

CUADRO DE COORDENADAS Y ELEMENTOS DE CURVAS

SENT.	DELTA	RADIO	TANG.	L.C.	Ext.	P.I.	P.C.	P.T.	NORTE	ESTE	PX	SA
90	75°00'01"	31.000	5.341	10.579	0.457	17 + 943.167	17 + 933.576	17 + 944.155	9178423.273	817684.446	8.0	2.30
91	D	59°24'23"	50.000	28.523	51.842	18 + 079.018	18 + 050.495	18 + 102.336	9178428.732	817540.094	7.0	1.50
92		39°24'30"	60.000	21.486	41.268	18 + 167.272	18 + 145.784	18 + 187.052	9178510.922	817495.604	6.0	1.30
93-CC		169°00'11"	25.000	259.708	73.741	-	18 + 564.301	18 + 304.594	9178661.349	817126.330	8.0	2.80
94	D	25°28'10"	85.000	19.210	37.785	18 + 449.415	18 + 430.205	18 + 467.990	9178480.411	817403.244	5.0	1.00
95		29°40'13"	100.000	26.487	51.784	18 + 851.124	18 + 824.637	18 + 876.422	9178136.879	817612.688	5.0	0.90

N°	PI	s	Le	x	y	p	k	ST	LT	Tt	TS	ST
90	27°43'26"		30.000	29.305	4.758	1.200	14.884	10.228	20.251	39.591	17 + 903.576	17 + 974.155

PLANTA  
1:2000

BM-33  
COTA: 2308.306

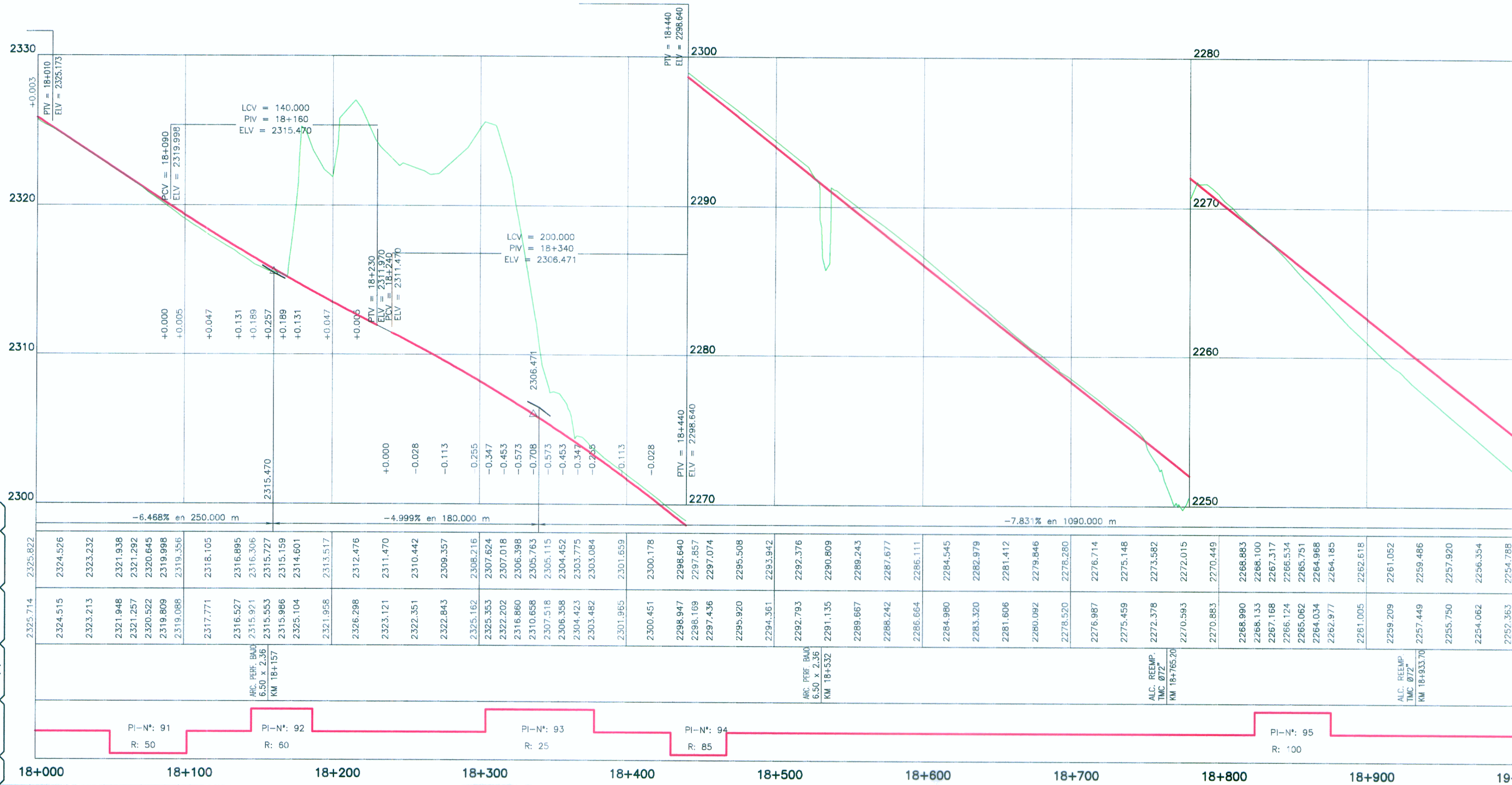
UBICACION: Km 18+360  
LADO: L.D. a 6.60 m del eje de la carretera  
REFERENCIAS: Marca sobre Hito de Concreto

BM-34  
COTA: 2269.591

UBICACION: Km 18+830  
LADO: L.D. a 9.35 m del eje de la carretera  
REFERENCIAS: Marca sobre Hito de Concreto

LEYENDA

- PLANTA :**
- TRAZO DE PROYECTO
  - - - - - CARRETERA EXISTENTE
  - ~ ~ ~ CURVA MAYOR
  - ~ ~ ~ CURVA MENOR
  - RIO
  - QUEBRADA
  - CANAL
  - ACEQUIA
  - MURO DE ADOBE
  - MURO DE CONCRETO
  - PLAZOLETA
  - PARADERO
  - VIVIENDA EXISTENTE
  - TERRENO DE CULTIVO
  - CERCOS
  - POSTE MEDIA TENSION
  - POSTE LUZ
  - CALICATA
  - MURO DE PIEDRA
  - DESLIZAMIENTO DE TERRENO
  - BOFEDAL
- PERFIL :**
- SUB RASANTE
  - TERRENO EXISTENTE



PENDIENTE	-6.468% en 250.000 m
COTA SUBRASANTE	2324.515, 2323.232, 2321.938, 2321.257, 2320.545, 2319.998, 2319.088, 2318.356, 2317.771, 2316.895, 2316.306, 2315.971, 2315.553, 2315.159, 2314.601, 2325.104, 2321.958, 2313.517, 2326.298, 2312.476, 2323.121, 2311.470, 2322.351, 2310.442, 2322.843, 2309.357, 2325.162, 2308.216, 2325.353, 2307.018, 2322.202, 2306.388, 2310.860, 2306.388, 2310.658, 2306.763, 2307.518, 2306.115, 2306.573, 2306.358, 2304.452, 2304.423, 2303.775, 2303.482, 2303.084, 2301.950, 2301.639, 2300.451, 2300.178, 2298.947, 2296.640, 2298.108, 2297.857, 2297.436, 2297.074, 2295.920, 2295.508, 2294.351, 2293.942, 2292.793, 2292.376, 2291.135, 2290.809, 2289.667, 2289.243, 2288.042, 2287.677, 2286.664, 2286.111, 2284.980, 2284.545, 2283.320, 2282.979, 2281.606, 2281.412, 2280.092, 2279.846, 2278.520, 2278.280, 2276.987, 2276.714, 2275.459, 2275.148, 2272.378, 2273.582, 2270.383, 2272.015, 2270.983, 2270.449, 2268.990, 2268.883, 2268.133, 2266.100, 2267.168, 2267.317, 2266.124, 2266.534, 2265.062, 2265.751, 2264.034, 2264.968, 2262.977, 2264.185, 2261.005, 2262.618, 2259.209, 2261.052, 2257.449, 2259.486, 2255.750, 2257.920, 2254.062, 2256.354, 2252.363, 2254.788
COTA TERRENO	2325.714, 2324.515, 2323.213, 2321.948, 2321.257, 2320.522, 2319.809, 2319.088, 2318.356, 2317.771, 2316.895, 2316.306, 2315.971, 2315.553, 2315.159, 2314.601, 2325.104, 2321.958, 2313.517, 2326.298, 2312.476, 2323.121, 2311.470, 2322.351, 2310.442, 2322.843, 2309.357, 2325.162, 2308.216, 2325.353, 2307.018, 2322.202, 2306.388, 2310.860, 2306.388, 2310.658, 2306.763, 2307.518, 2306.115, 2306.573, 2306.358, 2304.452, 2304.423, 2303.775, 2303.482, 2303.084, 2301.950, 2301.639, 2300.451, 2300.178, 2298.947, 2296.640, 2298.108, 2297.857, 2297.436, 2297.074, 2295.920, 2295.508, 2294.351, 2293.942, 2292.793, 2292.376, 2291.135, 2290.809, 2289.667, 2289.243, 2288.042, 2287.677, 2286.664, 2286.111, 2284.980, 2284.545, 2283.320, 2282.979, 2281.606, 2281.412, 2280.092, 2279.846, 2278.520, 2278.280, 2276.987, 2276.714, 2275.459, 2275.148, 2272.378, 2273.582, 2270.383, 2272.015, 2270.983, 2270.449, 2268.990, 2268.883, 2268.133, 2266.100, 2267.168, 2267.317, 2266.124, 2266.534, 2265.062, 2265.751, 2264.034, 2264.968, 2262.977, 2264.185, 2261.005, 2262.618, 2259.209, 2261.052, 2257.449, 2259.486, 2255.750, 2257.920, 2254.062, 2256.354, 2252.363, 2254.788
OBRAS DE ARTE	
ALINEAMIENTO	PI-N°: 91 (R: 50), PI-N°: 92 (R: 60), PI-N°: 93 (R: 25), PI-N°: 94 (R: 85), PI-N°: 95 (R: 100)
KILOMETRAJE	18+000, 18+100, 18+200, 18+300, 18+400, 18+500, 18+600, 18+700, 18+800, 18+900, 19+000

PERFIL LONGITUDINAL  
H=1:2000  
V=1:200

ING. JUAN EDUARDO GONZALEZ DEL AGUILA  
Esp. TOPOGRAFIA, FOTOGRAFIA AEREA Y DISEÑO VIAL  
CIP N° 48183

HOB CONSULTORES S.A.

ESTUDIO DEFINITIVO PARA EL MEJORAMIENTO DE LA CARRETERA: SAN MARCOS-CAJABAMBA-SAUSACOCCHA TRAMO: SAN MARCOS-CAJABAMBA CONTRATO N° 008-2011-MTC/20

PLANTA Y PERFIL  
KM 18+000 - KM 19+000  
008-11-PP-19

FECHA: MAYO 2012  
ESCALA FORMATO A1: 1/2000  
ESCALA FORMATO A3: 1/4000

PERU Ministerio de Transportes y Comunicaciones  
Provias Nacional

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Revisión:  
Proceso y Ploteo: M.CHWILOQUE

REVISIONES

N°	FECHA	DESCRIPCION