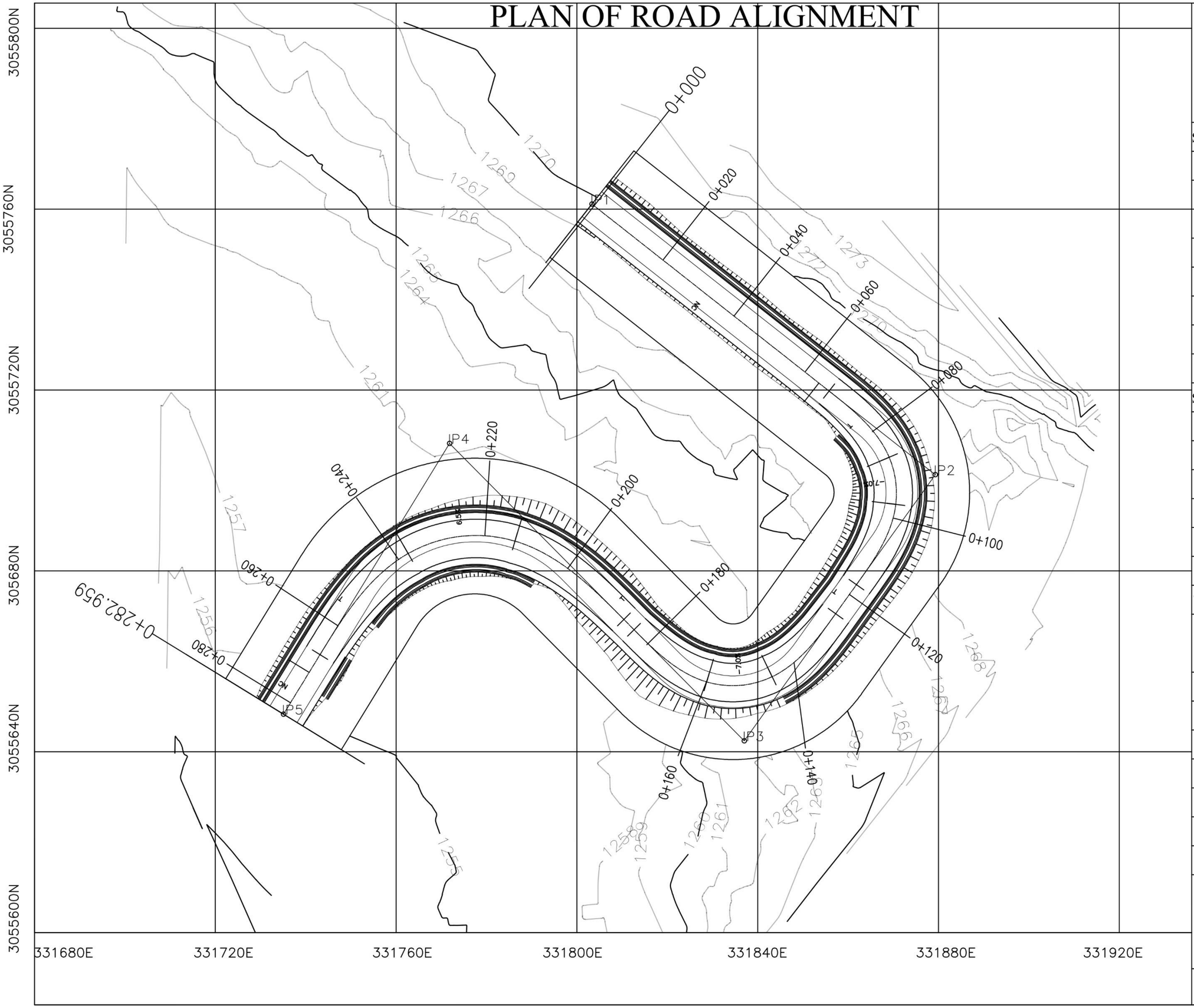
PLAN OF ROAD ALIGNMENT



N

S.N.	LEGENDS	SYMBOL
1.	RIGHT OF WAY	
2.	ROAD EDGE	
3.	CENTRE LINE	
4.	MINOR CONTOUR	
5.	MAJOR CONTOUR	
6.	SHOULDER	
7.	DRAINAGE	

S.N.	NORTHING	EASTING	RADIUS
1	3055760.352	331803.352	0
2	3055700.548	331879.316	20
3	3055641.68	331837.058	20
4	3055707.465	331771.848	30
5	3055647.599	331735.123	0

TITLE:PLAN OF ROAD ALIGNMENT

SUBMITTED BY: SARITA SAPKOTA

ROLL NO: 44

SUBMITTED TO: RAJU BHELE

DEPT. OF CIVIL ENGINEERING

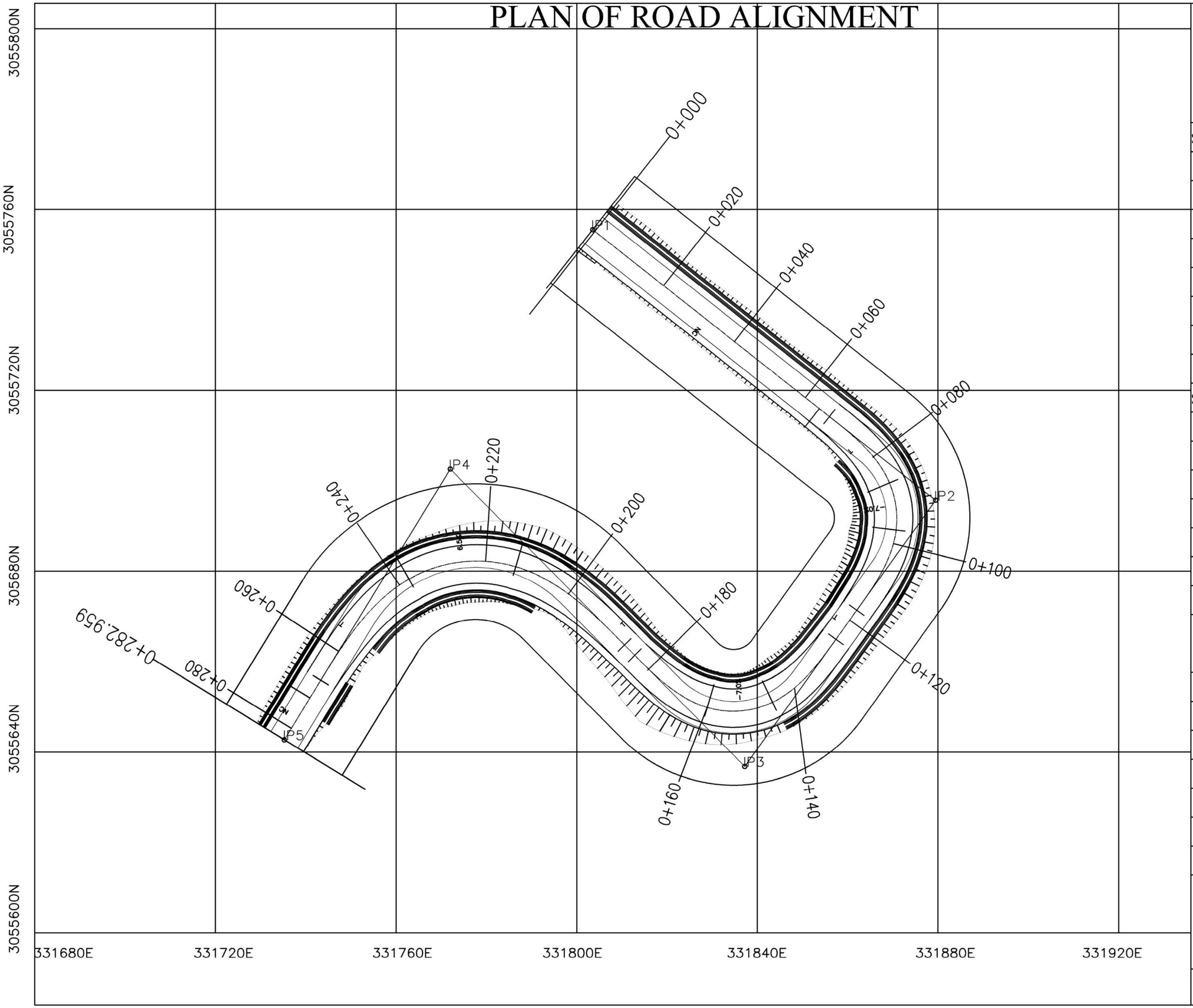
KATHMANDU UNIVERSITY

SCALE: 1:800

0 4.8 24 48

SHEET NO: 1

PLAN OF ROAD ALIGNMENT



N

S.N.	LEGENDS	SYMBOL
1.	RIGHT OF WAY	
2.	ROAD EDGE	
3.	CENTRE LINE	
4.	MINOR CONTOUR	
5.	MAJOR CONTOUR	
6.	SHOULDER	
7.	DRAINAGE	

S.N.	NORTHING	EASTING	RADIUS
1	3055760.352	331803.352	0
2	3055700.548	331879.316	20
3	3055641.68	331837.058	20
4	3055707.465	331771.848	30
5	3055647.599	331735.123	0

TITLE:PLAN OF ROAD ALIGNMENT

SUBMITTED BY: SARITA SAPKOTA

ROLL NO: 44

SUBMITTED TO: RAJU BHELE

DEPT. OF CIVIL ENGINEERING

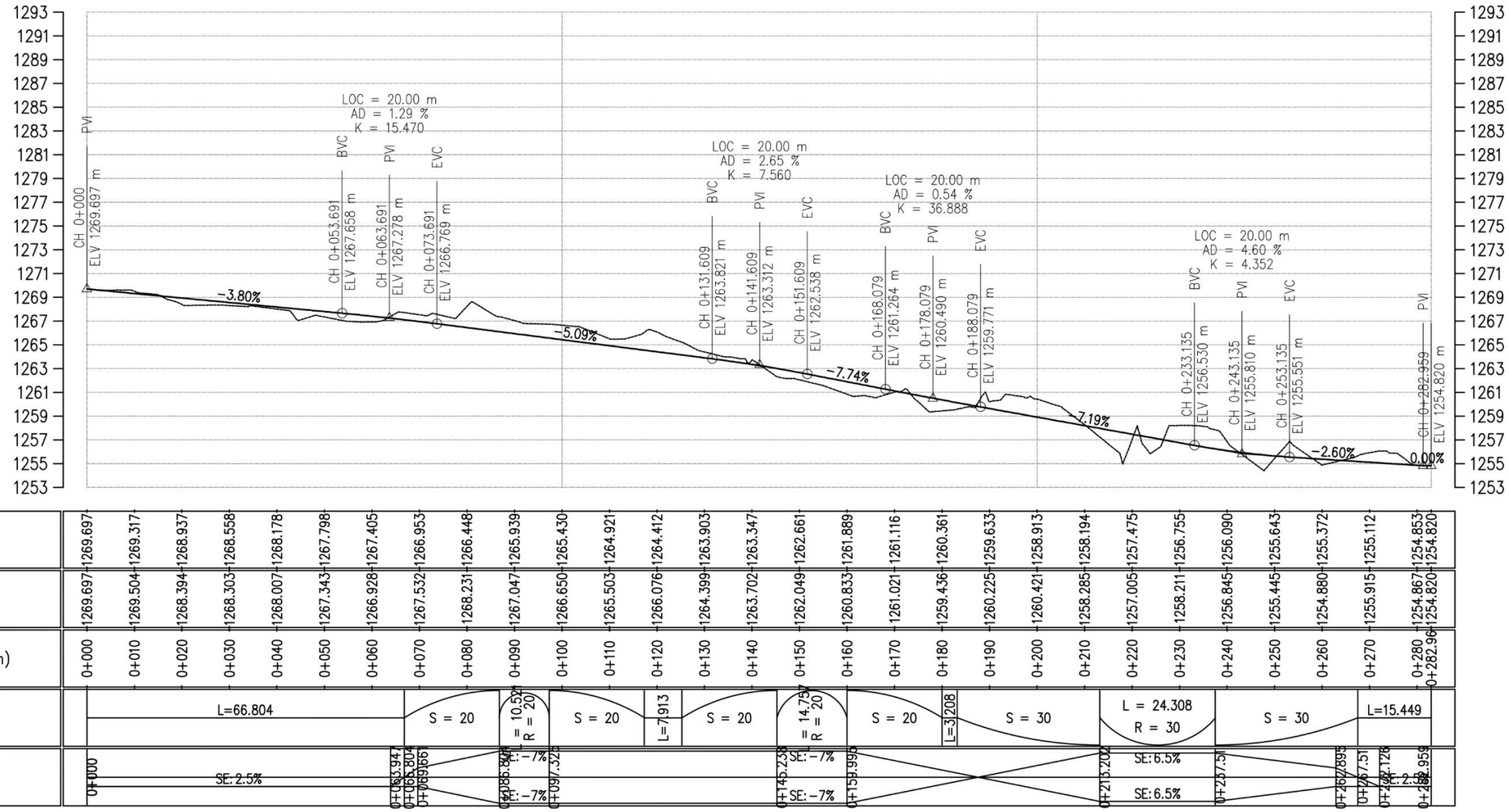
KATHMANDU UNIVERSITY

SCALE: 1:800

0 4.8 24 48

SHEET NO: 1

L–SECTION OF ROAD ALIGNMENT



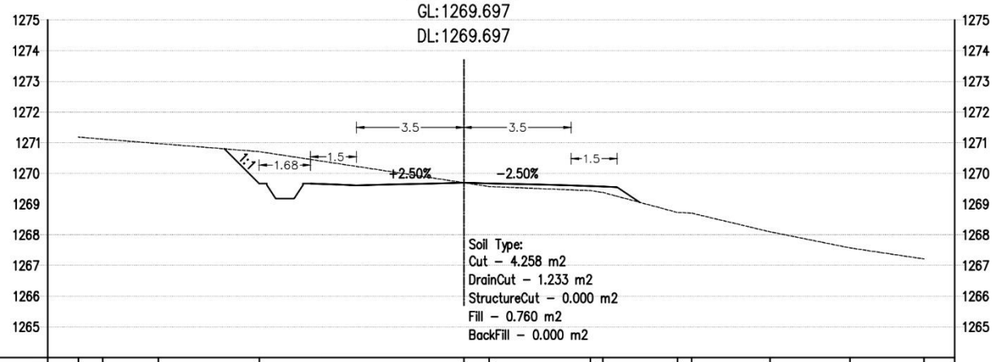
CHAINAGE : 0+000 – 0+282.959

IP No.	CO–ORDINATES(m)		WCB (D–M–S)	DIST. (m)	DEF. ANG. (D–M–S)	TAN. LEN. (m)	SIMPLE CURVE DATA			CHAINAGE			
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP
1	331803.352	3055760.413	328–14–27.31	0.000	00–00–0.00	0.000	0.000	0.000	0.000	0+000.000	0+000.000	0+000.000	0+000.000
2	331879.316	3055700.548	215–40–35.07	96.718	87–26–7.76	29.914	20.000	8.815	10.521	0+086.804	0+092.065	0+097.325	0+096.718
3	331837.058	3055641.688	315–14–51.20	72.458	99–34–16.13	34.632	20.000	12.256	14.757	0+145.238	0+152.616	0+159.995	0+159.869
4	331771.848	3055707.465	211–31–36.63	92.623	103–43–14.57	54.784	30.000	20.583	24.308	0+213.202	0+225.356	0+237.510	0+237.986

SUBMITTED BY: SARITA SAPKOTA	HORIZONTAL SCALE SCALE: 1:1000 0 8 16 24 32 40 80m	VERTICAL SCALE SCALE: 1:400 0 3.2 6.4 9.6 12.8 16 32m	TITLE: L- SECTION
SUBMITTED TO: RAJU BHELE			DATE OF SUBMISSION: 7 DECEMBER, 2024
DEPARTMENT OF CIVIL ENGINEERING			ROLL NO: 44 / SHEET NO: 1

Ch: 0+000

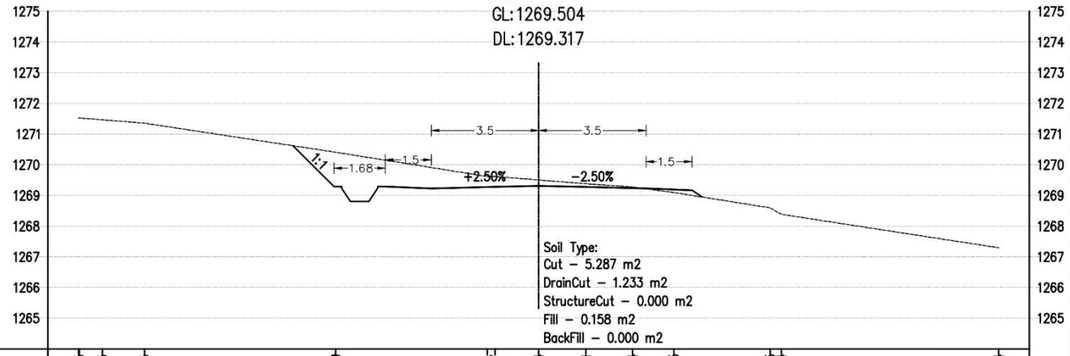
GL:1269.697
DL:1269.697



Existing RL(m)	1271.185	1271.117	1270.973	1270.709	1269.697	1269.572	1269.438	1269.379	1268.725	1268.706	1268.097	1267.573	1267.212
Partial Dist(m)	-12.565	-11.768	-9.962	-6.666	0.000	0.823	4.128	4.533	6.972	7.424	9.982	12.586	15.000

Ch: 0+010

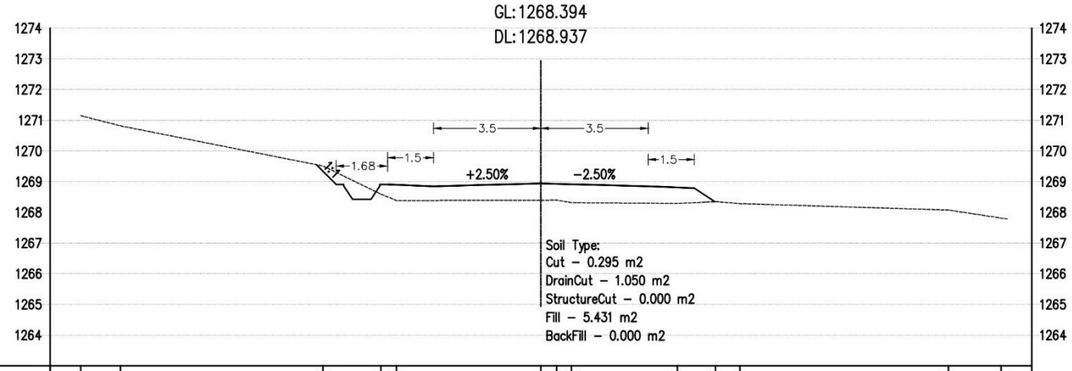
GL:1269.504
DL:1269.317



Existing RL(m)	1271.525	1271.465	1271.355	1270.409	1269.617	1269.504	1269.381	1269.274	1269.095	1268.595	1268.384	1267.294
Partial Dist(m)	-14.977	-14.225	-12.853	-6.621	-1.421	0.000	1.542	3.064	4.407	7.548	7.916	15.000

Ch: 0+020

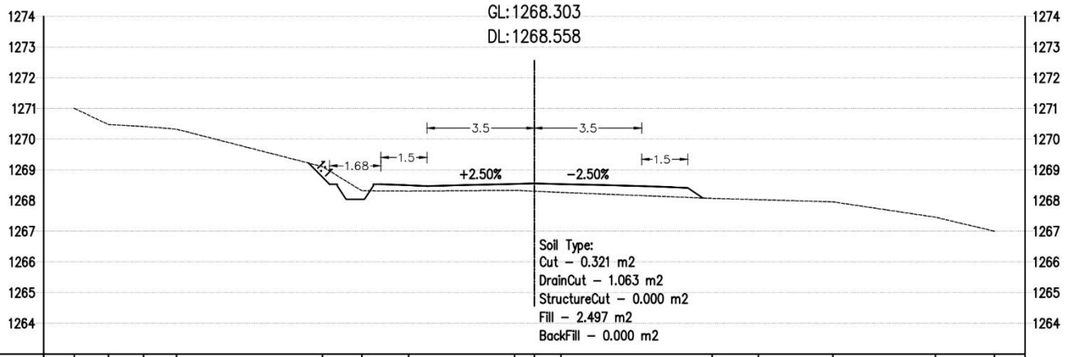
GL:1268.394
DL:1268.937



Existing RL(m)	1271.146	1270.816	1269.509	1268.592	1268.383	1268.394	1268.395	1268.313	1268.288	1268.346	1268.284	1268.074	1268.024
Partial Dist(m)	-15.000	-13.707	-7.105	-5.219	-4.708	0.000	0.509	0.993	4.446	5.695	6.485	13.286	15.000

Ch: 0+030

GL:1268.303
DL:1268.558



Existing RL(m)	1270.545	1270.476	1270.413	1270.324	1269.105	1268.318	1268.306	1268.332	1268.303	1268.264	1268.069	1268.028	1267.957	1267.456	1267.220
Partial Dist(m)	-15.000	-13.882	-12.744	-11.666	-6.909	-5.623	-4.097	-0.645	0.000	0.873	5.796	7.307	9.733	13.079	15.000

SUBMITTED BY: SARITA SAPKOTA

SUBMITTED TO: RAJU BHELE

DEPARTMENT OF CIVIL ENGINEERING

HORIZONTAL SCALE

SCALE: 1:200

0 1.2 2.4 3.6 4.8 6 12m

VERTICAL SCALE

SCALE: 1:200

0 1.2 2.4 3.6 4.8 6 12m

SN	LEGENDS	SYMBOL
1	DRAINAGE	

TITLE: CROSS SECTION

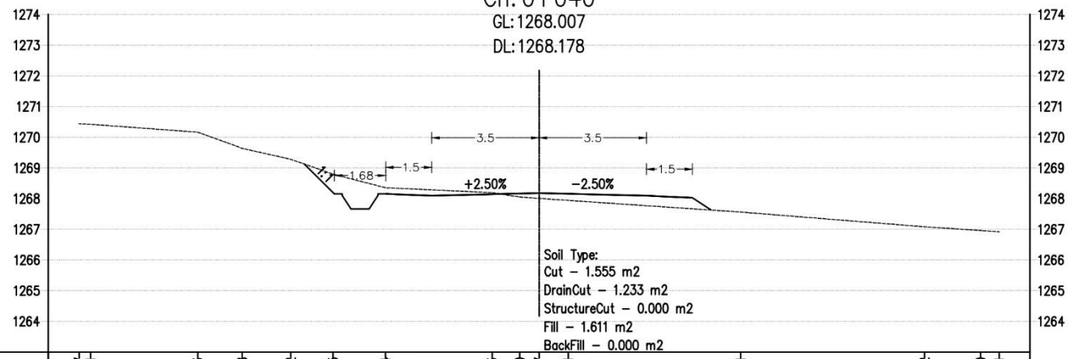
DATE OF SUBMISSION: 7,DECEMBER, 2024

ROLL NO: 44

SHEET NO: 1

Ch: 0+040

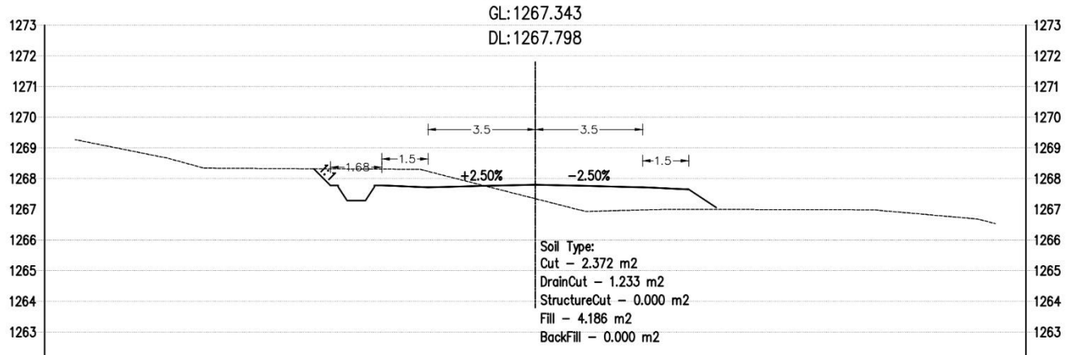
GL: 1268.007
DL: 1268.178



Existing RL(m)	1270.437	1270.421	1270.163	1269.638	1269.282	1268.795	1268.354	1268.193	1268.050	1268.007	1267.941	1267.561	1267.082	1266.960	1266.921
Partial Dist(m)	−15.000	−14.625	−11.125	−9.683	−8.101	−6.715	−5.012	−1.532	−0.631	0.000	0.948	6.571	12.562	14.398	15.000

Ch: 0+050

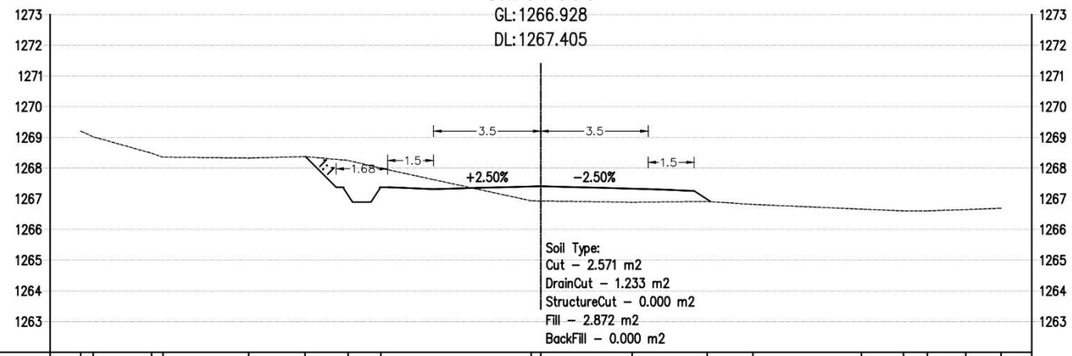
GL: 1267.343
DL: 1267.798



Existing RL(m)	1269.266	1268.662	1268.339	1268.321	1268.298	1267.986	1267.343	1266.927	1266.998	1267.133	1267.146	1267.124	1267.095		
Partial Dist(m)	−15.000	−11.977	−10.806	−7.977	−3.747	−2.535	0.000	1.641	4.322	8.182	13.416	13.835	15.000		

Ch: 0+060

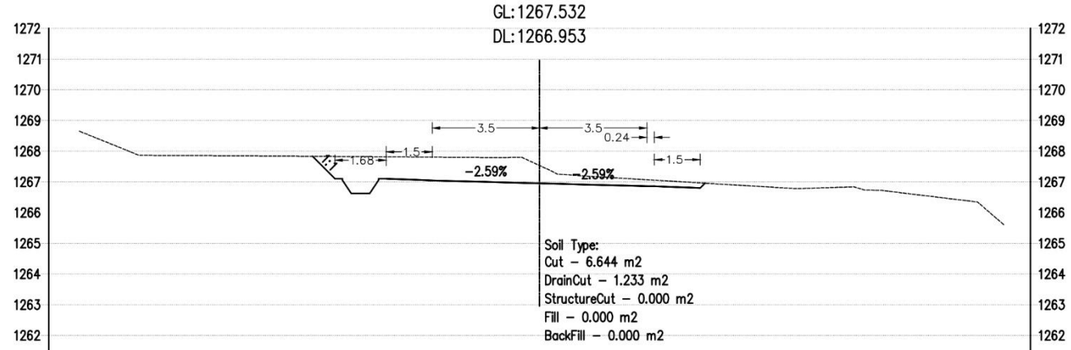
GL: 1266.928
DL: 1267.405



Existing RL(m)	1269.202	1269.020	1268.484	1268.355	1268.325	1268.373	1268.249	1267.996	1266.932	1266.928	1266.885	1266.913	1266.815	1266.662	1266.606	1266.607	1266.647	1266.690
Partial Dist(m)	−15.000	−14.599	−12.693	−12.322	−9.524	−7.686	−6.283	−5.220	−0.314	0.000	2.976	5.423	6.911	10.447	11.818	12.599	13.855	15.000

Ch: 0+070

GL: 1267.532
DL: 1266.953



Existing RL(m)	1268.642	1267.862	1267.858	1267.841	1267.791	1267.795	1267.531	1267.252	1267.179	1266.778	1266.837	1266.733	1266.719	1266.889	1266.891
Partial Dist(m)	−14.983	−13.053	−11.592	−8.612	−1.603	−0.573	0.001	0.569	1.658	8.378	10.233	10.603	11.167	14.661	15.000

SUBMITTED BY: SARITA SAPKOTA	HORIZONTAL SCALE	VERTICAL SCALE	SN	LEGENDS	SYMBOL
SUBMITTED TO: RAJU BHELE	SCALE: 1:200	SCALE: 1:200	1	DRAINAGE	
DEPARTMENT OF CIVIL ENGINEERING	0 1.2 2.4 3.6 4.8 6 12m	0 1.2 2.4 3.6 4.8 6 12m			

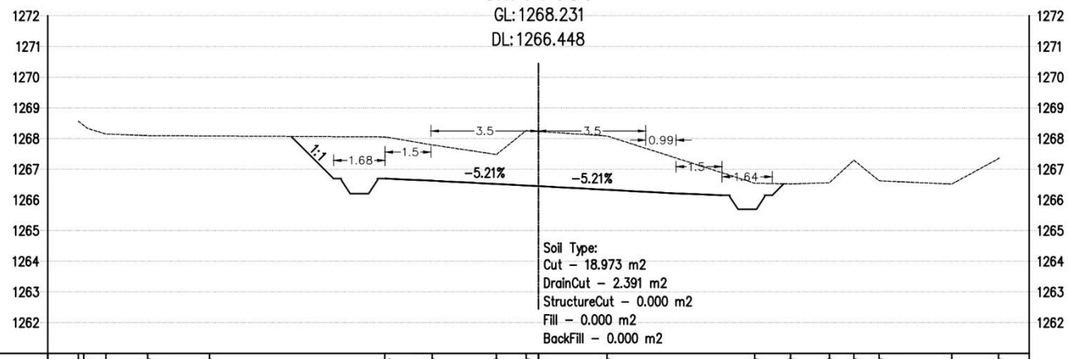
TITLE: CROSS SECTION

DATE OF SUBMISSION: 7,DECEMBER, 2024

ROLL NO: 44 | SHEET NO: 2

Ch: 0+080

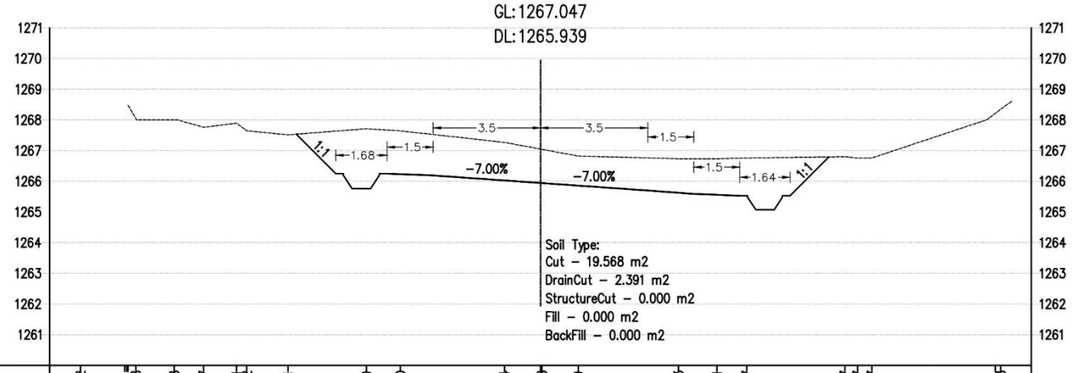
GL: 1268.231
DL: 1266.448



Existing RL(m)	1268.154	1268.146	1268.095	1268.084	1268.052	1267.794	1267.479	1268.258	1268.231	1268.085	1266.545	1266.520	1266.560	1267.293	1266.623	1266.515	1266.846
Partial Dist(m)	-14.817	-14.101	-12.740	-10.722	-5.009	-3.463	-1.369	-0.401	0.003	2.234	7.054	8.219	9.489	10.286	11.111	13.477	15.000

Ch: 0+090

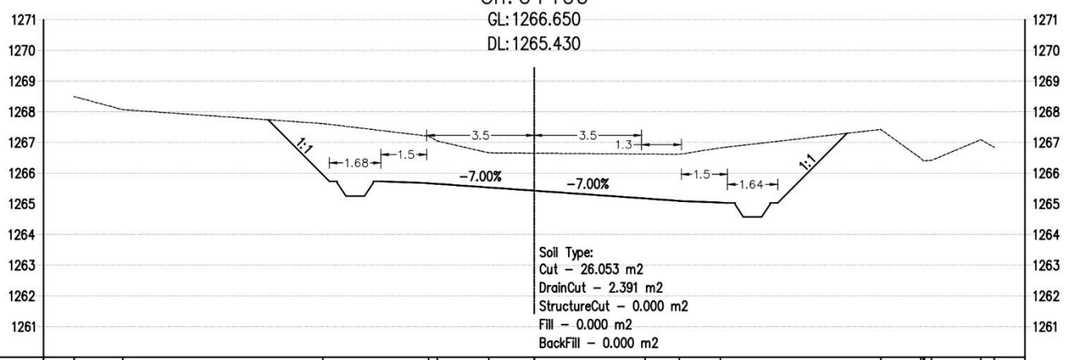
GL: 1267.047
DL: 1265.939



Existing RL(m)	1266.732	1267.398	1267.058	1267.757	1267.891	1267.642	1267.511	1267.710	1267.640	1267.264	1267.039	1266.819	1266.733	1266.731	1266.757	1266.797	1266.757	1266.757	1266.576
Partial Dist(m)	-15.000	-13.196	-11.944	-10.980	-9.904	-9.576	-8.232	-5.678	-4.568	-1.176	0.046	1.235	4.503	5.755	6.721	9.923	10.341	10.803	15.000

Ch: 0+100

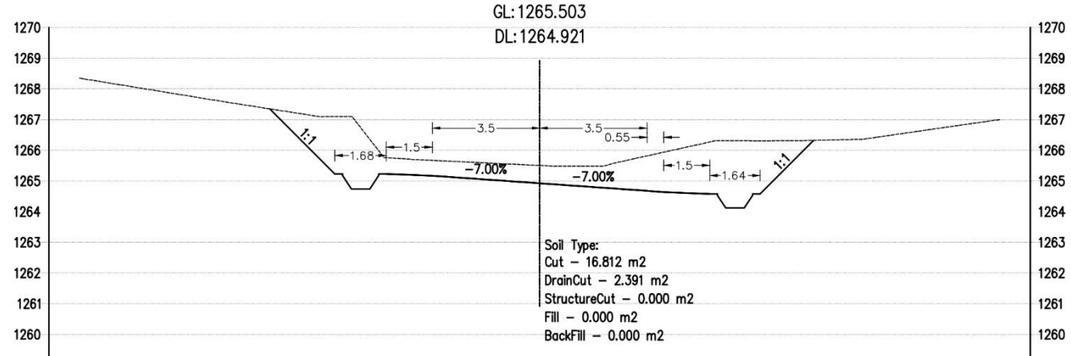
GL: 1266.650
DL: 1265.430



Existing RL(m)	1268.495	1268.069	1267.615	1267.047	1266.662	1266.650	1266.622	1266.612	1266.826	1267.423	1266.416	1267.089	1266.843
Partial Dist(m)	-15.000	-13.416	-6.886	-3.155	-1.480	0.005	3.617	4.733	6.071	11.299	12.955	14.557	15.000

Ch: 0+110

GL: 1265.503
DL: 1264.921



Existing RL(m)	1267.985	1267.575	1267.093	1267.098	1265.763	1265.696	1265.503	1265.481	1265.564	1266.308	1266.305	1266.313	1266.355	1266.539
Partial Dist(m)	-15.000	-10.263	-7.167	-6.117	-5.077	-4.086	0.002	0.479	2.364	5.729	7.498	8.543	10.518	15.000

SUBMITTED BY: SARITA SAPKOTA

SUBMITTED TO: RAJU BHELE

DEPARTMENT OF CIVIL ENGINEERING

HORIZONTAL SCALE

SCALE: 1:200

0 1.2 2.4 3.6 4.8 6 12m

VERTICAL SCALE

SCALE: 1:200

0 1.2 2.4 3.6 4.8 6 12m

SN	LEGENDS	SYMBOL
1	DRAINAGE	

TITLE: CROSS SECTION

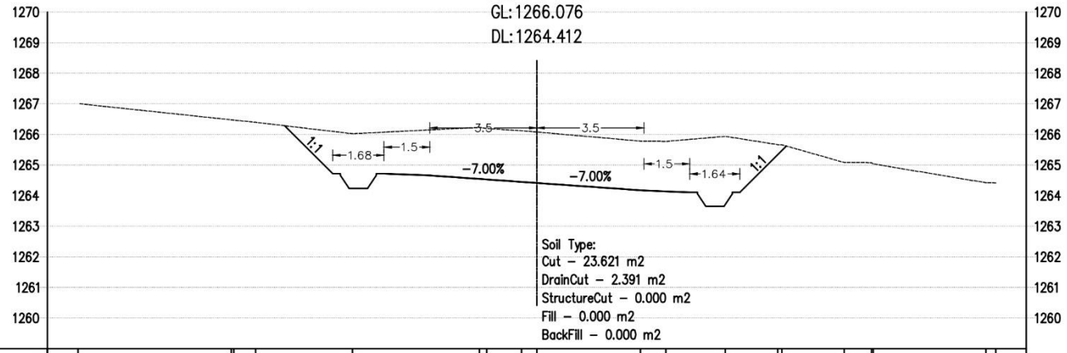
DATE OF SUBMISSION: 7,DECEMBER, 2024

ROLL NO: 44

SHEET NO: 3

Ch: 0+120

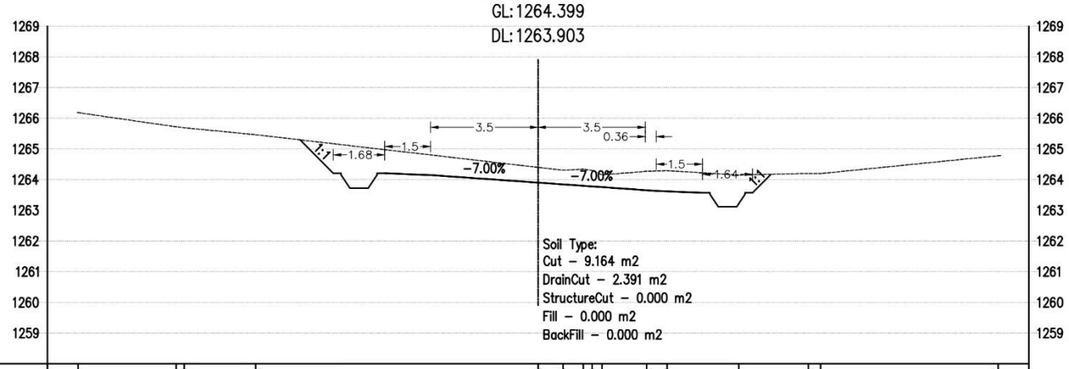
GL:1266.076
DL:1264.412



Existing RL(m)	1266.741	1266.467	1266.395	1266.022	1266.193	1266.120	1266.076	1265.782	1265.773	1265.937	1265.660	1265.083	1265.035	1264.420	1264.415
Partial Dist(m)	-15.000	-9.913	-9.195	-6.033	-1.641	-0.502	0.000	3.384	4.219	6.157	8.007	10.043	10.997	14.883	15.000

Ch: 0+130

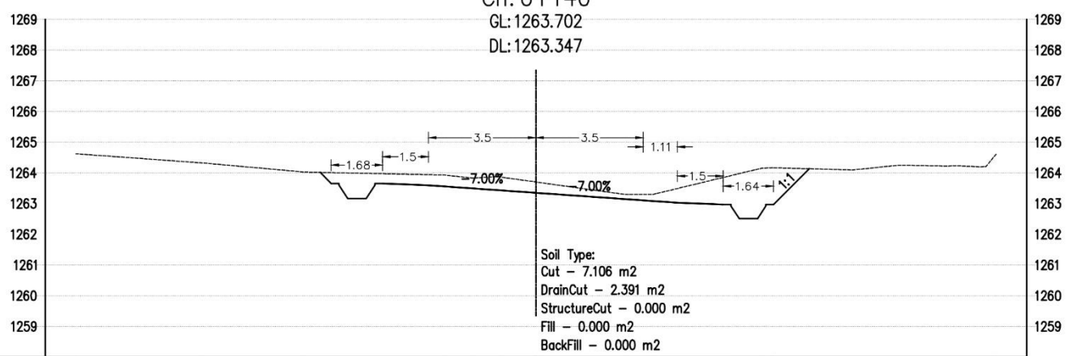
GL:1264.399
DL:1263.903



Existing RL(m)	1265.881	1265.690	1265.462	1264.398	1264.304	1264.300	1264.151	1264.272	1264.289	1264.149	1264.202	1264.196	1264.277
Partial Dist(m)	-15.000	-11.539	-9.209	0.001	0.815	1.763	2.087	3.541	4.209	6.544	8.811	9.212	15.000

Ch: 0+140

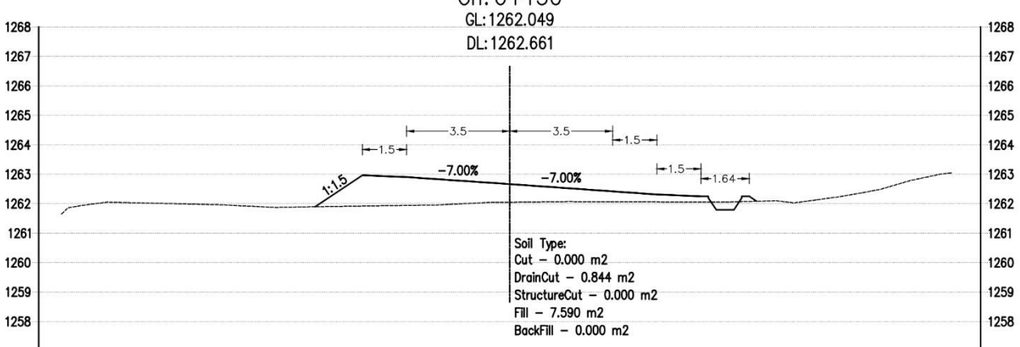
GL:1263.702
DL:1263.347



Existing RL(m)	1264.621	1264.321	1264.024	1263.929	1263.829	1263.861	1263.701	1263.300	1263.299	1264.166	1264.094	1264.248	1264.222	1264.229	1264.195	1264.189
Partial Dist(m)	-15.000	-10.852	-7.531	-2.974	-2.082	-1.145	0.003	2.878	3.817	7.696	10.336	11.901	13.322	13.764	14.469	15.000

Ch: 0+150

GL:1262.049
DL:1262.661



Existing RL(m)	1261.984	1261.961	1262.052	1261.964	1261.872	1261.905	1261.954	1262.043	1262.050	1262.069	1262.053	1262.098	1262.026	1262.225	1262.476	1262.779	1263.005	1263.041
Partial Dist(m)	-14.867	-14.377	-13.674	-9.865	-7.973	-6.068	-2.474	-0.676	0.046	2.008	7.267	9.064	9.667	11.134	12.569	13.592	14.650	15.000

SUBMITTED BY: SARITA SAPKOTA

SUBMITTED TO: RAJU BHELE

DEPARTMENT OF CIVIL ENGINEERING

HORIZONTAL SCALE
SCALE: 1:200
0 1.2 2.4 3.6 4.8 6 12m

VERTICAL SCALE
SCALE: 1:200
0 1.2 2.4 3.6 4.8 6 12m

SN	LEGENDS	SYMBOL
1	DRAINAGE	

TITLE: CROSS SECTION

DATE OF SUBMISSION: 7,DECEMBER, 2024

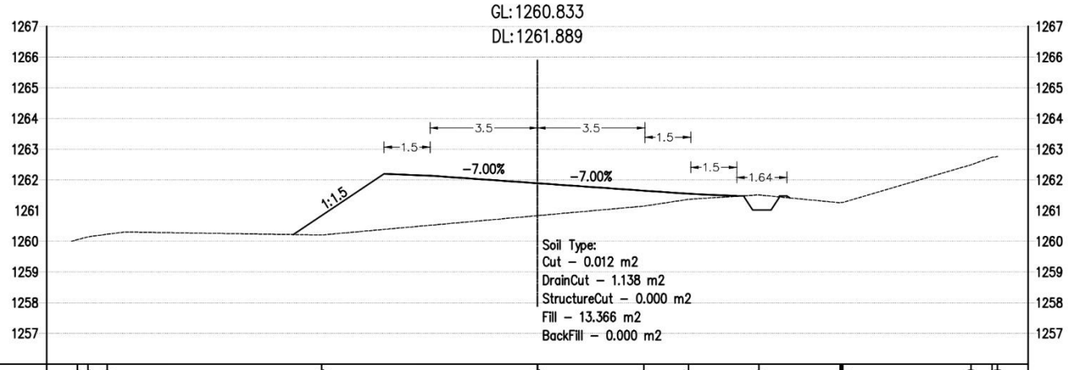
ROLL NO: 44

SHEET NO: 4

Ch: 0+160

GL: 1260.833

DL: 1261.889

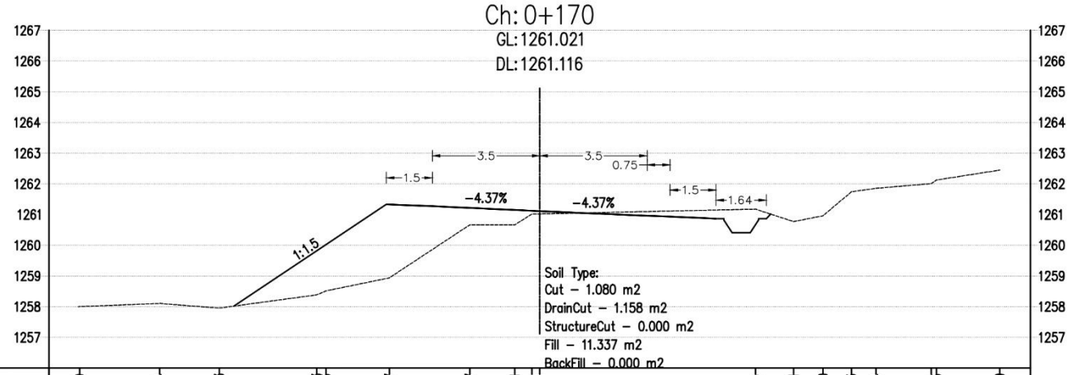


Existing RL(m)	1260.144	1260.145	1260.310	1260.204	1260.834	1261.144	1261.367	1261.509	1261.261	1262.489	1262.760			
Partial Dist(m)	-15.000	-14.651	-14.029	-7.034	0.007	3.470	4.929	7.217	9.954	14.134	15.000			

Ch: 0+170

GL: 1261.021

DL: 1261.116

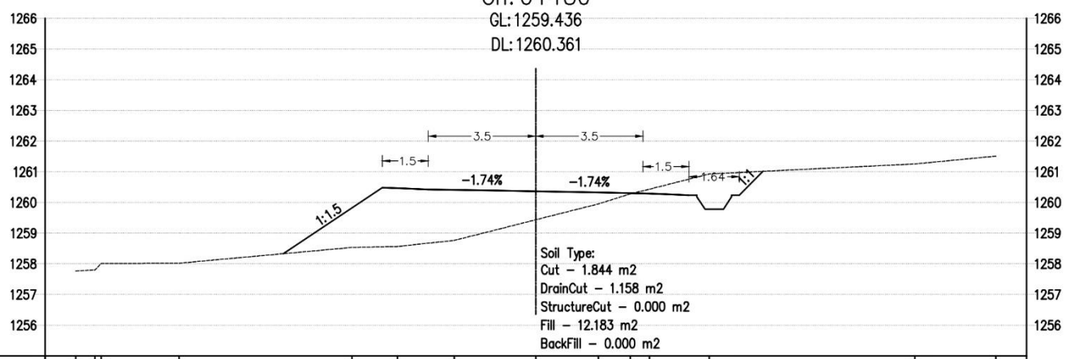


Existing RL(m)	1258.129	1258.104	1257.953	1258.383	1258.513	1258.937	1260.667	1260.661	1261.021	1261.176	1260.771	1260.960	1261.743	1261.854	1262.125	1262.449
Partial Dist(m)	-15.000	-12.397	-10.448	-7.271	-6.964	-4.906	-2.278	-0.817	0.000	7.036	8.278	9.232	10.165	10.959	12.938	15.000

Ch: 0+180

GL: 1259.436

DL: 1260.361

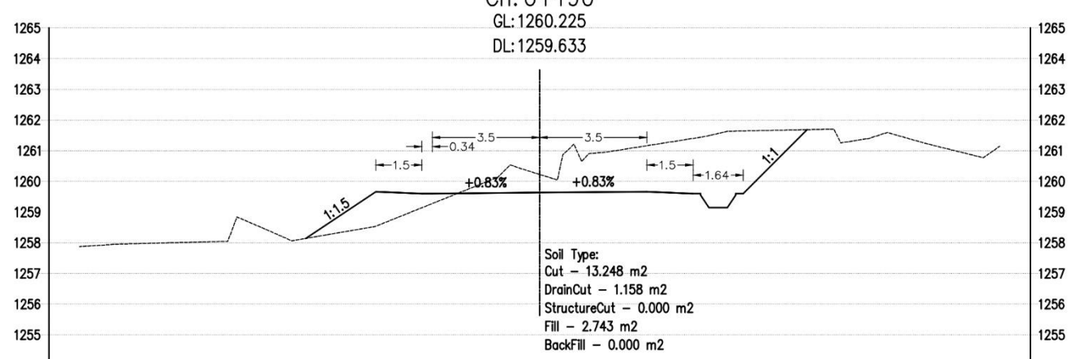


Existing RL(m)	1257.765	1258.009	1258.021	1258.535	1258.566	1258.763	1259.436	1259.952	1260.282	1260.432	1260.929	1261.255	1261.510
Partial Dist(m)	-15.000	-14.172	-11.630	-5.990	-4.512	-2.657	0.000	2.039	3.082	3.707	5.660	12.360	15.000

Ch: 0+190

GL: 1260.225

DL: 1259.633

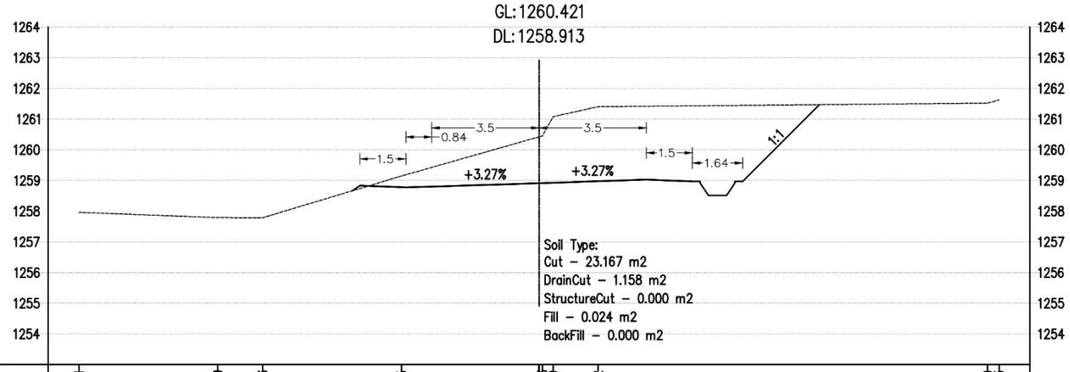


Existing RL(m)	1257.875	1257.917	1257.951	1258.046	1258.842	1258.063	1258.527	1260.134	1260.536	1260.409	1260.225	1260.867	1260.903	1260.956	1261.460	1261.633	1261.254	1261.400	1261.595	1261.233	1260.771	1261.145
Partial Dist(m)	-15.000	-14.277	-13.870	-10.169	-9.868	-8.078	-5.369	-1.364	-0.959	-0.588	0.000	0.755	1.607	2.189	5.380	6.132	9.817	10.738	11.338	12.592	14.463	15.000

SUBMITTED BY: SARITA SAPKOTA	HORIZONTAL SCALE SCALE: 1:200 0 1.2 2.4 3.6 4.8 6 12m	VERTICAL SCALE SCALE: 1:200 0 1.2 2.4 3.6 4.8 6 12m	SN | LEGENDS | SYMBOL 1 | DRAINAGE	TITLE: CROSS SECTION	
SUBMITTED TO: RAJU BHELE				DATE OF SUBMISSION: 7,DECEMBER, 2024	
DEPARTMENT OF CIVIL ENGINEERING				ROLL NO: 44	SHEET NO: 5

Ch: 0+200

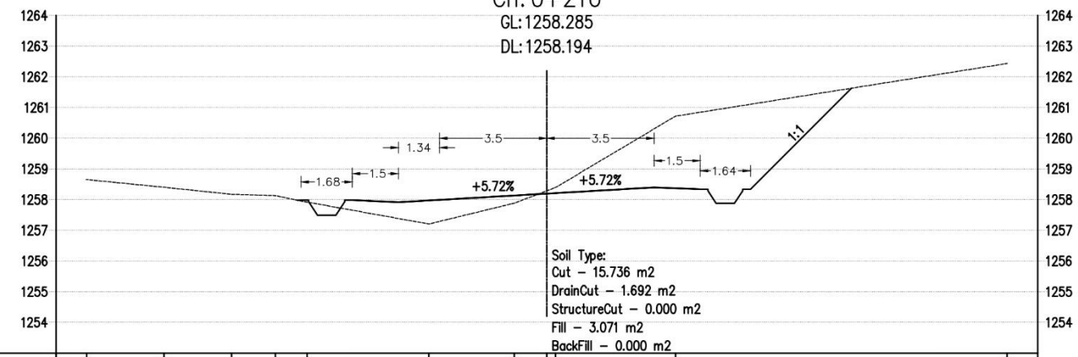
GL: 1260.421
DL: 1258.913



Existing RL(m)	1257.961	1257.789	1257.786	1259.145	1260.453	1261.079	1261.402	1261.520	1261.623
Partial Dist(m)	-15.000	-10.479	-9.012	-4.484	0.112	0.480	1.921	14.626	15.000

Ch: 0+210

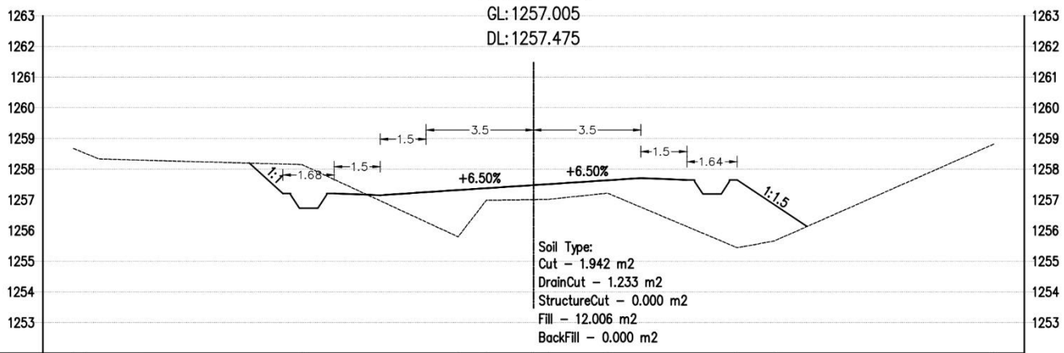
GL: 1258.285
DL: 1258.194



Existing RL(m)	1257.905	1257.963	1258.064	1258.129	1257.624	1257.204	1257.883	1258.394	1260.717	1262.432
Partial Dist(m)	-15.000	-12.482	-10.283	-8.847	-7.820	-3.848	-1.059	0.287	4.195	15.000

Ch: 0+220

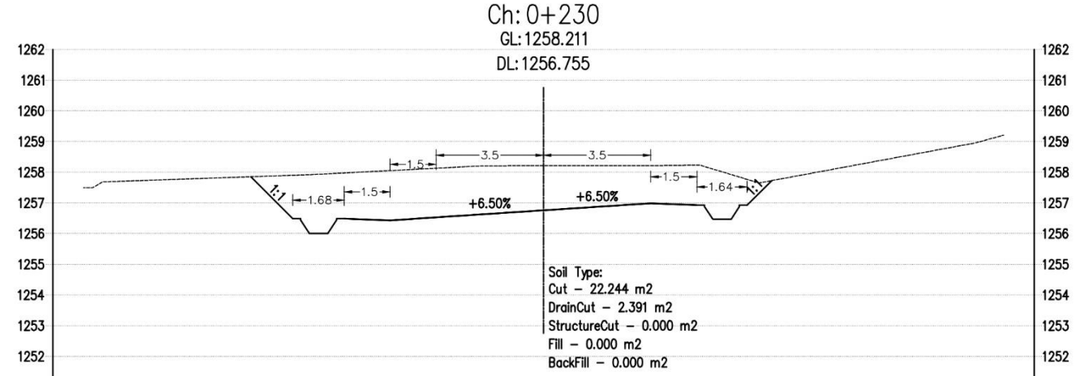
GL: 1257.005
DL: 1257.475



Existing RL(m)	1257.820	1257.839	1258.146	1255.793	1256.982	1257.005	1257.012	1257.215	1255.436	1255.656	1258.811
Partial Dist(m)	-15.000	-14.575	-7.551	-2.461	-1.540	0.000	0.480	2.413	6.645	7.843	15.000

Ch: 0+230

GL: 1258.211
DL: 1256.755



Existing RL(m)	1257.495	1257.494	1257.885	1257.748	1257.923	1258.208	1258.211	1258.217	1258.234	1257.649	1258.952	1259.205
Partial Dist(m)	-15.000	-14.575	-14.368	-12.536	-7.491	-1.960	0.000	3.889	5.088	7.024	14.070	15.000

SUBMITTED BY: SARITA SAPKOTA

SUBMITTED TO: RAJU BHELE

DEPARTMENT OF CIVIL ENGINEERING

HORIZONTAL SCALE

SCALE: 1:200

0 1.2 2.4 3.6 4.8 6 12m

VERTICAL SCALE

SCALE: 1:200

0 1.2 2.4 3.6 4.8 6 12m

SN	LEGENDS	SYMBOL
1	DRAINAGE	

TITLE: CROSS SECTION

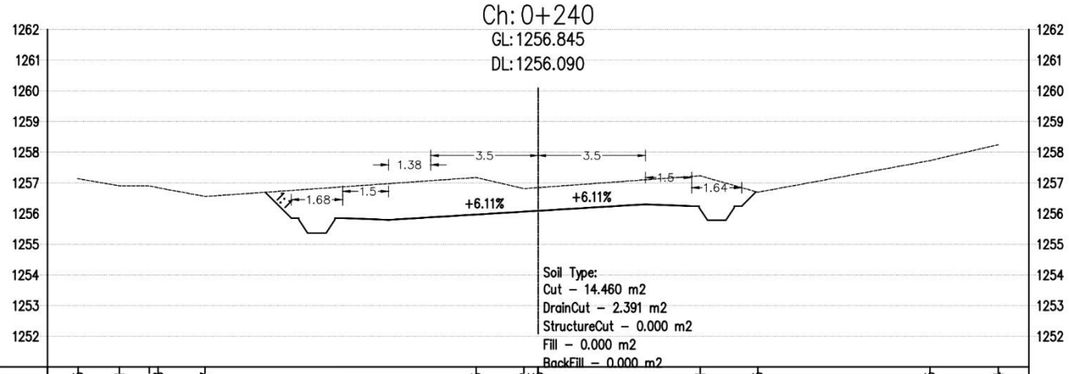
DATE OF SUBMISSION: 7,DECEMBER, 2024

ROLL NO: 44

SHEET NO: 6

Ch: 0+240

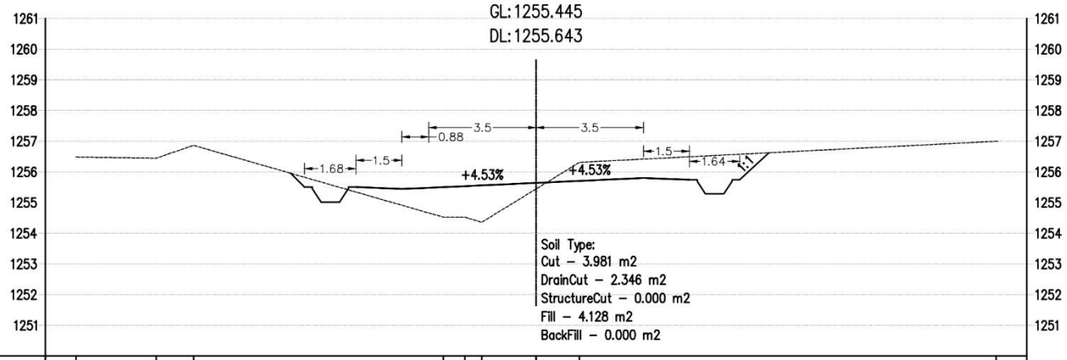
GL: 1256.845
DL: 1256.090



Existing RL(m)	1256.895	1256.901	1257.008	1256.557	1257.175	1256.812	1256.845	1257.231	1256.695	1257.725	1258.244
Partial Dist(m)	-15.000	-13.654	-12.392	-10.856	-2.021	-0.461	0.000	5.281	7.159	12.772	15.000

Ch: 0+250

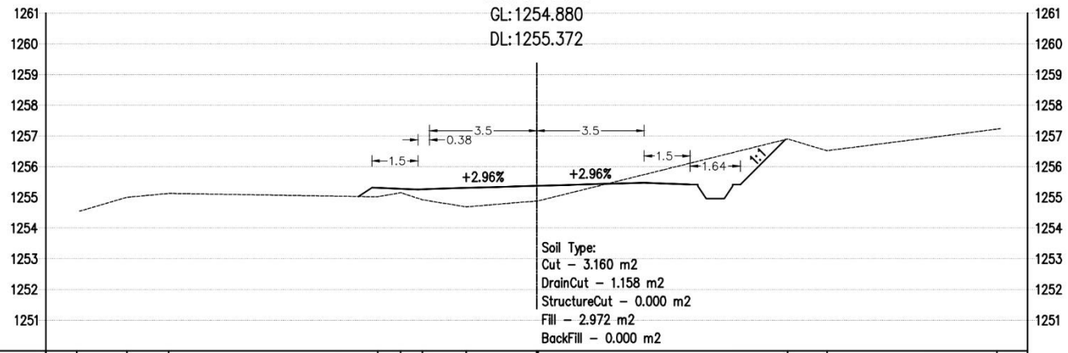
GL: 1255.445
DL: 1255.643



Existing RL(m)	1256.484	1256.447	1256.865	1254.524	1254.524	1254.358	1255.445	1256.312	1256.583
Partial Dist(m)	-15.000	-12.390	-11.171	-3.022	-2.318	-1.775	0.000	1.415	15.000

Ch: 0+260

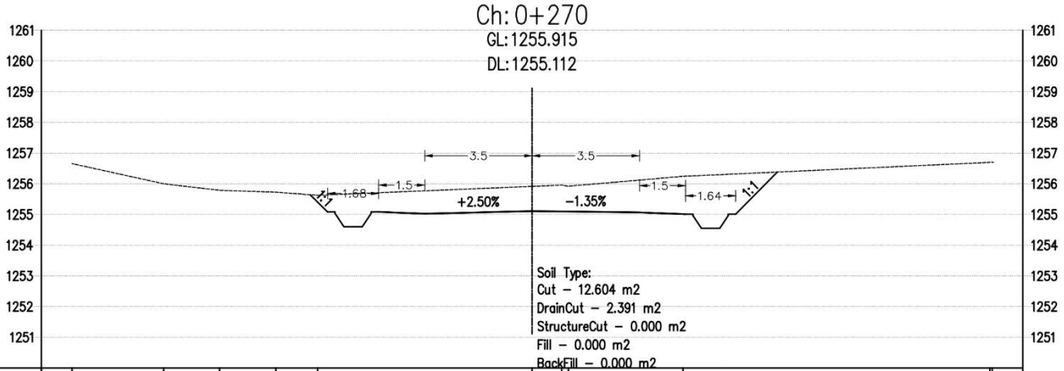
GL: 1254.880
DL: 1255.372



Existing RL(m)	1255.590	1255.210	1255.128	1255.016	1255.152	1254.919	1254.690	1254.885	1256.900	1256.520	1256.859
Partial Dist(m)	-15.000	-13.361	-12.002	-5.185	-4.438	-3.731	-2.296	0.050	8.180	9.466	15.000

Ch: 0+270

GL: 1255.915
DL: 1255.112



Existing RL(m)	1255.986	1255.812	1255.786	1255.726	1255.627	1255.915	1255.921	1256.242	1256.371
Partial Dist(m)	-15.000	-12.012	-10.190	-8.359	-6.995	0.000	1.185	4.918	15.000

SUBMITTED BY: SARITA SAPKOTA

SUBMITTED TO: RAJU BHELE

DEPARTMENT OF CIVIL ENGINEERING

HORIZONTAL SCALE
SCALE: 1:200
0 1.2 2.4 3.6 4.8 6 12m

VERTICAL SCALE
SCALE: 1:200
0 1.2 2.4 3.6 4.8 6 12m

SN	LEGENDS	SYMBOL
1	DRAINAGE	

TITLE: CROSS SECTION

DATE OF SUBMISSION:7, DECEMBER, 2024

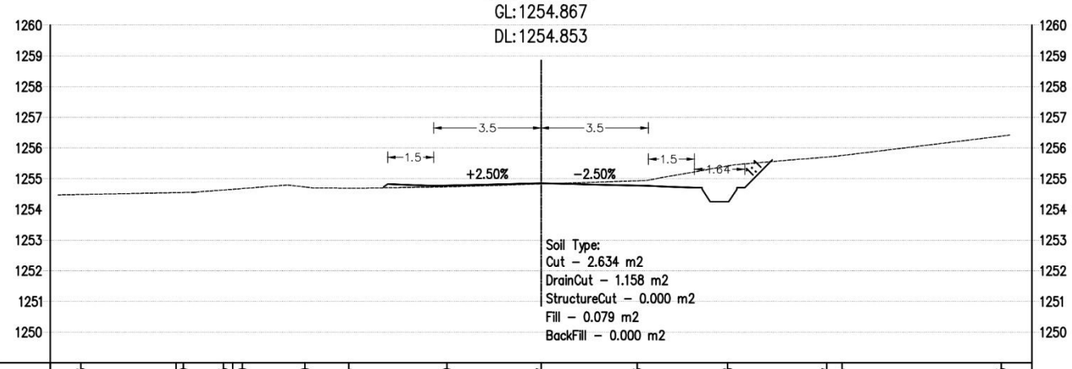
ROLL NO: 44

SHEET NO: 7

Ch: 0+280

GL:1254.867

DL:1254.853



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