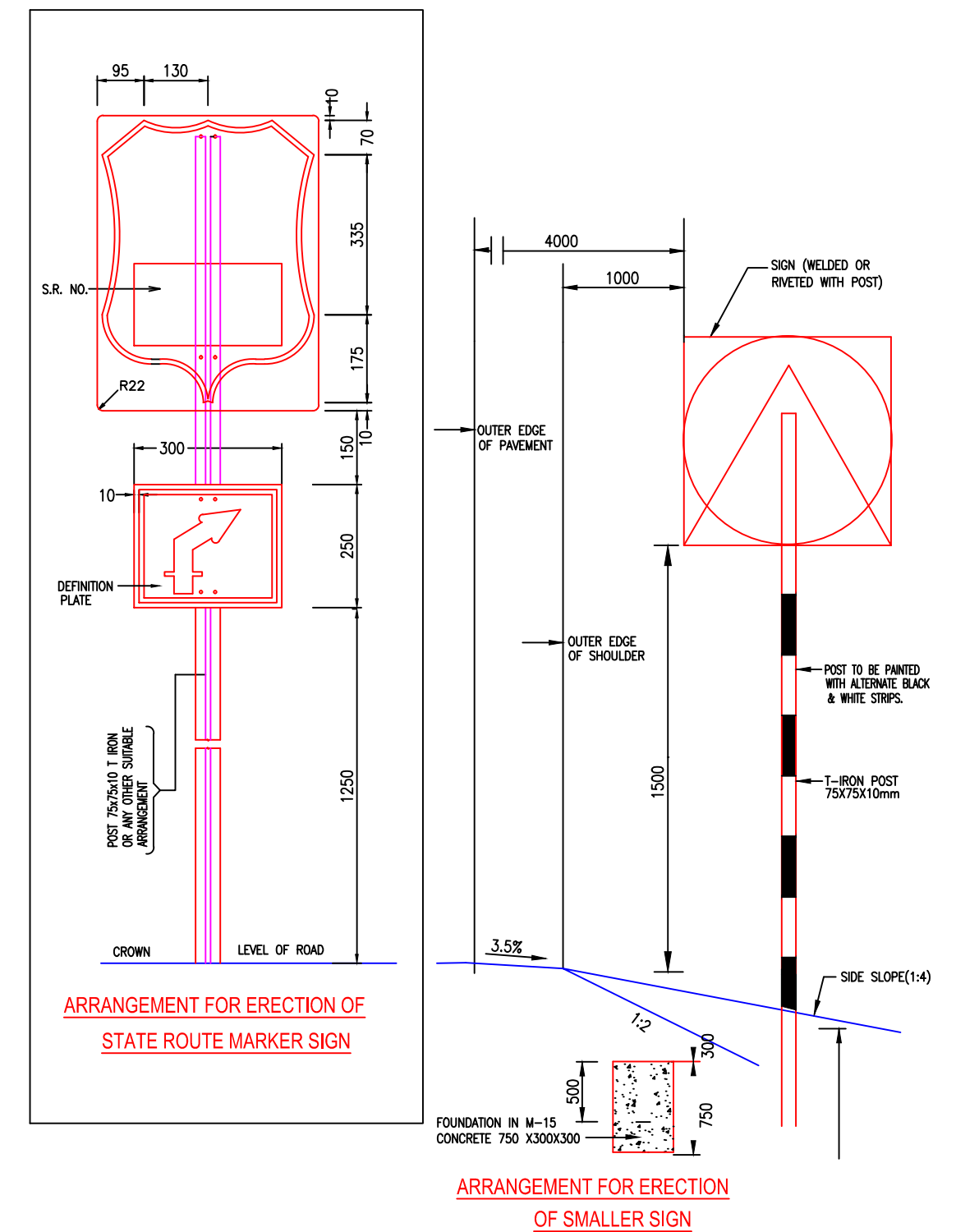
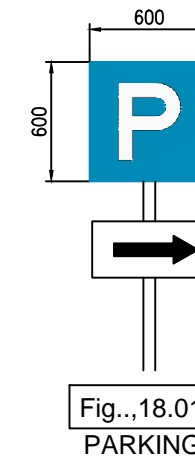
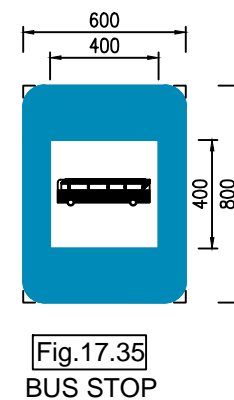
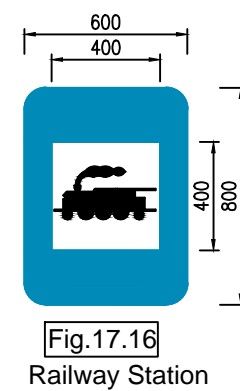
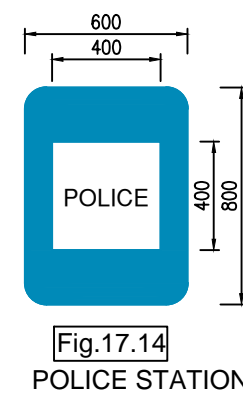
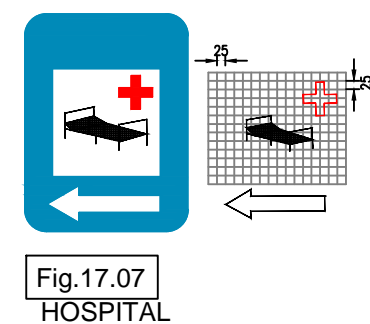
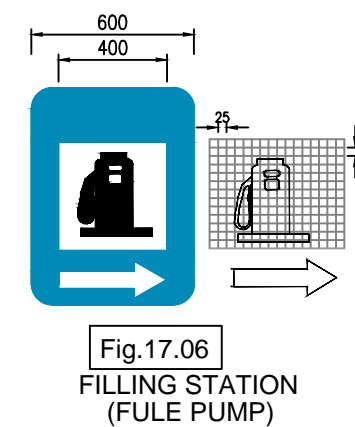
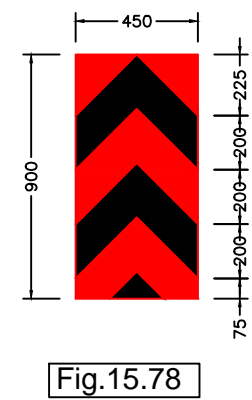
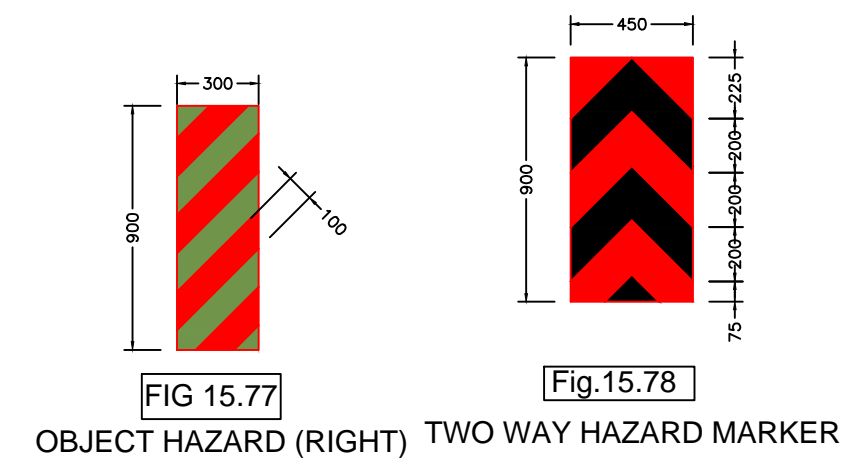
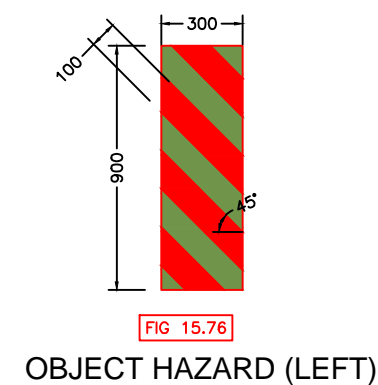
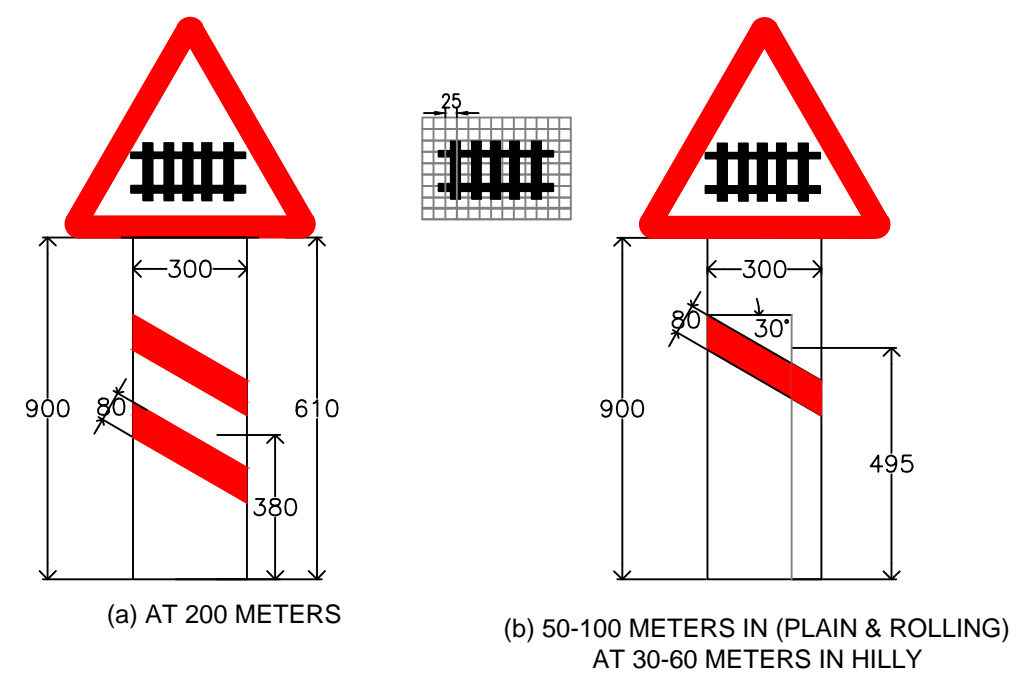
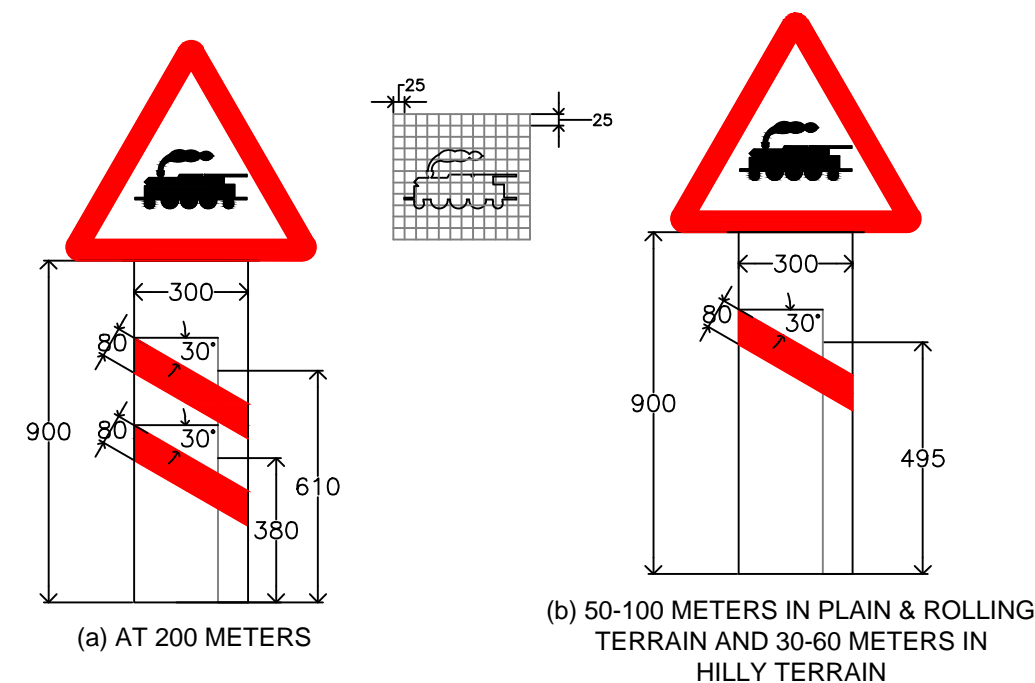
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1. ALL THE DIMENSIONS ARE IN MILLIMETERS UNLESS AND OTHERWISE SPECIFIED.
2. FOR FURTHER DETAILS OF DRAWING REFER IRC: 67-2012.

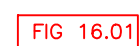
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						Date: OCT-2020 Project No: 1564 Drawing No: NHIDCL/NH-244-PACK-III/ RS/01







Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	<div>FINAL DETAILED PROJECT REPORT</div>			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
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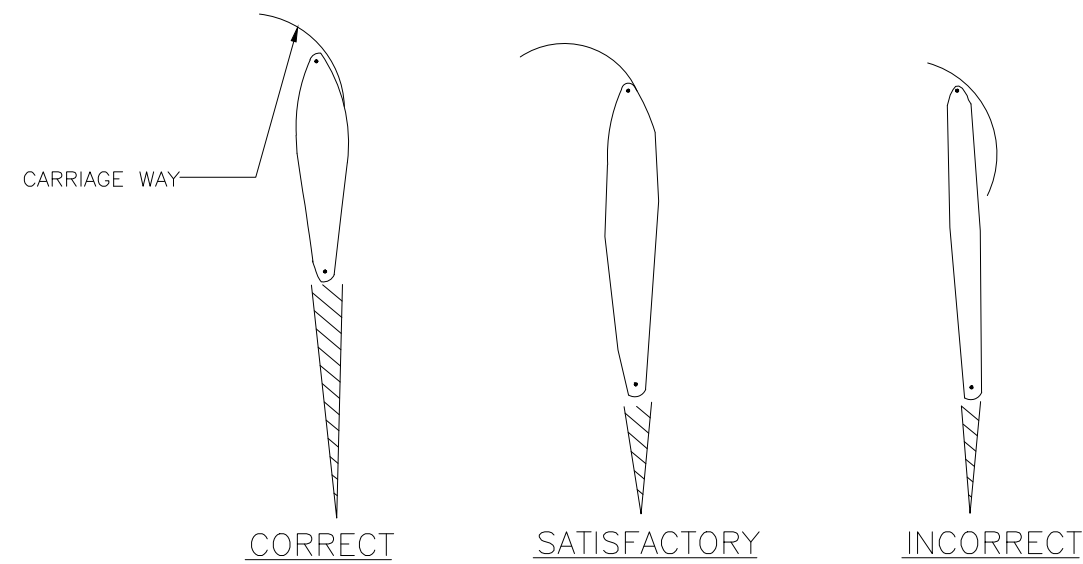
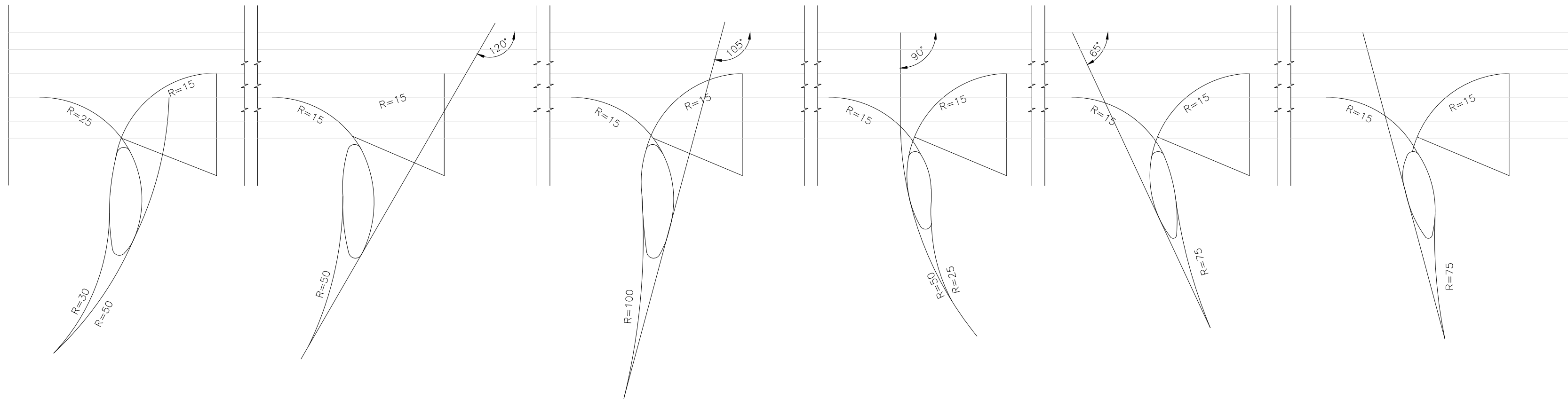


Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div> <div></div>	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT-2020										
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			<div>Date.</div>	<div>Project No.</div>	<div>Drawing No.</div>						
			<div>OCT -2020</div>	<div>1564</div>	<div>NHIDCL/NH-244-PA/CK-III/ RS-03</div>						

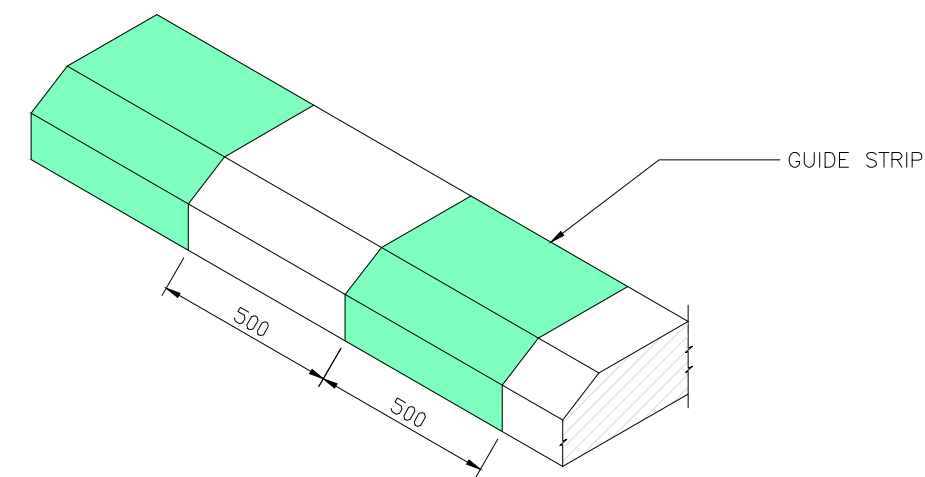


1. ALL THE DIMENSIONS ARE IN MILLIMETERS UNLESS AND OTHERWISE SPECIFIED.
2. FOR FURTHER DETAILS OF DRAWING REFER IRC: 67-2012.

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA)  JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	FINAL DETAILED PROJECT REPORT			Project Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Valloo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.					
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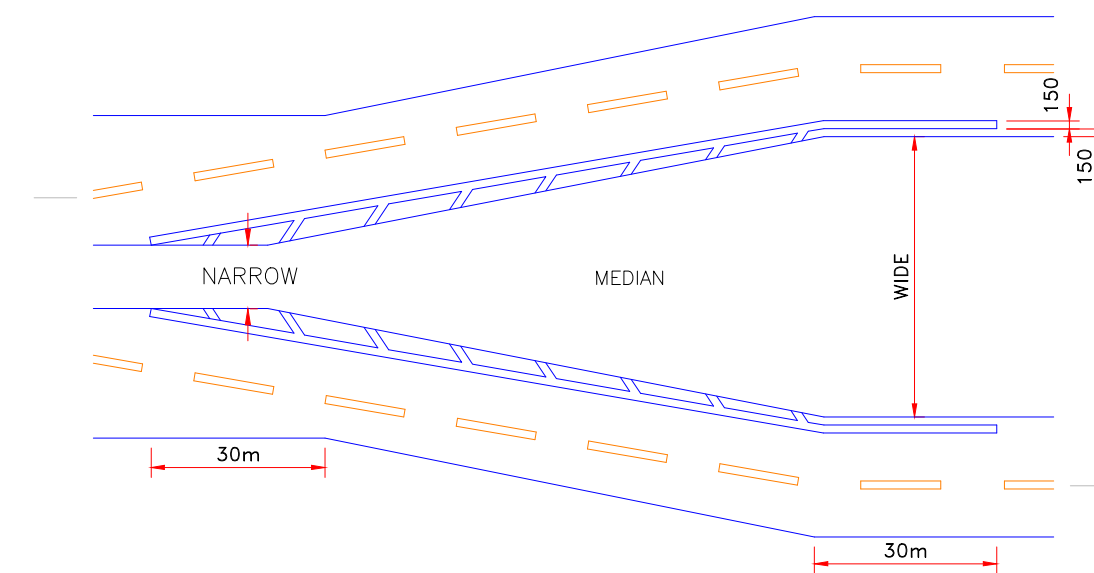


CORRECT METHOD OF SHAPING THE TRAFFIC ISLAND

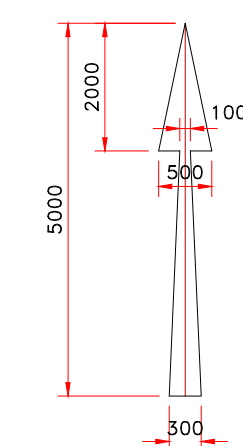


KERB MARKING

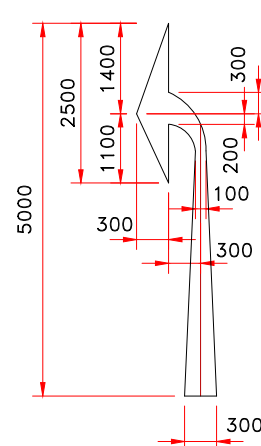
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R0	OCT-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd. 	Designed: _____ Scale Drawn: _____ NTS Checked: _____ Approved: _____		Drawing Title	STANDARD DRAWING		
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								Date.	Project No.	Drawing No.
								OCT-2020	1564	NHIDCL/NH-244-PACK-IV/ 03



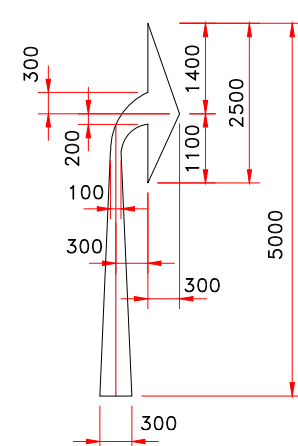
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2: ALL DIMENSIONS SHOULD
FOLLOW RELEVANT
IRC CODE NO. IRC : 355 – (LATEST)



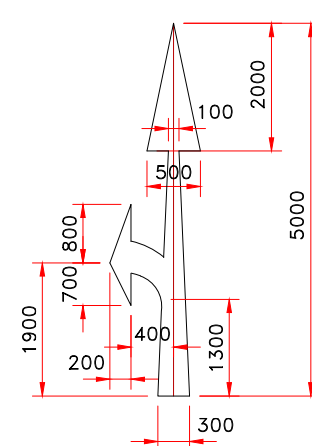
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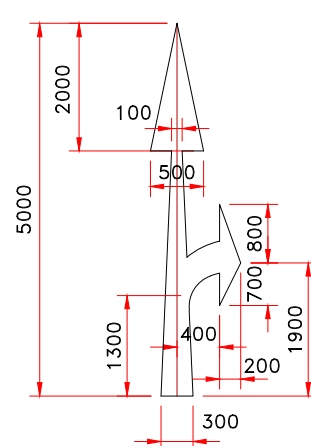
LEFT-RM-14






RIGHT-RM-15

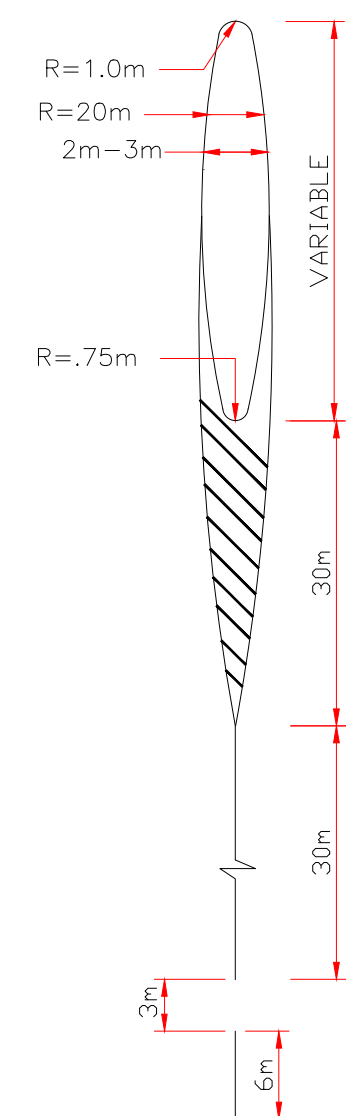
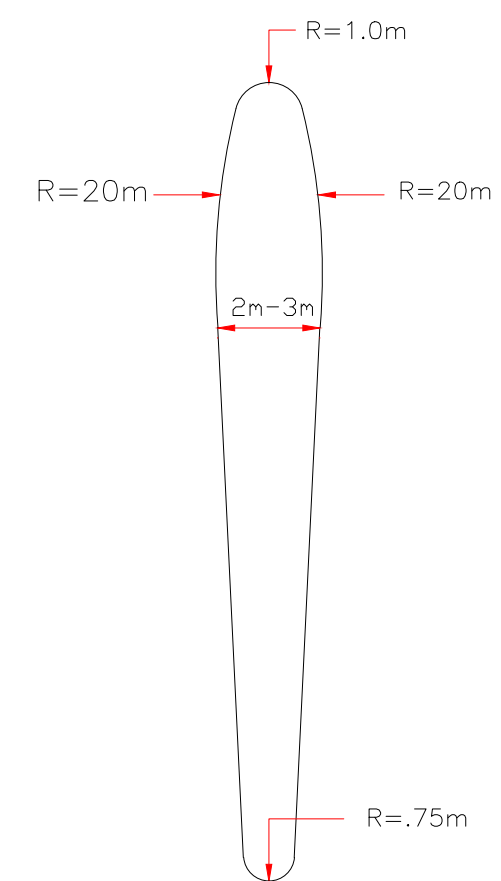
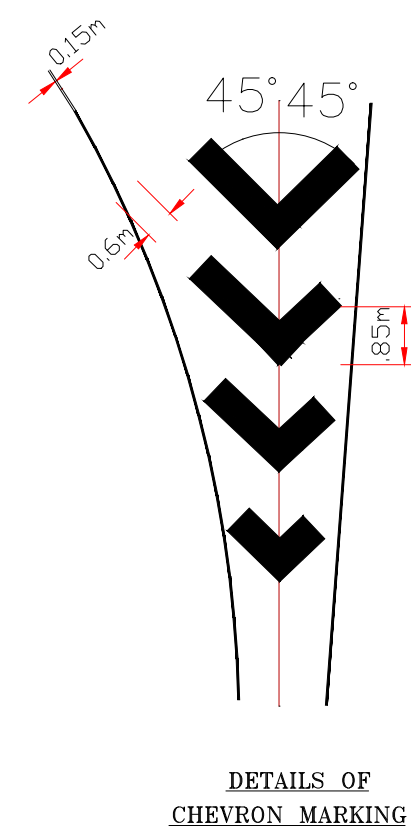
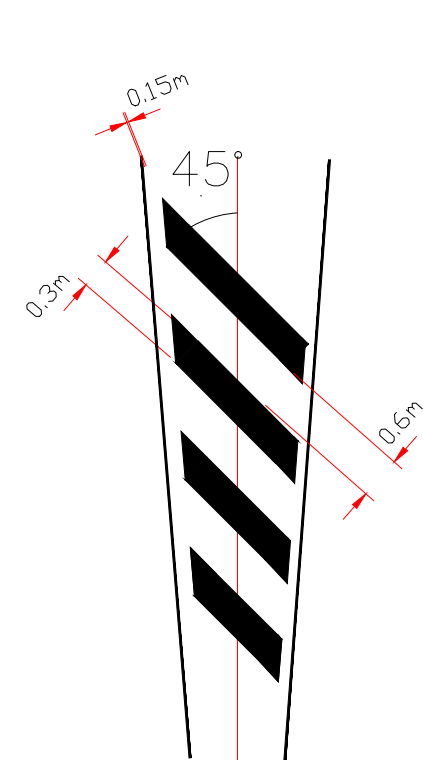
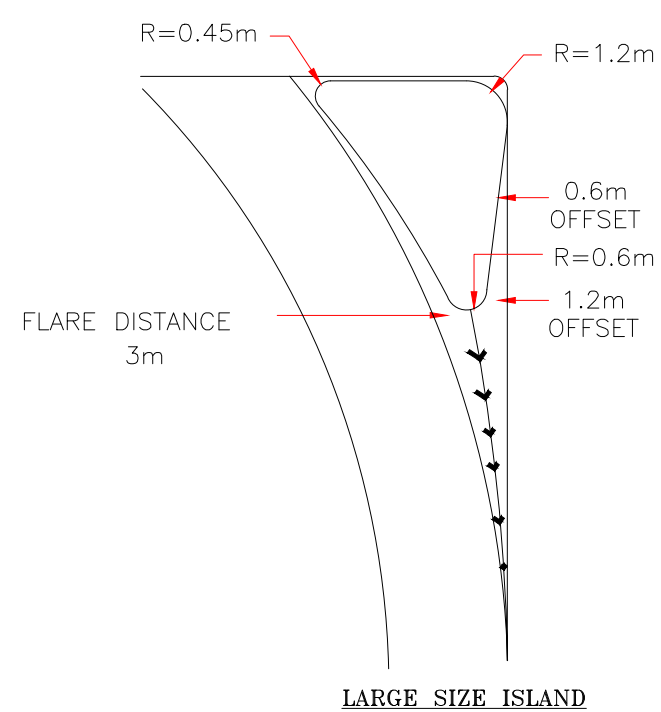
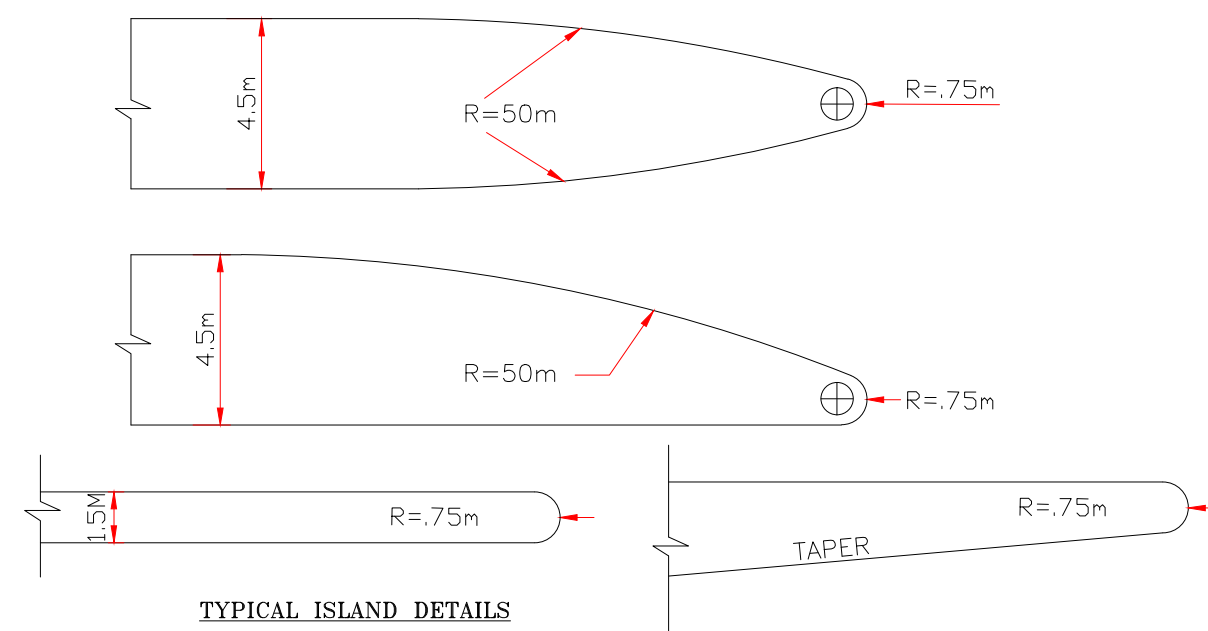
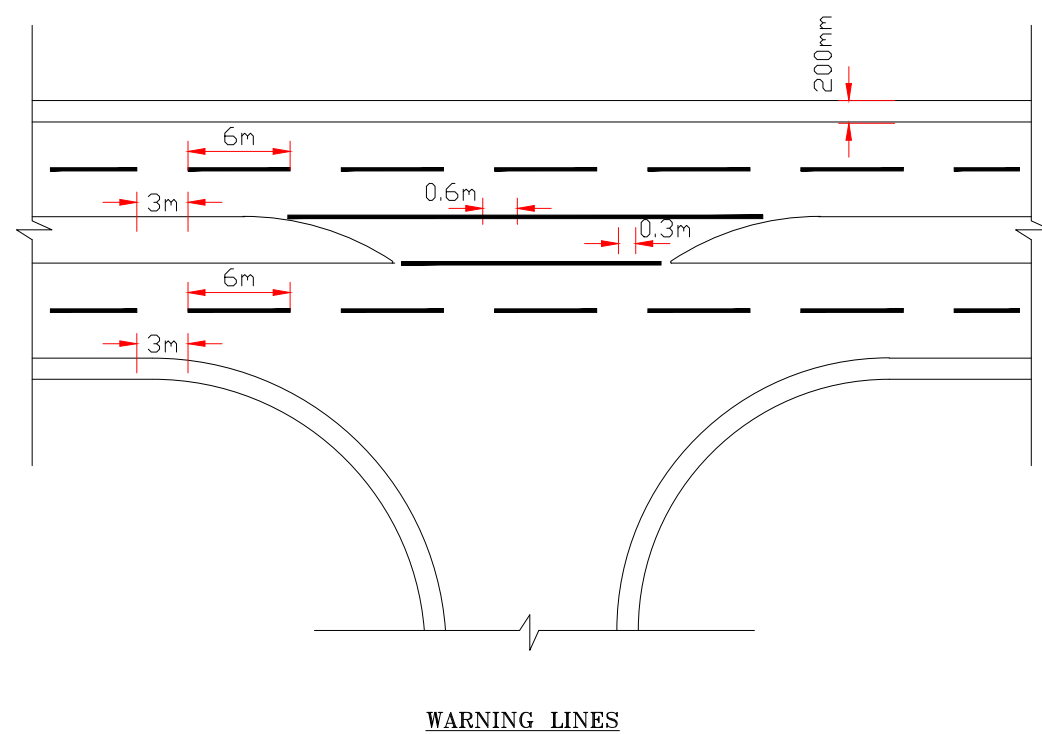
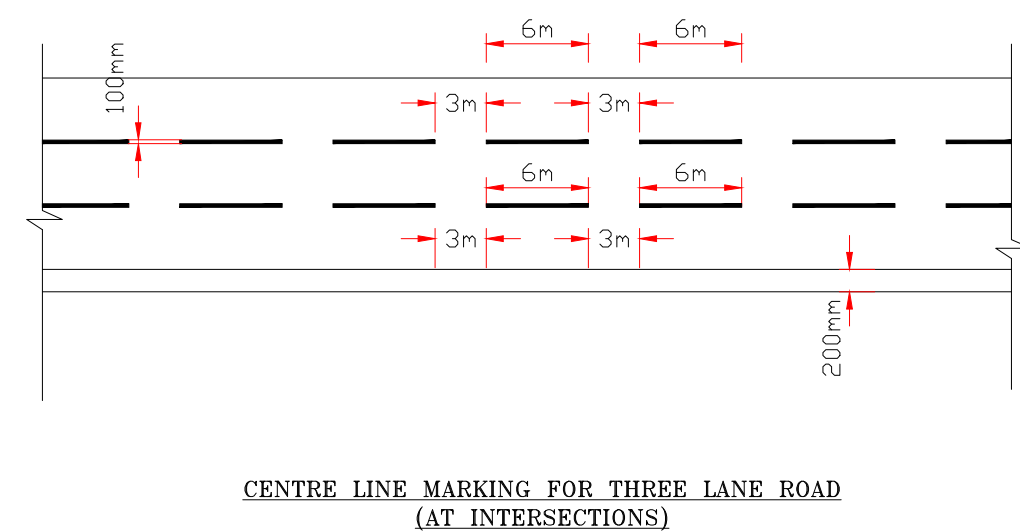
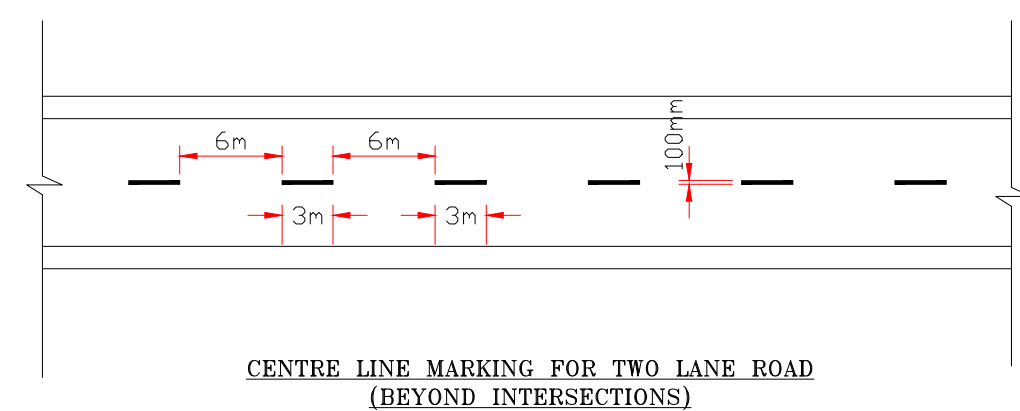





STRAIGHT & LEFT
RM-16

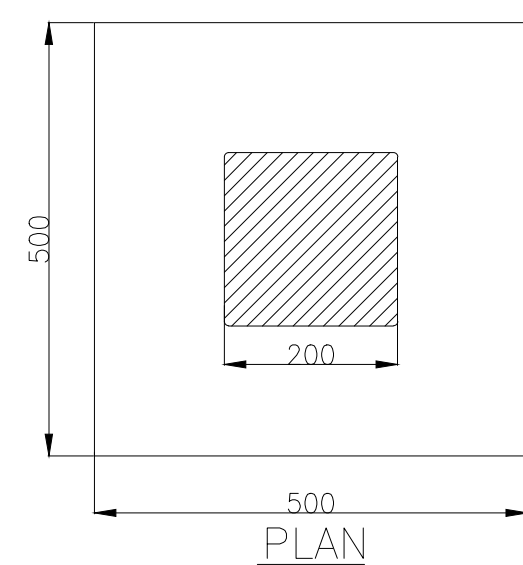


5U STRAIGHT & RIGHT
RM-17

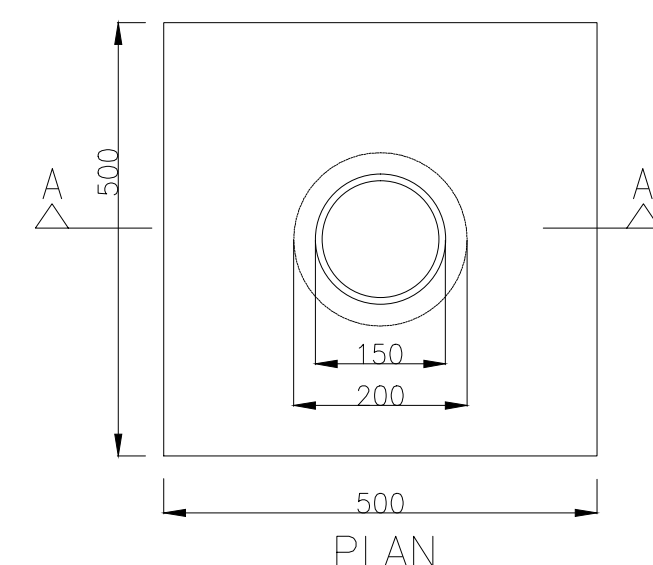
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd. 	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
R0	OCT-2020								
					Designed: <input type="text"/> Scale Drawn: <input type="text"/> NTS Checked: <input type="text"/> Approved: <input type="text"/>	Drawing Title	STANDARD DRAWING TYPICAL DETAILS OF DIRECTIONAL SIGNS		
							Date.	Project No.	Drawing No.
							OCT -2020	1564	NHIDCL/NH-244-PA/CK-III / RM/M1



Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd. 	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44,500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00 (Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT-2020										
					Designed: <input type="text"/>	Scale NTS		Drawing Title	STANDARD DRAWING TYPICAL DETAILS OF ROUTE MARKING (CHEVRON MARKING)		
					Drawn: <input type="text"/>				Date.	Project No.	Drawing No.
					Checked: <input type="text"/>				OCT -2020	1564	NHIDCL/NH-244-PACK-III/ RM/02
					Approved: <input type="text"/>						












TYPE DESIGN WITH STONE AS MATERIAL— BOUNDARY STONE

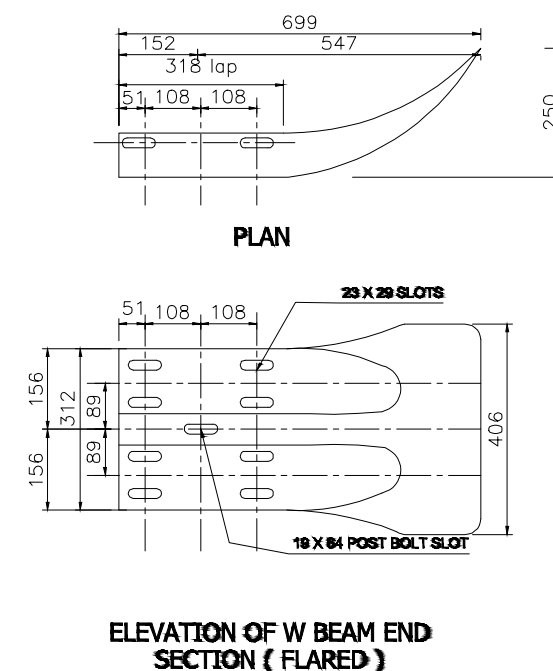
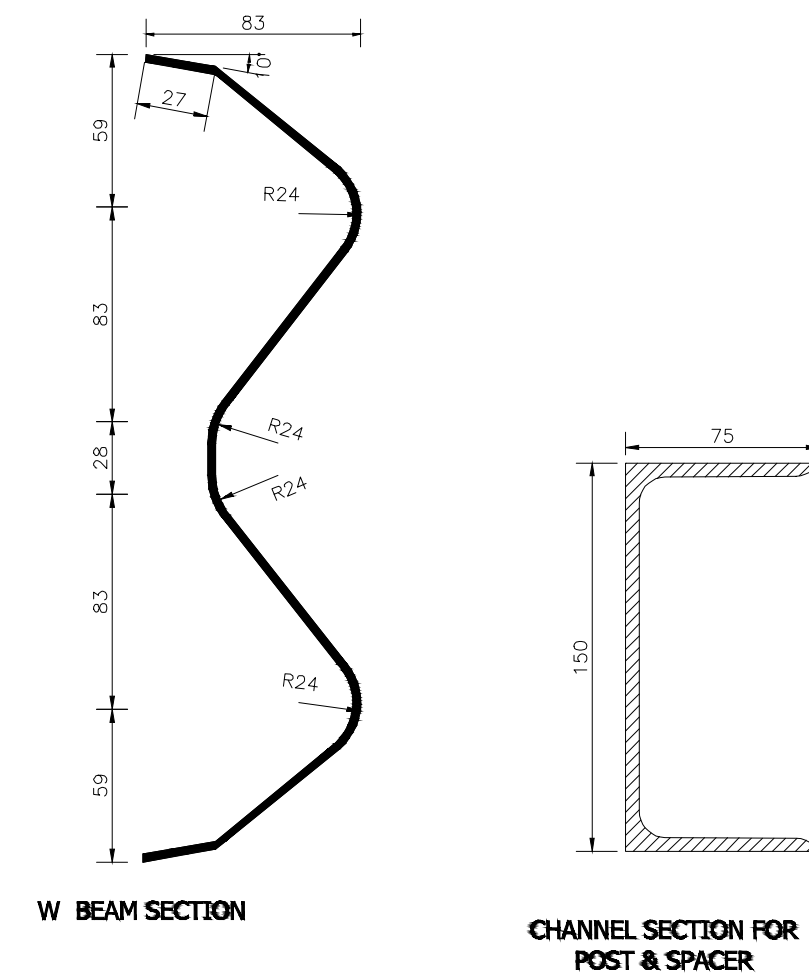
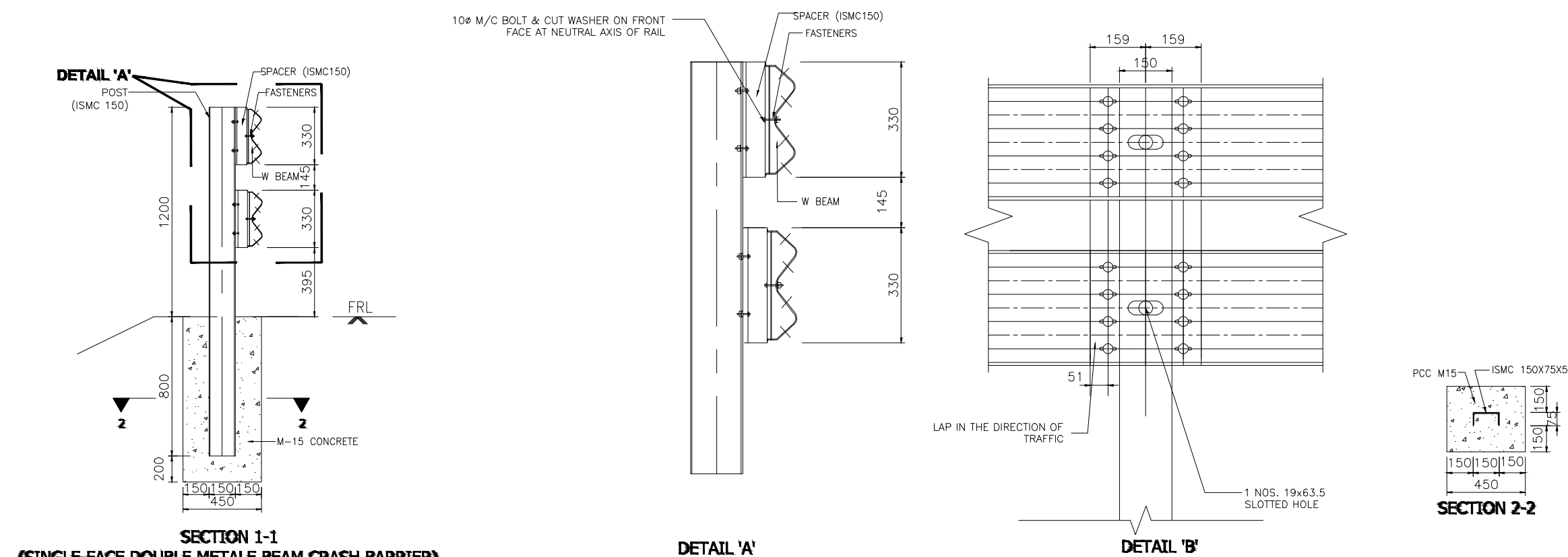


TYPE DESIGN WITH
R.C.C. AS MATERIAL—
BOUNDARY STONE

BAR BENDING SCHEDULE

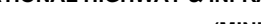


S.NO.	TYPE OF M.S BAR	NO. OF BARS	SHAPE OF BARS	DIA IN mm	LENTH OF BAR INCLUDING HOOKS
1	MAIN BARS	2		6mm	1.84m
2	TOPMOST STIRRUP	1		6mm	370mm
3	STIRRUP (FIRST FROM TOP)	1		6mm	405mm
4	STIRRUP (SECOND FROM TOP)	1		6mm	440mm
5	STIRRUP (THIRD FROM TOP)	1		6mm	475mm
6	BOTTOM STIRRUP	1		6mm	810mm

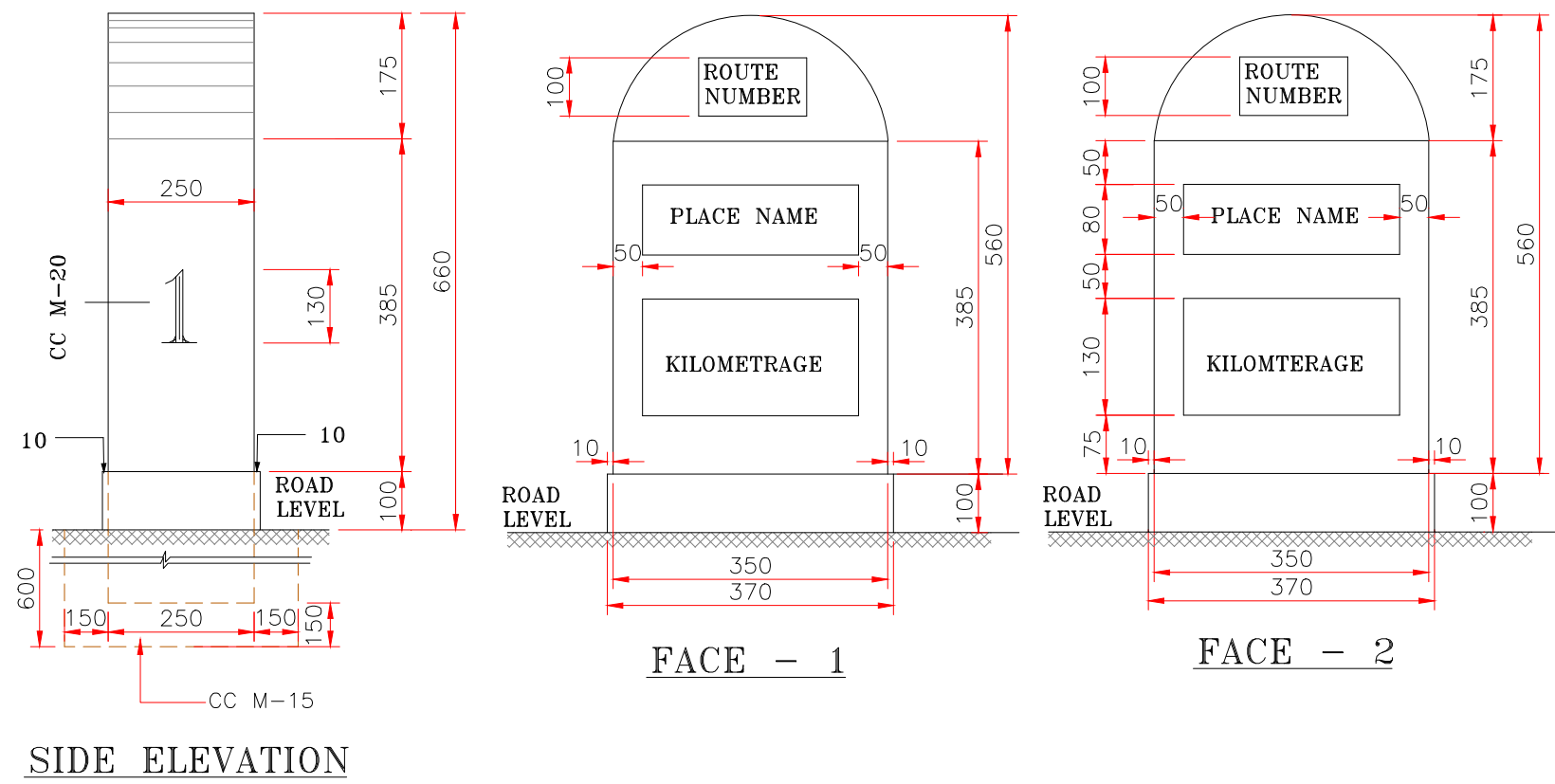
Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA 	CONSULTANT:  RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd. 	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.			
R0	OCT-2020											
					Designed:		Scale NTS		Drawing Title	STANDARD DRAWING		
				Drawn:		TYPICAL DETAIL FOR BOUNDARY STONE & GUARD POST						
				Checked:		Date.				Project No.	Drawing No.	
				Approved:		OCT -2020				1564	NHIDCI.NH-244-PACK-III/ RF/01	



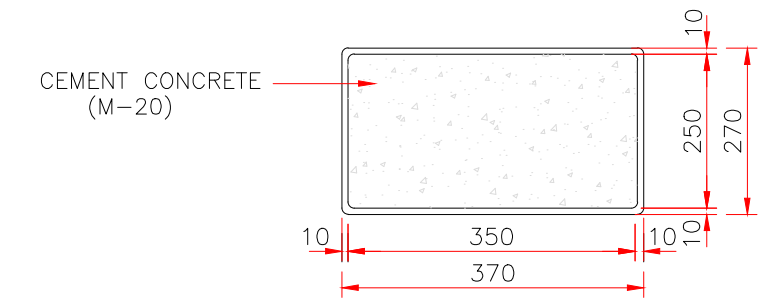
Notes:

1. All the dimensions are in MM unless and otherwise specified

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	<div>CLIENT</div> <div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div>CONSULTANT:</div> <div></div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div>	<div>FINAL DETAILED PROJECT REPORT</div>	<div>Project</div> <div>Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.</div>
R0	OCT-2020					
				<div>Designed: <input type="text"/></div> <div>Drawn: <input type="text"/></div> <div>Checked: <input type="text"/></div> <div>Approved: <input type="text"/></div>	<div>Scale</div> <div>NTS</div>	<div>Drawing Title</div> <div>STANDARD DRAWING</div> <div>TYPICAL DETAILS OF DOUBLE HEAD METAL BEAM CRASH BARRIER</div> <div><div>Date.</div><div>Project No.</div><div>Drawing No.</div><div>OCT - 2020</div><div>1564</div><div>NHIDCL/NH-244-PACK-III/ MIS/C01</div></div>

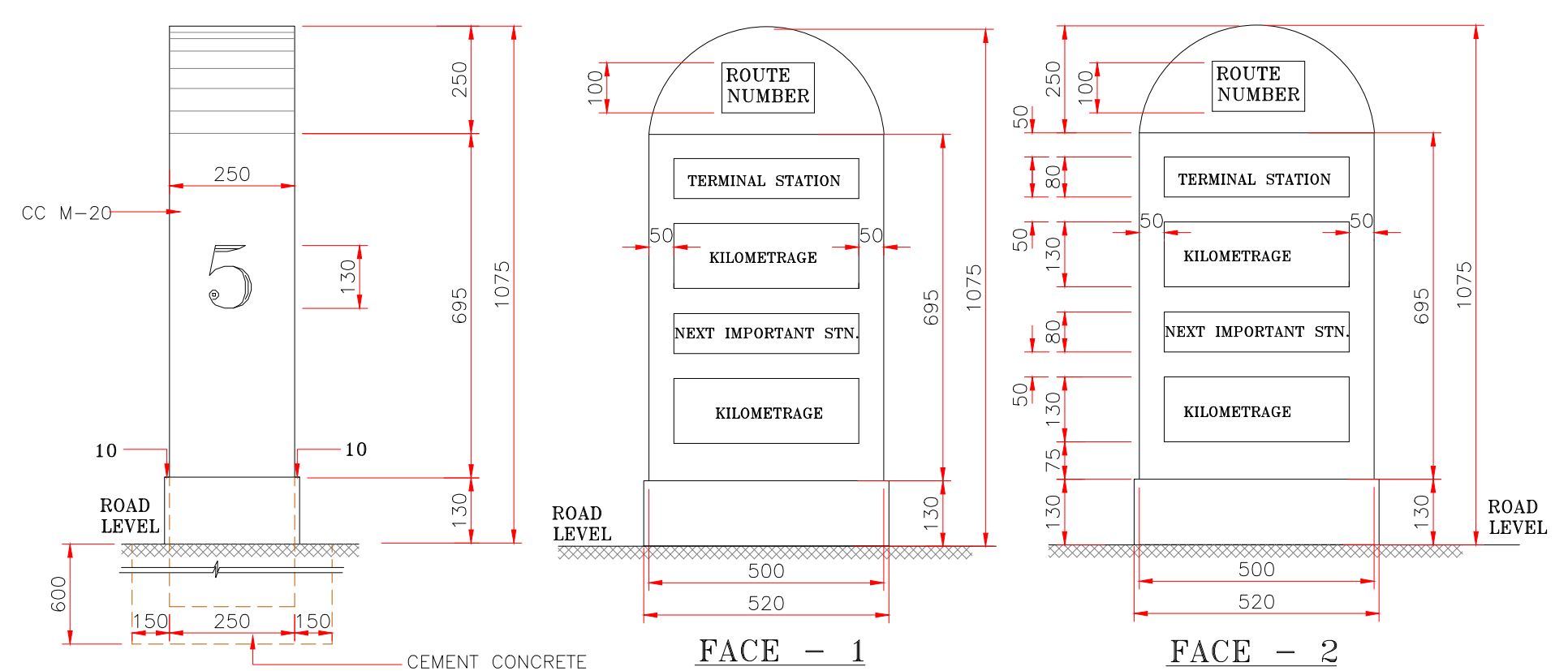


SIDE ELEVATION

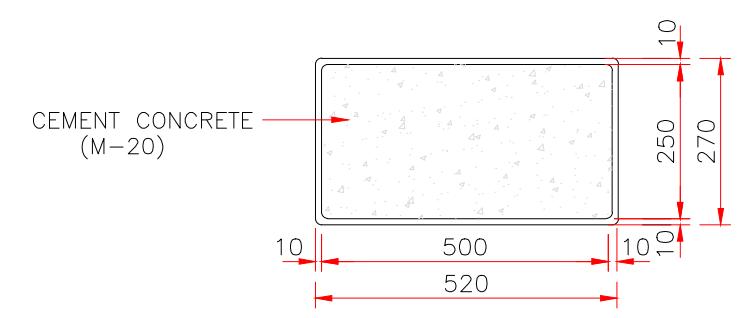


SECTIONAL PLAN

TYPE DESIGN FOR THE ORDINARY KILOMETRE STONE

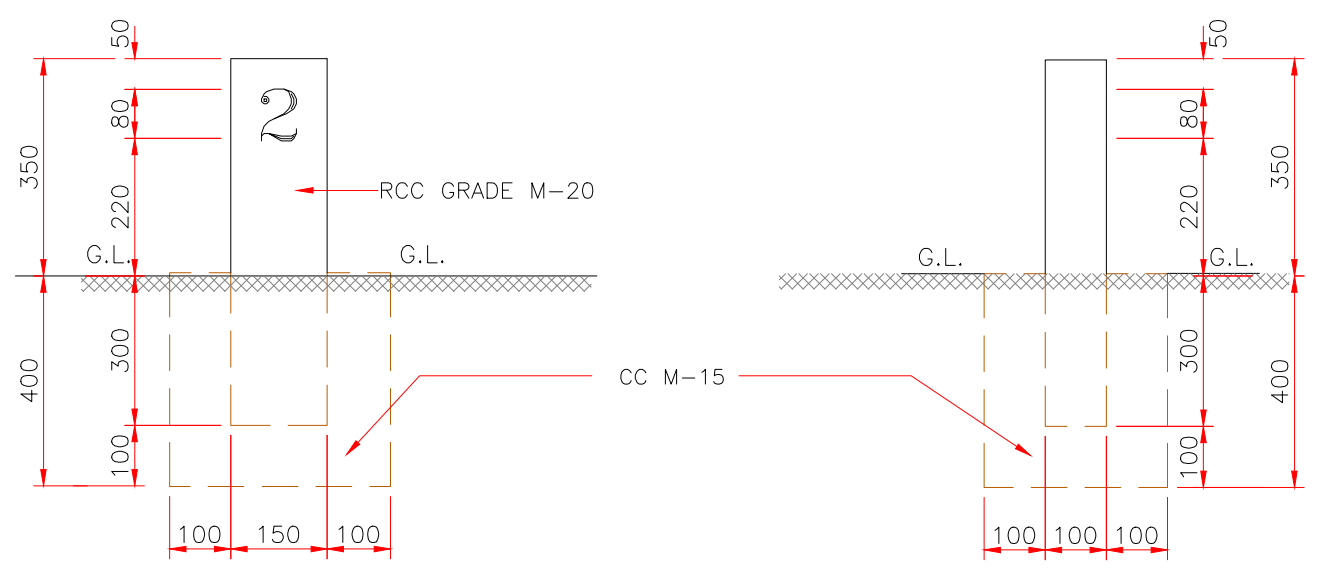


SIDE ELEVATION



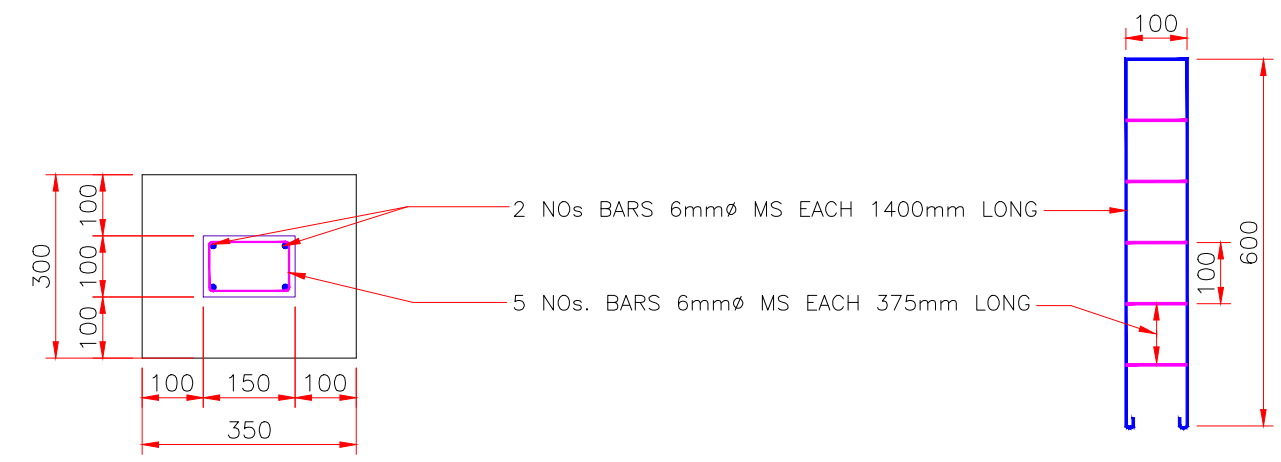
SECTIONAL PLAN

TYPE DESIGN FOR THE 5th KILOMETRE STONE



FRONT ELEVATION

SIDE ELEVATION



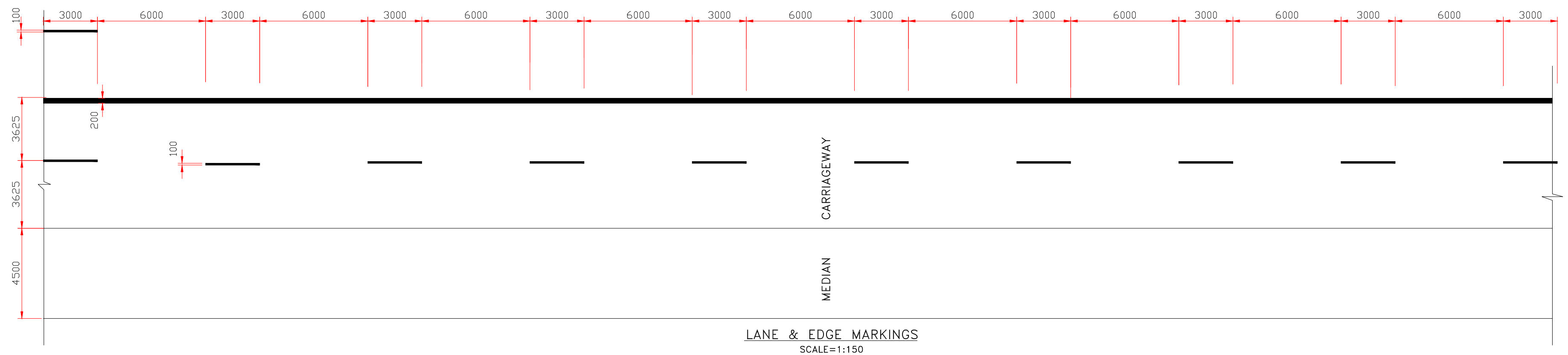
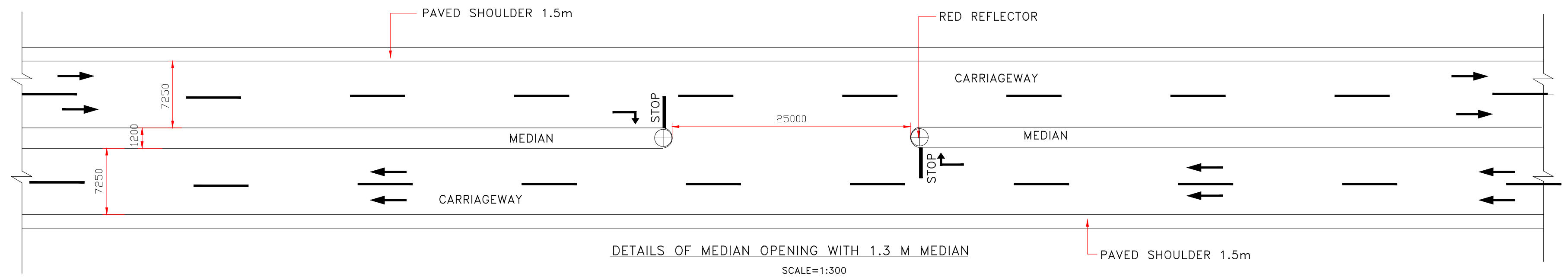
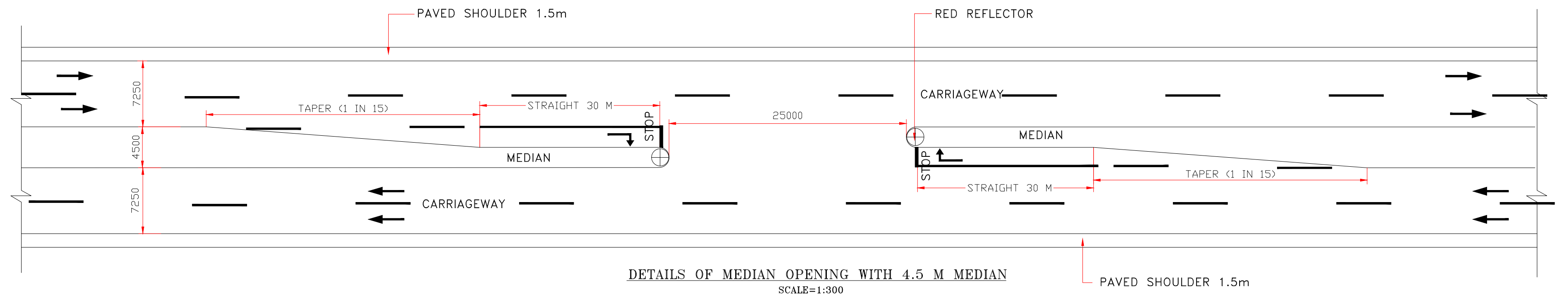
PLAN

SCHEDULE OF REINFORCEMENT

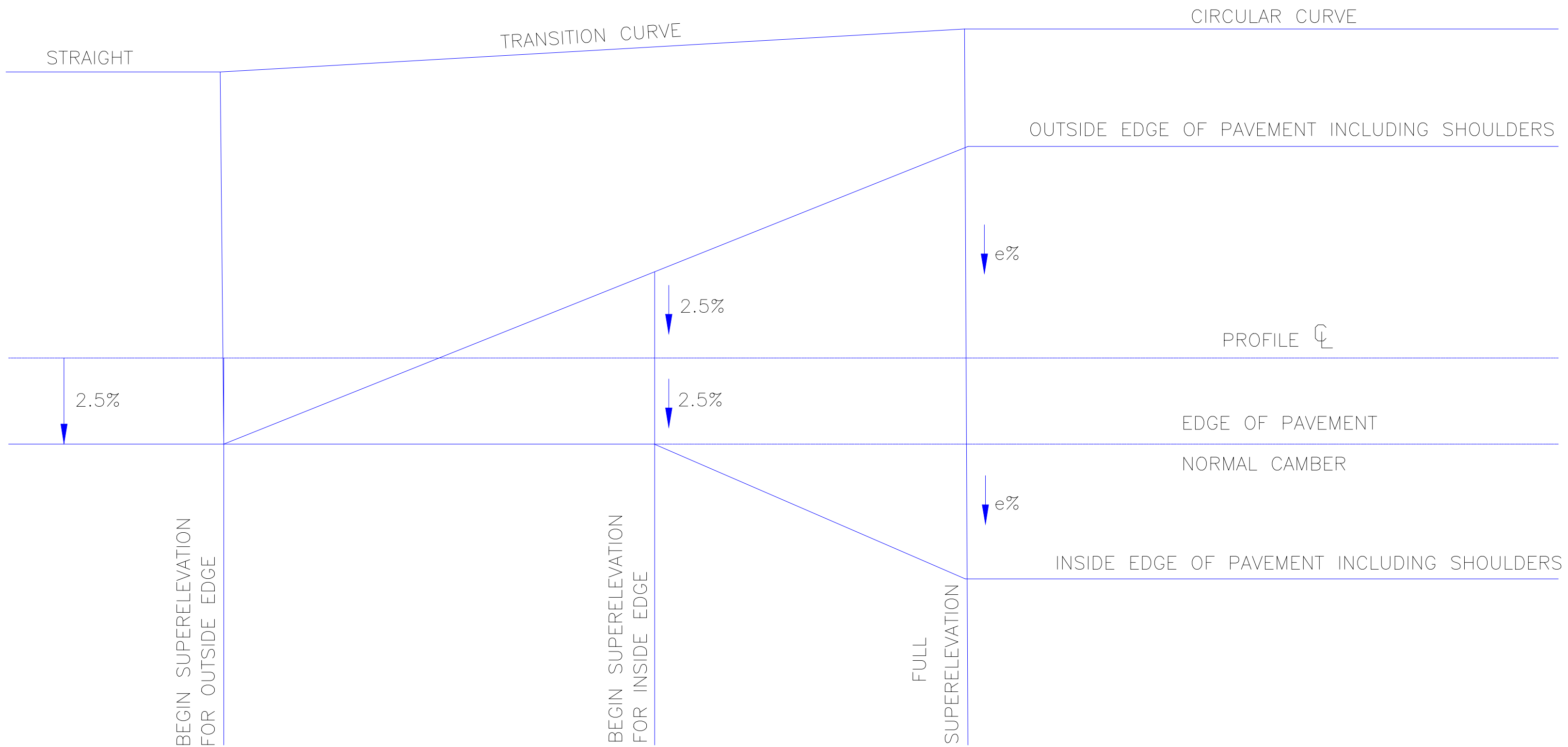
TYPE DESIGN FOR 200 - METRE STONES

- NOTES
1. ALL DIMENSIONS ARE IN MILLIMETRES
 2. FOR DETAILS REFER IRC:8-(LATEST) AND IRC:26-(LATEST)

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Drawing Title
R0	OCT-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed: Drawn: Checked: Approved:	Scale NTS	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
							STANDARD DRAWING TYPICAL DETAILS FOR 200 METER 1 Km & Km Post
							Date: OCT-2020
							Project No: 1564
							Drawing No: NHIDCL/NH-244-PACK-IV/ RF/02

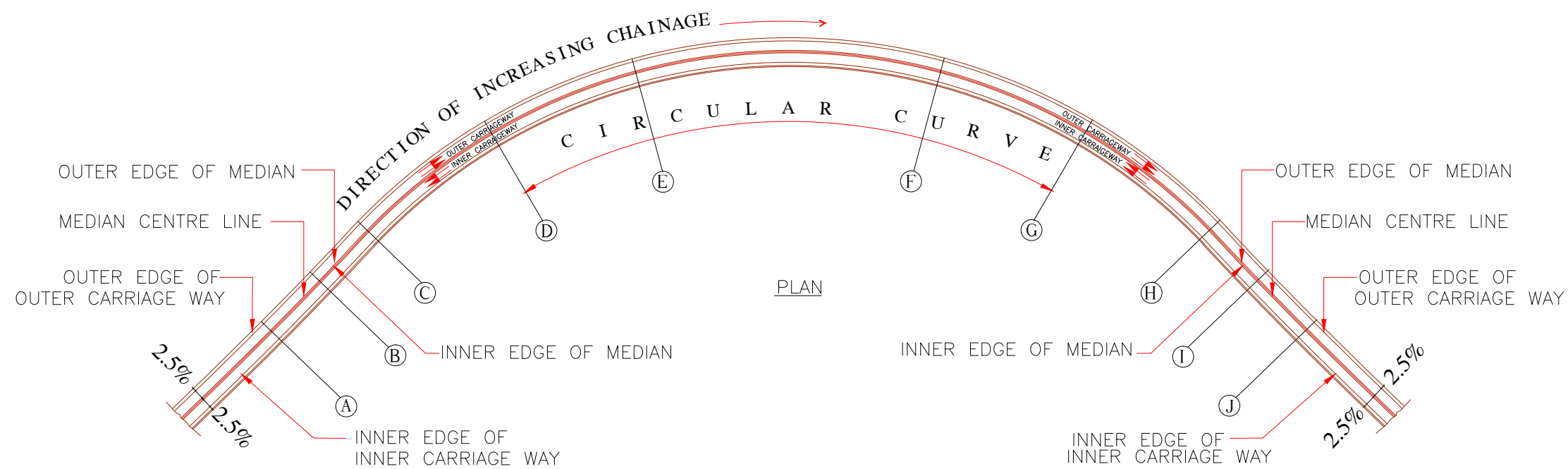
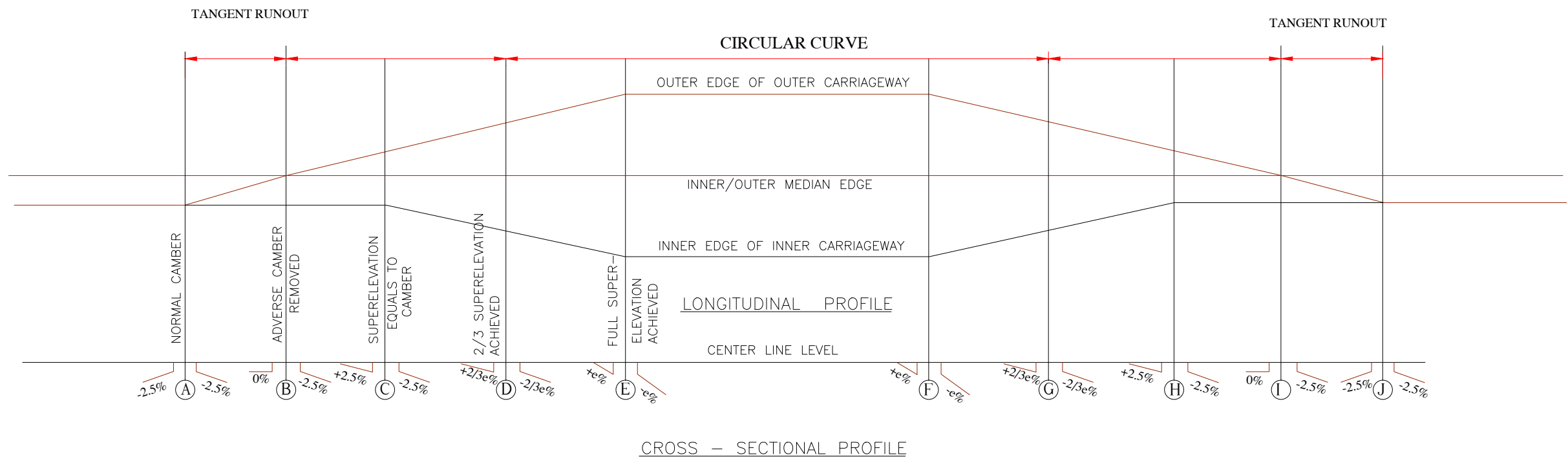


Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT-2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.</div> <div>(MINISTRY OF ROAD TRANSPORT & HIGHWAY)</div> <div>GOVERNMENT OF INDIA</div> <div></div>	<div></div> <div></div> <div>RODIC CONSULTANTS PVT. LTD.</div> <div>1, JAI SINGH MARG (FIRST FLOOR), YMCA</div> <div>CULTURAL CENTRE BUILDING</div> <div>NEW DELHI - 110001 (INDIA)</div> <div>JV with Monarch Surveyors</div> <div>and Engineering Consultants</div> <div>Pvt.Ltd.</div>	Designed: <div></div>	Scale	NTS	Drawing Title	STANDARD DRAWING		
	Drawn: <div></div>		MERGING PLAN & DETAILS OF MEDIAN OPENING								
	Checked: <div></div>		Date	Project No.	Drawing No.						
	Approved: <div></div>		OCT - 2020	1564	NHIDCL/NH-244-PACK-IV/ MISC/02						



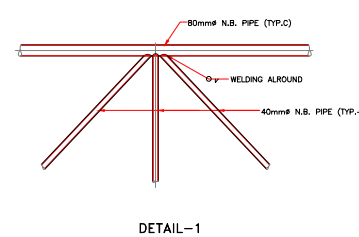
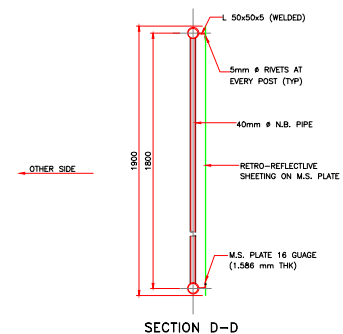
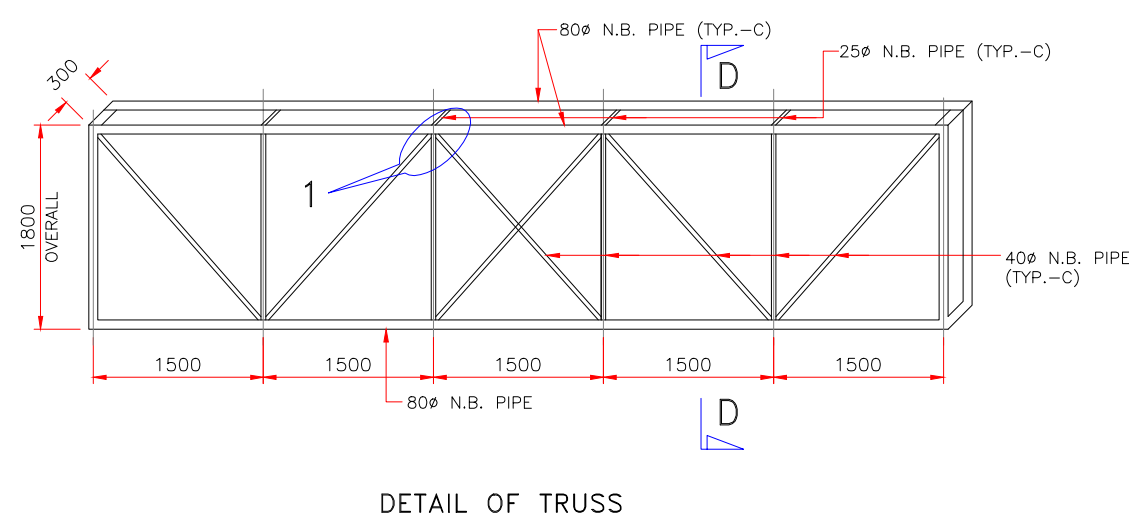
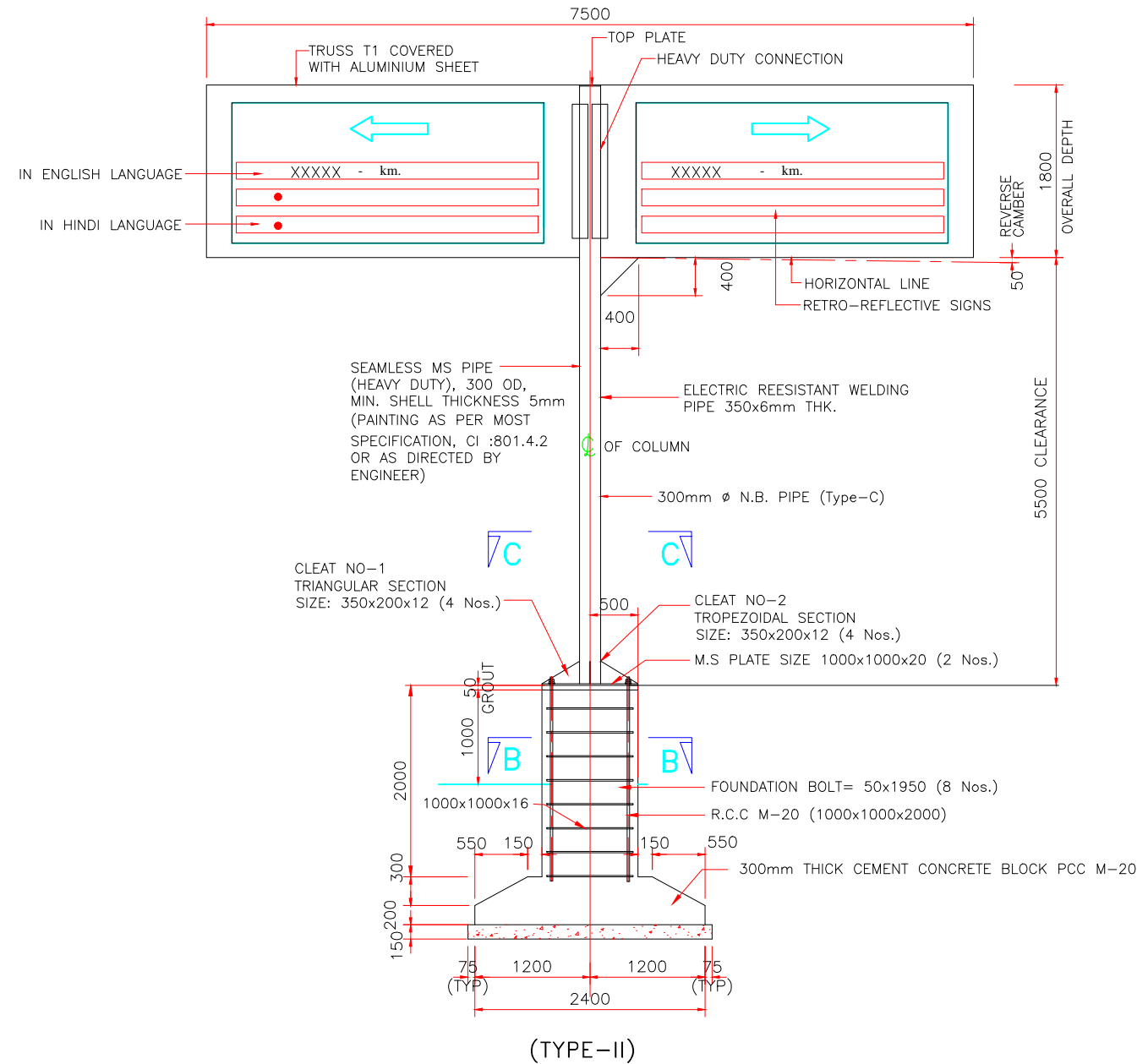
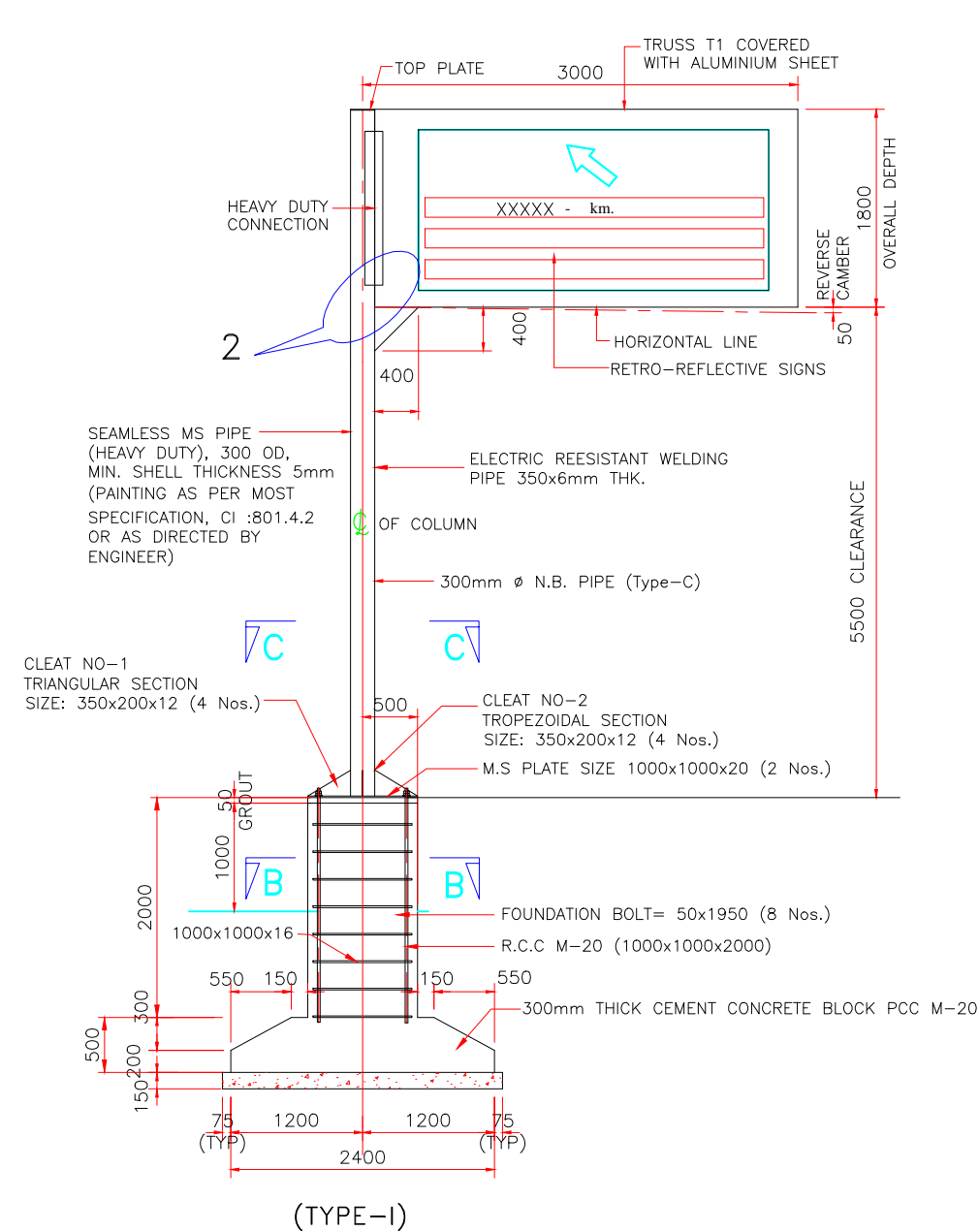
SUPERELEVATION DEVELOPMENT

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT			Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.		
R0	OCT-2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div> <div></div>	<div> RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</div> <div></div>	Designed: <div></div> Scale NTS			Drawing Title	STANDARD DRAWING Typical Attainment of Superelevation		
					Drawn: <div></div>				Date: OCT -2020	Project No. 1564	Drawing No.
					Checked: <div></div>				NHIDCL/NH-244-PACK-III/ MISC/IV		
					Approved: <div></div>						

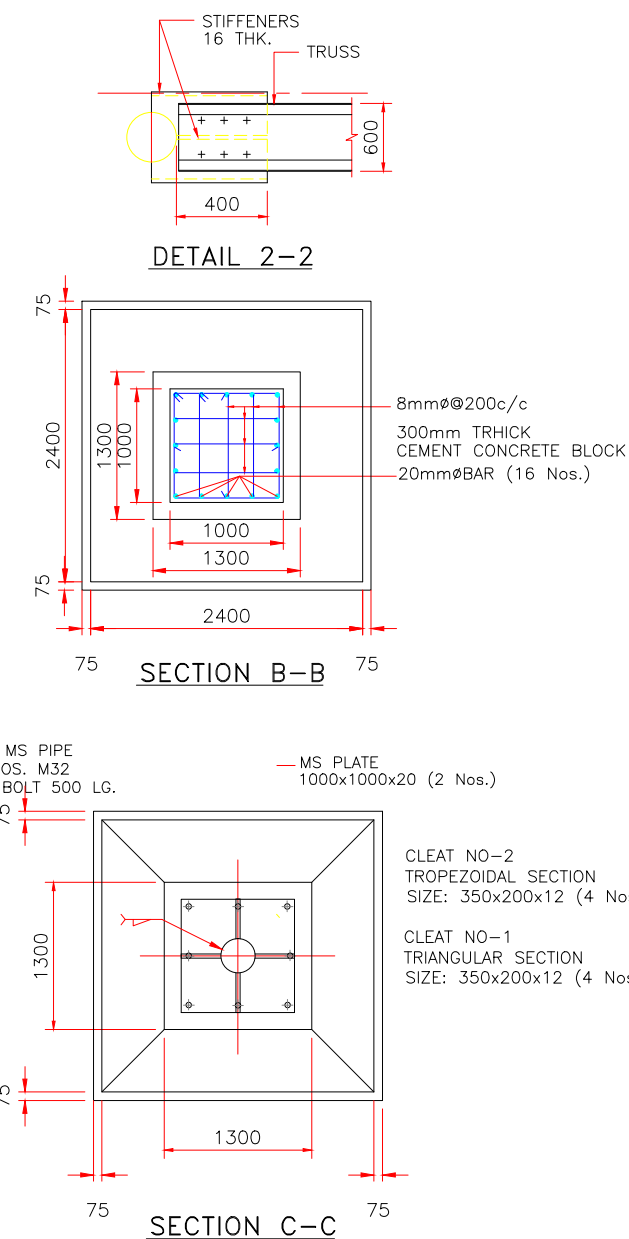


TYPICAL DETAILS OF SUPERELEVATION ATTAINMENT FOR A SIMPLE CIRCULAR CURVE
(ROTATION ABOUT MEDIAN EDGE)

Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Drawing Title		
R0	OCT-2020		<div>NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div>	<div>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</div>	FINAL DETAILED PROJECT REPORT	STANDARD DRAWING TYPICAL DETAIL OF CIRCULAR CURVE		
					Designed:	Scale	Drawing No.	
					Drawn:	NTS	Date:	Project No.
					Checked:		OCT-2020	1564
					Approved:		NHIDCL/NH-244-PACK-IV/ MISC03	

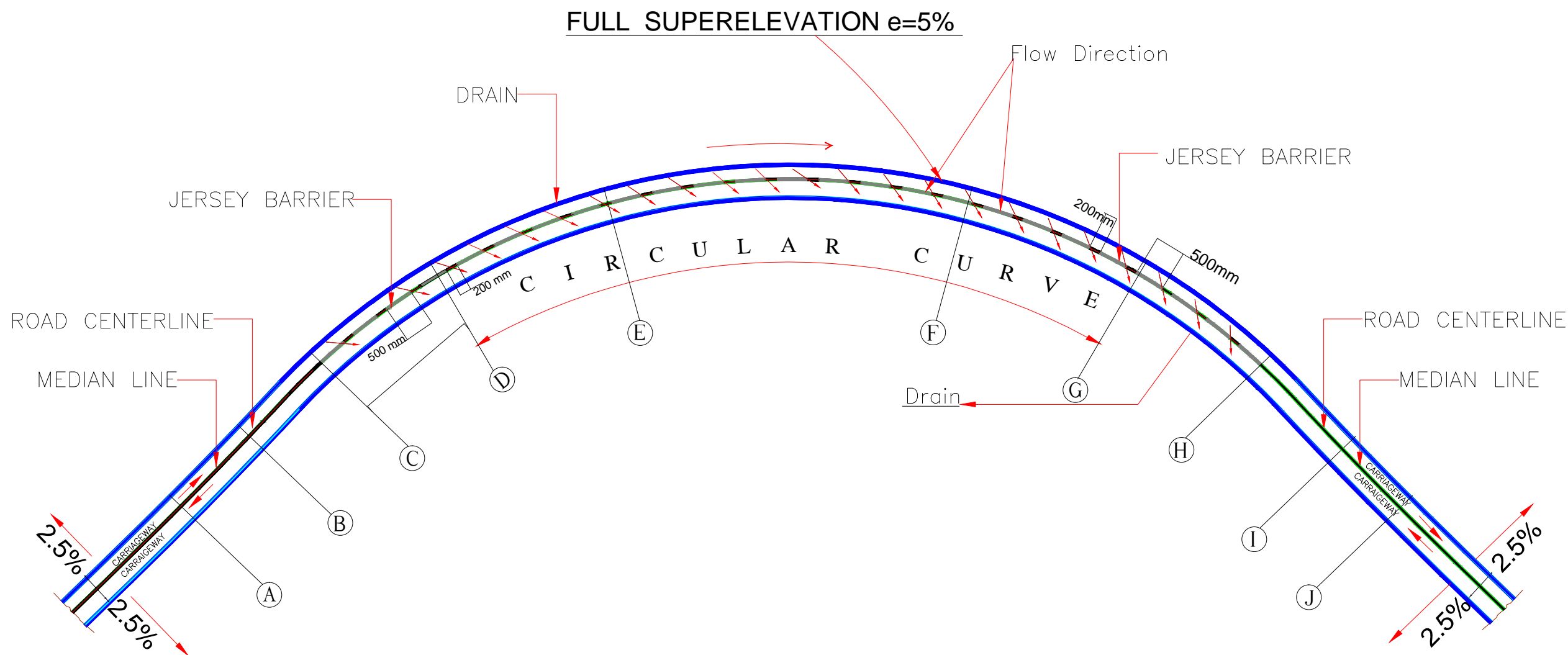
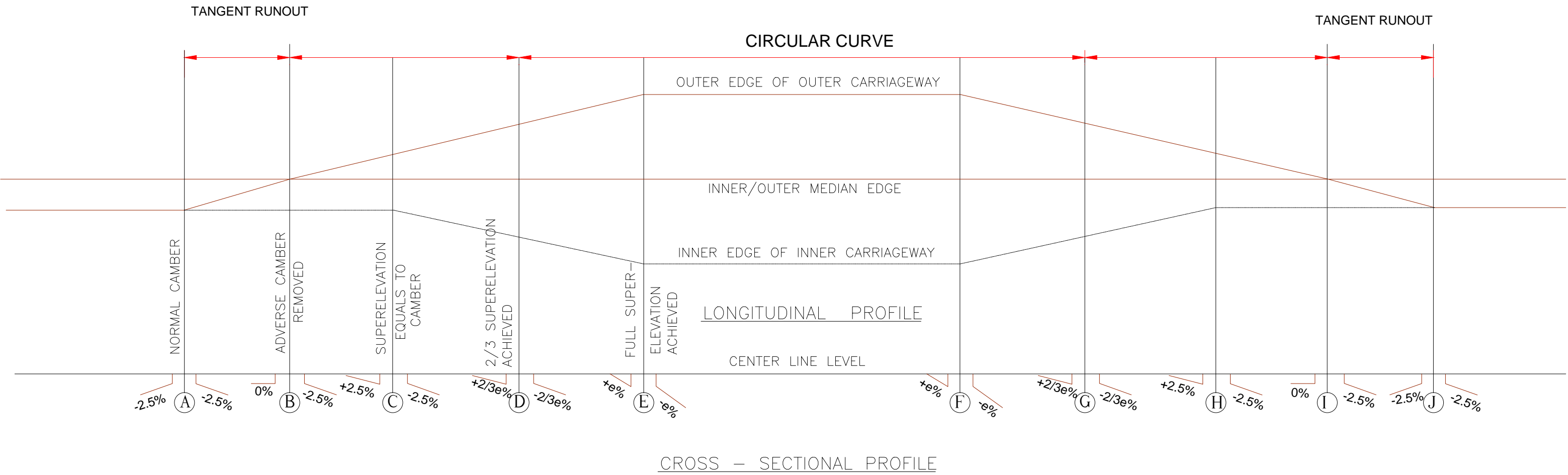


1. ALL DIMENSIONS ARE IN mm, LEVELS IN METRES & CHAINAGES IN KM UNLESS MENTIONED OTHERWISE.
2. DO NOT SCALE THE DRAWING. FOLLOW WRITTEN DIMENSIONS ONLY.
3. CONTRACTOR SHALL SUBMIT SHOP WORKING DETAILS OF ABOVE STRUCTURES FOR APPROVAL OF CONSULTANTS.
4. READ THIS DRAWING IN CONJUNCTION WITH TECHNICAL SPECIFICATIONS OF WORK.
5. GRADE OF CONCRETE TO BE M25.
6. GRADE OF REINFORCING STEEL SHALL BE Fe 415 CONFORMING TO IS:1786.
7. MINIMUM COVER TO ANY REINFORCEMENT SHALL BE 40mm.
8. ALL WELDS SHALL BE 6mm FILLET WELD UNLESS SPECIFIED OTHERWISE.

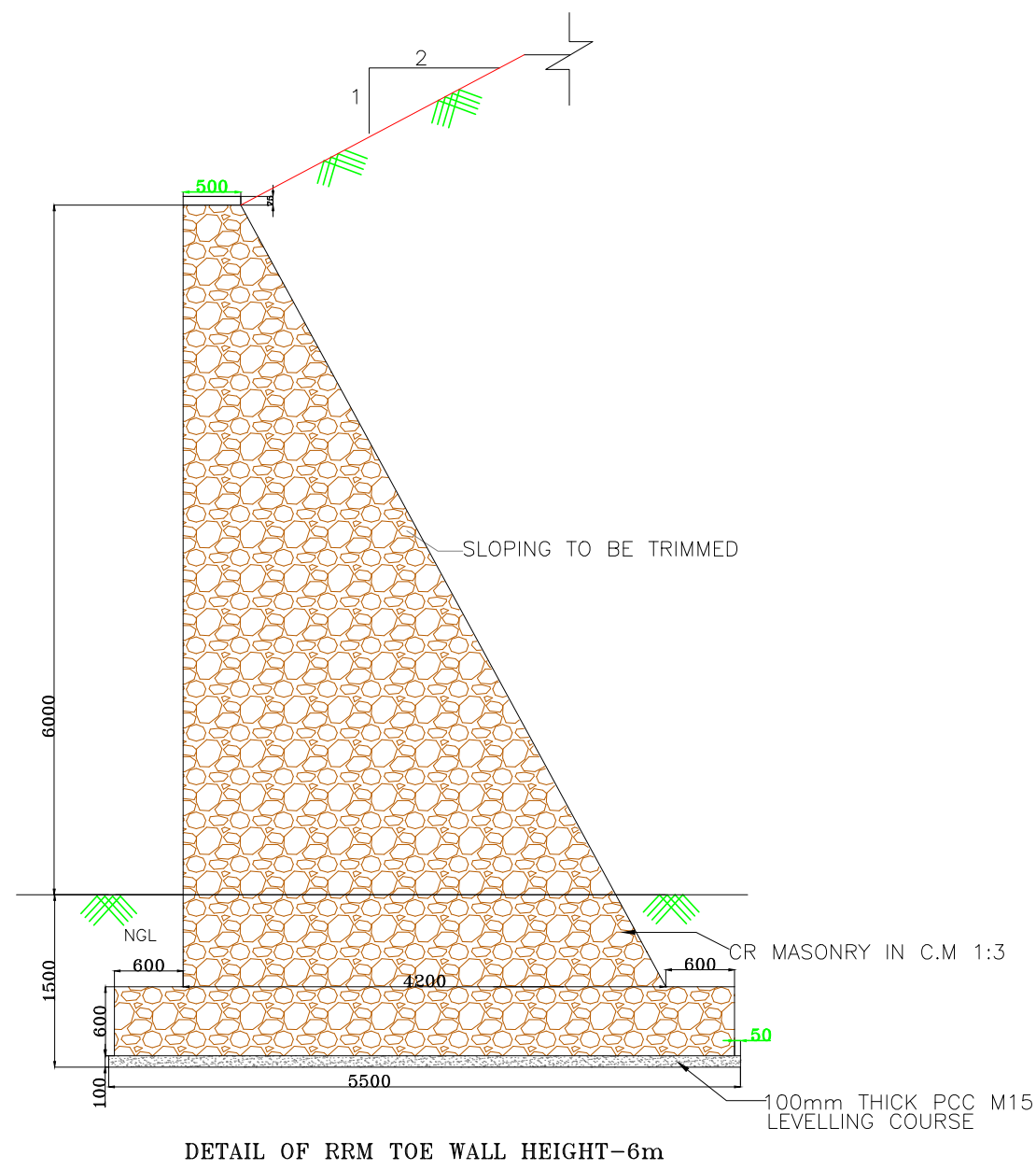
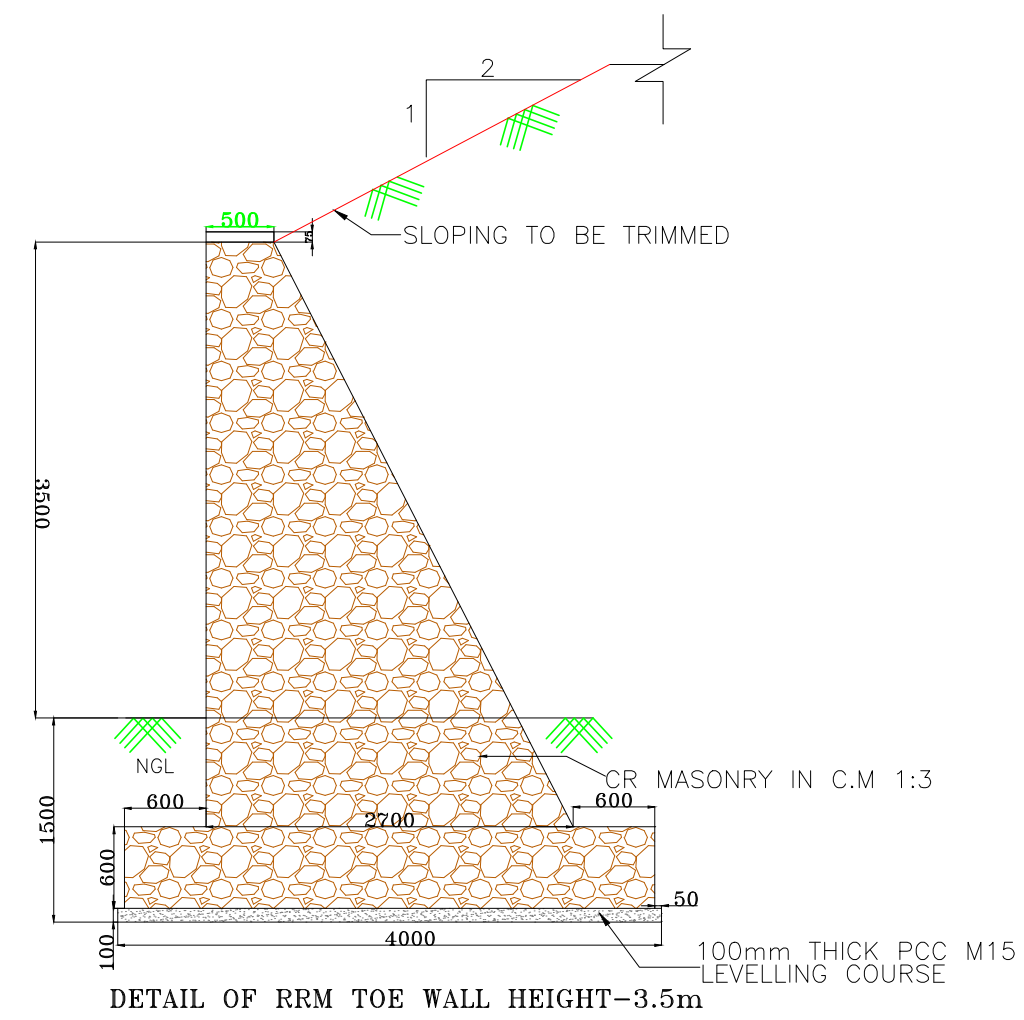
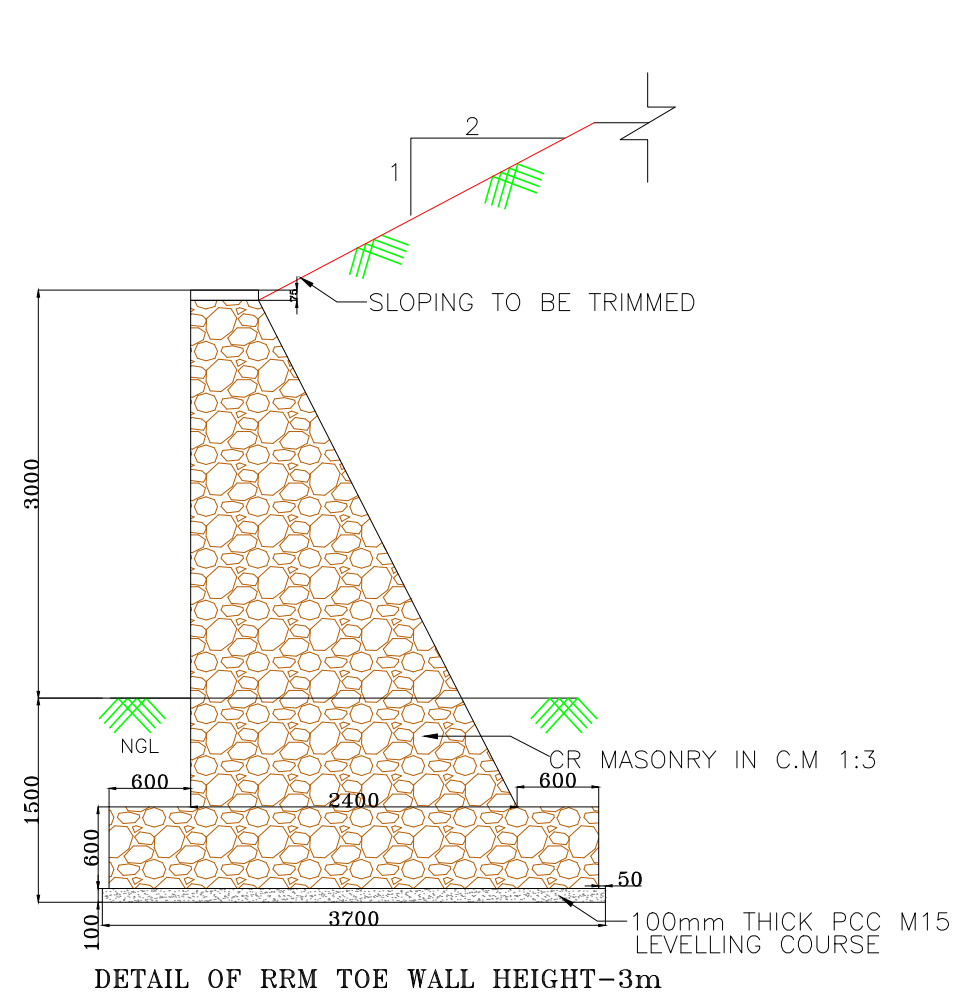


Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT	Project	Drawing Title
R0	OCT-2020		NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.	Designed: _____ Drawn: _____ Checked: _____ Approved: _____	Scale NTS	Project Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
							STANDARD DRAWING OVER HEAD GANTRY SIGNS
							Date: OCT-2020
							Project No: 1564
							Drawing No: NHIDCL/NH-244-PACK-III/ OHGS/01

DRAINAGE SYSTEM ON SUPERELEVATED SECTION



Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	Project	Project		
R0	OCT-2020		<div>NHIDCL NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA</div>	<div>RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd.</div>	FINAL DETAILED PROJECT REPORT			Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of Khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.
					Designed: _____ Scale _____			Drawing Title
					Drawn: _____ NTS			STANDARD DRAWING DRAINAGE SYSTEM ON SUPERELEVATED SECTION
					Checked: _____			Date: _____ Project No: _____ Drawing No: _____
					Approved: _____			OCT-2020 1564 NHIDCL/NH-244-PACK-II/ 01



Revision	DATE	AMENDMENT / ISSUE DESCRIPTION	CLIENT	CONSULTANT:	FINAL DETAILED PROJECT REPORT				Project	Consultancy Services for Feasibility Study, Preparation of Detailed Project Report and providing Pre-Construction Services for upgradation to 2 lane with paved shoulder from (i) Km 44.500 of Khellani to Km 142.00 of Chattroo Village & (ii) Km 235.00(Vailoo Village) to Km 269.00 (Khanabal) of khellani - Kishtwar - Chattroo - Khanabal Section of NH 244.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
R0	OCT-2020		 NATIONAL HIGHWAY & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (MINISTRY OF ROAD TRANSPORT & HIGHWAY) GOVERNMENT OF INDIA	 RODIC CONSULTANTS PVT. LTD. 1, JAI SINGH MARG (FIRST FLOOR), YMCA CULTURAL CENTRE BUILDING NEW DELHI - 110001 (INDIA) JV with Monarch Surveyors and Engineering Consultants Pvt.Ltd. 	Designed:	Scale NTS			Drawing Title	STANDARD DRAWING TOE WALL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									