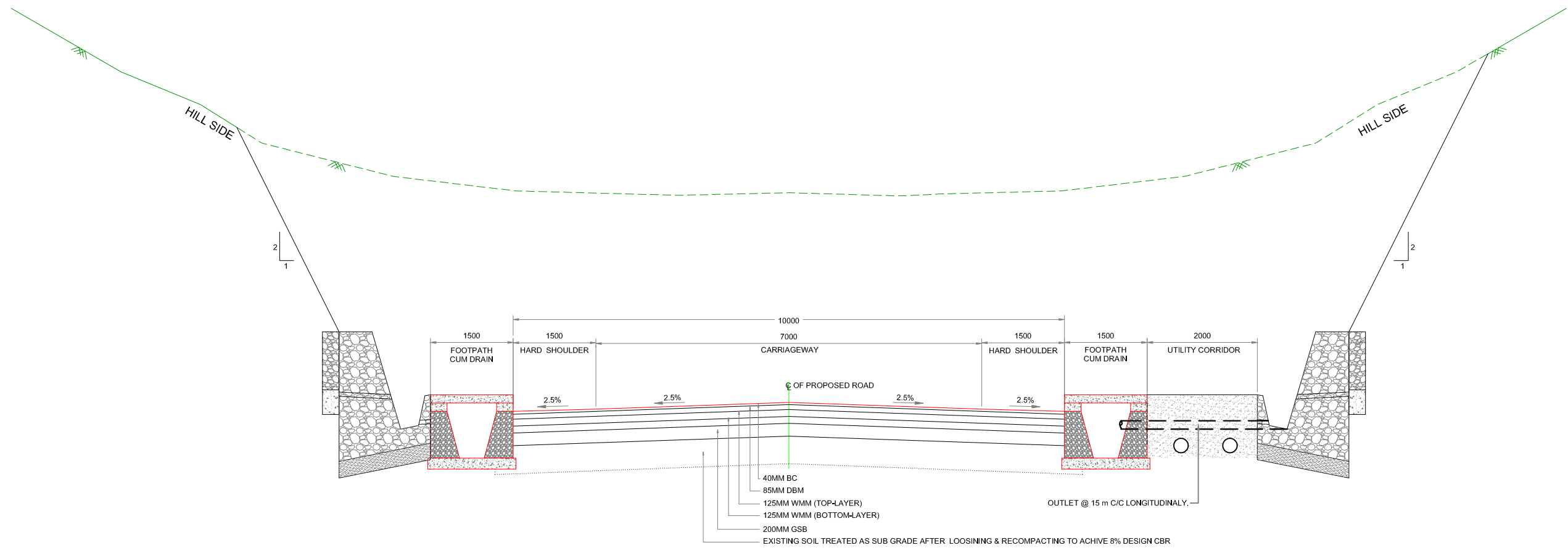


List of TCS			
Chainage (Km)		Net Length (m)	TCS No.
From	To		
81870	82005	135	TCS-4C
82005	82165	160	TCS-4A
82165	82225	60	TCS-4C
82225	82265	40	TCS-4A
82265	82425	160	TCS-3
82425	82465	40	TCS-1B
82465	82505	40	TCS-3
82505	82515	10	TCS-2A
82515	82555	40	TCS-3
82555	82585	30	TCS-2C
82585	82625	40	TCS-2A
82625	82645	20	TCS-2C
82645	82705	60	TCS-1B
82705	82725	20	TCS-3
82725	82785	60	TCS-1B
82785	82905	120	TCS-1
82905	82915	10	TCS-1B
82915	82935	20	TCS-2C
82935	83045	110	TCS-1
83045	83055	10	TCS-1B
83055	83155	100	TCS-2A
83155	83185	30	TCS-1B
83185	83245	60	TCS-4A
83245	83275	30	TCS-10A
83275	83515	240	TCS-8B
83515	83745	230	TCS-4C
83745	83765	20	TCS-9A
83765	83785	20	TCS-4C
83785	83905	120	TCS-8B
83905	83995	90	TCS-4C
83995	84015	20	TCS-4A
84015	84065	50	TCS-9A
84065	84145	80	TCS-4C
84145	84205	60	TCS-4A
84205	84385	180	TCS-4C
84385	84515	130	TCS-4A
84515	84535	20	TCS-9A
84535	84615	80	TCS-4A
84615	84795	180	TCS-4C
84795	84845	50	TCS-4A
84845	84885	40	TCS-4C
84885	84925	40	TCS-4A
84925	84995	70	TCS-4C
84995	85005	10	TCS-4A
85005	85025	20	TCS-9A
85025	85065	40	TCS-9D
85065	85155	90	TCS-9A
85155	85185	30	TCS-4A
85185	85305	120	TCS-9A
85305	85575	270	TCS-4A
85575	85645	70	TCS-4C
85645	85735	90	TCS-4A
85735	85755	20	TCS-10A
85755	86725	970	TCS-4A
86725	86785	60	TCS-9A
86785	86855	70	TCS-4A
86855	86935	80	TCS-9A
86935	87015	80	TCS-4C
87015	87045	30	TCS-4A
87045	87065	20	TCS-9A
87065	87645	580	TCS-4A

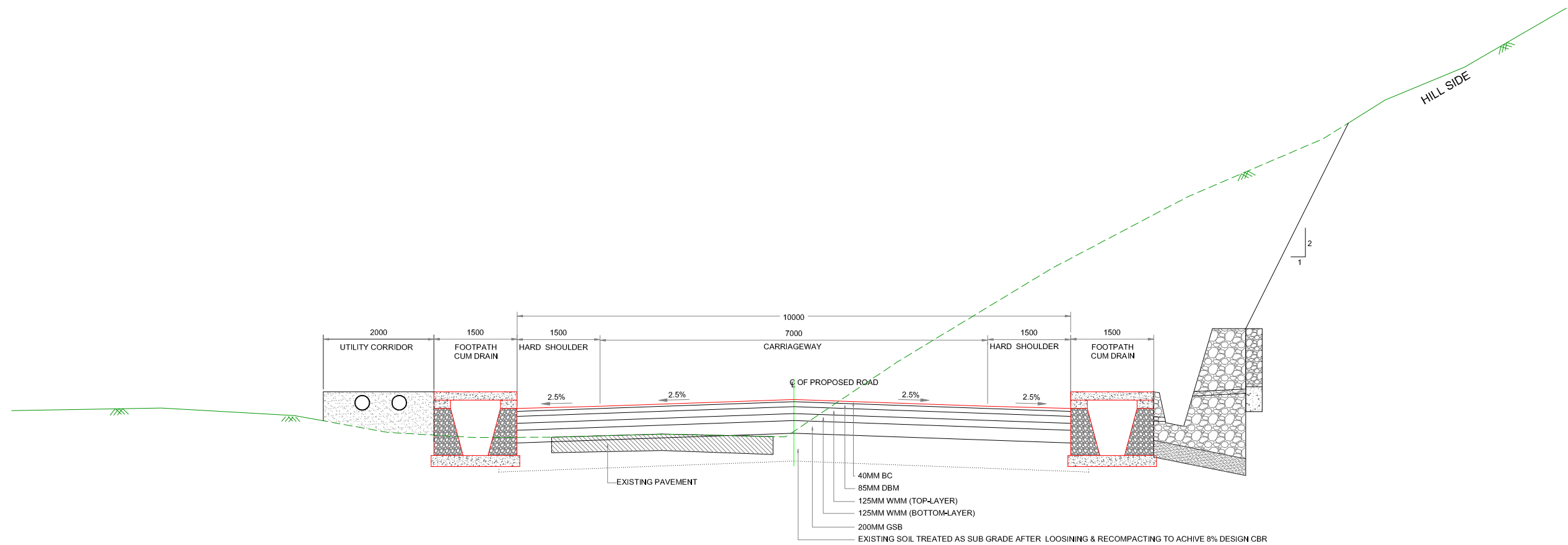
List of TCS			
Chainage (Km)		Net Length (m)	TCS No.
From	To		
87645	87705	60	TCS-7B
87705	87765	60	TCS-4A
87765	87835	70	TCS-9A
87835	87855	20	TCS-4A
87855	87875	20	TCS-9A
87875	87915	40	TCS-4A
87915	87955	40	TCS-4C
87955	88005	50	TCS-4A
88005	88035	30	TCS-4C
88035	88165	130	TCS-4A
88165	88255	90	TCS-4C
88255	88445	190	TCS-4A
88445	88635	190	TCS-4C
88635	88655	20	TCS-9A
88655	88845	190	TCS-4B
88845	88905	60	TCS-4C
88905	89015	110	TCS-4A
89015	89025	10	TCS-9A
89025	89095	70	TCS-4A
89095	89215	120	TCS-4C
89215	89435	220	TCS-4A
89435	89475	40	TCS-4C
89475	89825	350	TCS-4A
89825	89875	50	TCS-4C
89875	90295	420	TCS-4A
90295	90425	130	TCS-1B
90425	90545	120	TCS-1
90545	90655	110	TCS-1B
90655	90705	50	TCS-2C
90705	90915	210	TCS-1B
90915	91545	630	TCS-1
91545	91645	100	TCS-1B
91645	91715	70	TCS-1
91715	91765	50	TCS-1B
91765	91915	150	TCS-4C
91915	92045	130	TCS-4A
92045	92075	30	TCS-9A
92075	92165	90	TCS-4A
92165	92255	90	TCS-4A
92255	92275	20	TCS-9A
92275	92395	120	TCS-4A
92395	92495	100	TCS-9A
92495	92695	200	TCS-4A
92695	92725	30	TCS-4C
92725	92765	40	TCS-7B
92765	92785	20	TCS-4A
92785	92805	20	TCS-11
92805	93095	290	TCS-4A
93095	93115	20	TCS-9A
93115	93425	310	TCS-4A
93425	93445	20	TCS-11
93445	93615	170	TCS-4A
93615	93725	110	TCS-4C
93725	93745	20	TCS-4A
93745	93755	10	Bridge
93755	93785	30	Bridge
93785	93800	15	TCS-9B
Total Length		11930	

Summary of TCS including CD length	
Type of TCS	Length (m)
TCS-1	1050
TCS-1B	810
TCS-2A	150
TCS-2C	120
TCS-3	260
TCS-4A	5790
TCS-4B	190
TCS-4C	2145
TCS-7B	100
TCS-8B	360
TCS-9A	770
TCS-9B	15
TCS-9D	40
TCS-10A	50
TCS-11	40
CD Length=	40
Total length	11930

					SCALE :- N.T.S		CLIENT: NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 4, Parliament Street, New Delhi - 110001	LIST OF CHAINAGE FOR TYPICAL CROSS SECTION	CONSULTANT :  CE TESTING COMPANY PVT. LTD. 124-A, N.S.C. Bose Road Kolkata - 700092	DWG. NO:- CET/2016/3640/NH-102A/FDPR/TCS-01			
MKD.	DATE	DESCRIPTION	CHKD.	APPRD.						Drawn By.	Design By.	Checked By.	Approved By.
REVISIONS					April, 2020	PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhrul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.	Package:-IVA District:- SENAPATI	Design chainage:- 81+870 Km to 93+800 Km	Existing chainage:-88+520 Km to 101+475 Km	Prabir Das	Sutripa DEy	Biplab Das	Soubhik Sadhu

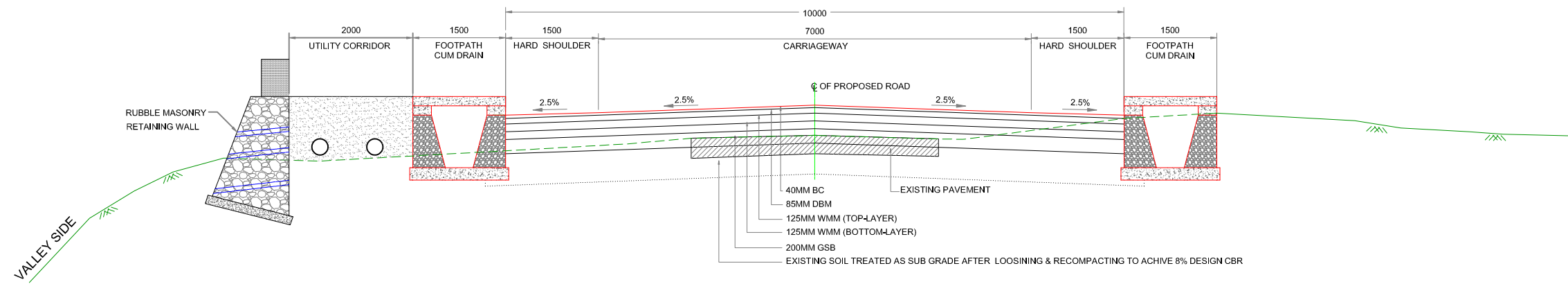


TCS-1 : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN CUTTING WITH BOTH SIDE COVER DRAIN CUM FOOTPATH AT BUILTUP AREA

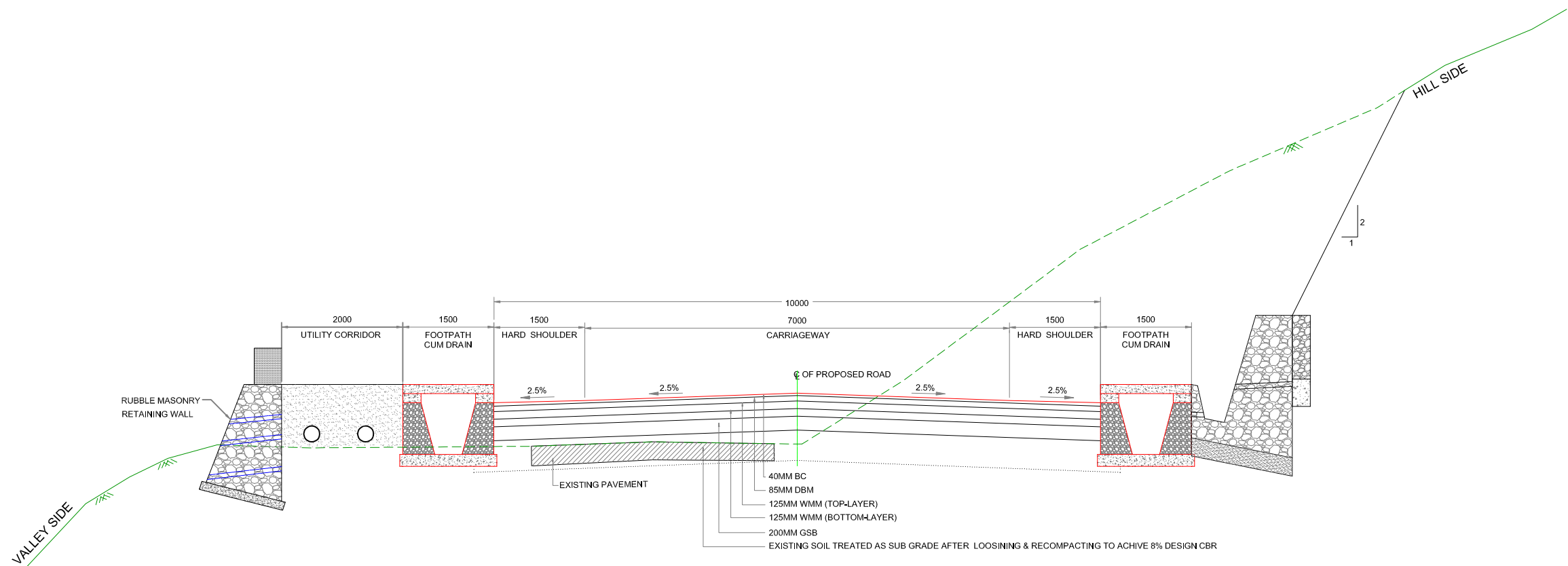


TCS-1B : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN CUTTING WITH BOTH SIDE COVER DRAIN CUM FOOTPATH & RIGHT SIDE BREAST WALL AT BUILTUP AREA

					SCALE :- 1:60		CLIENT: NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 4, Parliament Street, New Delhi - 110001	TYPICAL CROSS SECTION	CONSULTANT :  CETEST CE TESTING COMPANY PVT. LTD. 124-A, N.S.C. Bose Road Kolkata - 700092	DWG. NO:- CET/2016/3640/NH-102A/FDPR/TCS-02			
					PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhrul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.					Package:-IVA District:- SENAPATI Design chainage:- 81+870 Km to 93+800 Km Existing chainage:-88+520 Km to 101+475 Km	Drawn By.	Design By.	Checked By.
MKD.	DATE	DESCRIPTION	CHKD.	APPRD.		April, 2020	Prabir Das				Sutripa DEy	Biplab Das	Soubhik Sadhu
REVISIONS													

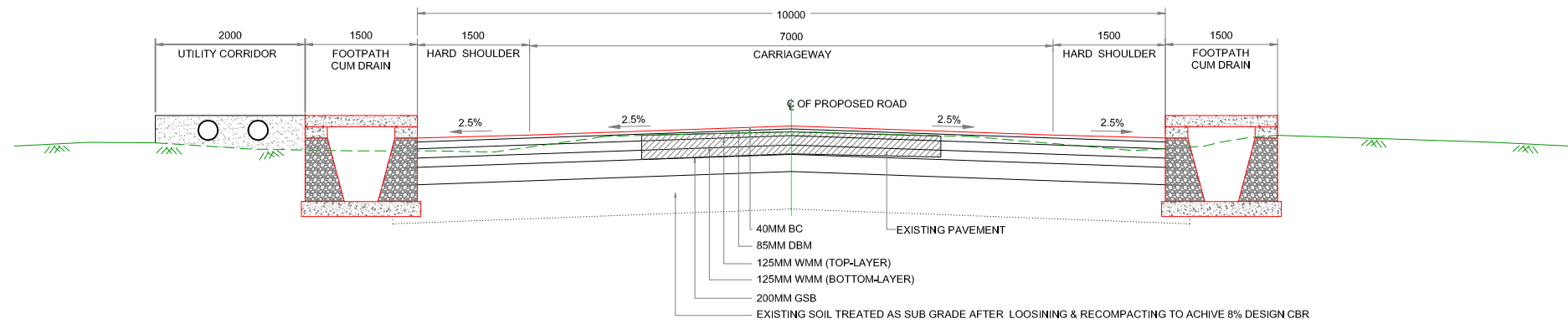


TCS-2A : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN FILLING WITH BOTH SIDE COVER DRAIN CUM FOOTPATH & LEFT SIDE RETAINING WALL AT BUILTUP AREA

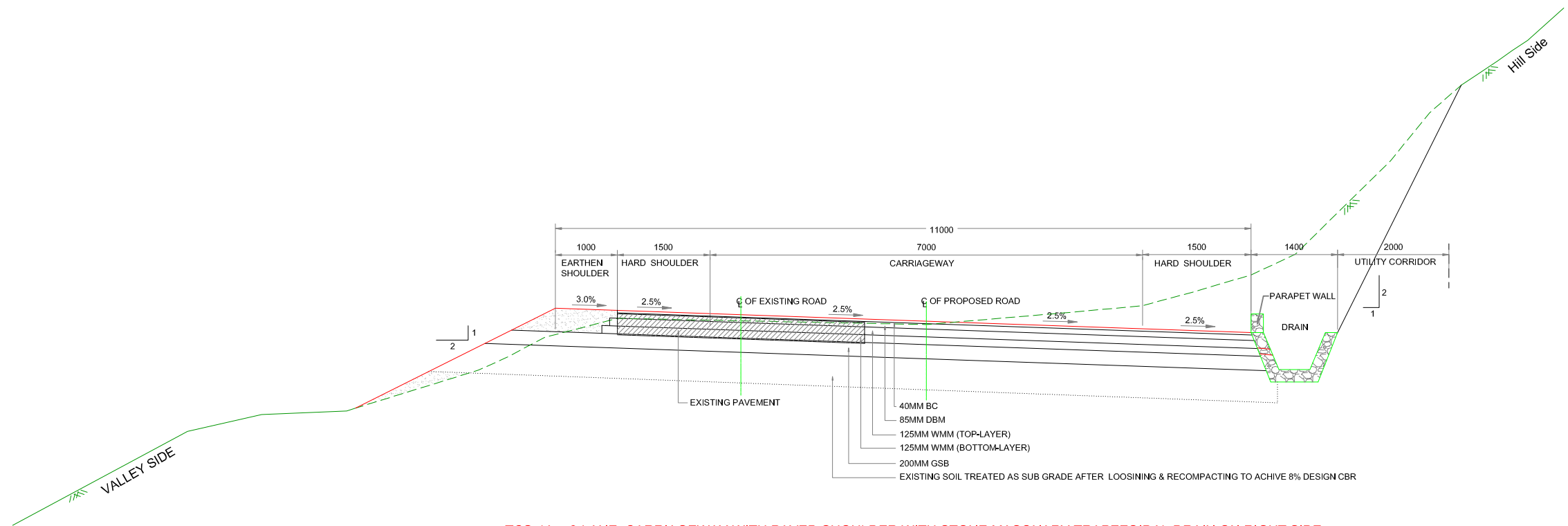


TCS-2C : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER IN FILLING WITH BOTH SIDE COVER DRAIN CUM FOOTPATH & LEFT SIDE RETAINING WALL & RIGHT SIDE BREAST WALL AT BUILTUP AREA

					SCALE :- 1:60		CLIENT: NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 4, Parliament Street, New Delhi - 110001	TYPICAL CROSS SECTION	CONSULTANT :  CETEST CE TESTING COMPANY PVT. LTD. 124-A, N.S.C. Bose Road Kolkata - 700092 An ISO 9001, 14001 & OHSAS 18001 Certified Company		DWG. NO:- CET/2016/3640/NH-102A/FDPR/TCS-03				
MKD.	DATE	DESCRIPTION	CHKD.	APPRD.	April, 2020						PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhrul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.	Package:-IVA District:- SENAPATI Design chainage:- 81+870 Km to 93+800 Km Existing chainage:-88+520 Km to 101+475 Km	Drawn By.	Design By.	Checked By.
REVISIONS												Prabir Das	Sutripa DEy	Biplab Das	Soubhik Sadhu

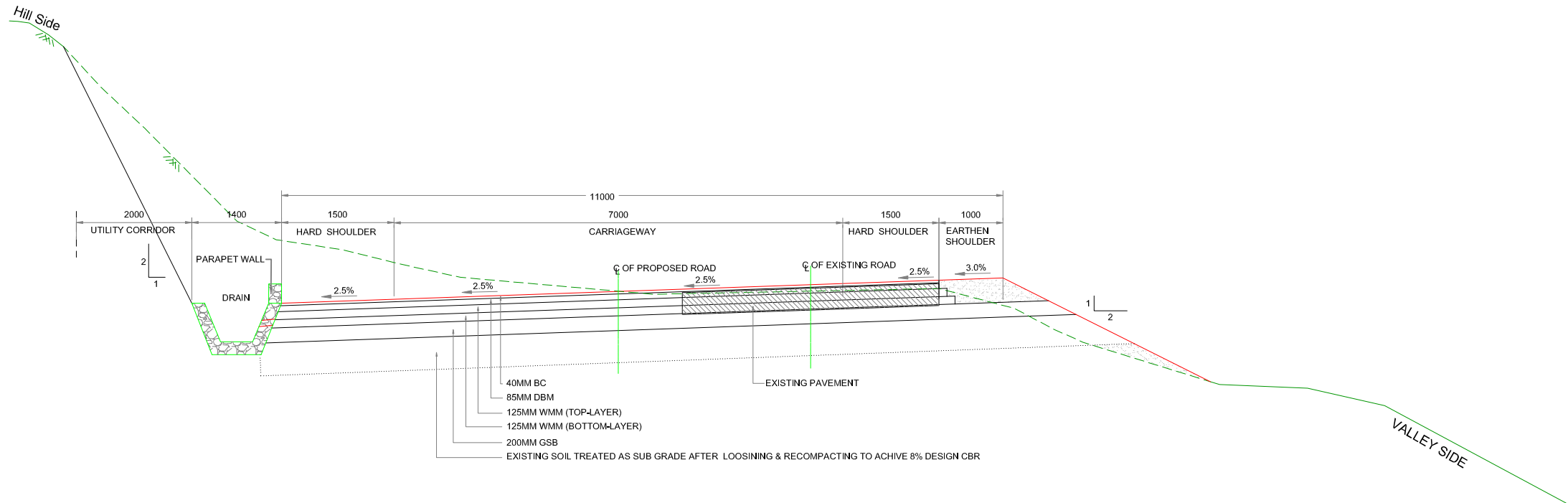


TCS-3 : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER WITH BOTH SIDE COVER DRAIN IN BUILTUP AREA

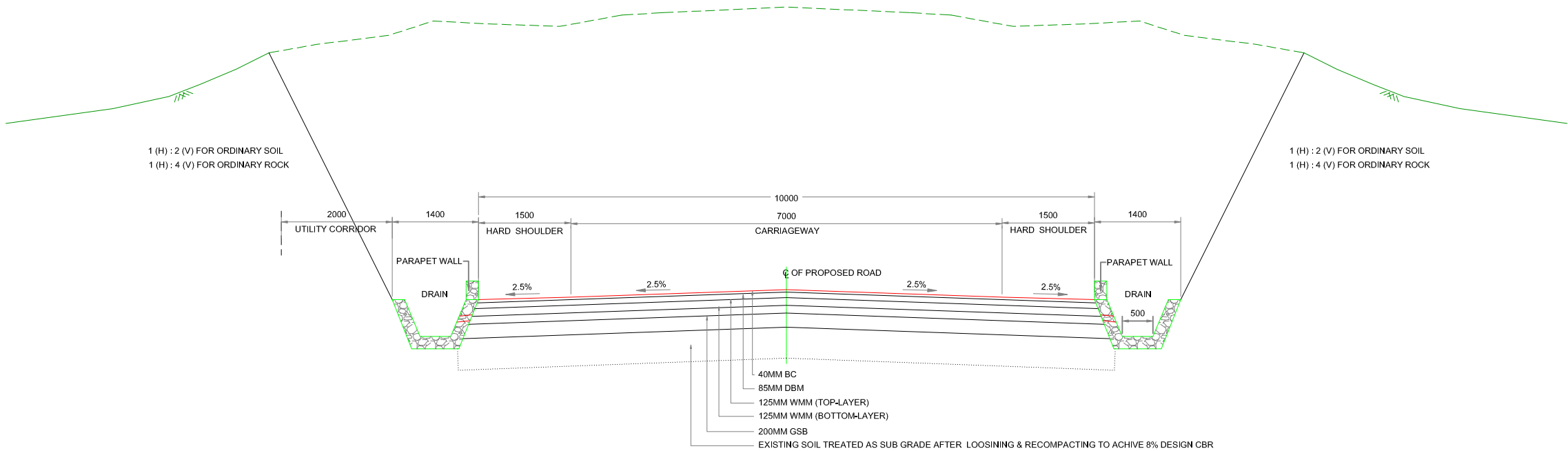


TCS-4A : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER WITH STONE MASONRY TRAPEZOIDAL DRAIN ON RIGHT SIDE

					SCALE :- 1:60	 CLIENT: NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 4, Parliament Street, New Delhi - 110001	TYPICAL CROSS SECTION		CONSULTANT :  CETEST CE TESTING COMPANY PVT. LTD. Engineering Consultants 124-A, N.S.C. Bose Road Kolkata - 700092 	DWG. NO:- CET/2016/3640/NH-102A/FDPR/TCS-04			
					PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhrul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.		Package:-IVA	District:- SENAPATI		Drawn By.	Design By.	Checked By.	Approved By.
MKD.	DATE	DESCRIPTION	CHKD.	APPRD.		April, 2020	Design chainage:- 81+870 Km to 93+800 Km Existing chainage:- 88+520 Km to 101+475 Km			Prabir Das	Sutripa DEy	Biplab Das	Soubhik Sadhu
REVISIONS													

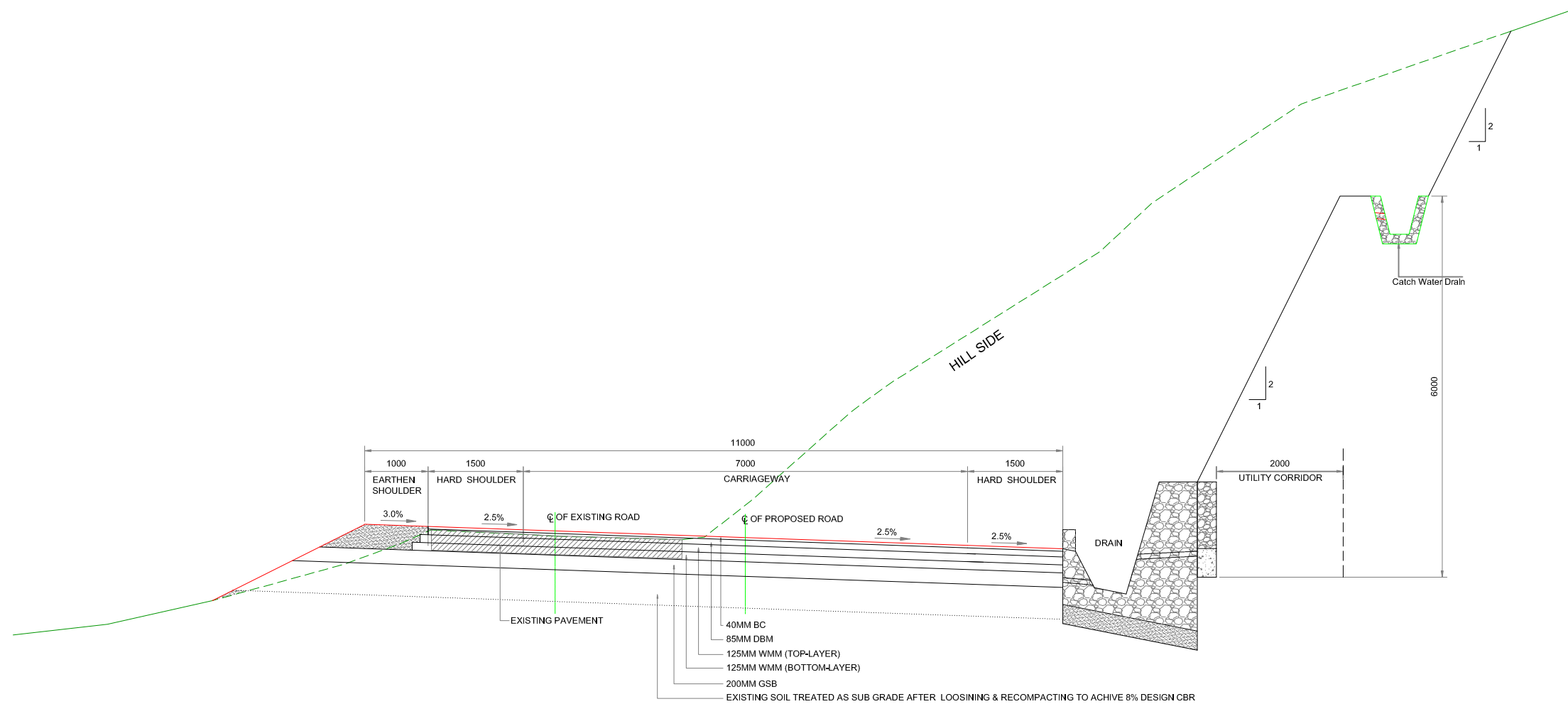


TCS-4B : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER WITH STONE MASONARY TRAPEZOIDAL DRAIN ON LEFT SIDE



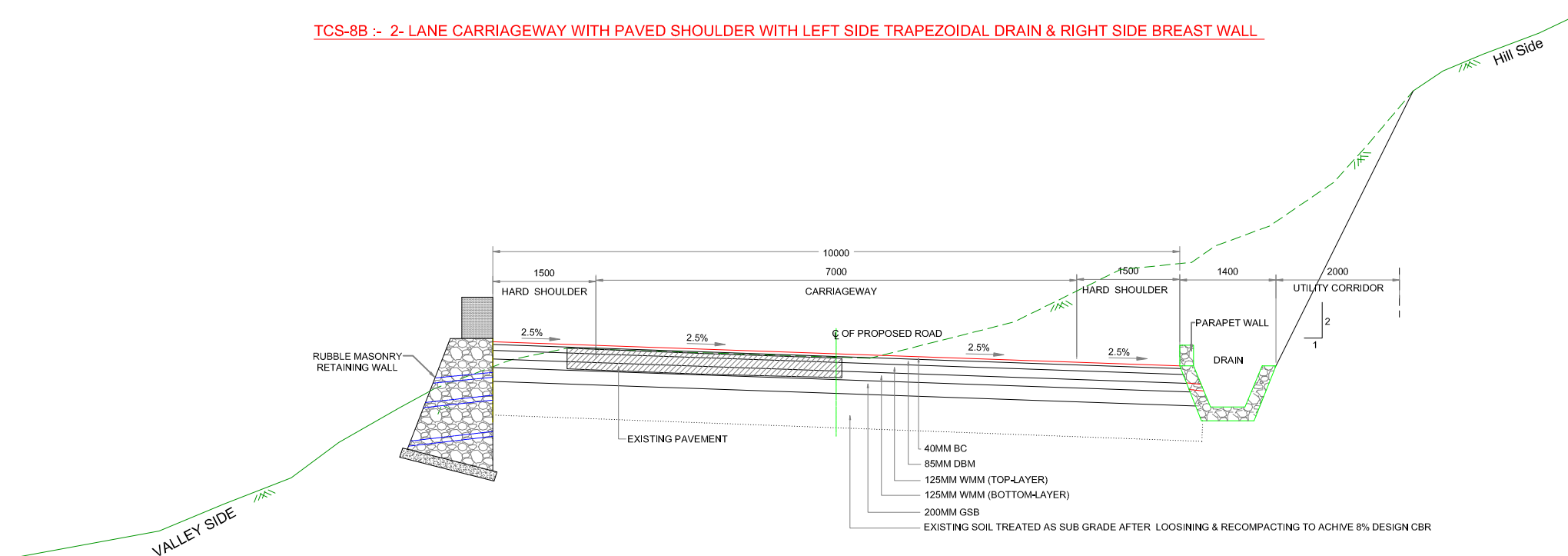
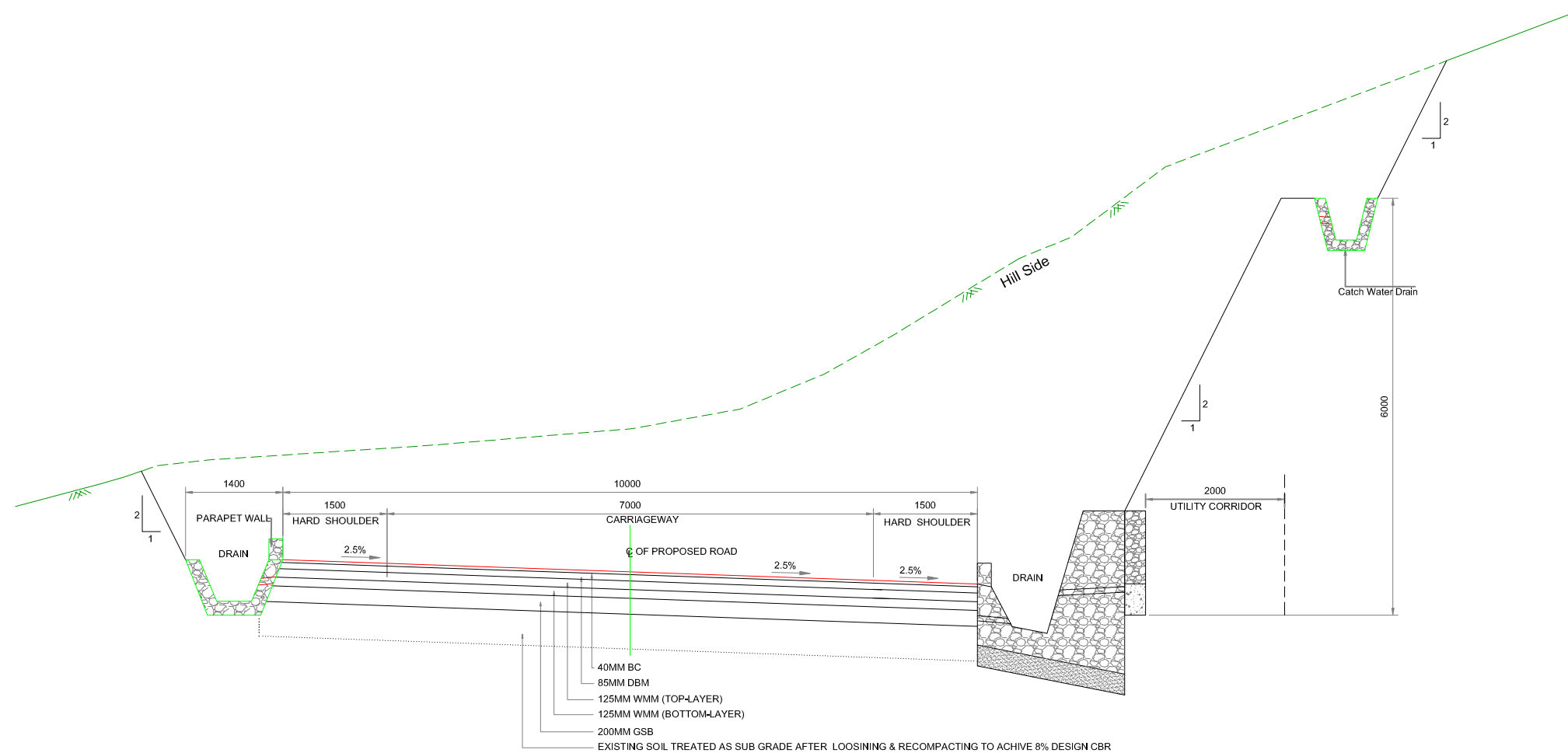
TCS-4C : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER WITH STONE MASONARY TRAPEZOIDAL DRAIN BOTH SIDE

					SCALE :- 1:60		CLIENT: NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 4, Parliament Street, New Delhi - 110001	TYPICAL CROSS SECTION	CONSULTANT :  CETEST CE TESTING COMPANY PVT. LTD. 124-A, N.S.C. Bose Road Kolkata - 700092	DWG. NO:- CET/2016/3640/NH-102A/FDPR/TCS-05			
										Drawn By.	Design By.	Checked By.	Approved By.
MKD.	DATE	DESCRIPTION	CHKD.	APPRD.	April, 2020	PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhrul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.	Package:-IVA District:- SENAPATI Design chainage:- 81+870 Km to 93+800 Km Existing chainage:-88+520 Km to 101+475 Km			Prabir Das	Sutripa DEy	Biplab Das	Soubhik Sadhu
REVISIONS													

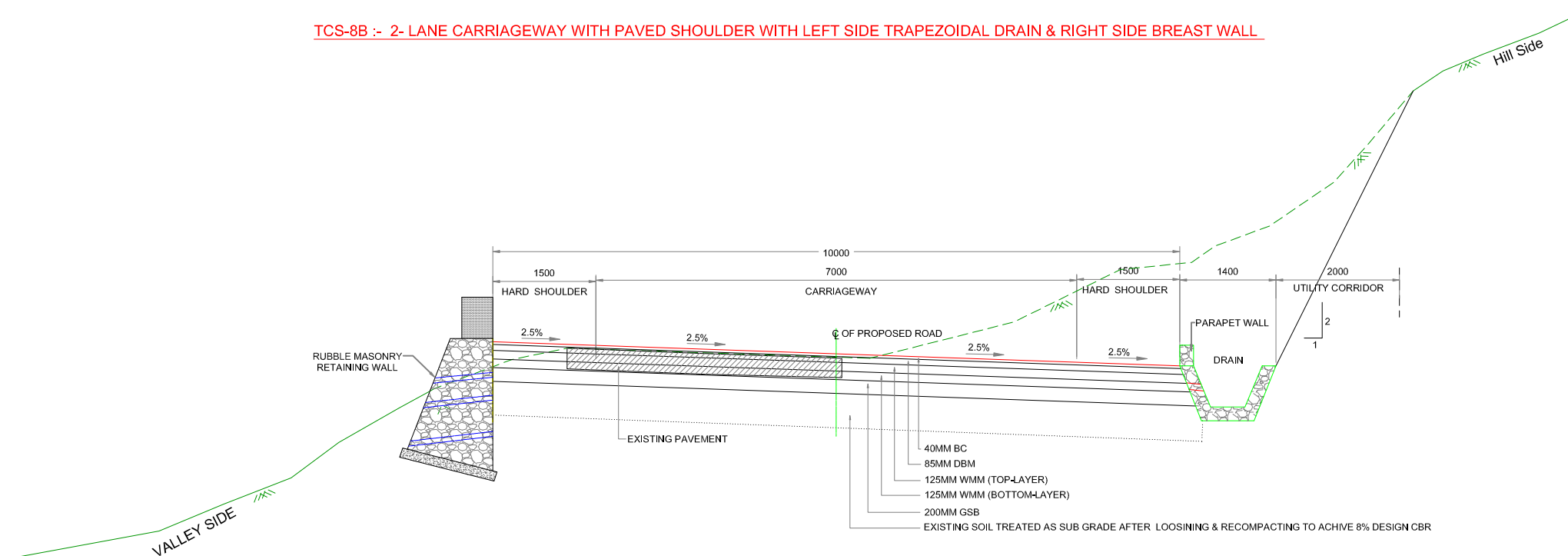
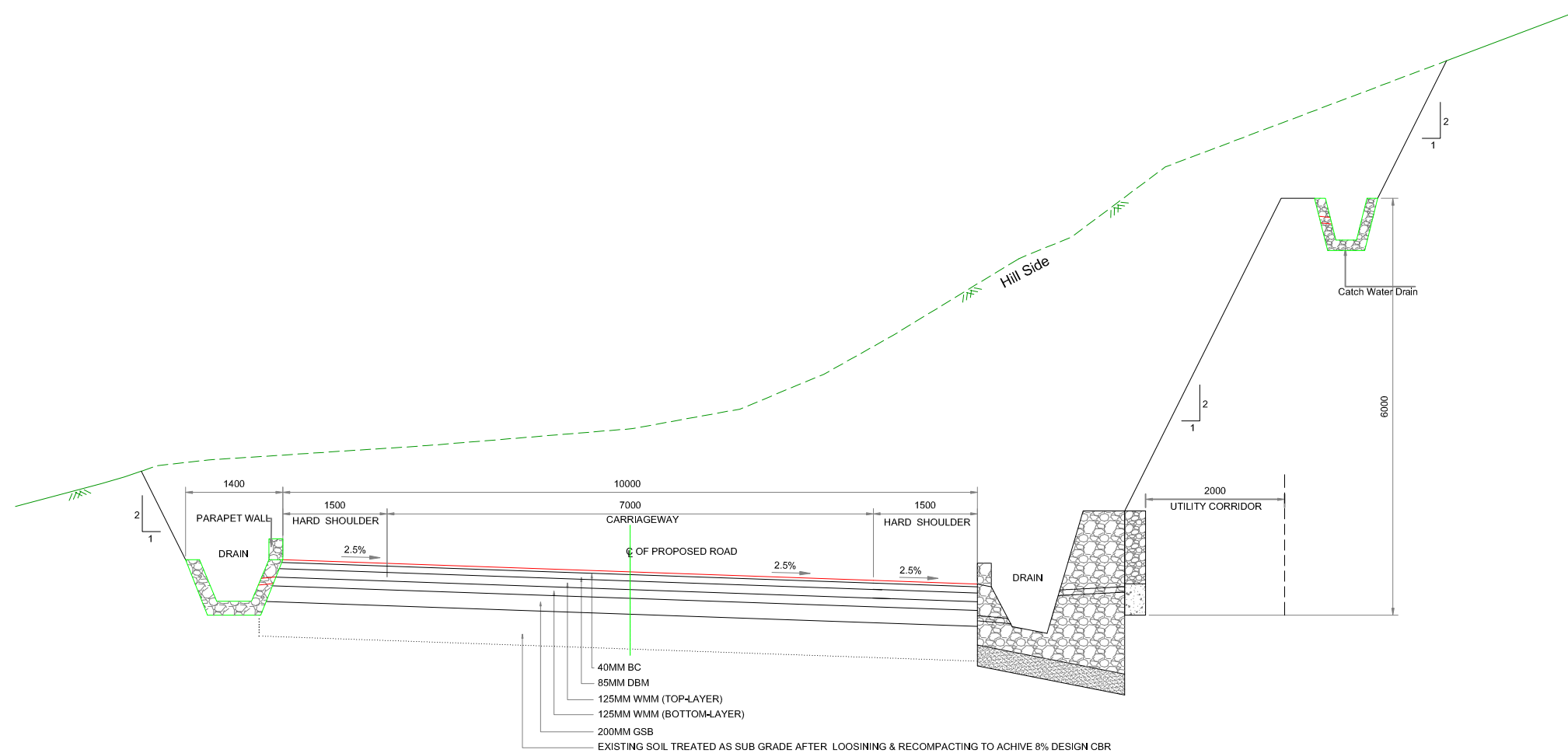


TCS-7B :- 2- LANE CARRIAGEWAY WITH PAVED SHOULDER WITH RIGHT SIDE BREAST WALL

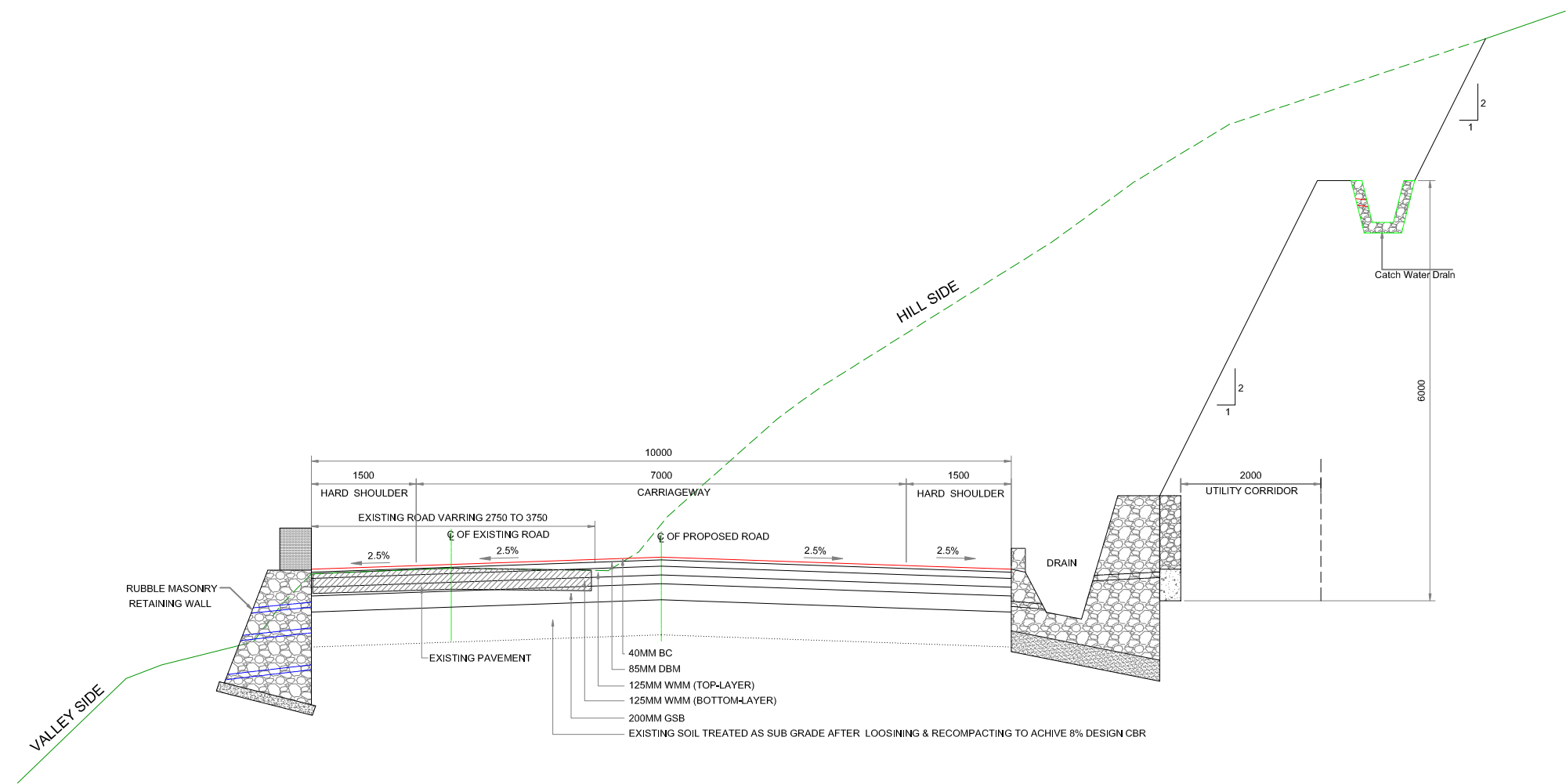
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MKD.	DATE	DESCRIPTION	CHKD.	APPRD.	April, 2020		PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhrul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.	Package:-IVA District:- SENAPATI Design chainage:- 81+870 Km to 93+800 Km Existing chainage:-88+520 Km to 101+475 Km			Drawn By.	Design By.	Checked By.	Approved By.
REVISIONS											Prabir Das	Sutripa DEy	Biplab Das	Soubhik Sadhu



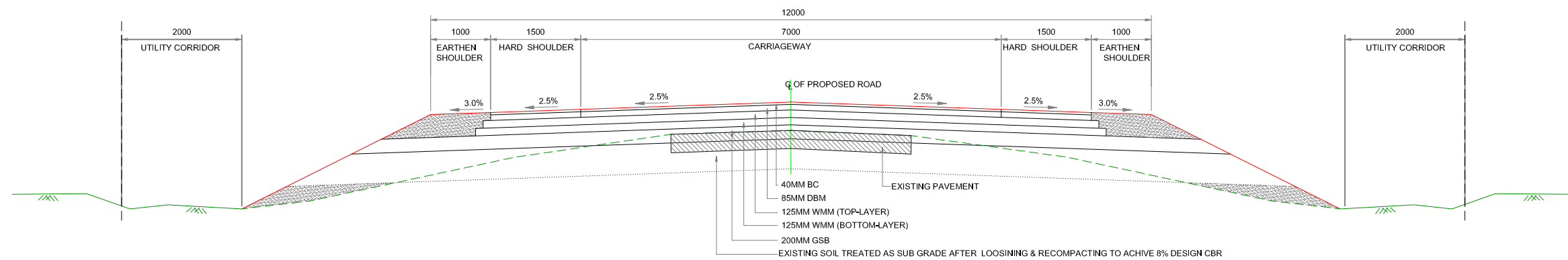
					SCALE :- 1:60		CLIENT: NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 4, Parliament Street, New Delhi - 110001	TYPICAL CROSS SECTION	CONSULTANT :  CETEST CE TESTING COMPANY PVT. LTD. Engineering Consultants 124-A, N.S.C. Bose Road Kolkata - 700092 AN ISO 9001, 14001 & OHSAS 18001 Certified Company		DWG. NO:- CET/2016/3640/NH-102A/FDPR/TCS-07			
							PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhrul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.		Package:-IVA District:- SENAPATI Design chainage:- 81+870 Km to 93+800 Km Existing chainage:-88+520 Km to 101+475 Km		Drawn By.	Design By.	Checked By.	Approved By.
MKD.	DATE	DESCRIPTION	CHKD.	APPRD.	April, 2020				Prabir Das	Sutripa DEy	Biplab Das	Soubhik Sadhu		
REVISIONS														



					SCALE :- 1:60		CLIENT: NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 4, Parliament Street, New Delhi - 110001	TYPICAL CROSS SECTION	CONSULTANT :  CETEST CE TESTING COMPANY PVT. LTD. Engineering Consultants 124-A, N.S.C. Bose Road Kolkata - 700092 AN ISO 9001, 14001 & OHSAS 18001 Certified Company		DWG. NO:- CET/2016/3640/NH-102A/FDPR/TCS-07				
					PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhrul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.		Package:-IVA District:- SENAPATI Design chainage:- 81+870 Km to 93+800 Km Existing chainage:-88+520 Km to 101+475 Km		Drawn By.		Design By.	Checked By.	Approved By.		
MKD.	DATE	DESCRIPTION	CHKD.	APPRD.	April, 2020							Prabir Das	Sutripa DEy	Biplab Das	Soubhik Sadhu
REVISIONS															



TCS-10A : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER WITH LEFT SIDE RETAINING WALL & RIGHT SIDE BREAST WALL



TCS-11 : 2-LANE CARRIAGEWAY WITH PAVED SHOULDER

					SCALE :- 1:60	 CLIENT: NATIONAL HIGHWAYS AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 4, Parliament Street, New Delhi - 110001	TYPICAL CROSS SECTION		CONSULTANT :  CETEST CE TESTING COMPANY PVT. LTD. Engineering Consultants 124-A, N.S.C. Bose Road Kolkata - 700092	DWG. NO:- CET/2016/3640/NH-102A/FDPR/TCS-09			
MKD.	DATE	DESCRIPTION	CHKD.	APPRD.	April, 2020		Package:-IVA	District:- SENAPATI		Drawn By.	Design By.	Checked By.	Approved By.
REVISIONS						PROJECT: Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Two Laning with Paved Shoulder of Ukhurul - Toloi - Tadubi Section of NH-102A (115 km) in the State of Manipur on EPC mode.	Design chainage:- 81+870 Km to 93+800 Km	Existing chainage:- 88+520 Km to 101+475 Km		Prabir Das	Sutripa DEy	Biplab Das	Soubhik Sadhu