



DRAWINGS VOLUMES

Road Safety Audit on the Blackspots in the state
of Meghalaya, under the jurisdiction of NHIDCL

1. Ryndang Briew
2. Mawiong Umjapung

PREPARED FOR



**National Highways Infrastructure
Development Corporation Limited,
RO Shillong, PMU-Mylliem**

PREPARED BY



**BTES CONSULTING SERVICES
PRIVATE LIMITED**

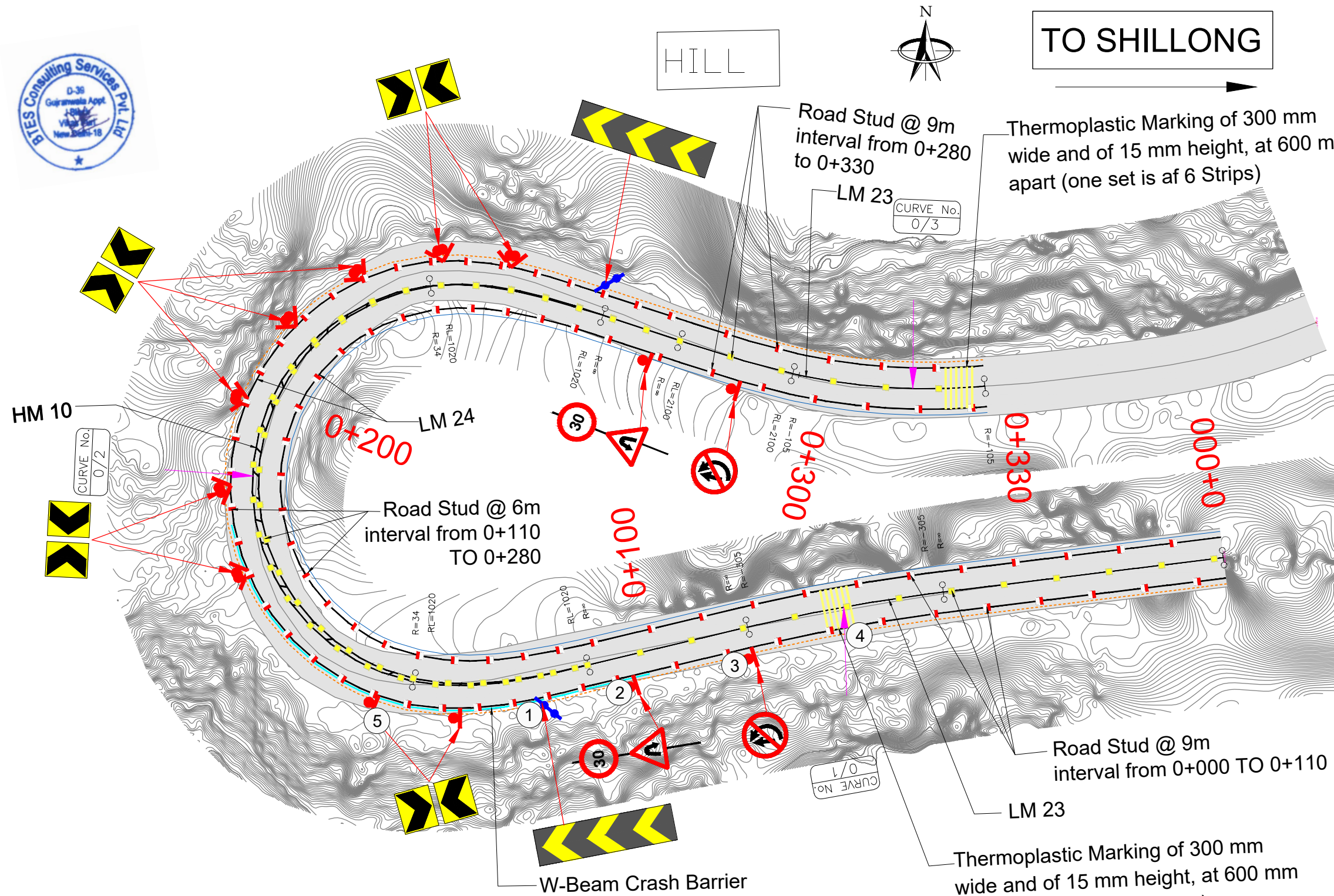


DRAWINGS VOLUME OF BLACKSPOT RYNDANG BRIEW

ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL.

DRAWING LIST

DRAWING NO.	DRAWING TITLE	REVISION NO.
PLAN AND PROFILE		
NHIDCL/BTES/RSA/DLP/PLN-01	ROAD SIGNAGE & MARKING PLAN	R0
NHIDCL/BTES/RSA/DLP/P&P-01	PLAN & PROFILE (CH. 0+000 to 0+330)	R0
STANDARD DRAWING		
NHIDCL/BTES/RSA/DLP/RS-01	TYPICAL DRAWING OF ROAD SIGNAGE	R0
NHIDCL/BTES/RSA/DLP/RM-01 to 02	TYPICAL DRAWING OF ROAD STUD & MARKING	R0
NHIDCL/BTES/RSA/DLP/W-Beam CB-01	TYPICAL DRAWING OF W-BEAM CRASH BARRIER	R0
TYPICAL CROSS SECTION		
NHIDCL/BTES/RSA/DLP/TCS-01	TYPICAL CROSS SECTION	R0



NOTE:-
1. ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE MENTIONED

LEGEND:-

EXISTING ROAD	
EXISTING CONTOUR	
PROPOSED CETER LINE	
PROP. C/W MARKING	
PROP. EARTHEN EDGE	
PROP. W-BEAM CRASH BARRIER	

SIGNAGES

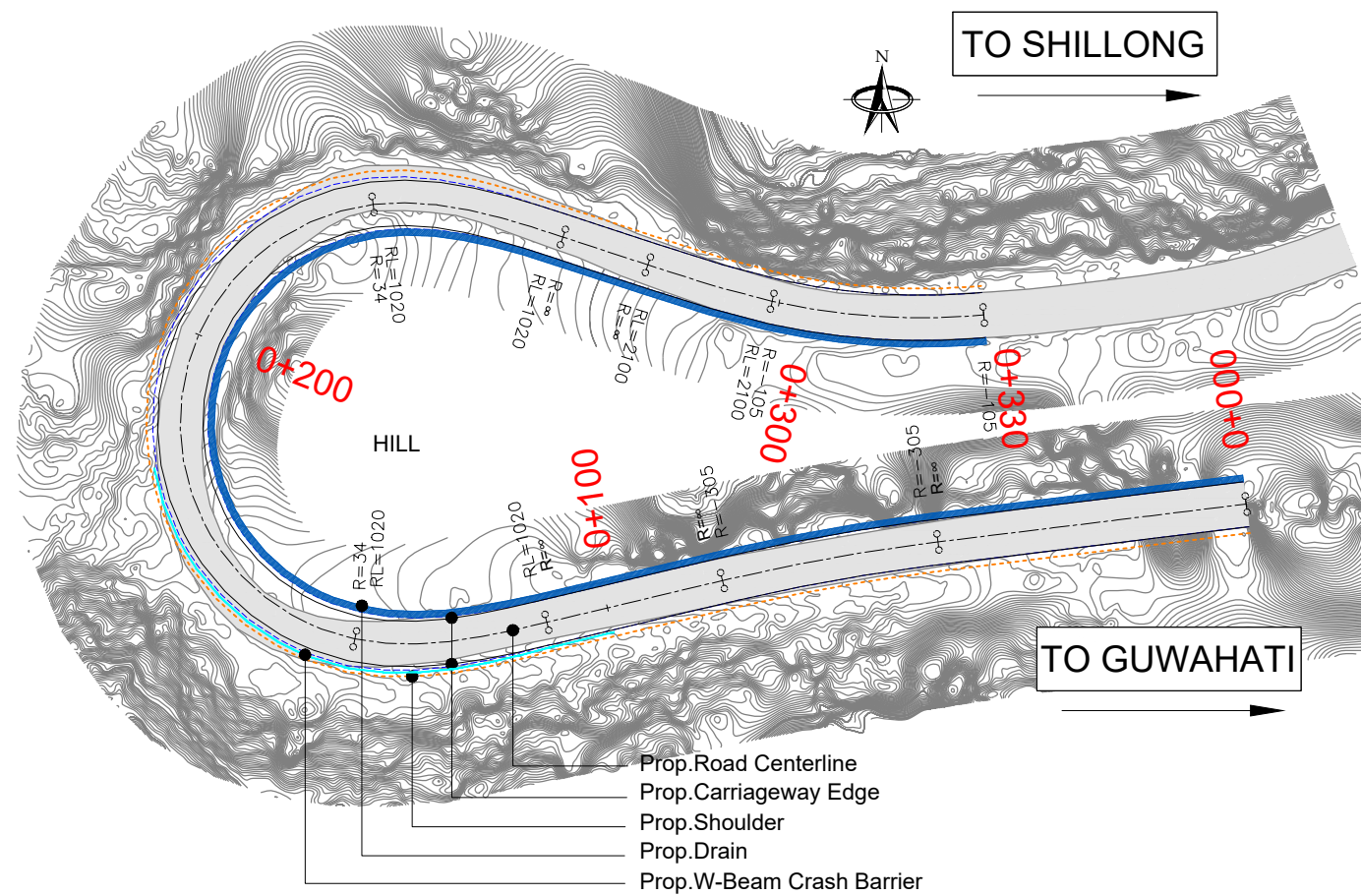
① TRIPLE CHEVRON	
② MAXIMUM SPEED LIMIT	
LEFT/RIGHT HAIRPIN BEND	
③ OVERTAKING PROHIBITED	
④ TRANSVERSE BAR MARKING	
⑤ SINGLE CHEVRON	

STUD:-

① RED WHITE ON CARIAGEWAY EDGE	
② YELLOW YELLOW ON LADDER HATCHING	

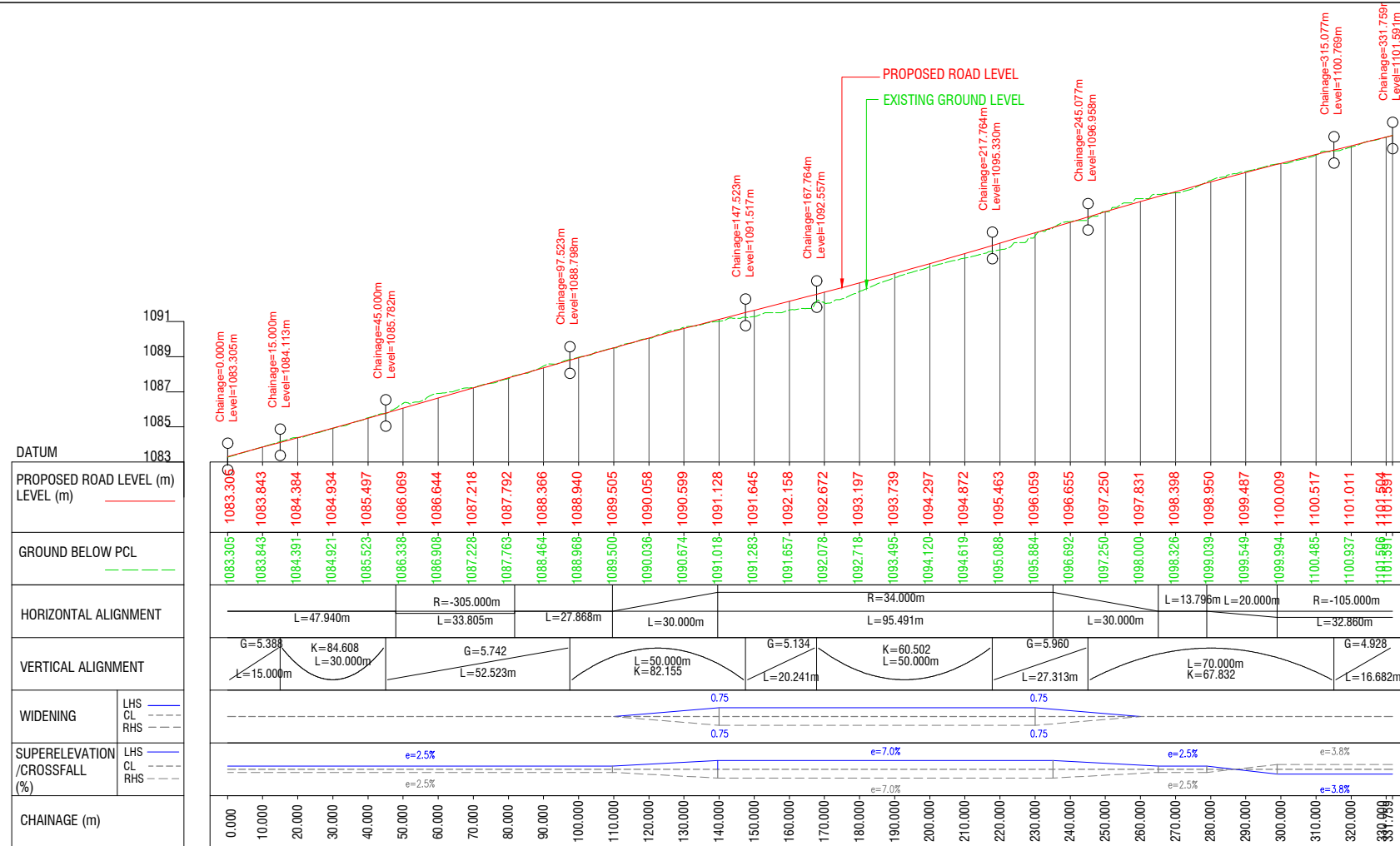
CURVE No. 0/1				CURVE No. 0/2				CURVE No. 0/3			
X=389418.75		Y=2837232.302		X=389354.372		Y=2837224.407		X=389417.481		Y=2837239.374	
R (m)	305	Ls (m)	55	R (m)	34	Ls (m)	30	R (m)	105	Ls (m)	0
Dc(deg)	6°21'2"	S(m)	0	Dc(deg)	160°55'5"	S(m)	1.095	Dc(deg)	17°55'50"	S(m)	0.159
Lc(m)	33.805	θs(deg)	0°0'0"	Lc(m)	95.491	θs(deg)	25°16'39"	Lc(m)	32.86	θs(deg)	5°27'24"
Ts(m)	16.92	D(deg)	6°21'2"	Ts(m)	-109.648	D(deg)	211°28'23"	Ts(m)	37.04	D(deg)	28°50'39"
Es(m)	0.469	e(%)	-2.5/2.5	Es(m)	-163.401	e(%)	7/-7	Es(m)	3.58	e(%)	-3.81/3.81
Design Speed (V) = 30Km/Hr				Design Speed (V) = 30Km/Hr				Design Speed (V) = 30Km/Hr			
EW= -				EW= 1.5				EW= 0.6			

			APPROVED:		CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA	SAFETY CONSULTANT:  11/1-A, Second Floor, Prem Nagar, Janakpuri , Near Tilak Nagar Metro, New Delhi – 110058	PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG			
			CHECKED:				TITLE: DRAWINGS LAYOUT PLAN	DATE: AUG. 2024	SCALE: HOR 1:1000	
			DESIGNED:				DRAWING NO. NHIDCL/BTES/RSA/DLP/PLAN-01	SHEET SIZE: A2	SHEET: 01 OF 01	REV: R0
R0	AUG 2024	FOR SUBMISSION	DRAWN:							
REV.	DATE	DESCRIPTION								



LEGEND:-

PROPOSED PLAN	
PROPOSED CENTER LINE	
PROP. C/W	
PROP. EXTRA WIDENING	
PROP. SHOULDER	
DRAIN	
PROP. W-BEAM	
CRASH BARRIER	
EXISTING	
EXISTING ROAD	
EXISTING CONTOUR	
PROFILE	
PROPOSED FRL	
GROUND LEVEL	



			APPROVED:		CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA	SAFETY AUDITOR CONSULTANT:  11/1-A, Second Floor, Prem Nagar, Janakpuri , Near Tilak Nagar Metro, New Delhi – 110058	PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEV 2. MAWIONG UMJAPUNG			
			CHECKED:				TITLE: DRAWINGS LAYOUT PLAN & PROFILE	DATE: AUG. 2024	SCALE: HOR 1:1000 VER 1:200	
			DESIGNED:				DRAWING NO. NHIDCL/BTES/RSA/DLP/P&P-01	SHEET SIZE: A2	SHEET: 01 OF 01	REV: R0
R0	AUG.2024	FOR SUBMISSION	DRAWN:							
REV.	DATE	DESCRIPTION								

MADATORY AND REGULATORY SIGN



Fig. 14.37 MAXIMUM SPEED LIMIT

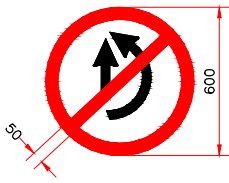


Fig. 14.23 OVERTAKING PROHIBITED



GO SLOW AHEAD

SIZES AND DIMENSIONS OF MANDATORY/REGULATORY SIGNS

Approach Speed	Size	Mandatory Signs			
		Diameter (mm)	Border (mm)	Oblique bar (mm)	Font Size (mm)
Upto 65 kmph	In Conjunction with traffic light signal	300	35	35	75
	Small	600	50	50	100

CAUTIONARY/ WARNING SIGNS

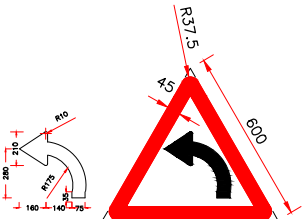


Fig. 15.01 LEFT HAND CURVE

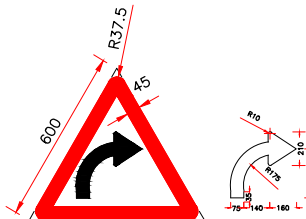


Fig. 15.02 RIGHT HAND CURVE

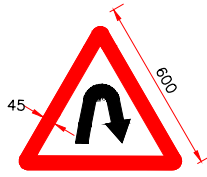


Fig. 15.03 Right Hairpin Bend

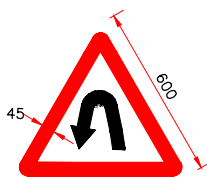


Fig. 15.04 Left Hairpin Bend

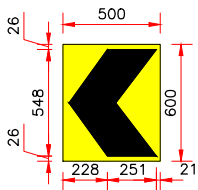
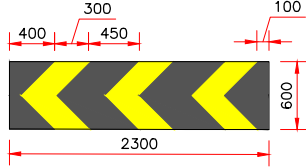
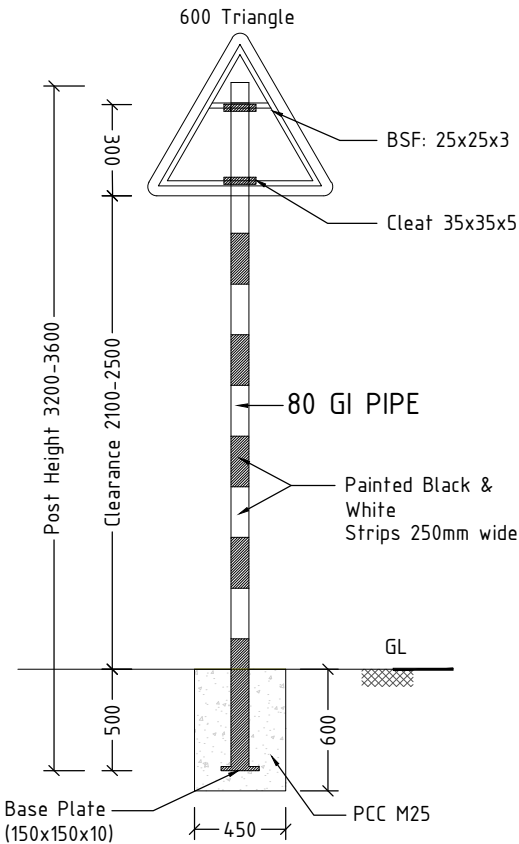


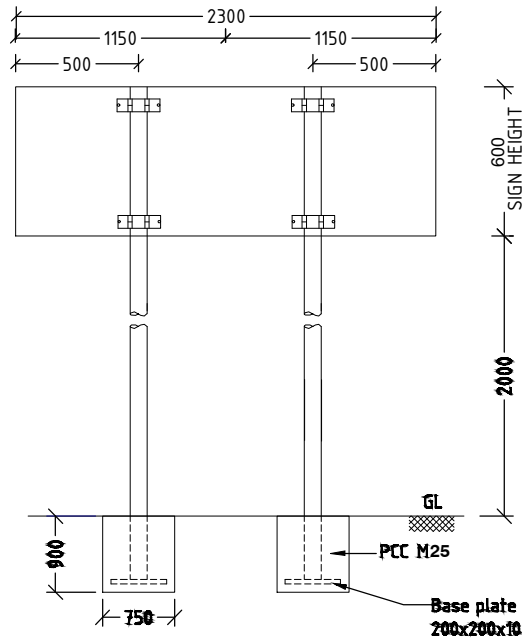
Fig. 15.72 SINGLE CHEVRON (NORMAL)



TRIPLE CHEVRON



Fixing Details of Cautionary/ Warning Signs



TRIPLE CHEVRON SIZE 2300X600mm

NOTES:

1. DIMENSIONS SHOWN ARE FOR NORMAL SIZED SIGNS.
2. ALL DIMENSIONS ARE IN MILLIMETERS.
3. FOR ROAD SIGN DETAILS REFER IRC 67-2022
4. REFER IRC:30-1968 FOR STANDARD LETTER.

REV.	DATE	DESCRIPTION	APPROVED:	CHECKED:	DESIGNED:	DRAWN:
R0	AUG.2024	FOR SUBMISSION				

CLIENT:



NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.
MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA

SAFETY CONSULTANT:



11/1-A, Second Floor, Prem Nagar,
Janakpuri , Near Tilak Nagar Metro,
New Delhi – 110058

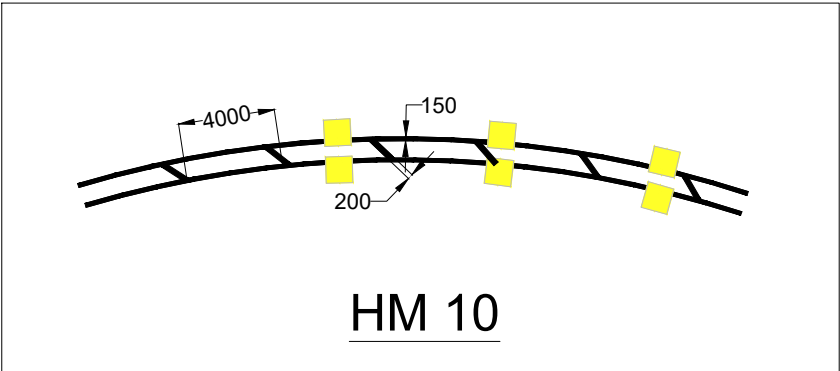
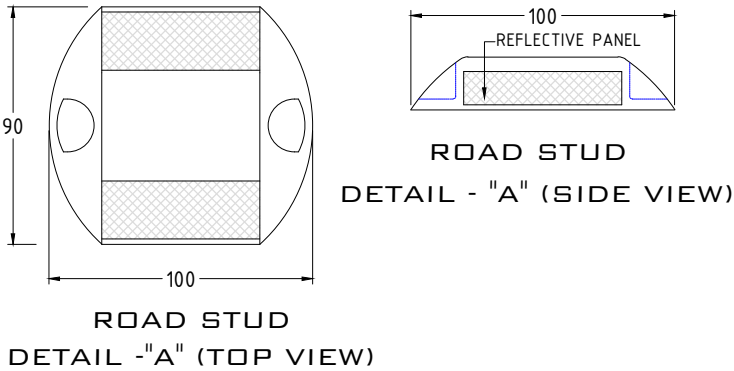
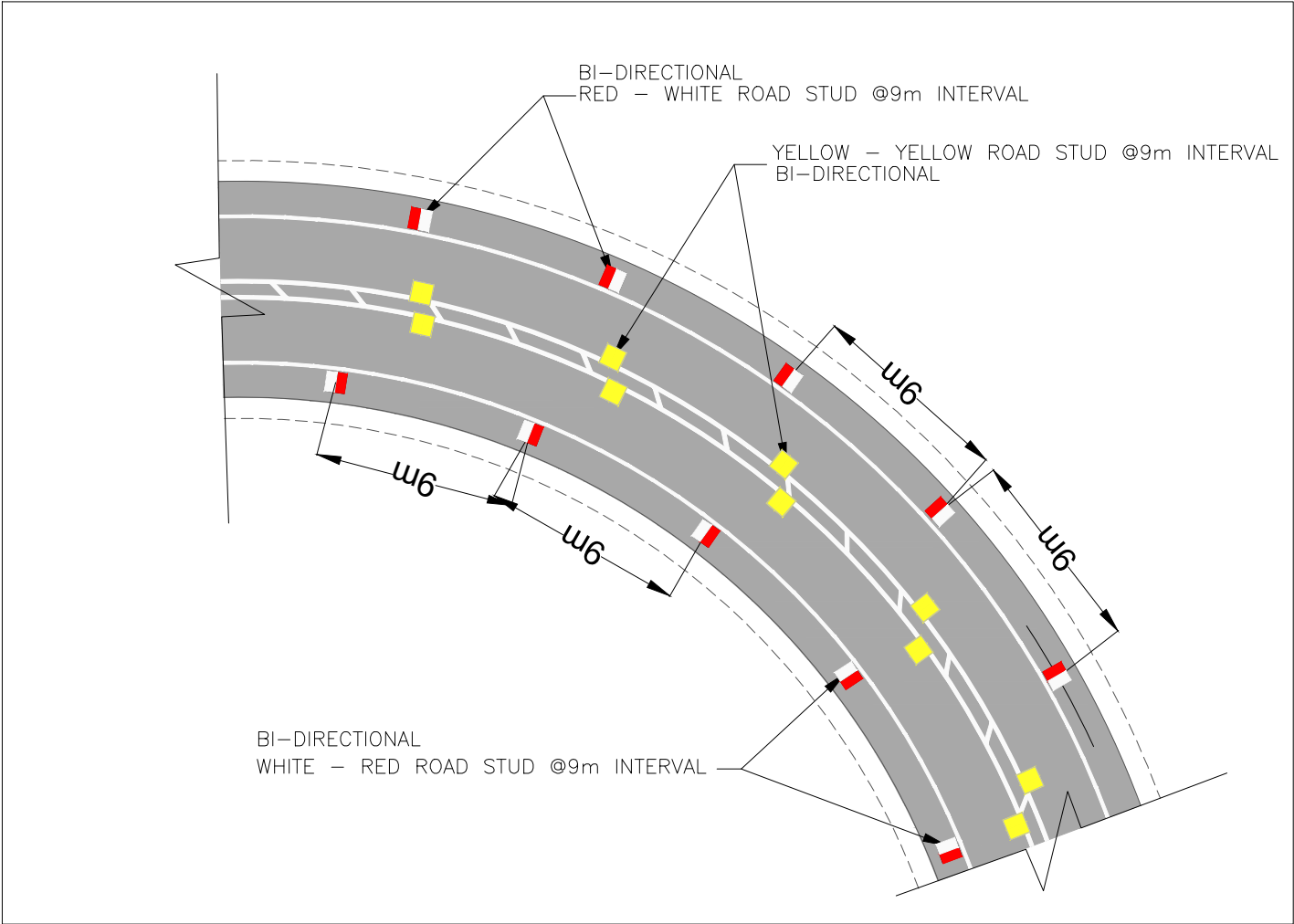
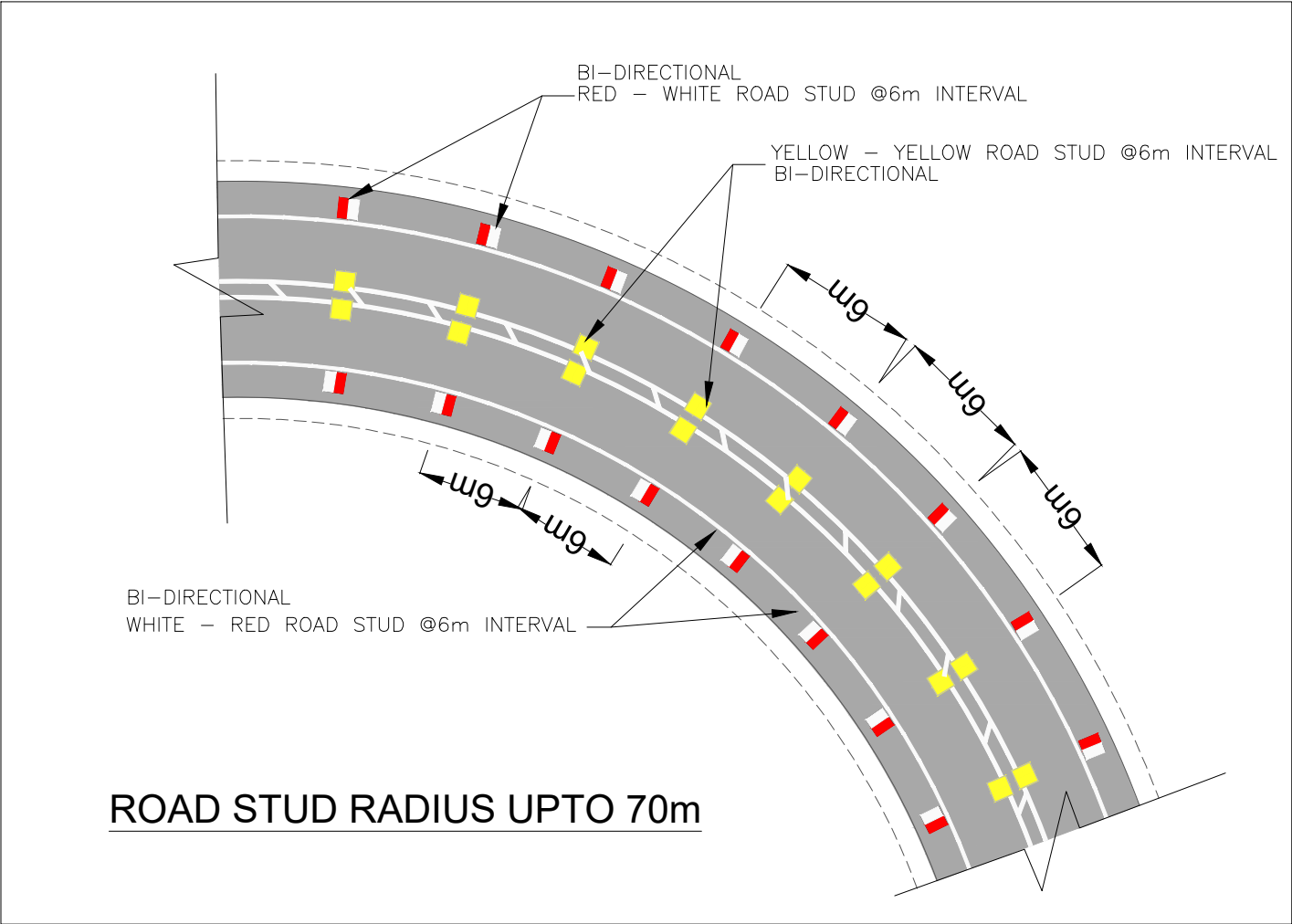
PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL.
1. RYNDANG BRIEW
2. MAWIONG UMJAPUNG

TITLE: DRAWINGS LAYOUT PLAN (MANDATORY SIGNS)

DATE: AUG. 2024
SCALE: HOR 1:1000

DRAWING NO. NHIDCL/BTES/RSA/DLP/01

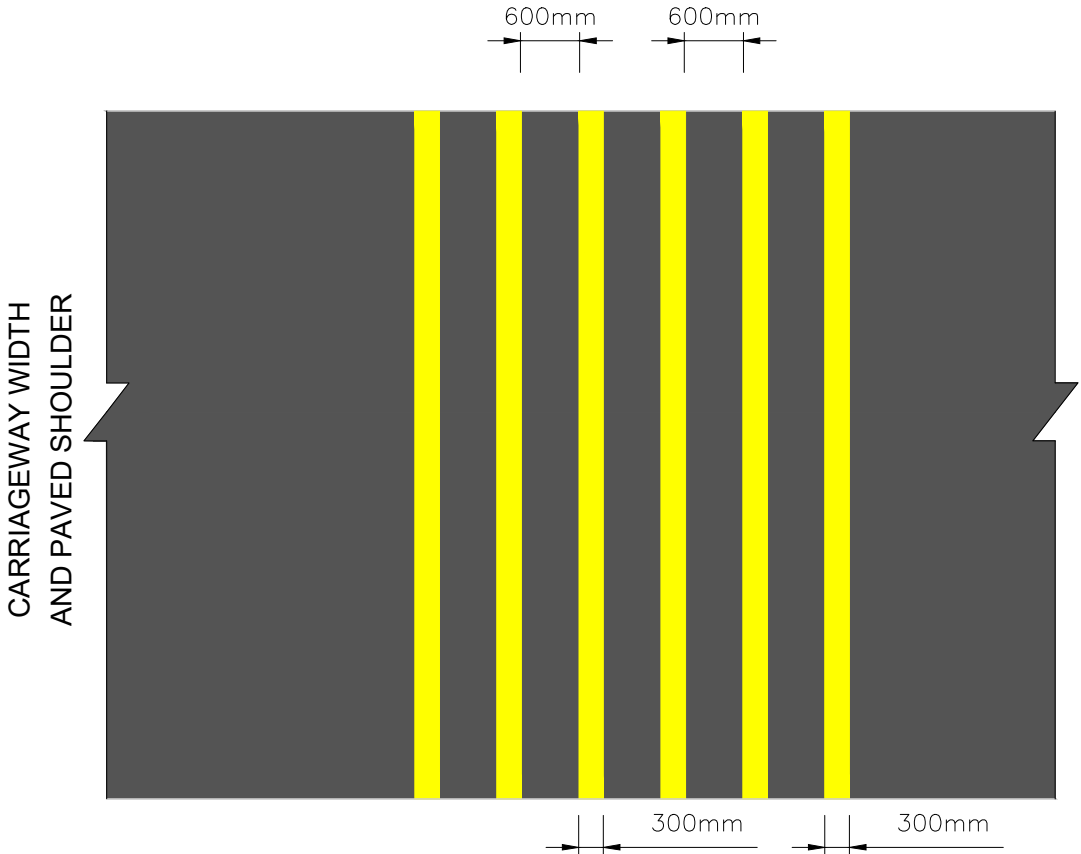
SHEET SIZE: A2
SHEET: 01 OF 01
REV: R0



- NOTES:
- DIMENSIONS SHOWN ARE FOR NORMAL SIZED SIGNS.
 - ALL DIMENSIONS ARE IN MILLIMETERS.
 - FOR ROAD SIGN DETAILS REFER IRC 67-2022
 - REFER IRC:30-1968 FOR STANDARD LETTER.

			APPROVED:		CLIENT:		SAFETY CONSULTANT:	PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG
			CHECKED:					
			DESIGNED:					
R0	AUG.2024	FOR SUBMISSION	DRAWN:				11/1-A, Second Floor, Prem Nagar, Janakpuri , Near Tilak Nagar Metro, New Delhi – 110058	TITLE: DRAWINGS LAYOUT PLAN (ROAD MARKING & STUD) DATE: AUG. 2024 SCALE: HOR 1:1000
REV.	DATE	DESCRIPTION						DRAWING NO. NHIDCL/BTES/RSA/DLP/02 SHEET SIZE: A2 SHEET: 01 OF 01 REV: R0

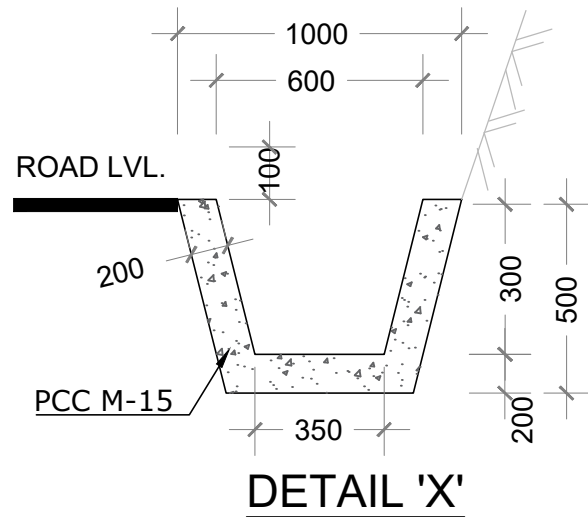
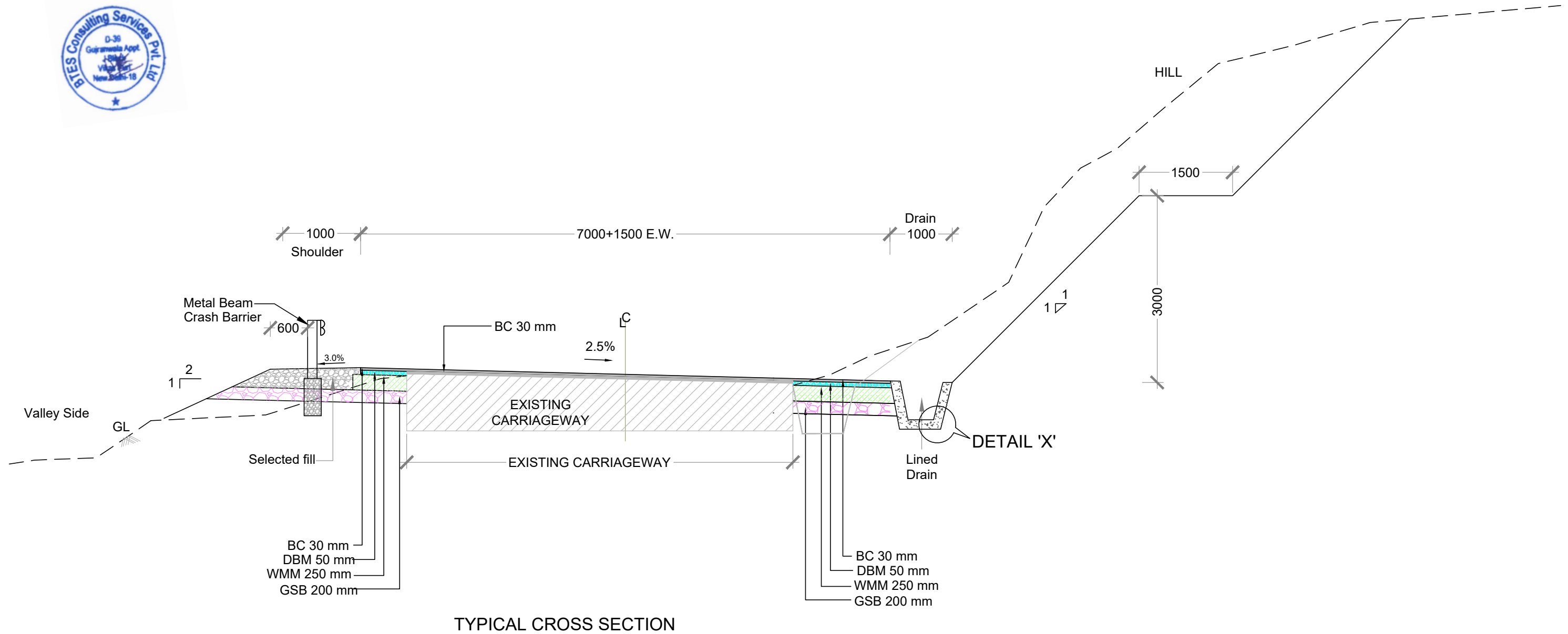
NOTE:-
1. ALL DIMENSION ARE IN MM.
UNLESS OTHERWISE MENTIONED.



*Thermoplastic marking of 300mm wide and 15mm height at 600m apart (one set is of 6 Strip).

Plan of Thermoplastic Bar Marking
15mm Height and Gap width 600mm

			APPROVED: RKC	CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA	SAFETY CONSULTANT:  11/1-A, Second Floor, Prem Nagar, Janakpuri , Near Tilak Nagar Metro, New Delhi – 110058	PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG		
			CHECKED: VK			TITLE: TYPICAL DRAWINGS LAYOUT FOR TRANSVERSE BAR MARKING	DATE: AUG. 2024	SCALE: HOR 1:1000
			DESIGNED: VS					
R0	AUG.2024	FOR SUBMISSION	DRAWN: VR			DRAWING NO. NHIDCL/BTES/RSA/MISC/TBM-01	SHEET SIZE: A2	
REV.	DATE	DESCRIPTION						



Note:-
1. All Dimensions are in mm otherwise specified.

REV.	DATE	DESCRIPTION	APPROVED:	CLIENT:  NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. MINISTRY OF ROAD TRANSPORT & HIGHWAYS, GOVERNMENT OF INDIA	SAFETY CONSULTANT:  11/1-A, Second Floor, Prem Nagar, Janakpuri, Near Tilak Nagar Metro, New Delhi - 110058	PROJECT: ROAD SAFETY AUDIT ON THE BLACK SPOTS IN THE STATE OF MEGHALAYA, UNDER THE JURISDICTION OF NHIDCL. 1. RYNDANG BRIEW 2. MAWIONG UMJAPUNG		
			CHECKED:			TITLE:	DATE:	SCALE:
			DESIGNED:			TYPICAL CROSS SECTION	AUG. 2024	HOR 1:1000
			DRAWN:			DRAWING NO.	SHEET SIZE:	SHEET: 01 OF 01 REV: R0
						NHIDCL/BTES/RSA/DLP/TCS/01	A2	

