



PUNTOS DE CONTROL VERTICAL (BM)			
PUNTOS	COORDENADAS TOPOGRAFICAS		COTA
	NORTE	ESTE	
PB-01/BM-000	8586597.282	504598.745	3758.221
AZ-01	8586643.906	504858.185	3765.427
BM-001	8586485.263	505071.613	3772.833
BM-002	8586158.557	505522.577	3774.287
BM-003	8585963.110	505831.518	3795.697
BM-004	8585625.532	505929.089	3806.619
BM-005	8585314.454	506124.034	3807.096
BM-006	8584927.681	506239.788	3811.639
BM-007	8584766.374	506583.886	3829.495
BM-008	8584562.341	506583.312	3851.581
BM-009	8585013.179	506745.061	3876.529
PB-02/BM-010	8584895.287	506823.234	3902.421
AZ-02/BM-011	8584548.906	506759.956	3921.829
BM-012	8583980.342	506871.231	3938.631
BM-013	8583853.911	507073.359	3962.145
BM-14	8583667.415	507402.415	3982.540
BM-015	8583928.269	507625.568	3989.420
BM-016	8584020.071	508068.439	4014.820
BM-017	8583920.765	508453.368	4035.013
BM-018	8583667.398	508559.462	4053.844
BM-019	8583389.787	508798.337	4077.675
PB-03/BM-020	8583052.936	509021.290	4095.763
BM-021	8582853.709	509281.412	4110.810
BM-022	8582626.308	509660.854	4137.390
BM-023	8582317.011	509881.129	4158.349
BM-024	8582435.504	510252.823	4183.464
BM-025	8582237.293	510316.394	4201.234
BM-026	8582312.242	510456.715	4231.970
BM-027	8582024.520	510529.128	4248.569
BM-028	8581769.893	510604.466	4275.287
BM-029	8581545.691	510673.616	4298.184
PB-04/BM-030	8581609.460	510978.223	4322.516
BM-031	8581594.797	511382.881	4331.823
BM-032	8581262.259	511749.324	4353.570
BM-033	8581345.056	512135.861	4372.352
BM-034	8580880.111	512222.545	4382.606
BM-035	8580464.702	512362.488	4387.380
BM-036	8580646.116	512724.100	4405.506
BM-037	8580333.382	513159.394	4417.616
BM-038	8580102.878	513587.601	4419.215
BM-039	8579653.082	513475.941	4397.101
PB-05/BM-040	8579230.650	513124.008	4352.760

PUNTOS DE CONTROL HORIZONTAL						
VERTICE	VERTICE	DISTANCIA	AZIMUT	NORTE	ESTE	COTA
PB-01/BM-000	PB-01/BM-000					
AZ-01	PB-01-AZ-01	263.60	79° 48' 43.47"	8586597.282	504598.745	3758.221
P-001	P-001-P-002	207.89	127° 6' 16.01"	8586359.846	505237.416	3776.745
P-002	P-002-P-003	75.15	106° 33' 39.91"	8585604.111	506001.121	3807.268
P-003	P-003-P-004	239.44	162° 14' 56.61"	8585376.073	506074.121	3806.791
P-004	P-004-P-005	171.55	163° 53' 39.44"	8585149.635	506171.625	3805.989
P-005	P-005-P-006	232.84	79° 7' 42.78"	8584971.597	506468.453	3819.729
P-006	P-006-PB-02	244.12	179° 22' 29.29"	8584522.273	506586.549	3852.940
PB-02/BM-010	PB-02-AZ-02	141.46	146° 27' 7.46"	8584895.287	506823.234	3902.421
AZ-02/BM-011	AZ-02-P-007	352.11	190° 21' 10.21"	8584548.906	506759.956	3921.829
P-007	P-007-P-008	208.40	169° 8' 19.7"	8584344.239	506799.225	3925.813
P-008	P-008-P-009	205.22	157° 4' 25.86"	8583791.332	506951.173	3954.652
P-009	P-009-P-010	102.89	59° 52' 6.78"	8583905.561	507162.347	3963.593
P-010	P-010-P-011	51.29	107° 3' 59.59"	8583890.509	507211.374	3964.771
P-011	P-011-P-012	227.05	11° 32' 54.68"	8583889.872	507447.870	3985.518
P-012	P-012-P-013	338.87	55° 32' 50.94"	8584119.977	507905.002	4005.477
P-013	P-013-P-014	54.83	142° 49' 51.43"	8583976.376	508101.568	4019.074
P-014	P-014-P-015	334.46	90° 59' 35.24"	8583970.579	508435.977	4031.490
P-015	P-015-P-016	93.43	119° 52' 57.71"	8583874.215	508534.378	4039.803
P-016	P-016-P-017	98.02	61° 49' 26.96"	8583920.500	508620.786	4041.624
P-017	P-017-P-018	81.14	158° 45' 39.82"	8583844.872	508650.179	4044.926
P-018	P-018-P-019	204.51	110° 26' 5.14"	8583318.383	508989.982	4087.729
P-019	P-019-PB-03	158.81	158° 29' 13.82"	8583170.635	509048.219	4091.332
PB-03	PB-03-AZ-03	120.74	192° 53' 14.16"	8583052.936	509021.290	4095.763
AZ-03	AZ-03-P-020	240.91	97° 19' 15.84"	8582823.010	509520.359	4137.526
P-020	P-020-P-021	251.59	45° 57' 6.48"	8582491.929	510061.957	4169.115
P-021	P-021-P-022	75.42	68° 27' 44.55"	8582519.618	510132.115	4174.343
P-022	P-022-PB-04	72.69	145° 25' 1.3"	8582375.657	510294.883	4194.788
PB-04	PB-04-AZ-04	311.21	78° 10' 33.11"	8581609.460	510978.223	4322.516
AZ-04	AZ-04-P-023	348.91	79° 2' 48.49"	8581675.756	511320.777	4328.570
P-023	P-023-P-024	321.21	59° 4' 0.39"	8581427.376	512024.852	4365.603
P-024	P-024-P-025	90.32	82° 12' 24.7"	8581439.623	512114.339	4369.536
P-025	P-025-P-026	174.24	53° 13' 47.45"	8580569.003	512502.061	4394.558
P-026	P-026-P-027	159.58	151° 23' 41.24"	8579962.780	513664.002	4410.527
P-027	P-027-P-028	118.71	190° 7' 36.16"	8579845.916	513643.129	4404.928
P-028	P-028-PB-05	116.30	210° 27' 37.69"	8579745.672	513584.174	4401.171
PB-05/BM-040	PB-05-AZ-05	436.70	231° 5' 11.36"	8579378.772	513136.149	4372.672

LEYENDA	
POLIGONAL DE APOYO	
CARRETERA EXISTENTE	
PUNTOS DE CONTROL HORIZONTAL (AZ)	
PUNTOS DE CONTROL HORIZONTAL (PB)	
PUNTOS DE POLIGONAL (P)	
PUNTOS DE CONTROL VERTICAL (BM)	

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 Ministerio de Transportes y Comunicaciones
 Provias Nacional

Buena Ventura
 Compañía de Minas

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 Proceso y Ploteo: GER. ESTUDIOS-HOB

REVISIONES		
N°	FECHA	DESCRIPCIÓN

ESTUDIO DEFINITIVO DE LA REHABILITACION Y MEJORAMIENTO CARRETERA: HUANCVELICA - LIRCAY TRAMO: 1+550(Av. Los Chancas)-LIRCAY
 CONTRATO N° 7341-2012

PLANO DE GEOREFERENCIACION
COORDENADAS TOPOGRAFICAS
 ESCALA FORMATO A1: 1/7500
 ESCALA FORMATO A3: 1/15000
 FECHA: SEPTIEMBRE 2013
7341-12-PGT-01