

添付資料 10.4 設計図面 (道路)

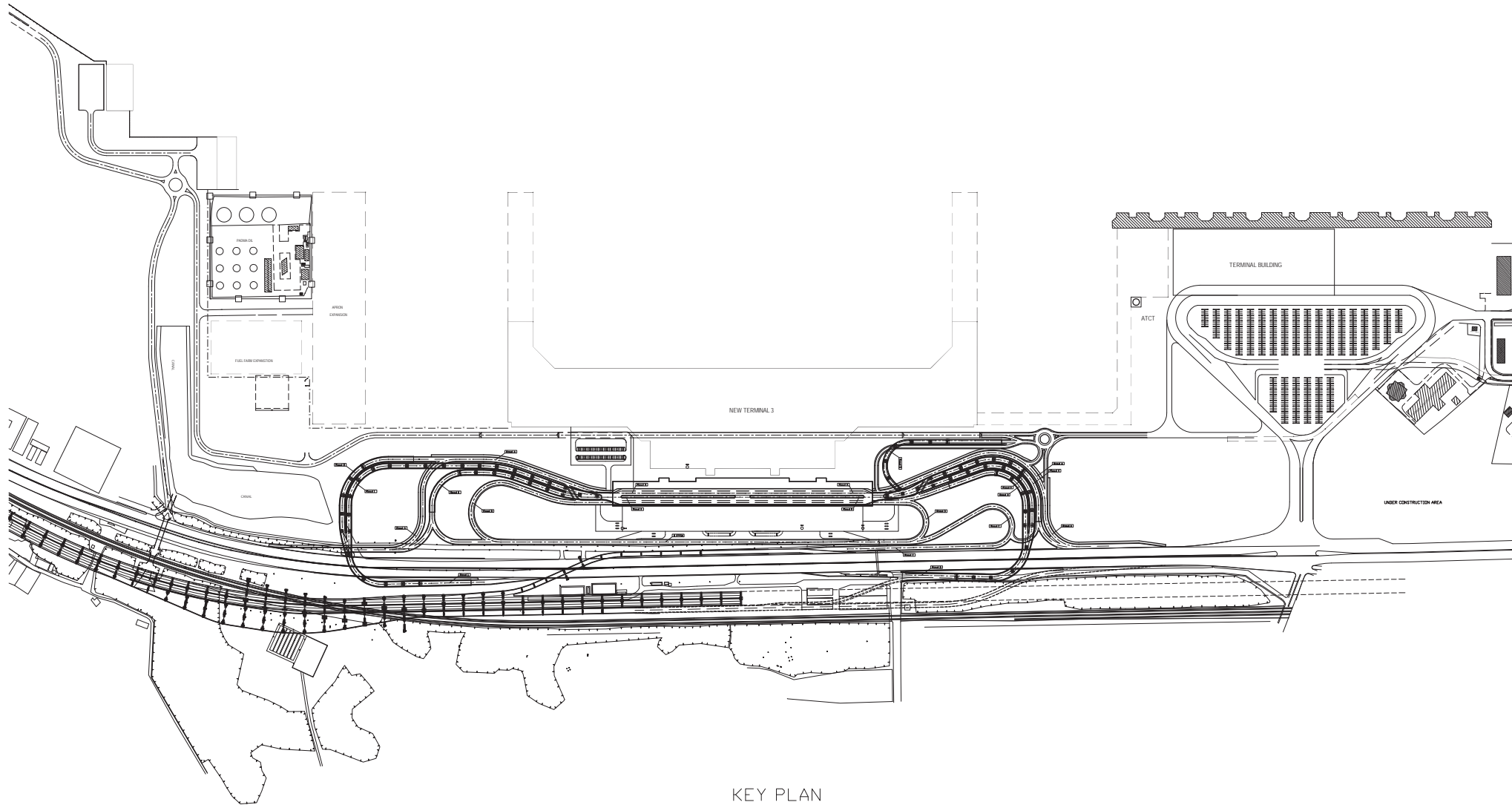
(余 白)

Land Side Civil Works (Road & Bridge)


Item	No.	Title	Remarks
Road	01	Key Plan	
	02	Plan & Profile (Road 0) 1/2	
	03	Plan & Profile (Road 0) 2/2	
	04	Plan & Profile (Road 1)	
	05	Plan & Profile (Road 2)	
	06	Plan & Profile (Road 3)	
	07	Plan & Profile (Road 4)	
	08	Plan & Profile (Road 5)	
	09	Plan & Profile (Road A) 1/2	
	10	Plan & Profile (Road A) 2/2	
	11	Plan & Profile (Road B) 1/2	
	12	Plan & Profile (Road B) 2/2	
	13	Plan & Profile (Road C)	
	14	Plan & Profile (VIP 1)	
	15	Plan & Profile (VIP 2) 1/3	
	16	Plan & Profile (VIP 2) 2/3	
	17	Plan & Profile (VIP 2) 3/3	
	18	Plan & Profile (VIP 3)	
	19	Plan & Profile (VIP 4)	
	20	Typical Cross Section 1/2	
	21	Typical Cross Section 2/2	
Elevated Way	22	Elevated Way General View (Road 0) 1/2	
	23	Elevated Way General View (Road 0) 2/2	
	24	Elevated Way General View (Road 1)	
	25	Elevated Way General View (Road 2)	
	26	Elevated Way General View (Road 3)	
	27	Elevated Way General View (Road 4)	
	28	Elevated Way General View (Road 5)	
	29	Elevated Way Substructure	
	30	Elevated Way Approach Structure	

A10.4-1

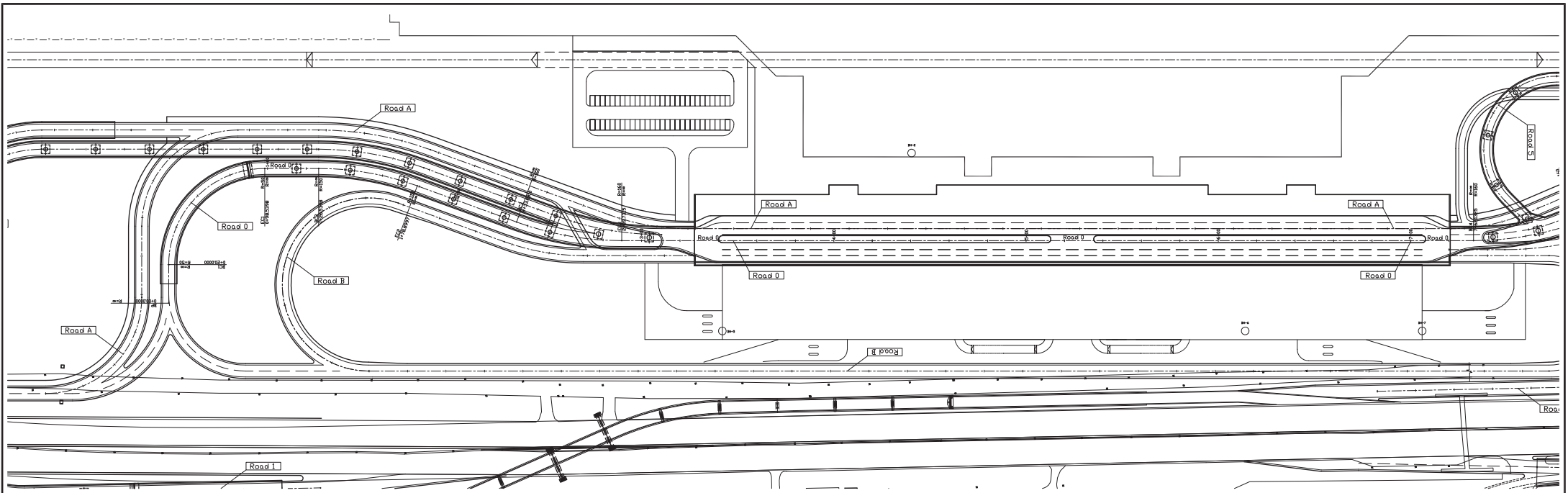
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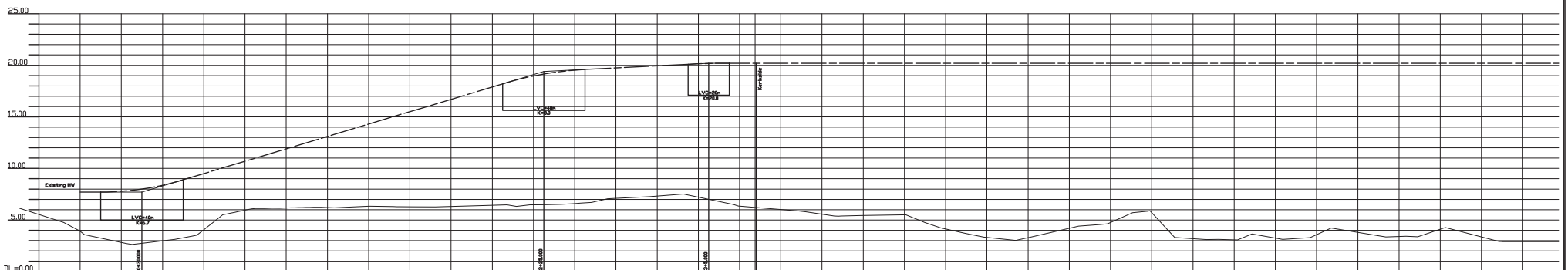
KEY PLAN

<p>PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT</p>	<p>CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH</p>	<p>CONSULTANT :</p>	<p>DRAWING TITLE : KEY PLAN BASIC DESIGN SCALE : 1/6000 @ A3 DRAWING NO. :</p>	<p>DRAWN BY CHECKED BY APPROVED BY</p>	<p>CHECKED BY: REVIEWED BY: APPROVED BY:</p>	<p>THE ENGINEER PROJECT DIRECTOR CHIEF ENGINEER</p>
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A10.4-3




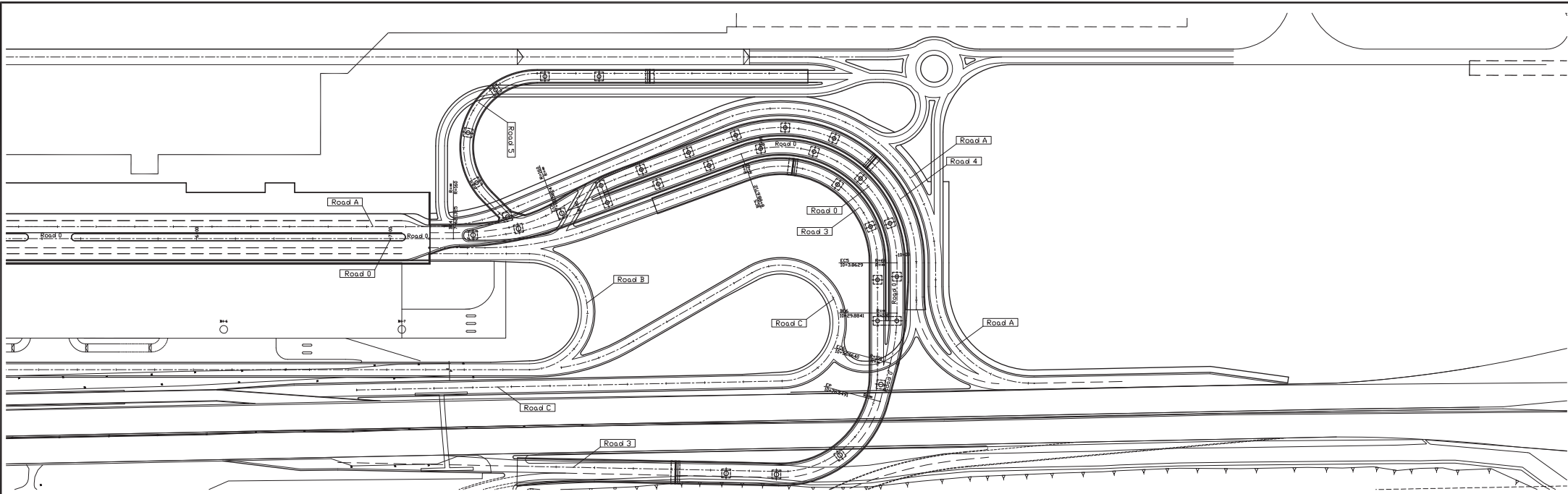
PLAN



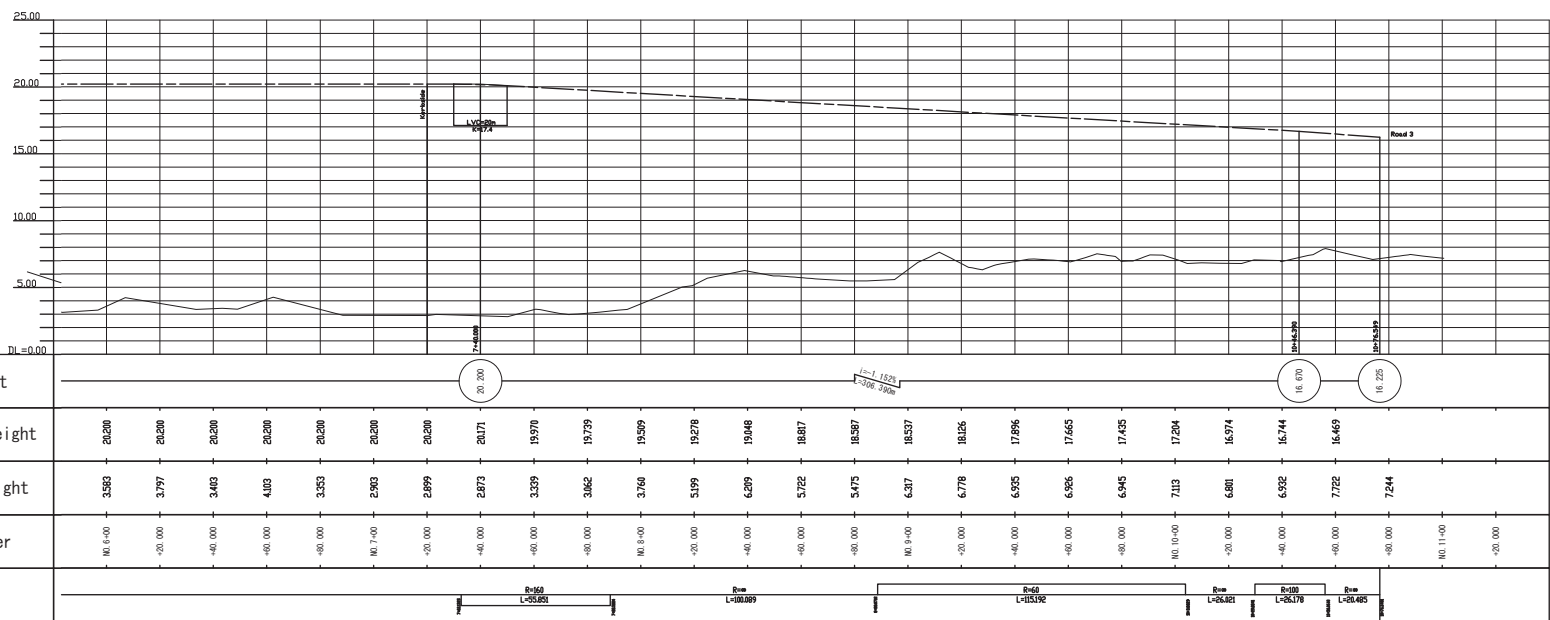
Gradient	Proposal Height	Ground Height	Kilometer	Curve
7.70%	7.70	3.90	M 0+00	R=30 L=20.00
	7.75	2.89	+0.00	R=30 L=76.54
	8.375	2.975	+0.00	R=30 L=20.00
	9.50	4.851	+0.00	R=30 L=52.54
	10.70	5.92	+0.00	R=30 L=20.00
	11.90	6.19	M 1+00	R=30 L=20.00
	13.10	6.21	+0.00	R=30 L=20.00
	14.30	6.23	+0.00	R=30 L=20.00
	15.50	6.27	+0.00	R=30 L=20.00
	16.70	6.316	+0.00	R=30 L=20.00
	17.90	6.421	M 2+00	R=30 L=20.00
	18.99	6.475	+0.00	R=30 L=20.00
	19.54	6.682	+0.00	R=30 L=20.00
	19.75	7.899	+0.00	R=30 L=20.00
	19.90	7.24	+0.00	R=30 L=20.00
	20.144	7.24	M 3+00	R=30 L=20.00
	20.20	6.348	+0.00	R=30 L=20.00
	20.20	6.621	+0.00	R=30 L=20.00
	20.20	5.566	+0.00	R=30 L=20.00
	20.20	5.07	+0.00	R=30 L=20.00
	20.20	5.30	M 4+00	R=30 L=20.00
	20.20	4.14	+0.00	R=30 L=20.00
	20.20	3.316	+0.00	R=30 L=20.00
	20.20	3.279	+0.00	R=30 L=20.00
	20.20	4.199	+0.00	R=30 L=20.00
	20.20	4.759	M 5+00	R=30 L=20.00
	20.20	5.715	+0.00	R=30 L=20.00
	20.20	3.188	+0.00	R=30 L=20.00
	20.20	3.881	+0.00	R=30 L=20.00
	20.20	3.251	+0.00	R=30 L=20.00
	20.20	3.583	M 6+00	R=30 L=20.00
	20.20	3.797	+0.00	R=30 L=20.00
	20.20	3.403	+0.00	R=30 L=20.00
	20.20	4.103	+0.00	R=30 L=20.00
	20.20	3.353	+0.00	R=30 L=20.00
	20.20	2.903	M 7+00	R=30 L=20.00

PROFILE

PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : PLAN & PROFILE (ROAD 0) 1/2 BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :	DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER





PLAN



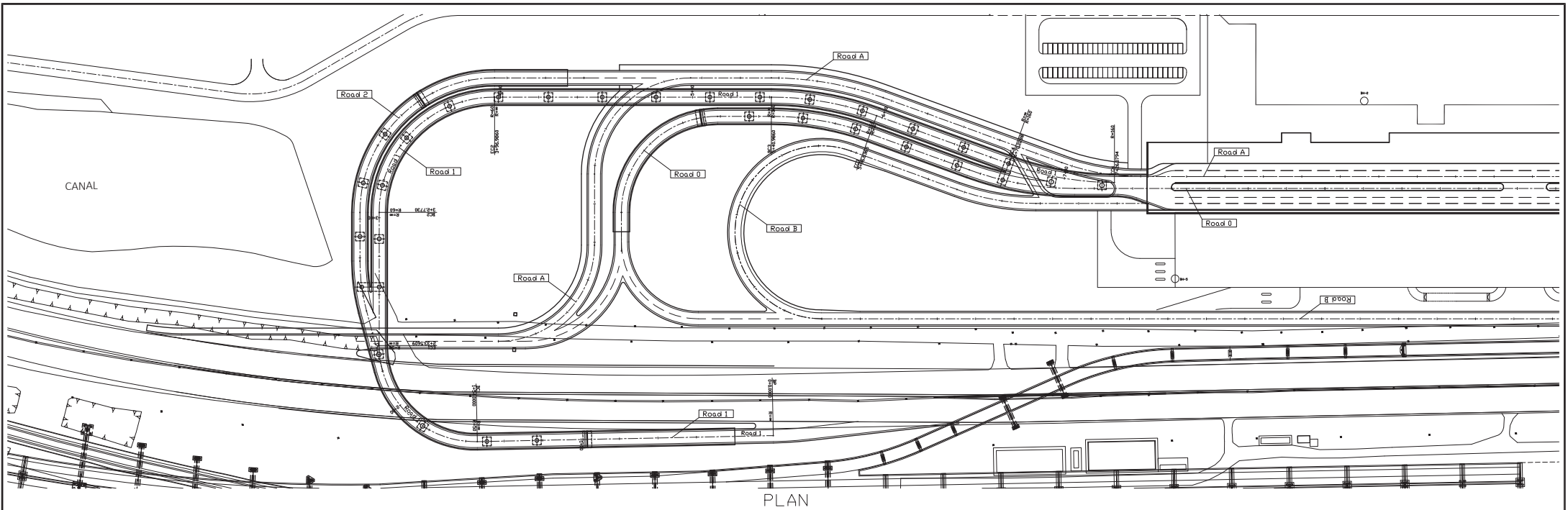
Gradient																												
Proposal Height	20.20	20.20	20.20	20.20	20.20	20.20	20.20	20.17	19.97	19.79	19.59	19.27	19.46	18.87	18.87	18.57	18.26	17.86	17.65	17.43	17.20	16.97	16.74	16.49	16.49	16.24		
Ground Height	3.583	3.797	3.403	4.103	3.353	2.903	2.899	2.873	3.329	3.062	3.760	3.199	6.239	5.722	3.475	6.537	6.778	6.925	6.526	6.945	7.113	6.501	6.592	7.722	7.244			
Kilometer	NO. 6+00	-20.00	-40.00	-60.00	-80.00	NO. 7+00	-20.00	-40.00	-60.00	-80.00	NO. 8+00	-20.00	-40.00	-60.00	-80.00	NO. 9+00	-20.00	-40.00	-60.00	-80.00	NO. 10+00	-20.00	-40.00	-60.00	-80.00	NO. 11+00	-20.00	
Curve																												

PROFILE

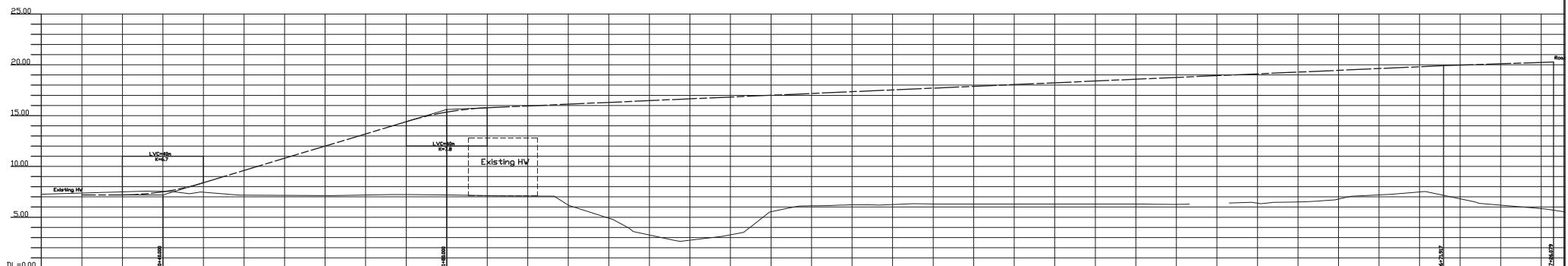
PROJECT NAME :  HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH	CONSULTANT : 	DRAWING TITLE : PLAN & PROFILE (ROAD 0) 2/2 BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :	DRAWN BY 	CHECKED BY 	APPROVED BY 	CHECKED BY: 	REVIEWED BY: 	APPROVED BY:
				THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER			

A10.4-4

A10.4.5



PLAN

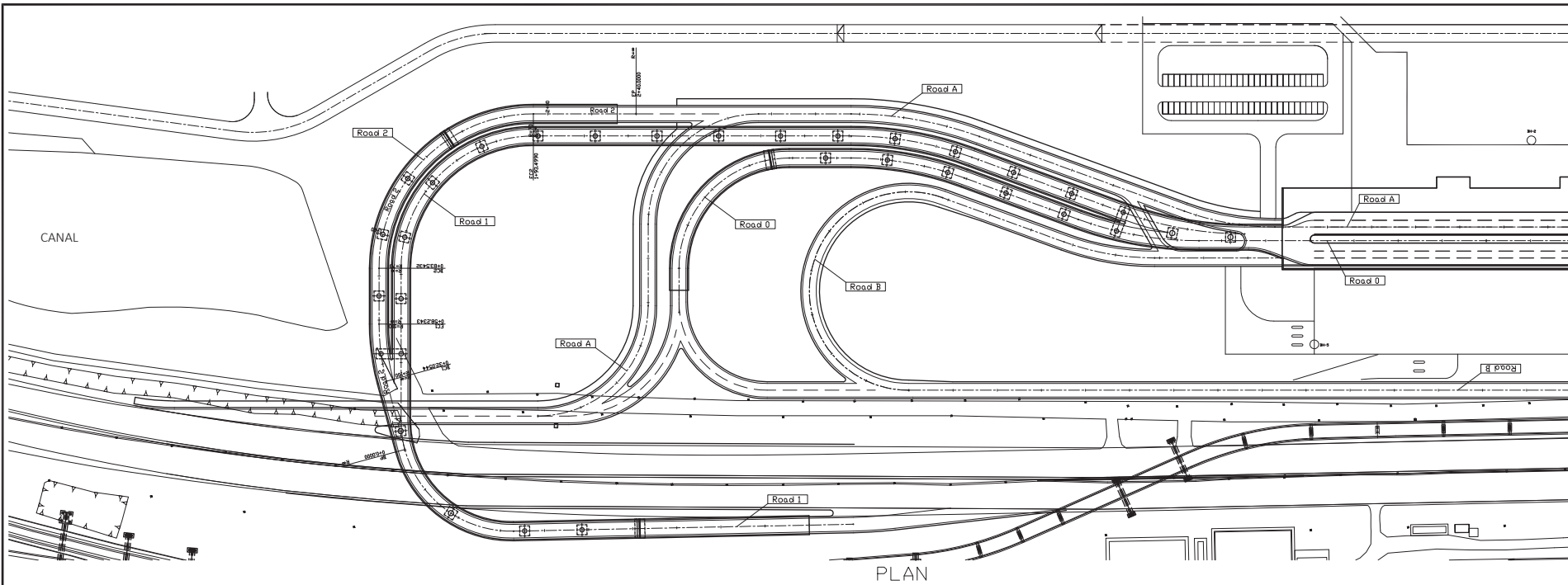


Gradient																																				
Proposal Height	7.20	7.20	7.30	8.40	9.60	10.80	12.00	13.20	14.40	15.34	15.75	15.91	16.26	16.32	16.47	16.62	16.82	17.03	17.19	17.54	17.59	17.76	17.86	18.56	18.52	18.72	18.93	19.08	19.23	19.45	19.64	19.80	19.96	20.00	20.22	
Ground Height	7.35	7.44	7.53	7.96	7.93	7.66	7.17	7.14	7.21	7.21	7.13	7.10	7.09	5.59	3.91	2.89	2.97	4.21	5.92	6.19	6.21	6.33	6.33	6.33	6.33	6.27	6.36	6.42	6.47	6.62	7.99	7.24	7.24	6.34	6.21	
Kilometer	0+00	-0+00	-0+00	-0+00	-0+00	0+00	-0+00	-0+00	-0+00	-0+00	0+00	-0+00	-0+00	-0+00	-0+00	0+00	-0+00	-0+00	-0+00	-0+00	0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00	-0+00
Curve																																				

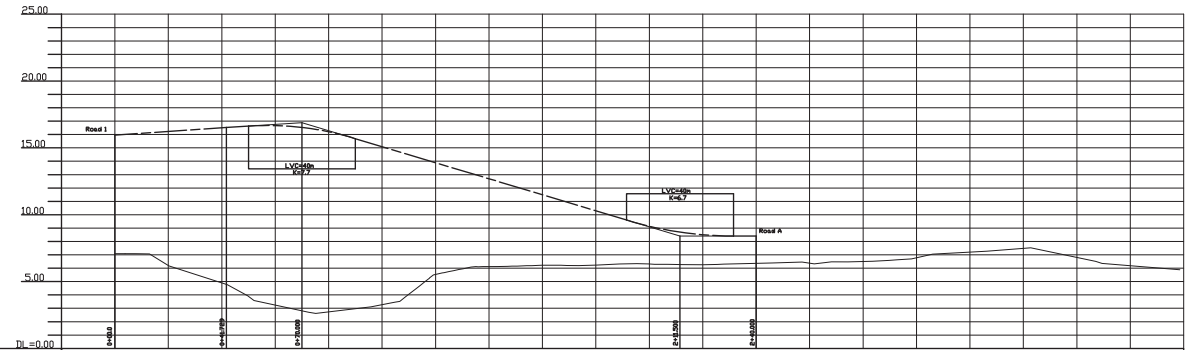
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PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :	DRAWN BY :	CHECKED BY :	APPROVED BY :
 HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH		PLAN & PROFILE (ROAD 1)			
			BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :			
				THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

A10.4-6



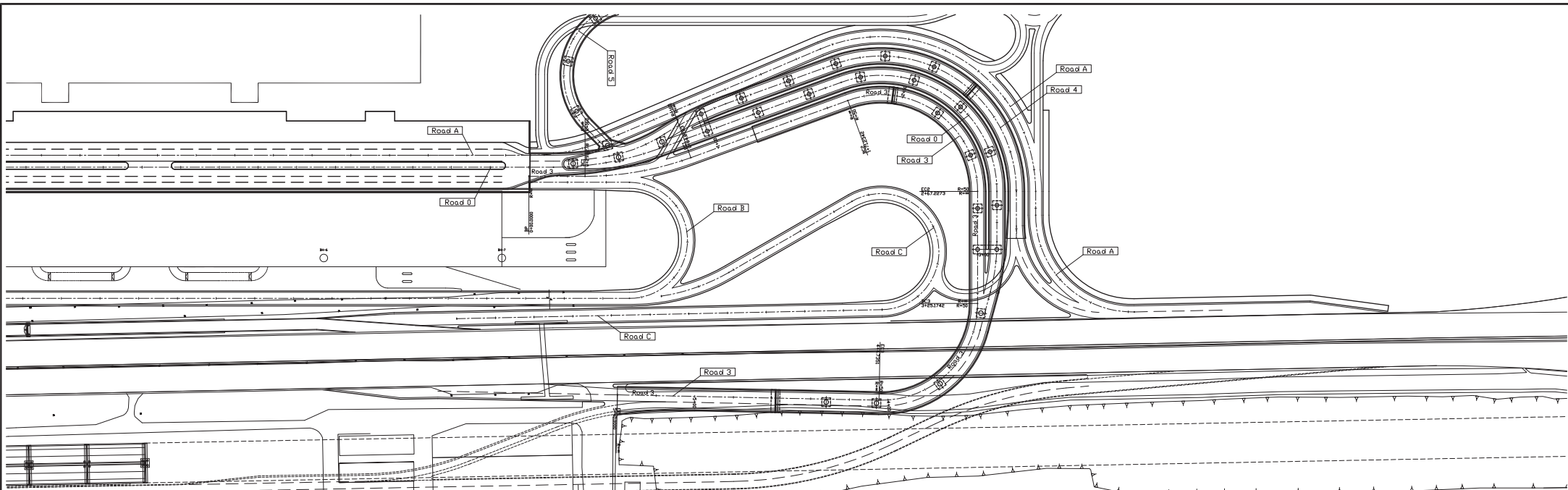
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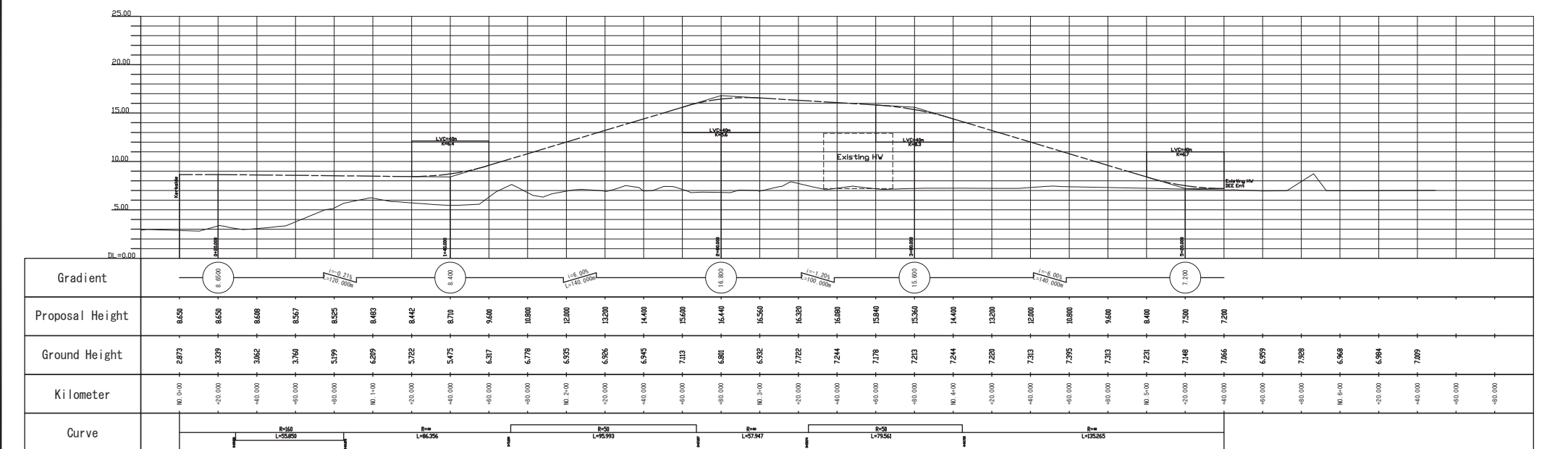
PROFILE

Gradient															
Proposal Height	15.955	16.293	16.510	16.674	16.819	15.091	13.890	12.850	11.491	10.890	9.144	8.499	8.400		
Ground Height	7.093	6.193	4.896	3.245	2.725	3.271	5.537	6.151	6.217	6.245	6.302	6.361	6.367	6.379	6.495
Kilometer	0+0.00	+20.000	+40.000	+60.000	+80.000	+100.000	+20.000	+40.000	+60.000	+80.000	+100.000	+20.000	+40.000	+60.000	+80.000
Curve															


PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH	CONSULTANT : 	DRAWING TITLE : PLAN & PROFILE (ROAD 2) BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :	DRAWN BY	CHECKED BY	APPROVED BY	CHECKED BY :	REVIEWED BY :	APPROVED BY :
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER



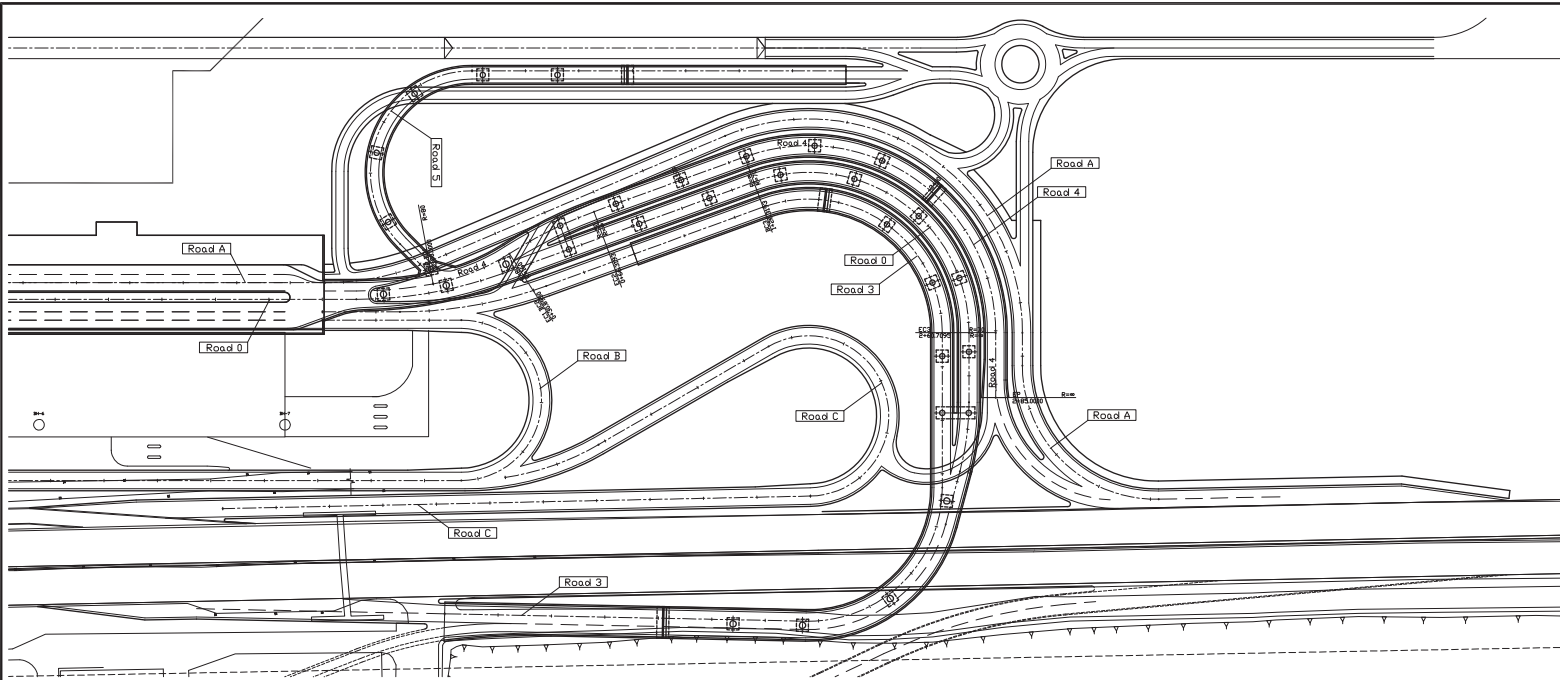
PLAN



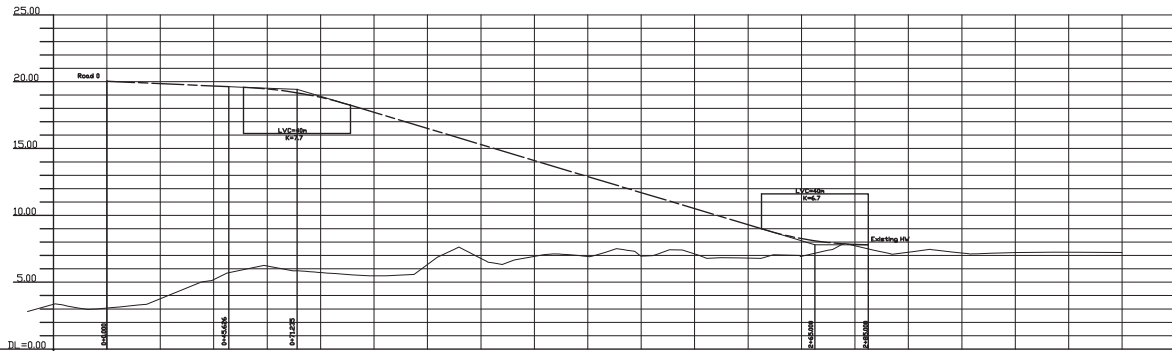
PROFILE

PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH	CONSULTANT : 	DRAWING TITLE : PLAN & PROFILE (ROAD 3)	DRAWN BY : 	CHECKED BY : 	CHECKED BY : 	REVIEWED BY : 	APPROVED BY :
			BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :	APPROVED BY : 	 	 	 	

A10.4-7




PLAN

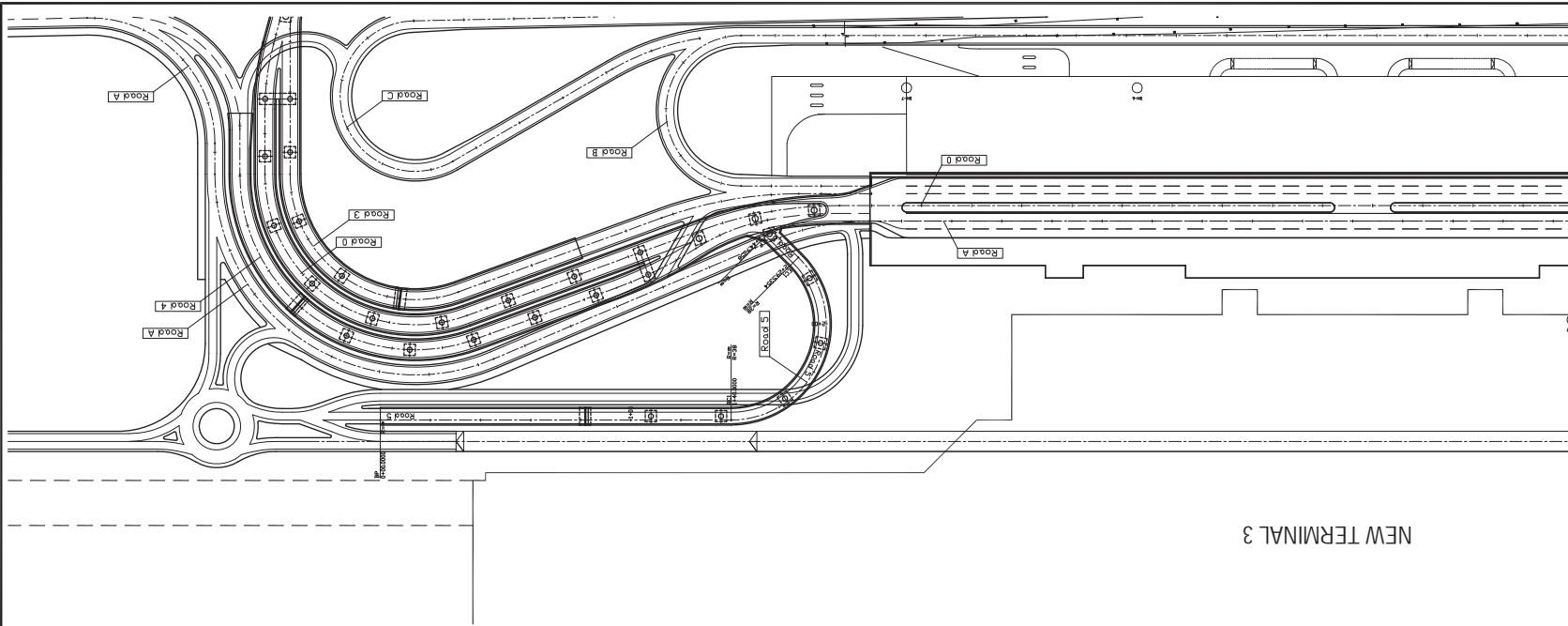


Gradient	20.00%		19.00%		18.00%		17.00%		16.00%		15.00%		14.00%		13.00%		12.00%		11.00%		10.00%		9.00%		8.00%		7.00%	
Proposal Height	20.02	19.849	19.676	19.464	18.858	17.700	16.500	15.300	14.000	12.900	11.700	10.500	9.300	8.059	7.819													
Ground Height	3.062	3.750	5.199	6.209	5.722	5.475	6.317	6.778	6.925	6.926	6.945	7.113	6.801	6.932	7.722	7.244	7.178	7.213	7.244									
Kilometer	0+00	0+300	0+600	0+900	0+900	1+100	1+300	1+600	1+900	2+100	2+300	2+600	2+900	3+100	3+400	3+700	4+000	4+300	4+600	4+900	5+200	5+500	5+800	6+100	6+400	6+700	7+000	
Curve	R=88 L=30.895		R=160 L=35.424		R=160 L=64.800		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399		R=70 L=124.399	

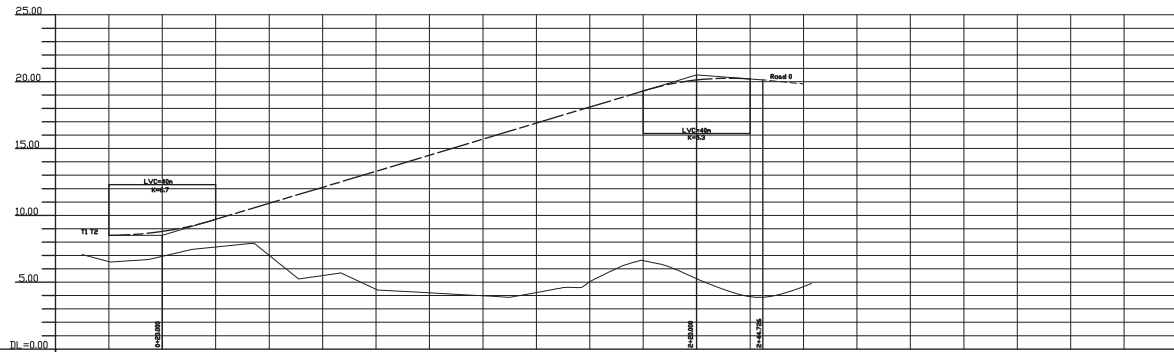
PROFILE

PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH	CONSULTANT : 	DRAWING TITLE : PLAN & PROFILE (ROAD 4) BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :	DRAWN BY	CHECKED BY	APPROVED BY	CHECKED BY:	REVIEWED BY:	APPROVED BY:
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

A10.4-8



PLAN



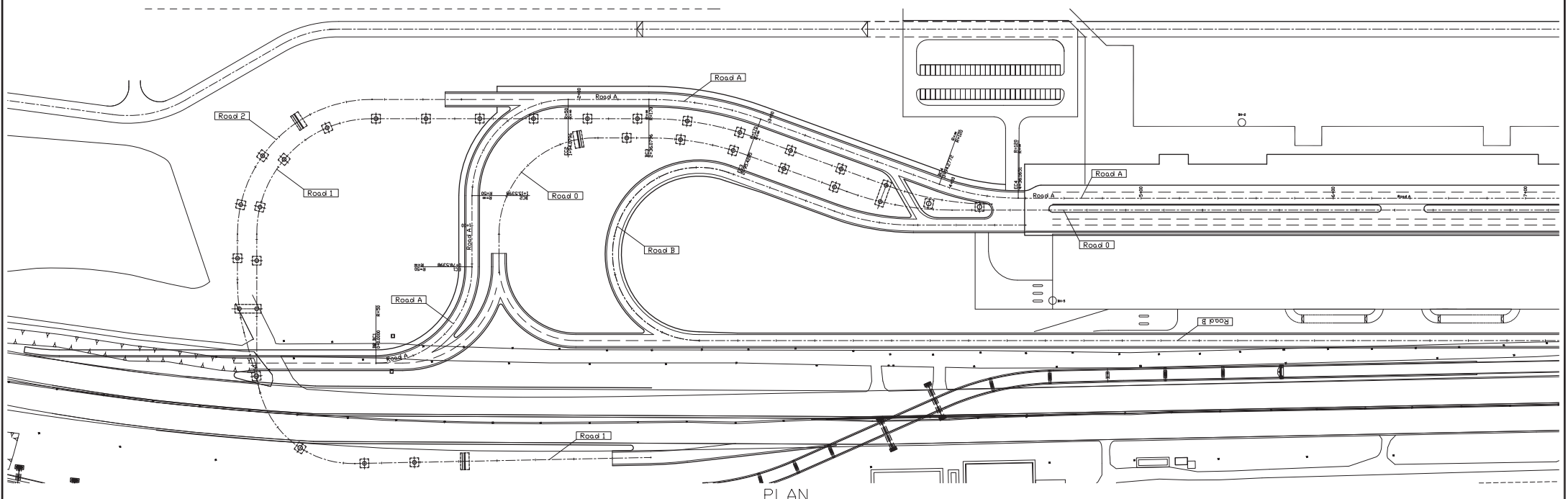
Gradient															
Proposal Height	6.500	8.800	9.700	10.900	12.100	13.300	14.500	15.700	16.900	18.100	19.300	20.427	20.629	20.829	46.75
Ground Height	6.545	6.979	7.654	7.017	5.498	4.469	4.288	3.984	4.259	5.039	6.663	5.259	3.923	4.675	
Kilometer	10.0+00	-20.000	-40.000	-60.000	-80.000	-100.000	-120.000	-140.000	-160.000	-180.000	-200.000	-220.000	-240.000	-260.000	-280.000
Curve															

PROFILE

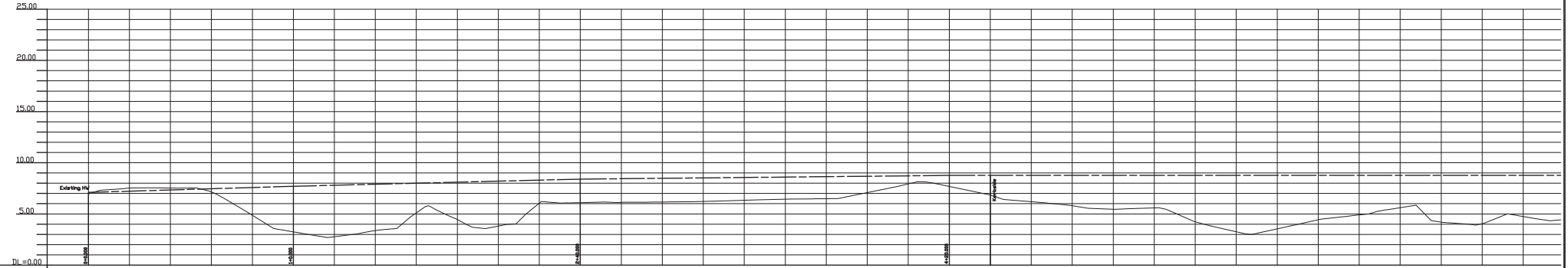
PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :	DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH		PLAN & PROFILE (ROAD 5) BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :						
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

A10.4-9

A10.4-10



PLAN

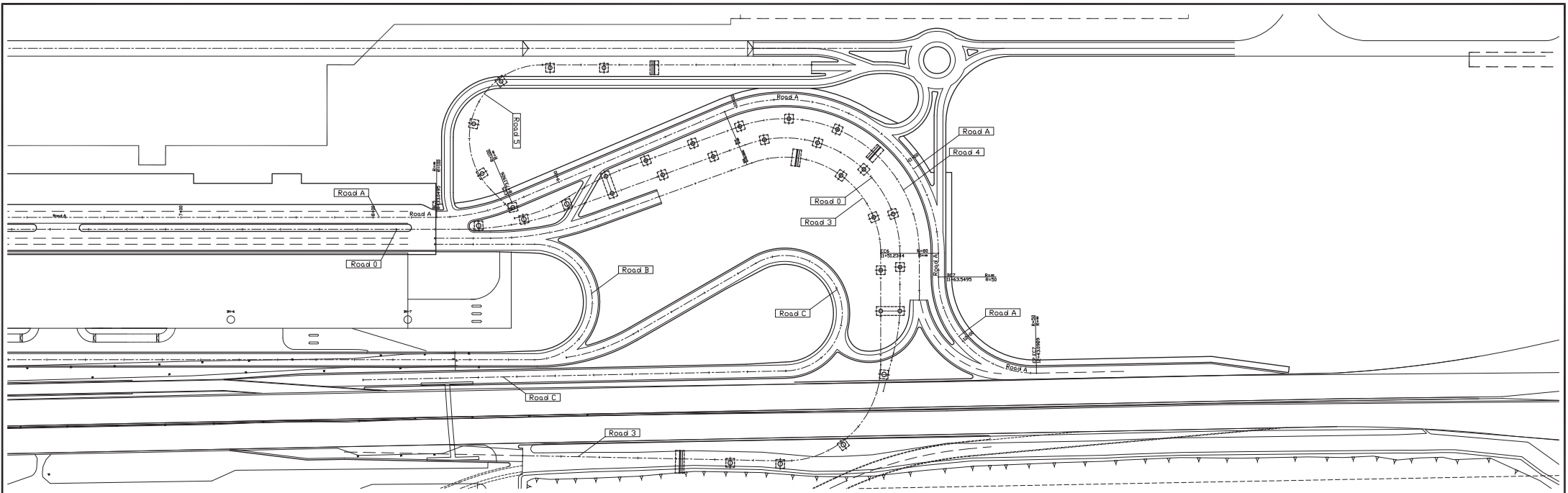


Gradient	7.100													7.700			8.400			8.700					Level L=400.000m											
Proposal Height	7.100	7.220	7.340	7.460	7.580	7.700	7.800	7.900	8.000	8.100	8.200	8.300	8.400	8.440	8.480	8.520	8.560	8.600	8.640	8.680	8.720	8.760	8.760	8.760	8.760	8.760	8.760	8.760	8.760	8.760	8.760	8.760	8.760			
Ground Height	6.560	7.520	7.525	7.144	4.866	3.248	2.771	3.391	5.098	4.446	3.811	6.050	6.111	6.133	6.162	6.207	6.341	6.451	6.488	7.084	7.933	7.682	6.837	6.200	5.794	5.464	5.381	4.232	3.257	3.545	4.432	4.910	5.605	4.197	4.047	4.752
Kilometer	NO. 0+00	+20.00	+40.00	+60.00	+80.00	NO. 1+00	+20.00	+40.00	+60.00	+80.00	NO. 2+00	+20.00	+40.00	+60.00	+80.00	NO. 3+00	+20.00	+40.00	+60.00	+80.00	NO. 4+00	+20.00	+40.00	+60.00	+80.00	NO. 5+00	+20.00	+40.00	+60.00	+80.00	NO. 6+00	+20.00	+40.00	+60.00	+80.00	NO. 7+00
Curve	R=50 L=78.540			R=150 L=332.91				R=50 L=78.540				R=170 L=95.341				R=50 L=78.540				R=120 L=41.888			R=50 L=78.540													

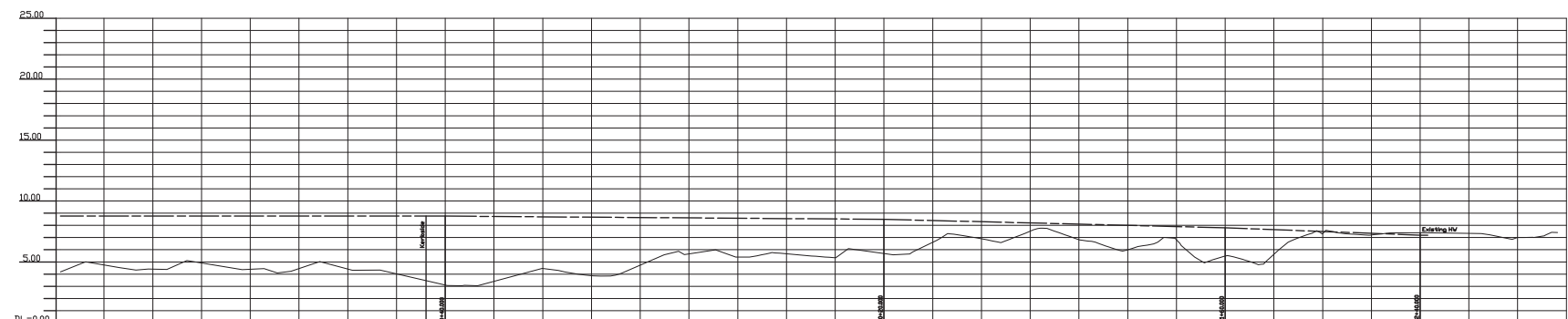
PROFILE

PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :			DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH		PLAN & PROFILE (ROAD A) 1/2								
			BASIC DESIGN								
			SCALE : H=1/:2,000 V=1/400 @ A3								
			DRAWING NO. :								
									THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

A104-11



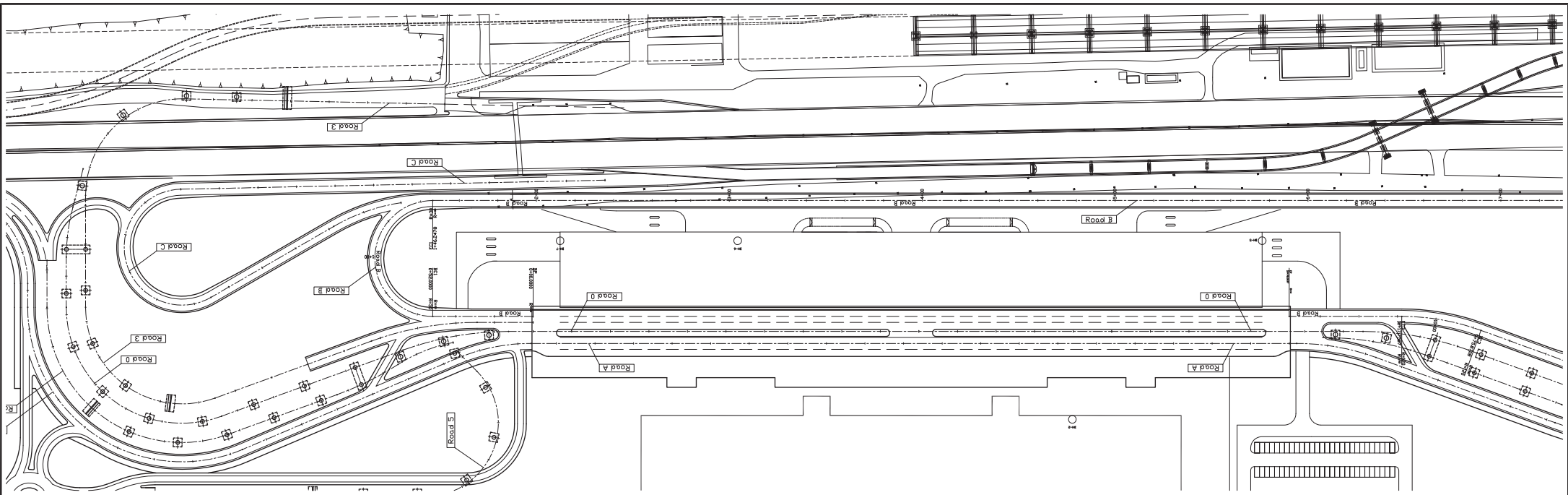
PLAN



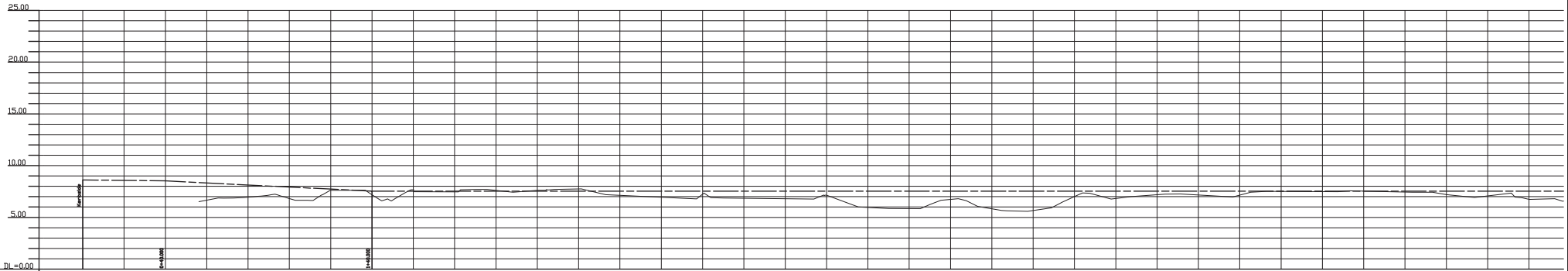
Gradient																														
Proposal Height	8.760	8.760	8.760	8.760	8.760	8.760	8.760	8.721	8.702	8.673	8.644	8.616	8.587	8.559	8.529	8.500	8.400	8.300	8.200	8.100	8.000	7.900	7.800	7.650	7.500	7.350	7.200	7.000		
Ground Height	4.732	4.412	4.522	4.401	4.448	4.419	4.420	3.099	3.408	4.469	3.875	4.741	5.665	5.392	5.571	5.351	5.691	6.615	6.697	7.519	6.627	6.000	6.823	5.477	5.638	7.313	7.222	7.296	7.348	7.007
Kilometer	NO. 7+00	-20.000	-40.000	-60.000	-80.000	NO. 8+00	-20.000	-40.000	-60.000	-80.000	NO. 9+00	-20.000	-40.000	-60.000	-80.000	NO. 10+00	-20.000	-40.000	-60.000	-80.000	NO. 11+00	-20.000	-40.000	-60.000	-80.000	NO. 12+00	-20.000	-40.000	-60.000	-80.000
Curve																														

PROFILE

PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :	DRAWN BY :	CHECKED BY :	APPROVED BY :
 HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH		PLAN & PROFILE (ROAD A) 2/2			
			BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :			
					THE ENGINEER	PROJECT DIRECTOR
						CHIEF ENGINEER



PLAN

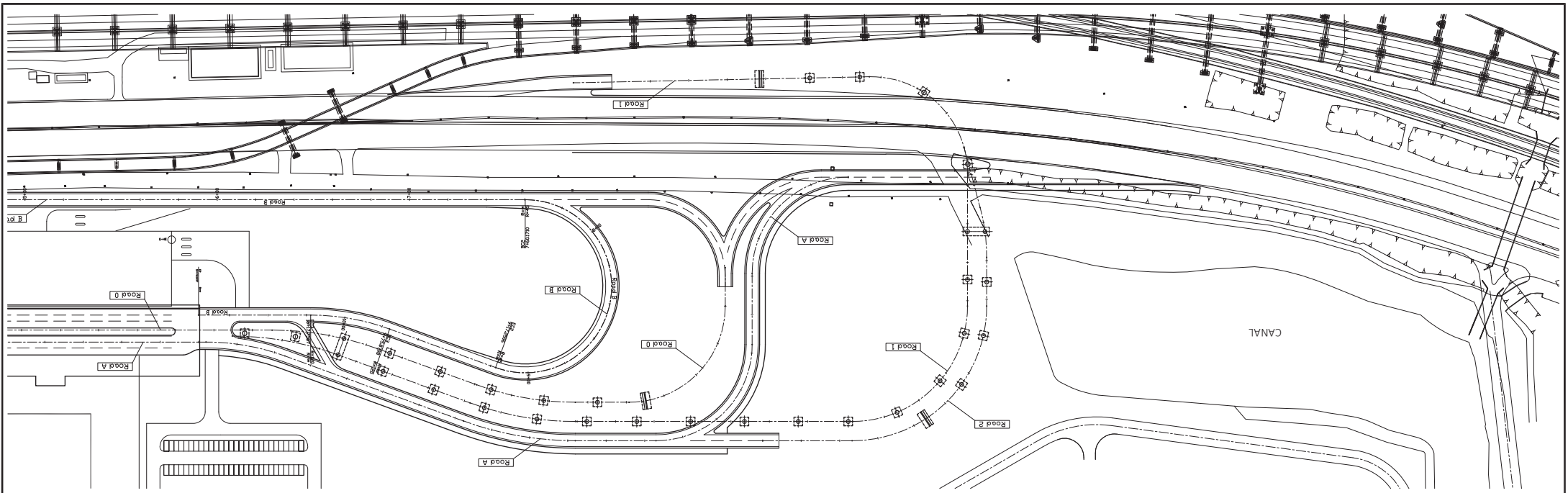


PROFILE

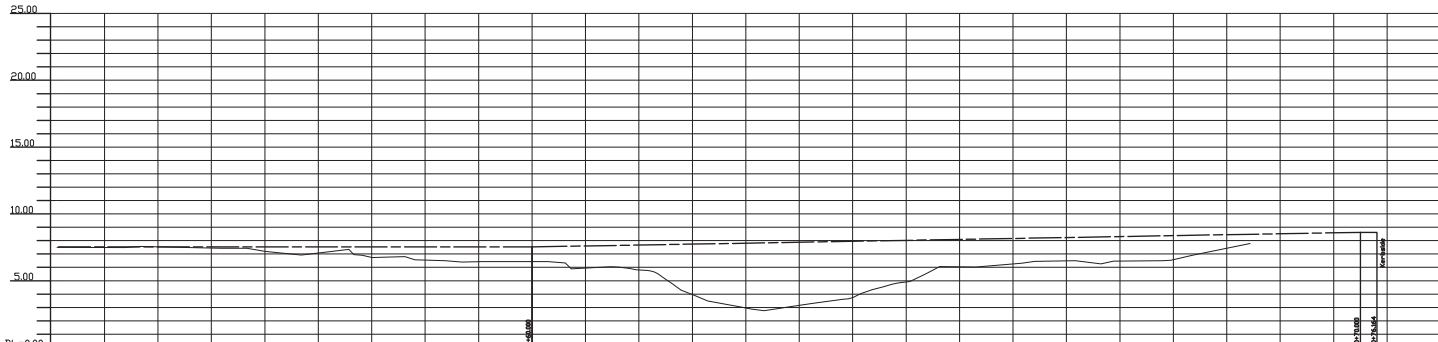
Gradient	8.620 L=30.231 V=40.000		8.530 L=100.000		7.530 L=620.000																															
Proposal Height	8.620	8.675	8.630	8.630	8.630	7.930	7.720	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530		
Ground Height				6.658	6.941	6.887	7.620	7.183	7.664	7.465	7.688	7.619	7.747	7.152	6.949	7.241	6.948	6.798	7.138	5.962	5.840	6.729	5.651	5.663	7.088	6.829	7.192	7.159	7.148	7.588	7.486	7.532	7.441	7.198	7.068	6.720
Kilometer	NO.0+00	0+20.000	+40.000	+60.000	+80.000	NO.1+00	+20.000	+40.000	+60.000	+80.000	NO.2+00	+20.000	+40.000	+60.000	+80.000	NO.3+00	+20.000	+40.000	+60.000	+80.000	NO.4+00	+20.000	+40.000	+60.000	+80.000	NO.5+00	+20.000	+40.000	+60.000	+80.000	NO.6+00	+20.000	+40.000	+60.000	+80.000	NO.7+00
Curve	R=		R=30		R=																															
	L=32.800		L=94.248																																	

PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : PLAN & PROFILE (ROAD B) 1/2 BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :	DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

A10.4-12



PLAN

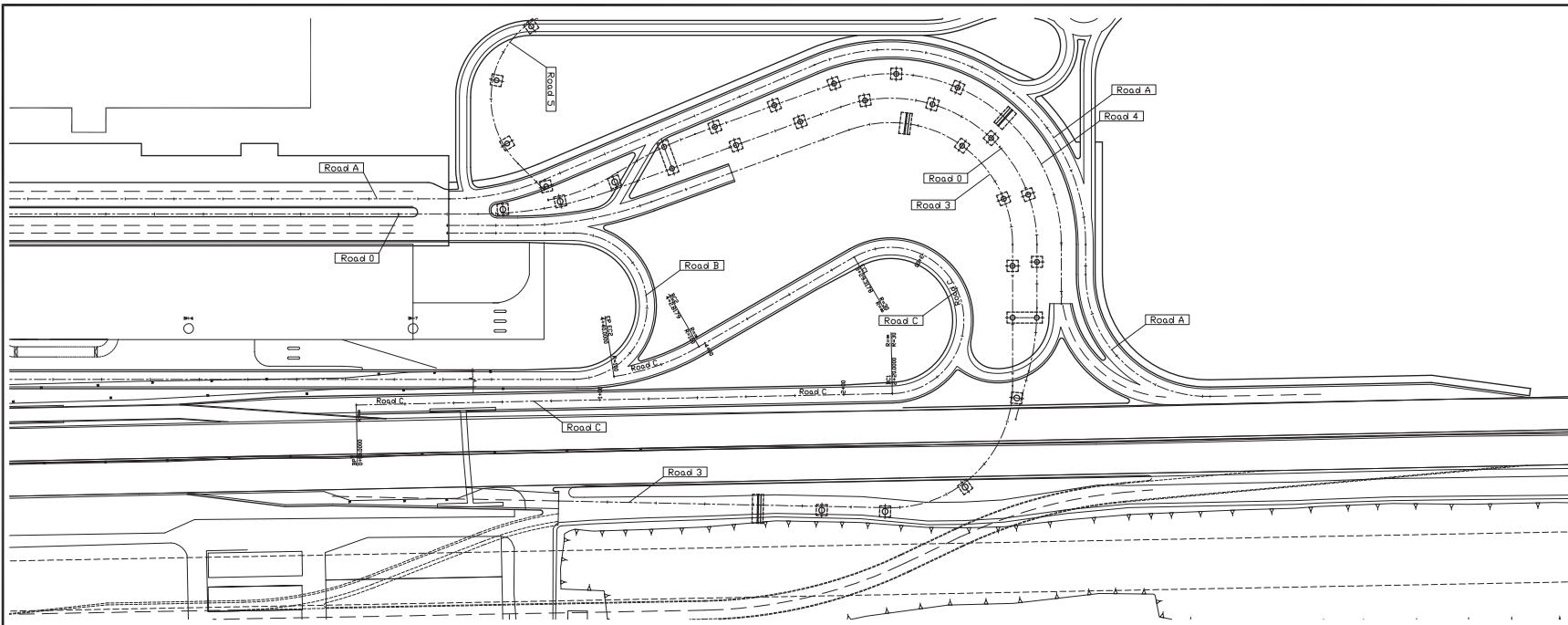


Gradient																								
Proposal Height	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.530	7.600	7.671	7.741	7.811	7.882	7.952	8.022	8.093	8.163	8.233	8.304	8.374	8.444	8.515	8.585	
Ground Height	7.486	7.532	7.441	7.398	7.268	6.790	6.541	6.423	6.435	5.954	5.954	5.869	5.869	5.869	5.869	5.869	6.257	6.462	6.475	6.581	7.427	8.315	8.585	
Kilometer	00.6+00	-20.000	-40.000	-60.000	-80.000	00.7+00	-20.000	-40.000	-60.000	-80.000	00.8+00	-20.000	-40.000	-60.000	-80.000	-20.000	-40.000	-60.000	-80.000	00.10+00	-20.000	-40.000	-60.000	-80.000
Curve																								

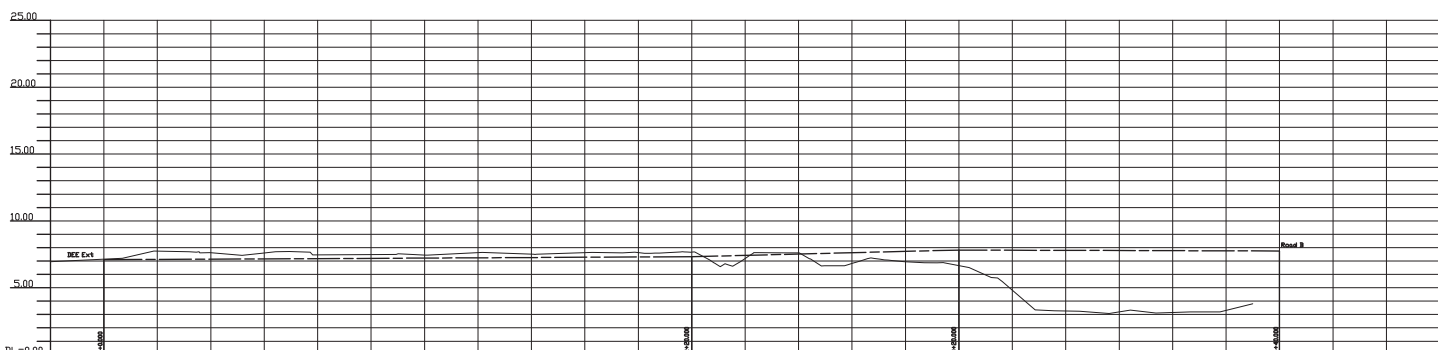
PROFILE

PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : PLAN & PROFILE (ROAD B) 2/2 BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :	DRAWN BY : CHECKED BY : APPROVED BY :	CHECKED BY : REVIEWED BY : APPROVED BY :
			THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

A104-13



PLAN



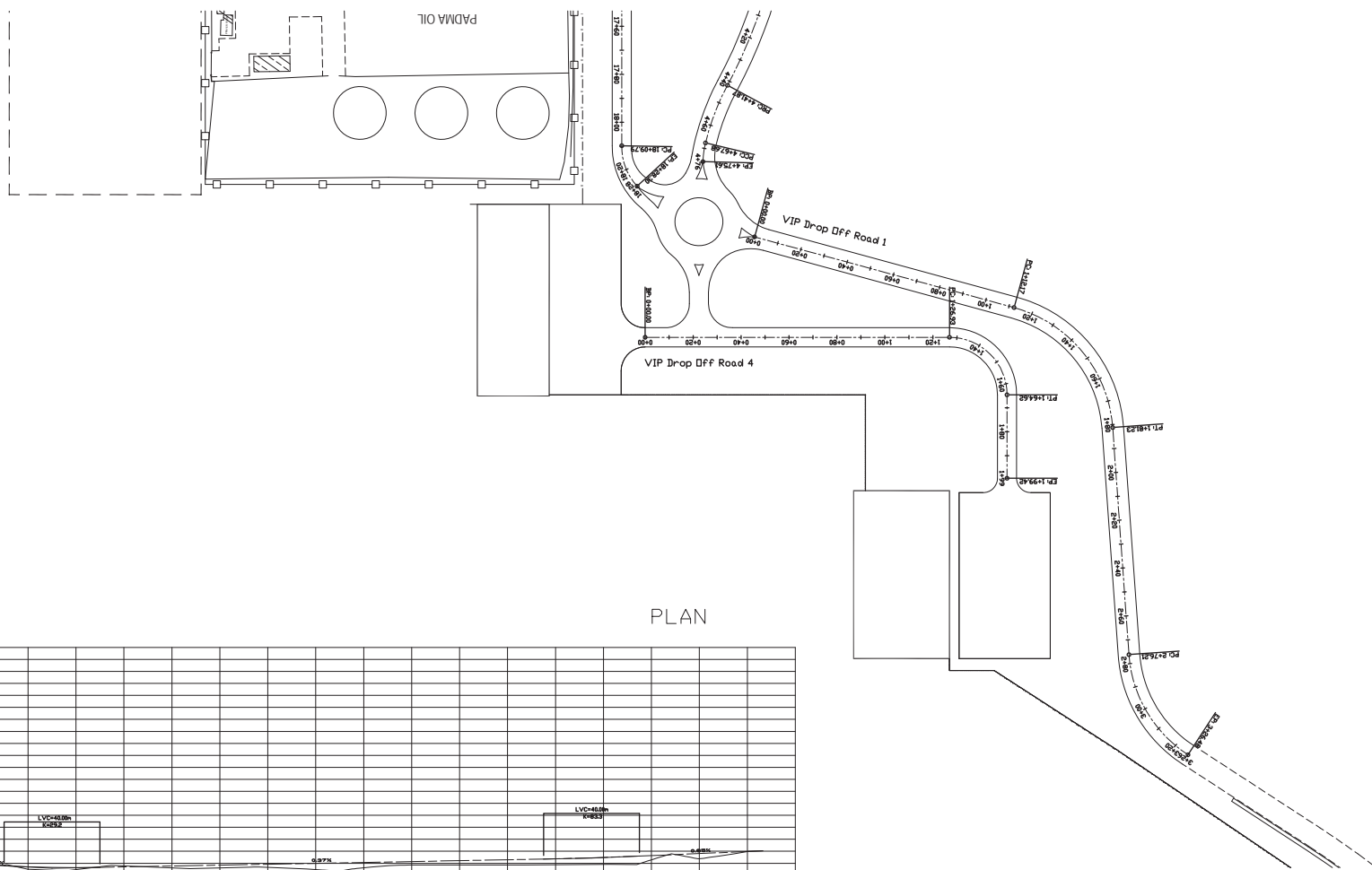
Gradient	7.100		$\frac{-0.105}{L=720.000}$				7.320		$\frac{1.00.50\%}{L=100.000}$				7.820		$\frac{-0.08\%}{L=120.000}$		7.750				
Proposal Height	7.100	7.120	7.140	7.160	7.180	7.200	7.220	7.240	7.260	7.280	7.300	7.320	7.340	7.360	7.380	7.400	7.420	7.440			
Ground Height	7.132	7.747	7.619	7.688	7.665	7.485	7.441	7.620	7.511	7.621	7.627	7.654	7.183	7.620	6.817	6.941	6.658	4.898			
Kilometer	0.0-0.0	-20.000	-40.000	-60.000	-80.000	0.1-0.0	-20.000	-40.000	-60.000	-80.000	0.2-0.0	-20.000	-40.000	-60.000	-80.000	0.3-0.0	-20.000	-40.000	-60.000	-80.000	-100.000
Curve	$R=225.000$ $R=30$ $R=100$ $L=225.000$ $L=49.500$ $L=73.500$ $L=97.182$																				

PROFILE

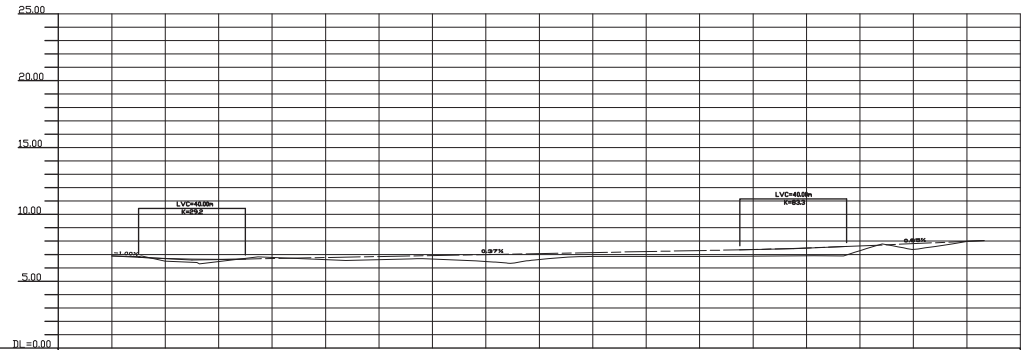
PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :	DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH		PLAN & PROFILE (ROAD C) BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :						
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

A104-14

A10.4-15



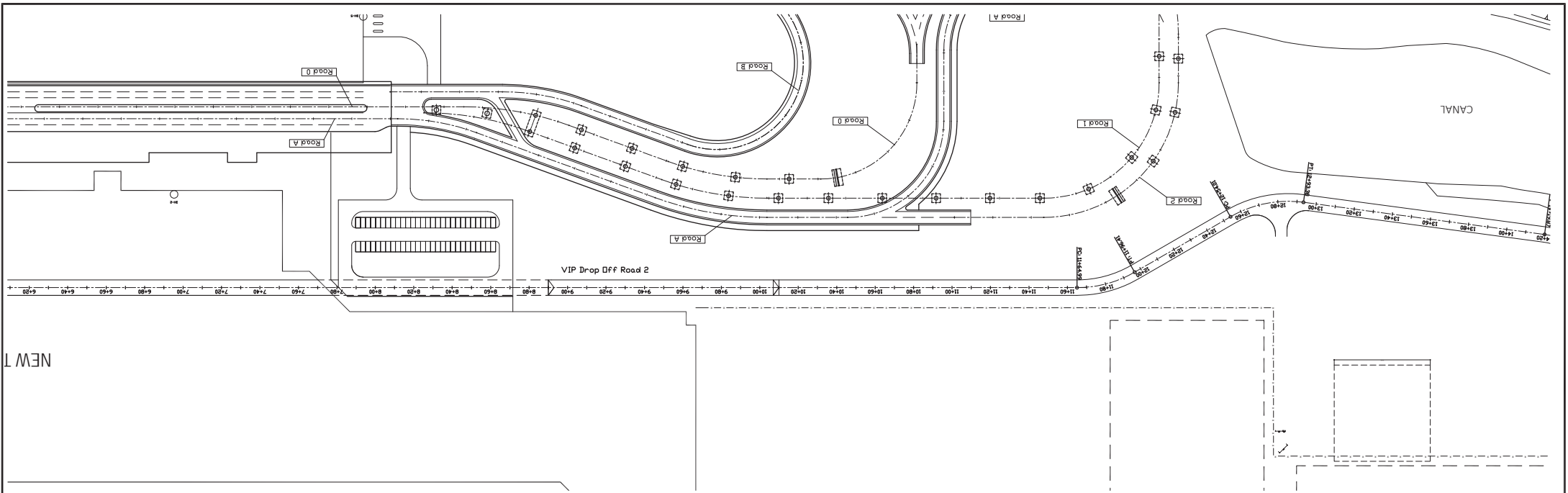
PLAN



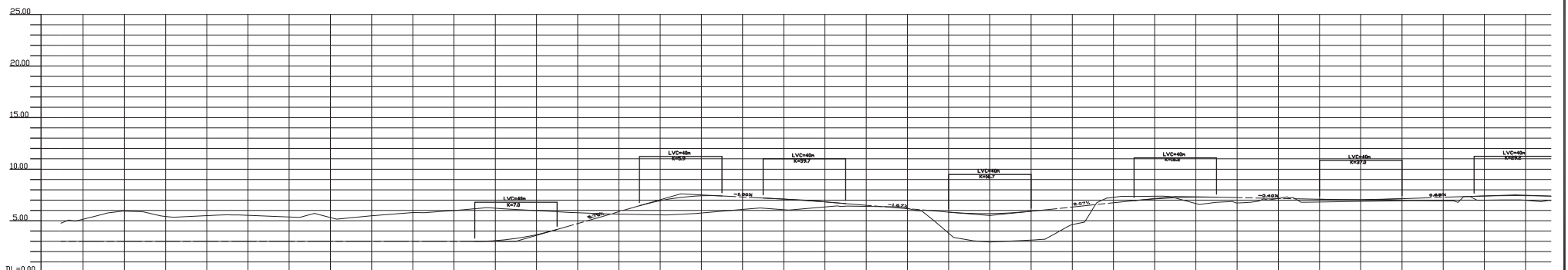
Gradient	-1.00%		+0.80%		+0.37%		+1.40%		+0.85%								
Proposal Height	6.882	6.699	6.636	6.694	6.769	6.843	6.918	6.993	7.068	7.143	7.218	7.292	7.369	7.480	7.637	7.808	7.978
Ground Height	6.882	6.497	6.469	6.781	6.611	6.612	6.671	6.481	6.658	6.855	6.856	6.856	6.878	6.910	7.289	7.381	7.972
Kilometer	NO.0+00	-20.000	-40.000	-60.000	-80.000	NO.1+00	-20.000	-40.000	-60.000	-80.000	NO.2+00	-20.000	-40.000	-60.000	-80.000	NO.3+00	-20.000
Curve	L=112.17																
	R=56.00 L=69.07																
	L=94.98																
	R=54.50 L=50.27																

PROFILE

PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :	DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH		PLAN & PROFILE (VIP 1) BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :						
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER



PLAN



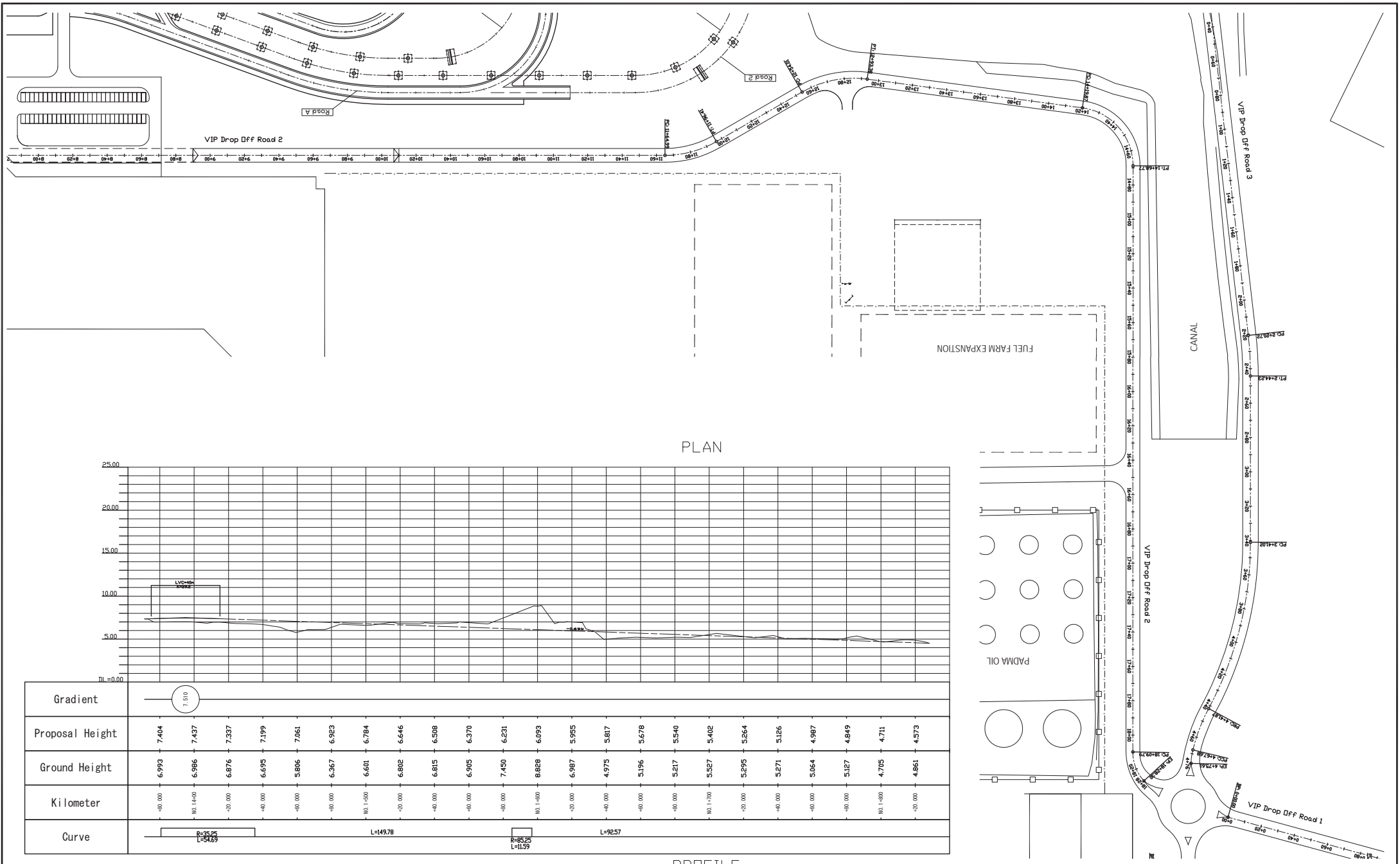
Gradient	Proposal Height	Ground Height	Kilometer	Curve
	3.000	5.142	NO 7+00	
	3.000	5.956	-0+00	
	3.000	5.408	-0+00	
	3.000	5.500	-0+00	
	3.000	5.517	-0+00	
	3.000	5.362	NO 8+00	
	3.000	5.305	-0+00	
	3.000	5.475	-0+00	
	3.000	5.788	-0+00	
	3.000	5.996	-0+00	
	3.072	6.209	NO 9+00	
	3.647	5.982	-0+00	
	4.725	5.771	-0+00	
	5.875	5.639	-0+00	
	6.941	5.575	-0+00	
	7.416	5.743	NO 10+00	
	7.300	6.101	-0+00	
	7.092	6.068	-0+00	
	6.825	6.338	-0+00	
	6.500	6.386	-0+00	
	6.167	6.207	NO 11+00	
	5.833	3.796	-0+00	
	5.687	2.933	-0+00	
	5.913	3.119	-0+00	
	6.327	4.618	-0+00	
	6.740	7.271	NO 12+00	
	7.122	7.372	-0+00	
	7.289	6.671	-0+00	
	7.540	6.725	-0+00	
	7.160	7.162	-0+00	
	7.080	6.817	NO 13+00	
	7.054	6.874	-0+00	
	7.136	6.930	-0+00	
	7.272	6.935	-0+00	
	7.404	6.993	-0+00	
	7.437	6.986	NO 14+00	

PROFILE



PROJECT NAME : HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : PLAN & PROFILE (VIP 2) 2/3			DRAWN BY : CHECKED BY : APPROVED BY :	CHECKED BY : REVIEWED BY : APPROVED BY :	
			BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :					
						THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

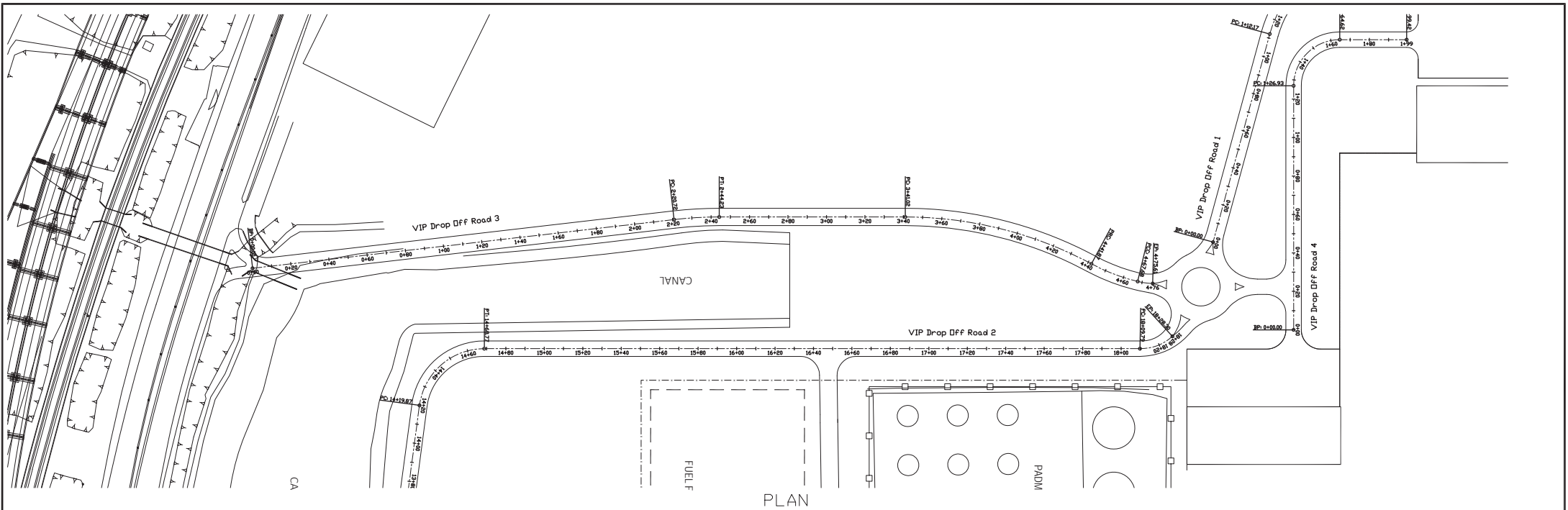
A10.4-17

A10.4-18

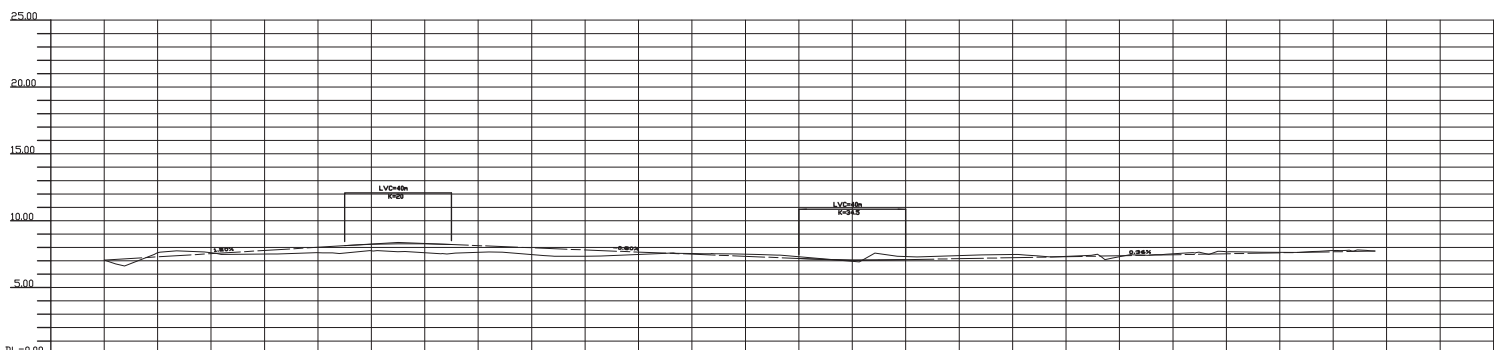


PROFILE

PROJECT NAME :  HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : PLAN & PROFILE (VIP 2) 3/3			DRAWN BY : CHECKED BY : APPROVED BY :	CHECKED BY : REVIEWED BY : APPROVED BY :
			BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :				



PLAN

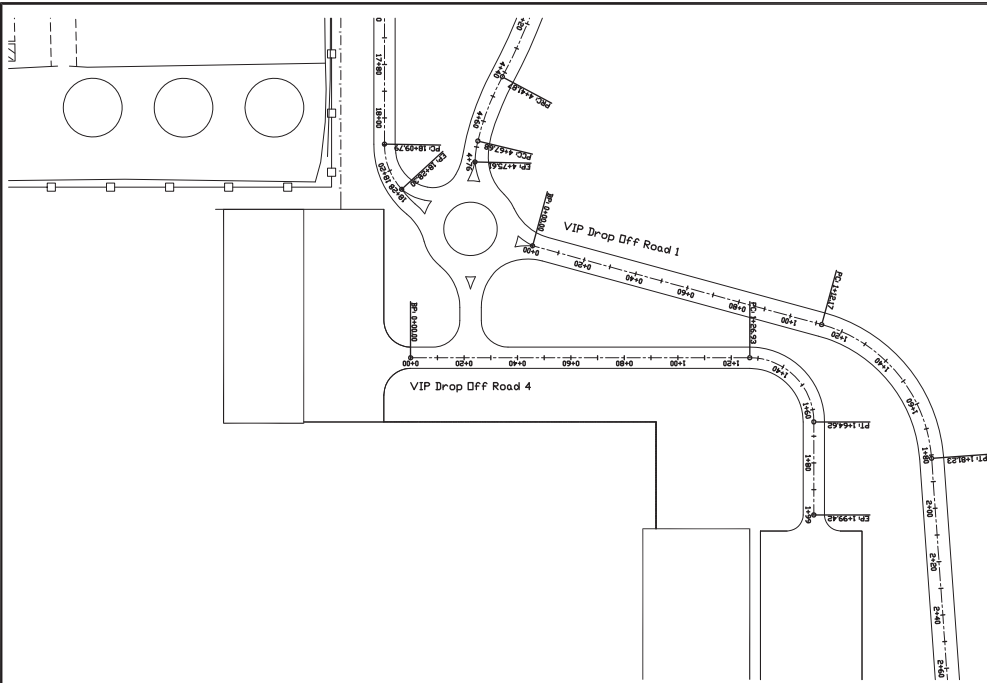


Gradient	1 in 200 L=170.00m		6.3%		1 in 438 L=170.00m		7.0%		1 in 36 L=170.00m															
Proposal Height	7.653	7.693	7.533	7.773	8.013	8.228	8.268	8.133	7.973	7.883	7.653	7.493	7.333	7.173	7.071	7.086	7.159	7.232	7.305	7.378	7.451	7.524	7.596	7.669
Ground Height	7.653	7.609	7.599	7.504	7.603	7.746	7.607	7.633	7.469	7.342	7.471	7.544	7.489	7.306	6.953	7.320	7.392	7.476	7.322	7.312	7.520	7.673	7.634	7.760
Kilometer	0+00	+20.00	+40.00	+60.00	+80.00	+100.00	+120.00	+140.00	+160.00	+180.00	+200.00	+220.00	+240.00	+260.00	+280.00	+300.00	+320.00	+340.00	+360.00	+380.00	+400.00	+420.00	+440.00	+460.00
Curve	L=220.72												R=204.50 L=23.51		L=96.79		R=204.50 L=100.85		R=100.00 L=7.92 L=25.81		R=34.50			

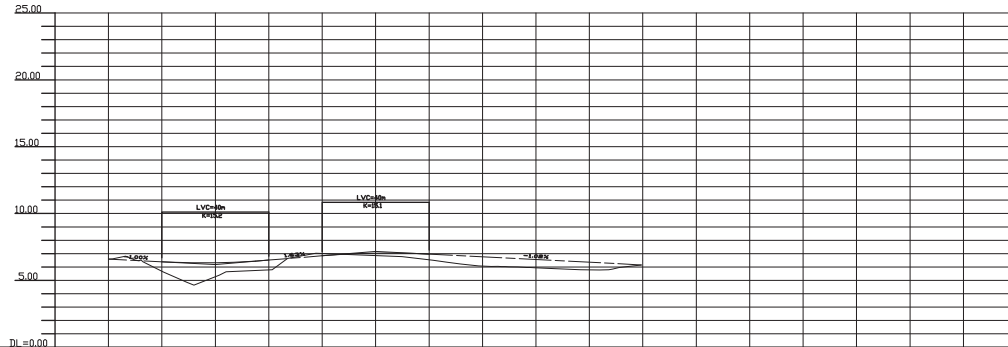
PROFILE

PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :	DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH		PLAN & PROFILE (VIP 3) BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :						
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

A10.4-19



PLAN

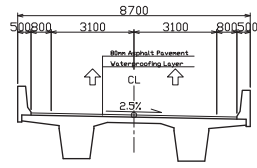


Gradient																				
Proposal Height	6.587	6.487	6.387	6.320	6.319	6.384	6.514	6.777	6.841	6.971	7.035	7.033	6.964	6.862	6.761	6.659	6.557	6.456	6.354	6.252
Ground Height	6.587	6.526	6.577	4.800	5.276	5.697	5.778	6.750	7.005	6.969	6.892	7.033	6.964	6.281	6.066	6.018	5.942	5.852	5.790	5.910
Kilometer	0+00	0+20	0+40	0+60	0+80	1+00	1+20	1+40	1+60	1+80	2+00	2+20	2+40	2+60	2+80	3+00	3+20	3+40	3+60	3+80
Curve																				

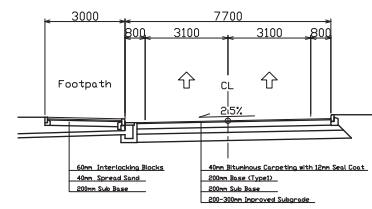
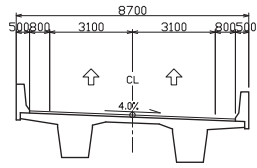
PROFILE

PROJECT NAME : HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : PLAN & PROFILE (VIP 4) BASIC DESIGN SCALE : H=1/:2,000 V=1/400 @ A3 DRAWING NO. :	DRAWN BY	CHECKED BY APPROVED BY	CHECKED BY:	REVIEWED BY:	APPROVED BY:
				THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER		

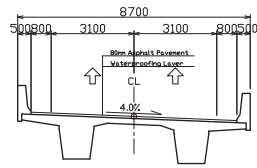
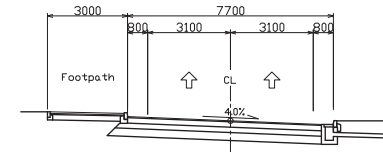
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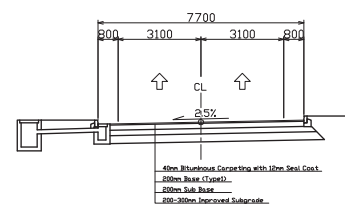
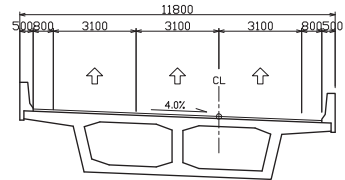
Road 0-4



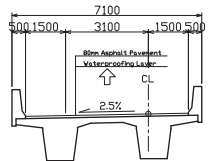
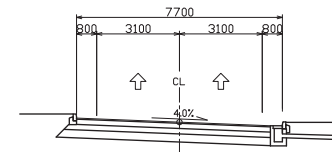
Road A



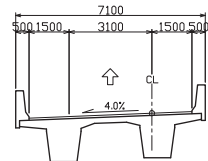
Road 3



Road B & C

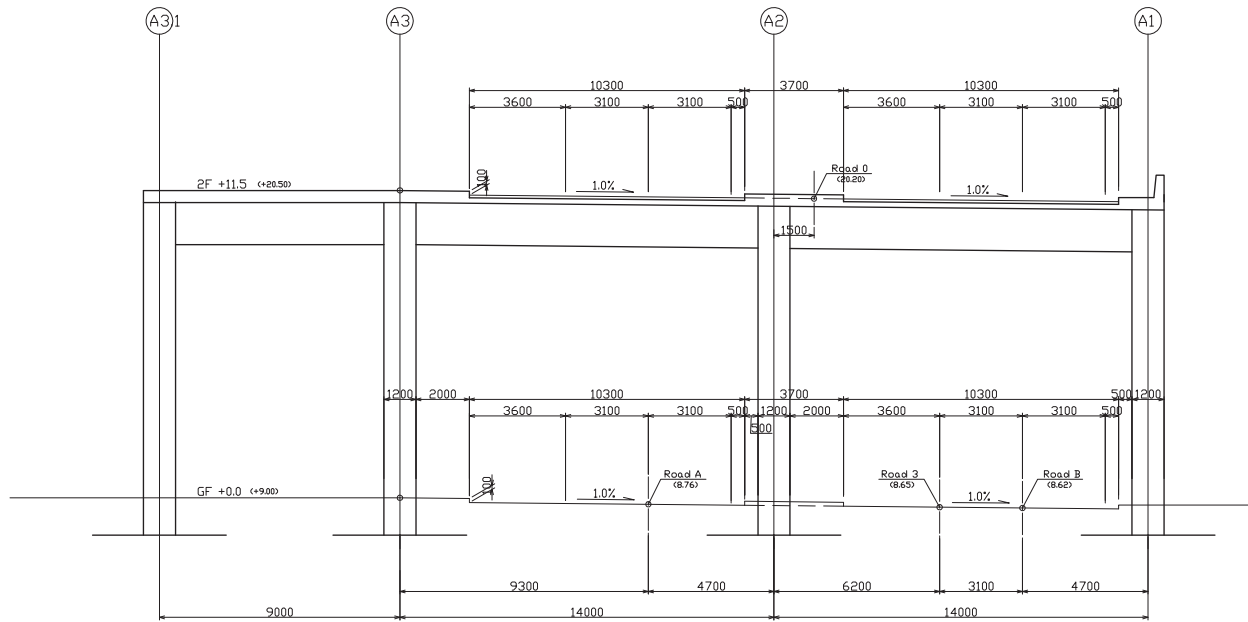


Road 5




A10.4-21

PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :				DRAWN BY		CHECKED BY :	REVIEWED BY :	APPROVED BY :	
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH		TYPICAL CROSS SECTION 1/2				CHECKED BY					
			BASIC DESIGN					APPROVED BY				
			SCALE : 1/:200 @ A3									
			DRAWING NO. :									
									THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER	

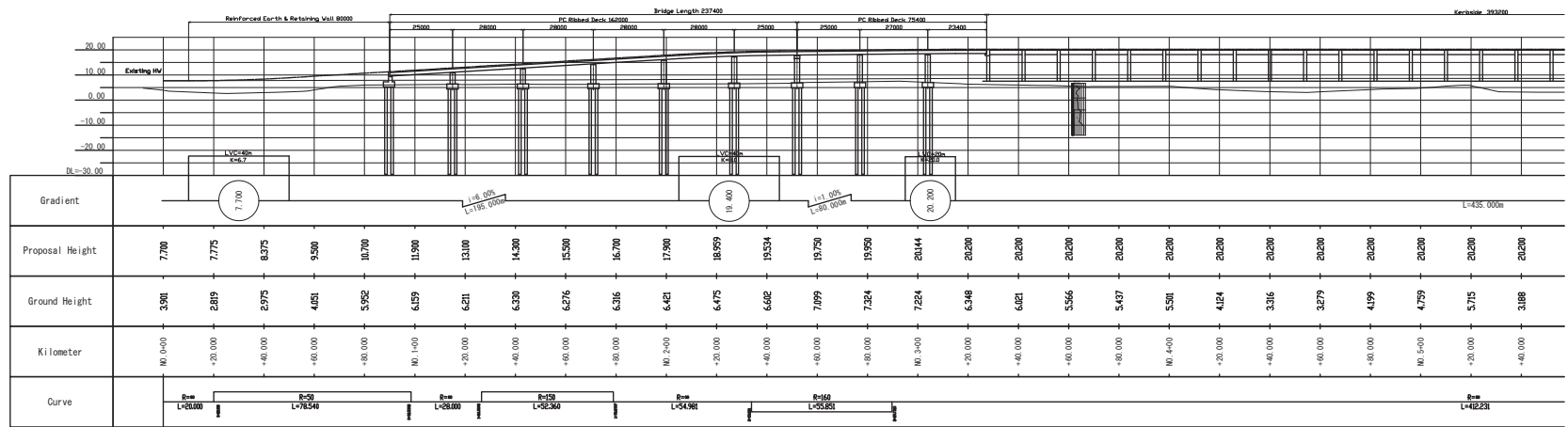


Kerbside

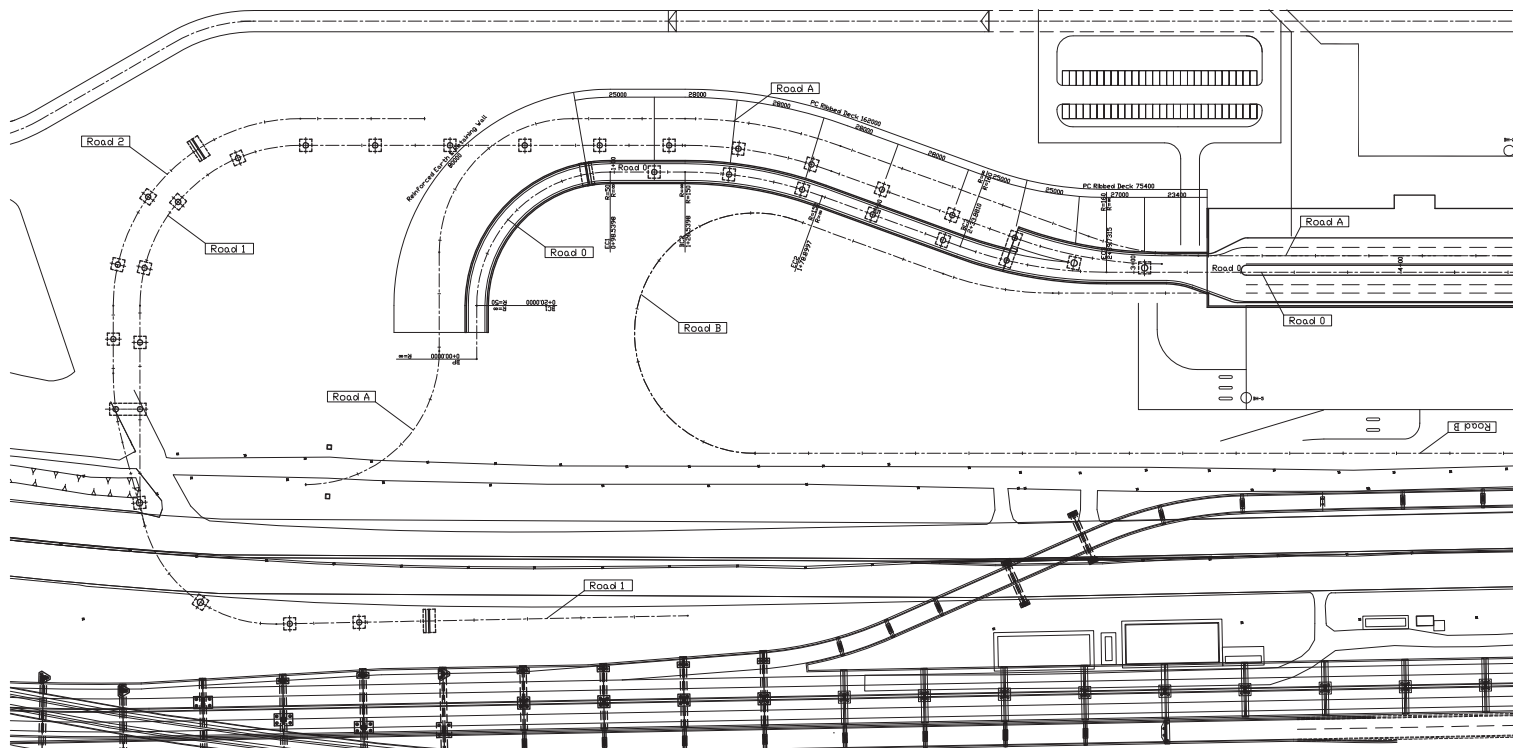
A10.4-22

PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :					DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH		TYPICAL CROSS SECTION 2/2										
			BASIC DESIGN										
			SCALE : 1/:200 @ A3										
			DRAWING NO. :										

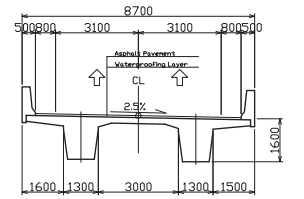
THE ENGINEER PROJECT DIRECTOR CHIEF ENGINEER



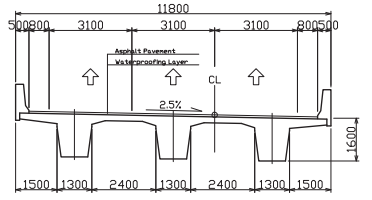
PROFILE



PLAN



PC Ribbed Deck (2-lane)



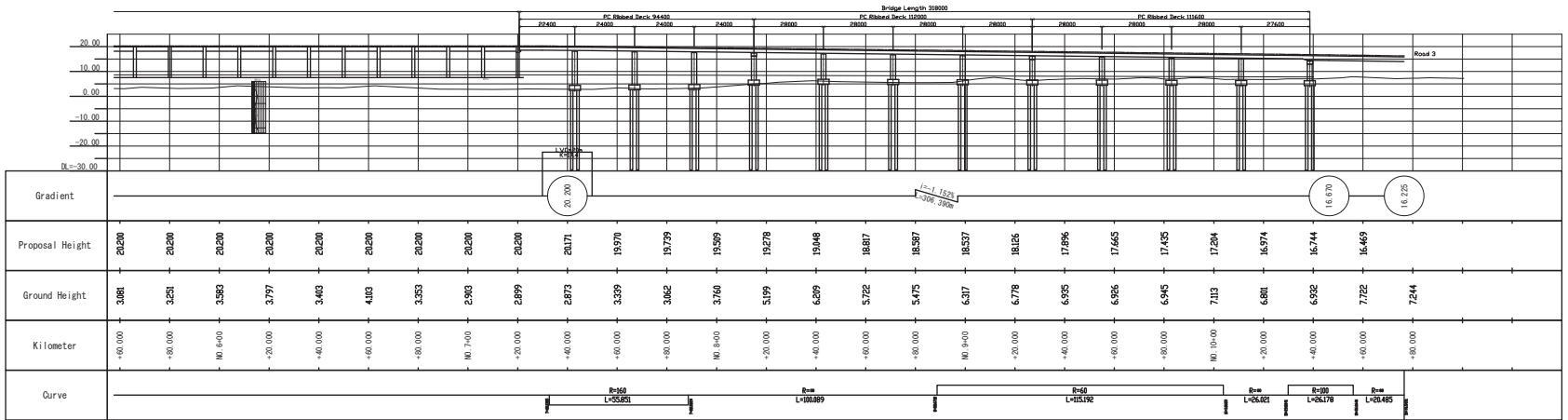
PC Ribbed Deck (3-lane)

CROSS SECTION

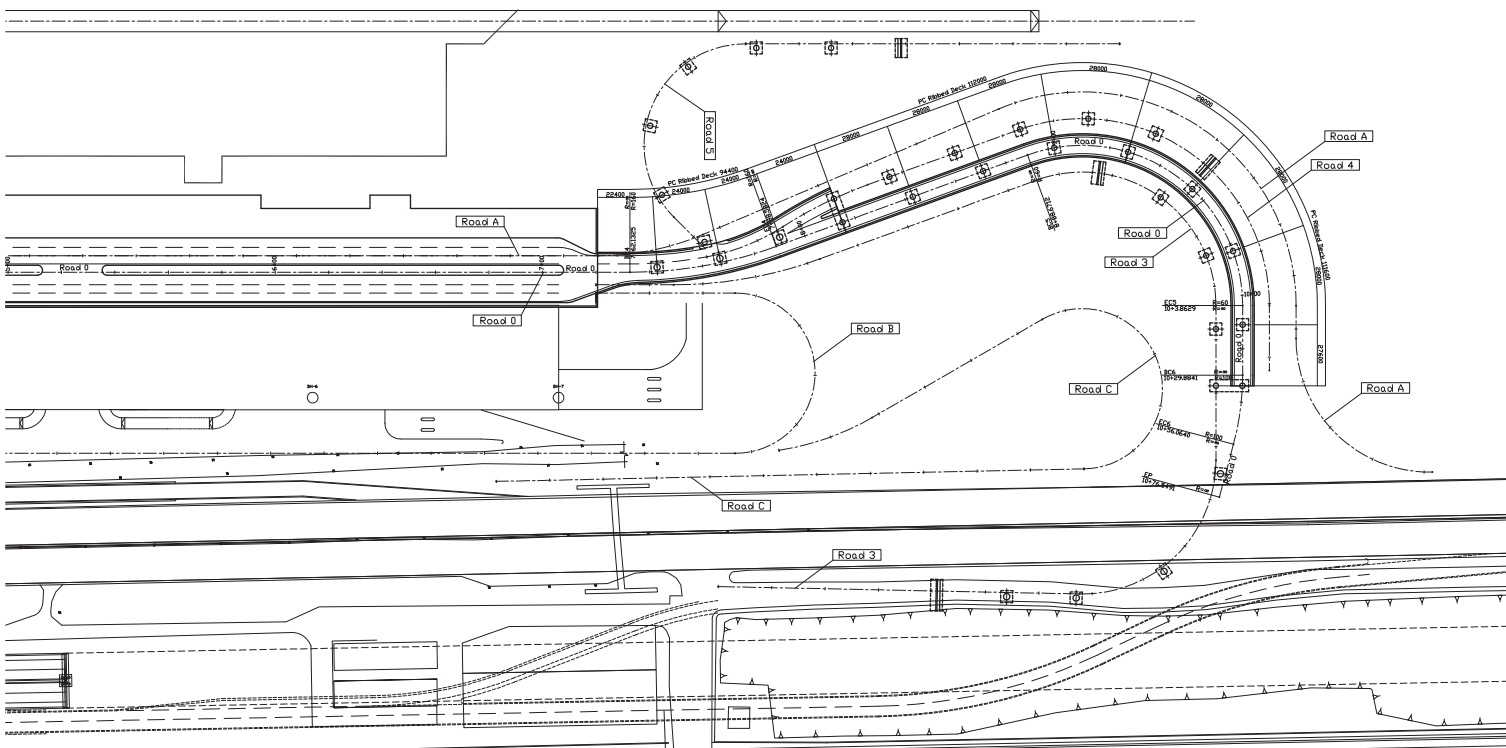
PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :	DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :	
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH		ELEVATED WAY GENERAL VIEW (Road 0) 1/2							
			BASIC DESIGN							
			SCALE : 1/:2,000 @ A3							
			DRAWING NO. :				THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER	

A10.4.23

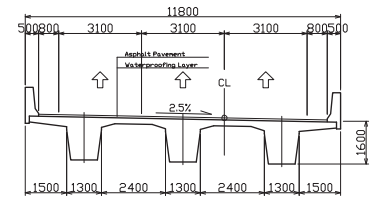
A10.4-24



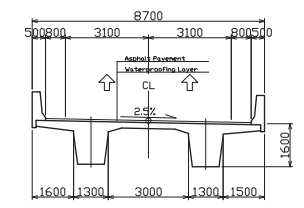
PROFILE



PLAN



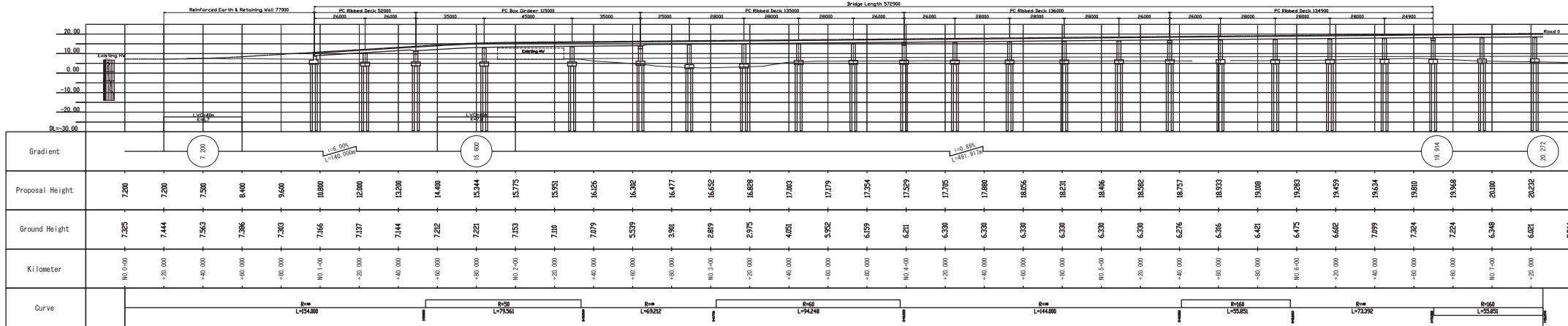
PC Ribbed Deck (3-lane)



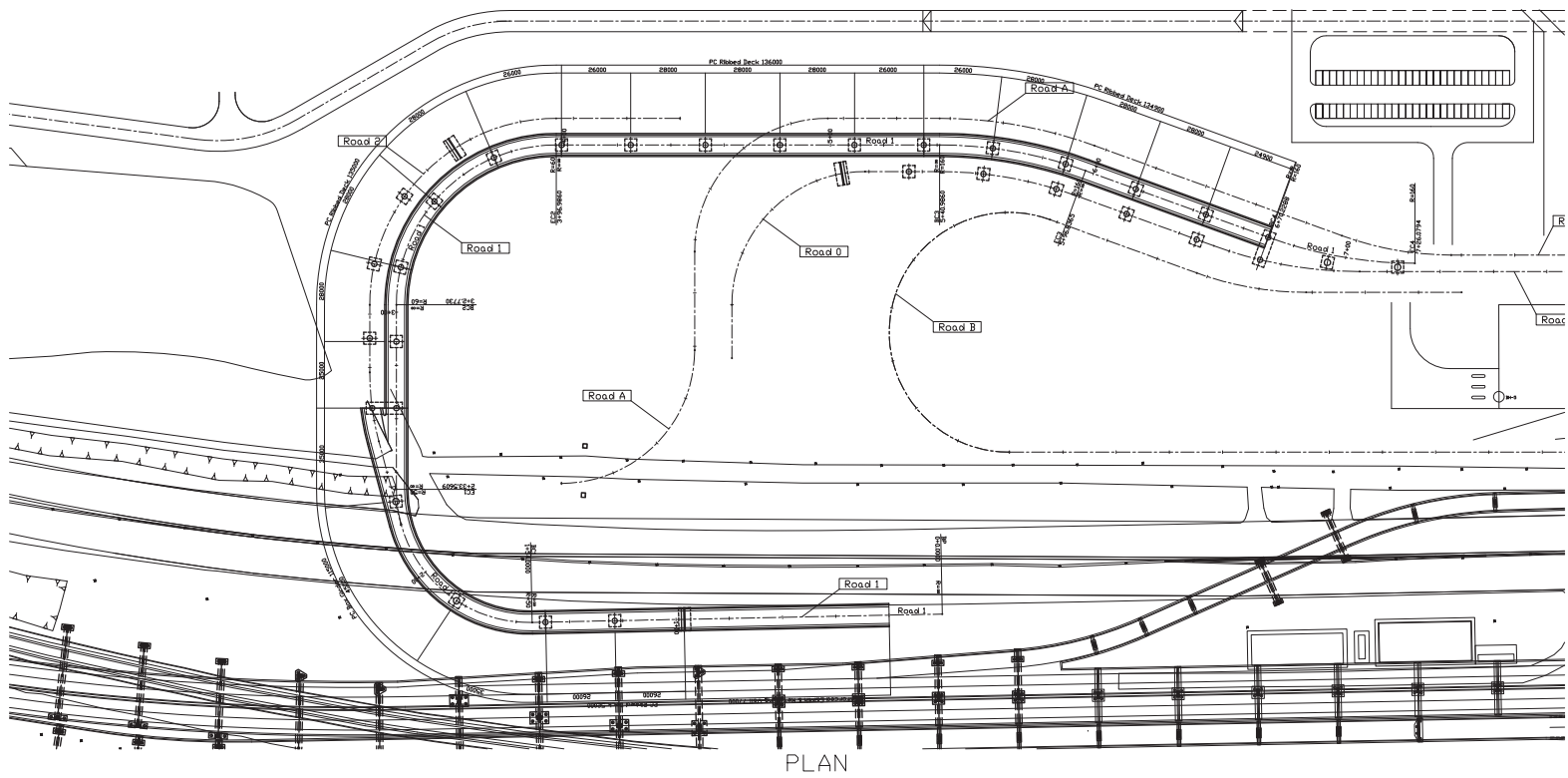
PC Ribbed Deck (2-lane)

CROSS SECTION

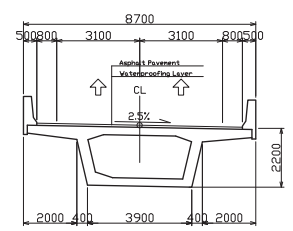
PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : ELEVATED WAY GENERAL VIEW (Road 0) 2/2	DRAWN BY CHECKED BY APPROVED BY	CHECKED BY: REVIEWED BY: APPROVED BY:
			BASIC DESIGN SCALE : 1/2,000 @ A3 DRAWING NO. :		



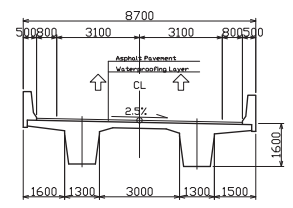
PROFILE



PLAN




PC Box Girder (2-lane)

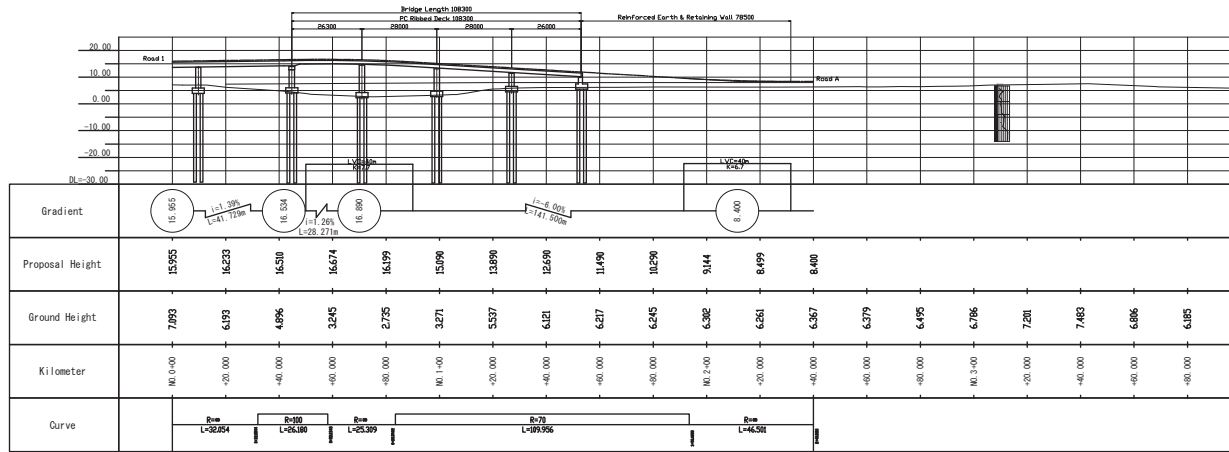


PC Ribbed Deck (2-lane)

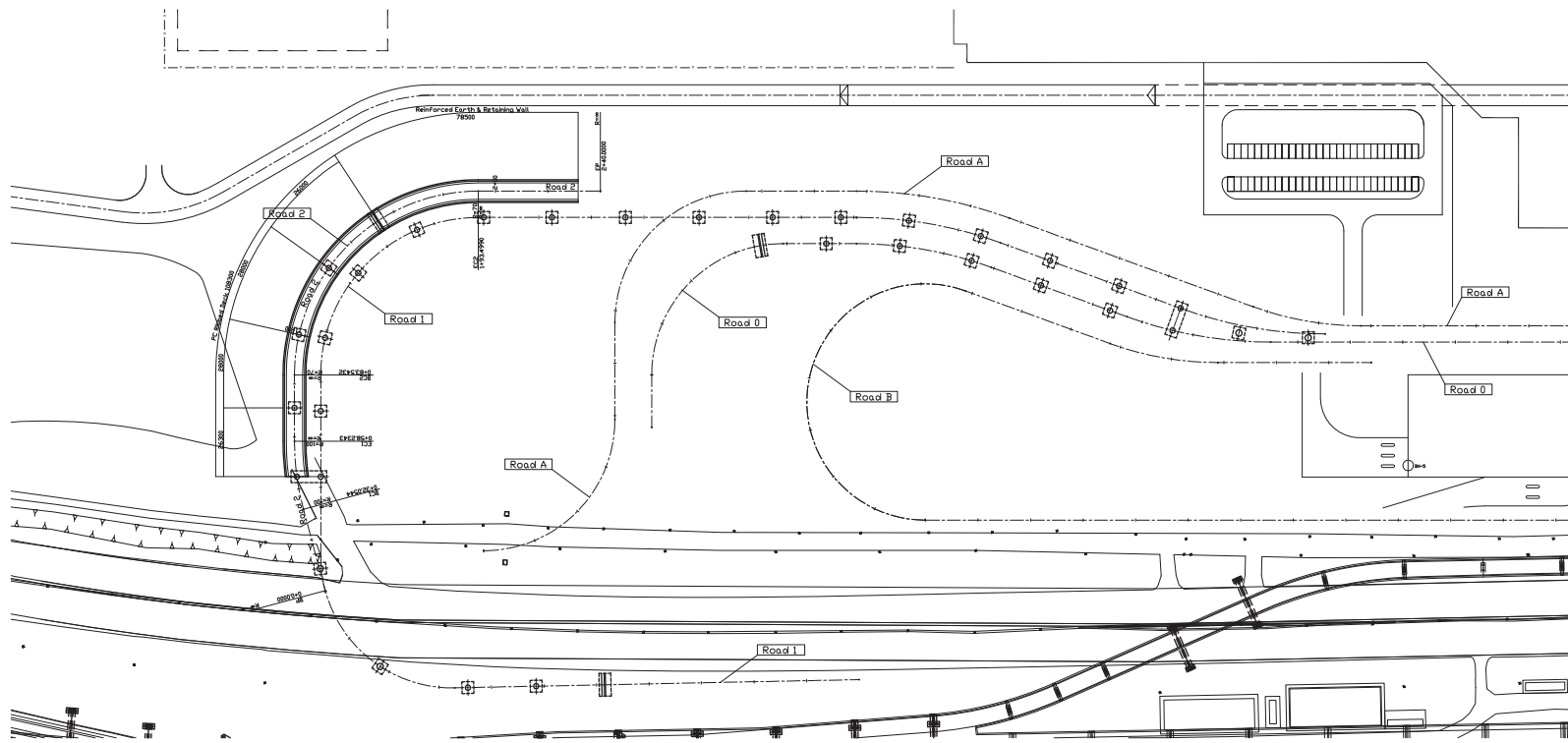
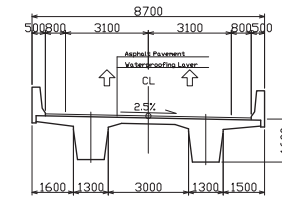
CROSS SECTION

PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMI TOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : ELEVATED WAY GENERAL VIEW (Road 1) BASIC DESIGN SCALE : 1/2,000 @ A3 DRAWING NO. :				DRAWN BY	CHECKED BY	CHECKED BY :	REVIEWED BY :	APPROVED BY :
			APPROVED BY								
								THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER	

A10.4.25



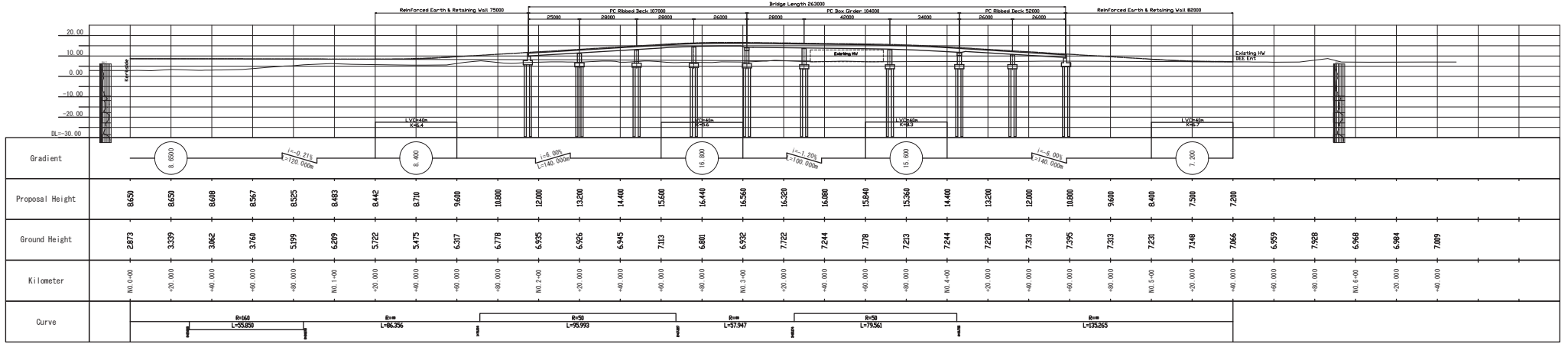
PROFILE



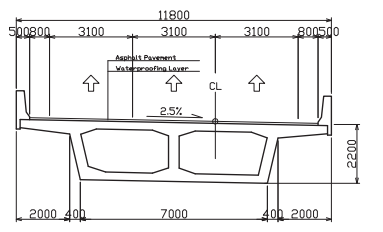
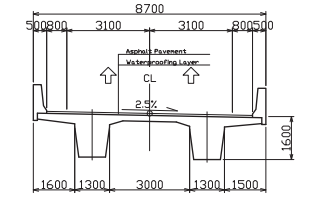
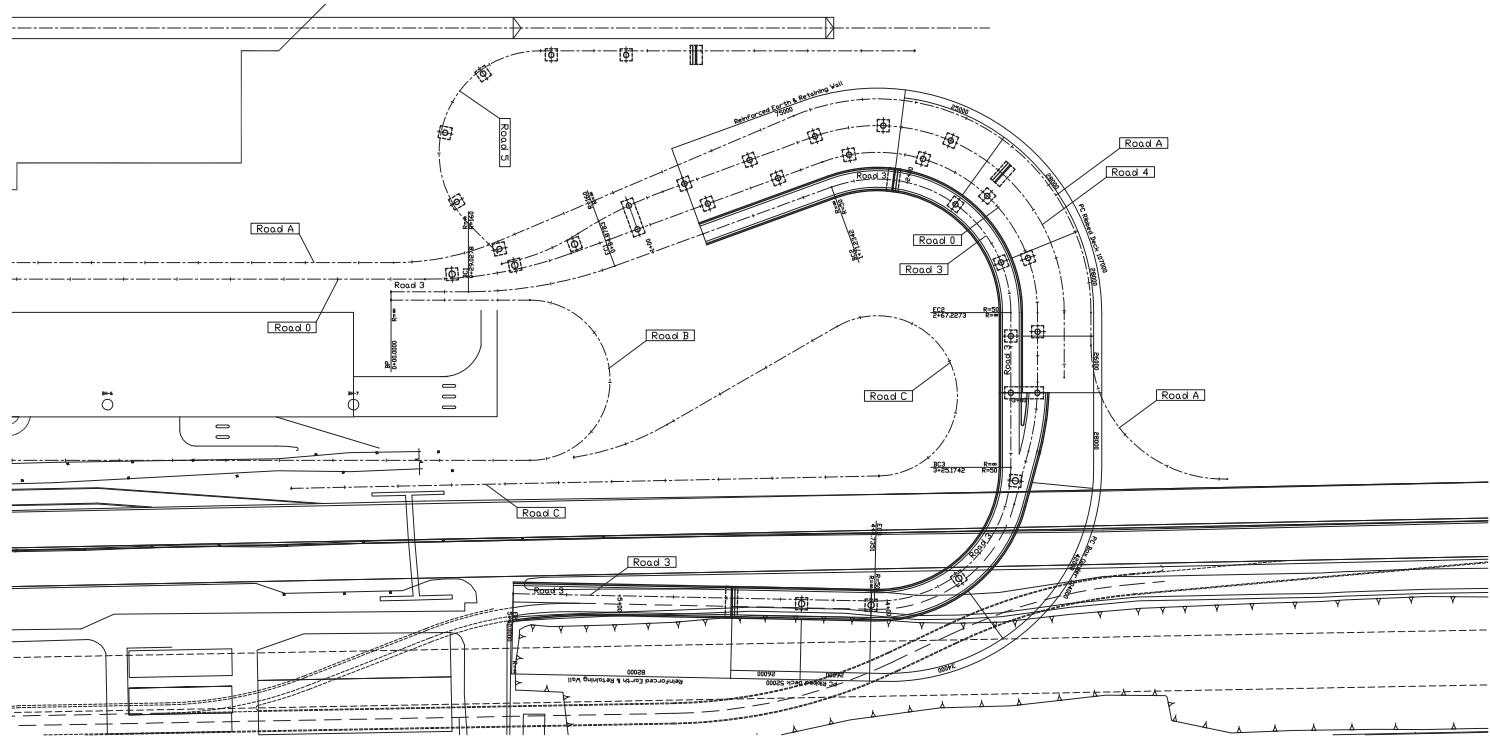
PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT : 	DRAWING TITLE : ELEVATED WAY GENERAL VIEW (Road 2) BASIC DESIGN SCALE : 1/2,000 @ A3 DRAWING NO. :	DRAWN BY _____	CHECKED BY _____ APPROVED BY _____	CHECKED BY: _____	REVIEWED BY: _____	APPROVED BY: _____
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A10.4-26

A10.4-27

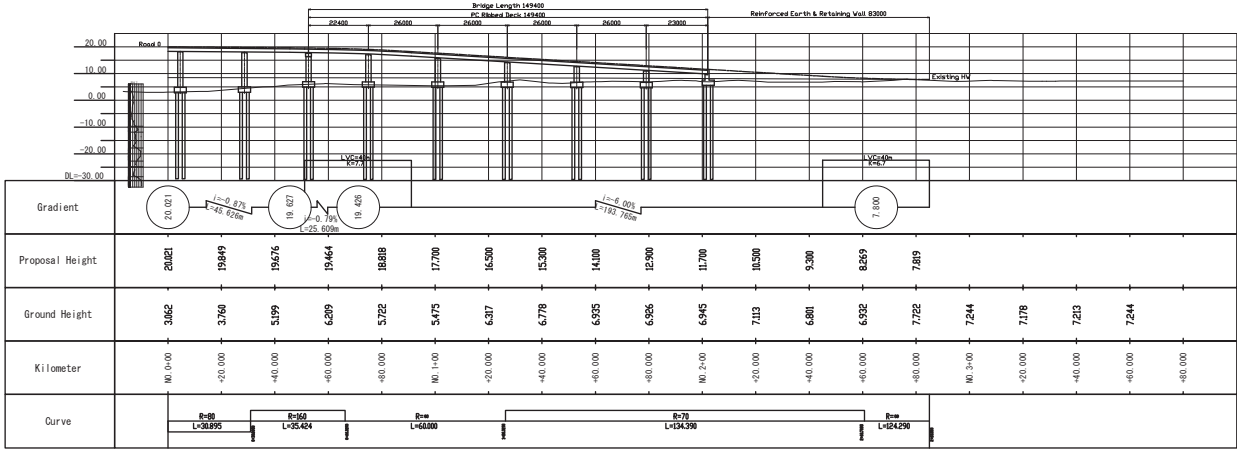


PROFILE

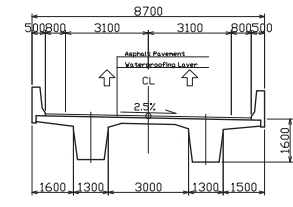


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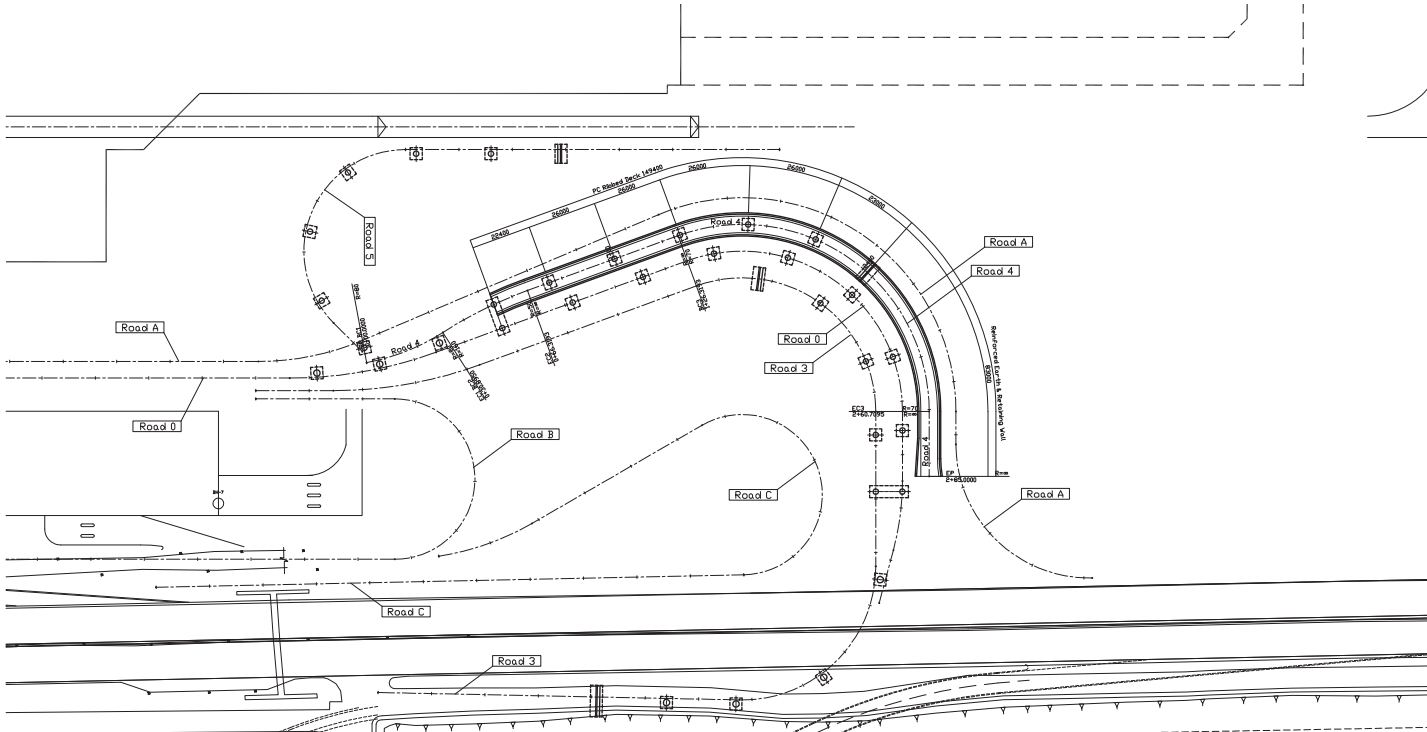
PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : ELEVATED WAY GENERAL VIEW (Road 3) BASIC DESIGN SCALE : 1/2,000 @ A3 DRAWING NO. :			DRAWN BY	CHECKED BY	CHECKED BY:	REVIEWED BY:	APPROVED BY:
			APPROVED BY							
								THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER



PROFILE



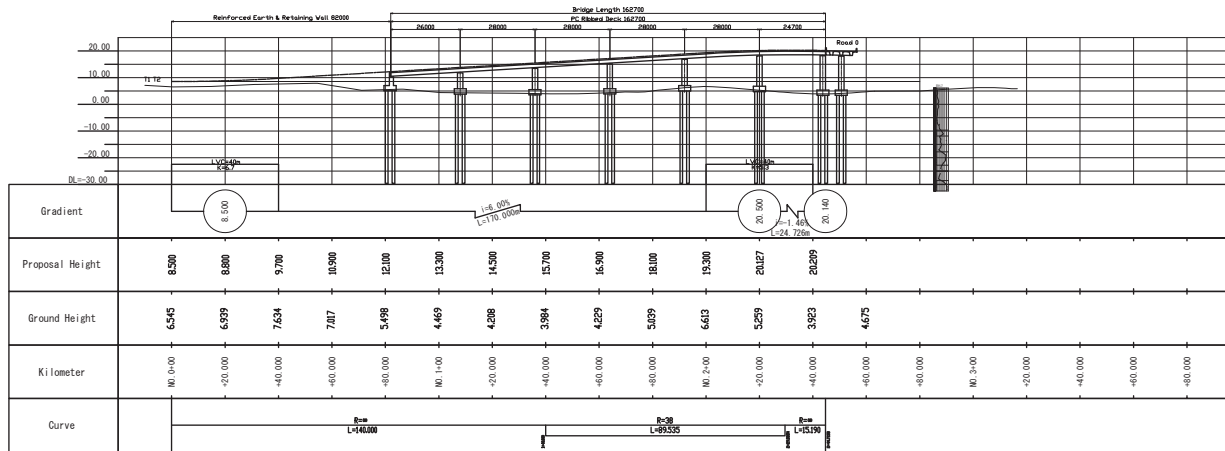
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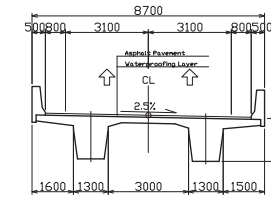
PLAN

PROJECT NAME :	CLIENT :	CONSULTANT :	DRAWING TITLE :	DRAWN BY :	CHECKED BY :	APPROVED BY :	CHECKED BY :	REVIEWED BY :	APPROVED BY :
HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	 CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH		ELEVATED WAY GENERAL VIEW (Road 4) BASIC DESIGN SCALE : 1/2,000 @ A3 DRAWING NO. :						
							THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

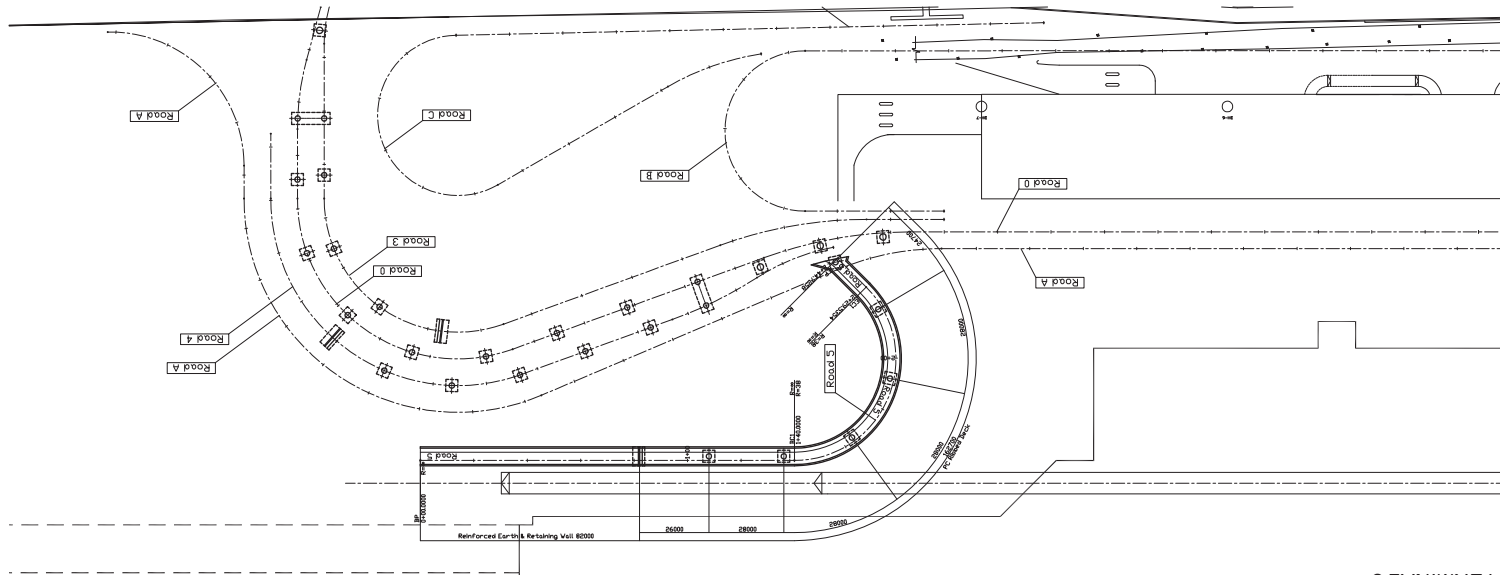
A10.4-28



PROFILE



CROSS SECTION



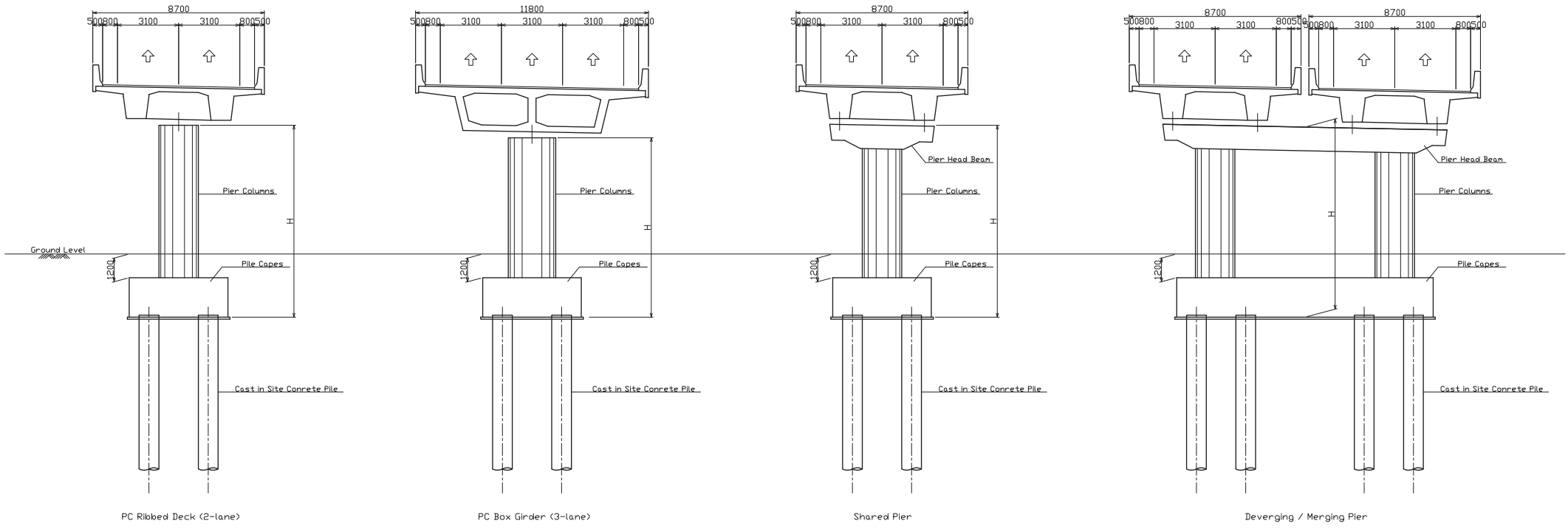
/ TERMINAL 3


PLAN

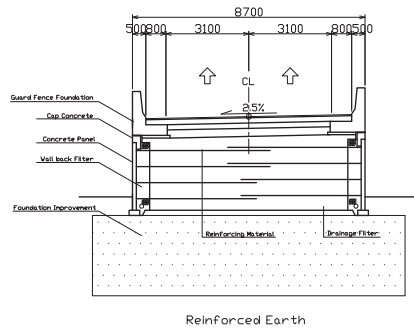
PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT : CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : ELEVATED WAY GENERAL VIEW (Road 5)			DRAWN BY	CHECKED BY	APPROVED BY	CHECKED BY :	REVIEWED BY :	APPROVED BY :	
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						THE ENGINEER			PROJECT DIRECTOR	CHIEF ENGINEER		

A10.4-29

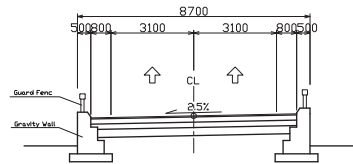
A10.4-30



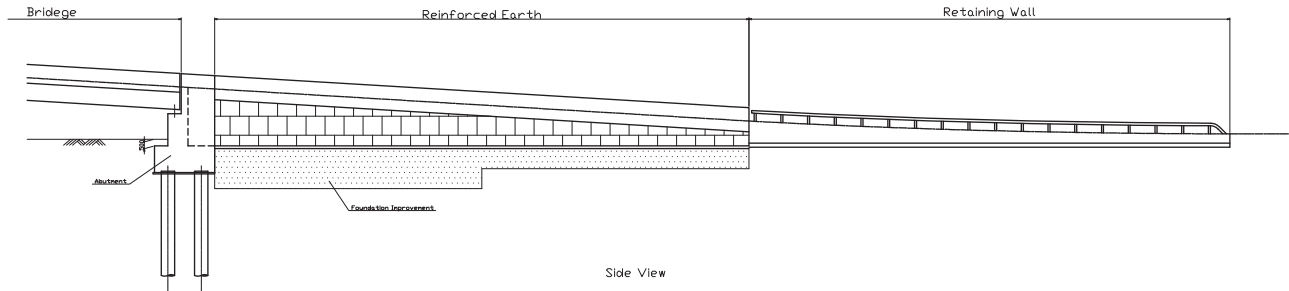
PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : ELEVATED WAY SUBSTRUCTURE			DRAWN BY CHECKED BY APPROVED BY	CHECKED BY: REVIEWED BY: APPROVED BY:	
			BASIC DESIGN					
			SCALE : 1/:200 @ A3					
			DRAWING NO. :					
						THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER



Reinforced Earth




Retaining Wall



Side View

A10.4-31

PROJECT NAME : HSIA HAZRAT SHAHJALAL INTERNATIONAL AIRPORT PREPARATELY SURVEY OF EXPANSION OF HAZRAT SHAHJALAL INTERNATIONAL AIRPORT	CLIENT :  CIVIL AVIATION AUTHORITY OF BANGLADESH KURMITOLA, DHAKA-1229, BANGLADESH	CONSULTANT :	DRAWING TITLE : ELEVATED WAY APPROACH STRUCTURE	DRAWN BY CHECKED BY APPROVED BY	CHECKED BY: REVIEWED BY: APPROVED BY:
			BASIC DESIGN		
			SCALE : 1/200 1/400 @ A3		
			DRAWING NO. :		
			THE ENGINEER	PROJECT DIRECTOR	CHIEF ENGINEER

(余 白)

添付資料 13.1 環境チェックリスト

(余 白)

環境チェックリスト

分類	環境項目	主なチェック事項	Yes: Y No: N	具体的な環境社会配慮 (Yes/No の理由、根拠、緩和策等)
1 許認可・説明	(1)EIA および環境許認可	(a) 環境アセスメント評価報告書 (EIA レポート)等は作成済みか。 (b) EIA レポート等は当該国政府により承認されているか。 (c) EIA レポート等の承認は付帯条件を伴うか。付帯条件がある場合は、その条件は満たされるか。 (d) 上記以外に、必要な場合には現地の所管官庁からの環境に関する許認可は取得済みか。	(a)Y (b)N (c)今後 (d)N	(a)IEE レポート及び EIA の TOR は環境局に提出済み。環境局は 2016 年 9 月に承認している。この承認に基づき 2016 年 12 月にドラフト EIA が環境局に提出された。このドラフト EIA は最終化に向けて更新中であり 3 月初めに提出予定。ECC 発行は 4 月頃と見込まれる。 (b)ドラフト EIA 報告書を更新し提出した後、EIA 報告書の承認が DOE から出される。 (c)今後確認される。 (d)関係自治体及び森林局より「異議申立書なし」書を今後取得する。
	(2)現地ステークホルダへの説明	(a) プロジェクトの内容および影響について、情報公開を含めて現地ステークホルダに適切な説明を行い、理解を得ているか。 (b) 住民等からのコメントを、プロジェクト内容に反映させたか。	(a)Y (b)Y	(a)2016 年 11 月から 2017 年 1 月までの EIA 準備中に、説明会と情報開示会議が行われる。 (b)湛水に関するステークホルダからの意見は、EIA で調査されプロジェクトで取り上げられる予定である。
	(3)代替案の検討	(a) プロジェクト計画の複数の代替案は (検討の際、環境・社会に係る項目も含めて) 検討されているか。	(a)Y	(a)EIA では事業範囲、整備段階、場所、施工方法などの様々な代替計画が検討されている。また、「プロジェクトなし」の検討もされている。
2 汚染対策	(1)大気質	(a) 利用する航空機等から排出される大気汚染物質による影響はあるか。当該国の環境基準等と整合するか。必要な緩和策はとられるか。 (b)空港及び付帯施設付近において大気汚染状況が既に環境基準を上回っている場合、プロジェクトが更に大気汚染を悪化させるか。大気質に対する対策はとられるか。	(a)Y (b)N	(a)プロジェクト現場の現在の大気質 (NOx、SOx) は、ダッカの他のモニタリングポイントより低い。建設活動や航空機の排出による影響は限られており、大気質の基準を超える可能性は低くなる。また粒子状物質(PM2.5,PM10)についても航空機による影響は小さいと予測される。 (b)このプロジェクトは大気質を大きく悪化させないと予測される。
	(2)水質	(a) 関連施設・付帯設備等からの排水に含まれる BOD、COD、SS、油分等の汚濁物質は当該国の排出基準等と整合するか。また、排出により当該国の環境基準と整合しない区域が生じるか。	(a)N	(a)排水処理施設は国の排水基準に適合して設置されるため、運用段階で汚染の危険性はない。油分離装置は、油が排水に侵入するのを防ぐために燃料施設に設置される。建設期間中、排水の適切な処分は請負業者の責任であり、入札文書の適切な条項 (例えば、SS 処理、下水道の浄化槽など) によって確実に行われる。
	(3)廃棄物	(a) 空港及び付帯施設からの廃棄物は当該国の規定に従って適切に処理・処分されるか。	(a)Y	(a)建設期間中の廃棄物の適切な処分は請負業者の責任であり、入札書類には、廃棄物の分別、保管および処分、保管管理などの適切な条項によって保証される。供用段階では、CAAB は空港のマニュアルに従って内部で発生した廃棄物をすべて回収し処分する責任があがり適切に実施される。
	(4)騒音・振動	(a) 航空機による騒音は当該国の基準と整合するか。	(a)Y (b)N	(a)航空機騒音は基準より除外されているが、予測を実施した結果、日本の環境基準を超過する範囲が空港周辺で広がる。CAAB は空港を利用

分類	環境項目	主なチェック事項	Yes: Y No: N	具体的な環境社会配慮 (Yes/No の理由、根拠、緩和策等)	
		(b) 空港利用者の車輛や空港稼働に伴う車両等からの騒音・振動による悪影響はあるか。ある場合、対策は用意されるか。		する航空機に ICAO の進める低騒音機型の航空機へのインセンティブを与えるなどの方法を推進する。また、苦情窓口を設け騒音問題について個別に対応する。本来は日本で行われている防音助成などの方法が望ましい。建設期間中、適切な騒音管理は請負業者の責任であり、入札文書の適切な条項、例えば建設機械の定期的なメンテナンス、防音壁などによって確保される。 (b)大きな影響はない。	
	(5) 土壌汚染	(a) サイトの土壌は、過去に汚染されたことがあるか。また、航空機燃料等の漏出によって土壌を汚染しない対策がなされるか。	(a)Y	(a)調査結果によるとプロジェクトサイトでは鉛 (Pb) による汚染土壌がある。工事期間中、適切な管理は請負業者の責任であり、入札文書の適切な条項によって確実に管理される。例えば、汚れた土壌はきれいな土壌から隔離され保管される。供用後は燃料漏れにより土壌汚染が発生する可能性があるが、燃料施設の排水システムの油分離器などの適切な手段によって最小限に抑えられる。	
	(6) 地盤沈下	(a) 大量の地下水汲み上げを行う場合、地盤沈下が生じる恐れがあるか。	(a)N	(a)地盤改良が舗装の不等沈下防止のため行われ、地震時の液化化被害防止のために、軟質土壌層のある池の埋め立てにおいて実施される。また、供用後に地下水の汲み上げを行うが、雨水、処理水を利用して地下水の汲み上げ量を小さくすることから影響は小さい。	
	(7) 悪臭	(a) 悪臭源はあるか。悪臭防止の対策は取られるか。	(a)N	(a)悪臭は発生しない。	
	3 自然環境	(1) 保護区	(a) サイトは当該国の法律・国際条約等に定められた保護区内に立地するか。プロジェクトが保護区に影響を与えるか。	(a)N	(a)プロジェクト区域に保護区はない。
		(2) 生態系	(a) サイトは原生林、熱帯の自然林、生態学的に重要な生息地 (珊瑚礁、マングローブ湿地、干潟等) を含むか。 (b) サイトは当該国の法律・国際条約等で保護が必要とされる貴重種の生息地を含むか。 (c) 生態系への重大な影響が懸念される場合、生態系への影響を減らす対策はなされるか。 (d) プロジェクトによる水利用 (地表水、地下水) が、河川等の水域環境に影響を及ぼすか。水生生物等への影響を減らす対策はなされるか。	(a)N (b)N (c)N (d)N	(a)含まない。 (b)含まない。 (c)影響しない。 (d)影響しない。
		(3) 水象	(a) 空港及び関連施設の建設による水系の変化に伴い、地表水・地下水の流れに悪影響を及ぼすか。 (b) 海域に建設される場合、流況、波浪、潮流、流入河川水流等に悪影響を及ぼすか。	(a)N (b)N/A	(a)舗装面積が増加し雨水の貯留用池の埋め立てを行うことから増加した舗装区域からの流出量、および埋め立てた池の代償としての新たな貯留池の建設を行う。 (b)該当しない。

分類	環境項目	主なチェック事項	Yes: Y No: N	具体的な環境社会配慮 (Yes/No の理由、根拠、緩和策等)
	(4)地形・地質	<p>(a) 広範囲の造成に伴い、計画地周辺の地形・地質構造が大規模に改変されるか。</p> <p>(b) 盛土、切り土等地山の改変は、地山の安定を考慮して計画されるか。</p> <p>(c) 盛土部、切土部、土捨て場、土砂採取場からの土壌流出は生じるか。土砂流出を防ぐための適切な対策がなされるか。</p> <p>(d) 海域に建設される場合、自然海浜の消失は生じるか。</p>	<p>(a)N</p> <p>(b)N</p> <p>(c)N</p> <p>(d)N/A</p>	<p>(a)改変されない。</p> <p>(b)改変されない。</p> <p>(c)操作中はない。 工事期間中の適切な管理は請負業者の責任であり、入札書類の適切な条項、例えば法面保護などによって保証される。</p> <p>(d)該当しない。</p>
4 社会 環境	(1)住民移転	<p>(a) プロジェクトの実施に伴い非自発的住民移転は生じるか。生じる場合は、移転による影響を最小限とする努力がなされるか。</p> <p>(b) 移転する住民に対し、移転前に補償・生活再建対策に関する適切な説明が行われるか。</p> <p>(c) 住民移転のための調査がなされ、再取得価格による補償、移転後の生活基盤の回復を含む移転計画が立てられるか。</p> <p>(d) 補償金の支払いは移転前に行われるか。</p> <p>(e) 補償方針は文書で策定されているか。</p> <p>(f) 移転住民のうち特に女性、子供、老人、貧困層、少数民族・先住民族等の社会的弱者に適切な配慮がなされた計画か。</p> <p>(g) 移転住民について移転前の合意は得られるか。</p> <p>(h) 住民移転を適切に実施するための体制は整えられるか。十分な実施能力と予算措置が講じられるか。</p> <p>(i) 移転による影響のモニタリングが計画されるか。</p> <p>(j) 苦情処理の仕組みが構築されているか。</p>	<p>(a) N</p> <p>(b) N/A</p> <p>(c) N/A</p> <p>(d) N/A</p> <p>(e) N/A</p> <p>(f) N/A</p> <p>(g) N/A</p> <p>(h) N/A</p> <p>(i) N/A</p> <p>(j) N/A</p>	<p>(a)発生しない。</p> <p>(b)該当しない。</p> <p>(c)該当しない。</p> <p>(d)該当しない。</p> <p>(e)該当しない。</p> <p>(f)該当しない。</p> <p>(g)該当しない。</p> <p>(h)該当しない。</p> <p>(i)該当しない。</p> <p>(j)該当しない。</p>
	(2)生活・生計	<p>(a) プロジェクトによる住民の生活への悪影響は生じるか。必要な場合は影響を緩和する配慮が行われるか。</p> <p>(b) プロジェクトによって周辺の道路交通や地域住民による土地利用、水域利用に影響はあるか。</p> <p>(c) 他の地域からの人口流入により病気の発生（HIV等の感染症を含む）の危険はあるか。必要に応じて適切な公衆衛生への配慮は行われるか。</p>	<p>(a) N/A</p> <p>(b) N</p> <p>(c) Y</p> <p>(d) Y</p> <p>(e) N</p>	<p>(a),(b)このプロジェクト基本的に土地取得なしに空港エリアで行われるため住民の生活条件に影響はない。</p> <p>(c)工事中労働者が増加により生じる可能性がある。工事計画策定時に感染症のリスクに対して適切な緩和措置を講じられる。 HIV /エイズ予防対策に関する条項が設けられる。</p> <p>(d)このプロジェクトは空港前道路から新ターミナルビルまでのアプローチ用道路が含まれている。これにより、既設のインフラである空</p>

分類	環境項目	主なチェック事項	Yes: Y No: N	具体的な環境社会配慮 (Yes/No の理由、根拠、緩和策等)
		(d) プロジェクトの実施により必要となる社会基盤の整備は十分か（アクセス道路等）。不十分な場合、整備計画はあるか。 (e) 空港施設及び構造物による日照障害、電波障害は生じるか。		港前道路の交差点付近の渋滞緩和に貢献できる。また場内運搬路を整備する。 (e)日照障害、電波障害は生じない。
	(3)文化遺産	(a) プロジェクトにより、考古学的、歴史的、文化的、宗教的に貴重な遺産、史跡等を損なう恐れはあるか。また、当該国の国内法上定められた措置が考慮されるか。	(a)N	(a)歴史的な遺跡等がない。
	(4)景 観	(a) 特に配慮すべき景観が存在する場合、それに対し悪影響を及ぼすか。影響がある場合には必要な対策は取られるか。	(a)N	(a)影響しない。
	(5)少数民族、先住民 族	(a) 少数民族、先住民の文化、生活様式への影響を軽減する配慮がなされているか。 (b) 少数民族、先住民の土地及び資源に関する諸権利は尊重されるか。	(a)N/A (b)N/A	(a)、(b)このプロジェクトは基本的に土地取得なしに空港エリアで行われるため少数民族や先住民の文化や生活様式に影響を与えない。
	(6)労働環境	(a) プロジェクトにおいて遵守すべき当該国の労働環境に関する法律が守られるか。 (b) 労働災害防止に係る安全設備の設置、有害物質の管理等、プロジェクト関係者へのハード面での安全配慮が措置されているか。 (c) 安全衛生計画の策定や作業員等に対する安全教育（交通安全や公衆衛生を含む）の実施等、プロジェクト関係者へのソフト面での対応が計画・実施されているか。 (d) プロジェクトに関係する警備要員が、プロジェクト関係者・地域住民の安全を侵害することのないよう、適切な措置が講じられているか。	(a) Y (b) Y (c) Y (d) Y	(a)遵守される。 (b)個人用保護具（PPE）の使用、コンクリートの解体時に労働者の聴覚保護が導入される。また JICA 建設安全指針が請負業者の入札書類に記載される。 (c)環境構築基準（ECS）および労働安全衛生（OHS）マニュアルとして請負業者の入札文書に記載される。また、JICA 建設安全指針は、請負業者の入札書類に記載される。 (d)請負業者の責任として請負業者の入札文書に記載される。
5 その 他	(1)工事中の影響	(a) 工事中の汚染（騒音、振動、濁水、粉じん、排ガス、廃棄物等）に対して緩和策が用意されるか。 (b) 工事により自然環境（生態系）に悪影響を及ぼすか。また、影響に対する緩和策が用意されるか。 (c) 工事により社会環境に悪影響を及ぼすか。また、影響に対する緩和策が用意されるか。	(a)Y (b)N (c)N	(a)建設中の環境緩和策が検討され、EMP 案が作成されている。EMP 案は最終化され EIA 報告書に記載される。 (b)影響は想定されない。 (c)影響は想定されない。

分類	環境項目	主なチェック事項	Yes: Y No: N	具体的な環境社会配慮 (Yes/No の理由、根拠、緩和策等)
	(2)モニタリング	(a) 上記の環境項目のうち、影響が考えられる項目に対して、事業者のモニタリングが計画・実施されるか。 (b) 当該計画の項目、方法、頻度等はどのように定められているか。 (c) 事業者のモニタリング体制（組織、人員、機材、予算等とそれらの継続性）は確立されるか。 (d) 事業者から所管官庁等への報告の方法、頻度等は規定されているか。	(a) Y (b) Y (c) Y (d) Y	(a)-(d)環境モニタリング計画案が検討され EMoP 案が作成されている。 EMoP 案は最終化され EIA 報告書に記載される。 モニタリングの項目、方法、頻度および枠組みは EMoF 案に記述されている。
6 留意点	他の環境チェックリストの参照	(a) 必要な場合は、道路、鉄道、橋梁に係るチェックリストの該当チェック事項も追加して評価すること（空港へのアクセス道路が整備される場合等）。 (b) 空港が海上に建設される場合等、必要な場合には港湾に係るチェックリストの該当チェック事項も追加して評価すること。 (c) 必要な場合は、林業に係るチェックリストの該当チェック事項も追加して評価すること（大規模な森林伐採が行われる場合等）。	(a)N/A (b)N/A (c)N/A	(a)該当しない。 (b)該当しない。 (c)該当しない。
	環境チェックリスト使用上の注意	(a) 必要な場合には、越境または地球規模の環境問題への影響も確認する（廃棄物の越境処理、酸性雨、オゾン層破壊、地球温暖化の問題に係る要素が考えられる場合等）。	(a)N	(a)これらへの影響は小さいと予測される。

添付資料 13.2 環境管理計画

(余 白)

Environmental Management Plan

Parameter	Mitigation Measures	Responsible for Implementation	Responsible for Monitoring	Parameters to be Monitored	Frequency of Monitoring	Guidelines/ Standards
Planning Phase						
Updating of safeguard documents	- IEE/ EMP will be updated at the time of detailed design and will be revised by the DSC team if needed.	DSC with input from the contractor	PIU	Updated IEE/EMP	---	JICA Environment Guideline, 2010 ECR 1997
Capacity Building	- Develop and submit for approval a capacity building and training program to to achieve the expected standards.	Contractors	DSC PIU	Capacity building and training program	---	All applicable laws and regulations
Work schedule	- Ensure careful planning and scheduling of the activities (CEMP).	Contractors	DSC PIU	Plan and schedules	Prior to start of construction	EIA report All applicable laws and regulations
Traffic Management Plan	- Prepare a traffic management plan and road safety plan.	Contractors	DSC PIU	Plan and schedules	Prior to start of construction	EIA report All applicable laws and regulations
Barricades and warning signs	- Use easily transportable barricades and warning signs such as those made of high reflector plastic materials. - Also use aluminized rolled warning signs to warn the public.	Contractors	DSC PIU	Lists and samples of warning signs and barricades	Prior to start of construction	Detailed design documents
Workers	- Employ workers with adequate experience, training, and know-how.	Contractors	DSC PIU	Workers list (for internal monitoring)	Prior to start of construction	Detailed Design documents
Legislation, permits, and agreements	- In all instances, CAAB, contractors and consultants must remain in compliance with relevant local and	PIU Contractor	DSC PIU	All applicable permits and approvals	Prior to start of civil works and as necessary	Ensure location clearance and ECC from DOE as per guidance provided in ECR 1997 is obtained

Parameter	Mitigation Measures	Responsible for Implementation	Responsible for Monitoring	Parameters to be Monitored	Frequency of Monitoring	Guidelines/ Standards
	national legislation. - A copy of the EIA must be kept on-site and disclosed in CAAB websites.					
Access to site	- Access to site will be via existing roads. The contractor will need to ascertain the existing condition of the roads and repair damage due to construction.	Contractor	DSC PIU	Traffic management plan Road condition	Prior to start of construction	Minimal traffic disturbance
Setting up of construction camp	Finding Suitable location as approved by the concerning authority.	Contractor	DSC PIU	Location plan Facilities plan	Prior to start of construction	Approved location plan Construction method Facilities plan
Establishing equipment lay-down and storage area	- Storage areas should be secure to minimize the risk of crime and should be safe from access by children, animals, etc. - Hazardous materials should store at secure place.	Contractor	DSC PIU	Location plan Facilities plan	Prior to start of construction	Approved location plan Construction method Facilities plan
Education of site staff on general and environmental conduct	- Environmental awareness training for staffs. - Staff must be trained up for operating equipment - All employees must undergo safety training.	Contractor	DSC PIU	Records of training	Prior to start of civil works and every new employee	Revised/Updated IEE/EMP (capacity building) Bid document CEMP
Construction Phase						
Occupational health and safety	-Using PPE, hearing protection for workers on demolition of concrete -Avoiding direct	Contractor	DSC	-The number of workers and the number of installation of hearing protections on demolition site	As work progresses	Construction method Detailed design documents Bid document JICA Construction Safety Guidelines

Parameter	Mitigation Measures	Responsible for Implementation	Responsible for Monitoring	Parameters to be Monitored	Frequency of Monitoring	Guidelines/ Standards
	contact with the contaminated water and soil			Use of PPE		
Construction camps and storage areas	<ul style="list-style-type: none"> -Open areas or surrounding bushes are not being used as toilet facility. - Litter is to be collected daily. - Bins and/or skips should be emptied regularly and waste should be disposed of at the pre-approved site. - Camp and working areas are kept clean and tidy at all times. - Camp is to be checked for spills of substances i.e. oil, paint, etc. - Camp is to be remake to its initial situation. 	Contractor	DSC	As mentioned in relevant impacts & mitigation section of the report	As work progresses	Approved location plan Bid document JICA Construction Safety Guidelines
Dust and air pollution	<ul style="list-style-type: none"> -Sprinkling water to the carrying road and working site in the airport area. -Cleaning of carrying route in airport area and around the entrance of the airport. -Using of low air pollutant emission type machinery for construction 	Contractor	DSC	-The number of sprinkling times and the number of cleaning times to the carrying road and entrance of the airport	As work progresses	No visible increase in dust and particulate matters Compare against baseline data Bid document JICA Construction Safety Guidelines

Parameter	Mitigation Measures	Responsible for Implementation	Responsible for Monitoring	Parameters to be Monitored	Frequency of Monitoring	Guidelines/ Standards
Noise levels	-Using of low noise type machinery for construction	Contractor	DSC	Complaints from community Noise level monitoring record	Regular monitoring during construction (e.g. 3 monthly)	ECR 1997 Compare against baseline data Bid document JICA Construction Safety Guidelines
Water quality	-Using appropriate measures for avoiding spread of pollution based on chemical analysis -Using wastewater treatment such as sedimentation tank for discharge to the canals (if any)	Contractor	DSC	Complaints from community Waste disposal manifest/record -The concentration of SS in the treated discharge water	-Regular monitoring during discharging (e.g. 3 monthly)	No increase in water pollution due to the project Compare against baseline data Bid document JICA Construction Safety Guidelines
Waste management	-Segregation and sorting of the waste	Contractor	DSC	Complaints from community Waste disposal manifest/record	Regular monitoring during construction (e.g. 3 monthly)	No dumped wastes and litter at work sites at all times Bid document JICA Construction Safety Guidelines
Conservation of natural environment	-Avoid unnecessary tree cutting -Plantation of tree	Contractor	DSC	-The number of cutting tree and planting tree	-Before the construction and after the construction	
Cultural and historical environment	-Complying with relevant law and order of relevant department	Contractor	DSC	sudden finding	As necessary	All finding shall be reported and turned over to the Department of Archaeology.
Operation and Maintenance phase						
Land contamination	-Securing that contaminated soil will be isolated from clean soil.	Contractor (up to service delivery period) CAAB	CAAB Independent Monitoring Agency	Specifications in the O&M Manual	As determined in the O&M Manual	As specified in the O&M Manual and all applicable laws and regulations
Wastewater	- After treatment, the discharge standards need to be followed similar to the standards mentioned in Schedule 10 of the ECR 1997 for inland	Contractor (up to service delivery period) CAAB	CAAB Independent Monitoring Agency	Specifications in the O&M Manual	As determined in the O&M Manual	ECR 1997 (Rule 13: The standard limits of the discharge of liquid wastes shall be determine in accordance with the standards specified in Schedule 10)

Parameter	Mitigation Measures	Responsible for Implementation	Responsible for Monitoring	Parameters to be Monitored	Frequency of Monitoring	Guidelines/ Standards
	water discharge					
Air quality	Implementation of the multistory parking for reducing exhaust gas from cars waiting for entering to the parking.	Contractor (up to service delivery period) CAAB	CAAB Independent Monitoring Agency	Specifications in the O&M Manual	As determined in the O&M Manual	As specified in the O&M Manual and all applicable laws and regulations
Noise	-Implement of the complaint section for noise. CAAB will accept the complain of aircraft noise and will consider remedial measures.	Contractor (up to service delivery period) CAAB	CAAB Independent Monitoring Agency	Specifications in the O&M Manual	As determined in the O&M Manual	As specified in the O&M Manual and all applicable laws and regulations
Water use	- Minimize water use through dedicated metering of water consumption	Contractor (up to service delivery period) CAAB	CAAB Independent Monitoring Agency	Specifications in the O&M Manual	As determined in the O&M Manual	As specified in the O&M Manual and all applicable laws and regulations
Health, hygiene, and safety	-Safety training for all staff	Contractor (up to service delivery period) CAAB	CAAB Independent Monitoring Agency	Specifications in the O&M Manual	As determined in the O&M Manual	As specified in the O&M Manual and all applicable laws and regulations

Note: DSC = Design and Supervision Consultants, PIU = Project Implementation Unit

添付資料 13.3 環境モニタリング計画

(余 白)

Environmental Monitoring Plan

Project stage	Monitoring Item	Parameter	Method of monitoring	Monitoring area/ point	Term / Frequency	Place of submission
Construction Phase	Occupational health and safety	1.W=The number of workers on demolition site 2.I=The number of installation of hearing protections on demolition site 3. Ratio (IR)=I/W 4. Number of PPE must be equal or more than W.	To monitor the state of implementation/ Collecting implementation data from contractor	Whole of the project site	During the demolition of concrete/ Reporting for once in 3 months	CAAB, DOE
	Dust, Air pollution	1. The number of times of water sprinkling to the carrying road and entrance of the airport 2. The number of times of cleaning of the equipment and work site	To monitor the state of implementation/ Collecting implementation data from contractor	Carrying road and entrance of the airport Equipment and work site	During the construction/ reporting for once in 3 months	CAAB, DOE
	Noise	Construction Noise	Noise survey	Around the construction area	During the construction/ Every 3-month survey at a.m. and p.m. of typical day	CAAB, DOE
	Water quality	pH, Temp, Turbidity, EC	Water quality survey	Discharging point to the canal	During the construction/ Every 3-month survey at typical day	CAAB, DOE
	Solid waste	1.Types of waste 2.Monthly quantity of waste	Collecting data from contractor	Whole of the project site	During the construction/ Reporting for once in 3 months	CAAB, DOE
	Natural environment	1.The number of cutting tree 2.The number of planting tree	1.Inventory survey 2.Implementation survey	Whole of the project site	1.Before the construction 2.After the construction	CAAB, DOE
Operation	Land	1.Quantity of	To monitor the state of	Whole of the	During operation/	CAAB,

Project stage	Monitoring Item	Parameter	Method of monitoring	Monitoring area/ point	Term / Frequency	Place of submission
and Maintenance Phase	contamination	contaminated soil 2.Method of the storing and managing contaminated soil	implementation	project site	Annual report	DOE
	Air quality	NOx, SO2, PM10, PM2.5	Air quality survey	Project site	During operation/ Annual report	CAAB, DOE
	Wastewater	pH, Temp, SS, EC, TDS, NH3, COD, BOD, Coli, Oil & Grease	Water quality survey with laboratory analysis	Discharging point of the treated water	During operation/ Annual report	CAAB, DOE
	Noise	1.The status of implementation complaint section 2.Ambient noise level(Leq) 3. Aircraft noise (Lden)	1.To monitor the state of implementation 2.Ambient noise level monitoring 3.Continuous measurement and calculating L(den) and compare with baseline	1. Project site 2. Bboundary of the project area 3. At the point of near residential area	1,2. During operation/ Annual report 3. During operation/ Once	CAAB, DOE

添付資料 13.4 モニタリングフォーム案

(余 白)

Construction Phase

Monitoring Item: Occupational health and safety

Company:	Monitoring period
Monitoring area/ Point:	
Project activity: Demolition of the existing apron/ Others (please mention)	
Monitoring method: Collecting implementation data	
Equipment used: -	
All workers using PPE:	YES NO

Date	Time	Parameter1	Parameter2	Parameter3	Remark
		W=The number of workers on demolition site	I=The number of installation of hearing protections on demolition site	Ratio=I/W	

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature	Date
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Monitoring Item: Dust, Air pollution

Company:	Monitoring period
Monitoring area/ Point:	
Project activity: Carrying construction materials	
Monitoring method: Collecting implementation data	
Equipment used: -	

Date	Time	Parameter1	Parameter2	Parameter3	Remark
		Sprinkling	Cleaning		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
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		<input type="checkbox"/>	<input type="checkbox"/>		
Total					

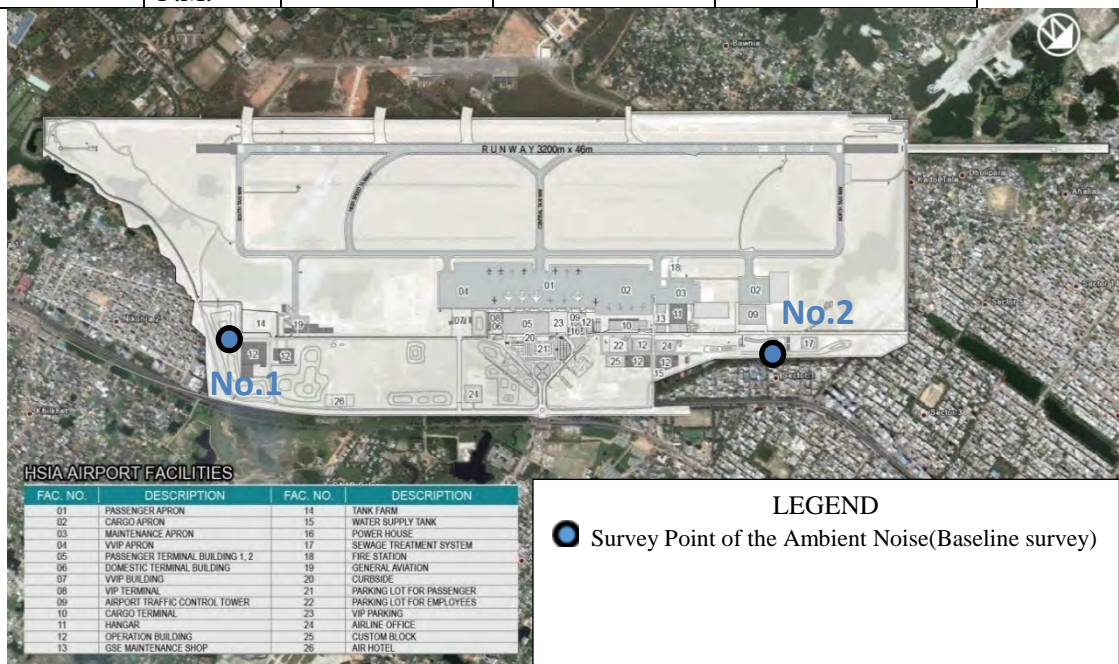
I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature	Date
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Monitoring Item: Construction Noise

Company:	Monitoring Date
Monitoring area/ Point: As shown below figure	
Project activity:	
Monitoring method: Construction noise survey	
Equipment used: - Sound level meter Type ****	

Survey point	Time	Parameter1		Criteria LAeq(dB)	Remark
		Measured value LAeq(dB)	Baseline value LAeq,10min(dB)		
No.1	A.M.		67.1(max.)	70 (Commercial zone at daytime) 60 (Commercial zone at night time)	
	P.M.		53.5(min.) 58.6(ave.)		
No.2	A.M.		63.4(max.)		
	P.M.		50.4(min.) 54.8(ave.)		
No.3	A.M.		-		
	P.M.		-		
No.4	A.M.		-		
	P.M.		-		



I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature	Date
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Monitoring Item: Water quality

Company:		Monitoring Date
Monitoring area/ Point: As shown below figure		
Project activity:		
Monitoring method: Onsite water quality survey		
Equipment used: Multi-parameter water quality meter		

Survey point	Time	Parameters	Measured Value	Baseline value	Criteria	Remark
SW-1		pH		7.48	6.5-8.5	
		Temp			-	
		Turbidity(NTU)		8.77	10	
		EC(μ S/cm)		229	700	
SW-2		pH		7.08	6.5-8.5	
		Temp			-	
		Turbidity(NTU)		69.4	10	
		EC(μ S/cm)		209	700	
SW-3		pH		6.99	6.5-8.5	
		Temp			-	
		Turbidity(NTU)		45.4	10	
		EC(μ S/cm)		279	700	

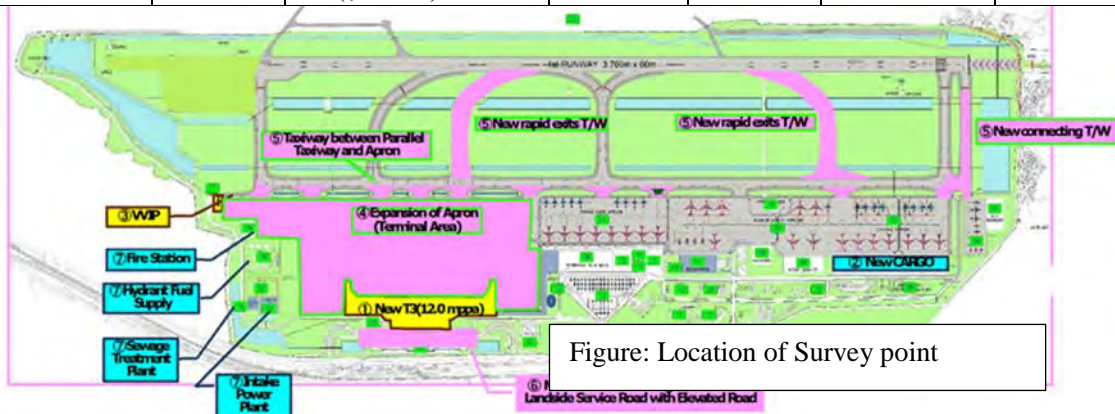


Figure: Location of Survey point

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ Date _____

Monitoring Item: Solid waste

Company:	Monitoring period
Monitoring area/ Point:	
Project activity:	
Monitoring method: Data collecting	
Equipment used: -	

Types of the waste	Category (Hazardous/Non-Hazardous)	Parameter1	unit	Remark
		Monthly quantity		

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Signature	Date
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Monitoring Natural environment

Company:	Monitoring period
Monitoring area/ Point:	
Project activity:	
Monitoring method: Inventory survey	
Equipment used: -	

Types of the tree	Parameter1	Remark
	Number of tree	
Total		

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Signature	Date
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Operation and Maintenance phase

Monitoring Item: Land (Soil) contamination

Company:	Monitoring Date
Monitoring area/ Point: As shown below figure	
Project activity: Storing and managing contaminated soil	
Monitoring method: Data collecting	
Equipment used: -	

Storing area	Storing quantity	Contained substances	chemical	Method of management

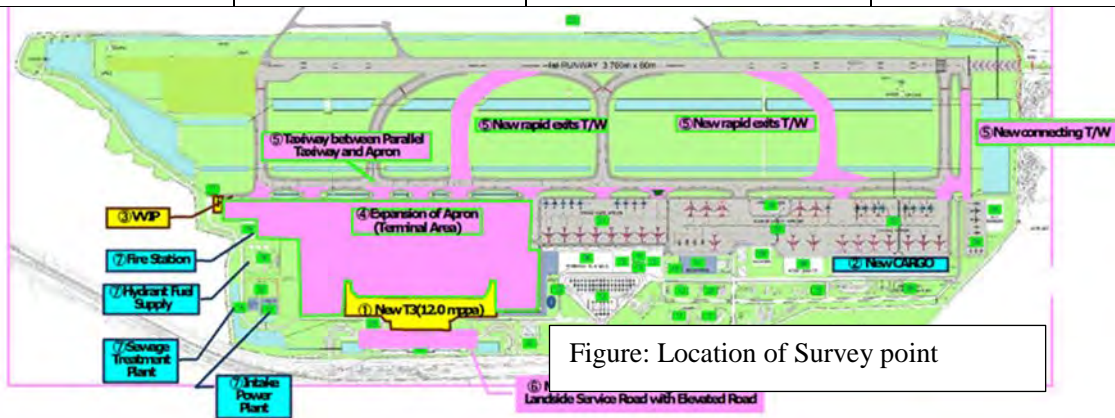


Figure: Location of Survey point

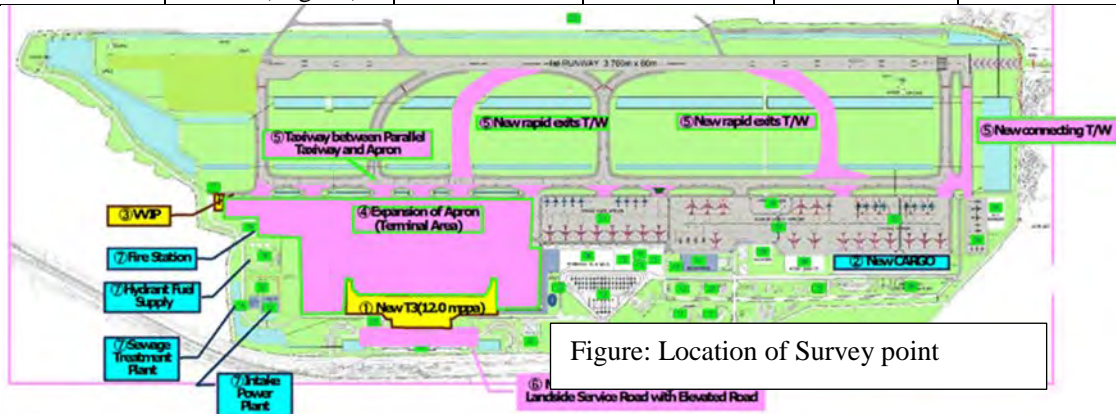
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Monitoring Item: air quality

Company:	Monitoring Date
Monitoring area/ Point: As shown below figure	
Project activity:	
Monitoring method:	
Equipment used:	

Survey point	Parameters	Measured Value	Baseline value	Criteria	Remark
AAQ-1	NOx ($\mu\text{g}/\text{m}^3$)		57.20	100	
	SO2 ($\mu\text{g}/\text{m}^3$)		8.62	365	
	PM10 ($\mu\text{g}/\text{m}^3$)		145.45	150	
	PM2.5 ($\mu\text{g}/\text{m}^3$)		74.66	65	
AAQ-2	NOx ($\mu\text{g}/\text{m}^3$)		55.10	100	
	SO2 ($\mu\text{g}/\text{m}^3$)		8.12	365	
	PM10 ($\mu\text{g}/\text{m}^3$)		142.50	150	
	PM2.5 ($\mu\text{g}/\text{m}^3$)		71.54	65	
AAQ-3	NOx ($\mu\text{g}/\text{m}^3$)		58.12	100	
	SO2 ($\mu\text{g}/\text{m}^3$)		9.01	365	
	PM10 ($\mu\text{g}/\text{m}^3$)		148.52	150	
	PM2.5 ($\mu\text{g}/\text{m}^3$)		76.88	65	



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Signature _____ Date _____

Monitoring Item: Waste water quality

Company:	Monitoring Date
Monitoring area/ Point: As shown below figure	
Project activity:	
Monitoring method: Laboratory analysis	
Equipment used:	

Survey point	Parameters	Measured Value	Baseline value	Criteria	Remark
	pH				
	Temp				
	TSS(mg/L)				
	EC(μ S/cm)				
	TDS(mg/L)				
	NH3(mg/L)				
	COD(mg/L)				
	BOD(mg/L)				
	Coli(MPN)				
	Oil&Grease(mg/L)				

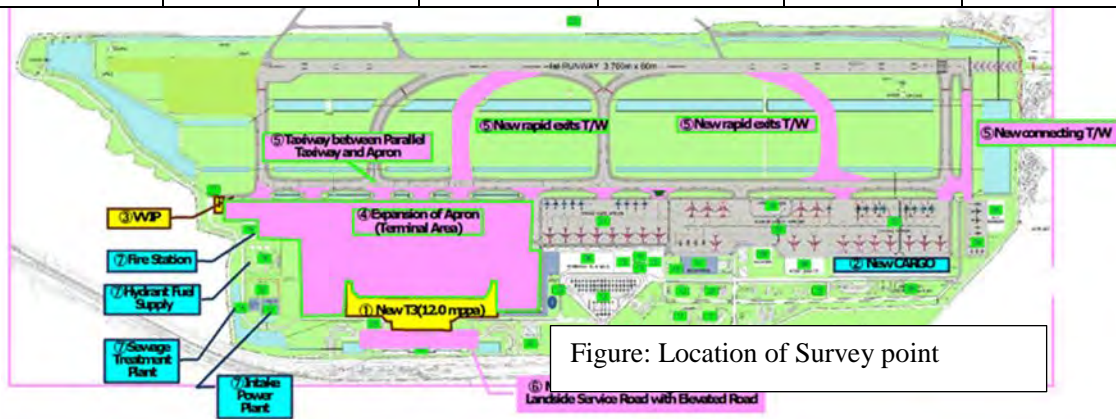


Figure: Location of Survey point

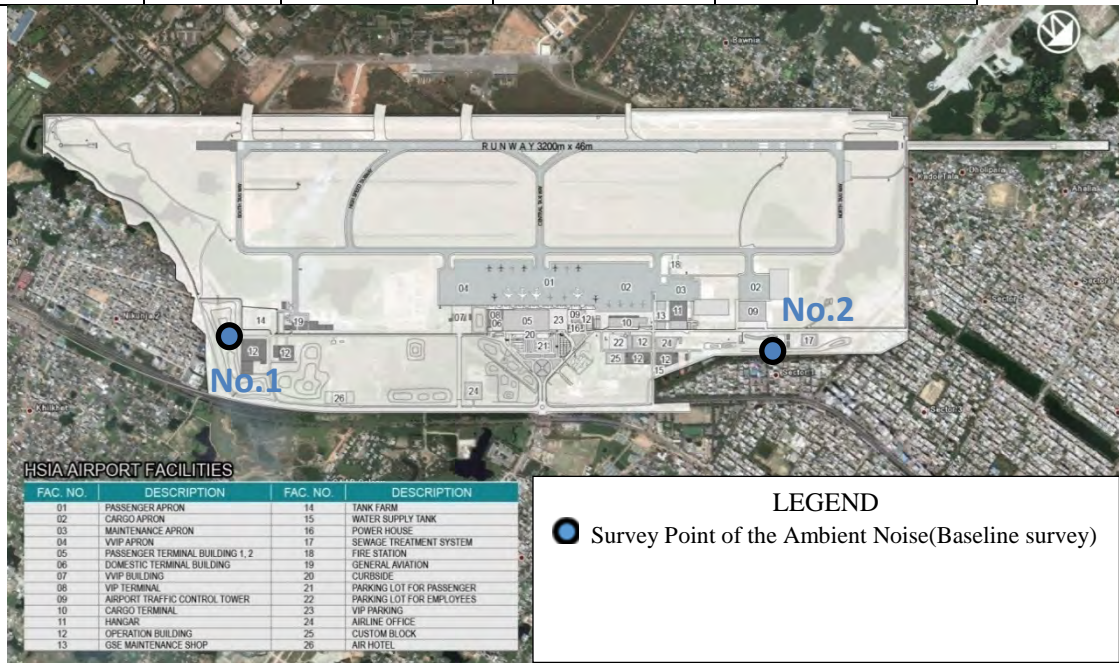
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Signature	Date
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Monitoring Item: Ambient noise level

Company:	Monitoring Date
Monitoring area/ Point: As shown below figure	
Project activity:	
Monitoring method: Construction noise survey	
Equipment used: - Sound level meter Type ****	

Survey point	Time	Parameter1		Criteria LAeq(dB)	Remark
		Measured value LAeq(dB)	Baseline value LAeq,10min(dB)		
No.1	A.M.		67.1(max.)	70 (Commercial zone at daytime) 60 (Commercial zone at night time)	
	P.M.		53.5(min.) 58.6(ave.)		
No.2	A.M.		63.4(max.)		
	P.M.		50.4(min.) 54.8(ave.)		
No.3	A.M.		-		
	P.M.		-		
No.4	A.M.		-		
	P.M.		-		



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Signature _____ Date _____

Monitoring Item: Aircraft Noise

Company:	Monitoring Date
Monitoring area/ Point: As shown below figure	
Project activity:	
Monitoring method: Ambient noise survey	
Equipment used: - Sound level meter Type ****	

Survey point	Parameter1		Criteria (dB)	Remark
	Measured value Lden(dB)	Baseline value Lden (dB)		
No.1		75(74.9)	62	
No.2		75(75.2)	62	



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Signature	Date
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(余 白)

添付資料 14 Annual Fund Requirement

(余 白)

Annual Fund Requirement

78,387 35,169 126,920

Base Year for Cost Estimation:

Jan, 2017

FC & Total: million JPY

Exchange Rates

BDT = JPY 1.38

LC : million BDT

Price Escalation:

FC: 1.6% LC: 10.1%

Physical Contingency

5%

Physical Contingency for Consultant

5%

Item	Total			2016			2017		
	FC	LC	Total	FC	LC	Total	FC	LC	Total
A. ELIGIBLE PORTION									
I) Procurement / Construction	85,484	46,492	149,643	0	0	0	0	0	0
A: Building Work	57,595	17,922	82,327	0	0	0	0	0	0
B: Civil Work	10,527	15,933	32,515	0	0	0	0	0	0
C: Utility Work	10,265	1,314	12,078	0	0	0	0	0	0
D			0	0	0	0	0	0	0
Dispute Board	64	0	64	0	0	0	0	0	0
Base Cost for JICA Financing	78,451	35,169	126,984	0	0	0	0	0	0
Price Escalation	2,962	9,109	15,533	0	0	0	0	0	0
Physical Contingency	4,071	2,214	7,126	0	0	0	0	0	0
II) Consulting Services	3,940	856	5,121	0	0	0	1,415	216	1,712
Base Cost	3,672	698	4,636	0	0	0	1,347	205	1,631
Price Escalation	80	117	241	0	0	0	0	0	0
Physical Contingency	188	41	244	0	0	0	67	10	82
Total (I+II)	89,423	47,348	154,764	0	0	0	1,415	216	1,712
B. NON ELIGIBLE PORTION									
a Procurement / Construction	0	0	0	0	0	0	0	0	0
Base Cost for GoB Financing	0	0	0	0	0	0	0	0	0
Price Escalation	0	0	0	0	0	0	0	0	0
Physical Contingency	0	0	0	0	0	0	0	0	0
b Land Acquisition	0	0	0	0	0	0	0	0	0
Base Cost	0	0	0	0	0	0	0	0	0
Price Escalation	0	0	0	0	0	0	0	0	0
Physical Contingency	0	0	0	0	0	0	0	0	0
c Administration Cost	0	224	310	0	0	0	0	2	3
d VAT (Contractor & Consultant)	0	3,346	4,618	0	0	0	0	186	257
e Import Tax	0	12,389	17,097	0	0	0	0	0	0
f Corporate Tax	0	0	0	0	0	0	0	0	0
g Income Tax (Contractor)	0	7,591	10,475	0	0	0	0	0	0
h Income Tax (Consultant)	0	445	615	0	0	0	0	149	205
Total (a+b+c+d+e+f+g+h)	0	23,995	33,114	0	0	0	0	338	466
TOTAL (A+B)	89,423	71,344	187,878	0	0	0	1,415	553	2,178
C. Interest during Construction									
Interest during Construction (Construction)	3,776	0	3,776	0	0	0	0	0	0
Interest during Construction (C/S)	2	0	2	0	0	0	0	0	0
D. Front End Fee	317	0	317	0	0	0	317	0	317
GRAND TOTAL (A+B+C+D)	93,516	71,344	191,971	0	0	0	1,732	553	2,496
E. JICA Finance Portion (A)	89,423	47,348	154,764	0	0	0	1,415	216	1,712
G. GoB Finance Portion (B+C+D)	4,093	23,995	37,207	0	0	0	317	338	783

Administration Cost = 0.2% Import Tax / Contractor = 20.0% of the expenditure in foreign currency of the e

VAT / Contractor = 6.0% of the expenditure in local currency of the elig

VAT / Consultant = 15.0%

2018			2019			2020			2021			2022		
FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total
27,815	13,516	46,466	20,687	10,888	35,713	21,018	11,988	37,562	11,506	7,113	21,322	4,457	2,987	8,579
19,146	5,958	27,368	14,010	4,359	20,026	14,010	4,359	20,026	7,550	2,349	10,792	2,880	896	4,116
3,500	5,297	10,809	2,561	3,876	7,909	2,561	3,876	7,909	1,380	2,089	4,262	526	797	1,626
3,412	437	4,015	2,497	320	2,938	2,497	320	2,938	1,346	172	1,583	513	66	604
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	15	20	0	20	20	0	20	9	0	9	1	0	1
26,073	11,691	42,207	19,087	8,555	30,892	19,087	8,555	30,892	10,284	4,610	16,646	3,921	1,758	6,347
417	1,181	2,047	616	1,815	3,121	931	2,863	4,881	674	2,164	3,661	324	1,086	1,823
1,325	644	2,213	985	518	1,701	1,001	571	1,789	548	339	1,015	212	142	409
807	175	1,048	800	206	1,084	692	184	946	214	69	310	12	7	22
756	151	965	738	162	961	629	131	809	191	45	253	11	4	16
12	15	33	24	34	71	31	44	91	13	21	42	1	2	4
38	8	50	38	10	52	33	9	45	10	3	15	1	0	1
28,622	13,690	47,515	21,487	11,094	36,797	21,711	12,172	38,508	11,720	7,182	21,632	4,469	2,994	8,601
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	69	95	0	53	74	0	56	77	0	31	43	0	12	17
0	925	1,276	0	771	1,064	0	822	1,134	0	460	635	0	182	251
0	4,031	5,563	0	2,998	4,137	0	3,046	4,204	0	1,668	2,301	0	646	891
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	2,357	3,253	0	1,812	2,500	0	1,905	2,629	0	1,082	1,493	0	435	601
0	91	126	0	94	130	0	82	113	0	27	37	0	2	3
0	7,473	10,313	0	5,728	7,905	0	5,912	8,158	0	3,268	4,510	0	1,277	1,762
28,622	21,163	57,827	21,487	16,823	44,702	21,711	18,083	46,666	11,720	10,450	26,141	4,469	4,271	10,363
326	0	326	576	0	576	839	0	839	988	0	988	1,048	0	1,048
325	0	325	575	0	575	838	0	838	987	0	987	1,048	0	1,048
0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28,947	21,163	58,153	22,063	16,823	45,278	22,549	18,083	47,504	12,708	10,450	27,129	5,517	4,271	11,411
28,622	13,690	47,515	21,487	11,094	36,797	21,711	12,172	38,508	11,720	7,182	21,632	4,469	2,994	8,601

326	7,473	10,638	576	5,728	8,481	839	5,912	8,997	988	3,268	5,498	1,048	1,277	2,810
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eligible portion	Corporate (Profit) Tax =	12%	FALSE	0	0%	included in the Billing Rate
eligible portion	Income Tax / Contractor =	7%	TRUE	1	7%	
	Income Tax / Consultant =	12%	TRUE	1	12%	

(余 白)

**添付資料 17 Financial and Economic Cash Flow of
Incremental Case**

(余 白)

Financial Cashflow of Incremental Case (Million BDT)

USD 1 = 78.4 BDT

BDT 1 = 1.38 JPY

Physical Contingency = 5%

Project FIRR = 5.570%

(Operation period = 25 years)

Pax Forecast	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1. Aeronautical Revenue	0	0	0	0	1,107	2,329	3,630	5,017	6,495	7,943	9,469	11,082	12,786	14,624	14,666
2. Non-Aeronautical Revenue	0	0	0	0	2,819	3,075	3,348	3,637	3,945	4,240	4,552	4,881	5,228	5,601	5,622
Total Revenue	0	0	0	0	3,926	5,404	6,978	8,655	10,440	12,184	14,021	15,962	18,014	20,225	20,288
Expenditure															
1. Capital Expenditures															
(1) Procurement / Construction															
A: Building Work	0	19,832	14,511	14,511	7,820	2,983	0	0	0	0	0	0	0	0	0
B: Civil Work	0	7,833	5,731	5,731	3,088	1,178	0	0	0	0	0	0	0	0	0
C: Utility Work	0	2,910	2,129	2,129	1,147	438	0	0	0	0	0	0	0	0	0
D. Dispute Board	0	13	14	14	3	2	0	0	0	0	0	0	0	0	0
Base Cost for JICA Financing	0	30,587	22,386	22,386	12,059	4,601	0	0	0	0	0	0	0	0	0
Physical Contingency	0	1,529	1,119	1,119	603	230	0	0	0	0	0	0	0	0	0
Sub Total (1)	0	33,600	25,766	27,042	15,314	6,152	0	0	0	0	0	0	0	0	0
(2) Consulting Services															
Base Cost	1,182	699	696	587	139	8	0	0	0	0	0	0	0	0	0
Physical Contingency	59	35	35	29	7	0	0	0	0	0	0	0	0	0	0
Sub Total (2)	1,241	758	783	682	155	9	0	0	0	0	0	0	0	0	0
(3) Administration Cost															
(4) VAT (Contractor & Consultant)	186	925	771	822	450	181	0	0	0	0	0	0	0	0	0
(5) Import Tax	0	4,032	2,998	3,046	1,667	646	0	0	0	0	0	0	0	0	0
Sub Total (3)-(5)	189	5,025	3,823	3,924	2,148	839	0	0	0	0	0	0	0	0	0
Total Capex (1)+(2)+(3)+(4)+(5)	1,430	39,383	30,372	31,648	17,616	7,000	0	0	0	0	0	0	0	0	0
2. Operation expenses															
(9) Personnel Expenses	0	0	0	0	298	298	298	298	298	298	298	298	298	298	298
(10) Maintenance Expenses	0	0	0	0	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839
(11) Other Administrative Expenses	0	0	0	0	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670
Total Opex (9)+(10)+(11)	0	0	0	0	4,807	4,807	4,807	4,807	4,807	4,807	4,807	4,807	4,807	4,807	4,807
Total Expenditure 1+2	1,430	39,383	30,372	31,648	22,424	11,808	4,807	4,807	4,807	4,807	4,807	4,807	4,807	4,807	4,807
Net Cash from Operational Activities	-1,430	-39,383	-30,372	-31,648	-18,498	-6,404	2,171	3,847	5,632	7,376	9,213	11,155	13,206	15,418	15,480

Financial Cashflow of Incremental Case (Million BDT)

Project FIRR =

Pax Forecast	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>2036</u>	<u>2037</u>	<u>2038</u>	<u>2039</u>	<u>2040</u>	<u>2041</u>	<u>2042</u>	<u>2043</u>	<u>2044</u>	<u>2045</u>
1. Aeronautical Revenue	14,707	14,749	14,790	14,832	14,832	14,832	14,832	14,832	14,832	14,832	14,832	14,832	14,832	14,832
2. Non-Aeronautical Revenue	5,643	5,663	5,684	5,705	5,705	5,705	5,705	5,705	5,705	5,705	5,705	5,705	5,705	5,705
Total Revenue	<u>20,350</u>	<u>20,412</u>	<u>20,474</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>	<u>20,537</u>
Expenditure														
1. Capital Expenditures														
(1) Procurement / Construction														
A:Building Work	0	0	0	7,933	0	0	0	0	0	0	0	0	0	0
B:Civil Work	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C:Utility Work	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. Dispute Board	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Cost for JICA Financing	<u>0</u>	<u>0</u>	<u>0</u>	<u>7,933</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Physical Contingency	0	0	0	397	0	0	0	0	0	0	0	0	0	0
Sub Total (1)	<u>0</u>	<u>0</u>	<u>0</u>	<u>8,330</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(2) Consulting Services														
Base Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physical Contingency	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total (2)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(3) Administration Cost														
(4) VAT (Contractor & Consultant)														
(5) Import Tax														
Sub Total (3)-(5)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Capex (1)+(2)+(3)+(4)+(5)	<u>0</u>	<u>0</u>	<u>0</u>	<u>8,330</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
2. Operation expenses														
(9) Personnel Expenses	298	298	298	298	298	298	298	298	298	298	298	298	298	298
(10) Maintenance Expenses	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839	1,839
(11) Other Administrative Expenses	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670	2,670
Total Opex (9)+(10)+(11)	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>
Total Expenditure 1+2	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>13,137</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>	<u>4,807</u>
Net Cash from Operational Activities	15,542	15,605	15,667	7,400	15,729	15,729	15,729	15,729	15,729	15,729	15,729	15,729	15,729	15,729

A17-2

Economic Cashflow of Incremental Case (Million BDT)

USD 1 = **78.4** BDT BDT 1 = **1.38** JPY Conversion Factor = **95%** Physical Contingency = **5%**
 Project EIRR = **22.518%**

	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Economic Benefit															
Domestic flights															
Consumer surplus of Incremental Bangladesh passengers	0	0	0	0	1,058	1,368	1,680	2,012	2,366	2,713	3,081	3,471	3,884	4,323	4,323
International flights															
Consumer surplus of Incremental Bangladesh passengers	0	0	0	0	6,990	13,862	21,146	28,867	37,051	45,003	53,393	62,244	71,582	81,434	81,434
Saved time for Existing Bangladesh passenger	0	0	0	0	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332
Total of Economic Benefit	0	0	0	0	9,381	16,562	24,158	32,211	40,749	49,048	57,806	67,047	76,799	87,089	87,089
Economic Cost															
1. Capital Economic Cost															
(1) Procurement / Construction															
A: Building Work	0	19,538	14,296	14,296	7,704	2,939	0	0	0	0	0	0	0	0	0
B: Civil Work	0	7,571	5,540	5,540	2,985	1,139	0	0	0	0	0	0	0	0	0
C: Utility Work	0	2,888	2,113	2,113	1,139	434	0	0	0	0	0	0	0	0	0
D. Dispute Board	0	13	14	14	3	2	0	0	0	0	0	0	0	0	0
Base Cost for JICA Financing	0	30,011	21,964	21,964	11,831	4,514	0	0	0	0	0	0	0	0	0
Physical Contingency	0	1,572	1,207	1,268	719	289	0	0	0	0	0	0	0	0	0
Sub Total (1)	0	31,583	23,171	23,232	12,550	4,803	0	0	0	0	0	0	0	0	0
(2) Consulting Services															
Base Cost	1,172	692	688	580	139	8	0	0	0	0	0	0	0	0	0
Physical Contingency	59	35	35	30	7	0	0	0	0	0	0	0	0	0	0
Sub Total (2)	1,230	727	724	610	146	8	0	0	0	0	0	0	0	0	0
(3) Administration Cost															
Base Cost	2	65	51	53	30	12	0	0	0	0	0	0	0	0	0
Total Capital Economic Cost (1)+(2)+(3)	1,233	32,375	23,945	23,895	12,726	4,823	0	0	0	0	0	0	0	0	0
2. Operational Economic Cost															
(4) Personnel Expenses	0	0	0	0	283	283	283	283	283	283	283	283	283	283	283
(5) Maintenance Expenses	0	0	0	0	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749
(6) Other Administrative Expenses	0	0	0	0	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539
Total Operational Economic Cost (4)+(5)+(6)	0	0	0	0	4,570	4,570	4,570	4,570	4,570	4,570	4,570	4,570	4,570	4,570	4,570
Total Economic Cost 1+2	1,233	32,375	23,945	23,895	17,296	9,394	4,570	4,570	4,570	4,570	4,570	4,570	4,570	4,570	4,570
Net Cash from Operational Activities	-1,764	-40,353	-31,204	-32,522	-13,261	4,816	19,587	27,640	36,178	44,478	53,236	62,477	72,229	82,519	82,519

Economic Cashflow of Incremental Case (Million BDT)

Project EIRR =

	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>2036</u>	<u>2037</u>	<u>2038</u>	<u>2039</u>	<u>2040</u>	<u>2041</u>	<u>2042</u>	<u>2043</u>	<u>2044</u>	<u>2045</u>
Economic Benefit														
Domestic flights														
Consumer surplus of Incremental Bangladesh passengers	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323
International flights	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer surplus of Incremental Bangladesh passengers	81,434	81,434	81,434	81,434	81,434	81,434	81,434	81,434	81,434	81,434	81,434	81,434	81,434	81,434
Saved time for Existing Bangladesh passenger	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332	1,332
Total of Economic Benefit	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>	<u>87,089</u>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Economic Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1. Capital Economic Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1) Procurement / Construction	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A: Building Work	0	0	0	7,679	0	0	0	0	0	0	0	0	0	0
B: Civil Work	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C: Utility Work	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. Dispute Board	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Cost for JICA Financing	0	0	0	7,679	0	0	0	0	0	0	0	0	0	0
Physical Contingency	0	0	0	384	0	0	0	0	0	0	0	0	0	0
Sub Total (1)	<u>0</u>	<u>0</u>	<u>0</u>	<u>8,063</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(2) Consulting Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physical Contingency	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total (2)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(3) Administration Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Capital Economic Cost (1)+(2)+(3)	<u>0</u>	<u>0</u>	<u>0</u>	<u>8,063</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Operational Economic Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(4) Personnel Expenses	283	283	283	283	283	283	283	283	283	283	283	283	283	283
(5) Maintenance Expenses	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749	1,749
(6) Other Administrative Expenses	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539
Total Operational Economic Cost (4)+(5)+(6)	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Economic Cost 1+2	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>12,633</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>	<u>4,570</u>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Cash from Operational Activities	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>	<u>74,456</u>	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>	<u>82,519</u>