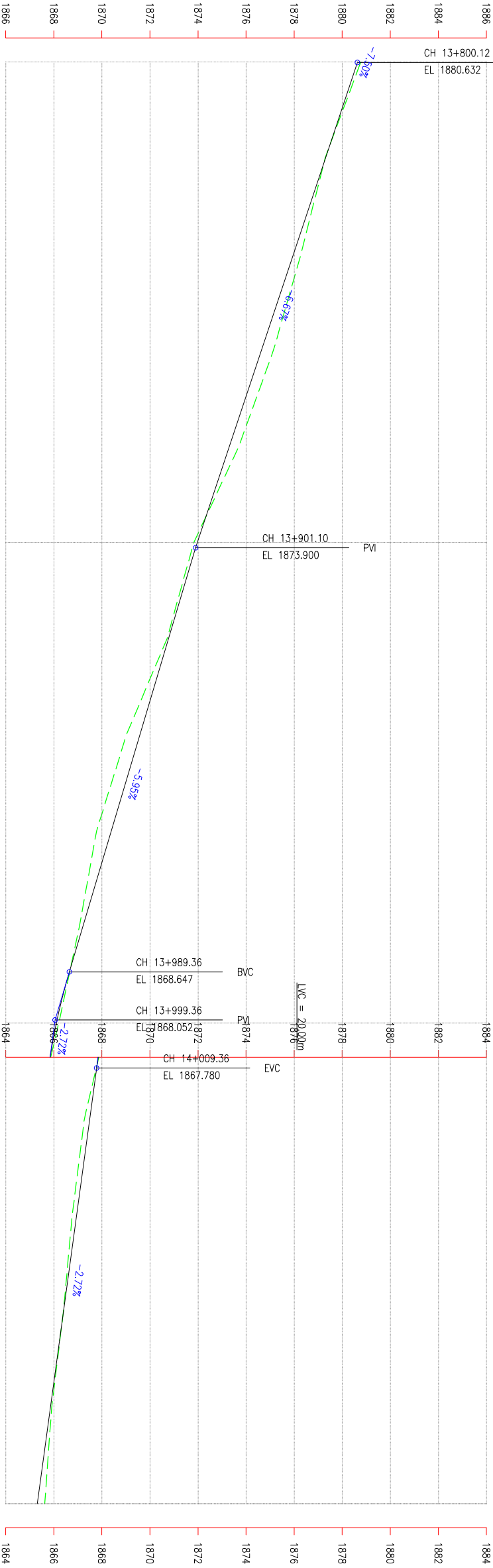
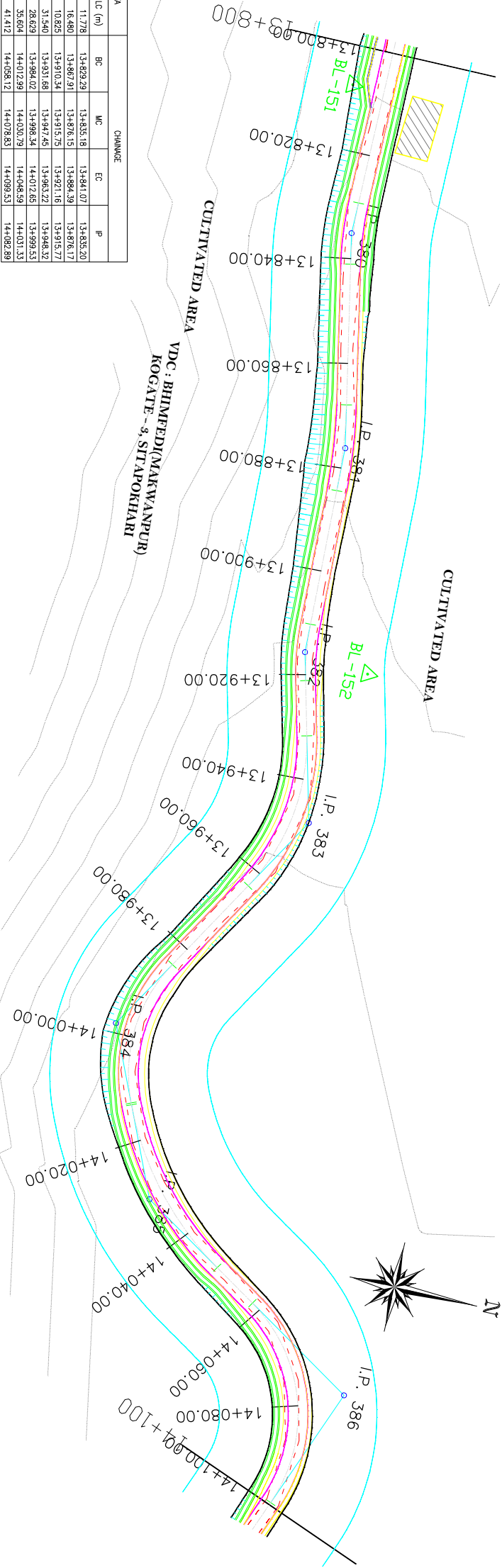


P.No	CO-ORDINATES(m)		WGS (0+M-S)	DST (m)	DEF. ANG (0+M-S)	TAL. LEN. (m)	SAMPLE CURVE DATA			CHAINAGE						
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	WC	EC	IP			
380	319475.250	3046584.750	78-45-00	57.469	11-14-49	5.908	60.000	0.290	11.778	13+829.29	13+835.18	13+841.07	13+835.20			
381	319515.469	3046592.750	88-11-35	41.007	09-26-32	8.259	100.000	0.340	16.480	13+867.91	13+876.15	13+884.39	13+876.17			
382	319555.094	3046594.000	75-47-26	39.645	12-24-16	5.434	50.000	0.294	10.825	13+910.34	13+915.75	13+921.16	13+915.77			
383	319586.688	3046602.000	120-58-10	32.591	46-10-39	16.641	40.000	3.324	31.540	13+931.68	13+947.45	13+963.22	13+948.32			
384	319632.094	3046574.750	66-17-32	52.955	54-40-38	15.510	30.000	3.772	28.629	13+984.02	13+998.34	14+012.65	13+999.53			
385	319653.406	3046588.500	32-17-37	34.198	33-59-57	18.343	60.000	2.741	35.604	14+012.99	14+030.79	14+046.59	14+031.33			
386	319691.531	3046633.000	111-22-56	52.643	79-06-27	24.770	30.000	8.805	41.412	14+058.12	14+078.83	14+098.53	14+082.89			



DESIGN LEVEL (m)	1880.641	1879.973	1879.307	1878.640	1877.973	1877.307	1876.640	1875.973	1875.307	1874.640	1873.973	1873.370	1872.775	1872.180	1871.585	1870.990	1870.395	1869.799	1869.204	1868.609	1868.105	1867.490	1866.857	1866.218	1865.585	1864.946	1864.313
EXISTING LEVEL (m)	1880.772	1880.030	1879.289	1878.786	1878.284	1877.713	1877.141	1876.421	1875.701	1874.764	1873.827	1873.268	1872.710	1871.866	1871.023	1870.402	1869.781	1869.420	1869.059	1868.633	1868.206	1867.737	1867.268	1866.766	1866.218	1865.583	1864.946
CHAINAGE (km)	13+800.00	13+810.00	13+820.00	13+830.00	13+840.00	13+850.00	13+860.00	13+870.00	13+880.00	13+890.00	13+900.00	13+910.00	13+920.00	13+930.00	13+940.00	13+950.00	13+960.00	13+970.00	13+980.00	13+990.00	14+000.00	14+010.00	14+020.00	14+030.00	14+040.00	14+050.00	14+060.00
HORIZONTAL ALIGNMENT	RIGHT	R=60.00		IP-380		R=100.00		IP-381		R=50.00		IP-382		R=40.00		IP-383		R=30.00		IP-384		R=60.00		IP-385		R=30.00	
	LEFT	R=60.00		IP-380		R=100.00		IP-381		R=50.00		IP-382		R=40.00		IP-383		R=30.00		IP-384		R=60.00		IP-385		R=30.00	



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KATHMANDU, NEPAL



BEAM-CADWATER
KATHMANDU

CONSULTANT:

PROJECT:

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

PLAN & PROFILES

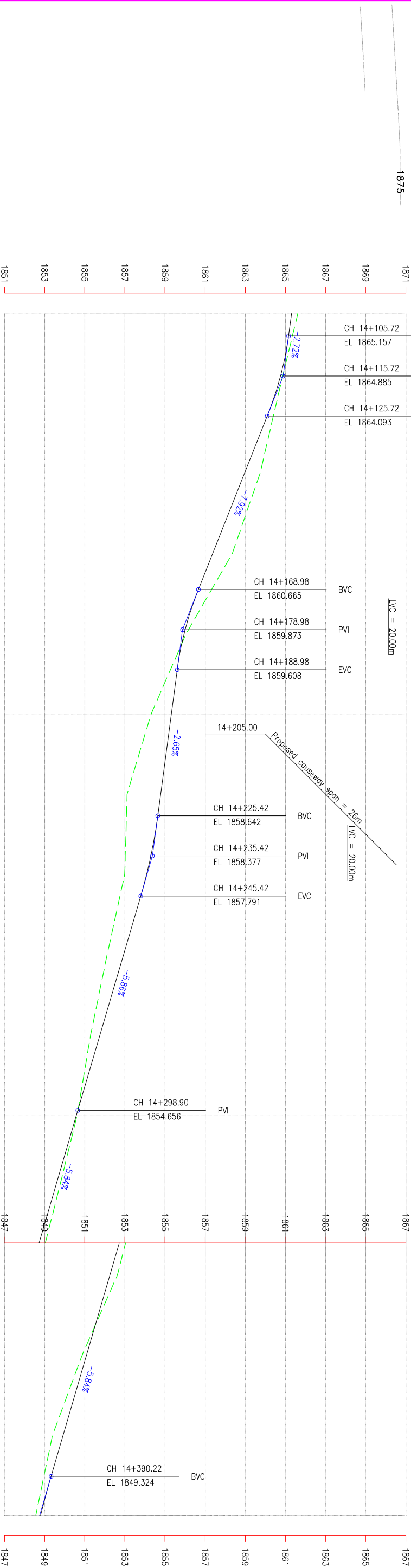
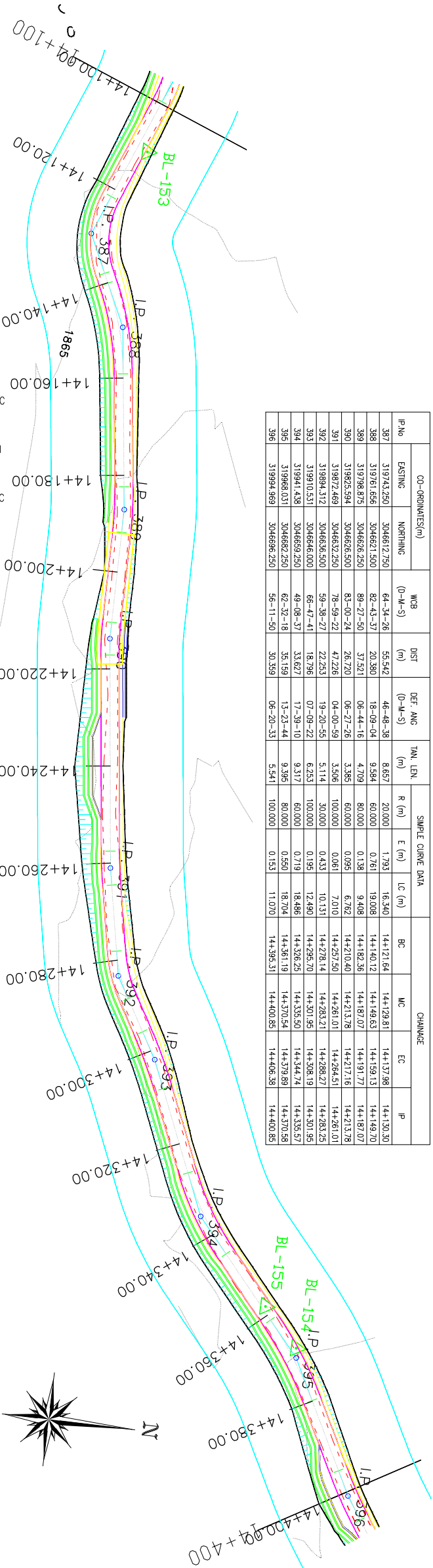
CH: 13+800 - 14+100

DATE: November, 2017

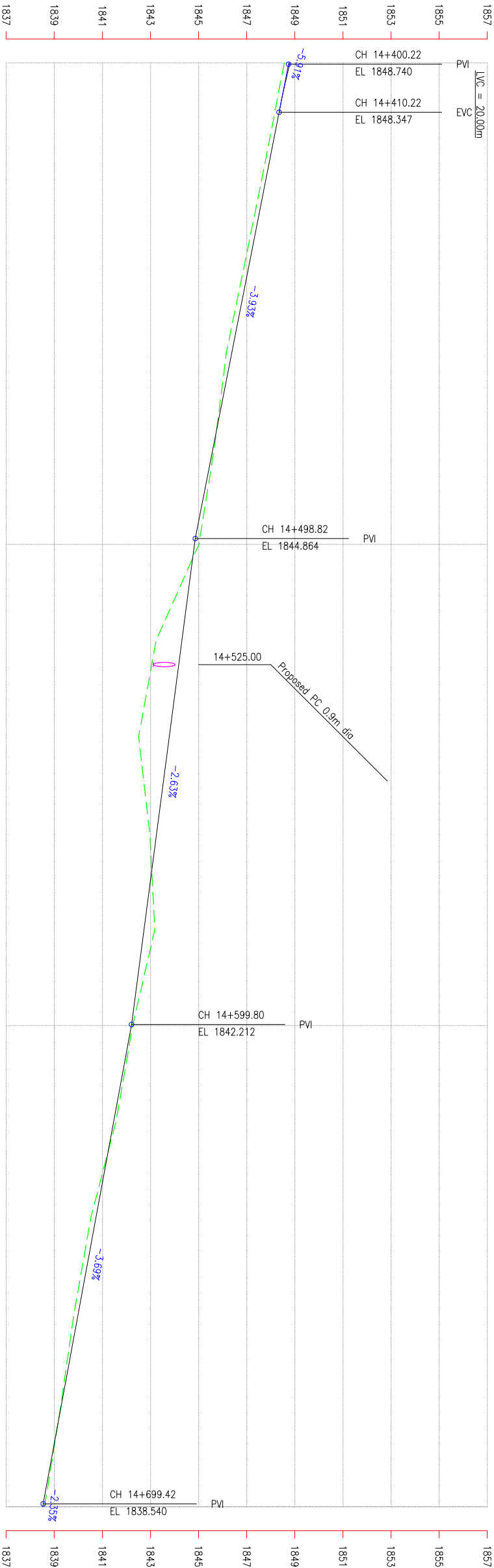
DRAWING NO.: 1

SHEET No.: 47

IP No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (m)	DEF. ANG (D-M-S)	TAN. LEN (m)	SAMPLE CURVE DATA						
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP
387	319743.250	3046612.750	64-34-26	55.542	46-48-38	8.657	20.000	1.793	16.340	14+121.64	14+129.81	14+137.98	14+130.30
388	319761.656	3046621.500	82-43-37	20.380	18-09-04	9.584	60.000	0.761	19.008	14+140.12	14+149.63	14+159.13	14+149.70
389	319798.875	3046626.250	89-27-50	37.521	06-44-16	4.709	80.000	0.138	9.408	14+182.36	14+187.07	14+191.77	14+187.07
390	319825.994	3046626.500	83-00-24	26.720	04-27-26	3.385	60.000	0.095	6.792	14+210.40	14+213.78	14+217.16	14+213.78
391	319872.489	3046632.250	78-59-22	47.226	04-00-59	3.506	100.000	0.061	7.010	14+257.50	14+261.01	14+268.51	14+261.01
392	319894.312	3046636.500	59-38-27	22.253	19-20-55	5.114	30.000	0.433	10.131	14+278.14	14+283.21	14+288.27	14+283.25
393	319910.531	3046646.000	66-47-41	18.796	07-09-22	6.253	100.000	0.195	12.490	14+295.70	14+301.92	14+308.19	14+301.92
394	319941.438	3046659.250	49-08-37	33.827	17-39-10	9.317	60.000	0.719	18.486	14+326.25	14+333.50	14+344.74	14+333.57
395	319968.031	3046682.250	62-32-18	35.159	13-23-44	9.395	80.000	0.550	18.704	14+361.19	14+370.54	14+379.89	14+370.58
396	319994.989	3046696.250	56-11-50	30.359	06-20-33	5.541	100.000	0.153	11.070	14+395.31	14+400.85	14+406.38	14+400.85



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1865.313	1865.625	14+100.00	 Profile view diagram showing vertical alignment with grades, vertical curves, and points of interest.	
1865.017	1865.143	14+110.00		
1864.503	1864.662	14+120.00		
1863.754	1864.200	14+130.00		
1862.961	1863.737	14+140.00		
1862.169	1863.045	14+150.00		
1861.377	1862.353	14+160.00		
1860.586	1861.204	14+170.00		
1859.952	1860.055	14+180.00		
1859.581	1859.184	14+190.00		
1859.316	1858.312	14+200.00		
1859.051	1857.711	14+210.00		
1858.786	1857.110	14+220.00		
1858.504	1857.052	14+230.00		
1858.085	1856.994	14+240.00		
1857.522	1856.557	14+250.00		
1856.936	1856.120	14+260.00		
1856.350	1855.708	14+270.00		
1855.764	1855.297	14+280.00		
1855.178	1854.961	14+290.00		
1854.592	1854.626	14+300.00		
1854.008	1854.135	14+310.00		
1853.424	1853.645	14+320.00		
1852.840	1853.135	14+330.00		
1852.256	1852.625	14+340.00		
1851.672	1851.746	14+350.00		
1851.088	1850.867	14+360.00		
1850.505	1850.129	14+370.00		
1849.921	1849.391	14+380.00		
1849.337	1848.976	14+390.00		
1848.798	1848.560	14+400.00		



DESIGN LEVEL (m)	1848.798	1848.356	1847.962	1847.569	1847.176	1846.783	1846.390	1845.997	1845.604	1845.211	1844.833	1844.570	1844.308	1844.045	1843.783	1843.520	1843.257	1842.995	1842.732	1842.469	1842.205	1841.836	1841.467	1841.099	1840.730	1840.362	1839.993	1839.624	1839.256	1838.887	1838.526
EXISTING LEVEL (m)	1848.560	1848.178	1847.796	1847.391	1846.986	1846.573	1846.161	1845.908	1845.654	1845.334	1845.014	1844.124	1843.234	1842.872	1842.509	1842.740	1842.971	1843.077	1843.183	1842.722	1842.261	1841.914	1841.568	1841.044	1840.519	1840.168	1839.817	1839.529	1839.242	1838.919	1838.596
CHAINAGE (km)	14+400.00	14+410.00	14+420.00	14+430.00	14+440.00	14+450.00	14+460.00	14+470.00	14+480.00	14+490.00	14+500.00	14+510.00	14+520.00	14+530.00	14+540.00	14+550.00	14+560.00	14+570.00	14+580.00	14+590.00	14+600.00	14+610.00	14+620.00	14+630.00	14+640.00	14+650.00	14+660.00	14+670.00	14+680.00	14+690.00	14+700.00
HORIZONTAL ALIGNMENT	RIGHT	R=100.00 IP-396										R=80.00 IP-397										R=50.00 IP-398									
	LEFT	R=100.00 IP-396										R=80.00 IP-397										R=50.00 IP-398									



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



CONSULTANT:
BEAM-CADWGA - JV

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN OF BHIMPHEDE - BOCATE, IPA DEURKALI - SENSEBI ROAD, KATHMANDU DISTRICT, NEPAL

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

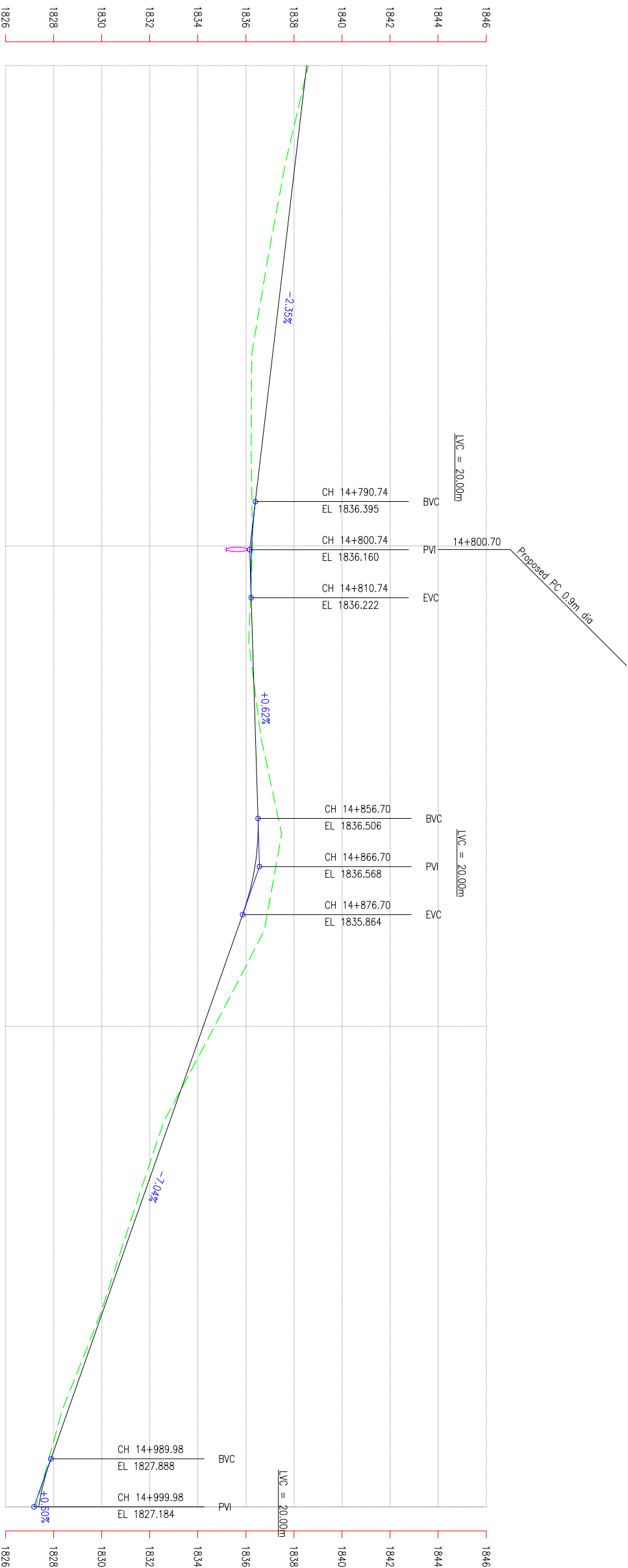
NAME
DESIGNATION
SIGNATURE
DATE

SCALE
HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES
CH: 14+400 - 14+700

DATE: November, 2017

DRWG NO.:
SHEET No. : 49B



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT		
			RIGHT	LEFT	
1838.526	1838.596	14+700.00	R=200.00 IP-403		
1838.291	1838.127	14+710.00			
1838.057	1837.658	14+720.00			
1837.822	1837.288	14+730.00			
1837.587	1836.918	14+740.00		R=60.00 IP-404	
1837.352	1836.581	14+750.00			
1837.117	1836.243	14+760.00			
1836.882	1836.233	14+770.00			
1836.647	1836.222	14+780.00		R=30.00 IP-405	
1836.412	1836.250	14+790.00			
1836.241	1836.277	14+800.00			
1836.218	1836.198	14+810.00			
1836.279	1836.119	14+820.00	R=120.00 IP-406		
1836.341	1836.377	14+830.00			
1836.403	1836.635	14+840.00	R=40.00 IP-407		
1836.465	1837.061	14+850.00			
1836.506	1837.487	14+860.00			
1836.250	1837.128	14+870.00			
1835.632	1836.768	14+880.00	R=30.00 IP-408		
1834.927	1835.732	14+890.00			
1834.223	1834.697	14+900.00			
1833.519	1833.632	14+910.00			
1832.815	1832.567	14+920.00	R=15.00 IP-409		
1832.111	1831.901	14+930.00			
1831.407	1831.235	14+940.00			
1830.703	1830.587	14+950.00			
1829.999	1829.939	14+960.00	R=60.00 IP-410		
1829.295	1829.142	14+970.00			
1828.591	1828.346	14+980.00			
1827.887	1827.801	14+990.00			
1827.375	1827.257	14+999.98			



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KAPILKOT, LALITPUR



BEAM-CADWCA - JV
KAPILKOT, LALITPUR

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN OF BHIMPHEDE - BODATE - IPA DEURALI - SENSEI ROAD, KAPILKOT, LALITPUR

DESIGNED BY :	NAME	DESIGNATION	SIGNATURE	DATE
CHECKED BY :				
RECOMMENDED BY :				
APPROVED BY :				

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

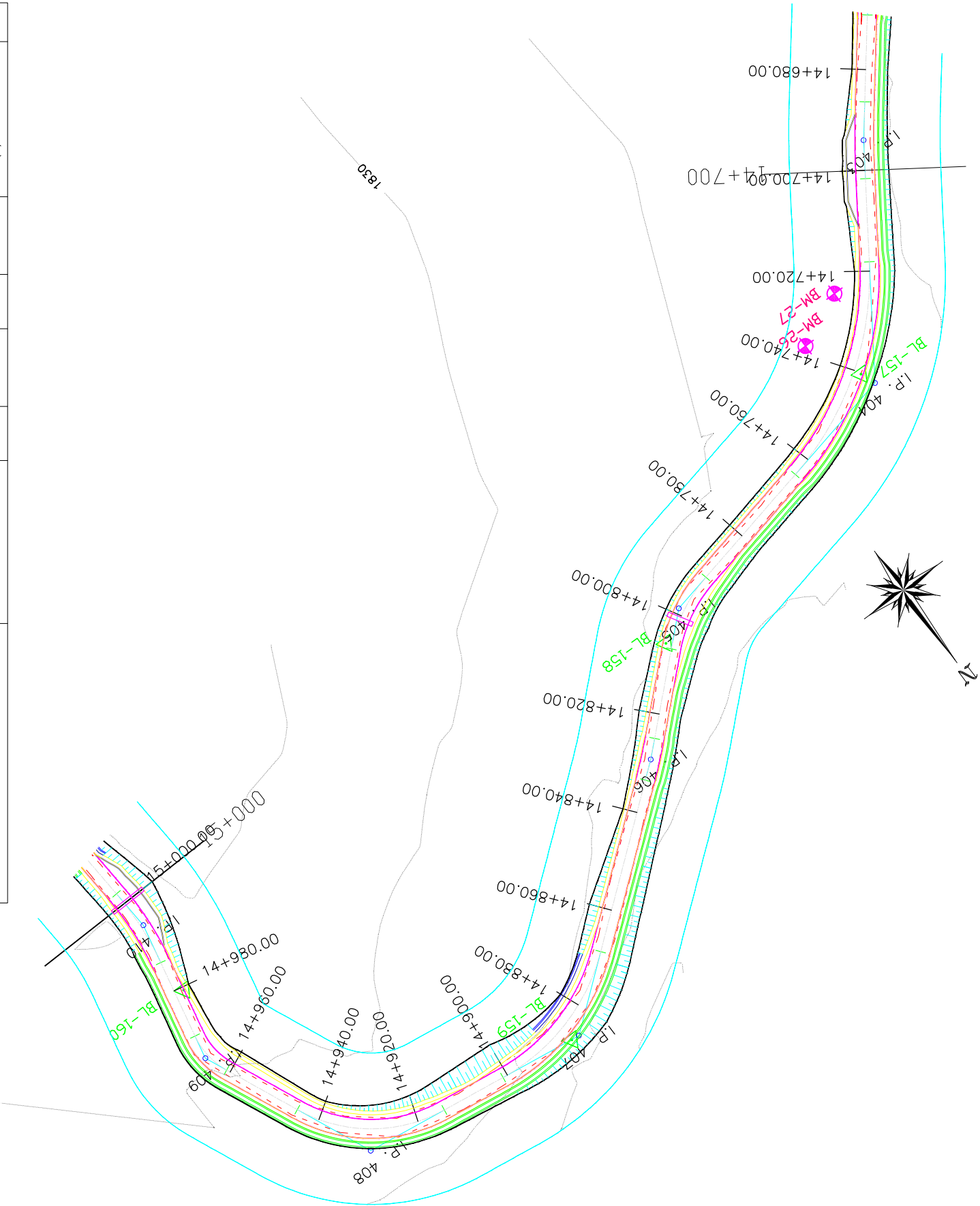
PLAN & PROFILES

CH: 14+700 - 15+000

DATE: November, 2017

DRWG NO.: 1

SHEET No.: 50B



P.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	
403	320145.875	3046932.250	33-51-56	42.012	04-21-57	7.624	200.000	0.145	15.240	14+686.39	14+694.01	14+701.63	14+694.01	
404	320172.719	3046972.250	77-34-09	48.173	43-42-18	24.062	60.000	4.645	45.768	14+718.12	14+741.01	14+763.89	14+742.18	
405	320230.562	3046985.000	47-04-43	59.232	30-29-34	8.177	30.000	1.094	15.966	14+790.88	14+798.87	14+806.85	14+799.06	
406	320252.875	3047005.750	51-07-21	30.470	04-02-42	4.238	120.000	0.075	8.472	14+824.91	14+829.15	14+833.38	14+829.15	
407	320296.906	3047041.250	97-36-52	56.560	46-29-23	17.181	40.000	3.534	32.456	14+868.52	14+884.75	14+900.98	14+885.70	
408	320343.656	3047035.000	155-44-12	47.166	58-07-15	16.671	30.000	4.321	30.432	14+914.29	14+929.51	14+944.72	14+930.96	
409	320359.094	3047000.750	191-31-41	37.569	35-47-33	4.844	15.000	0.763	9.371	14+960.77	14+965.46	14+970.14	14+965.61	
410	320353.281	3046972.250	175-59-25	29.087	15-32-19	8.186	60.000	0.556	16.272	14+986.20	14+994.34	15+002.47	14+994.39	



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KAPILKOT, LALITPUR



BEAM-CADWATER
KAPILKOT, LALITPUR

CONSULTANT:

PROJECT:

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

PLAN & PROFILES

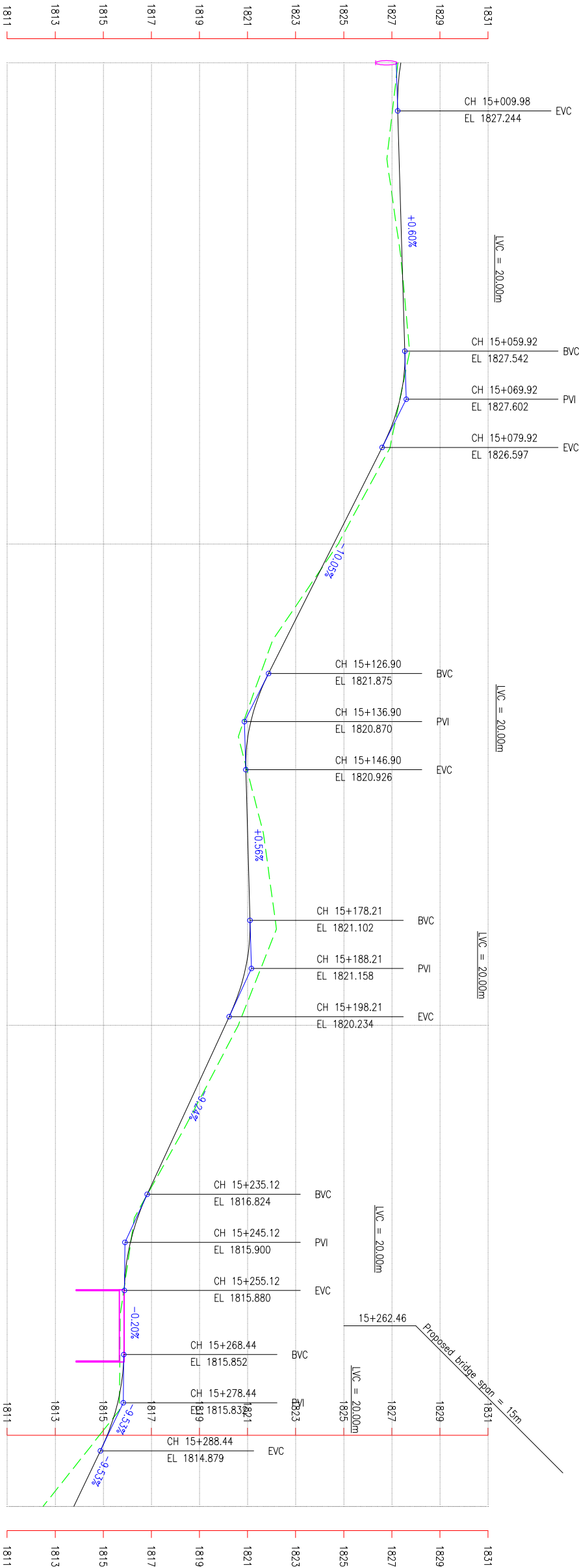
DATE: November, 2017

CH: 14+700 - 15+000

DRWG NO.:
SHEET No. :

1

50A



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1827.374	1827.257	15+000.00	R=60.00 IP-410	R=100.00 IP-411
1827.244	1827.024	15+010.00		
1827.304	1826.791	15+020.00	R=80.00 IP-412	R=100.00 IP-413
1827.363	1827.079	15+030.00		
1827.423	1827.367	15+040.00	R=40.00 IP-414	R=30.00 IP-416
1827.483	1827.554	15+050.00		
1827.543	1827.742	15+060.00	R=40.00 IP-415	R=30.00 IP-417
1827.332	1827.331	15+070.00		
1826.589	1826.920	15+080.00	R=20.00 IP-418	R=50.00 IP-419
1825.584	1825.843	15+090.00		
1824.579	1824.766	15+100.00		
1823.574	1823.402	15+110.00		
1822.569	1822.038	15+120.00		
1821.589	1821.326	15+130.00		
1821.014	1820.613	15+140.00		
1820.944	1821.135	15+150.00		
1821.000	1821.657	15+160.00		
1821.056	1821.930	15+170.00		
1821.104	1822.203	15+180.00		
1820.827	1821.409	15+190.00		
1820.069	1820.614	15+200.00		
1819.145	1819.570	15+210.00		
1818.221	1818.527	15+220.00		
1817.297	1817.409	15+230.00		
1816.427	1816.290	15+240.00		
1815.949	1815.999	15+250.00		
1815.870	1815.707	15+260.00		
1815.844	1815.687	15+270.00		
1815.517	1815.667	15+280.00		
1814.730	1814.080	15+290.00		
1813.777	1812.493	15+300.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



BEAM-CAD/CAS
SARNOBOLLA

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN, BRIDGEPHED - BOCATE - IPA DEURALI - SENSEI ROAD
Kathmandu, Nepal

CONSULTANT:
BEAM-CAD/CAS

NAME

DESIGNATION

SIGNATURE

DATE

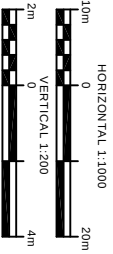
DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

SCALE

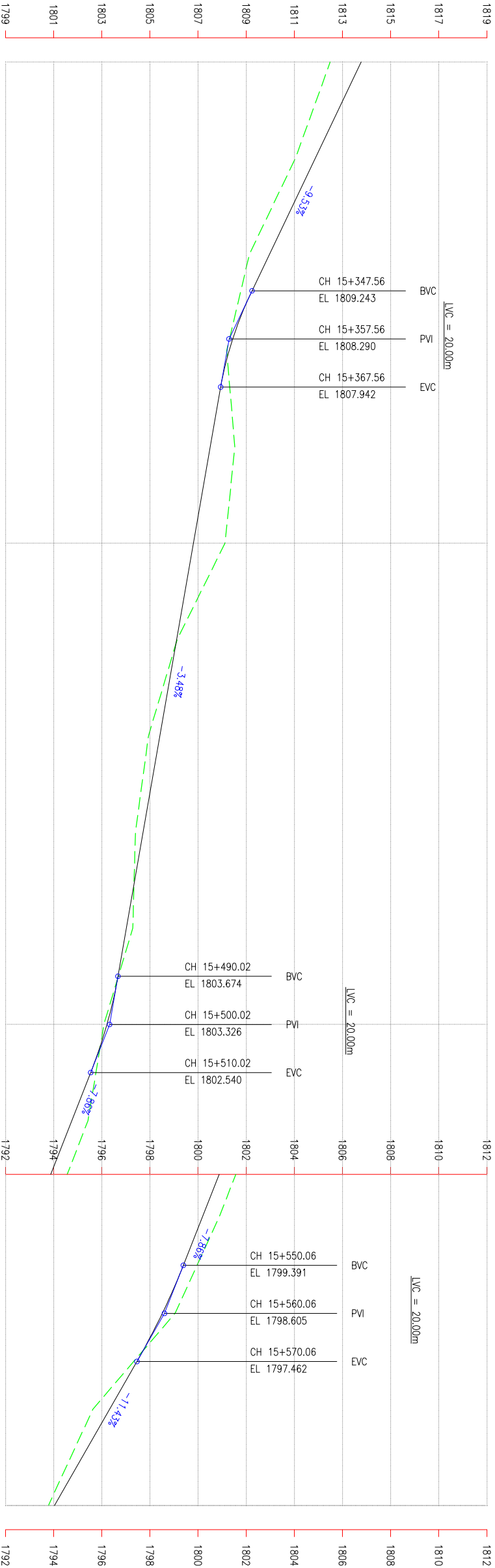


PLAN & PROFILES

DATE: November, 2017

CH: 15+000 - 15+300

DRWG NO.:
SHEET No. :
51B



DESIGN LEVEL (m)	1813.777	1812.824	1811.870	1810.917	1809.964	1809.020	1808.291	1807.857	1807.508	1807.160	1806.811	1806.463	1806.114	1805.766	1805.417	1805.069	1804.720	1804.372	1804.024	1803.675	1803.218	1802.541	1801.755	1800.969	1800.182	1799.396	1798.522	1797.469	1796.326	1795.183	1794.040	
EXISTING LEVEL (m)	1812.493	1811.771	1811.048	1810.091	1809.133	1808.663	1808.193	1808.360	1808.527	1808.325	1808.123	1807.130	1806.137	1805.541	1804.945	1804.672	1804.400	1804.345	1804.290	1803.690	1803.090	1802.760	1802.430	1801.658	1800.885	1799.968	1799.051	1797.341	1795.630	1794.706	1793.783	
CHAINAGE (km)	15+300.00	15+310.00	15+320.00	15+330.00	15+340.00	15+350.00	15+360.00	15+370.00	15+380.00	15+390.00	15+400.00	15+410.00	15+420.00	15+430.00	15+440.00	15+450.00	15+460.00	15+470.00	15+480.00	15+490.00	15+500.00	15+510.00	15+520.00	15+530.00	15+540.00	15+550.00	15+560.00	15+570.00	15+580.00	15+590.00	15+600.00	
HORIZONTAL ALIGNMENT	RIGHT		LEFT		RIGHT		LEFT		RIGHT		LEFT		RIGHT		LEFT		RIGHT		LEFT		RIGHT		LEFT		RIGHT		LEFT		RIGHT		LEFT	
	IP-419	R=50.00	IP-420	R=20.00	IP-421	R=30.00	IP-422	R=50.00	IP-423	R=100.00	IP-424	R=50.00	IP-425	R=40.00	IP-426	R=15.00	IP-427	R=15.00														



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KATHMANDU, NEPAL



BEAM-COMCA - JV
KATHMANDU

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
BIRAPHEDE - BOGATE - IPA DEURALI - SENSEI ROAD
KATHMANDU, NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

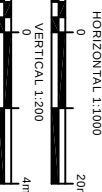
NAME

DESIGNATION

SIGNATURE

DATE

SCALE

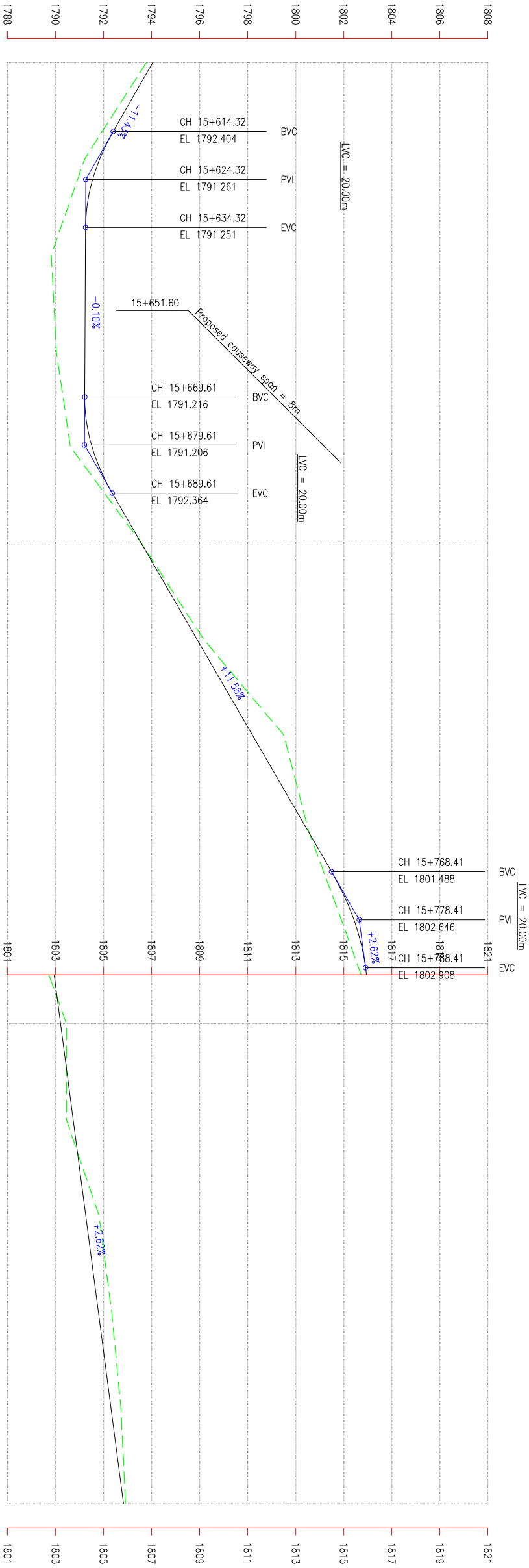


PLAN & PROFILES

CH: 15+300 - 15+600

DATE: November, 2017

DRWG NO.:
SHEET No. :
52B



DESIGN LEVEL (m)	1794.040	1792.898	1791.846	1791.308	1791.245	1791.235	1791.226	1791.216	1791.521	1792.409	1793.567	1794.725	1795.883	1797.041	1798.199	1799.356	1800.514	1801.667	1802.529	1802.950	1803.212	1803.474	1803.736	1803.999	1804.261	1804.523	1804.785	1805.047	1805.309	1805.572	1805.834
EXISTING LEVEL (m)	1793.783	1792.501	1791.219	1790.521	1789.822	1789.927	1790.031	1790.326	1790.620	1792.094	1793.569	1794.865	1796.160	1797.833	1799.507	1800.023	1800.539	1801.277	1802.015	1802.733	1803.451	1803.451	1803.451	1804.132	1804.812	1805.074	1805.336	1805.530	1805.723	1805.818	1805.912
CHAINAGE (km)	15+600.00	15+610.00	15+620.00	15+630.00	15+640.00	15+650.00	15+660.00	15+670.00	15+680.00	15+690.00	15+700.00	15+710.00	15+720.00	15+730.00	15+740.00	15+750.00	15+760.00	15+770.00	15+780.00	15+790.00	15+800.00	15+810.00	15+820.00	15+830.00	15+840.00	15+850.00	15+860.00	15+870.00	15+880.00	15+890.00	15+900.00
HORIZONTAL ALIGNMENT	RIGHT	R=30.00		R=12.50		R=12.50		R=30.00		R=40.00		R=30.00		R=120.00		R=70.00		R=60.00		R=35.00											
	LEFT	IP-428		IP-429		IP-430		IP-431		IP-432		IP-433		IP-434		IP-435		IP-436		IP-437											



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



BEM-COMCA - JV
भूमिका-कमका

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN OF BHIMPHEDI - BOCATE - IPA DEURALI - SENSEBI ROAD
Bhimphe迪 - Bocate - IPA Deurali - Sensebi Road

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

NAME
DESIGNATION
SIGNATURE
DATE

SCALE
HORIZONTAL 1:1000
VERTICAL 1:200

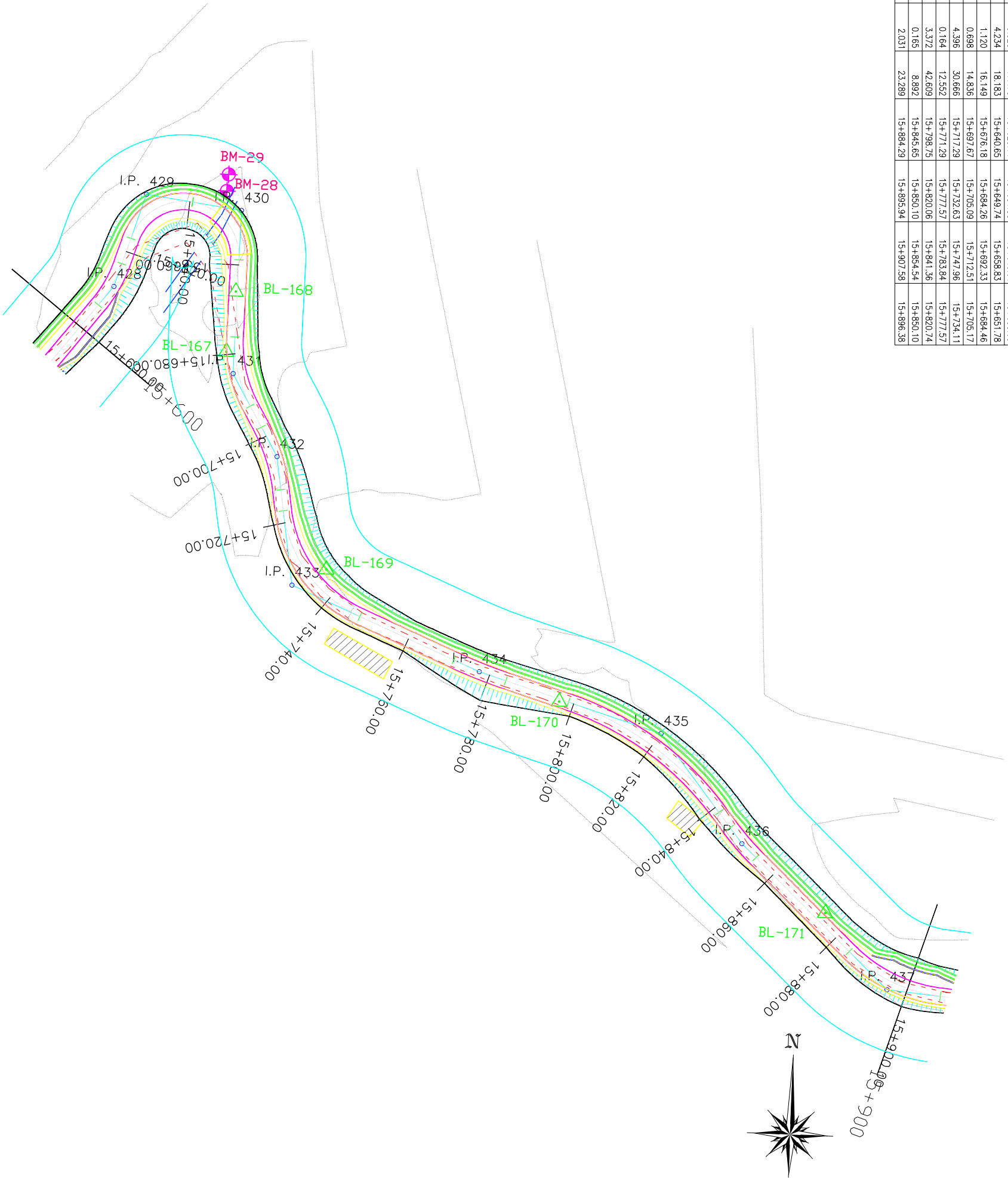
PLAN & PROFILES

CH: 15+600 - 15+900

DATE: November, 2017

DRWG NO.:
SHEET No. : 53B

IP No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (m)	DEF. ANG (D-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA			CHANGAGE				
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP	
428	320431.125	3046548.500	17-11-54	34.129	20-30-42	5.428	30.000	0.487	10.740	15+606.35	15+611.72	15+617.09	15+611.78	
429	320437.625	3046569.500	97-17-20	21.983	80-05-16	10.505	12.500	3.828	17.473	15+623.14	15+631.88	15+640.61	15+633.65	
430	320459.125	3046566.750	180-37-58	21.675	83-20-32	11.126	12.500	4.234	18.183	15+640.65	15+649.74	15+658.83	15+651.78	
431	320458.719	3046530.000	30-47-32	36.752	30-50-32	8.275	30.000	1.120	16.149	15+676.18	15+684.26	15+692.33	15+684.46	
432	320469.344	3046511.750	171-02-38	21.118	21-15-03	7.504	40.000	0.888	14.836	15+697.67	15+705.09	15+712.51	15+705.17	
433	32043.875	3046483.000	112-28-28	29.105	58-34-03	16.824	30.000	4.396	30.666	15+717.29	15+732.63	15+747.96	15+734.11	
434	320516.781	3046465.250	106-28-49	46.433	05-59-35	6.282	120.000	0.164	12.552	15+771.29	15+777.57	15+783.84	15+777.57	
435	320558.188	3046453.000	141-21-32	43.181	34-52-33	21.988	70.000	3.372	42.609	15+798.75	15+820.06	15+841.36	15+820.74	
436	320577.375	3046429.000	132-52-01	30.727	08-29-28	4.454	60.000	0.165	8.892	15+845.65	15+850.10	15+854.54	15+850.10	
437	320611.312	3046397.500	94-44-37	46.303	38-07-28	12.094	35.000	2.031	23.289	15+884.29	15+895.94	15+907.58	15+896.38	





GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
MICROSCALE UNIT/TEAM

CONSULTANT:



BRAM-CEMICA - JV
Sole Proprietors

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, D/R, PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN, CONCESSION FEE STUDY AND GAS PLAN OF BHIMTHED - BODGAJ - SIKHIN ROAD KAWANPUR, NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

10m

0

20m

HORIZONTAL 1:1000

2m

0

4m

VERTICAL 1:200

PLAN & PROFILES

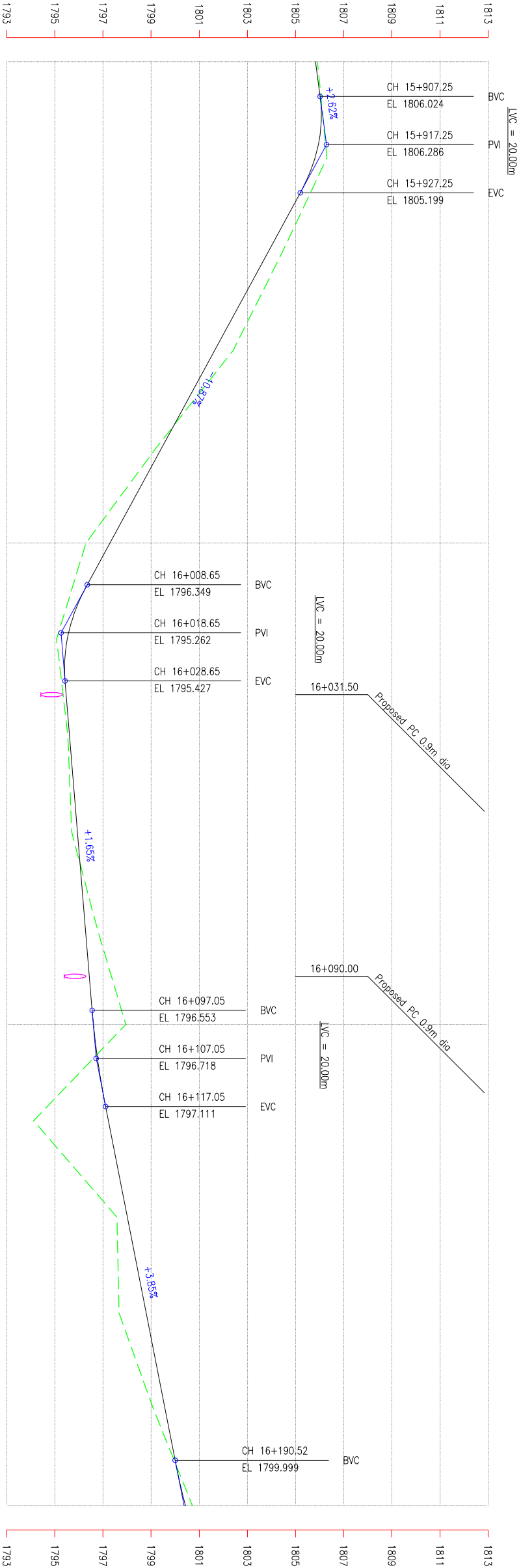
DATE: November, 2017

CH: 15+600 - 15+900

DRWG NO.: 1

SHEET No. :

53A



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1805.834	1805.912	15+900.00		
1806.070	1806.109	15+910.00		
1805.810	1806.307	15+920.00		
1804.900	1805.360	15+930.00		
1803.813	1804.413	15+940.00		
1802.725	1803.411	15+950.00		
1801.638	1802.410	15+960.00		
1800.551	1800.829	15+970.00		
1799.464	1799.248	15+980.00		
1798.377	1797.772	15+990.00		
1797.290	1796.295	16+000.00		
1796.208	1795.684	16+010.00		
1795.518	1795.073	16+020.00		
1795.449	1795.308	16+030.00		
1795.614	1795.543	16+040.00		
1795.778	1795.622	16+050.00		
1795.943	1795.702	16+060.00		
1796.108	1796.229	16+070.00		
1796.272	1796.757	16+080.00		
1796.437	1797.352	16+090.00		
1796.607	1797.948	16+100.00		
1796.862	1796.034	16+110.00		
1797.227	1794.121	16+120.00		
1797.620	1795.850	16+130.00		
1798.013	1797.579	16+140.00		
1798.406	1797.625	16+150.00		
1798.799	1797.672	16+160.00		
1799.192	1798.390	16+170.00		
1799.585	1799.107	16+180.00		
1799.978	1799.915	16+190.00		
1800.430	1800.723	16+200.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



BAM - COMCA - JV
BANK OF AMERICA MORGAN STANLEY

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN OF BHIMPHEDE - BOGATE - IPA DEURALI - SENSEI ROAD, KATHMANDU DISTRICT, NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE



PLAN & PROFILES

CH: 15+900 - 16+200

DATE: November, 2017

DRWG NO.: 1

SHEET No.: 54B



CONSULTANT:



BEAM - CEMECA - JY
SANGALALITER

PROJECT: DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN PREPARATION, ENVIRONMENTAL IMPACT ASSESSMENT, BHMATHIED - DODATE - JPA DETRAIL - SENSEI ROAD
MAMWAPUR, NEPAL

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200



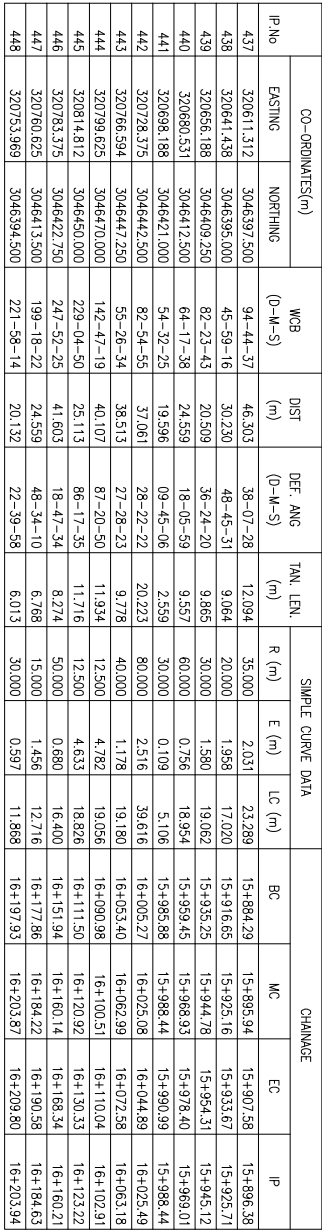
PLAN & PROFILES

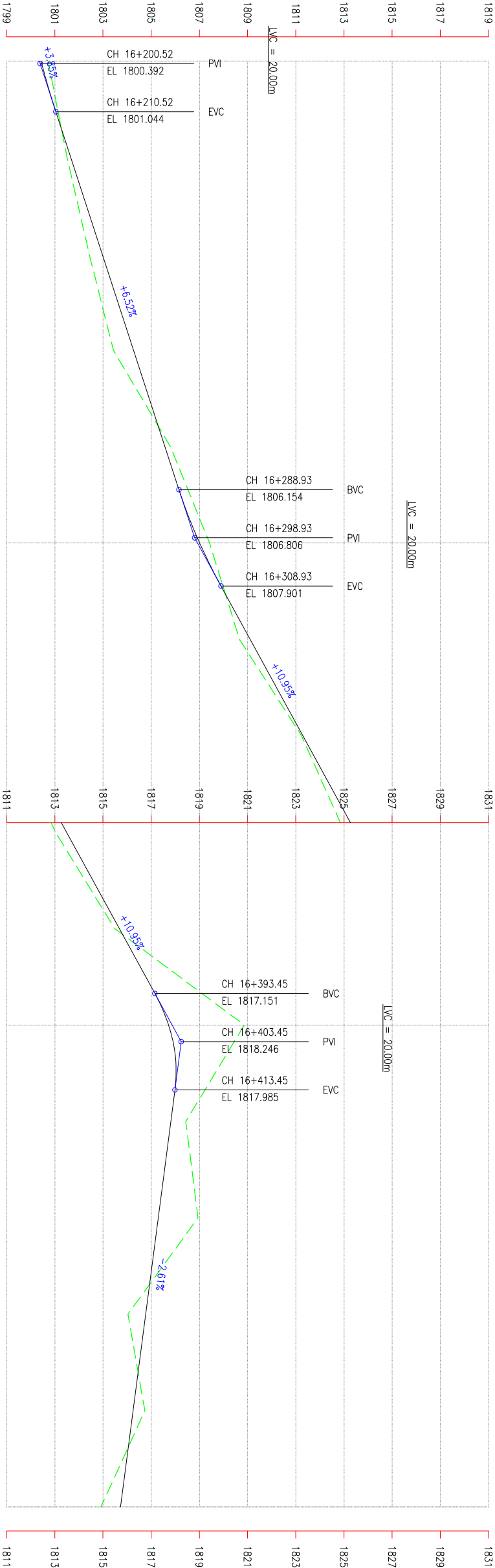
CH: 15+900 - 16+200

DATE: November, 2017

DRWG NO.: 1

SHEET NO.: 54A





DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1800.430	1800.723	16+200.00	IP-448 R=30.00	
1801.010	1801.117	16+210.00		
1801.662	1801.510	16+220.00		
1802.313	1801.968	16+230.00	R=30.00	IP-449
1802.965	1802.425	16+240.00		
1803.617	1802.929	16+250.00		
1804.269	1803.432	16+260.00		
1804.920	1804.615	16+270.00		
1805.572	1805.797	16+280.00	R=20.00	IP-450
1806.225	1806.611	16+290.00		
1807.011	1807.425	16+300.00		
1808.018	1808.044	16+310.00	R=20.00	IP-451
1809.112	1808.664	16+320.00		
1810.207	1809.952	16+330.00		
1811.301	1811.241	16+340.00	R=50.00	IP-452
1812.396	1812.135	16+350.00		
1813.490	1813.030	16+360.00		
1814.585	1814.260	16+370.00	R=30.00	IP-453
1815.679	1815.489	16+380.00		
1816.774	1818.177	16+390.00		
1817.723	1820.866	16+400.00	R=12.50	IP-454
1818.035	1819.652	16+410.00		
1817.814	1818.439	16+420.00	R=12.50	IP-455
1817.553	1818.692	16+430.00		
1817.293	1818.945	16+440.00		
1817.032	1817.489	16+450.00	R=12.50	IP-456
1816.771	1816.033	16+460.00		
1816.510	1816.385	16+470.00	R=15.00	IP-457
1816.249	1816.738	16+480.00		
1815.988	1815.827	16+490.00	R=15.00	IP-458
1815.727	1814.915	16+500.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
NIPUNAL TAAPPA



BRAM - CEMICA - JV
सुधारकर्ता

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR, PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
BRINFIELD - BOUGHADALI - SIKHARI ROAD
KATHMANDU, NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES

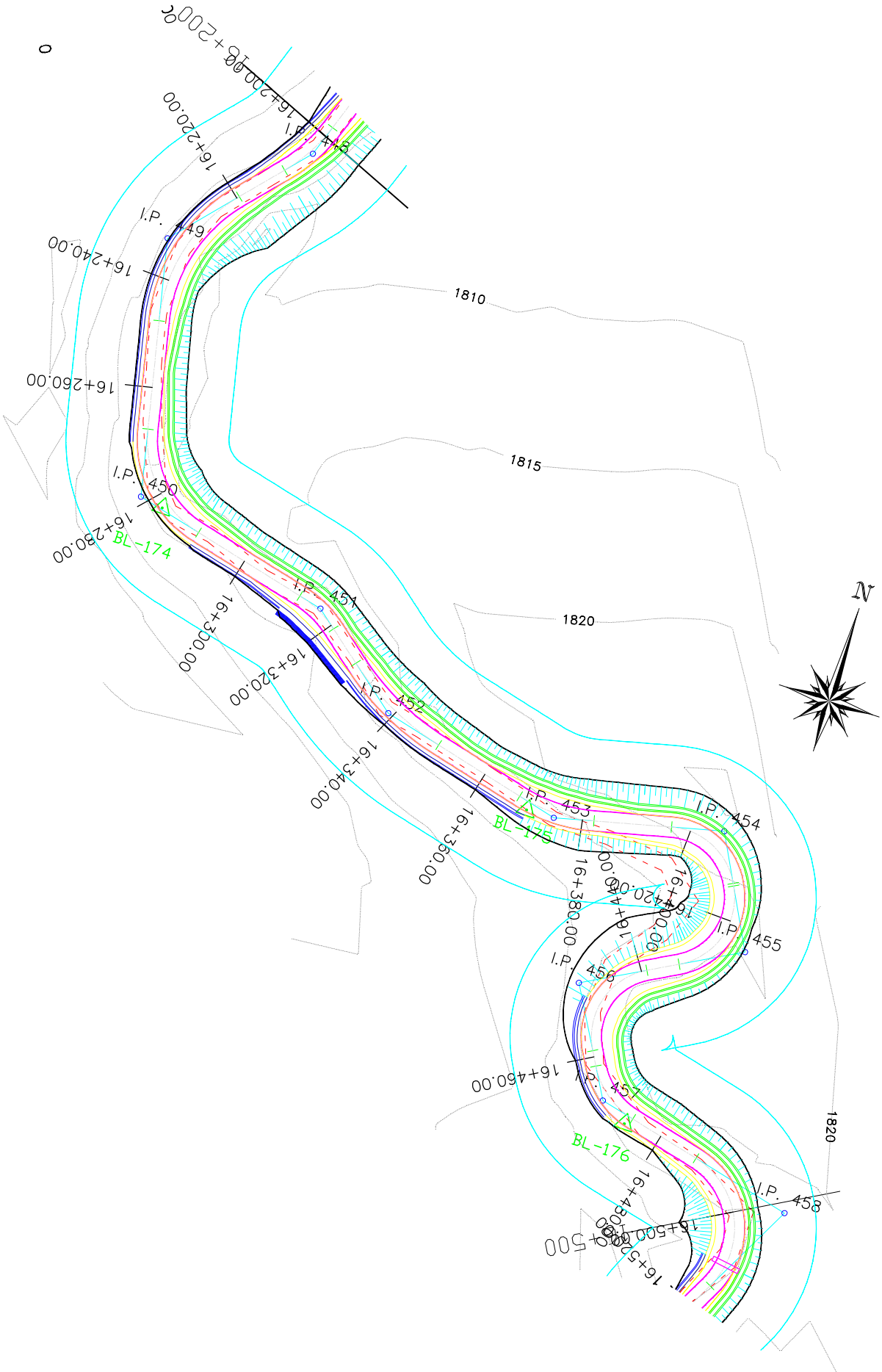
CH: 16+200 - 16+500

DATE: November, 2017

DRAWG NO.:
SHEET No. :

55B

1



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
448	320753.969	3046394.500	221-58-14	20.132	22-39-58	6.013	30.000	0.597	11.868	16+197.93	16+203.87	16+209.80	16+203.94
449	320733.281	3046371.500	168-04-21	30.935	53-53-53	15.252	30.000	3.655	28.221	16+219.47	16+233.58	16+247.69	16+234.72
450	320743.156	3046324.750	104-07-31	47.782	63-56-52	12.485	20.000	3.577	22.322	16+267.73	16+278.89	16+290.05	16+280.21
451	320780.906	3046315.250	129-11-41	38.927	25-04-00	4.446	20.000	0.488	8.750	16+312.05	16+316.43	16+320.80	16+316.50
452	320798.688	3046300.750	104-28-14	22.944	24-43-23	10.958	50.000	1.187	21.575	16+328.34	16+339.13	16+349.92	16+339.30
453	320833.562	3046291.750	76-40-54	36.017	27-47-18	7.421	30.000	0.904	14.550	16+367.56	16+374.84	16+382.11	16+374.98
454	320864.188	3046299.000	152-26-31	31.472	75-45-43	9.724	12.500	3.337	16.529	16+396.44	16+404.71	16+412.97	16+406.16
455	320874.625	3046279.000	241-41-00	22.560	89-14-38	12.336	12.500	5.062	19.470	16+413.47	16+423.21	16+432.94	16+425.81
456	320847.250	3046264.250	150-36-23	31.096	91-04-38	12.737	12.500	5.346	19.870	16+438.96	16+448.90	16+458.83	16+451.70
457	320858.094	3046245.000	103-58-51	22.094	46-37-38	6.464	15.000	1.334	12.207	16+461.72	16+467.83	16+473.93	16+468.18
458	320896.250	3046235.500	207-50-24	39.321	103-51-36	19.151	15.000	9.326	27.191	16+487.64	16+501.24	16+514.83	16+506.79



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



BEAM-CADWAT
KATHMANDU

CONSULTANT:

PROJECT:

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

10m
20m
4m

PLAN & PROFILES

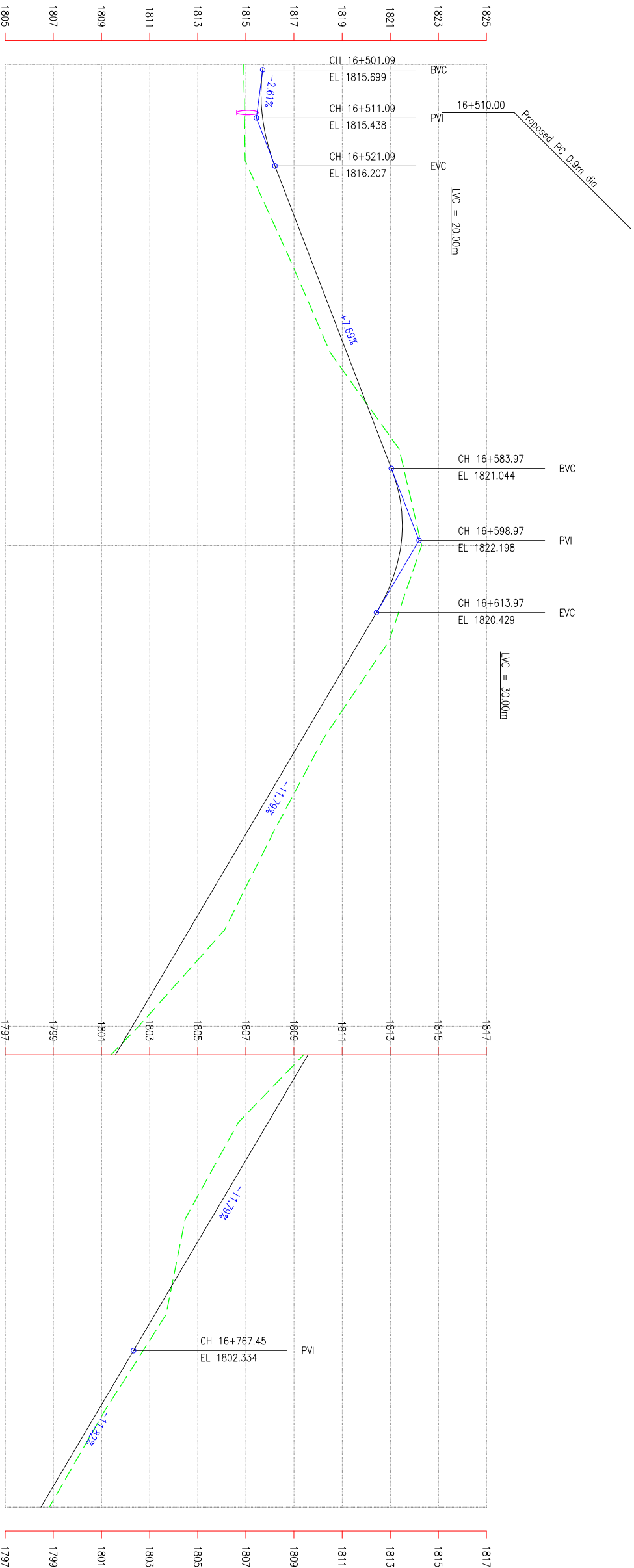
CH: 16+200 - 16+500

DATE: November, 2017

DRWG NO.:
SHEET No. :

1

55A



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1815.727	1814.915	16+500.00	IP-458 R=15.00	
1815.671	1814.942	16+510.00		
1816.126	1814.969	16+520.00	IP-459 R=20.00	
1816.893	1815.879	16+530.00		
1817.662	1816.789	16+540.00	IP-460 R=60.00	
1818.431	1817.653	16+550.00		
1819.200	1818.517	16+560.00	IP-461 R=20.00	
1819.970	1819.945	16+570.00		
1820.739	1821.373	16+580.00	IP-462 R=30.00	
1821.390	1821.839	16+590.00		
1821.443	1822.305	16+600.00	IP-463 R=20.00	
1820.846	1821.621	16+610.00		
1819.719	1820.936	16+620.00	IP-464 R=20.00	
1818.540	1819.591	16+630.00		
1817.361	1818.247	16+640.00	IP-465 R=12.50	
1816.182	1817.178	16+650.00		
1815.002	1816.110	16+660.00	IP-466 R=12.50	
1813.823	1815.112	16+670.00		
1812.644	1814.114	16+680.00		
1811.465	1812.331	16+690.00		
1810.286	1810.549	16+700.00		
1809.107	1808.620	16+710.00		
1807.928	1806.691	16+720.00		
1806.749	1805.589	16+730.00		
1805.570	1804.486	16+740.00		
1804.391	1804.086	16+750.00		
1803.212	1803.685	16+760.00		
1802.033	1802.411	16+770.00		
1800.851	1801.137	16+780.00		
1799.669	1799.987	16+790.00		
1798.487	1798.836	16+800.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KAPILKOT, LALITPUR



BEAM-CADWATER
SARNOBOL, LALITPUR

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN OF BHIMPHEDE - BOGATE - IPA DEURALI - SENSEBI ROAD, KAPILKOT, LALITPUR

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

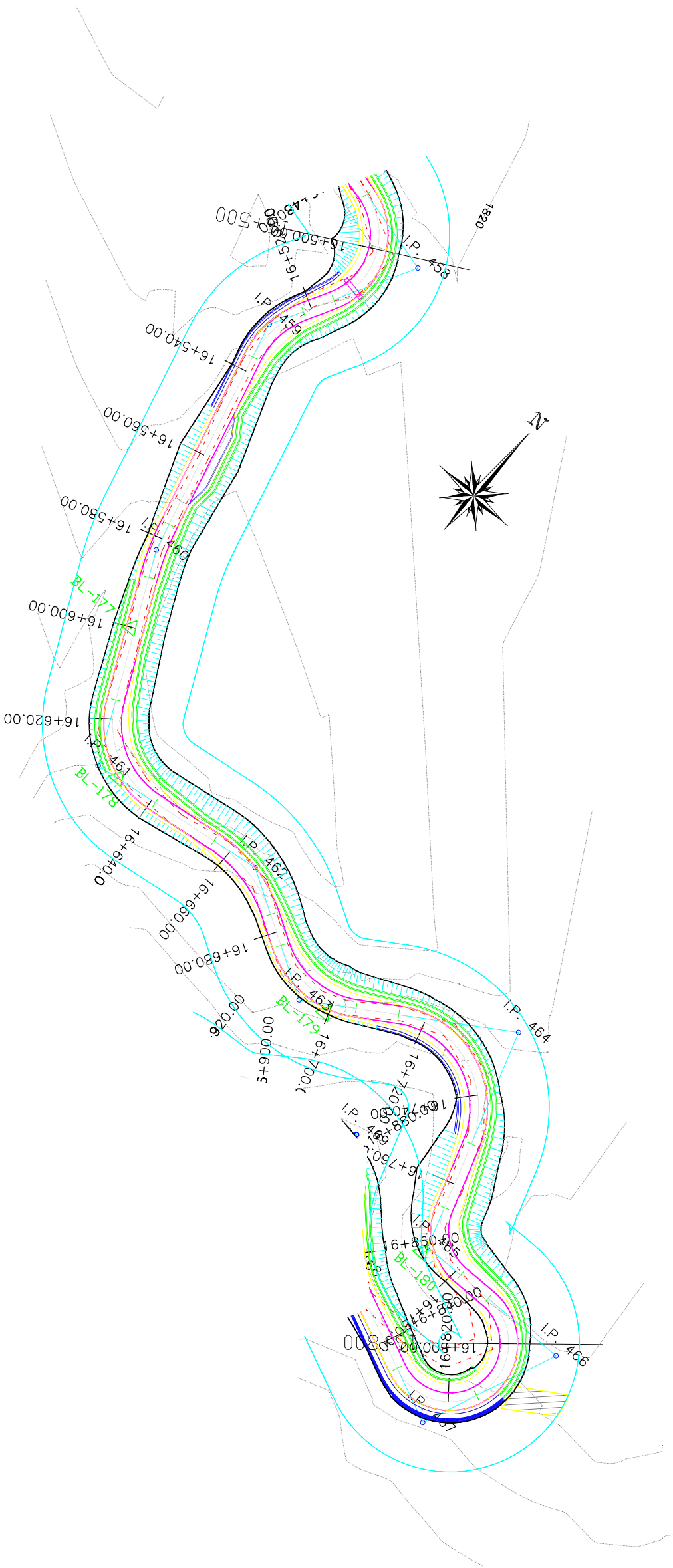
PLAN & PROFILES

CH: 16+500 - 16+800

DATE: November, 2017

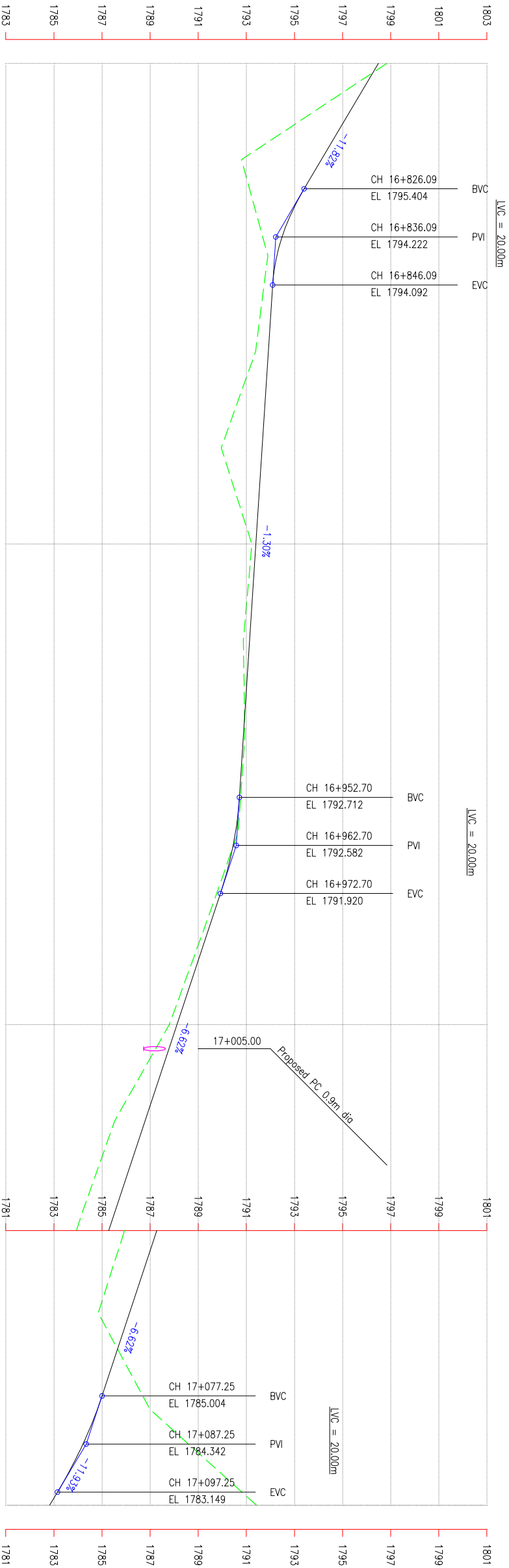
DRWG NO.: 1

SHEET No.: 56B



IP No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (m)	DEF. ANG (D-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA			CHAMANGE			
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP
458	320896.250	3046235.500	207-50-24	39.321	103-51-36	19.151	15.000	9.326	27.191	16+487.64	16+501.24	16+514.83	16+506.79
459	320880.406	3046205.500	165-15-08	33.927	42-35-16	7.795	20.000	1.465	14.866	16+521.81	16+529.25	16+536.68	16+529.61
460	320894.094	3046153.500	153-42-12	53.771	11-33-02	6.069	60.000	0.306	12.096	16+576.65	16+582.64	16+588.69	16+582.66
461	320915.219	3046110.750	81-43-26	47.685	71-58-50	14.526	20.000	4.718	25.126	16+615.78	16+628.35	16+640.91	16+630.31
462	320954.750	3046116.500	120-15-06	39.947	38-31-32	10.484	30.000	1.779	20.172	16+655.85	16+665.94	16+676.02	16+666.33
463	320980.469	3046101.500	57-02-40	29.774	63-12-31	12.306	20.000	3.483	22.064	16+683.00	16+694.03	16+705.06	16+695.31
464	321020.188	3046127.250	161-35-59	47.336	104-33-12	25.855	20.000	12.688	36.496	16+714.23	16+732.48	16+750.73	16+740.09
465	321035.906	3046080.000	88-48-04	49.796	72-48-00	9.216	12.500	3.030	15.883	16+765.45	16+773.39	16+781.33	16+774.67
466	321071.750	3046080.750	201-58-43	35.852	113-10-34	18.949	12.500	10.200	24.691	16+789.02	16+801.37	16+813.71	16+807.97

 GOVERNMENT OF NEPAL MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT EARTHQUAKE EMERGENCY ASSISTANCE PROJECT KIPRONOLE JAMTHIR	CONSULTANT:  BAM-CEMCA -IV MEMBERSHIP	PROJECT: DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DRAINAGE, EROSION CONTROL, ENVIRONMENTAL PLAN, CONCISE FEE STUDY AND GSI PLAN OF BHAMPHED - BOCATE - IPA DETAIL - SINNER ROAD BHAMPHED, NEPAL	NAME	DESIGNATION	SIGNATURE	DATE	SCALE HORIZONTAL 1:1000 VERTICAL 1:200 	PLAN & PROFILES		DATE: November, 2017
			DESIGNED BY :	CHECKED BY :	RECOMMENDED BY :	APPROVED BY :		CH: 16+500 - 16+800	DWG NO.: SHEET No. : 56A	



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1798.487	1798.836	16+800.00	IP-466 R=12.50	1798.487
1797.305	1795.816	16+810.00		
1796.124	1792.796	16+820.00	IP-467 R=12.50	1796.124
1794.982	1793.345	16+830.00		
1794.269	1793.894	16+840.00	IP-468 R=30.00	1794.269
1794.042	1793.638	16+850.00		
1793.912	1793.382	16+860.00	IP-469 R=15.00	1793.912
1793.783	1792.670	16+870.00		
1793.653	1791.959	16+880.00	IP-470 R=20.00	1793.653
1793.524	1792.594	16+890.00		
1793.394	1793.229	16+900.00	IP-471 R=15.00	1793.394
1793.265	1793.054	16+910.00		
1793.135	1792.878	16+920.00	IP-472 R=30.00	1793.135
1793.006	1792.908	16+930.00		
1792.876	1792.938	16+940.00	IP-473 R=40.00	1792.876
1792.747	1792.797	16+950.00		
1792.546	1792.656	16+960.00	IP-474 R=40.00	1792.546
1792.089	1791.953	16+970.00		
1791.437	1791.251	16+980.00	IP-475 R=12.50	1791.437
1790.776	1790.523	16+990.00		
1790.114	1789.796	17+000.00	IP-475	1790.114
1789.453	1788.661	17+010.00		
1788.791	1787.527	17+020.00	IP-475	1788.791
1788.130	1786.822	17+030.00		
1787.468	1786.117	17+040.00	IP-475	1787.468
1786.806	1785.479	17+050.00		
1786.145	1784.842	17+060.00	IP-475	1786.145
1785.483	1785.915	17+070.00		
1784.812	1786.988	17+080.00	IP-475	1784.812
1783.944	1789.204	17+090.00		
1782.821	1791.420	17+100.00	IP-475	1782.821



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KATHMANDU, NEPAL



BEAM-CAD/CAD
KATHMANDU

CONSULTANT:

PROJECT:

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES

CH: 16+800 - 17+100

DATE: November, 2017

DRWG NO.:
SHEET No. : 57



PROJECT: DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESSETTLEMENT PLAN
BHMATHDIP - BOCATE - JPA DETHALL - SENSEN ROAD
MAKAWAPUR, NEPAL

SCALE

HORIZONTAL 1:1000

10m
0
20m

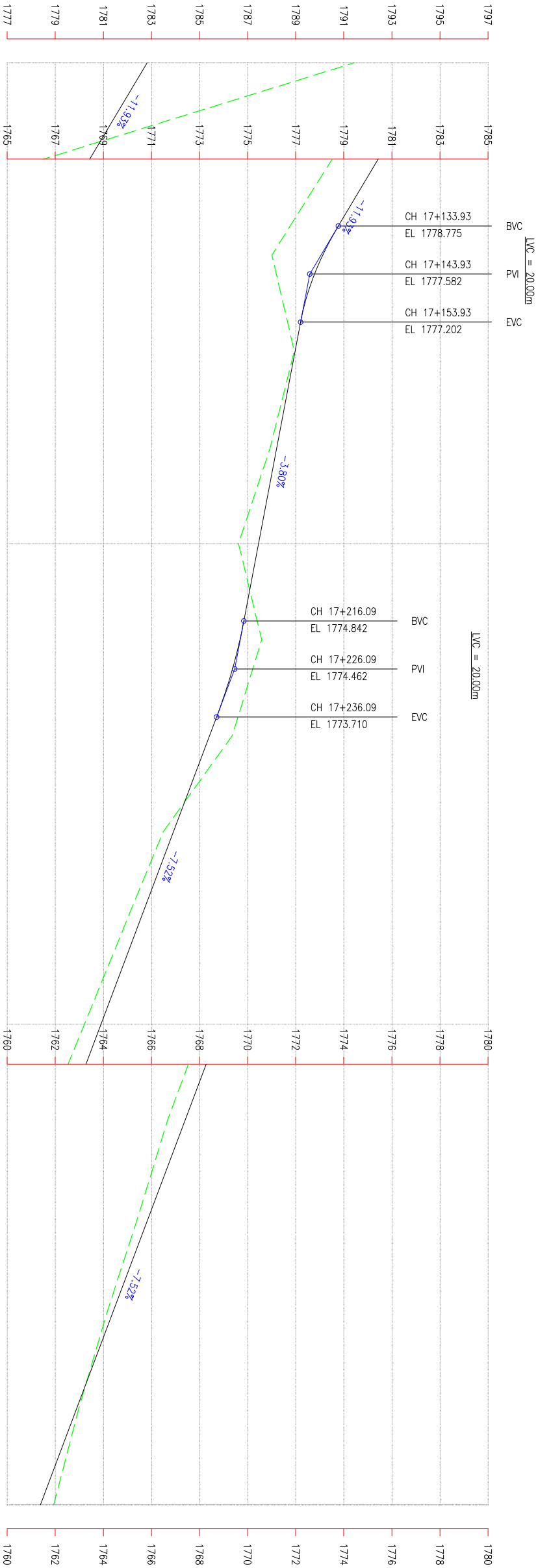
VERTICAL 1:200

2m
0
4m

A scale bar showing horizontal and vertical dimensions. The horizontal scale is 1:1000, with markings for 10m and 20m. The vertical scale is 1:200, with markings for 2m and 4m. The scales are represented by alternating black and white segments.

The diagram features a compass rose with eight points, indicating North. Below it is a circular plot with concentric arcs and radial lines. The arcs are labeled with '100' and '100', and the radial lines are labeled with '100' and '100'. The plot is divided into several colored regions (green, yellow, orange, red, purple, blue, cyan) by these lines.





DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1782.821	1791.420	17+100.00	R=12.50	IP-475
1781.629	1784.970	17+110.00		
1780.436	1778.519	17+120.00	R=12.50	IP-476
1779.243	1777.265	17+130.00		
1778.126	1776.011	17+140.00	R=60.00	IP-477
1777.383	1776.477	17+150.00		
1776.972	1776.944	17+160.00		
1776.592	1776.444	17+170.00		
1776.212	1775.945	17+180.00	R=30.00	IP-478
1775.833	1775.283	17+190.00		
1775.453	1774.621	17+200.00		
1775.073	1775.103	17+210.00		
1774.679	1775.585	17+220.00	R=15.00	IP-479
1774.133	1774.972	17+230.00		
1773.416	1774.359	17+240.00	R=15.00	IP-480
1772.664	1772.921	17+250.00		
1771.912	1771.483	17+260.00	R=20.00	IP-481
1771.160	1770.664	17+270.00		
1770.408	1769.846	17+280.00		
1769.656	1768.998	17+290.00		
1768.904	1768.150	17+300.00	R=60.00	IP-482
1768.152	1767.410	17+310.00		
1767.400	1766.670	17+320.00		
1766.648	1766.059	17+330.00		
1765.895	1765.447	17+340.00	R=150.00	IP-483
1765.143	1764.799	17+350.00		
1764.391	1764.150	17+360.00		
1763.639	1763.562	17+370.00		
1762.887	1762.975	17+380.00	R=60.00	IP-484
1762.135	1762.454	17+390.00		
1761.383	1761.934	17+400.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KATHMANDU, NEPAL



BEM-CONCA - JV
KATHMANDU

CONSULTANT:

PROJECT:

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE



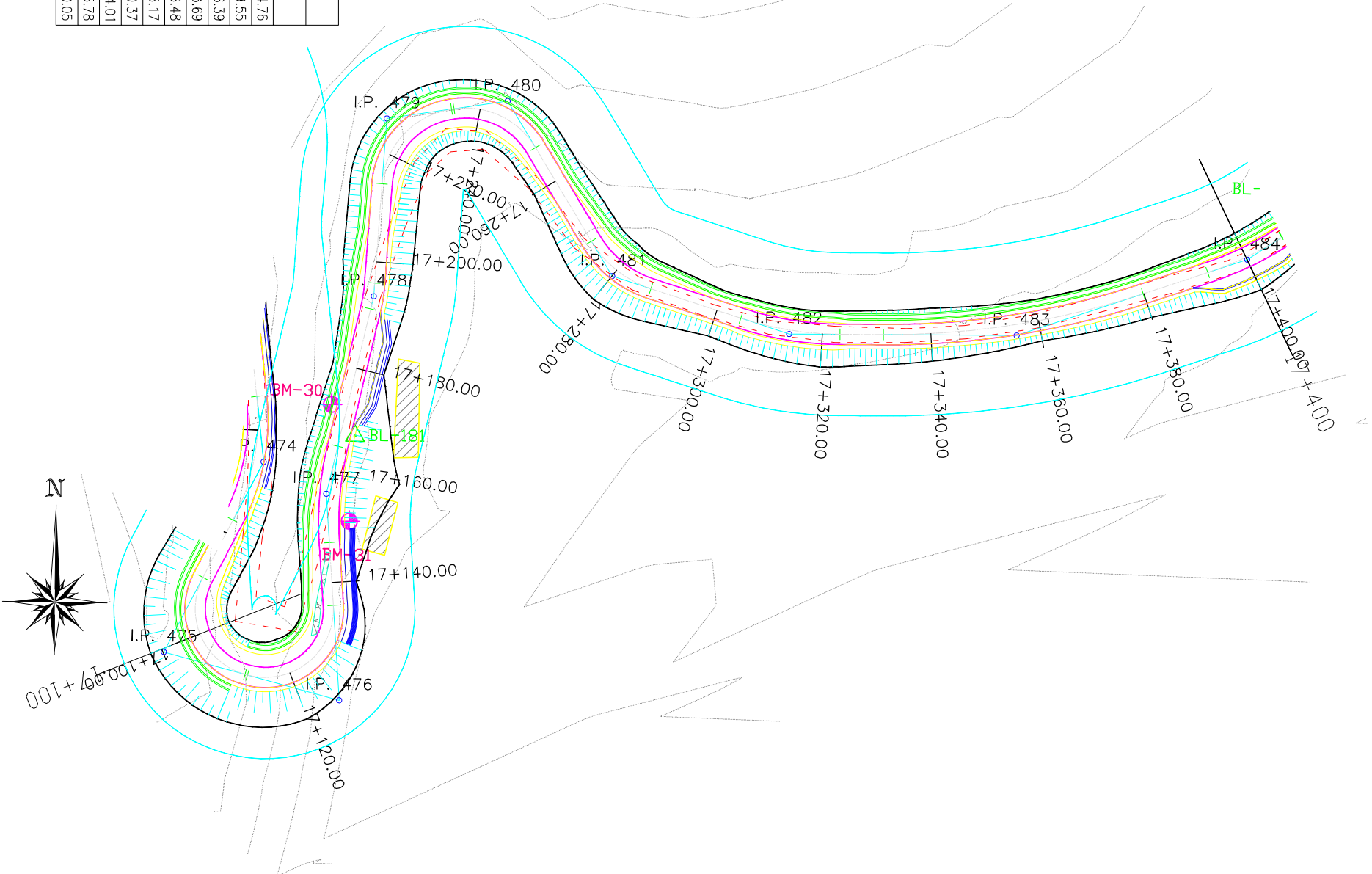
PLAN & PROFILES

CH: 17+100 - 17+400

DATE: November, 2017

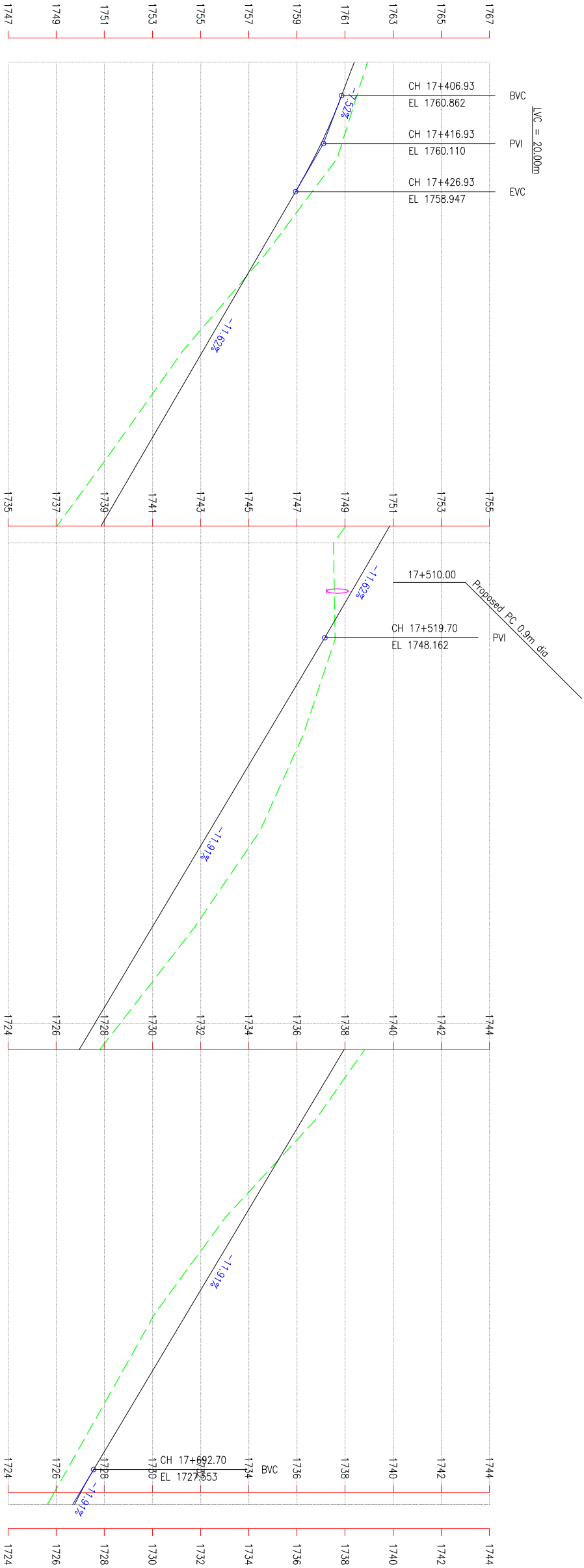
DRWG NO.:
SHEET No. :
58B

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
475	320983.688	3045917.000	104-41-50	39.551	102-16-22	15.512	12.500	7.421	22.313	17+089.25	17+100.41	17+111.56	17+104.76
476	321016.094	3045908.500	355-43-11	33.502	108-58-35	17.517	12.500	9.019	23.775	17+112.03	17+123.92	17+135.80	17+129.55
477	321013.250	3045946.500	12-46-57	38.106	17-03-45	9.001	60.000	0.671	17.868	17+147.39	17+156.33	17+165.26	17+156.39
478	321021.531	3045983.000	03-29-40	37.428	09-17-15	2.437	30.000	0.099	4.863	17+191.25	17+193.68	17+196.11	17+193.69
479	321023.531	3046015.750	81-02-53	32.811	77-33-20	12.051	15.000	4.241	20.304	17+214.43	17+224.58	17+234.73	17+226.48
480	321045.750	3046019.250	148-26-22	22.493	67-23-28	10.002	15.000	3.029	17.643	17+235.17	17+243.99	17+252.81	17+245.17
481	321065.406	3045987.250	107-23-39	37.555	41-02-48	7.487	20.000	1.355	14.328	17+272.88	17+280.05	17+287.21	17+280.37
482	321098.125	3045977.000	89-39-29	34.287	17-44-19	9.363	60.000	0.726	18.576	17+304.65	17+313.94	17+323.23	17+314.01
483	321140.031	3045977.250	71-04-15	41.907	18-35-12	24.546	150.000	1.995	48.660	17+331.23	17+355.56	17+379.89	17+355.78
484	321182.312	3045991.750	56-32-42	44.698	14-31-28	7.646	60.000	0.485	15.210	17+392.40	17+400.01	17+407.61	17+400.05



 GOVERNMENT OF NEPAL MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT EARTHQUAKE EMERGENCY ASSISTANCE PROJECT	 BEAM-CAD/CAD - JV BANGALORE	CONSULTANT: PROJECT: DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN CONCEIVE THE STUDY AND GEN PLAN OF BIRAPPHEDI - BODGATE - IPA DEURALI - SENSEBI ROAD BIRAPPHEDI, NEPAL	NAME	DESIGNATION	SIGNATURE	DATE	SCALE HORIZONTAL 1:1000 VERTICAL 1:200	PLAN & PROFILES		DATE: November, 2017
			DESIGNED BY :					DRWG NO.:	1	
			CHECKED BY :					SHEET No. :	58A	
RECOMMENDED BY :										
APPROVED BY :										

CH: 17+100 - 17+400



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1761.383	1761.934	17+400.00	R=60.00 IP-484	
1760.621	1761.304	17+410.00		
1759.704	1760.674	17+420.00		
1758.590	1760.044	17+430.00		
1757.428	1759.180	17+440.00	R=25.00 IP-485	
1756.265	1758.316	17+450.00		
1755.103	1757.452	17+460.00		
1753.940	1756.588	17+470.00		
1752.778	1755.724	17+480.00	R=15.00 IP-486	
1751.615	1754.860	17+490.00		
1750.452	1754.000	17+500.00		
1749.290	1753.140	17+510.00		
1748.126	1752.280	17+520.00	R=30.00 IP-487	
1746.935	1751.420	17+530.00		
1745.744	1750.560	17+540.00		
1744.552	1749.700	17+550.00		
1743.361	1748.840	17+560.00	R=40.00 IP-488	
1742.170	1747.980	17+570.00		
1740.979	1747.120	17+580.00		
1739.787	1746.260	17+590.00		
1738.596	1745.400	17+600.00	R=20.00 IP-489	
1737.405	1744.540	17+610.00		
1736.214	1743.680	17+620.00		
1735.022	1742.820	17+630.00		
1733.831	1741.960	17+640.00	R=20.00 IP-490	
1732.640	1741.100	17+650.00		
1731.449	1740.240	17+660.00		
1730.257	1739.380	17+670.00		
1729.066	1738.520	17+680.00	R=120.00 IP-491	
1727.875	1737.660	17+690.00		
1726.764	1736.800	17+700.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KATHMANDU, NEPAL



BEAM-COMPA - JV
KATHMANDU

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN, BIMPHEDEI - BOGATE, IPA DEURALI - SENSEI ROAD, KATHMANDU, NEPAL

CONSULTANT:

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

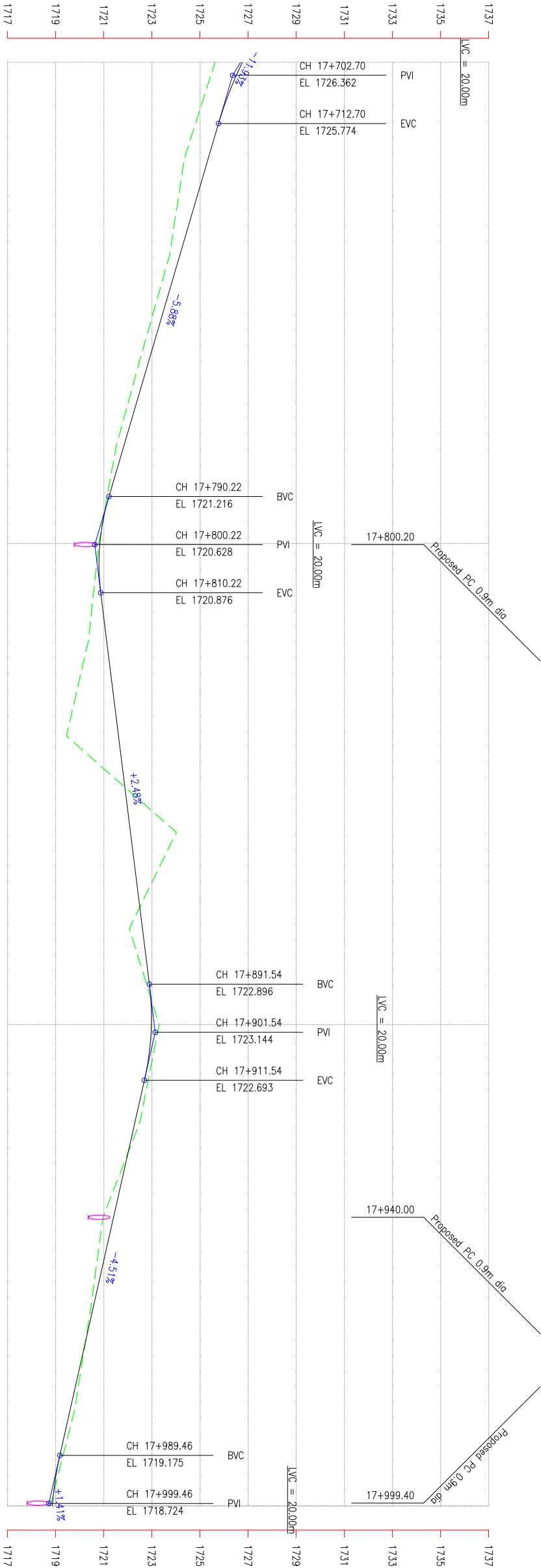
SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES

CH: 17+400 - 17+700

DATE: November, 2017
DRWG NO.:
SHEET No. : 59B



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1726.764	1725.624	17+700.00		
1725.944	1724.987	17+710.00		
1725.345	1724.350	17+720.00	IP-492	
1724.757	1724.046	17+730.00		
1724.169	1723.742	17+740.00		R=20.00
1723.581	1723.176	17+750.00		IP-493
1722.993	1722.610	17+760.00		
1722.405	1722.060	17+770.00	IP-494	R=60.00
1721.817	1721.509	17+780.00		
1721.229	1721.154	17+790.00		
1720.841	1720.798	17+800.00		
1720.871	1720.584	17+810.00		R=70.00
1721.119	1720.370	17+820.00		
1721.368	1719.913	17+830.00		
1721.616	1719.456	17+840.00		R=15.00
1721.864	1721.738	17+850.00	IP-496	
1722.112	1724.020	17+860.00	IP-497	R=15.00
1722.361	1723.042	17+870.00		
1722.609	1722.065	17+880.00		
1722.857	1722.683	17+890.00		R=30.00
1722.981	1723.301	17+900.00	IP-498	
1722.758	1722.909	17+910.00		
1722.311	1722.517	17+920.00		
1721.859	1721.745	17+930.00	IP-499	R=40.00
1721.408	1720.973	17+940.00		
1720.957	1720.701	17+950.00	IP-500	R=40.00
1720.505	1720.429	17+960.00		
1720.054	1720.110	17+970.00		
1719.602	1719.792	17+980.00		R=100.00
1719.151	1719.286	17+990.00	IP-501	
1718.864	1718.779	18+000.00	IP-502	R=30.00



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



BEAM-CAD/CAD
SARNOBOL LATHIA

CONSULTANT:

PROJECT:

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

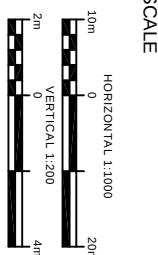
NAME

DESIGNATION

SIGNATURE

DATE

SCALE



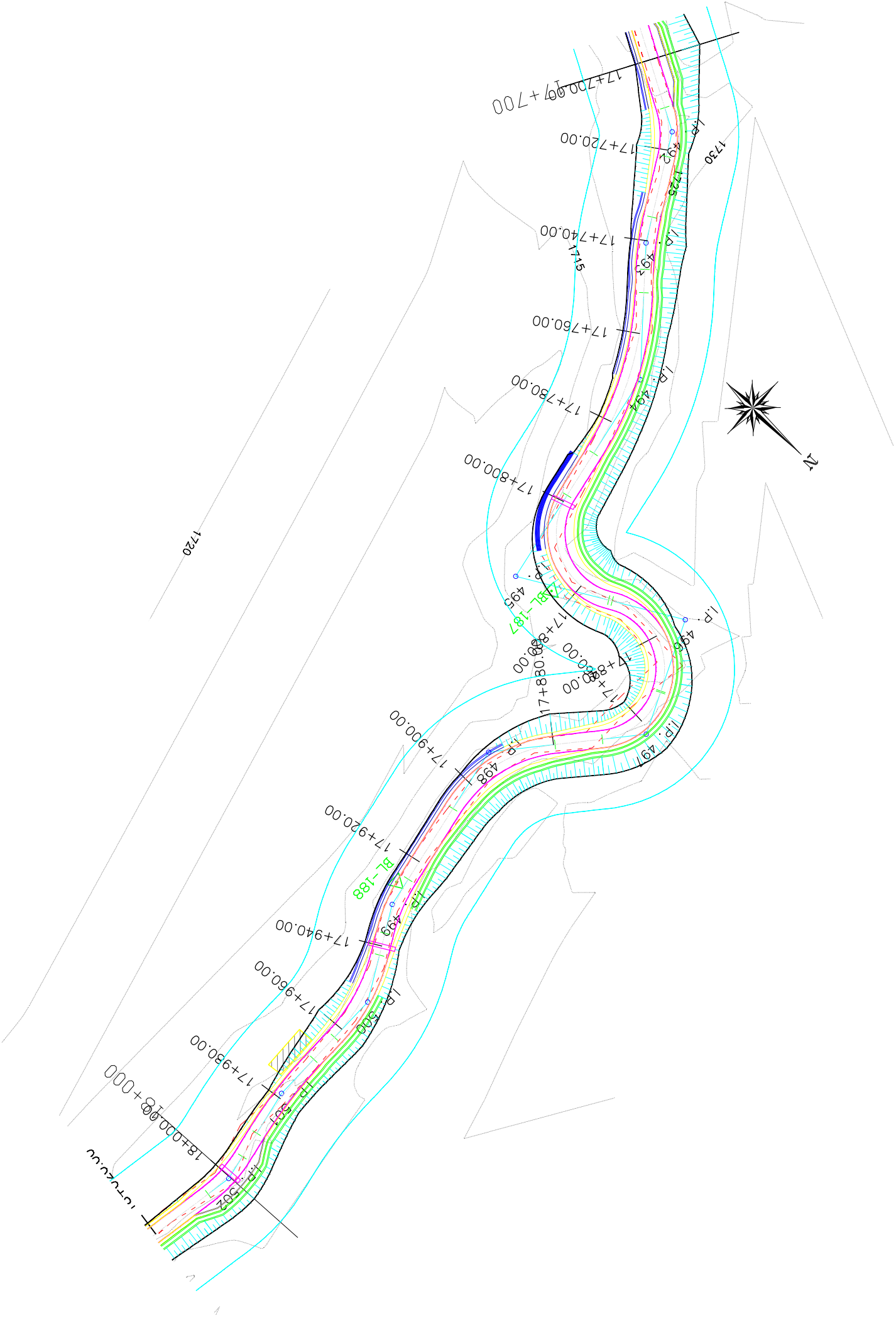
PLAN & PROFILES

CH: 17+700 - 18+000

DATE: November, 2017

DRWG NO.: 1

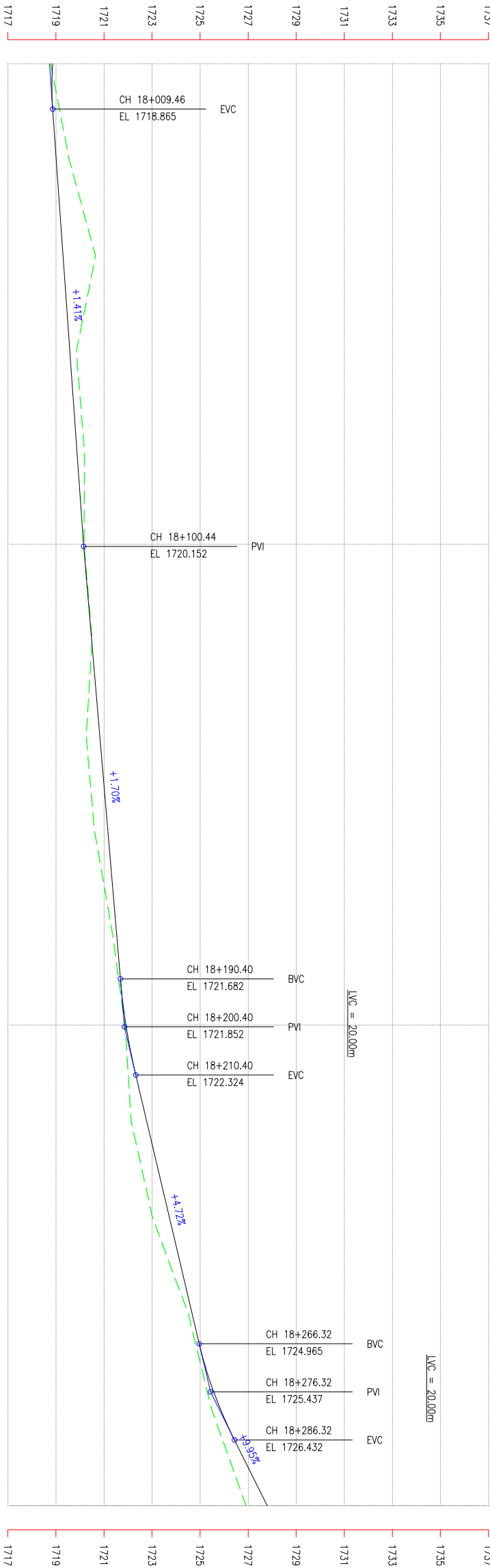
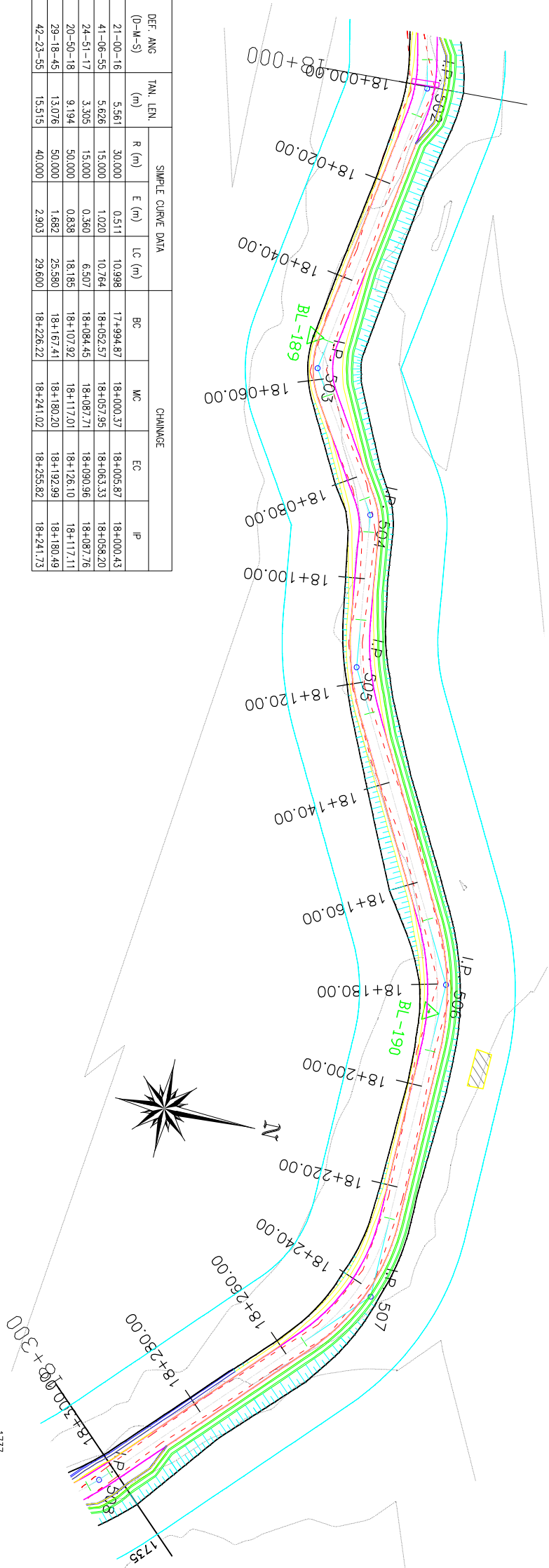
SHEET No.: 60B



IP.No	CO-ORDINATES(m)		WCB (0-M-S)	DIST (m)	DEF. ANG (0-M-S)	TAN. LEN. (m)	SAMPLE CURVE DATA				CHANGGE			
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP	
492	321404.500	3046161.000	59-23-11	54.580	30-24-45	5.436	20.000	0.276	10.616	17+110.77	17+716.08	17+721.39	17+716.21	
493	321425.625	3046173.500	48-31-43	24.546	10-51-27	5.702	60.000	0.270	11.370	17+734.80	17+740.49	17+746.17	17+740.50	
494	321447.688	3046193.000	78-28-20	29.445	29-56-33	18.719	70.000	2.460	36.392	17+751.19	17+769.48	17+787.17	17+769.91	
495	321496.719	3046203.000	330-29-50	50.040	107-58-26	20.636	15.000	10.512	28.268	17+798.46	17+812.60	17+826.73	17+819.10	
496	321478.188	3046235.750	64-58-27	37.629	94-28-30	16.220	15.000	7.093	24.734	17+827.50	17+839.87	17+852.23	17+843.72	
497	321501.750	3046246.750	129-38-39	26.003	64-40-11	9.495	15.000	2.753	16.931	17+852.52	17+860.99	17+869.45	17+862.02	
498	321528.000	3046225.000	78-27-48	34.090	51-10-56	14.368	30.000	3.263	26.799	17+879.68	17+893.08	17+906.48	17+894.05	
499	321565.969	3046232.750	60-15-16	38.552	18-12-30	6.410	40.000	0.510	12.712	17+924.45	17+930.81	17+937.16	17+930.86	
500	321584.781	3046243.500	89-28-10	21.667	29-12-54	10.425	40.000	1.336	20.396	17+941.99	17+952.19	17+962.39	17+952.41	
501	321611.781	3046243.750	77-56-25	27.001	11-31-40	10.094	100.000	0.508	20.120	17+968.87	17+978.83	17+988.99	17+978.96	
502	321632.844	3046248.250	98-56-37	21.538	21-00-16	5.561	30.000	0.511	10.998	17+994.87	18+000.37	18+005.87	18+000.43	

 GOVERNMENT OF NEPAL MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT EARTHQUAKE EMERGENCY ASSISTANCE PROJECT KAPILKOT, LALITPUR		CONSULTANT:  BEAM-COMCA - JV KAPILKOT, LALITPUR		PROJECT: DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN OF BIMPHEDI - BOCATE - IPA DEURALI - SENSEI ROAD KAPILKOT, LALITPUR		DESIGNED BY : CHECKED BY : RECOMMENDED BY : APPROVED BY : NAME DESIGNATION SIGNATURE DATE		SCALE HORIZONTAL 1:1000 VERTICAL 1:200 PLAN & PROFILES CH: 17+700 - 18+000		DATE: November, 2017 DRAWING NO.: SHEET No. : 60A	
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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
502	321632.844	3046248.250	98-56-37	21.538	21-00-16	5.561	30.000	0.511	10.998	17+994.87	18+000.37	18+005.87	18+000.43
503	321690.031	3046239.250	57-49-51	57.891	41-06-55	5.626	15.000	1.020	10.764	18+052.57	18+057.95	18+063.33	18+058.20
504	321715.469	3046255.250	82-41-11	30.051	24-51-17	3.305	15.000	0.360	6.507	18+084.45	18+087.71	18+090.96	18+087.76
505	321744.888	3046259.000	61-50-52	29.439	20-50-18	9.194	50.000	0.838	18.185	18+107.92	18+117.01	18+126.10	18+117.11
506	321800.750	3046289.000	91-09-30	63.584	29-18-45	13.076	50.000	1.682	23.580	18+167.41	18+180.20	18+192.99	18+180.49
507	321862.562	3046287.750	133-33-21	61.825	42-23-55	15.515	40.000	2.903	29.600	18+226.22	18+241.02	18+255.82	18+241.73



DESIGN LEVEL (m)	1718.864	1718.873	1719.014	1719.156	1719.297	1719.439	1719.580	1719.722	1719.863	1720.004	1720.146	1720.315	1720.485	1720.655	1720.825	1720.995	1721.165	1721.335	1721.505	1721.675	1721.915	1722.305	1722.778	1723.250	1723.722	1724.194	1724.666	1725.156	1725.855	1726.798	1727.793
EXISTING LEVEL (m)	1718.779	1719.167	1719.555	1720.103	1720.650	1720.249	1719.848	1720.016	1720.184	1720.178	1720.173	1720.339	1720.505	1720.383	1720.260	1720.438	1720.616	1720.969	1721.322	1721.600	1721.878	1722.006	1722.133	1722.576	1723.018	1723.761	1724.504	1724.995	1725.486	1726.201	1726.916
CHAINAGE (km)	18+000.00	18+010.00	18+020.00	18+030.00	18+040.00	18+050.00	18+060.00	18+070.00	18+080.00	18+090.00	18+100.00	18+110.00	18+120.00	18+130.00	18+140.00	18+150.00	18+160.00	18+170.00	18+180.00	18+190.00	18+200.00	18+210.00	18+220.00	18+230.00	18+240.00	18+250.00	18+260.00	18+270.00	18+280.00	18+290.00	18+300.00
HORIZONTAL ALIGNMENT	RIGHT	IP-502 R=30.00										IP-503 R=15.00										IP-504 R=15.00									
	LEFT	IP-502 R=30.00										IP-503 R=15.00										IP-504 R=15.00									



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



BEAM-COMCA - JV
Joint Venture

CONSULTANT:

PROJECT:

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

PLAN & PROFILES

CH: 18+000 - 18+300

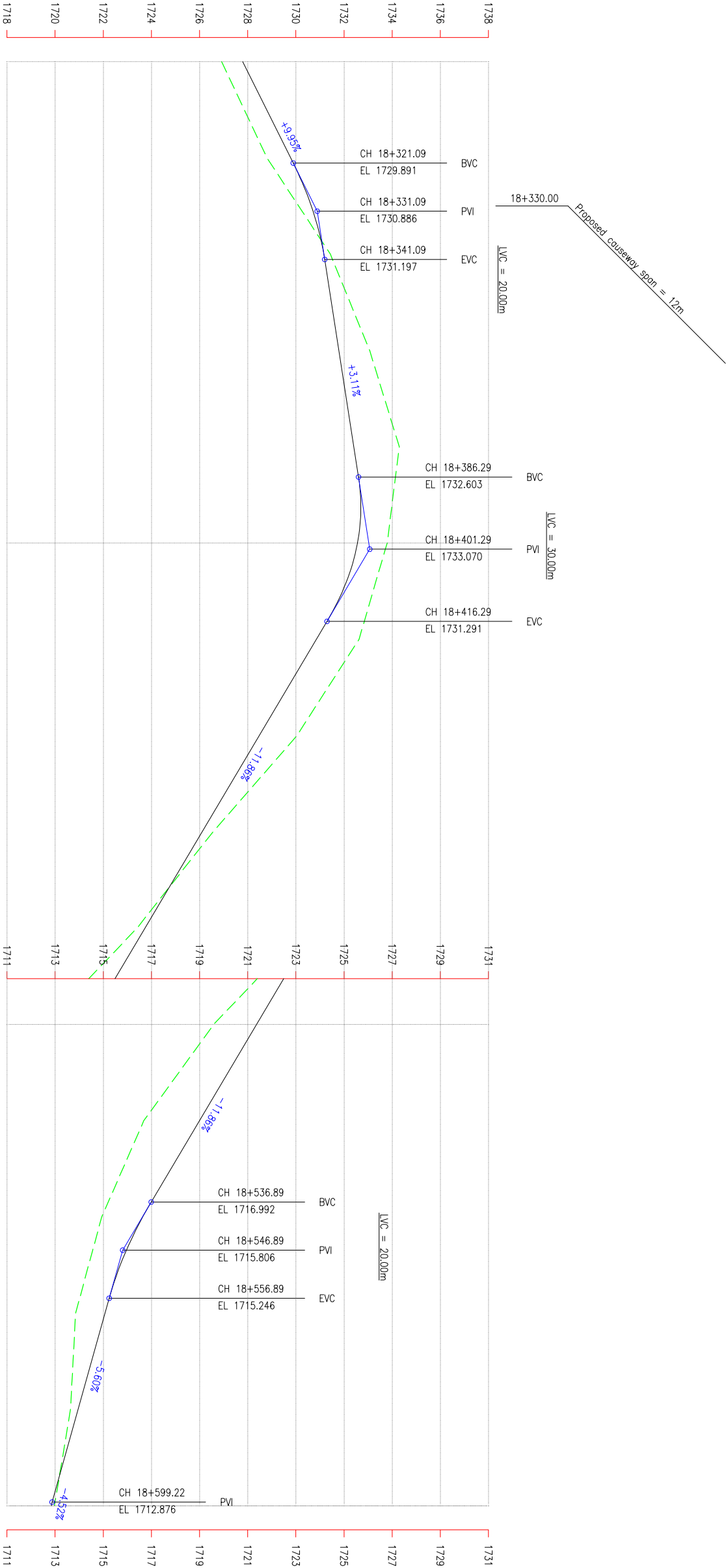
DATE: November, 2017

DRWG NO.:

SHEET No.:

1

61



HORIZONTAL ALIGNMENT	RIGHT	CHAINAGE (km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)
	LEFT			
		18+300.00	1726.916	1727.793
		18+310.00	1727.858	1728.788
		18+320.00	1728.800	1729.783
		18+330.00	1730.116	1730.642
		18+340.00	1731.431	1731.161
		18+350.00	1732.247	1731.474
		18+360.00	1733.064	1731.785
		18+370.00	1733.680	1732.097
		18+380.00	1734.296	1732.408
		18+390.00	1734.044	1732.684
		18+400.00	1733.793	1732.561
		18+410.00	1733.208	1731.939
		18+420.00	1732.624	1730.852
		18+430.00	1731.336	1729.666
		18+440.00	1730.047	1728.480
		18+450.00	1728.302	1727.294
		18+460.00	1726.557	1726.109
		18+470.00	1724.979	1724.923
		18+480.00	1723.401	1723.737
		18+490.00	1721.494	1722.552
		18+500.00	1719.587	1721.366
		18+510.00	1718.137	1720.180
		18+520.00	1716.686	1718.994
		18+530.00	1715.811	1717.809
		18+540.00	1714.935	1716.638
		18+550.00	1714.394	1715.706
		18+560.00	1713.852	1715.072
		18+570.00	1713.746	1714.512
		18+580.00	1713.639	1713.952
		18+590.00	1713.307	1713.392
		18+600.00	1712.974	1712.841



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KAPILKOTTA LATHIM



BEAM-CAD/CAD - JV
KAPILKOTTA LATHIM

CONSULTANT:

PROJECT:

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

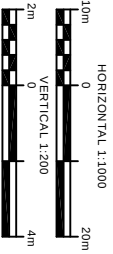
NAME

DESIGNATION

SIGNATURE

DATE

SCALE



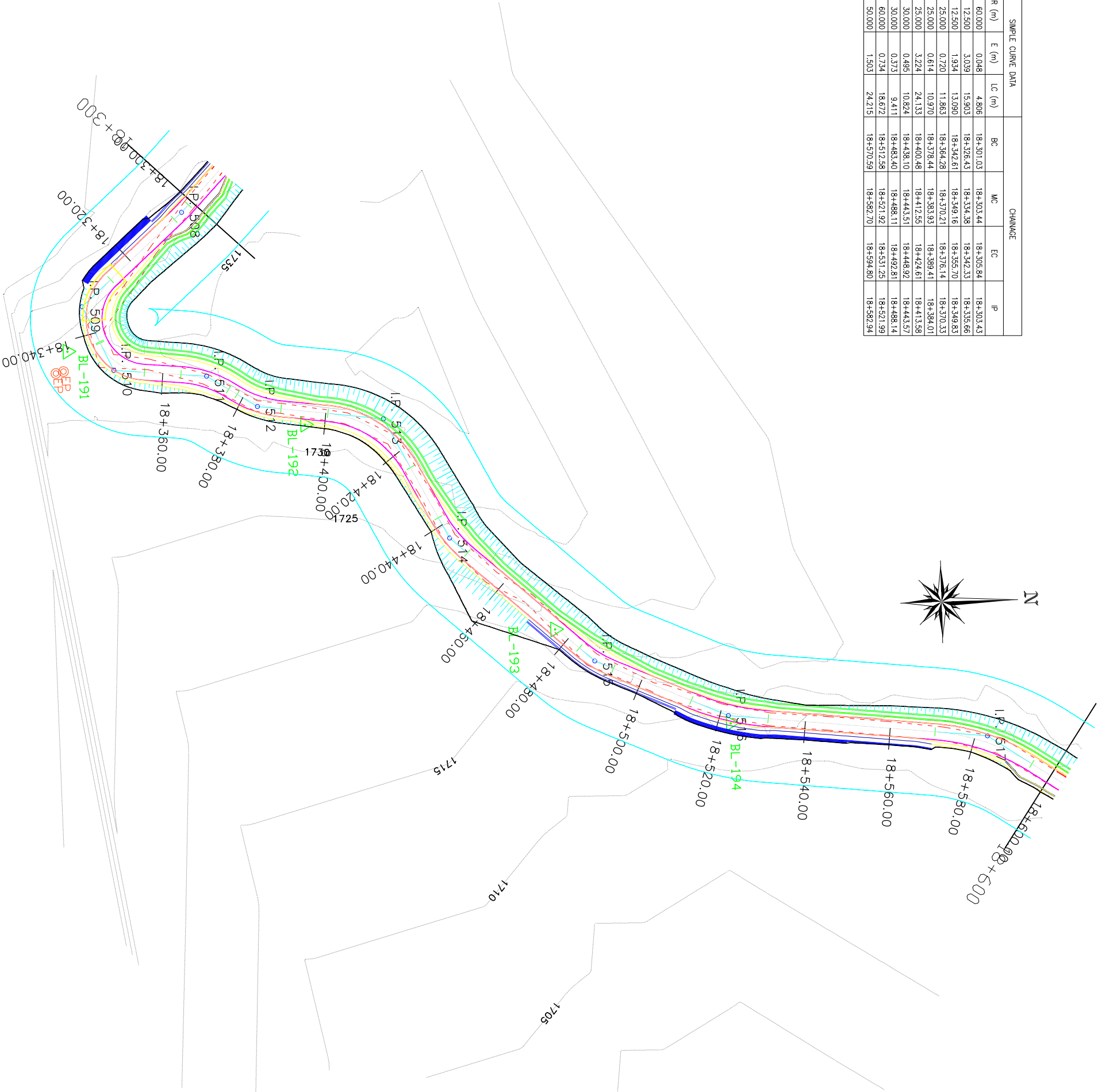
PLAN & PROFILES

DATE: November, 2017

CH: 18+300 - 18+600

DRWG NO.:
SHEET No. :
62B

P.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	
508	321908.312	304624.250	138-08-42	63.129	04-35-21	2.404	60.000	0.048	4.806	18+301.03	18+303.44	18+305.84	18+303.43	
509	321929.812	304620.250	65-15-19	32.222	72-53-30	9.231	12.500	3.039	15.903	18+326.43	18+334.38	18+342.33	18+335.66	
510	321945.000	304627.250	05-15-13	16.724	60-00-00	7.217	12.500	1.934	13.090	18+342.61	18+349.16	18+355.70	18+349.83	
511	321947.000	304629.000	32-26-33	21.942	27-11-12	6.045	25.000	0.720	11.863	18+364.28	18+370.21	18+376.14	18+370.33	
512	321954.469	304626.750	07-18-13	13.923	25-08-28	5.575	25.000	0.614	10.970	18+378.44	18+383.93	18+389.41	18+384.01	
513	321968.250	304629.250	62-36-39	29.741	55-18-27	5.471	25.000	3.224	24.133	18+400.48	18+412.55	18+424.61	18+413.58	
514	321986.719	304630.000	41-56-22	32.063	20-40-20	5.471	30.000	0.495	10.824	18+438.10	18+443.51	18+448.92	18+443.57	
515	322016.594	304633.250	23-58-03	44.700	17-58-25	4.744	30.000	0.373	9.411	18+483.40	18+488.11	18+492.81	18+488.14	
516	322030.375	304639.250	06-08-09	33.925	17-49-49	9.412	60.000	0.734	18.672	18+512.58	18+521.92	18+531.25	18+521.99	
517	32206.906	3046430.000	33-53-11	61.100	27-44-54	12.350	50.000	1.303	24.715	18+570.99	18+582.70	18+594.80	18+582.94	





GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



BEAM-CADWCA - JV
LIMITED LIABILITY PARTNERSHIP

CONSULTANT:

PROJECT:

DETAILED ENGINEERING SURVEY DESIGN OF ROAD
DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
BIMPHEDI - BOCATE - IPA DEURALI - SENSEI ROAD
KATHMANDU, NEPAL

NAME

DESIGNATION

SIGNATURE

DATE

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

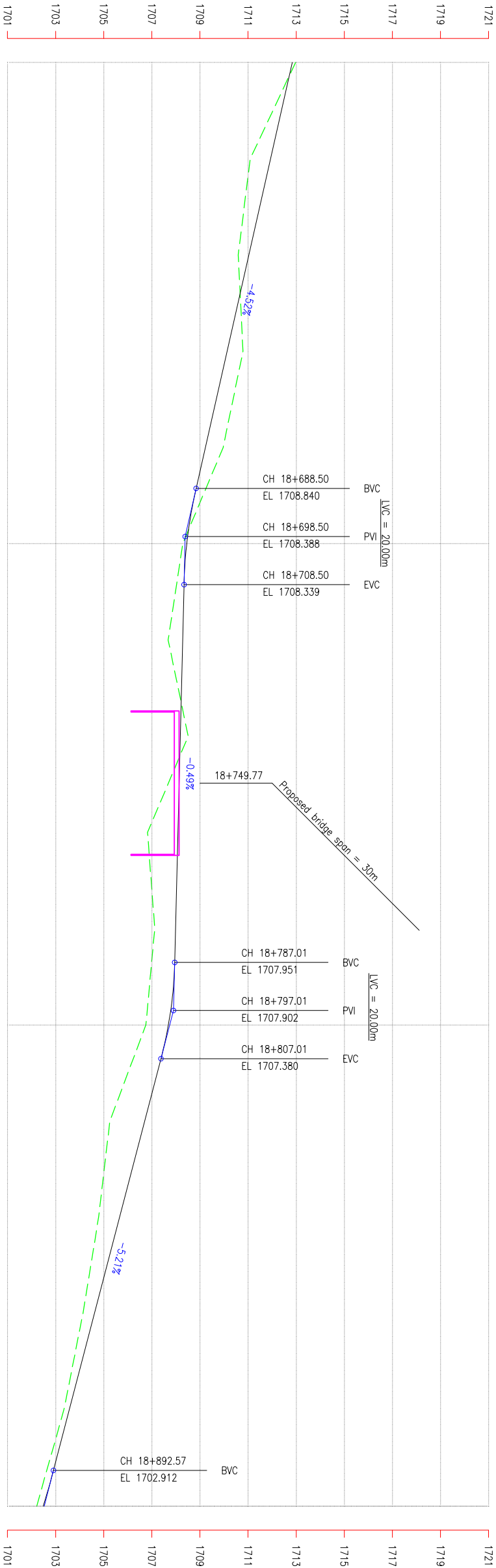
PLAN & PROFILES

DATE: November, 2017

CH: 18+300 - 18+600

DRAWING NO.:
SHEET No. : 62A

1



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1712.841	1712.974	18+600.00		
1712.389	1712.032	18+610.00		
1711.937	1711.090	18+620.00		
1711.485	1710.841	18+630.00		
1711.033	1710.592	18+640.00		
1710.580	1710.690	18+650.00		
1710.128	1710.789	18+660.00		
1709.676	1710.376	18+670.00		
1709.224	1709.964	18+680.00		
1708.775	1709.123	18+690.00		
1708.453	1708.283	18+700.00		
1708.331	1707.981	18+710.00		
1708.282	1707.679	18+720.00		
1708.233	1708.095	18+730.00		
1708.183	1708.512	18+740.00		
1708.134	1707.667	18+750.00		
1708.085	1706.822	18+760.00		
1708.035	1706.971	18+770.00		
1707.986	1707.121	18+780.00		
1707.926	1706.936	18+790.00		
1707.688	1706.752	18+800.00		
1707.224	1706.004	18+810.00		
1706.702	1705.256	18+820.00		
1706.179	1705.021	18+830.00		
1705.657	1704.787	18+840.00		
1705.135	1704.461	18+850.00		
1704.613	1704.134	18+860.00		
1704.091	1703.740	18+870.00		
1703.569	1703.345	18+880.00		
1703.046	1702.779	18+890.00		
1702.486	1702.213	18+900.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KATHMANDU, NEPAL



BEAM-CAD/CAD
KATHMANDU

CONSULTANT:

PROJECT:

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

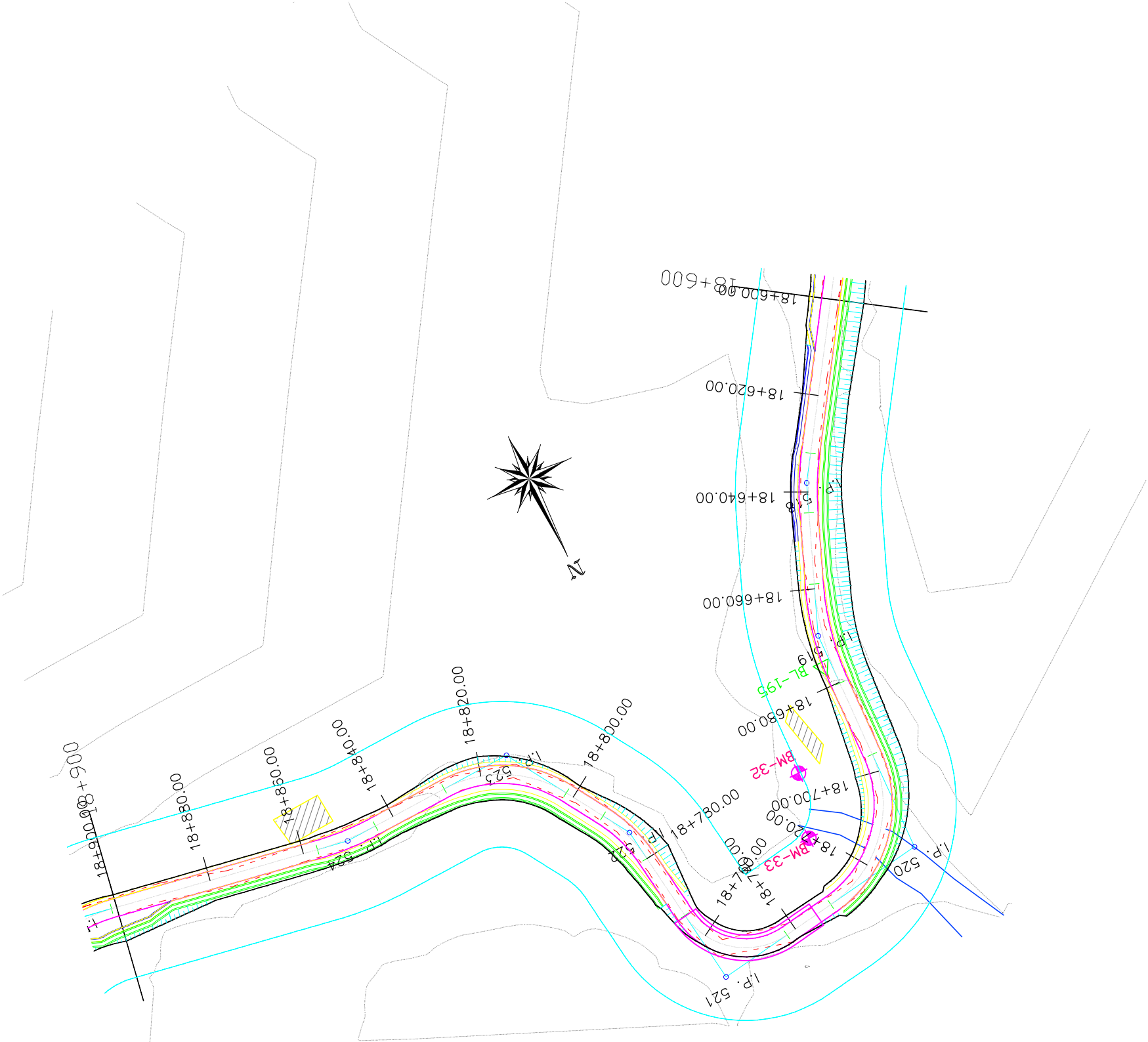
PLAN & PROFILES

CH: 18+600 - 18+900

DATE: November, 2017

DRWG NO.: 1

SHEET No.: 63B



IP No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (m)	DEF. ANG (D-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA				CHANGAGE			
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP	
518	322067.969	3046476.250	22-08-54	55.713	11-44-23	6.169	60.000	0.316	12.294	18+631.99	18+638.14	18+644.28	18+638.16	
519	322079.875	3046505.500	01-54-42	31.580	20-14-12	10.708	60.000	0.948	21.192	18+658.98	18+669.58	18+680.17	18+669.69	
520	322081.469	3046553.250	81-46-04	47.777	79-51-11	20.923	25.000	7.600	34.843	18+696.32	18+713.74	18+731.16	18+717.24	
521	322128.125	3046580.000	172-40-32	47.142	90-54-19	15.239	15.000	6.383	23.799	18+742.14	18+754.04	18+765.94	18+757.38	
522	322132.688	3046524.500	148-30-14	35.792	24-10-23	6.424	30.000	0.680	12.657	18+780.07	18+786.40	18+792.73	18+786.49	
523	322148.312	3046499.000	88-04-11	29.906	60-28-08	14.561	25.000	3.931	26.370	18+801.65	18+814.84	18+828.02	18+816.21	
524	322185.406	3046500.250	100-23-20	37.115	12-19-06	6.475	60.000	0.348	12.900	18+844.10	18+850.55	18+857.00	18+850.57	



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KAPNODUL LATIMAR



CONSULTANT:
BEAM-CADWCA - JV
KAPNODUL LATIMAR

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
BIMPHEDI - BOCATE - IPA DEURALI - SENSEI ROAD
KAPNODUL LATIMAR

NAME

DESIGNATION

SIGNATURE

DATE

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

SCALE

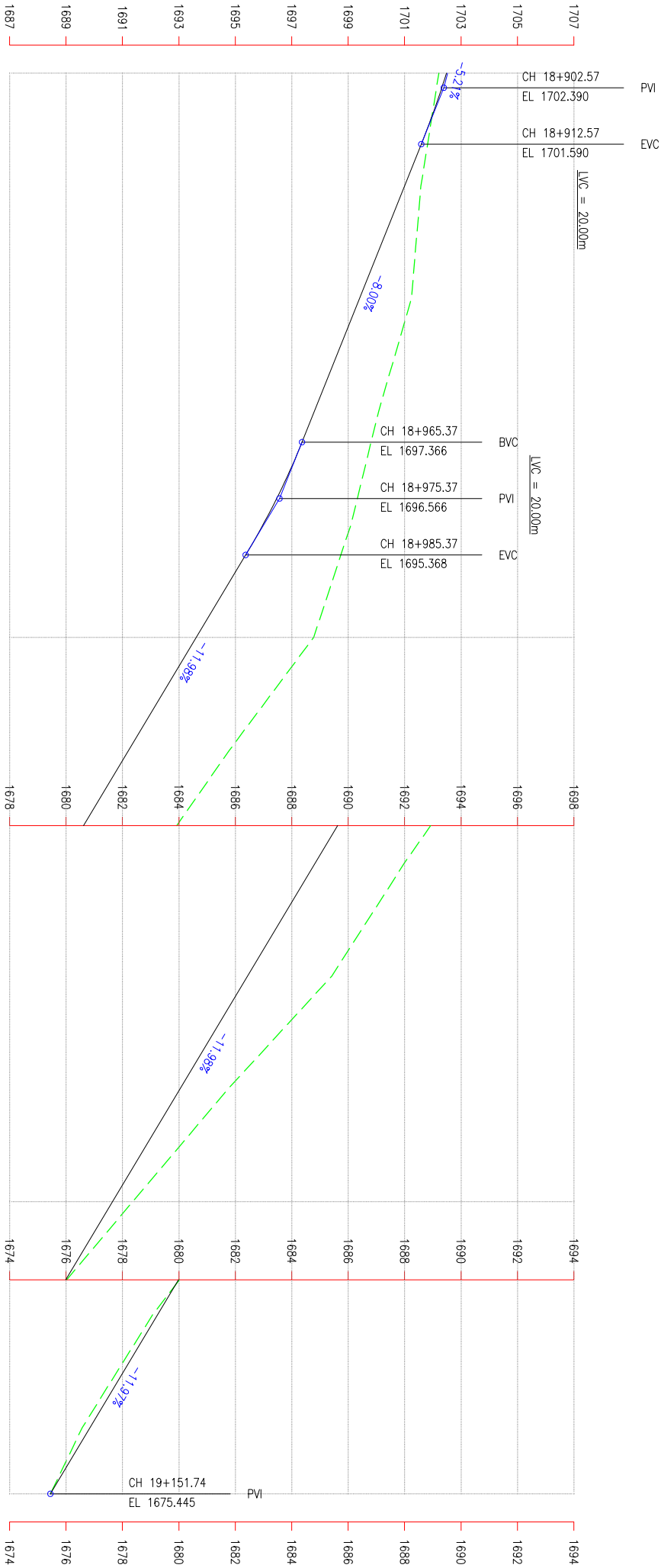
HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES

DATE: November, 2017

CH: 18+600 - 18+900

DRWG NO.:
SHEET No. :
63A



DESIGN LEVEL (m)	1702.486	1701.791	1700.996	1700.196	1699.396	1698.596	1697.796	1696.974	1695.983	1694.814	1693.616	1692.419	1691.221	1690.024	1688.826	1687.629	1686.431	1685.234	1684.036	1682.839	1681.641	1680.444	1679.246	1678.048	1676.851	1675.653	1675.445
EXISTING LEVEL (m)	1702.213	1701.896	1701.579	1701.409	1701.239	1700.658	1700.076	1699.588	1699.099	1698.437	1697.775	1696.281	1694.786	1693.388	1691.991	1690.704	1689.418	1687.582	1685.746	1683.942	1682.138	1680.605	1679.073	1677.824	1676.575	1675.615	1675.448
CHAINAGE (km)	18+900.00	18+910.00	18+920.00	18+930.00	18+940.00	18+950.00	18+960.00	18+970.00	18+980.00	18+990.00	19+000.00	19+010.00	19+020.00	19+030.00	19+040.00	19+050.00	19+060.00	19+070.00	19+080.00	19+090.00	19+100.00	19+110.00	19+120.00	19+130.00	19+140.00	19+150.00	19+151.74
HORIZONTAL ALIGNMENT	RIGHT	R=30.00		R=60.00		R=30.00		R=20.00		R=15.00		R=15.00		R=30.00		R=15.00		R=20.00		R=60.00		R=0.00					
	LEFT	IP-525		IP-526		IP-527		IP-528		IP-529		IP-530		IP-531		IP-532		IP-533		IP-534		IP-535					



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
KATHMANDU, NEPAL

CONSULTANT:



BEAM-COMCA - JV
KATHMANDU

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
BIRAPHEDE - BODATE - IPA DEURALI - SENSEI ROAD
KATHMANDU, NEPAL

NAME	DESIGNATION	SIGNATURE	DATE
DESIGNED BY :			
CHECKED BY :			
RECOMMENDED BY :			
APPROVED BY :			

PLAN & PROFILES

CH: 18+900 - 19+200

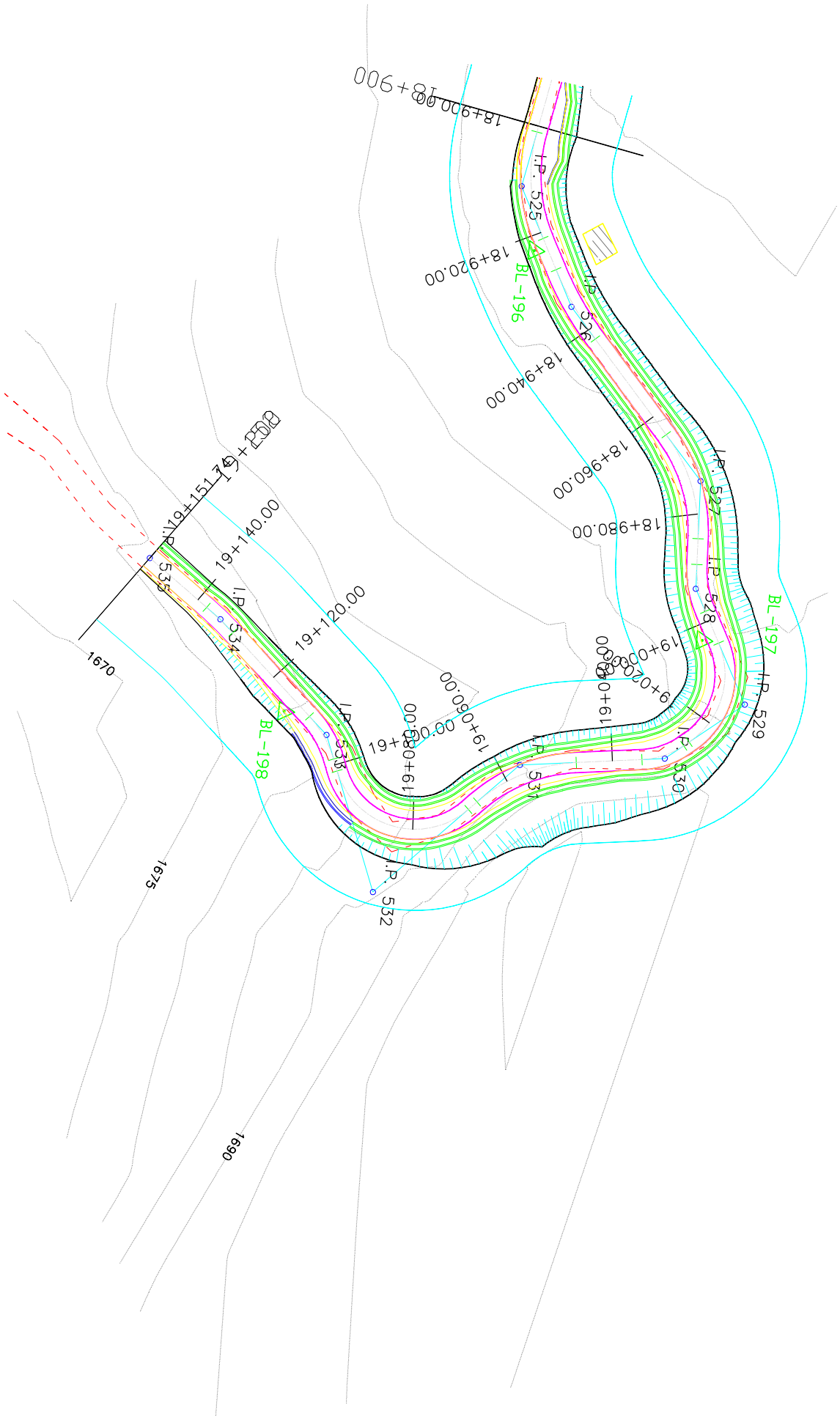
DATE: November, 2017

DRWG NO.:
SHEET No. : 64B

SCALE

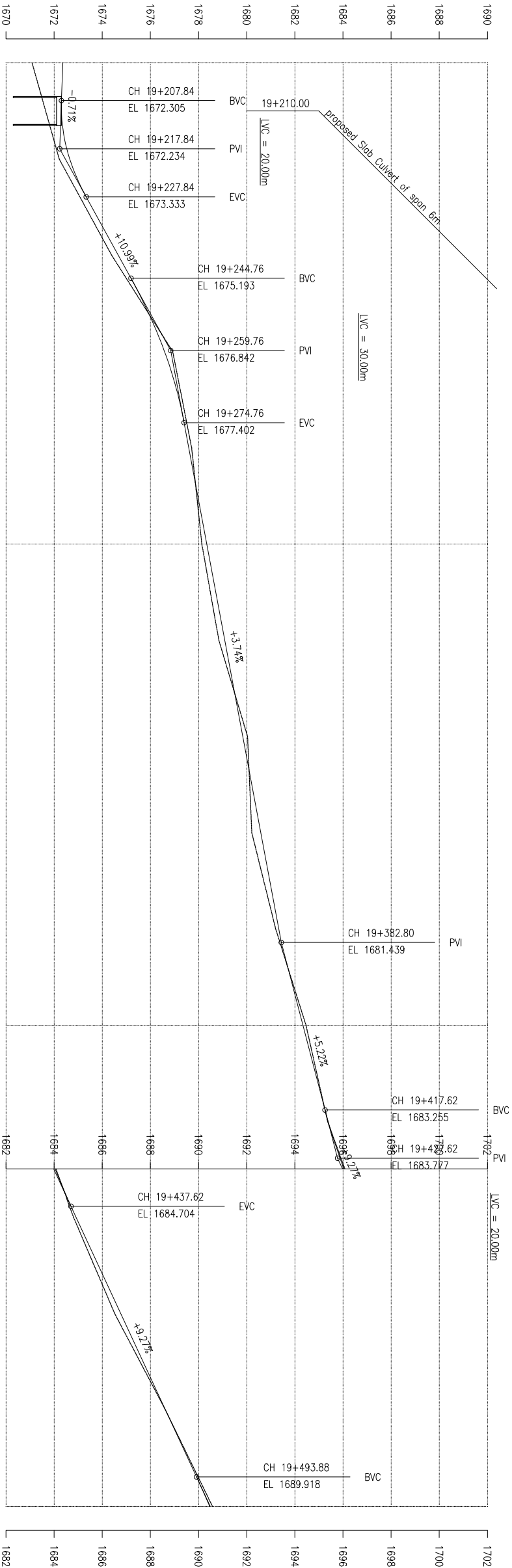
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VERTICAL 1:200



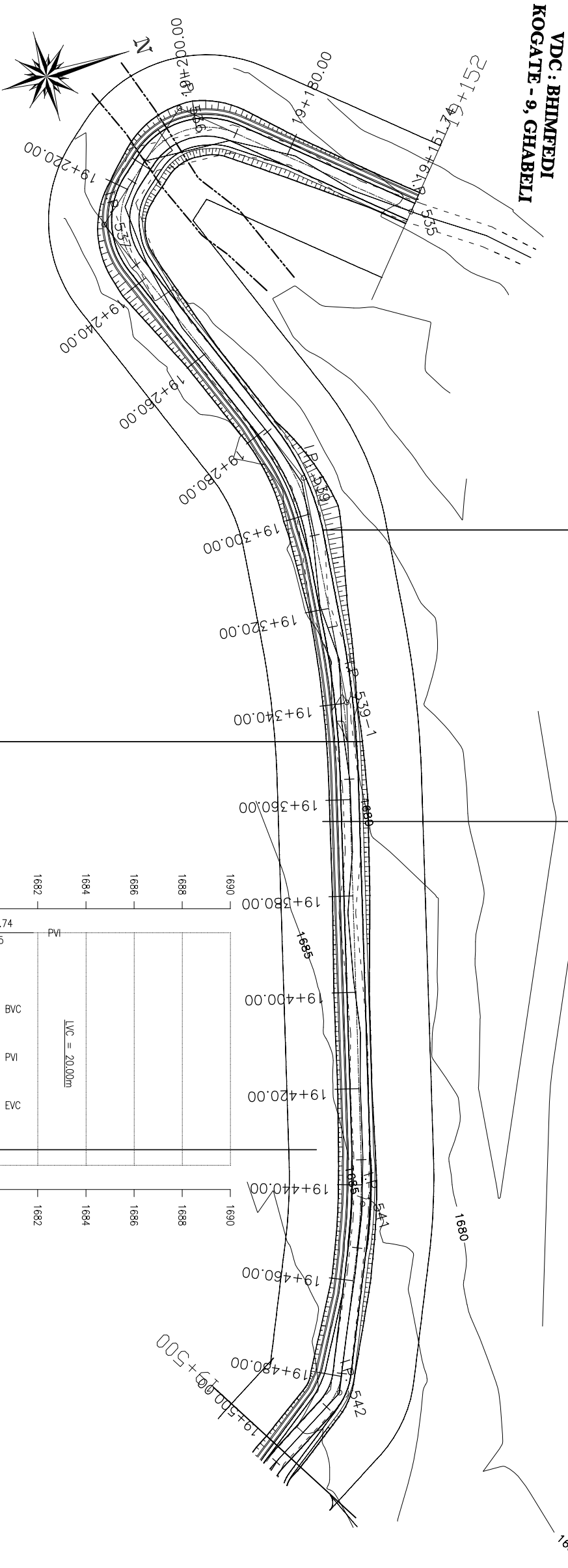
IP.No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (m)	DEF. ANG (D-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA			CHAINAGE			
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP
525	322245.406	3046489.250	62-06-09	61.000	38-17-06	10.413	30.000	1.756	20.046	18+901.11	18+911.14	18+921.16	18+911.52
526	322266.656	3046500.500	48-02-21	24.044	14-03-58	7.402	60.000	0.455	14.730	18+927.39	18+934.76	18+942.12	18+934.79
527	322296.406	3046527.250	87-07-10	40.008	39-04-53	10.648	30.000	1.833	20.463	18+964.08	18+974.31	18+984.54	18+974.73
528	322316.281	3046528.250	61-40-26	19.900	25-26-42	4.515	20.000	0.503	8.882	18+989.28	18+993.72	18+998.16	18+993.80
529	322336.688	3046539.250	140-37-59	23.183	78-57-33	12.356	15.000	4.434	20.672	19+004.47	19+014.81	19+025.14	19+016.83
530	322347.969	3046525.500	172-00-40	17.785	31-22-30	4.213	15.000	0.580	8.214	19+026.36	19+030.47	19+034.57	19+030.57
531	322351.688	3046499.000	133-43-41	26.760	38-17-06	10.413	30.000	1.756	20.046	19+046.70	19+056.73	19+066.75	19+057.11
532	322377.562	3046474.250	248-07-56	35.805	114-24-08	23.277	15.000	12.691	29.951	19+068.87	19+083.85	19+098.82	19+092.15
533	322349.531	3046463.000	222-01-26	30.204	26-06-34	4.638	20.000	0.531	9.114	19+101.11	19+105.67	19+110.22	19+105.75
534	322330.156	3046441.500	215-37-17	28.942	06-23-59	3.354	60.000	0.094	6.702	19+131.17	19+134.52	19+137.87	19+134.52
535	322320.125	3046427.500	00-00-00	17.223	00-00-00	0.000	0.000	0.000	0.000	19+151.74	19+151.74	19+151.74	19+151.74

 GOVERNMENT OF NEPAL MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT EARTHQUAKE EMERGENCY ASSISTANCE PROJECT			CONSULTANT:  BEAM-CORRCA - JV BANGALORE			PROJECT: DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN BIMPHEDI - BOCATE - IPA BUKHAL - SENSEI ROAD Makawanagar, Nepal			DESIGNED BY : CHECKED BY : RECOMMENDED BY : APPROVED BY :			NAME			DESIGNATION			SIGNATURE			DATE			SCALE HORIZONTAL 1:1000 VERTICAL 1:200			PLAN & PROFILES			DATE: November, 2017		
CH: 18+900 - 19+200															DRWG NO.:			1														
															SHEET No.:			64A														

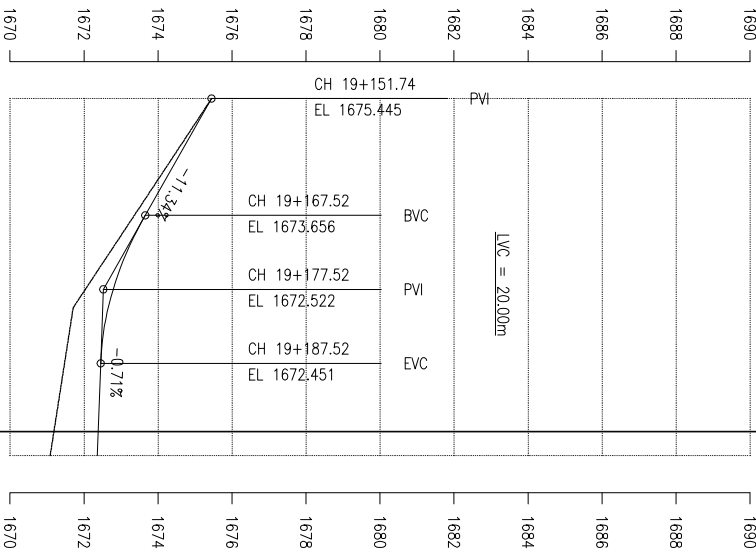


DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1672.361	1671.085	19+200.00	R=15.00 IP-536	
1672.304	1671.649	19+210.00		
1672.651	1672.214	19+220.00	R=15.00 IP-537	
1673.571	1673.305	19+230.00		
1674.670	1674.395	19+240.00		
1675.736	1675.661	19+250.00		
1676.587	1676.928	19+260.00		
1677.197	1677.321	19+270.00		
1677.598	1677.715	19+280.00	R=50.00 IP-539	
1677.972	1677.926	19+290.00		
1678.345	1678.137	19+300.00		
1678.719	1678.491	19+310.00		
1679.093	1678.845	19+320.00		
1679.466	1679.441	19+330.00		
1679.840	1680.037	19+340.00	R=200.00 IP--497093	
1680.214	1680.125	19+350.00		
1680.587	1680.213	19+360.00		
1680.961	1680.710	19+370.00		
1681.334	1681.206	19+380.00		
1681.815	1681.835	19+390.00		
1682.336	1682.464	19+400.00		
1682.858	1682.913	19+410.00		
1683.385	1683.362	19+420.00		
1684.056	1684.089	19+430.00		
1684.924	1684.815	19+440.00	R=120.00 IP-541	
1685.851	1685.670	19+450.00		
1686.778	1686.525	19+460.00		
1687.705	1687.578	19+470.00		
1688.632	1688.631	19+480.00	R=12.50 IP-542	
1689.559	1689.605	19+490.00		
1690.462	1690.580	19+500.00		

CO-ORDINATES(m)		WCB (0-M-S)	DIST (m)	DEF. ANG (0-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA				CHANCE			
IP No	EASTING					NORTHING	R (m)	E (m)	LC (m)	BC	MC	EC	IP
535	322320.125	3046427.500	221-01-57	19151.740	00-00-00	0.000	0.000	0.000	19+151.74	19+151.74	19+151.74	19+151.74	19+151.74
536	322285.531	3046387.750	139-50-35	52.695	81-11-17	12.854	15.000	4.754	21.255	19+191.58	19+202.21	19+212.84	19+204.43



IP No	OO-ORDINATES(m)		WCB	DIST	DEF. ANG	TAN. LEN.	SIMPLE CURVE DATA				CHANCE		
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP
536	322285.531	3046387.750	139-50-35	52.695	81-11-17	12.854	15.000	4.754	21.255	19+191.58	19+202.21	19+212.84	19+204.43
537	322304.094	3046365.750	68-45-17	28.785	71-05-12	10.717	15.000	3.435	18.611	19+218.05	19+227.36	19+236.66	19+228.77
539	322366.469	3046390.000	96-02-54	66.923	27-17-44	12.140	50.000	1.453	23.820	19+280.23	19+292.64	19+304.55	19+292.87
539-1	322413.656	3046385.000	105-09-57	47.451	09-06-56	15.944	280.000	0.634	31.820	19+323.92	19+339.93	19+355.74	19+339.86
541	322514.188	3046357.750	113-55-33	104.160	08-45-37	9.192	120.000	0.352	18.348	19+434.76	19+443.94	19+453.11	19+443.95
542	322550.250	3046341.750	149-29-21	39.452	35-33-48	4.009	12.500	0.627	7.799	19+479.36	19+483.24	19+487.12	19+483.37



DESIGN LEVEL (m)	1674.508	1673.391	1672.654	1672.433	1672.361
	1674.357	1673.032	1671.707	1671.396	1671.085
EXISTING LEVEL (m)					
CHAINAGE (km)					
	19+160.00	19+170.00	19+180.00	19+190.00	19+200.00
HORIZONTAL ALIGNMENT	RIGHT	IP-535 R=0.00			
	LEFT	IP-536 R=15.00			



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



BRAM-COMEGA - JV
MEMORANDUM

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN CONCISE RE STUDY AND GAS PLANT FOR BHIMEDEI - BOGATE, KOGATE, GHABELI, SIKHRA ROAD (KOGATE - 9, GHABELI)

CONSULTANT:

PROJECT:

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

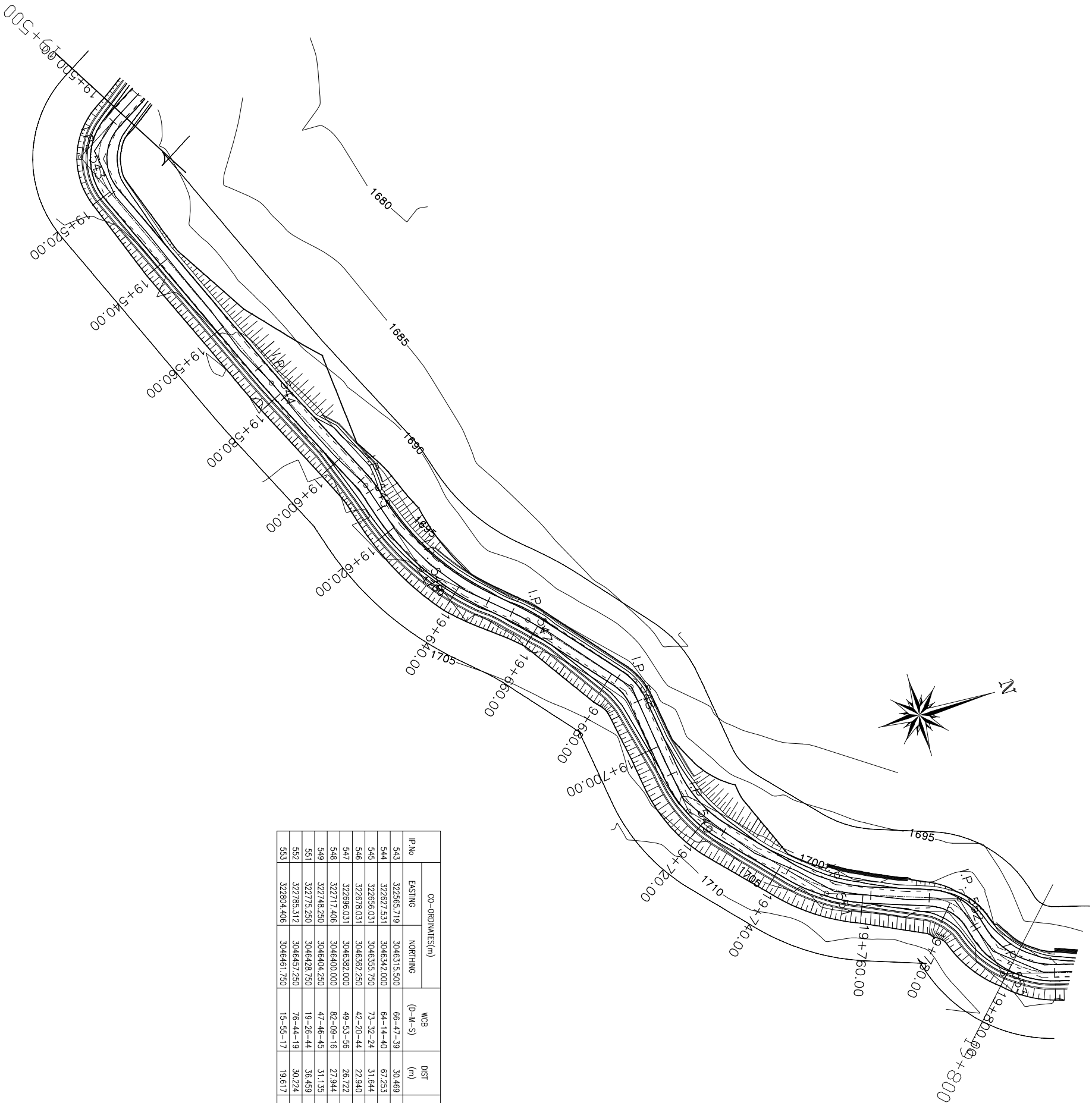
HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES

DATE: September, 2017

CH: 19+152 - 19+500

DRWG NO.: 1
SHEET No.: 66A



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
543	322565.719	3046315.500	66-47-39	30.468	82-41-41	11.000	12.500	4.151	18.041	19+502.58	19+511.60	19+520.62
544	322627.531	3046342.000	64-14-40	67.253	02-32-58	4.451	200.000	0.050	8.900	19+576.87	19+581.32	19+576.87
545	322656.031	3046355.750	73-32-24	31.644	09-17-36	1.626	20.000	0.066	3.244	19+608.89	19+610.13	19+608.52
546	322678.031	3046362.250	42-20-44	22.940	31-11-30	16.748	60.000	2.294	32.664	19+631.03	19+647.36	19+631.45
547	322696.031	3046382.000	49-53-56	26.722	07-33-05	3.960	60.000	0.131	7.908	19+653.37	19+667.33	19+667.33
548	322717.406	3046400.000	82-09-16	27.944	32-15-27	3.615	12.500	0.512	7.038	19+681.65	19+685.17	19+685.26
549	322748.250	3046404.250	47-46-45	31.135	34-22-38	9.280	30.000	1.403	18.000	19+706.93	19+715.93	19+724.93
551	322775.250	3046428.750	19-26-44	36.459	28-19-57	10.097	40.000	1.255	19.780	19+742.01	19+751.90	19+761.79
552	322785.312	3046457.250	76-44-19	30.224	57-17-44	6.839	12.500	1.744	12.500	19+775.09	19+781.34	19+781.92
553	322804.406	3046461.750	15-55-17	19.617	60-49-10	11.728	20.000	3.190	21.230	19+786.64	19+799.26	19+800.87



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED LAYOUT



CONSULTANT:
BRAM-COMEGA-IT
NEPAL

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
CONJUSE RE STUDY AND GAS PLAN OF
BHHNHEDH - BOCATE, AERIAL - SISWEN ROAD
SISWENWEN, NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

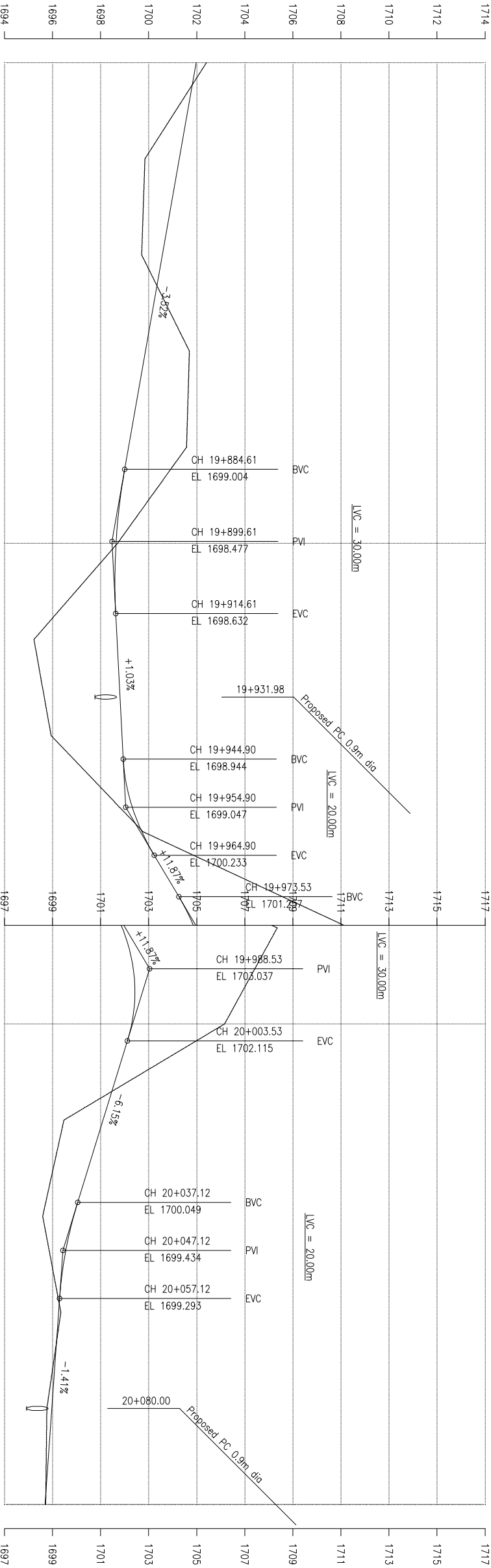
PLAN & PROFILES

DATE: September, 2017

CH: 19+500 - 19+800

DRWG NO.: 1

SHEET No.: 67A



DESIGN LEVEL (m)	1701.979	1701.628	1701.276	1700.925	1700.573	1700.221	1699.870	1699.518	1699.166	1698.837	1698.643	1698.600	1698.687	1698.790	1698.893	1699.067	1699.717	1700.839	1701.899	1702.397	1702.294	1701.717	1701.102	1700.487	1699.882	1699.453	1699.252	1699.111	1698.970	1698.828	1698.687															
	EXISTING LEVEL (m)	1702.403	1701.124	1699.845	1699.777	1699.709	1700.702	1701.695	1701.636	1701.577	1700.140	1698.703	1696.965	1695.227	1695.584	1695.941	1697.852	1699.762	1704.056	1708.351	1707.255	1706.159	1702.817	1699.475	1699.032	1698.590	1698.969	1699.347	1699.056	1698.764	1698.740	1698.715														
CHAINAGE (km)	19+800.00	19+810.00	19+820.00	19+830.00	19+840.00	19+850.00	19+860.00	19+870.00	19+880.00	19+890.00	19+900.00	19+910.00	19+920.00	19+930.00	19+940.00	19+950.00	19+960.00	19+970.00	19+980.00	19+990.00	20+000.00	20+010.00	20+020.00	20+030.00	20+040.00	20+050.00	20+060.00	20+070.00	20+080.00	20+090.00	20+100.00															
	HORIZONTAL ALIGNMENT	RIGHT		R=20.00		IP-554		R=20.00		IP-555		R=12.50		IP-556		R=12.50		IP-557		R=12.50		IP-558		R=12.50		IP-559		R=12.50		IP-560		R=12.50		IP-561		R=20.00		IP-562		R=80.00		IP-563		R=150.00		
LEFT	R=20.00		IP-553		R=20.00		IP-554		R=20.00		IP-555		R=12.50		IP-556		R=12.50		IP-557		R=12.50		IP-558		R=12.50		IP-559		R=12.50		IP-560		R=12.50		IP-561		R=20.00		IP-562		R=80.00		IP-563		R=150.00	



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED FOR LAYOUT



CONSULTANT:
BRAM-COMEGA - JV
MEMBERSHIP

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
CONCESSION STUDY AND GAS PLAN OF
BHIRNPHEDI - BOKATE, KATARMALI - SIKHRA ROAD
KATHMANDU - NEPAL

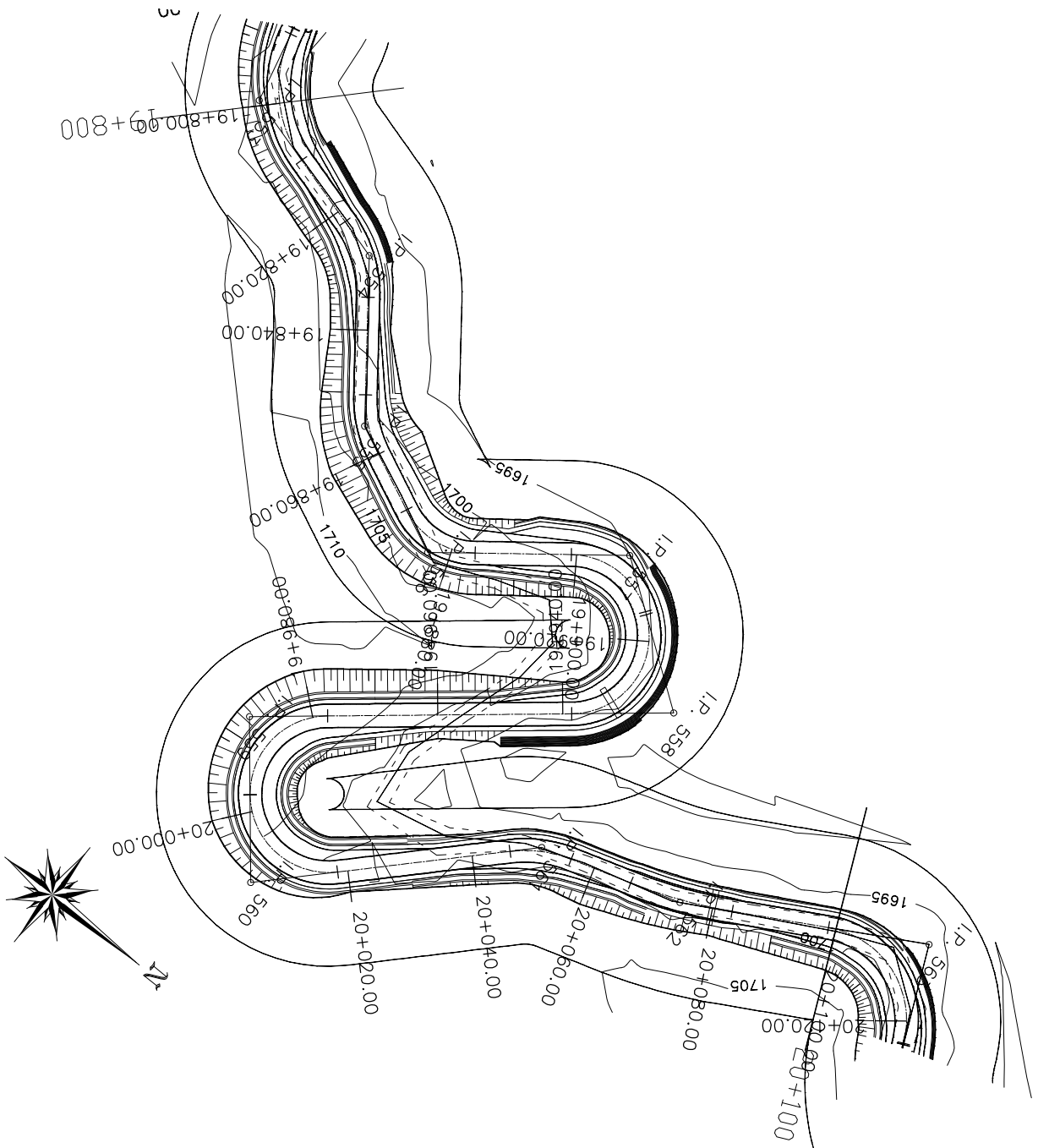
DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

NAME
DESIGNATION
SIGNATURE
DATE

SCALE
HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES
CH: 19+800 - 20+100

DATE: September, 2017
DRWG NO.: 1
SHEET No.: 68B



IP No	CO-ORDINATES (m)		WCB (0-M-S)	DIST (m)	DEF. ANG (0-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA			CHANGAGE		
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC
553	322804.406	3046461.750	15-56-17	19.617	60-49-10	11.738	20.000	3.190	21.230	19+788.64	19+799.26	19+809.87
554	322812.750	3046491.000	52-46-33	30.417	36-51-09	6.663	20.000	1.081	12.864	19+821.89	19+828.32	19+834.75
555	322834.469	3046507.500	24-38-49	27.276	28-07-35	5.010	20.000	0.618	9.818	19+850.35	19+855.26	19+860.17
556	322843.875	3046528.000	322-06-36	22.555	62-32-18	7.591	12.500	2.124	13.644	19+870.12	19+876.94	19+883.76
557	322824.031	304653.500	35-36-35	32.312	73-29-56	9.334	12.500	3.100	16.035	19+899.15	19+907.17	19+915.19
558	322839.250	3046574.750	140-43-17	26.138	105-06-32	16.322	12.500	8.059	22.931	19+915.67	19+927.14	19+938.60
559	322892.188	3046522.250	50-50-00	67.823	89-53-08	12.475	12.500	5.160	19.610	19+977.63	19+987.44	19+997.24
560	322902.750	3046539.000	314-21-05	26.521	96-28-49	14.000	12.500	6.269	21.049	19+997.29	20+007.82	20+018.34
561	322869.250	3046571.750	342-53-50	46.849	28-32-41	5.088	20.000	0.637	9.964	20+046.10	20+051.08	20+056.06
562	322862.250	3046594.500	330-48-56	23.803	12-05-01	8.467	80.000	0.447	16.872	20+066.31	20+074.75	20+083.18
563	322842.562	3046629.750	65-32-55	40.375	94-43-58	16.293	15.000	7.147	24.801	20+098.79	20+111.19	20+123.59



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED LAYOUT

CONSULTANT:



BEAM-CEMCA -PVT
MEMBERSHIP

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
CONCESSION STUDY AND GAS PLAN OF
BHIRNETHI - BOGAATE, KATHMANDU, SIKHIND ROAD
KATHMANDU, NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

10m

20m

4m

PLAN & PROFILES

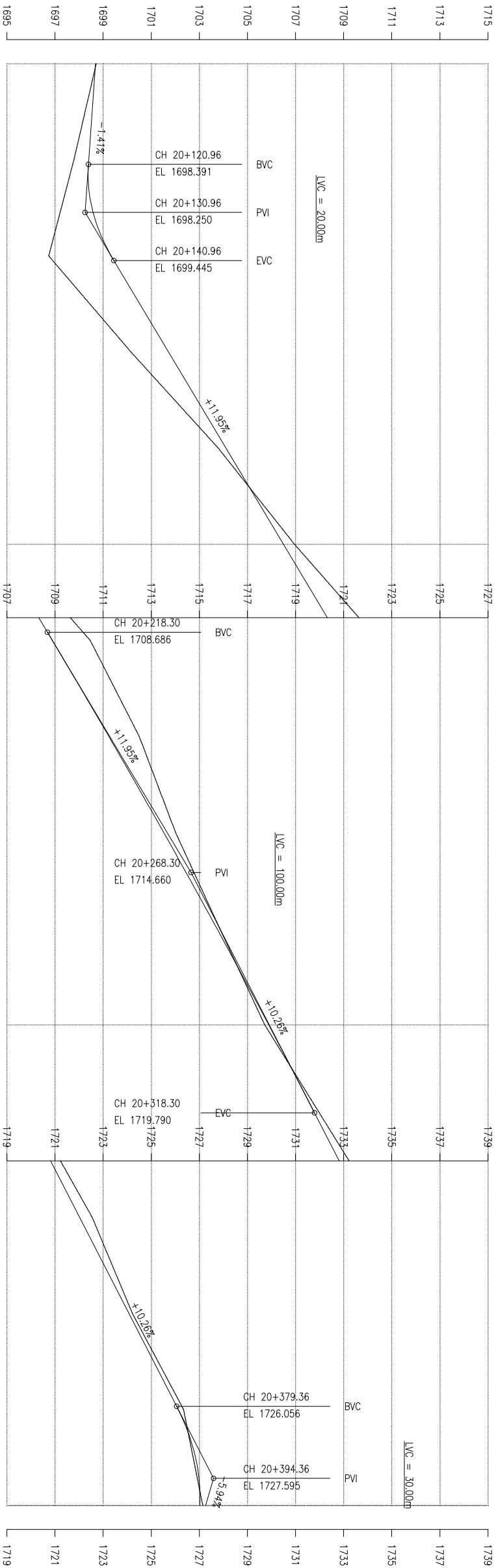
DATE: September, 2017

CH: 19+800 - 20+100

DRWG NO.:
SHEET No. :

1

68A



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			R\GHT	LEFT
1698.687	1698.715	20+100.00	IP-563 R=15.00	
1698.546	1698.251	20+110.00		
1698.405	1697.787	20+120.00		
1698.537	1697.263	20+130.00	R=25.00	
1699.333	1696.739	20+140.00		
1700.525	1698.449	20+150.00		
1701.720	1700.159	20+160.00	IP-565	
1702.915	1701.974	20+170.00		
1704.110	1703.789	20+180.00		
1705.304	1705.373	20+190.00	IP-566 R=18.00	
1706.499	1706.957	20+200.00		
1707.694	1708.711	20+210.00		
1708.889	1710.464	20+220.00	R=25.00	
1710.072	1711.484	20+230.00		
1711.239	1712.504	20+240.00		
1712.389	1713.260	20+250.00	IP-567	
1713.522	1714.015	20+260.00		
1714.638	1714.935	20+270.00		
1715.737	1715.854	20+280.00	IP-569 R=20.00	
1716.819	1716.787	20+290.00		
1717.884	1717.720	20+300.00		
1718.933	1719.007	20+310.00	IP-570 R=15.00	
1719.965	1720.294	20+320.00		
1720.991	1721.418	20+330.00		
1722.017	1722.542	20+340.00	IP-571 R=12.50	
1723.043	1723.378	20+350.00		
1724.069	1724.213	20+360.00		
1725.095	1725.278	20+370.00	IP-572 R=12.50	
1726.120	1726.342	20+380.00		
1726.842	1726.743	20+390.00		
1727.023	1727.144	20+400.00	IP-573 R=40.00	
			IP-574 R=20.00	



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED FOR LAYOUT

CONSULTANT:



BRAM-COMEGA-IV
MEMORANDUM

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN CONDUCE RE STUDY AND GAT PLAN OF BIRAHITHED - BOKATE, KATARUA - SIKHRI ROAD (KATARUA - SIKHRI ROAD)

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

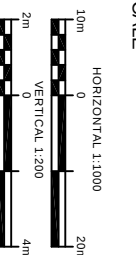
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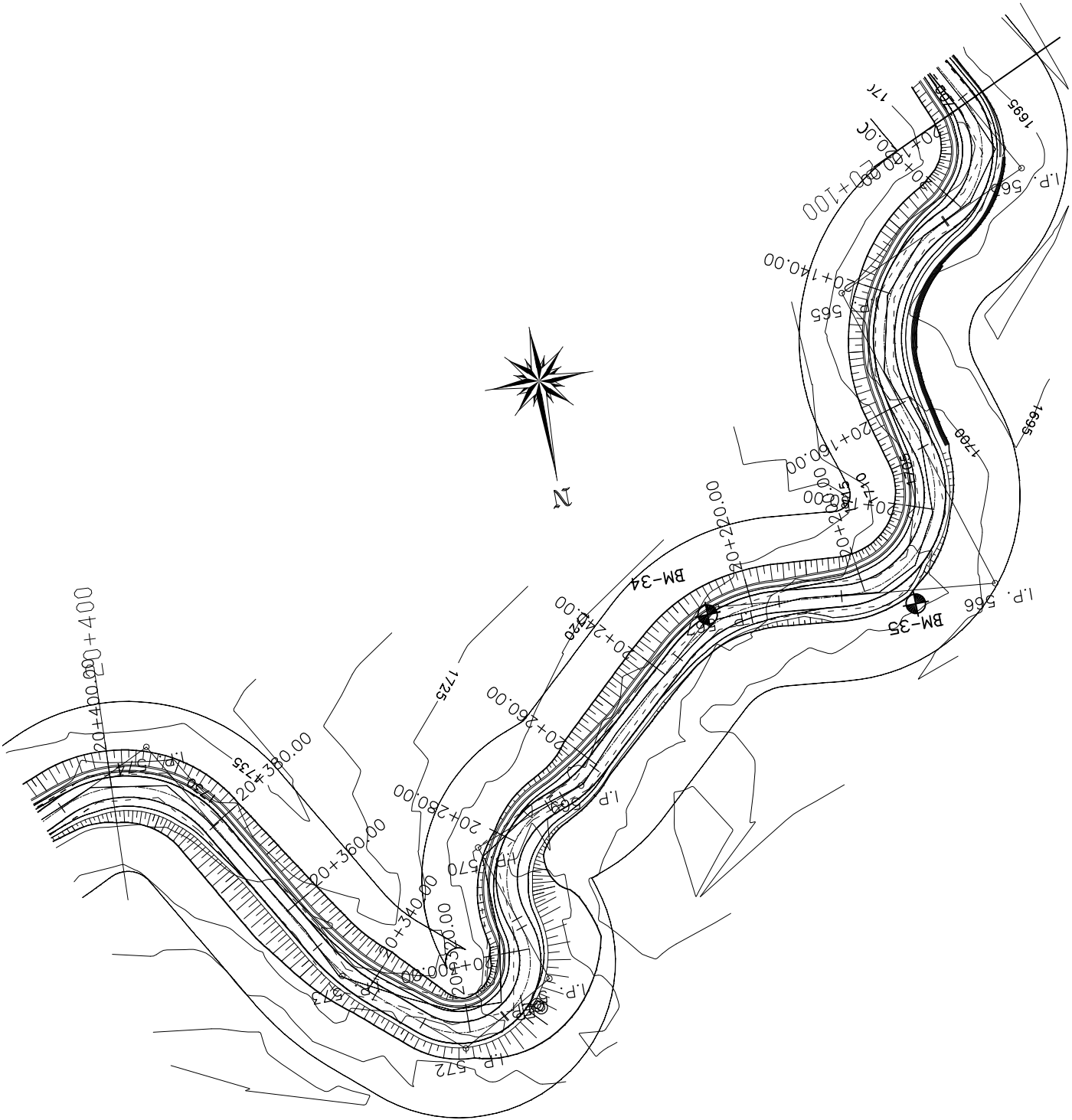
PLAN & PROFILES

DATE: September, 2017

CH: 20+100 - 20+400

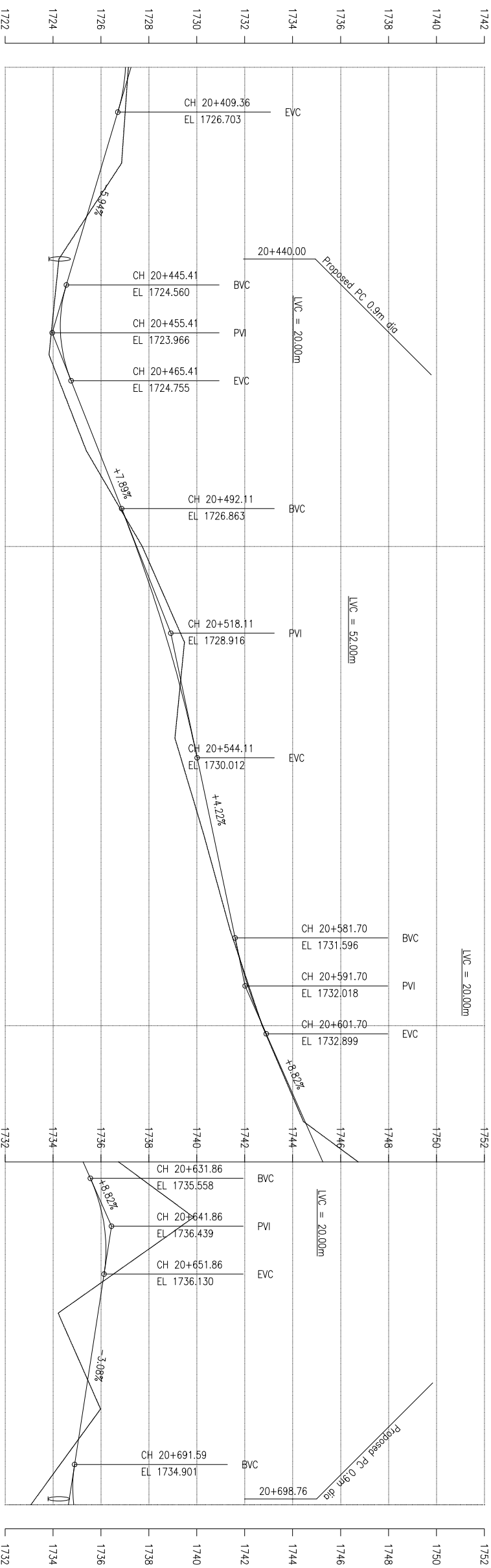
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SHEET No.: 69B



IP No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (m)	DEF. ANG (D-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA			CHANGGE			
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP
563	322842.562	3046629.750	65-32-55	40.375	94-43-58	16.293	15.000	7.147	24.801	20+098.79	20+111.19	20+123.59	20+135.08
565	322877.750	3046645.750	34-2-28-59	38.655	83-04-02	22.144	25.000	8.397	36.245	20+123.81	20+141.94	20+160.06	20+145.95
566	322860.312	3046701.000	95-30-44	57.937	113-01-38	27.209	18.000	14.624	35.509	20+168.64	20+186.40	20+204.15	20+195.85
567	322909.531	3046696.250	47-24-12	49.448	48-06-40	11.160	25.000	2.378	20.993	20+215.23	20+225.73	20+236.22	20+226.39
569	322938.625	3046723.000	69-17-45	39.522	21-53-33	3.688	20.000	0.371	7.642	20+260.71	20+264.53	20+268.55	20+264.58
570	322958.469	3046730.500	341-48-04	21.214	87-29-46	14.358	15.000	5.765	22.907	20+271.34	20+282.80	20+294.25	20+286.70
571	322980.250	3046755.500	60-23-38	26.316	78-35-33	10.230	12.500	3.652	17.146	20+295.98	20+304.56	20+313.13	20+306.21
572	322966.969	3046765.000	130-44-23	19.230	70-20-51	8.809	12.500	2.792	15.346	20+313.32	20+321.00	20+328.67	20+322.13
573	322986.125	3046748.500	149-49-15	25.282	19-04-46	6.722	40.000	0.561	13.320	20+338.42	20+345.08	20+351.74	20+345.14
574	323012.875	3046702.500	64-32-44	53.212	85-16-23	18.415	20.000	7.166	29.766	20+379.82	20+394.71	20+409.59	20+396.23

 GOVERNMENT OF NEPAL MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT EARTHQUAKE EMERGENCY ASSISTANCE PROJECT KATHMANDU, NEPAL	CONSULTANT: BEAM-CEMCA - JV KATHMANDU	PROJECT: DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN CONJUSE RE STUDY AND GAS PLAN OF BHHINHEDI - BOGATE, KATHMANDU - SIKHIND ROAD KATHMANDU, NEPAL	NAME		DESIGNATION	SIGNATURE	DATE	SCALE HORIZONTAL 1:1000 0 10m 20m VERTICAL 1:200 0 4m		PLAN & PROFILES		DATE: September, 2017	
			DESIGNED BY :						CH: 20+100 - 20+400		DRWG NO.:		1
			CHECKED BY :								SHEET No.:		
			RECOMMENDED BY :										
			APPROVED BY :										69A



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1727.023	1727.144	20+400.00	IP-575 R=20.00	IP-574 R=20.00
1726.665	1727.004	20+410.00		
1726.071	1726.863	20+420.00		
1725.476	1725.555	20+430.00		
1724.882	1724.247	20+440.00		
1724.360	1724.040	20+450.00		
1724.430	1723.834	20+460.00		
1725.118	1724.612	20+470.00		
1725.907	1725.389	20+480.00		
1726.697	1726.557	20+490.00		
1727.464	1727.726	20+500.00	IP-577 R=20.00	IP-576 R=35.00
1728.163	1728.606	20+510.00		
1728.790	1729.486	20+520.00		
1729.347	1729.287	20+530.00		
1729.833	1729.088	20+540.00		
1730.260	1729.685	20+550.00		
1730.682	1730.283	20+560.00		
1731.103	1730.835	20+570.00		
1731.525	1731.387	20+580.00		
1732.026	1732.057	20+590.00		
1732.753	1732.728	20+600.00		
1733.631	1733.589	20+610.00		
1734.512	1734.449	20+620.00		
1735.394	1737.160	20+630.00		
1736.078	1739.872	20+640.00		
1736.177	1737.044	20+650.00		
1735.878	1734.216	20+660.00		
1735.569	1735.100	20+670.00		
1735.260	1735.985	20+680.00	IP-581 R=20.00	IP-582 R=12.50
1734.950	1734.530	20+690.00		
1734.867	1733.075	20+700.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED FOR LAYOUT

CONSULTANT:



BRAM-COMEGA-IV
MEMBERSHIP

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN, CONCESSION STUDY AND GAS PLAN OF BIRAHATHI - BOKATE, KATHMANDU, SIKHIND ROAD, KATHMANDU, NEPAL

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

NAME

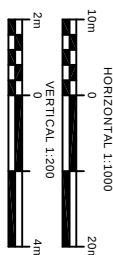
DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200



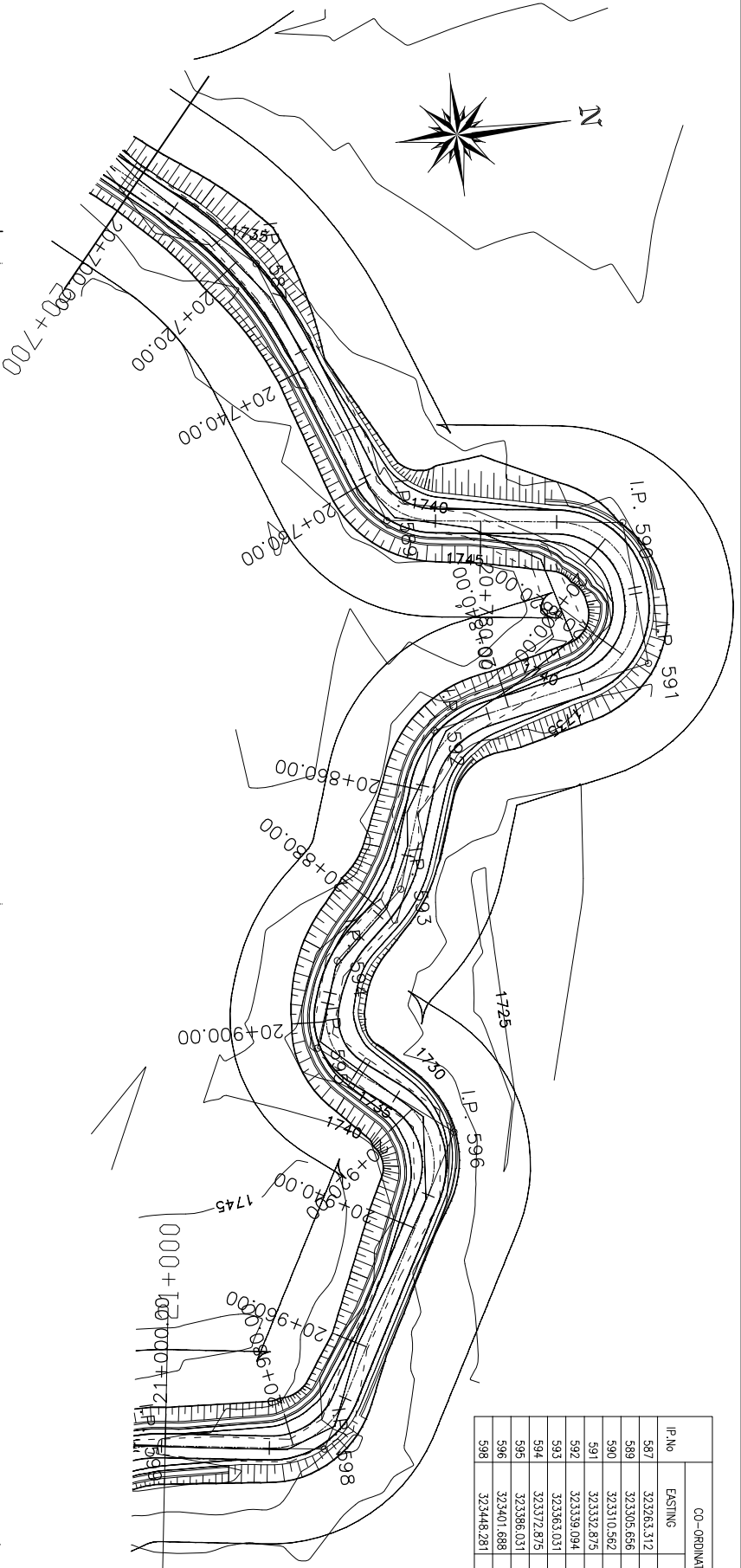
PLAN & PROFILES

DATE: September, 2017

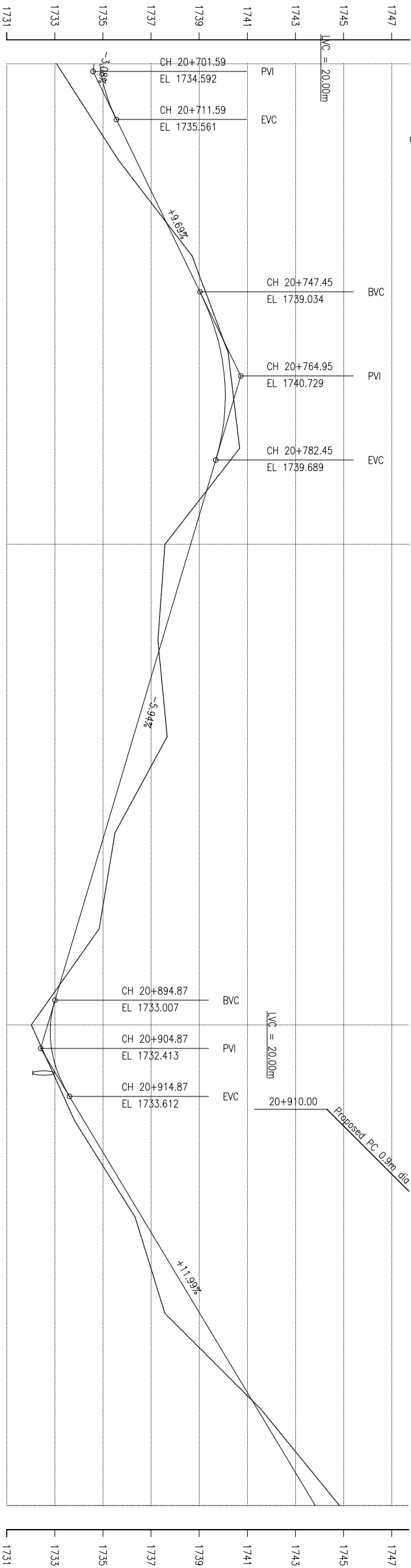
DRWG NO.:
SHEET No. :

1
70B

CH: 20+400 - 20+700



IP No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (m)	DEF. ANG (D-M-S)	TAN. LEN. (m)	SAMPLE CURVE DATA				CHAINAGE			
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP	
587	323263.312	3046648.750	70-11-37	52.257	28-52-37	15.448	60.000	1.957	30.240	20+707.07	20+722.19	20+737.31	20+722.52	
589	323305.656	3046664.000	07-39-19	45.006	62-52-18	7.591	12.500	2.174	13.644	20+759.28	20+766.10	20+772.92	20+766.87	
590	323310.562	3046700.500	86-47-36	36.828	79-08-12	10.329	12.500	3.716	17.265	20+809.47	20+809.10	20+809.54	20+809.27	
591	323332.875	3046701.750	169-46-53	22.348	82-59-13	11.057	12.500	4.188	18.105	20+810.06	20+819.11	20+828.16	20+821.12	
592	323339.094	3046672.250	109-01-00	35.056	60-45-43	8.794	15.000	2.388	15.908	20+843.37	20+851.33	20+859.28	20+852.16	
593	323363.031	3046659.000	138-48-48	25.319	29-47-37	5.320	20.000	0.656	10.400	20+870.48	20+875.68	20+880.88	20+875.80	
594	323372.875	3046647.750	109-51-07	14.949	28-57-46	5.165	20.000	0.656	10.110	20+885.34	20+890.40	20+895.45	20+890.51	
595	323396.031	3046643.000	38-45-42	13.987	71-05-33	7.145	10.000	2.290	12.408	20+916.80	20+903.34	20+909.54	20+904.28	
596	323401.688	3046662.500	119-23-47	25.008	80-37-56	10.607	12.500	3.894	17.591	20+925.60	20+934.39	20+943.39	20+927.41	
598	323448.281	3046636.250	188-21-57	53.719	68-58-00	8.586	12.500	2.865	15.046	20+968.68	20+976.21	20+983.73	20+977.27	



DESIGN LEVEL (m)	1734.867	1735.415	1736.375	1737.344	1738.312	1739.266	1739.898	1740.083	1739.821	1739.240	1738.646	1738.052	1737.457	1736.863	1736.268	1735.674	1735.080	1734.485	1733.891	1733.297	1732.820	1733.134	1734.227	1735.426	1736.625	1737.824	1739.023	1740.221	1741.420	1742.619	1743.818
EXISTING LEVEL (m)	1733.075	1734.357	1735.640	1737.174	1738.707	1739.453	1740.198	1740.440	1740.682	1739.129	1737.576	1737.431	1737.285	1737.478	1737.671	1736.587	1735.503	1735.174	1734.845	1733.435	1732.025	1732.928	1733.831	1735.085	1736.339	1736.956	1737.574	1739.573	1741.572	1743.199	1744.826
CHAINAGE (km)	20+700.00	20+710.00	20+720.00	20+730.00	20+740.00	20+750.00	20+760.00	20+770.00	20+780.00	20+790.00	20+800.00	20+810.00	20+820.00	20+830.00	20+840.00	20+850.00	20+860.00	20+870.00	20+880.00	20+890.00	20+900.00	20+910.00	20+920.00	20+930.00	20+940.00	20+950.00	20+960.00	20+970.00	20+980.00	20+990.00	21+000.00
HORIZONTAL ALIGNMENT	RIGHT	IP-587 R=60.00																	IP-590 R=12.50										IP-591 R=12.50		
	LEFT	IP-589 R=60.00																	IP-592 R=12.50										IP-593 R=20.00		
HORIZONTAL ALIGNMENT	RIGHT	IP-594 R=12.50																	IP-595 R=12.50										IP-596 R=12.50		
	LEFT	IP-598 R=12.50																	IP-599 R=12.50										IP-600 R=12.50		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT



CONSULTANT:
BEAM-COMEGA - JV
MEMBERSHIP

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DIR PREPARATION & COST ESTIMATE, RESSETTLEMENT PLAN
BIMPHEDI - BOGATE, KATHMANDU, NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES

DATE: September, 2017

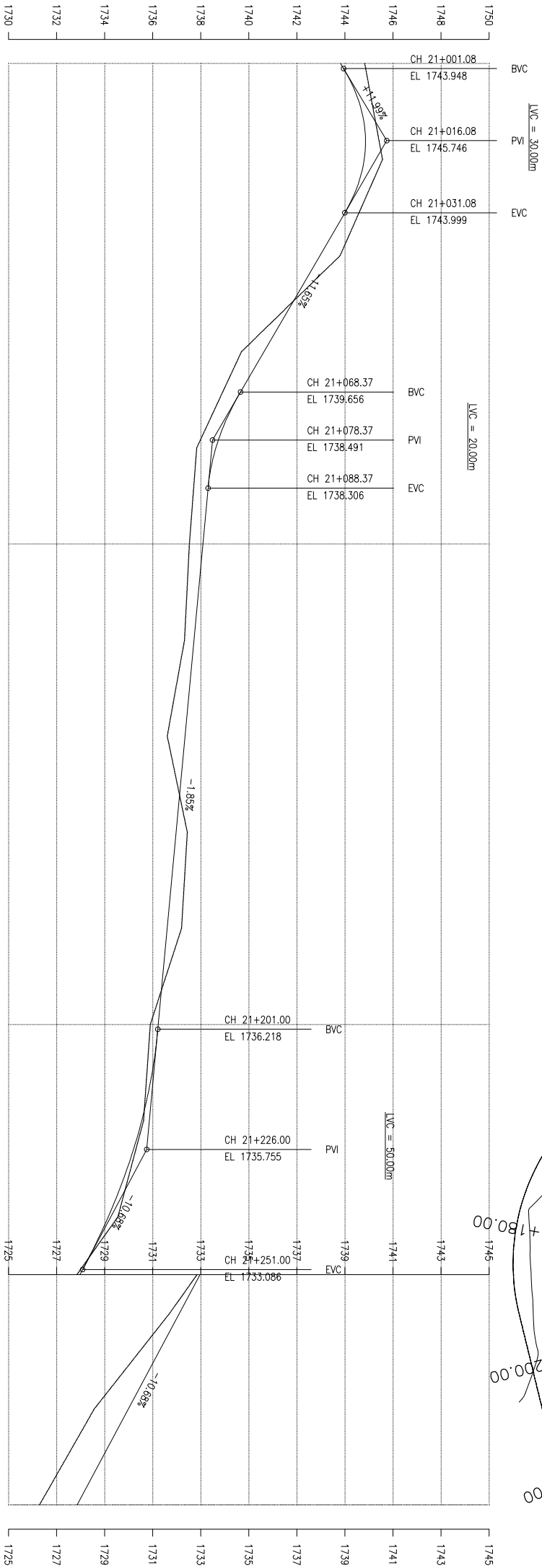
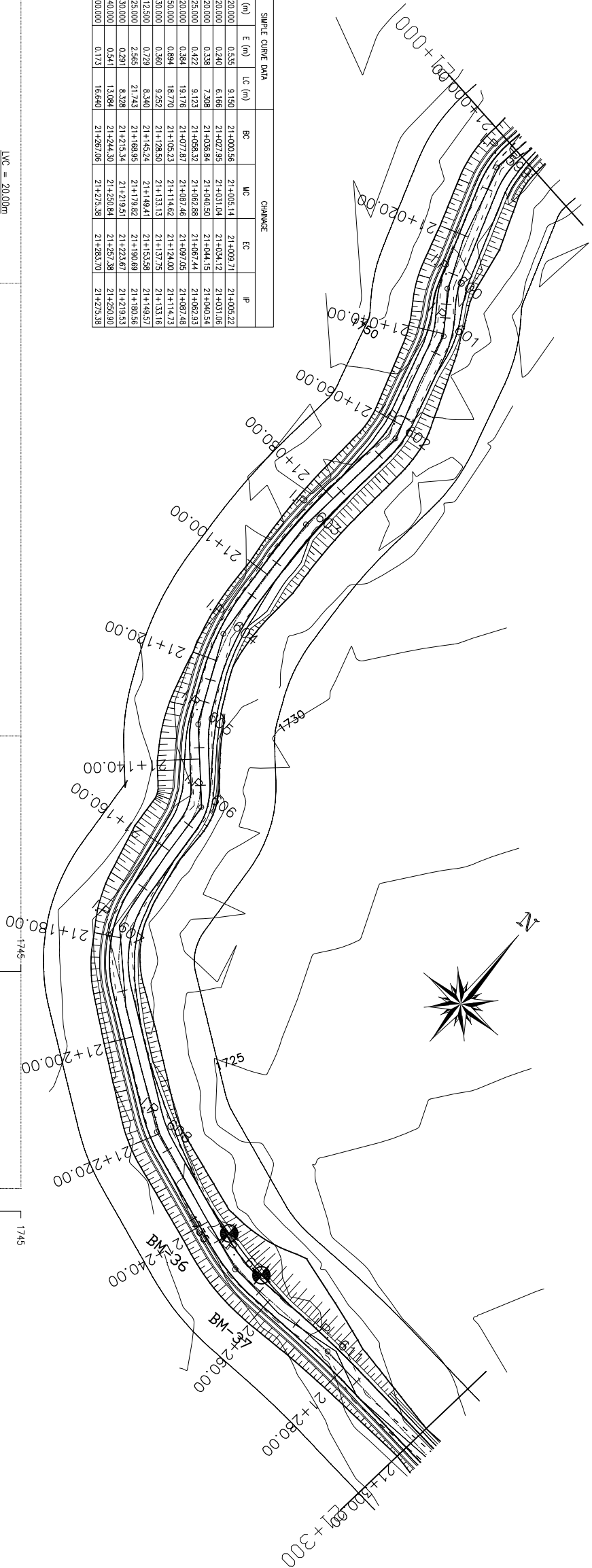
CH: 20+700 - 21+000

DRWG NO.:
SHEET No.:

1

71

P.No	CO-ORDINATES(m)		WOB (0-M-S)	DIST (m)	DEF. ANG (0-M-S)	TAN. LEN (m)	SAMPLE CURVE DATA			CHAINAGE				
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	P	
599	32344.906	304606.500	162-09-09	30.070	26-12-46	4.657	20.000	0.535	9.150	21+000.56	21+005.14	21+009.71	21+005.22	
600	323451.875	3046581.750	144-29-07	26.001	17-39-51	3.108	20.000	0.240	6.166	21+027.95	21+031.04	21+034.12	21+031.06	
601	323457.000	3046571.000	165-25-23	9.521	20-56-09	3.095	20.000	0.338	7.308	21+036.94	21+040.50	21+044.15	21+040.54	
602	323463.062	3046552.250	186-19-49	22.473	20-54-26	4.613	25.000	0.422	9.123	21+068.32	21+062.88	21+067.44	21+062.93	
603	323460.344	3046527.750	177-10-35	24.650	09-09-21	9.609	120.000	0.384	19.176	21+077.87	21+082.86	21+087.87	21+087.48	
604	323461.688	3046500.500	155-40-06	27.283	17-30-31	9.497	50.000	0.894	18.770	21+050.23	21+146.82	21+124.00	21+114.73	
605	323460.375	3046483.500	137-59-50	16.657	38-13-39	4.653	30.000	0.360	9.252	21+128.50	21+149.41	21+151.56	21+149.57	
606	323480.406	3046471.250	176-13-22	16.485	49-49-48	11.613	25.000	0.729	6.340	21+168.95	21+149.41	21+155.95	21+149.57	
607	323515.031	3046441.000	126-23-32	31.318	15-54-19	4.191	30.000	0.291	8.328	21+215.34	21+219.51	21+222.67	21+219.53	
608	323544.489	3046405.000	110-29-20	40.451	18-44-29	6.601	40.000	0.541	13.094	21+244.30	21+250.84	21+252.38	21+250.90	
611	323569.082	3046404.250	96-30-51	24.604	04-46-01	8.325	200.000	0.173	16.640	21+267.06	21+275.38	21+283.70	21+275.38	



HORIZONTAL ALIGNMENT	RIGHT	DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)
	LEFT			
		1743.818	1744.826	21+000.00
		1744.704	1745.197	21+010.00
		1744.806	1745.567	21+020.00
		1744.120	1744.685	21+030.00
		1742.960	1743.803	21+040.00
		1741.795	1741.750	21+050.00
		1740.631	1739.696	21+060.00
		1739.472	1738.766	21+070.00
		1738.632	1737.835	21+080.00
		1738.275	1737.682	21+090.00
		1738.090	1737.529	21+100.00
		1737.905	1737.428	21+110.00
		1737.719	1737.327	21+120.00
		1737.534	1736.968	21+130.00
		1737.349	1736.609	21+140.00
		1737.163	1737.026	21+150.00
		1736.978	1737.443	21+160.00
		1736.793	1737.323	21+170.00
		1736.608	1737.203	21+180.00
		1736.422	1736.553	21+190.00
		1736.237	1735.903	21+200.00
		1735.980	1735.763	21+210.00
		1735.548	1735.623	21+220.00
		1734.939	1735.090	21+230.00
		1734.154	1734.556	21+240.00
		1733.192	1733.140	21+250.00
		1732.125	1731.724	21+260.00
		1731.058	1730.148	21+270.00
		1729.990	1728.572	21+280.00
		1728.922	1727.431	21+290.00
	1727.855	1726.290	21+300.00	



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED FOR SIGNATURE



BRAM-COMEGA-JV
MEMBERSHIP

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
CONCRETE STUDY AND GATE PLAN OF
BIRBHADRA - BOGATE, NEPAL - SIKHAR ROAD
KATHMANDU - NEPAL

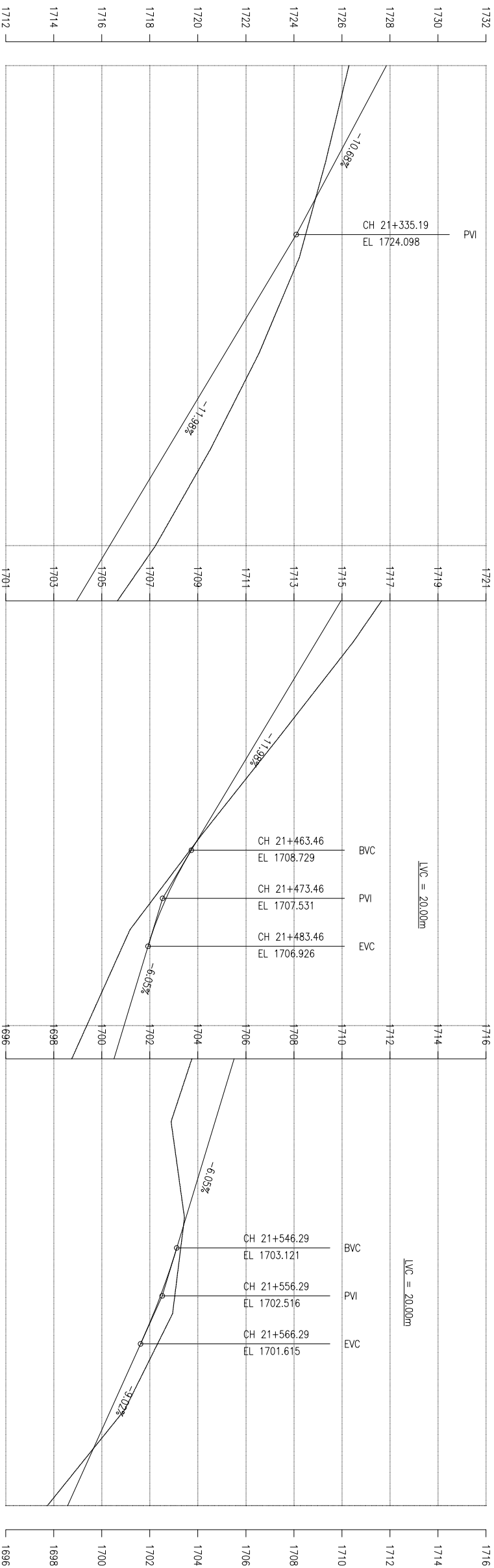
DESIGNED BY :		NAME		DESIGNATION		SIGNATURE		DATE	
CHECKED BY :									
RECOMMENDED BY :									
APPROVED BY :									

PLAN & PROFILES

DATE: September, 2017

DRWG NO.: 1

SHEET No.: 72



HORIZONTAL ALIGNMENT	RIGHT LEFT	CHAINAGE (km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)
<				



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED FOR LAYOUT



BRAM-COMEGA-IT
CONSULTANTS

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN CONDUCE REE STUDY AND GAS PLAN OF BHIMPHEDI - BOKATE, KATHMANDU - SIKHIND ROAD, KATHMANDU - NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

PLAN & PROFILES

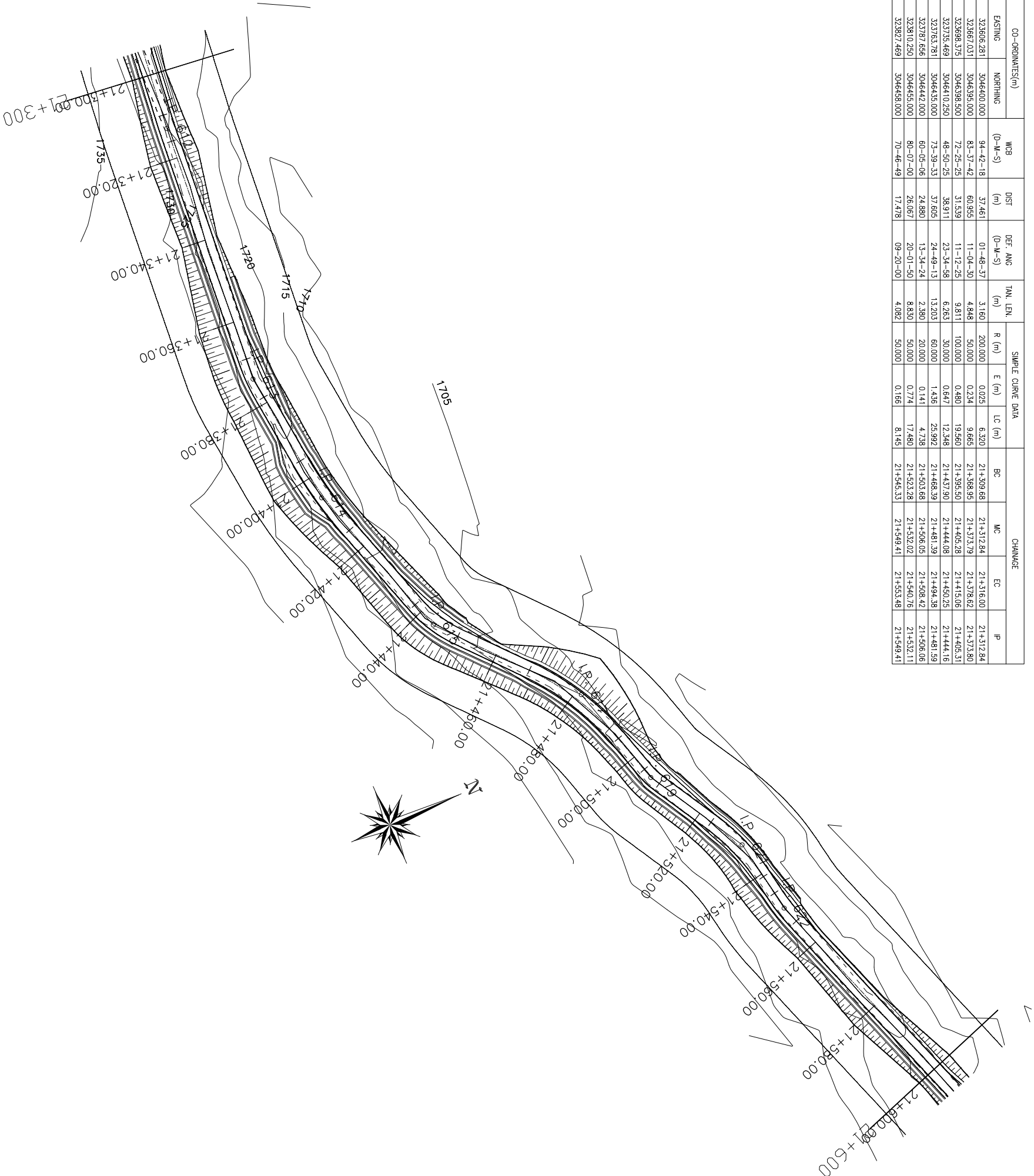
DATE: September, 2017

CH: 21+300 - 21+600

DRWG NO.: 1

SHEET No.: 73B

IP No	CO-ORDINATES(m)		WCB (0-M-S)	DIST (m)	DEF. ANG (0-M-S)	TAN. LEN. (m)	SAMPLE CURVE DATA			CHANGAGE				
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP	
612	323606.281	3046400.000	94-42-18	37.461	01-48-37	3.160	200.000	0.025	6.320	21+309.68	21+312.84	21+316.00	21+312.84	
613	323667.031	3046395.000	83-37-42	60.955	11-04-30	4.848	50.000	0.234	9.665	21+368.95	21+373.79	21+376.62	21+373.80	
614	323698.375	3046398.500	72-25-25	31.539	11-12-25	9.811	100.000	0.460	19.560	21+395.50	21+405.28	21+415.06	21+405.31	
615	323735.469	3046410.250	48-30-23	38.911	23-34-58	6.263	30.000	0.647	12.346	21+437.90	21+444.08	21+450.25	21+444.16	
617	323763.781	3046435.000	73-39-33	37.605	24-49-13	13.203	60.000	1.436	25.992	21+468.39	21+481.39	21+494.36	21+481.39	
619	323787.656	3046442.000	60-05-06	24.880	13-34-24	2.380	20.000	0.141	4.738	21+503.68	21+506.05	21+508.42	21+506.06	
621	323810.250	3046455.000	80-07-00	26.067	20-01-50	8.830	50.000	0.774	17.480	21+523.28	21+532.02	21+540.76	21+532.11	
622	323827.469	3046458.000	70-46-49	17.478	09-20-00	4.082	50.000	0.166	8.145	21+545.33	21+549.41	21+553.48	21+549.41	





GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVAL LETTER

CONSULTANT:

**BEAM-CEMCA - JV**
MEMBERSHIP

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DIR PREPARATION & COST ESTIMATE, RESSETTLEMENT PLAN
CONJUSE RE STUDY AND GAS PLAN OF
BHINPHEDI - BOGATE, AERIAL, SILVER ROAD
SILVER ROAD, NEPAL

NAME

DESIGNATION

SIGNATURE

DATE

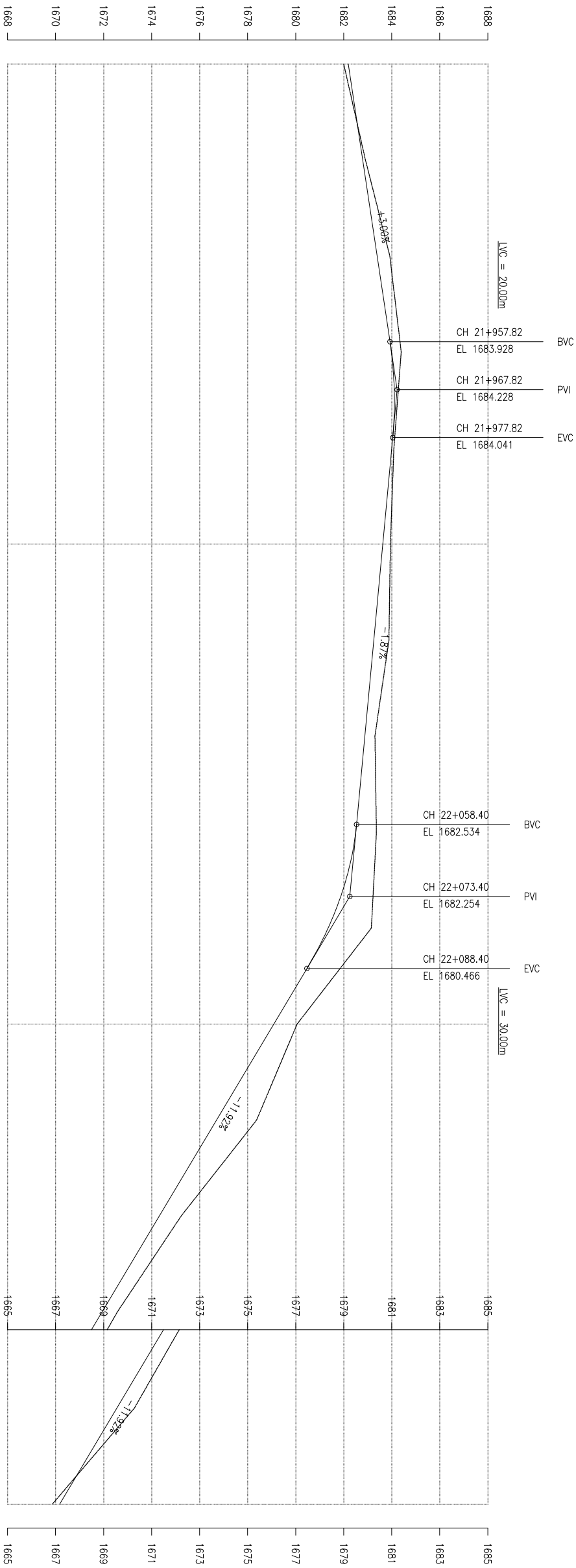
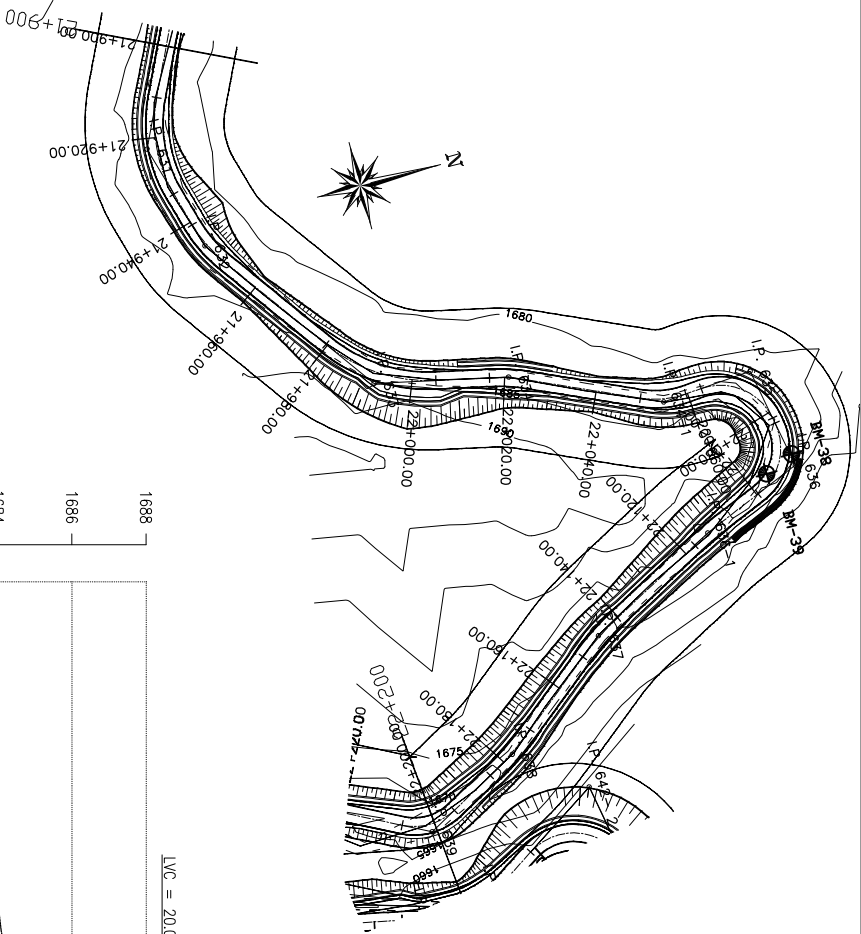
SCALE

HORIZONTAL 1:1000
VERTICAL 1:200
10m
20m
4m
2m

PLAN & PROFILES

DATE: September, 2017
DRWG NO.: **1**
SHEET No.: **73A**

CH: 21+300 - 21+600



IP No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (m)	DEF. ANG (D-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA			CHANGING		
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC
631	324142.689	3046394.000	73-54-47	42.681	41-23-46	11.335	30.000	2.070	21.675	21+911.31	21+922.15	21+932.98
632	324165.575	3046400.750	53-52-58	24.380	20-01-50	5.286	30.000	0.464	10.468	21+940.71	21+945.96	21+951.20
633	324203.906	3046428.500	12-00-35	47.079	41-52-18	13.390	35.000	2.474	25.578	21+979.59	21+992.38	22+005.17
634	324209.989	3046457.000	23-52-18	29.138	11-51-36	4.195	40.000	0.215	8.280	22+016.76	22+020.90	22+025.04
634-1	324223.688	3046488.000	35-12-15	33.900	28-39-54	5.110	20.000	0.642	10.006	22+049.68	22+054.69	22+059.69
635	324222.031	3046507.750	79-07-35	19.819	83-55-16	11.239	12.500	4.310	18.309	22+063.16	22+072.32	22+081.47
636	324244.156	3046517.000	156-59-15	22.530	77-51-33	10.097	12.500	3.569	16.986	22+082.66	22+091.16	22+099.65
636-1	324253.500	3046490.000	151-30-29	23.902	05-28-38	3.827	80.000	0.091	7.648	22+109.63	22+113.46	22+117.28
637	324288.989	3046461.500	140-43-50	32.427	10-46-38	6.591	60.000	0.286	11.286	22+140.22	22+145.87	22+151.51
638	324289.000	3046437.000	150-46-18	31.646	10-02-38	5.646	75.000	0.289	13.148	22+170.91	22+177.49	22+184.06
639	324300.750	3046416.000	206-42-42	24.064	55-56-16	6.638	12.500	1.653	12.204	22+194.90	22+201.00	22+207.10

IGN E.L (m)	FINING E.L (m)	IMAGE (km)	HORIZONTAL ALIGNMENT		R=30.00 IP-631	R=30.00 IP-632	R=35.00 IP-633	R=40.00 IP-634	R=12.50 IP-635	R=12.50 IP-636	R=80.00 IP-637	R=75.00 IP-638	R=12.50 IP-639
			RIGHT	LEFT									
1682.191	1682.002	21+900.00											
1682.491	1682.454	21+910.00											
1682.792	1682.907	21+920.00											
1683.092	1683.415	21+930.00											
1683.392	1683.923	21+940.00											
1683.693	1684.159	21+950.00											
1683.987	1684.395	21+960.00											
1684.113	1684.243	21+970.00											
1684.000	1684.091	21+980.00											
1683.813	1684.018	21+990.00											
1683.626	1683.945	22+000.00											
1683.439	1683.914	22+010.00											
1683.252	1683.884	22+020.00											
1683.065	1683.593	22+030.00											
1682.878	1683.302	22+040.00											
1682.692	1683.333	22+050.00											
1682.500	1683.363	22+060.00											
1682.092	1683.258	22+070.00											
1681.349	1683.152	22+080.00											
1680.276	1681.605	22+090.00											
1679.084	1680.058	22+100.00											
1677.892	1679.215	22+110.00											
1676.701	1678.372	22+120.00											
1675.509	1676.799	22+130.00											
1674.317	1675.227	22+140.00											
1673.126	1673.897	22+150.00											
1671.934	1672.567	22+160.00											
1670.742	1671.424	22+170.00											
1669.551	1670.282	22+180.00											
1668.359	1668.574	22+190.00											
1667.167	1666.866	22+200.00											



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVAL LATTER



BEAM-COMEGA - JV
ARCHITECTS

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DPR PREPARATION & COST ESTIMATE, RESSETTLEMENT PLAN
CONCESSION STUDY AND GAS PLAN OF
BIRAHEDI - BOGATE, KATHMANDU - SIKHRA ROAD
KATHMANDU - 10700

DESIGNED BY :		NAME		DESIGNATION		SIGNATURE		DATE	
CHECKED BY :									
RECOMMENDED BY :									
APPROVED BY :									

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

10m
20m
4m

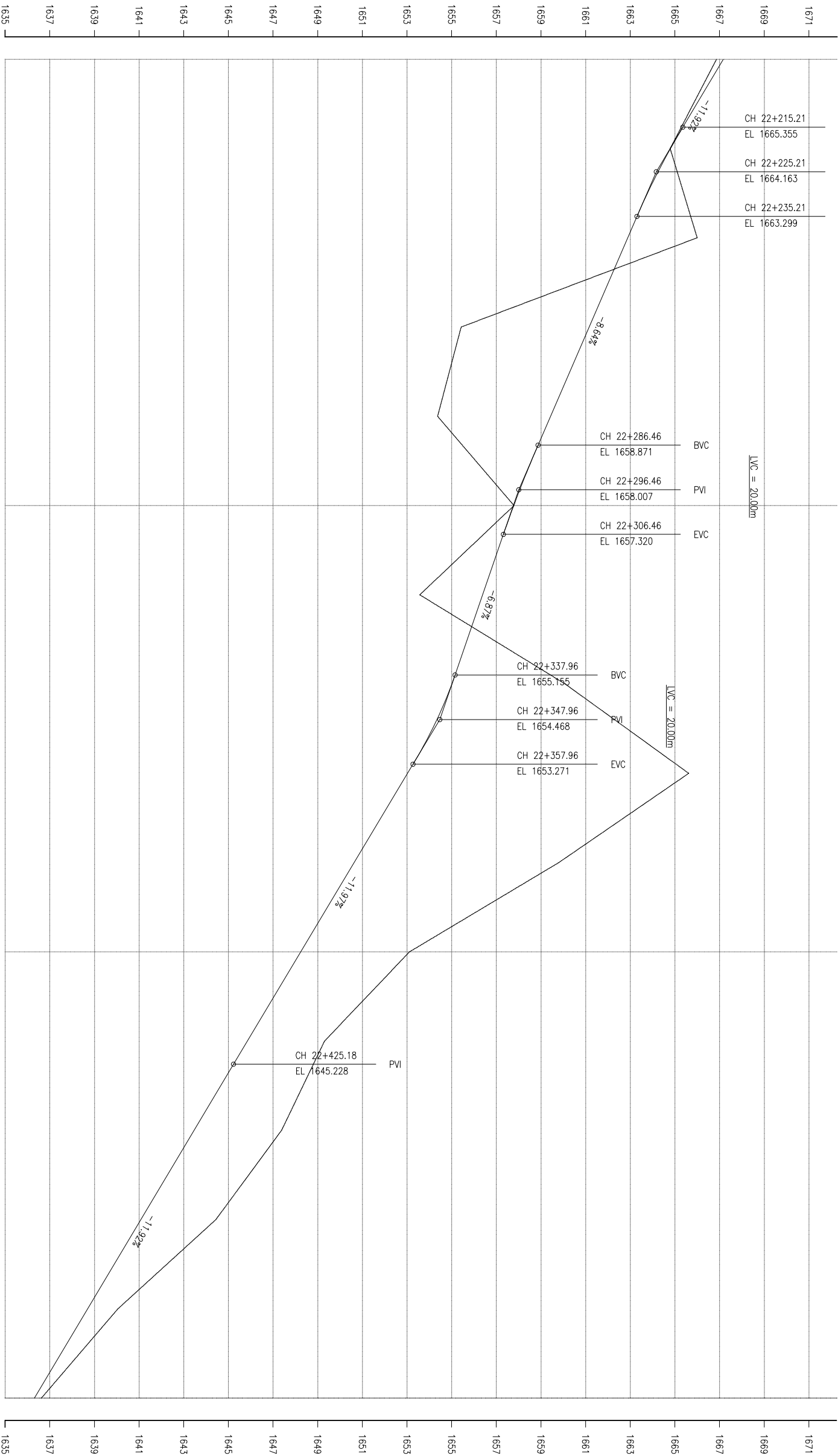
PLAN & PROFILES

CH: 21+900 - 22+200

DATE: September, 2017

DRAWING NO.: 1

SHEET NO.: 75



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1667.167	1666.866	22+200.00	IP-639 R=12.50	
1665.976	1665.826	22+210.00		
1664.803	1664.787	22+220.00		
1663.771	1665.392	22+230.00		
1662.885	1665.997	22+240.00	R=12.50	IP-640
1662.021	1660.711	22+250.00		
1661.157	1655.426	22+260.00	R=12.50	IP-641
1660.293	1654.898	22+270.00		
1659.429	1654.371	22+280.00		
1658.571	1656.082	22+290.00		
1657.782	1657.793	22+300.00	R=30.00	IP-642
1657.077	1655.683	22+310.00		
1656.389	1653.573	22+320.00	R=20.00	IP--459473
1655.702	1656.832	22+330.00		
1655.010	1660.091	22+340.00		
1654.143	1662.855	22+350.00	R=12.50	IP--459442
1653.027	1665.619	22+360.00		
1651.831	1662.708	22+370.00	R=12.50	IP--459414
1650.634	1659.798	22+380.00		
1649.438	1656.455	22+390.00		
1648.241	1653.112	22+400.00		
1647.044	1651.209	22+410.00	R=20.00	IP-643
1645.848	1649.305	22+420.00		
1644.654	1648.344	22+430.00		
1643.462	1647.382	22+440.00		
1642.270	1645.910	22+450.00		
1641.079	1644.438	22+460.00		
1639.887	1642.243	22+470.00	R=12.50	IP-644
1638.696	1640.049	22+480.00		
1637.504	1638.336	22+490.00		IP--458743
1636.313	1636.623	22+500.00	R=20.00	



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVAL LATTER

CONSULTANT:



BRAM-COMEGA - JV
ASSOCIATES

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DRR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
BIRBHEDI - BOGATE, KATHMANDU, NEPAL
SIVAPADA - 10754

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

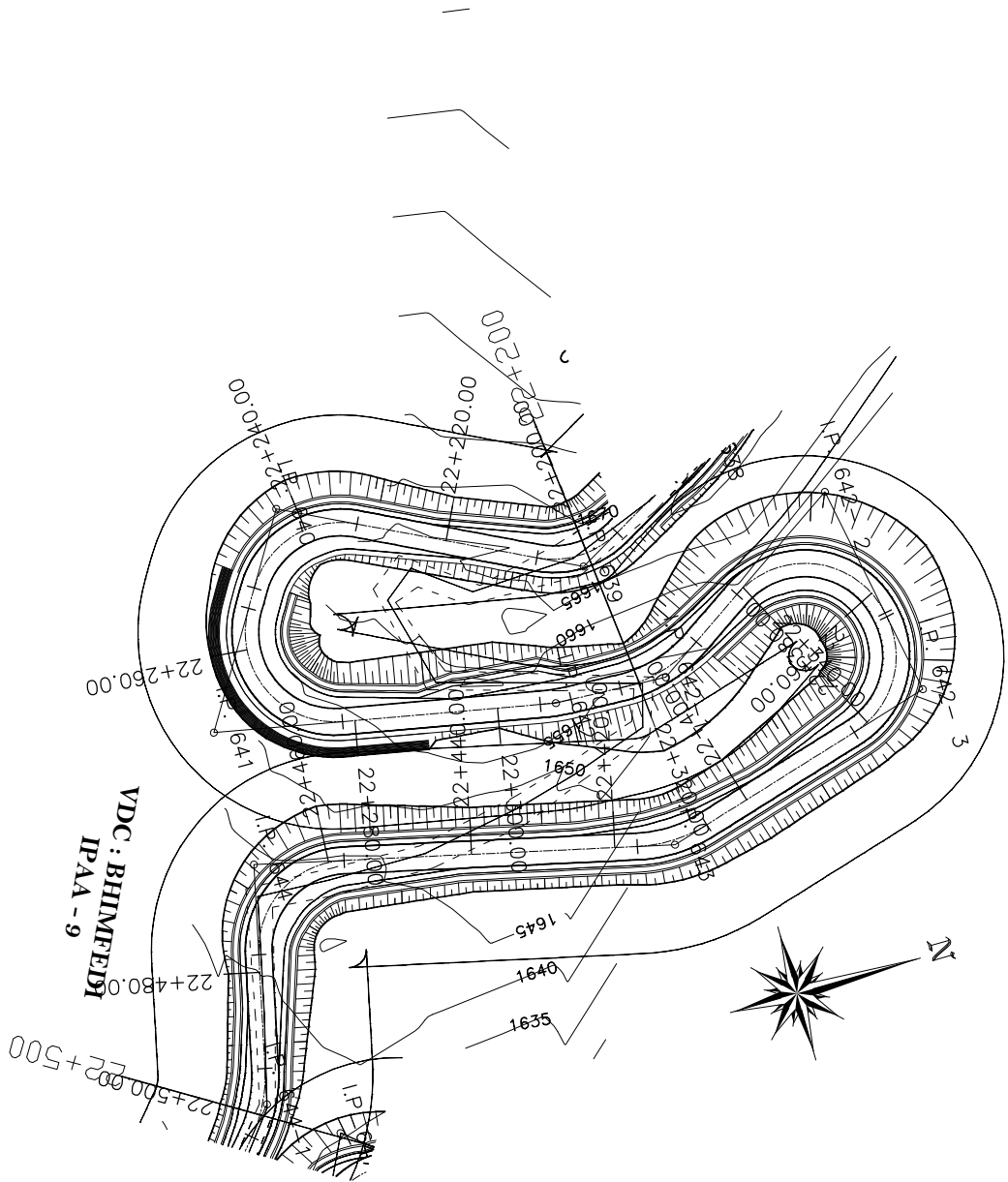
HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES

DATE: September, 2017

CH: 22+200 - 22+500

DRWG NO.:
SHEET No. :
76B



	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
623	323896.312	3046482.000	38-59-18	72.907	31-47-36	14.240	50.000	1.988	27.745	21+608.07	21+621.95	21+635.82	21+622.31
625	323925.250	3046517.750	100-21-27	45.994	61-22-10	26.703	45.000	7.326	48.200	21+640.87	21+664.97	21+689.07	21+667.57
626	323973.125	3046509.000	158-12-18	48.668	57-50-44	13.814	25.000	3.563	25.240	21+697.22	21+709.84	21+722.46	21+711.03
627	323991.719	3046462.500	92-18-42	50.080	65-53-45	22.684	35.000	6.708	40.254	21+736.04	21+756.17	21+776.29	21+758.72
628	324028.875	3046461.000	133-37-46	37.186	41-18-57	7.541	20.000	1.374	14.422	21+783.25	21+790.46	21+797.67	21+790.79
629	324042.250	3046448.250	120-17-33	18.478	13-20-18	2.339	20.000	0.136	4.656	21+806.27	21+808.60	21+810.93	21+808.61
630	324103.875	3046412.250	115-18-29	71.370	04-59-05	5.223	120.000	0.114	10.440	21+874.74	21+879.96	21+885.18	21+879.96



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED LAYOUT

CONSULTANT:

**BEAM-CEMCA -Pvt**
MEMBERSHIP

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
CONJUSE HE STUDY AND GAS PLAN OF
BHIMEDEH - BOGATE, KHERALI - SIKHRI ROAD
KARNALI DISTRICT, NEPAL

NAME

DESIGNATION

SIGNATURE

DATE

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

10m
20m

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0

2m
4m

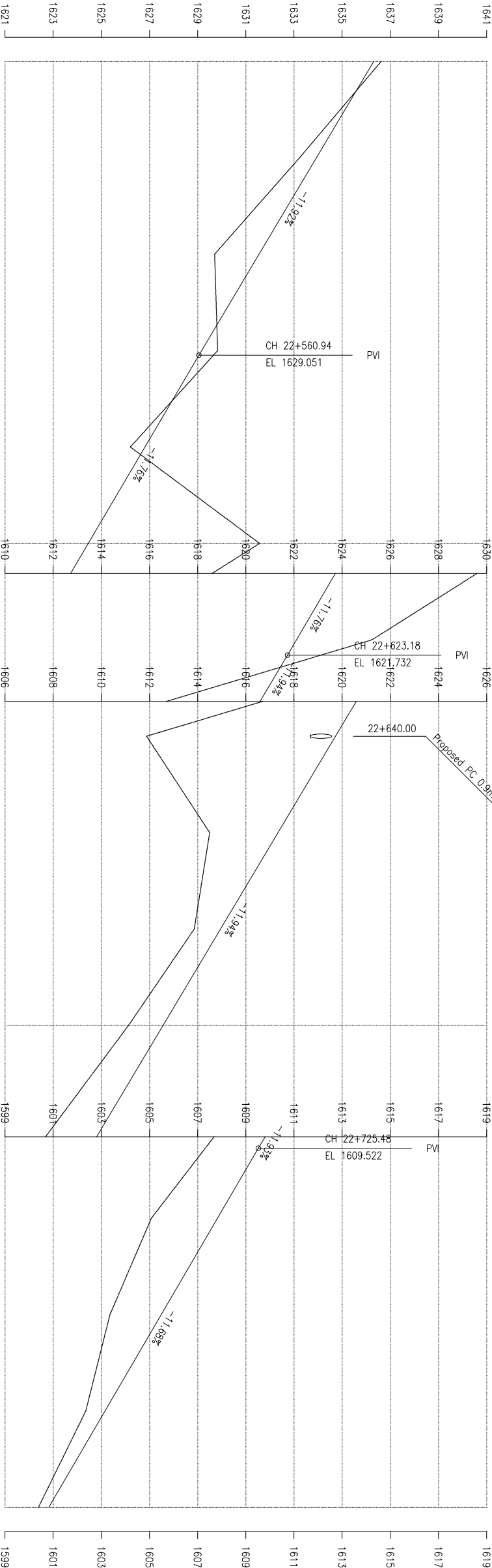
PLAN & PROFILES

DATE: September, 2017

CH: 22+200 - 22+500

DRWG NO.:
SHEET No. :
76A

1



DESIGN LEVEL (m)	1636.313	1635.121	1633.929	1632.738	1631.546	1630.355	1629.163	1627.986	1626.810	1625.634	1624.458	1623.282	1622.106	1620.918	1619.724	1618.531	1617.337	1616.144	1614.950	1613.757	1612.563	1611.370	1610.176	1608.994	1607.826	1606.657	1605.489	1604.321	1603.152	1601.984	1600.816
EXISTING LEVEL (m)	1636.623	1634.928	1633.232	1631.469	1629.706	1629.769	1629.832	1628.020	1626.207	1628.890	1631.573	1628.409	1625.244	1618.562	1611.880	1613.191	1614.502	1614.181	1613.861	1612.496	1611.131	1609.647	1608.163	1606.621	1605.079	1604.220	1603.361	1602.858	1602.355	1601.372	1600.389
CHAINAGE (km)	22+500.00	22+510.00	22+520.00	22+530.00	22+540.00	22+550.00	22+560.00	22+570.00	22+580.00	22+590.00	22+600.00	22+610.00	22+620.00	22+630.00	22+640.00	22+650.00	22+660.00	22+670.00	22+680.00	22+690.00	22+700.00	22+710.00	22+720.00	22+730.00	22+740.00	22+750.00	22+760.00	22+770.00	22+780.00	22+790.00	22+800.00
HORIZONTAL ALIGNMENT	RIGHT	IP--458743 R=20.00		R=10.50		R=10.50		R=10.50		IP-647 R=10.50		IP-648 R=10.50		R=10.50		IP-649 R=20.00		R=50.00		IP-650 R=50.00		R=50.00		IP-652 R=50.00		R=50.00		IP-653 R=50.00			
	LEFT																														



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED FOR LAYOUT

CONSULTANT:



BEAM-CEMCA - JV
ASSOCIATES

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN CONSIDER THE STUDY AND GIST PLAN OF BIRAHITHI - BOGATE, KERALA - SIKHRI ROAD (KATHMANDU - NEPAL)

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000

VERTICAL 1:200

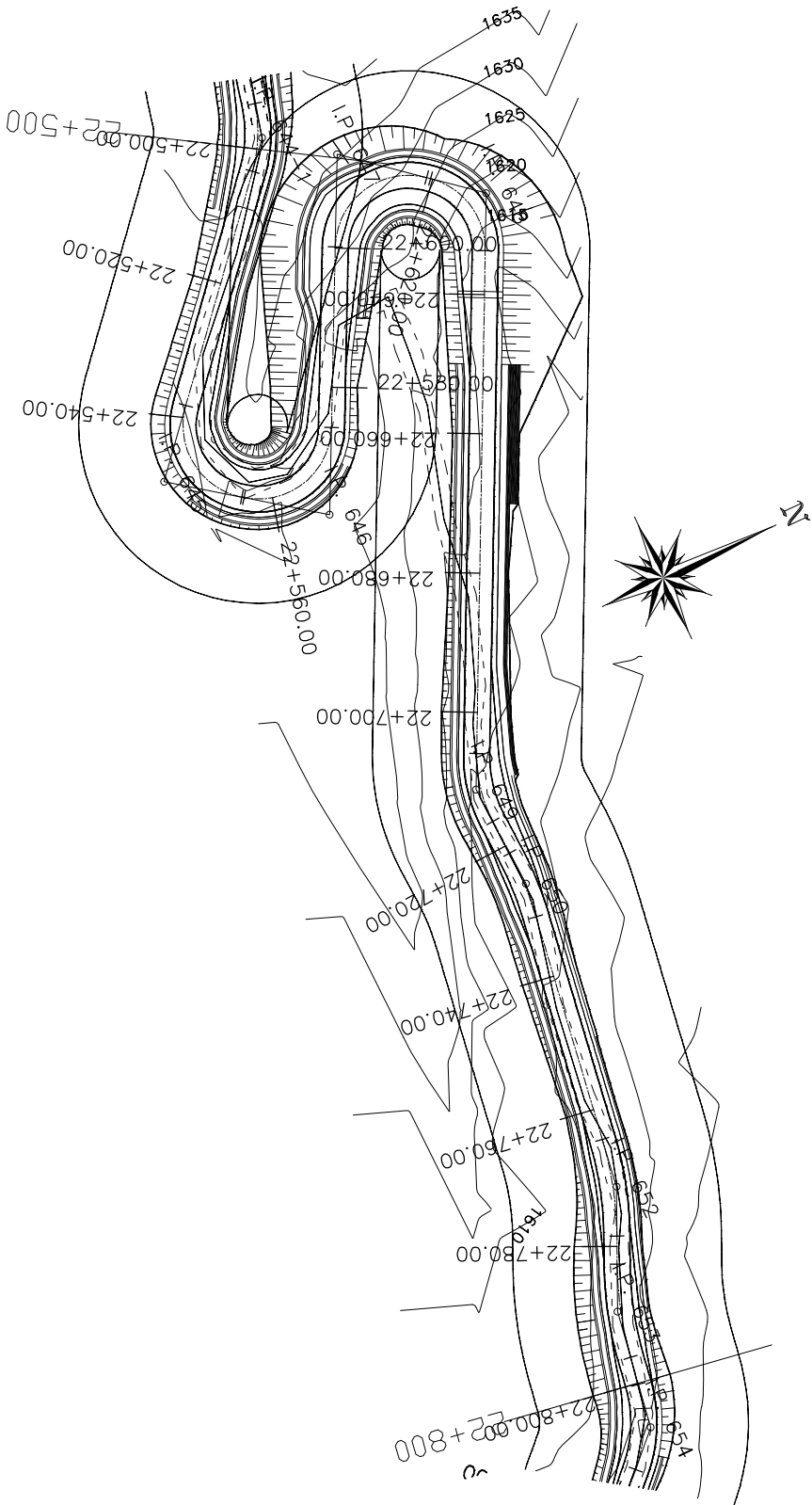
PLAN & PROFILES

CH: 22+500 - 22+800

DATE: September, 2017

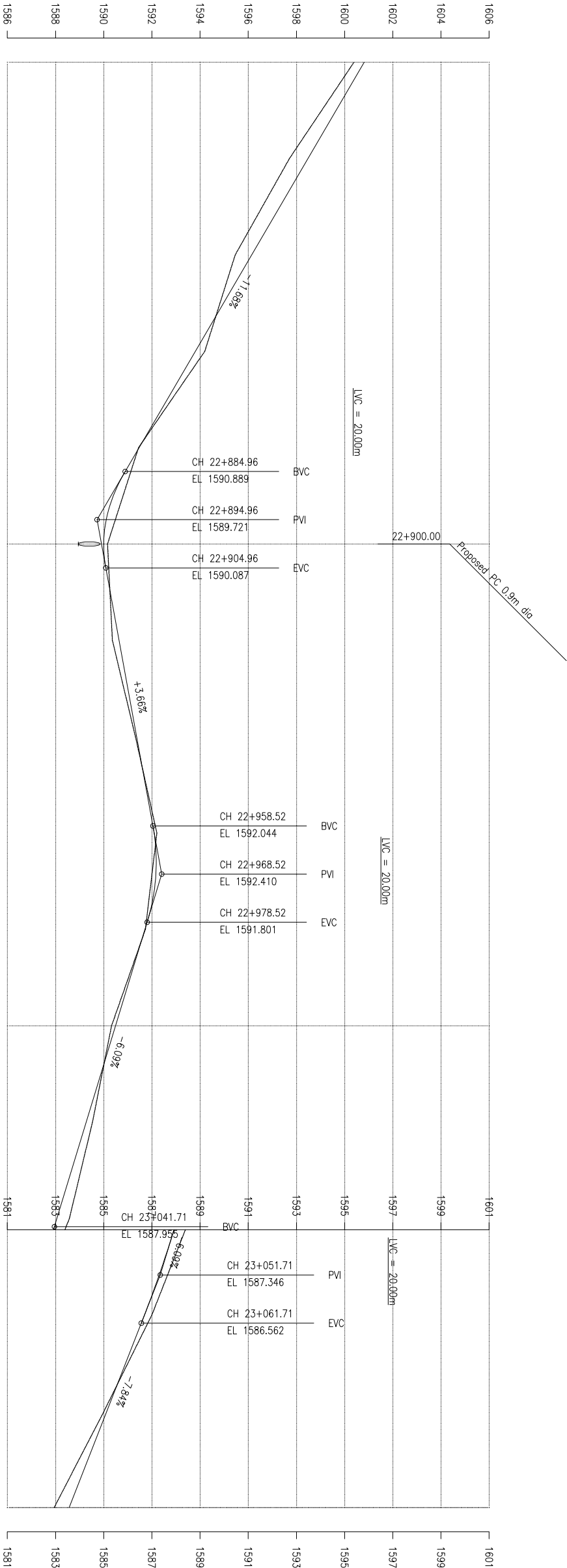
DRWG NO.: 1

SHEET No.: 77B



IP No	CO-ORDINATES(m)		WCB (0-M-S)	DIST (m)	DEF. ANG (0-M-S)	TAN. LEN. (m)	SIMPLE CURVE DATA			CHAINAGE			
	EASTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	IP
644-1	324360.656	3046352.750	131-06-01	33.506	28-09-59	5.017	20.000	0.620	9.832	22+493.46	22+498.38	22+503.29	22+498.48
645	324399.344	3046319.000	36-27-20	51.340	94-38-48	11.388	10.500	4.990	17.345	22+538.22	22+546.89	22+555.56	22+549.61
646	324413.750	3046338.500	296-22-45	24.244	100-04-42	12.531	10.500	5.848	18.340	22+555.89	22+565.06	22+574.23	22+568.42
647	324367.375	3046361.500	39-47-03	51.765	103-24-26	13.297	10.500	6.443	18.950	22+600.17	22+609.65	22+619.12	22+613.47
648	324381.531	3046378.500	116-09-13	22.122	76-22-10	8.258	10.500	2.858	13.995	22+619.69	22+626.69	22+633.69	22+627.95
649	324458.406	3046340.750	87-11-25	85.644	28-57-46	5.165	20.000	0.656	10.110	22+705.91	22+710.97	22+716.02	22+711.08
650	324473.688	3046341.500	98-32-54	15.300	11-21-21	4.971	50.000	0.247	9.910	22+721.18	22+726.14	22+731.09	22+726.15
652	324518.594	3046334.750	114-41-31	45.410	16-08-45	7.092	50.000	0.500	14.090	22+764.44	22+771.49	22+778.53	22+771.53
653	324534.906	3046327.250	99-09-19	17.954	15-32-19	6.822	50.000	0.463	13.560	22+782.57	22+789.35	22+796.13	22+789.39

 GOVERNMENT OF NEPAL MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT EARTHQUAKE EMERGENCY ASSISTANCE PROJECT APPROVAL LATHIM		CONSULTANT:  BRAM - COMEGA - JV MEMORANDUM		PROJECT: DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESSETTLEMENT PLAN CONJUSE HE STUDY AND GAS PLAN OF BHINPHEDI - BOGATE, KERALA - SIKHRI ROAD KATHMANDU - 1070.		DESIGNED BY : CHECKED BY : RECOMMENDED BY : APPROVED BY :		NAME DESIGNATION SIGNATURE DATE		SCALE HORIZONTAL 1:1000 VERTICAL 1:200		PLAN & PROFILES CH: 22+500 - 22+800		DATE: September, 2017 DRWG NO.: 1 SHEET No.: 77A	
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DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1600.816	1600.389	22+800.00	IP-654	R=20.00
1599.647	1599.049	22+810.00		
1598.479	1597.709	22+820.00	IP-655	R=40.00
1597.311	1596.583	22+830.00		
1596.142	1595.458	22+840.00	IP-656	R=60.00
1594.974	1594.827	22+850.00		
1593.806	1594.196	22+860.00	IP-657	R=40.00
1592.637	1592.821	22+870.00		
1591.469	1591.446	22+880.00	IP-658	R=20.00
1590.398	1590.802	22+890.00		
1590.000	1590.158	22+900.00	IP-659	R=35.00
1590.271	1590.259	22+910.00		
1590.636	1590.360	22+920.00	IP-660	R=20.00
1591.002	1590.838	22+930.00		
1591.367	1591.316	22+940.00	IP-661	R=35.00
1591.733	1591.761	22+950.00		
1592.093	1592.206	22+960.00	IP-662	R=20.00
1592.143	1591.968	22+970.00		
1591.711	1591.730	22+980.00	IP-663	R=35.00
1591.102	1591.027	22+990.00		
1590.494	1590.325	23+000.00	IP-664	R=20.00
1589.885	1589.930	23+010.00		
1589.276	1589.534	23+020.00	IP-665	R=35.00
1588.668	1589.054	23+030.00		
1588.059	1588.574	23+040.00	IP-666	R=20.00
1587.420	1587.787	23+050.00		
1586.695	1587.000	23+060.00	IP-667	R=35.00
1585.913	1586.006	23+070.00		
1585.129	1585.012	23+080.00	IP-668	R=20.00
1584.345	1583.977	23+090.00		
1583.562	1582.943	23+100.00	IP-669	R=35.00



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED FOR LAYOUT

CONSULTANT:



BEAM-CONCRETE - JV
MEMBERSHIP

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESSETTLEMENT PLAN CONDUIT RE STUDY AND GAS PLAN OF BIRAHEDI - BOKATE, KATARMALI - SIKHARI ROAD, KATARMALI - SIKHARI ROAD, KATARMALI - SIKHARI ROAD, KATARMALI - SIKHARI ROAD

DESIGNED BY :		NAME		DESIGNATION		SIGNATURE		DATE	
CHECKED BY :									
RECOMMENDED BY :									
APPROVED BY :									

PLAN & PROFILES

DATE: September, 2017

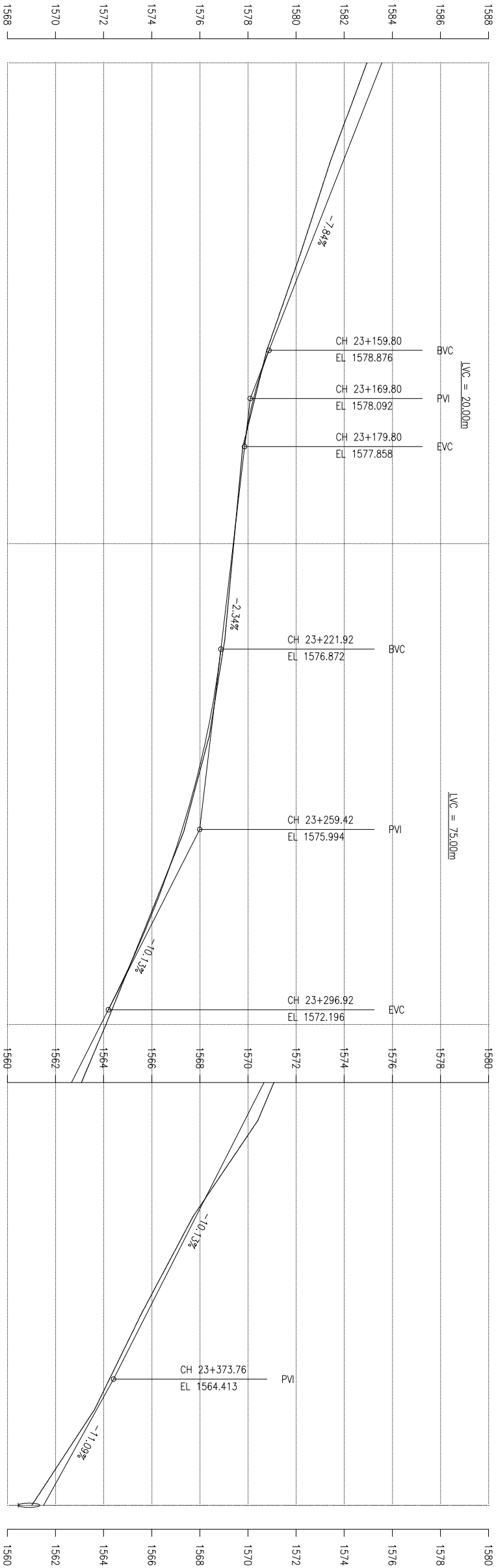
CH: 22+800 - 23+100

DRWG NO.: 1

SHEET No.: 78B

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200



DESIGN LEVEL (m)	EXISTING LEVEL (m)	CHAINAGE (km)	HORIZONTAL ALIGNMENT	
			RIGHT	LEFT
1583.562	1582.943	23+100.00	IP-661 R=35.00	
1582.778	1582.200	23+110.00		
1581.995	1581.457	23+120.00	IP-662 R=50.00	
1581.211	1580.809	23+130.00		
1580.427	1580.161	23+140.00	IP-663 R=20.00	
1579.644	1579.466	23+150.00		
1578.860	1578.770	23+160.00	IP-664 R=12.50	
1578.219	1578.275	23+170.00		
1577.853	1577.780	23+180.00	IP-665 R=30.00	
1577.619	1577.594	23+190.00		
1577.385	1577.408	23+200.00	IP-666 R=12.50	
1577.151	1577.221	23+210.00		
1576.917	1577.035	23+220.00	IP-667 R=30.00	
1576.649	1576.713	23+230.00		
1576.279	1576.391	23+240.00	IP-668 R=15.00	
1575.805	1575.856	23+250.00		
1575.228	1575.321	23+260.00	IP-669 R=20.00	
1574.546	1574.518	23+270.00		
1573.761	1573.716	23+280.00	IP-670 R=20.00	
1572.872	1572.906	23+290.00		
1571.884	1572.096	23+300.00	IP-671 R=30.00	
1570.871	1571.251	23+310.00		
1569.858	1570.406	23+320.00	IP-672 R=12.50	
1568.845	1569.057	23+330.00		
1567.832	1567.709	23+340.00		
1566.820	1566.648	23+350.00		
1565.807	1565.587	23+360.00		
1564.794	1564.609	23+370.00		
1563.721	1563.632	23+380.00		
1562.612	1562.323	23+390.00		
1561.502	1561.014	23+400.00		



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED LAYOUT



CONSULTANT:
BRAM - COMEGA - JV
MEMBERSHIP

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DPR PREPARATION & COST ESTIMATE, RESSETTLEMENT PLAN
CONCISE HSE STUDY AND GAS PLAN OF
BIRNPHEDI - BOKATE, KATHMANDU - SIKHRA ROAD
KATHMANDU - NEPAL

DESIGNED BY :		NAME		DESIGNATION		SIGNATURE		DATE	
CHECKED BY :									
RECOMMENDED BY :									
APPROVED BY :									

PLAN & PROFILES

CH: 23+100 - 23+400

DATE: September, 2017

DRWG NO.: 1

SHEET No.: 79B

10m

0

20m

HORIZONTAL 1:1000

2m

0

4m

VERTICAL 1:200



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
661	324778.562	3046377.000	64-16-59	43.941	38-18-08	12.155	35.000	2.050	23.398	23+094.00	23+105.70	23+117.40	23+106.15
662	324799.844	3046367.250	45-06-05	23.622	19-10-57	8.449	50.000	0.709	16.740	23+120.42	23+128.79	23+137.16	23+128.87
663	324826.438	3046413.750	83-34-52	37.543	36-28-47	6.980	20.000	1.183	13.432	23+159.27	23+165.99	23+172.70	23+166.25
664	324846.438	3046416.000	169-38-49	20.126	86-03-50	11.669	12.500	4.601	18.776	23+174.18	23+183.57	23+192.96	23+185.85
665	324852.969	3046380.250	156-43-15	36.342	12-55-33	3.398	30.000	0.192	6.768	23+214.23	23+217.62	23+221.00	23+217.63
666	324857.594	3046369.500	182-41-29	11.703	25-58-19	2.883	12.500	0.328	5.666	23+226.42	23+229.26	23+232.09	23+229.30
667	324856.219	3046340.250	166-23-38	29.282	16-17-41	4.295	30.000	0.306	8.532	23+254.19	23+258.46	23+262.72	23+258.48
668	324862.875	3046312.750	232-50-31	28.294	66-26-45	9.824	15.000	2.931	17.396	23+276.89	23+285.59	23+294.29	23+286.71
669	324848.031	3046301.500	259-44-55	18.625	26-54-21	4.784	20.000	0.564	9.392	23+298.31	23+303.01	23+307.70	23+303.09
670	324824.531	3046297.250	220-33-48	23.881	39-11-04	7.119	20.000	1.229	13.678	23+319.68	23+326.52	23+333.36	23+326.80
671	324807.625	3046277.500	239-20-59	25.998	18-47-14	4.963	30.000	0.408	9.837	23+347.28	23+352.20	23+357.12	23+352.24
672	324789.062	3046266.500	188-57-17	21.577	50-23-50	5.882	12.500	1.315	10.995	23+367.85	23+373.35	23+378.84	23+373.73



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVED LAYOUT



CONSULTANT:
BRAM-COMEGA -PVT
LIMITED

PROJECT:

DETAILED ENGINEERING SURVEY, DESIGN OF ROAD,
DPR PREPARATION & COST ESTIMATE, RESETTLEMENT PLAN
CONJISE RE STUDY AND GAS PLAN OF
BHIMEDEI - BOKATE, AERIAL, SENSEN ROAD
DARWANGH, NEPAL

DESIGNED BY :

CHECKED BY :

RECOMMENDED BY :

APPROVED BY :

NAME

DESIGNATION

SIGNATURE

DATE

SCALE

HORIZONTAL 1:1000
VERTICAL 1:200

10m

20m

4m

PLAN & PROFILES

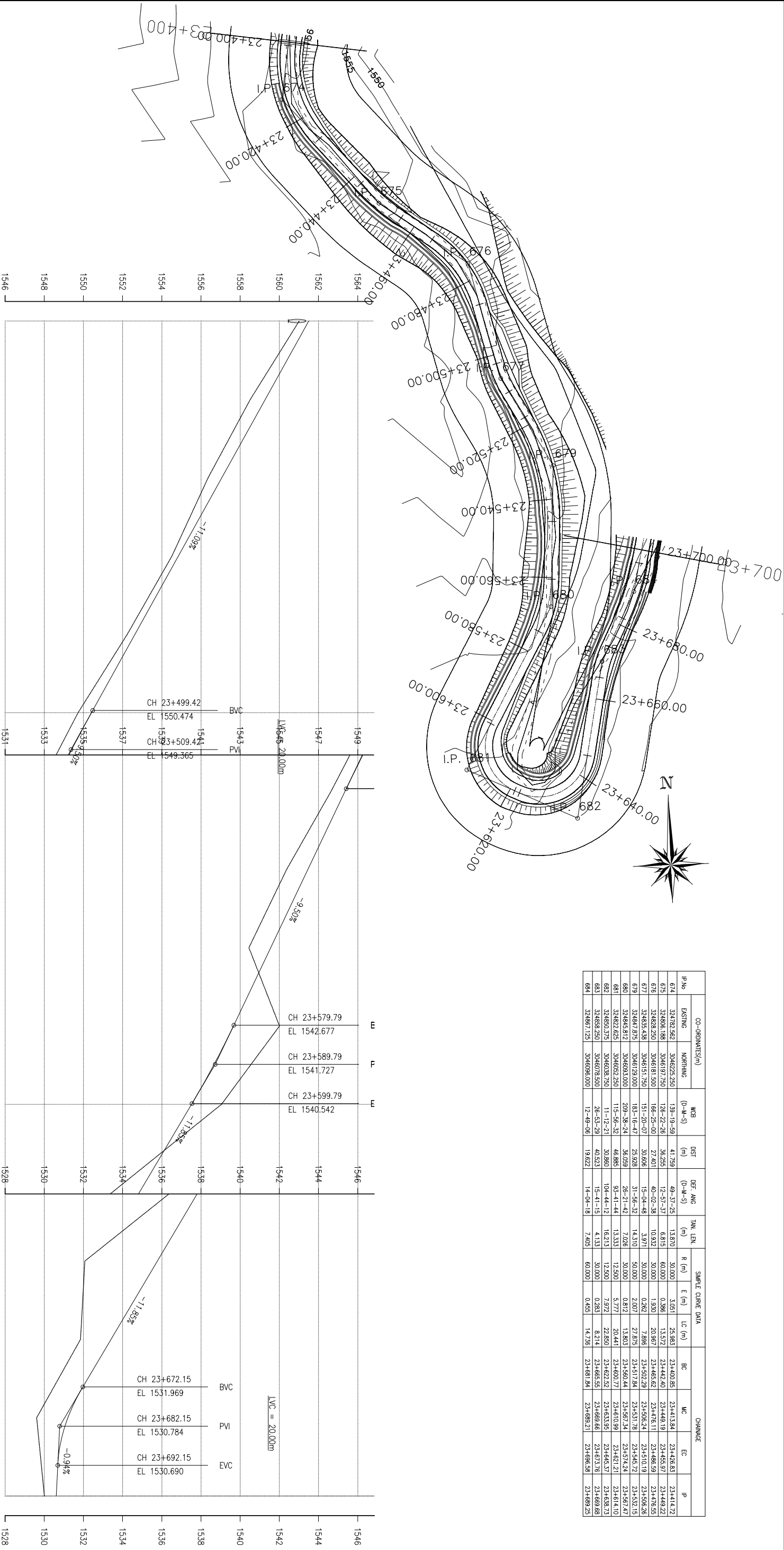
DATE: September, 2017

CH: 23+100 - 23+400

DRWG NO.:
SHEET No. :

1
79A

IP No	CO-ORDINATES(m)		WCB (D-M-S)	DIST (D-M-S)	DEF. ANG (D-M-S)	TAN. LEN. (m)	SAMPLE CURVE DATA			CHAINAGE			
	EXISTING	NORTHING					R (m)	E (m)	LC (m)	BC	MC	EC	P
674	324782.582	3046225.250	139-19-59	41.759	49-37-25	13.870	30.000	3.051	25.983	23+400.85	23+413.84	23+426.83	23+414.72
675	324868.188	3046197.750	178-22-26	36.250	12-57-57	6.815	60.000	0.386	13.572	23+442.40	23+449.19	23+465.97	23+449.22
676	324858.250	3046181.500	166-25-00	27.401	40-02-38	10.932	30.000	1.930	20.967	23+465.62	23+476.11	23+486.59	23+476.55
677	324835.438	3046151.750	151-20-07	30.606	15-04-48	3.971	30.000	0.262	7.896	23+502.29	23+506.24	23+510.19	23+506.26
679	324847.975	3046129.000	183-16-47	25.928	31-56-32	14.370	50.000	2.007	27.875	23+517.84	23+531.78	23+545.72	23+552.15
680	324845.812	3046093.000	209-38-24	36.059	26-21-42	7.026	30.000	0.812	13.803	23+560.44	23+567.34	23+574.24	23+567.47
681	324822.825	3046052.250	115-56-32	46.865	93-41-44	13.333	12.500	5.777	20.441	23+600.77	23+610.99	23+621.21	23+614.10
682	324850.375	3046038.750	11-12-21	30.860	104-44-12	16.213	12.500	7.972	22.850	23+622.52	23+633.95	23+645.37	23+638.73
683	324858.250	3046078.500	26-53-29	40.523	15-41-15	4.133	30.000	0.283	8.214	23+665.55	23+669.66	23+673.76	23+669.68
684	324867.125	3046096.000	12-49-06	19.622	14-04-18	7.405	60.000	0.455	14.735	23+681.84	23+689.21	23+696.58	23+689.25



DESIGN LEVEL (m)	1561.502	1560.393	1559.284	1558.175	1557.065	1555.956	1554.847	1553.738	1552.628	1551.519	1550.410	1549.345	1548.360	1547.409	1546.459	1545.508	1544.558	1543.608	1542.657	1541.646	1540.517	1539.332	1538.148	1536.963	1535.778	1534.593	1533.408	1532.224	1531.207	1530.723	1530.616
EXISTING LEVEL (m)	1561.014	1559.767	1558.520	1557.443	1556.366	1555.443	1554.519	1553.378	1552.236	1550.982	1549.727	1548.688	1547.648	1546.511	1545.374	1544.411	1543.447	1544.228	1545.008	1543.526	1542.044	1539.564	1537.085	1534.579	1532.073	1531.962	1531.851	1530.732	1529.613	1529.810	1530.007
CHAINAGE (km)	23+400.00	23+410.00	23+420.00	23+430.00	23+440.00	23+450.00	23+460.00	23+470.00	23+480.00	23+490.00	23+500.00	23+510.00	23+520.00	23+530.00	23+540.00	23+550.00	23+560.00	23+570.00	23+580.00	23+590.00	23+600.00	23+610.00	23+620.00	23+630.00	23+640.00	23+650.00	23+660.00	23+670.00	23+680.00	23+690.00	23+700.00
HORIZONTAL ALIGNMENT	RIGHT	R=30.00		R=30.00		R=60.00		R=60.00		R=30.00		R=30.00		R=50.00		R=30.00		R=12.50		R=12.50		R=12.50		R=30.00		R=60.00		R=60.00		R=60.00	
	LEFT	IP-674		IP-675		IP-676		IP-677		IP-679		IP-680		IP-681		IP-682		IP-683		IP-684		IP-685		IP-686		IP-687		IP-688		IP-689	



GOVERNMENT OF NEPAL
MINISTRY OF FEDERAL AFFAIRS AND LOCAL DEVELOPMENT
CENTRAL LEVEL PROJECT IMPLEMENTATION UNIT
EARTHQUAKE EMERGENCY ASSISTANCE PROJECT
APPROVAL LETTER



BRAM-COMEGA-IT
CONSULTANT

PROJECT:
DETAILED ENGINEERING SURVEY, DESIGN OF ROAD, DPR PREPARATION & COST ESTIMATE, RESSETTLEMENT PLAN
CONCESSION STUDY AND GAST PLAN OF
BIRAHEDHI - BOGATE, KATHMANDU - SIKHRA ROAD
KATHMANDU - 10700

DESIGNED BY :
CHECKED BY :
RECOMMENDED BY :
APPROVED BY :

NAME
DESIGNATION
SIGNATURE
DATE

SCALE
HORIZONTAL 1:1000
VERTICAL 1:200

PLAN & PROFILES
CH: 23+400 - 23+700
DATE: September, 2017
DRWG NO.:
SHEET No. : 80