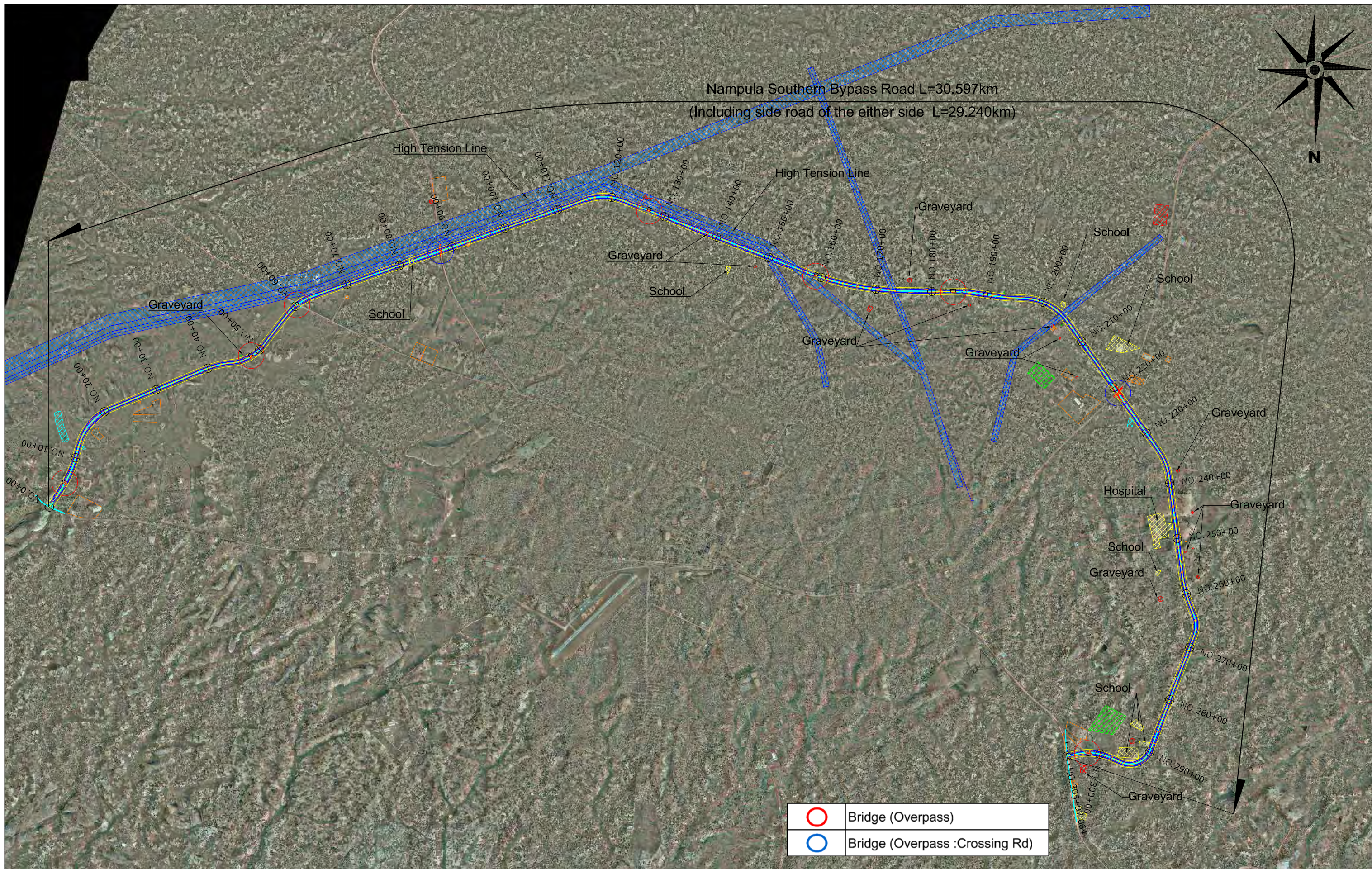


(C) NAMPULA SOUTHERN BYPASS ROAD



Japan International Cooperation Agency

National Road Administration (ANE)

Oriental Consultants Global Co., Ltd.

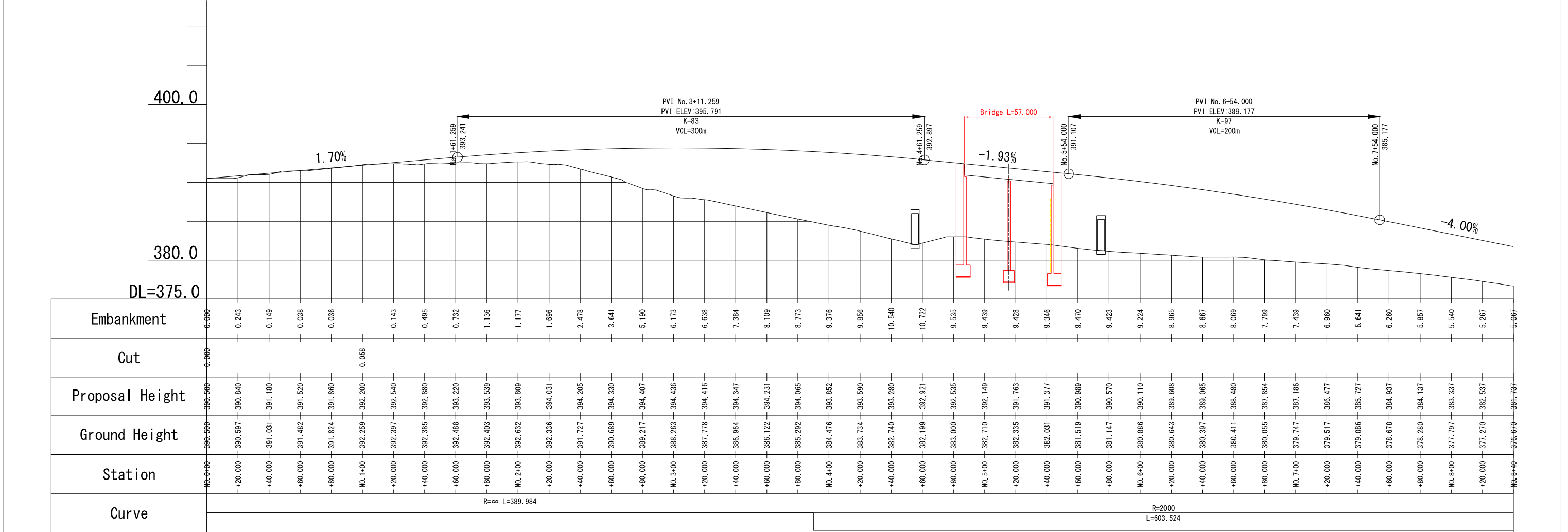
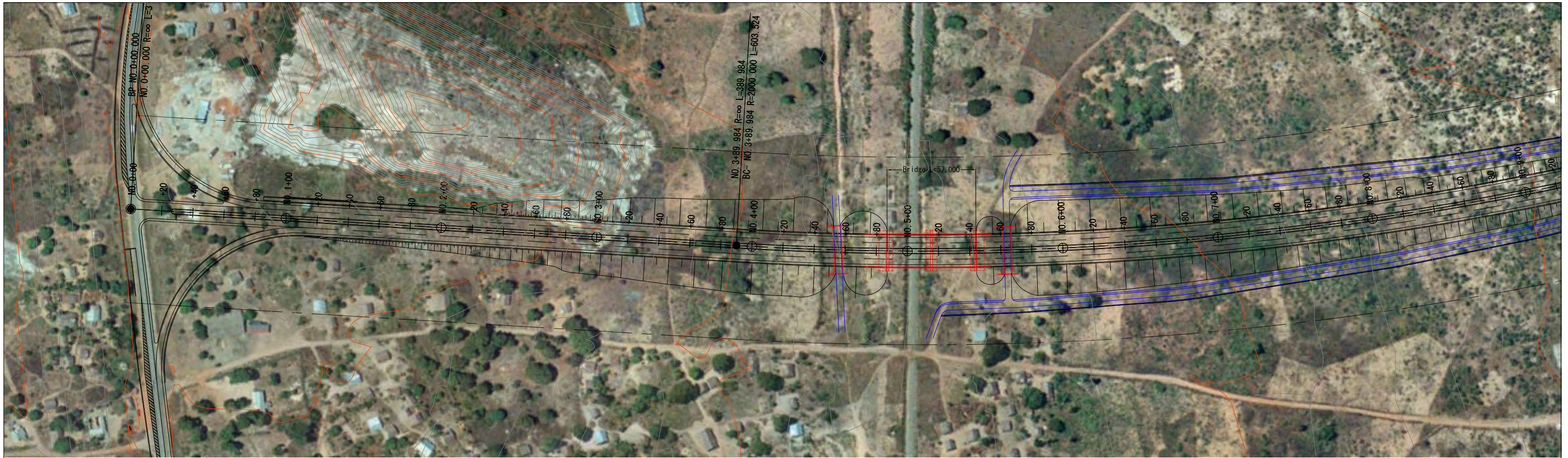
Eight-Japan Engineering Consultants Inc.

Kokusai Kogyo Co., Ltd.

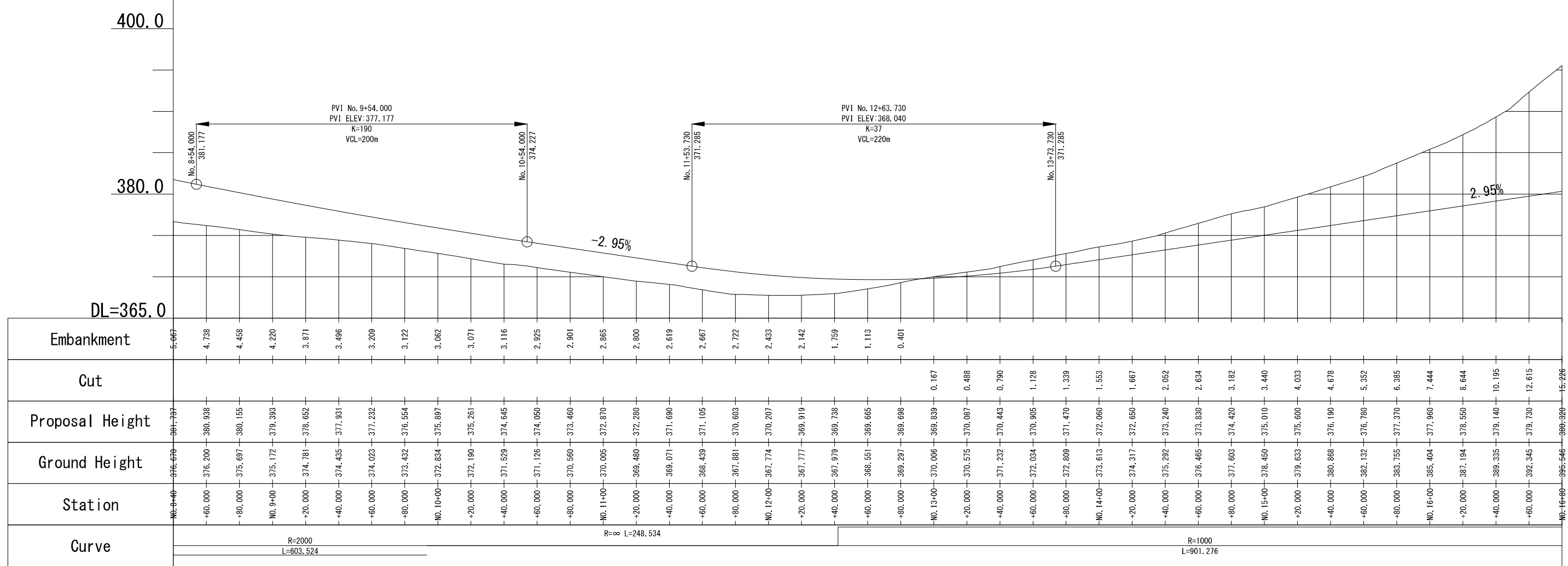
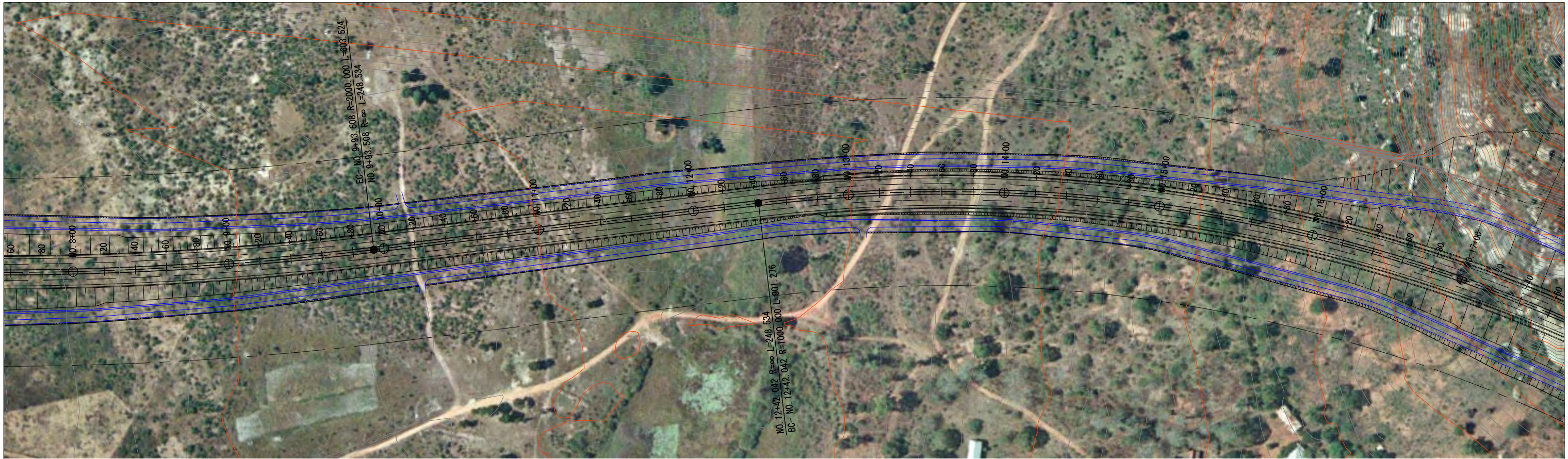
NAME	PREPARED BY	CHECKED BY	APPROVED BY
SIGNATURE			
DATE			

PROJECT TITLE:
**Preparatory Survey for Nacala Corridor
 Road Network Upgrading Project
 (Nampula Southern Bypass Road)**

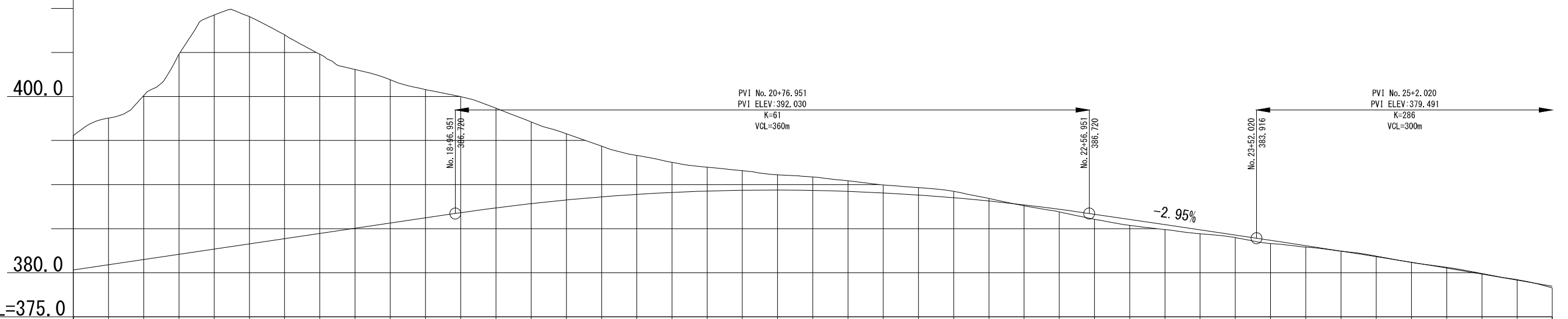
DRAWING TITLE: Completion Stage ROUTE MAP			
SCALE	SHEET NO.	DRAWING NO.	REV. NO.
—		C-1	



		PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME					SCALE	SHEET NO.	DRAWING NO.
		SIGNATURE				1/2500		C-2	
		DATE							

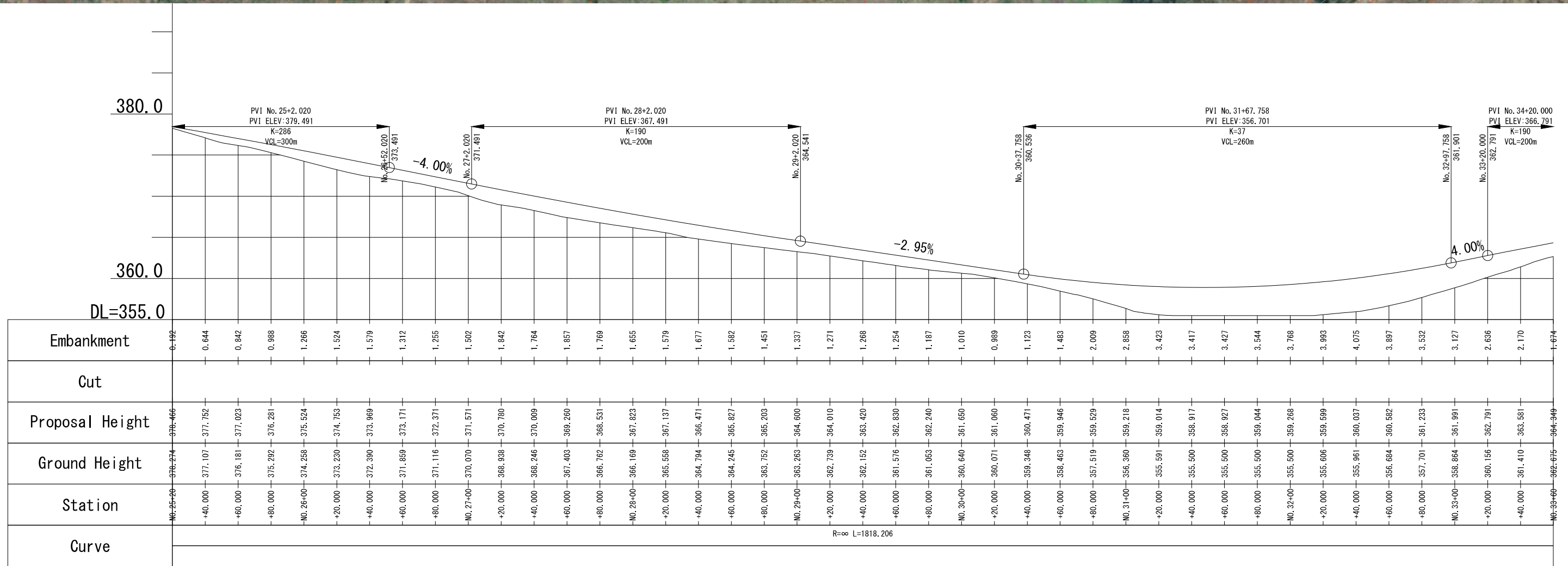


Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-3	
		DATE							

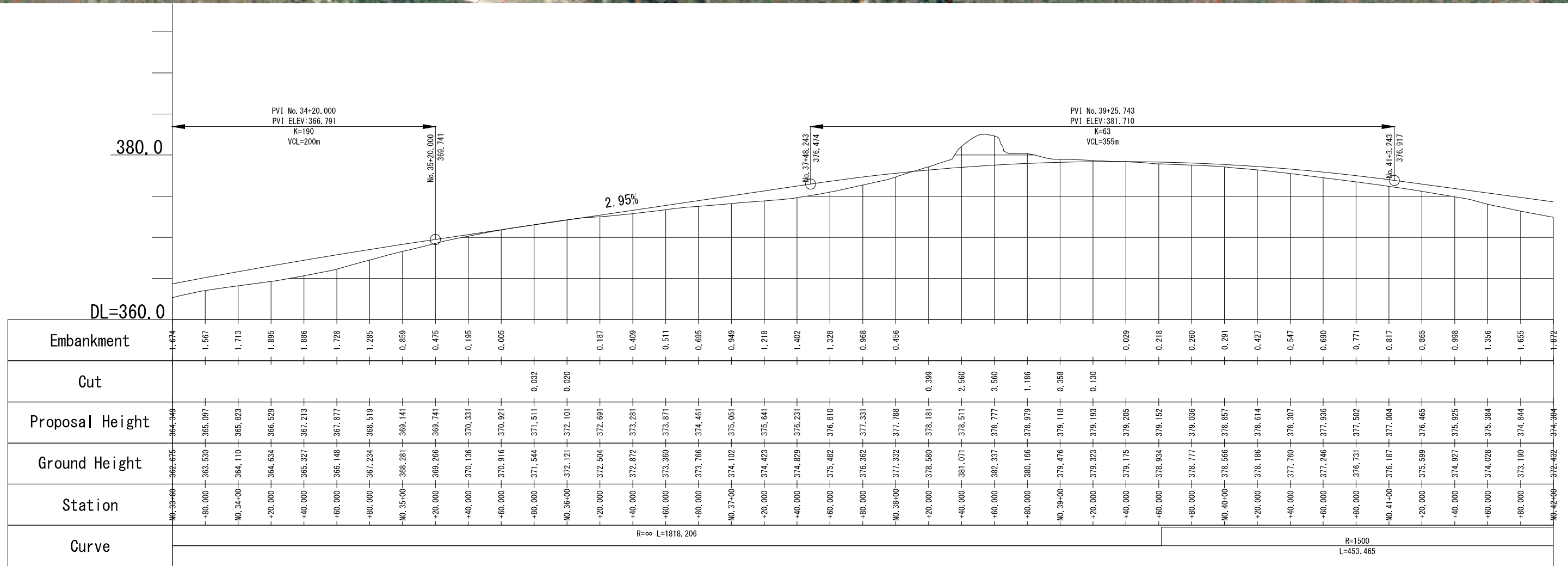
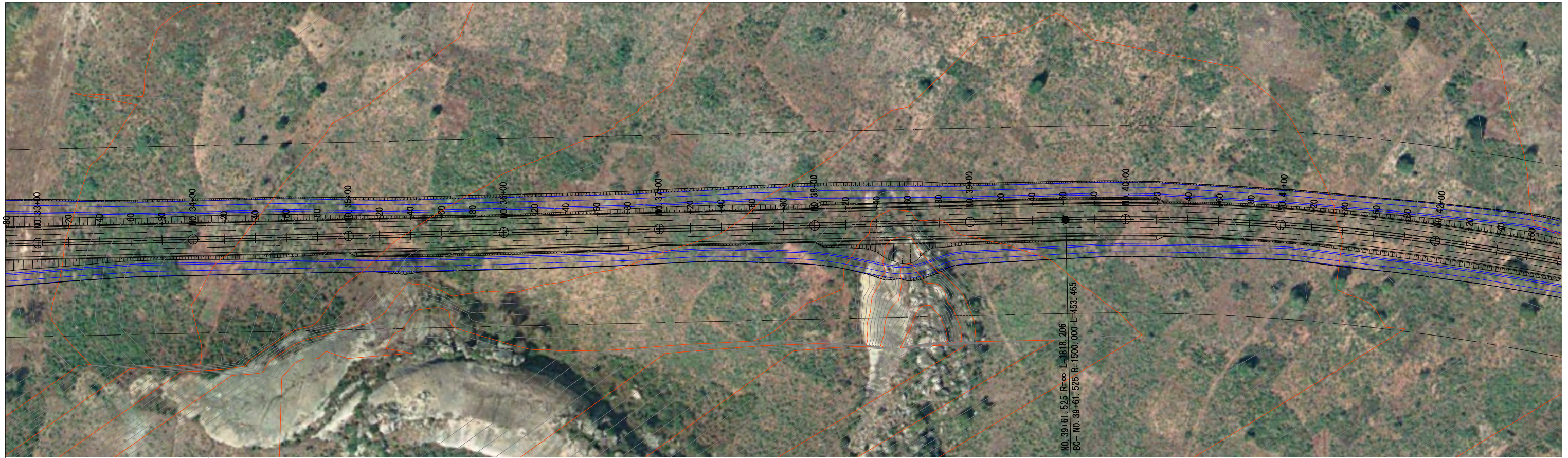


Station	Ground Height	Proposal Height	Cut	Embankment
NO. 16+00	395.546	396.320	15.226	
NO. 17+00	397.555	380.910	16.644	
+20.000	400.113	381.500	18.613	
+40.000	404.786	382.090	22.696	
+60.000	409.246	382.680	26.566	
+80.000	409.062	383.270	25.791	
NO. 18+00	407.002	383.860	23.141	
+20.000	404.804	384.450	20.354	
+40.000	403.068	385.040	18.028	
+60.000	401.917	385.630	16.287	
+80.000	400.793	386.220	14.573	
NO. 19+00	399.989	386.809	13.180	
+20.000	398.679	387.357	11.322	
+40.000	397.123	387.838	9.285	
+60.000	395.780	388.254	7.526	
+80.000	394.362	388.605	5.757	
NO. 20+00	393.304	388.890	4.414	
+20.000	392.521	389.109	3.412	
+40.000	391.980	389.263	2.716	
+60.000	391.568	389.352	2.216	
+80.000	391.110	389.374	1.735	
NO. 21+00	390.862	389.332	1.530	
+20.000	390.442	389.223	1.219	
+40.000	389.968	389.049	0.918	
+60.000	389.645	388.810	0.835	
+80.000	389.226	388.505	0.721	
NO. 22+00	388.427	388.134	0.283	
+20.000	387.602	387.698	0.096	
+40.000	386.897	387.197	0.300	
+60.000	386.066	386.630	0.564	
+80.000	385.367	386.040	0.673	
NO. 23+00	384.890	385.450	0.560	
+20.000	384.426	384.860	0.435	
+40.000	383.969	384.270	0.281	
+60.000	383.309	383.679	0.370	
+80.000	382.914	383.077	0.163	
NO. 24+00	382.451	382.460	0.009	
+20.000	381.890	381.829	0.060	
+40.000	381.191	381.185	0.006	
+60.000	380.607	380.526	0.081	
+80.000	379.910	379.854	0.056	
NO. 25+00	379.215	379.167	0.048	
NO. 25+20	376.274	376.466	0.192	

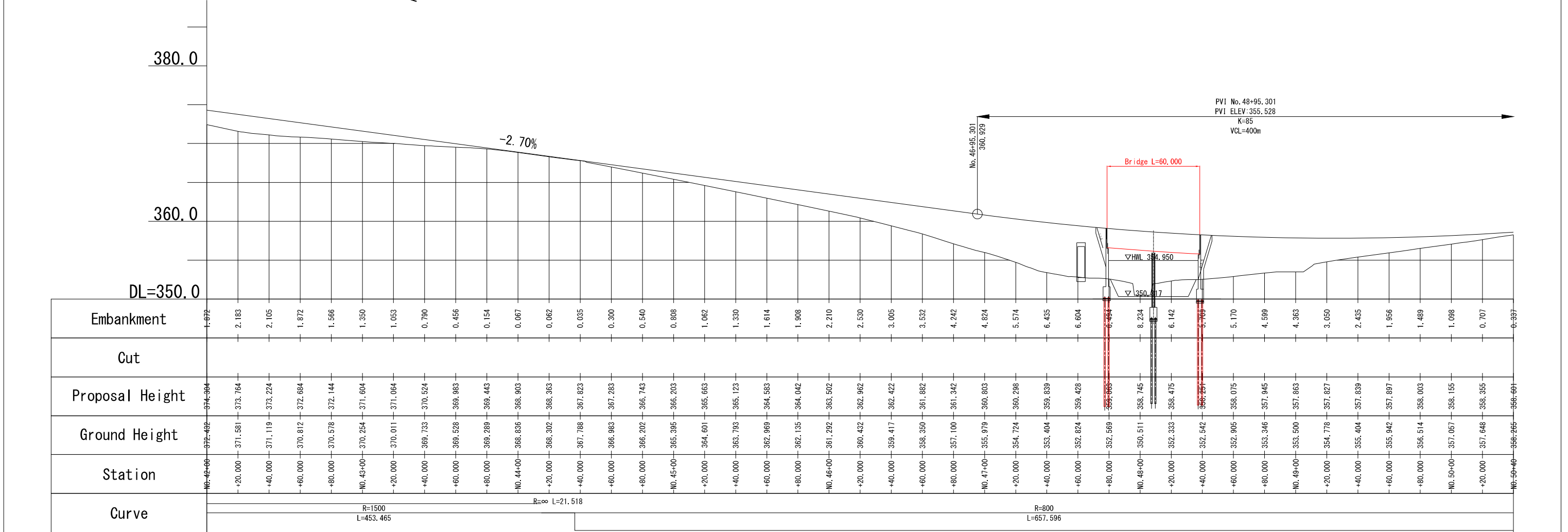
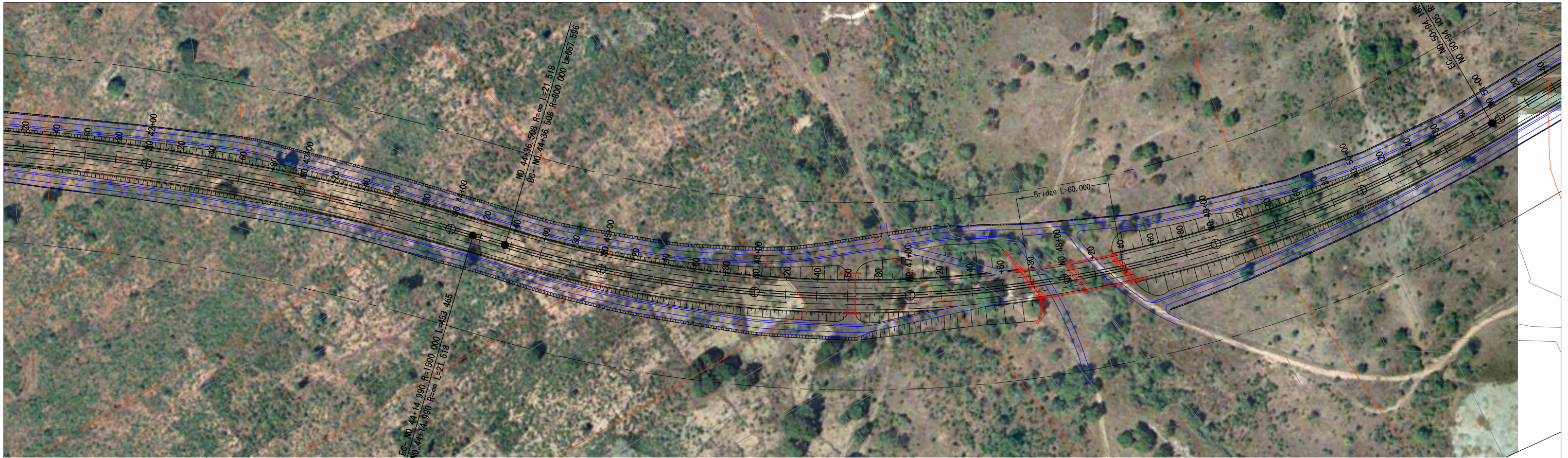
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-4	
		DATE							



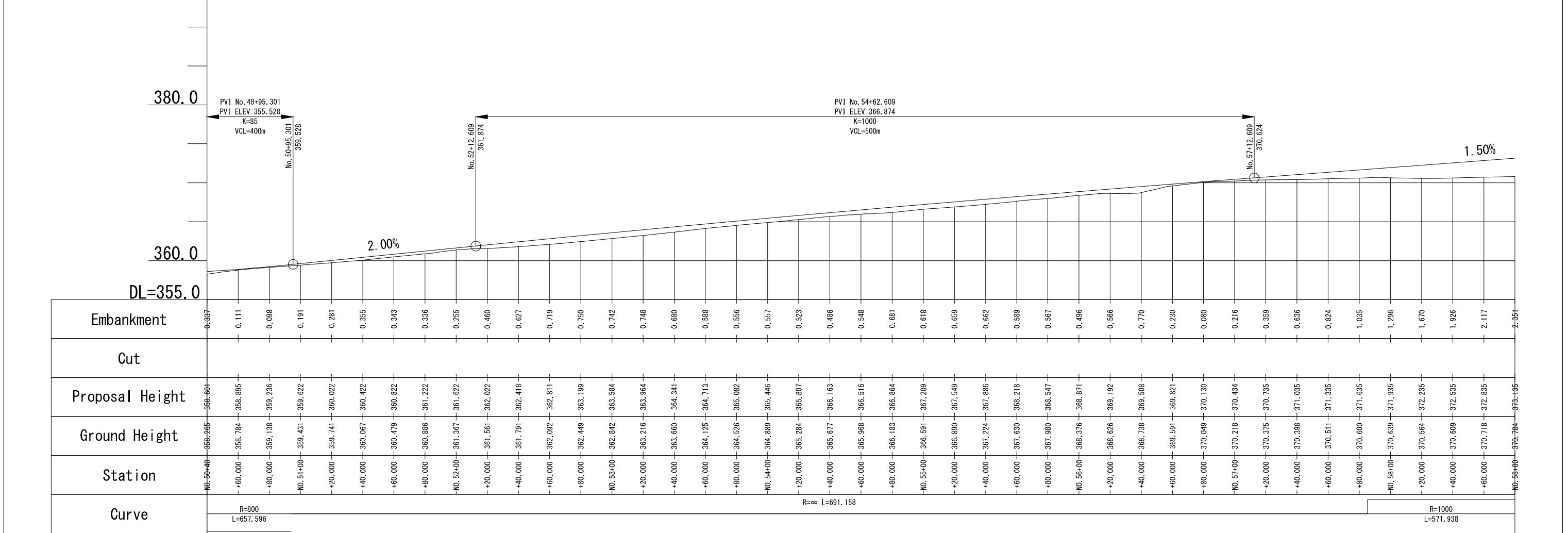
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-5	
		DATE							



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-6	
		DATE							



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-7	
		DATE							



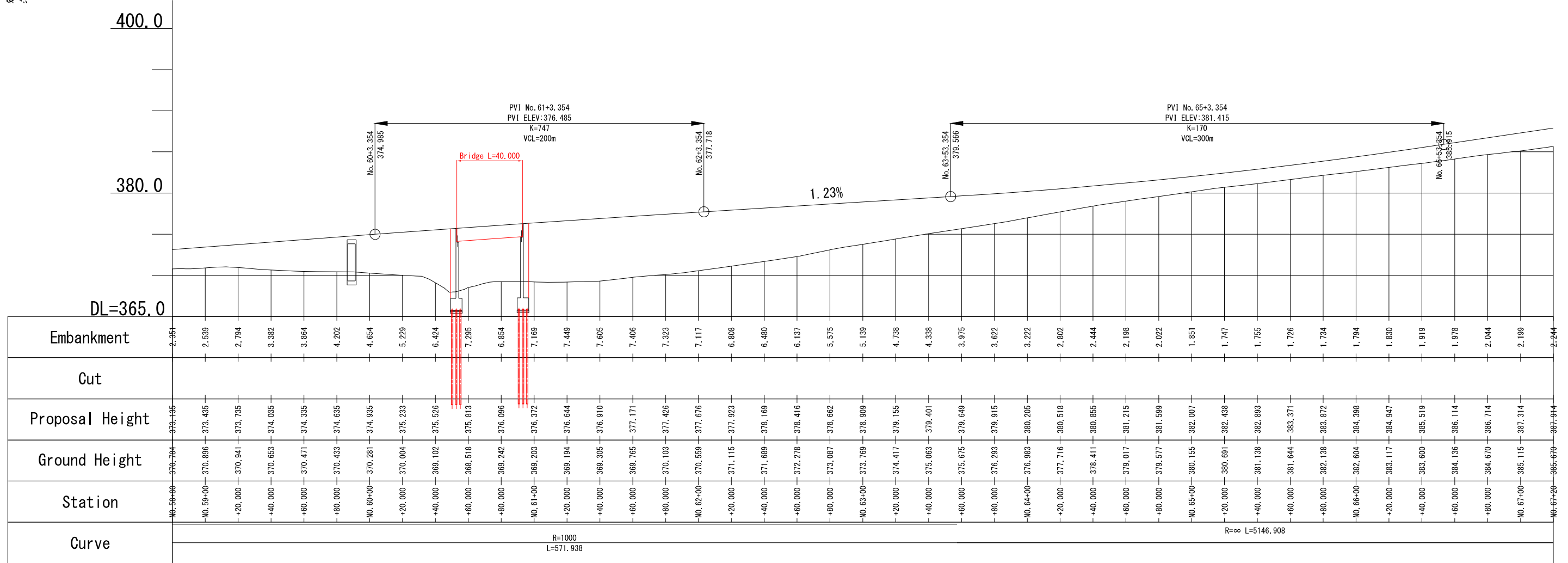
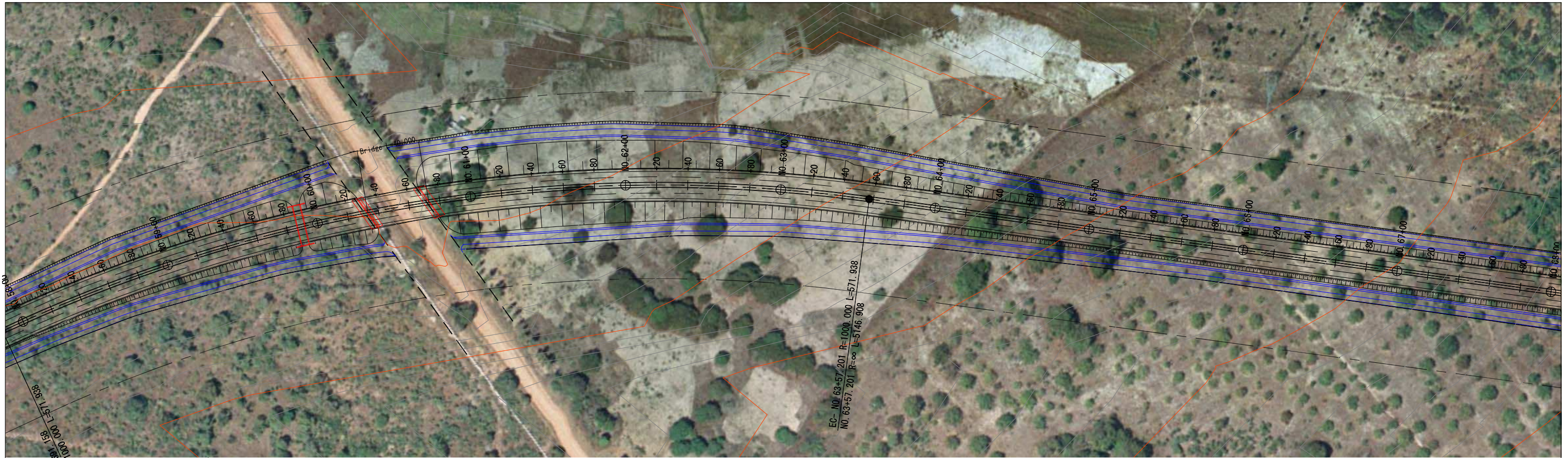
Japan International Cooperation Agency
 National Road Administration (ANE)

Oriental Consultants Global Co., Ltd.
 Eight-Japan Engineering Consultants Inc.
 Kokusai Kogyo Co., Ltd.

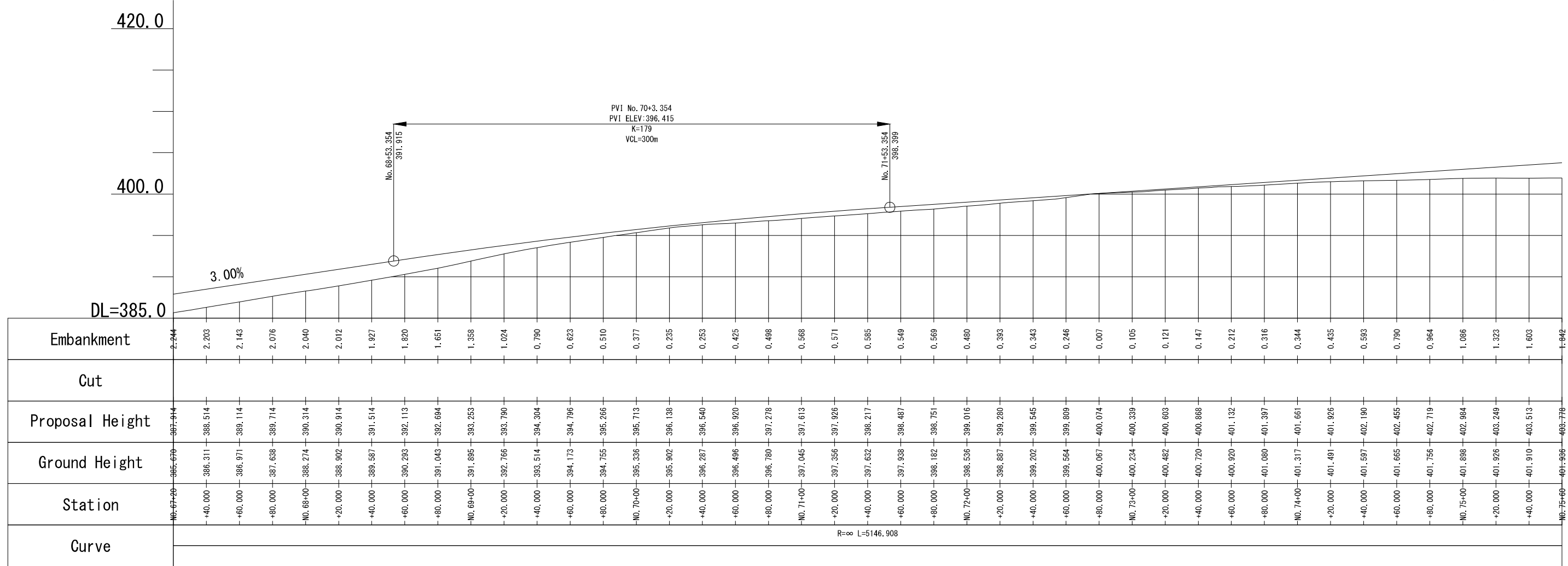
PREPARED BY	CHECKED BY	APPROVED BY
NAME		
SIGNATURE		
DATE		

PROJECT TITLE:
**Preparatory Survey for Nacala Corridor
 Road Network Upgrading Project
 (Nampula Southern Bypass Road)**

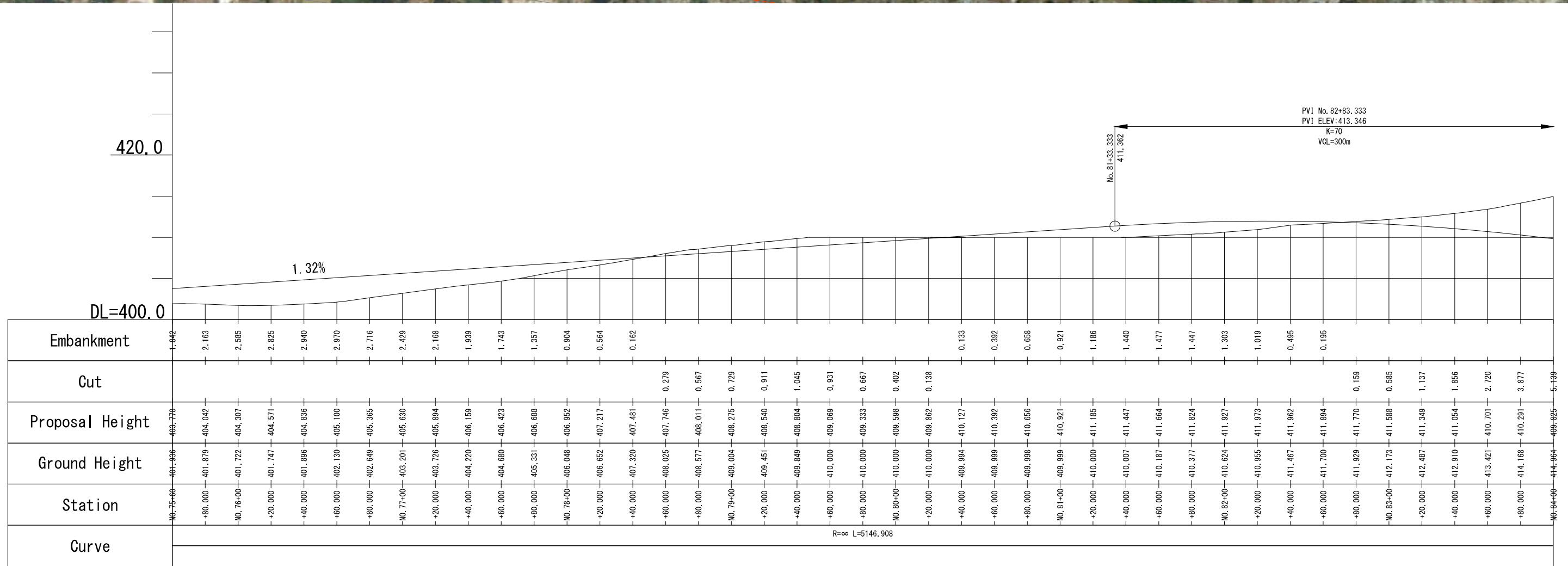
DRAWING TITLE: Completion Stage Plan and Profile			
SCALE	SHEET NO.	DRAWING NO.	REV. NO.
1/2500		C-8	



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-9	
		DATE							



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		DATE				1/2500		C-10	



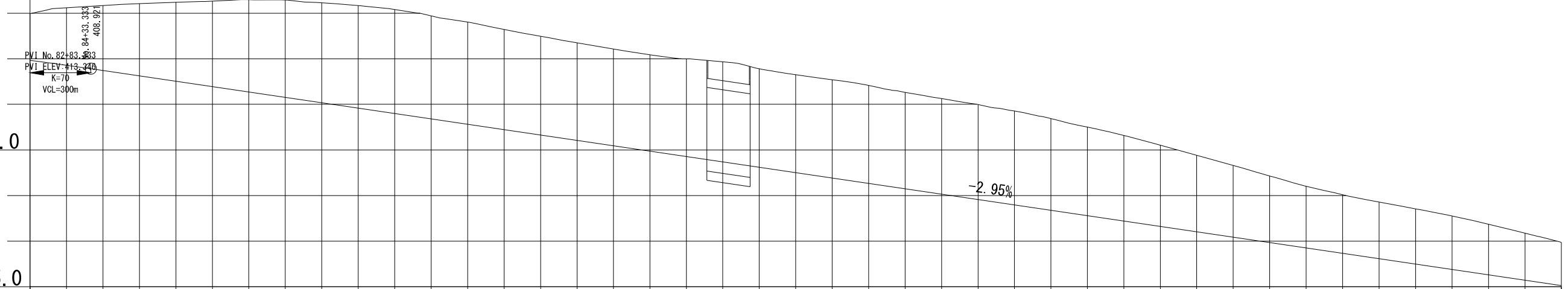
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-11	
		DATE							



420.0

400.0

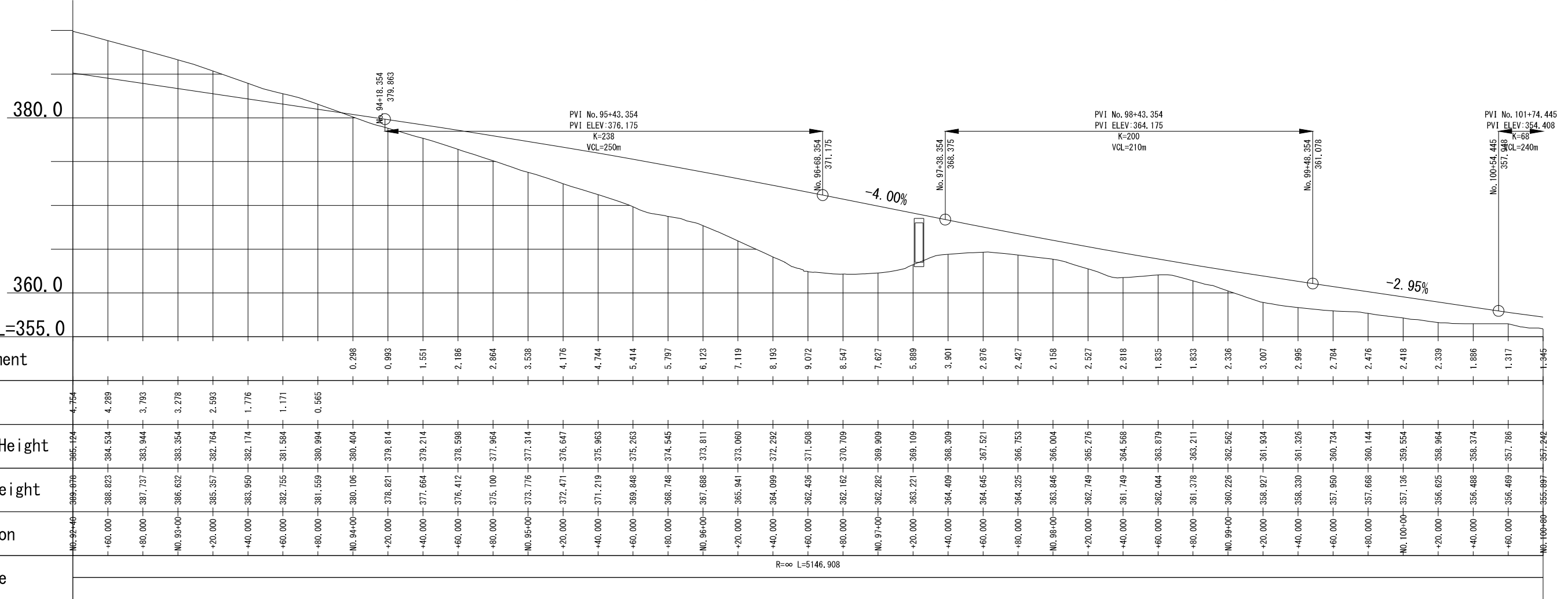
DL=385.0



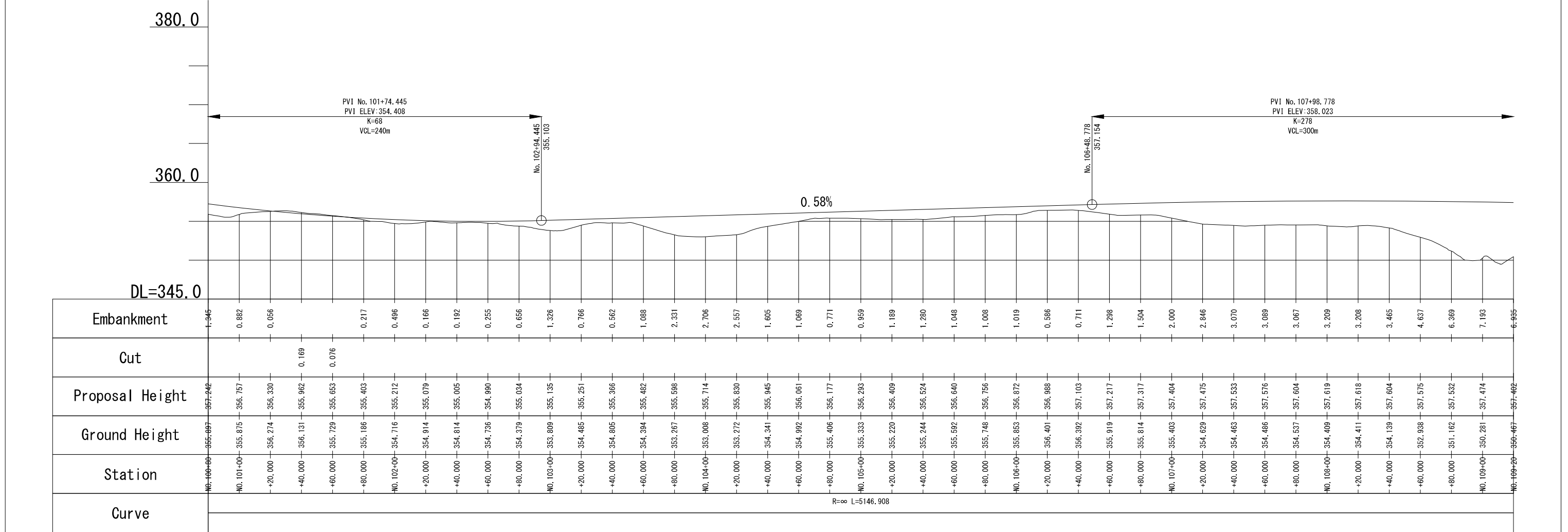
Station	Ground Height	Proposal Height	Cut	Embankment
+00+00	414.964	409.855	5.199	
+20+00	415.595	409.301	6.294	
+40+00	415.844	408.724	7.120	
+60+00	416.054	408.134	7.920	
+80+00	416.194	407.544	8.650	
+00+85+00	416.330	406.954	9.376	
+00+90+00	416.470	406.364	10.106	
+00+95+00	416.444	405.774	10.670	
+00+100+00	416.137	405.184	10.953	
+00+105+00	415.843	404.594	11.249	
+00+110+00	415.406	404.004	11.401	
+00+115+00	414.711	403.414	11.296	
+00+120+00	414.033	402.824	11.209	
+00+125+00	413.225	402.234	10.991	
+00+130+00	412.463	401.644	10.819	
+00+135+00	411.754	401.054	10.699	
+00+140+00	411.079	400.464	10.615	
+00+145+00	410.434	399.874	10.560	
+00+150+00	410.007	399.284	10.723	
+00+155+00	409.675	398.694	10.981	
+00+160+00	408.916	398.104	10.812	
+00+165+00	408.260	397.514	10.746	
+00+170+00	407.711	396.924	10.787	
+00+175+00	407.084	396.334	10.750	
+00+180+00	406.332	395.744	10.588	
+00+185+00	405.624	395.154	10.470	
+00+190+00	404.964	394.564	10.400	
+00+195+00	404.258	393.974	10.284	
+00+200+00	403.430	393.384	10.046	
+00+205+00	402.507	392.794	9.713	
+00+210+00	401.592	392.204	9.388	
+00+215+00	400.522	391.614	8.908	
+00+220+00	399.412	391.024	8.388	
+00+225+00	398.305	390.434	7.871	
+00+230+00	397.149	389.844	7.305	
+00+235+00	396.023	389.254	6.769	
+00+240+00	395.090	388.664	6.426	
+00+245+00	394.279	388.074	6.205	
+00+250+00	393.544	387.484	6.060	
+00+255+00	392.747	386.894	5.853	
+00+260+00	391.859	386.304	5.555	
+00+265+00	390.878	385.714	5.164	
+00+270+00	389.878	385.124	4.754	

R=∞ L=5146.908

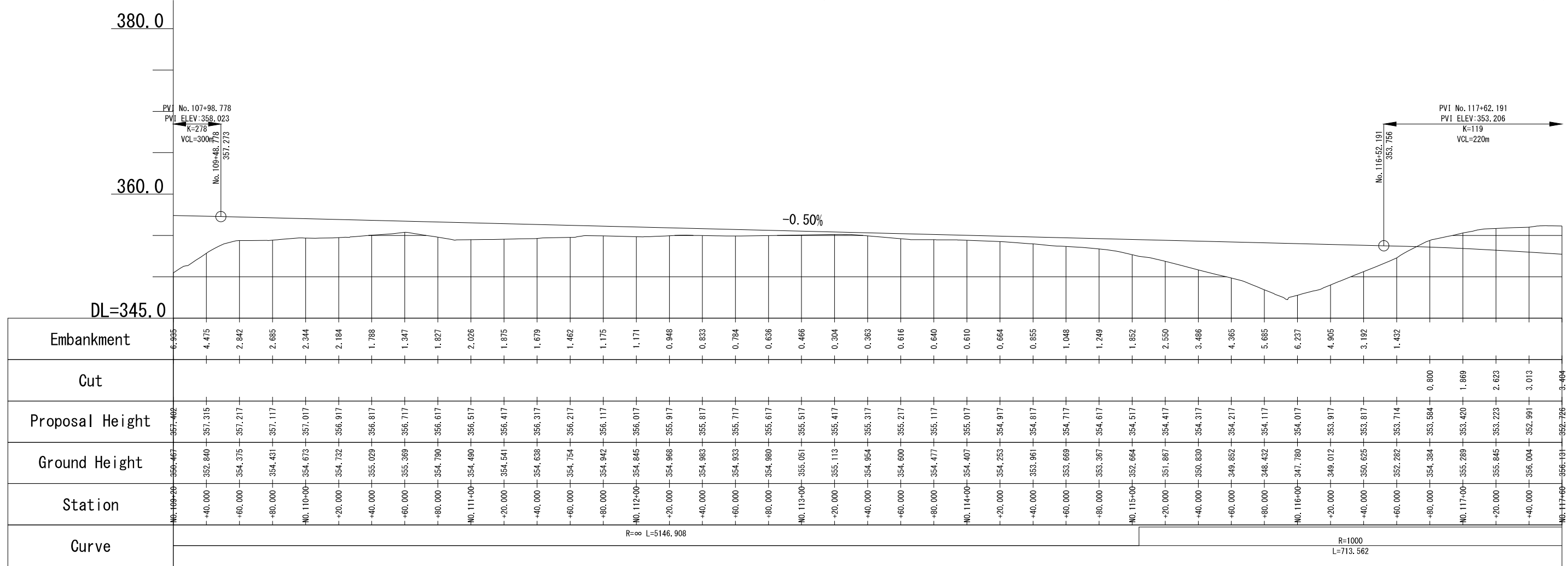
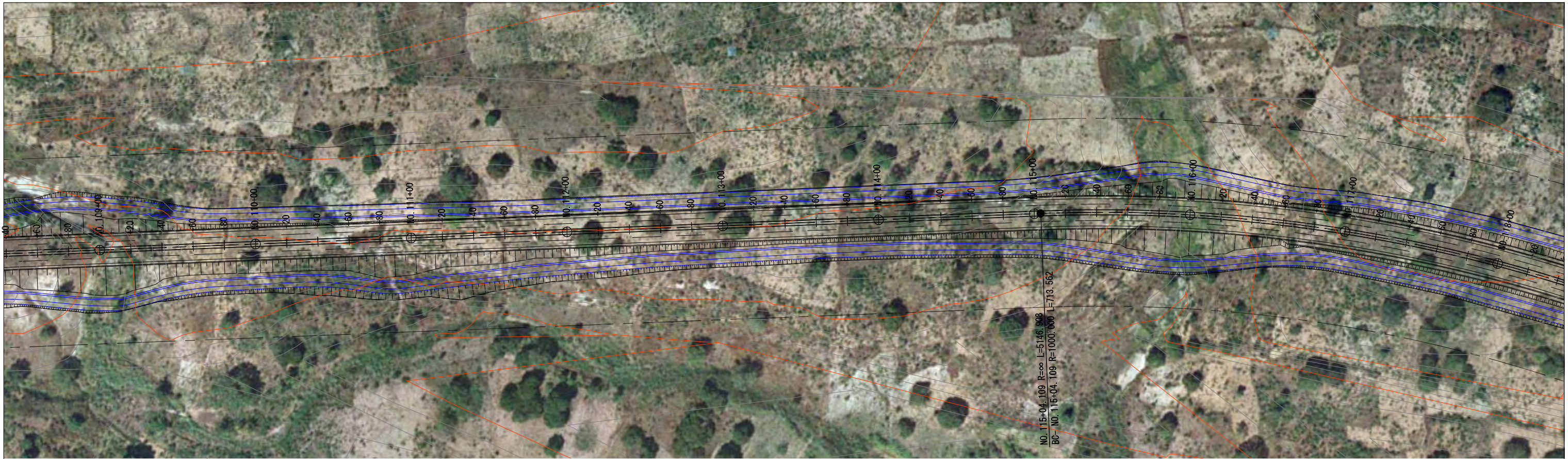
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-12	
		DATE							



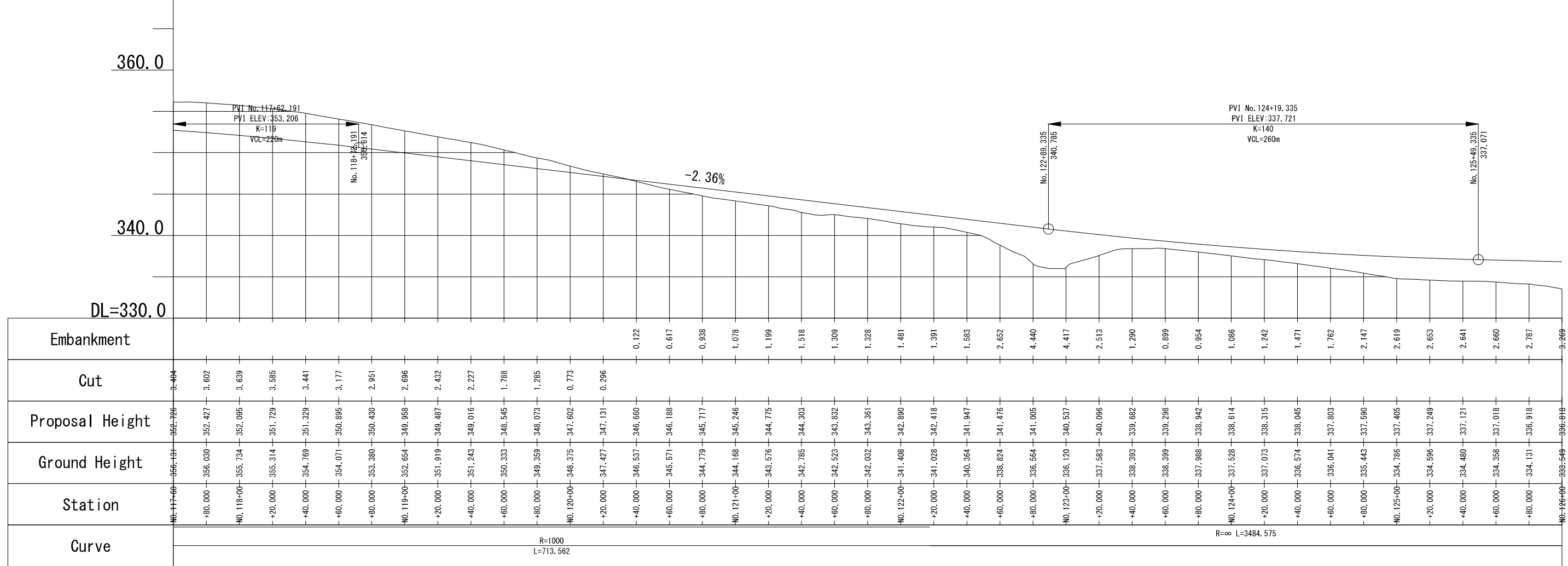
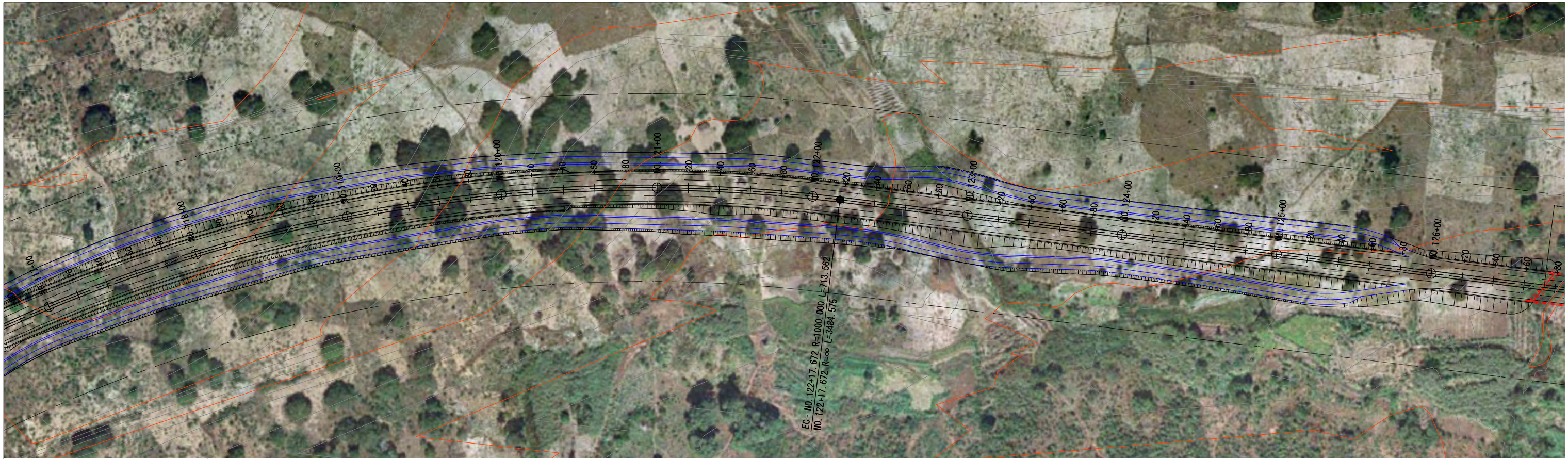
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-13	
		DATE							



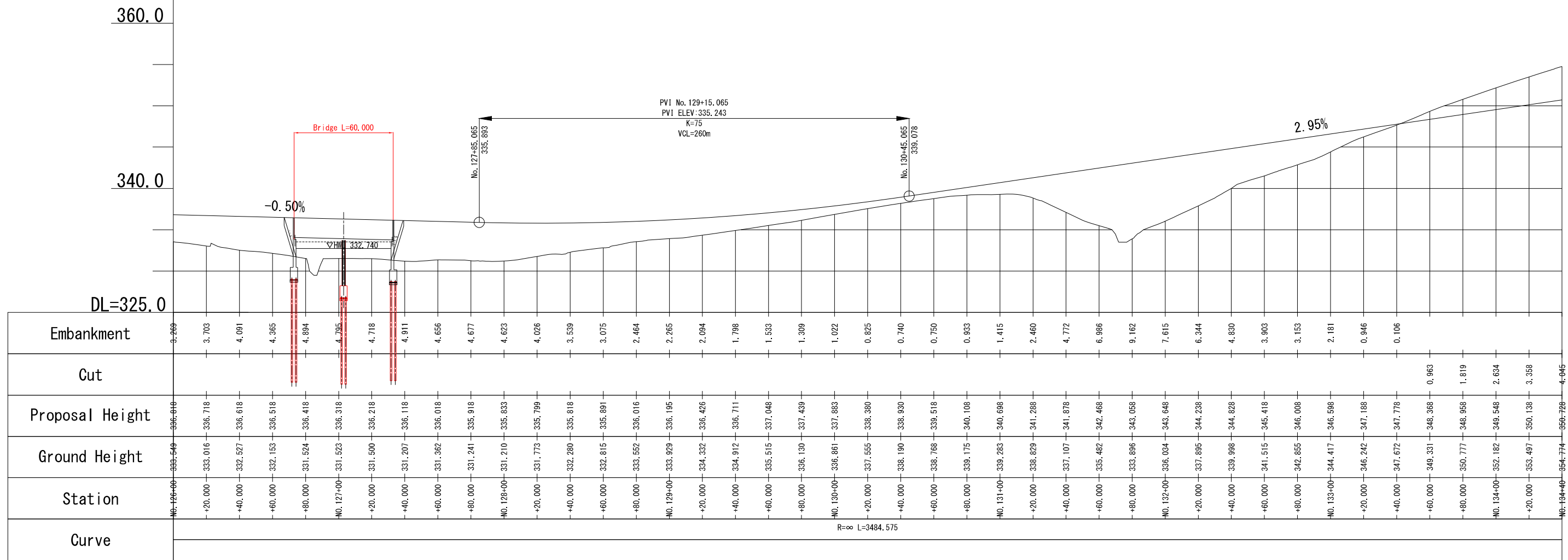
		PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-14	
		DATE							



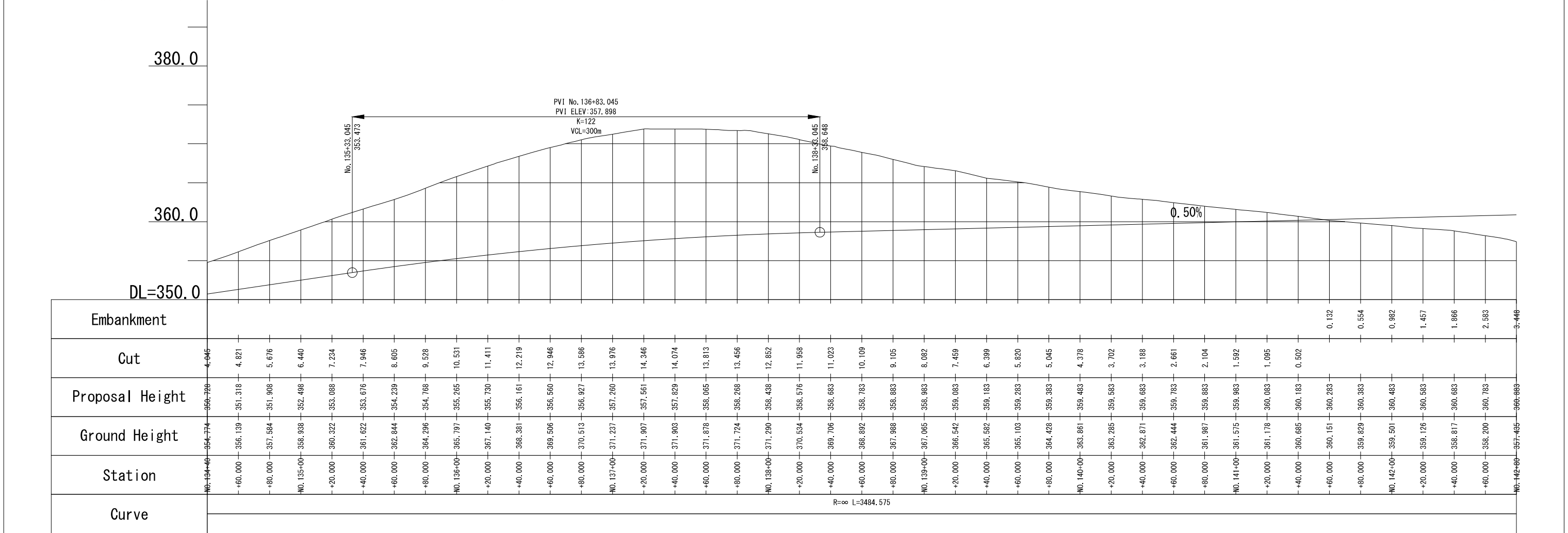
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-15	
		DATE							



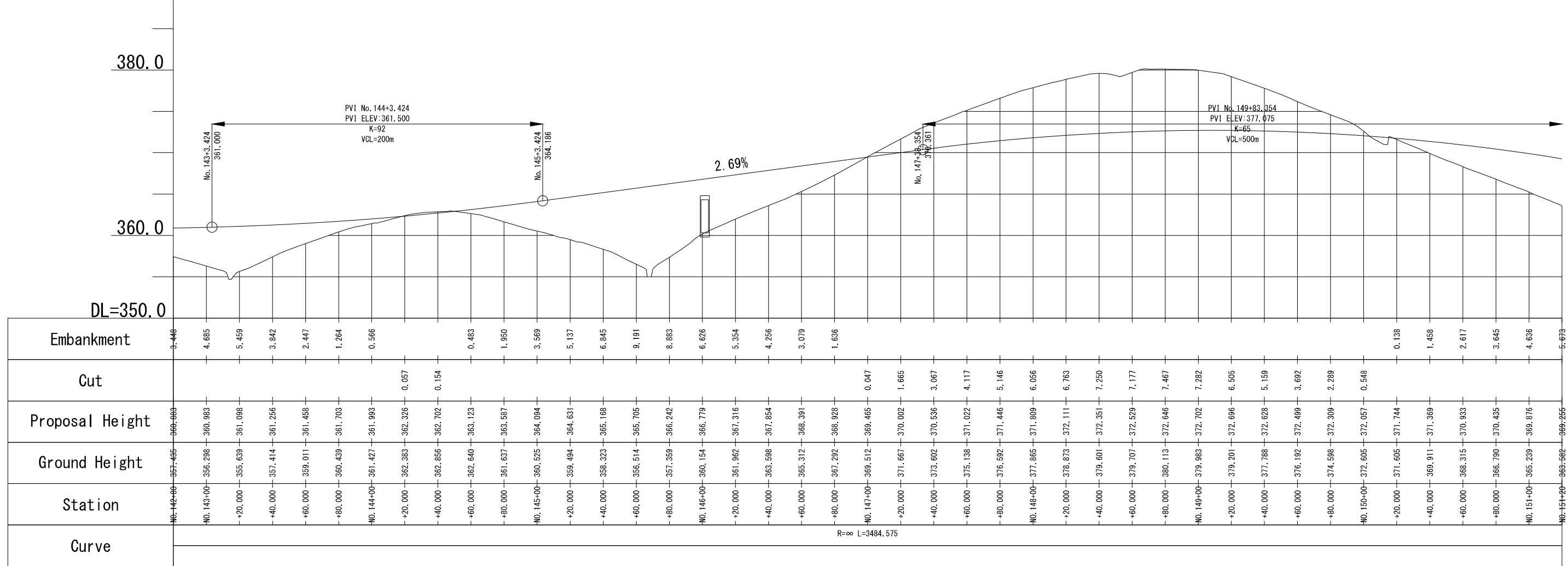
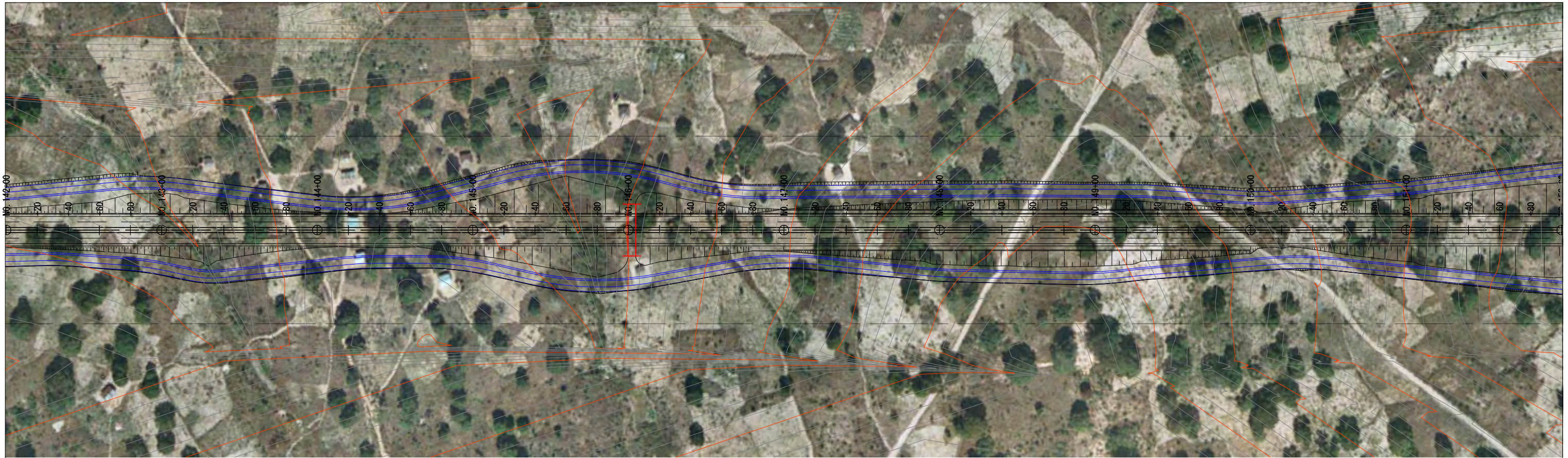
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-16	
		DATE							



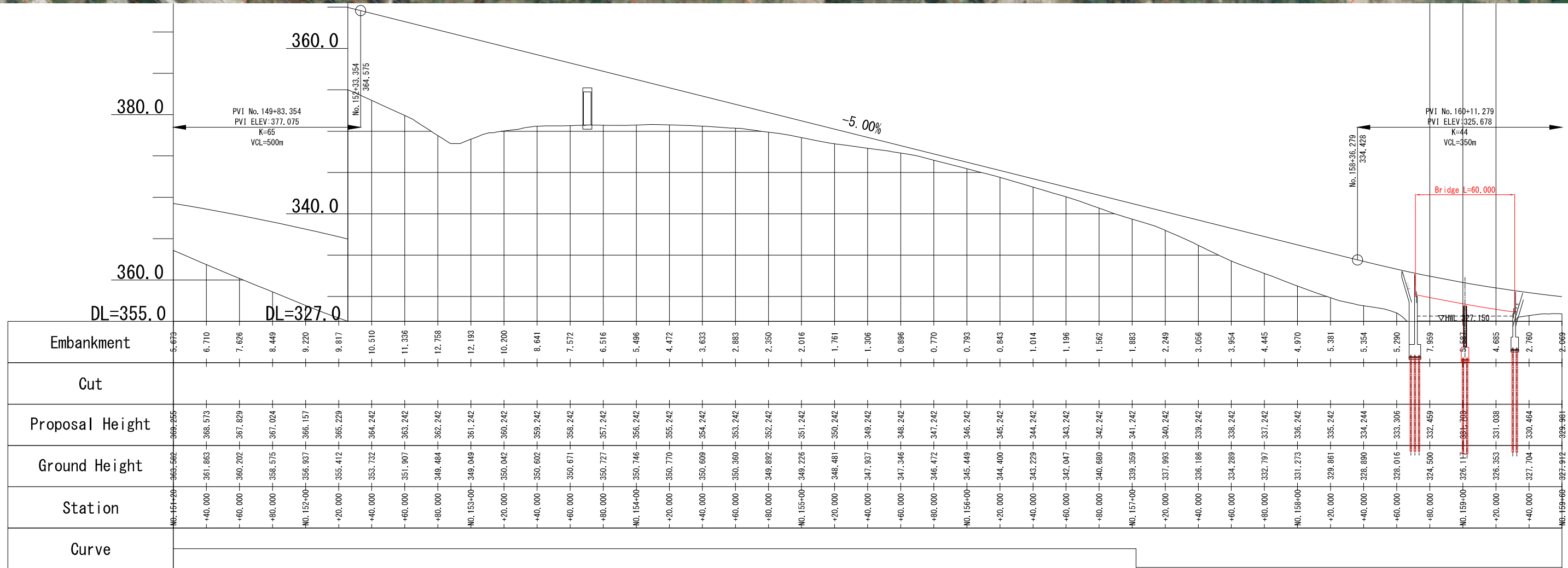
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-17	
		DATE							



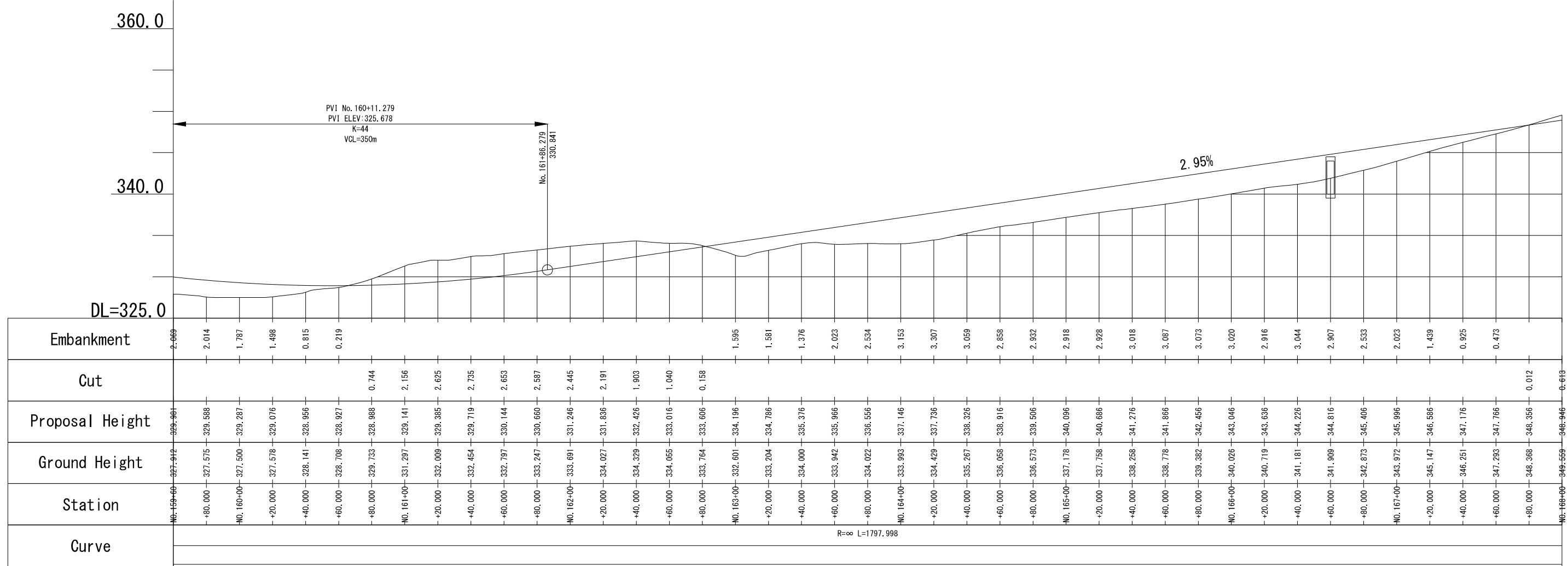
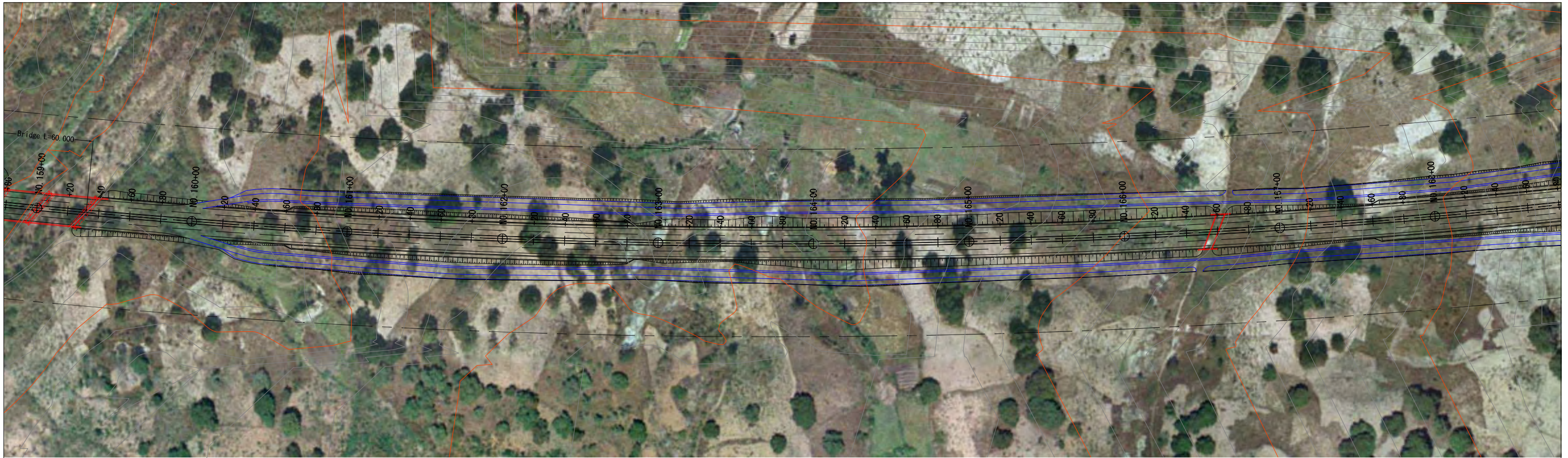
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-18	
		DATE							



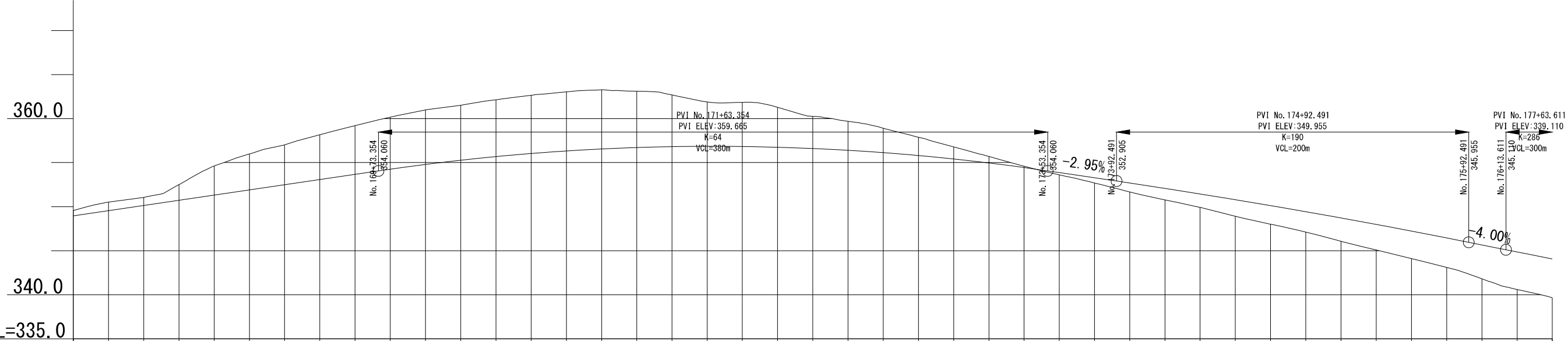
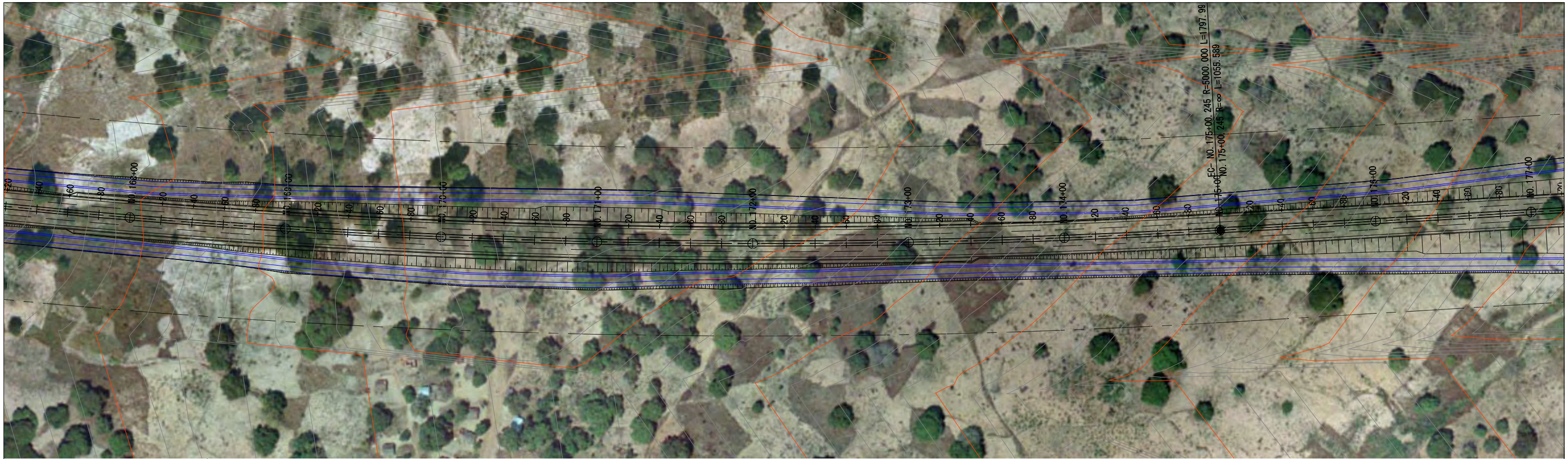
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		DATE				1/2500		C-19	



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-20	
		DATE							



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-21	
		DATE							

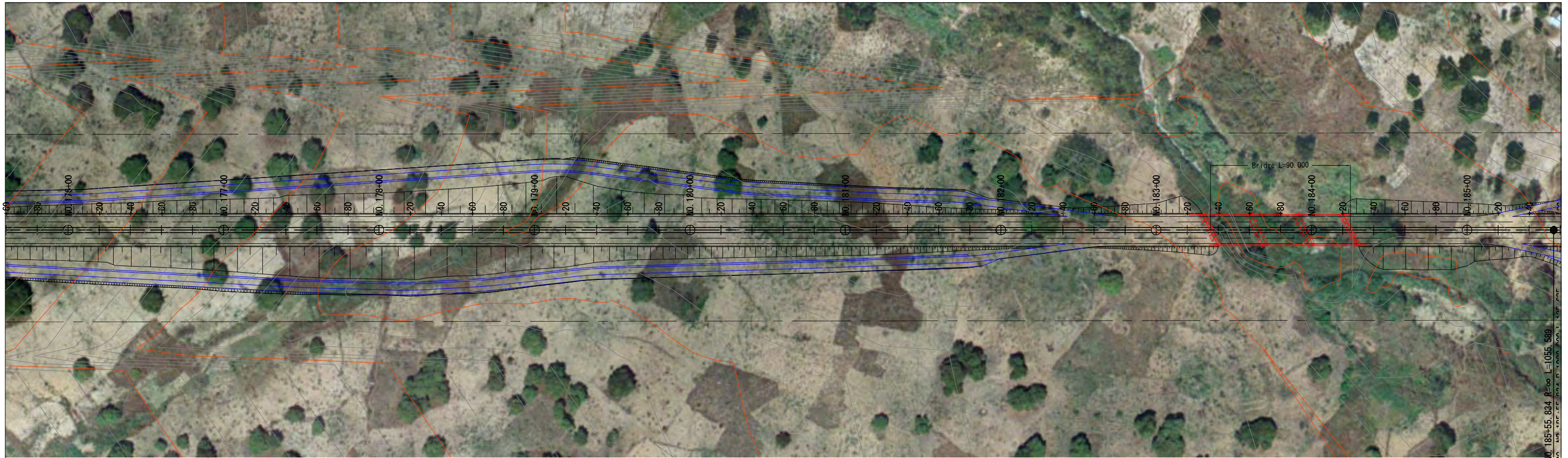


Station	Ground Height	Proposal Height	Cut	Embankment
No. 166+00	349.559	346.946	0.613	
+20,000	350.513	349.536	0.978	
+40,000	351.046	350.126	0.921	
+60,000	352.492	350.716	1.777	
+80,000	354.609	351.306	3.304	
No. 169+00	355.986	351.896	4.090	
+20,000	357.033	352.486	4.547	
+40,000	358.174	353.076	5.098	
+60,000	359.206	353.666	5.540	
+80,000	360.166	354.252	5.914	
No. 170+00	360.995	354.791	6.204	
+20,000	361.513	355.267	6.246	
+40,000	362.150	355.681	6.469	
+60,000	362.656	356.033	6.623	
+80,000	363.041	356.323	6.719	
No. 171+00	363.278	356.551	6.727	
+20,000	363.110	356.716	6.394	
+40,000	362.687	356.820	5.867	
+60,000	361.895	356.861	5.034	
+80,000	361.851	356.841	5.010	
No. 172+00	361.283	356.758	4.525	
+20,000	360.264	356.613	3.651	
+40,000	359.704	356.406	3.298	
+60,000	358.912	356.137	2.775	
+80,000	357.896	355.806	2.091	
No. 173+00	356.786	355.413	1.373	
+20,000	355.685	354.957	0.727	
+40,000	354.576	354.440	0.136	
+60,000	353.606	353.864		0.257
+80,000	352.682	353.274		0.591
No. 174+00	351.669	352.682		1.014
+20,000	350.768	352.074		1.306
+40,000	349.911	351.444		1.533
+60,000	348.907	350.794		1.887
+80,000	348.007	350.123		2.115
No. 175+00	347.117	349.430		2.314
+20,000	346.069	348.717		2.648
+40,000	345.074	347.982		2.908
+60,000	344.107	347.227		3.120
+80,000	343.098	346.451		3.353
No. 176+00	341.808	345.655		3.846
+20,000	340.600	344.855		4.255
No. 176+40	339.656	344.067		4.411

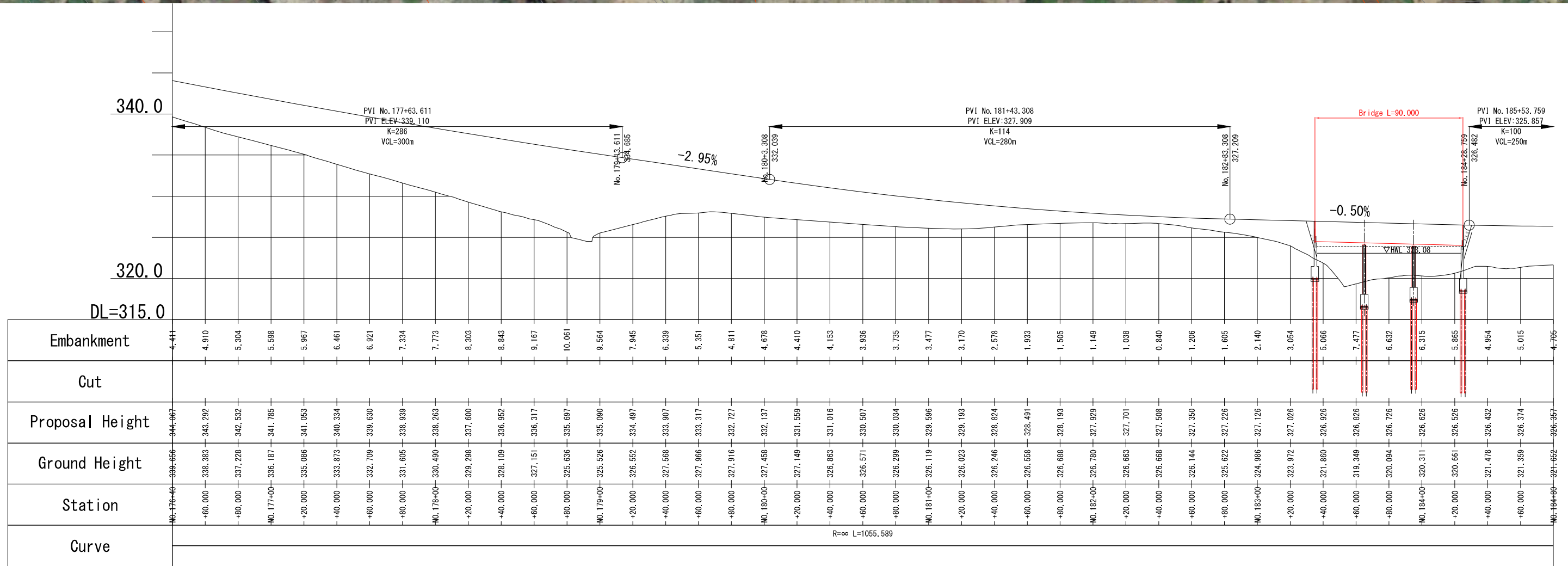
R=5000
L=1797.998

R=∞ L=1055.589

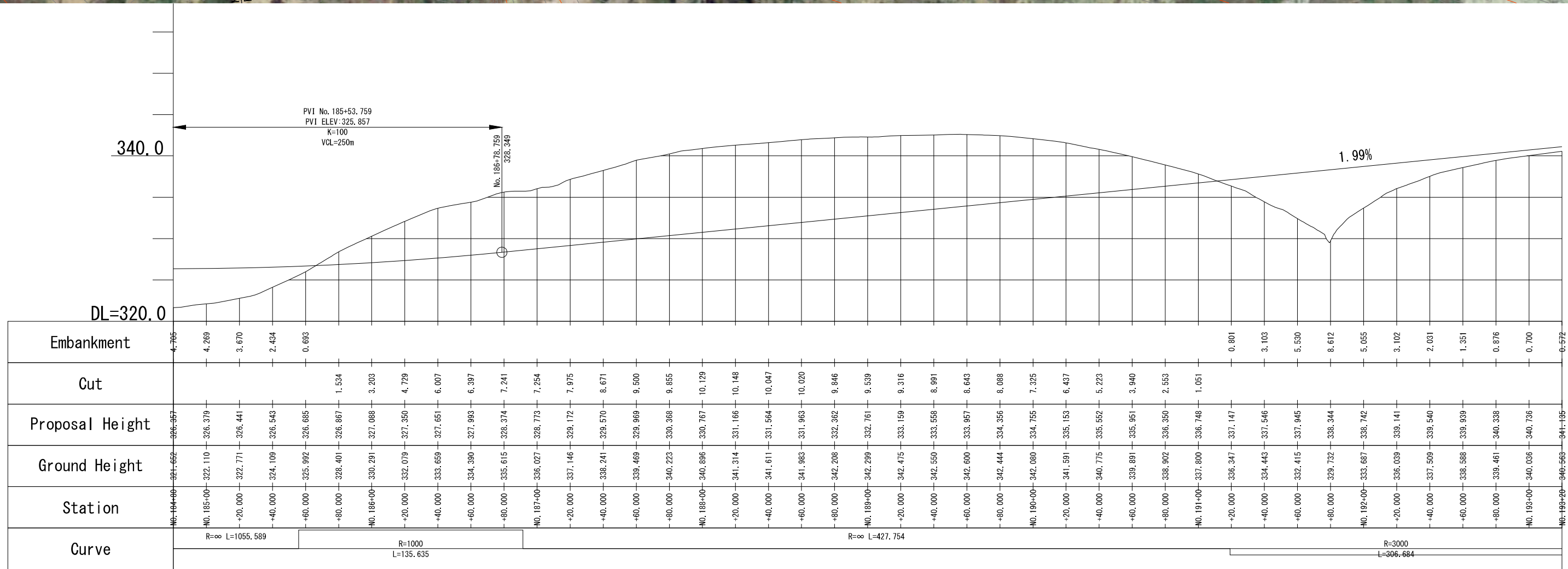
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-22	
		DATE							



M: 185+55.834 R=∞ L=1055.589



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-23	
		DATE							



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	DRAWING TITLE: Completion Stage Plan and Profile			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-24	
		DATE							