

UBICACION DE SEÑALAMIENTO VERTICAL

No. SEÑAL	CADENAMIENTO DE REFERENCIA	TIPO DE SEÑAL	DIMENSION (Cms.)	DESCRIPCION
01	IZQUIERDO	DERECHO	30 x 76	KILOMETRAJE SIN RUTA
02			71 x 71	SEÑAL DE VELOCIDAD (30 km/h)
03			71 x 71	ZONA DE CURVAS
04			71 x 71	CURVA INVERSA CERRADA
05	0+380.00	0+366.54	SP-9 (DER)	ZONA DE CURVAS
06	0+489.65	0+514.00	SP-9 (DER)	CURVA INVERSA CERRADA
07	0+634.95	0+695.35	SP-7 (DER)	CURVA CERRADA
08	0+833.42	0+848.82	SP-7 (DER)	CURVA CERRADA
09			SP-9 (DER)	CURVA INVERSA CERRADA
10			SP-7 (DER)	CURVA CERRADA
11			SP-7 (DER)	CURVA CERRADA
12	0+924.75		SP-7 (DER)	CURVA CERRADA
13			SP-9 (DER)	KILOMETRAJE SIN RUTA
14	1+040.00	1+000.00	SP-9 (DER)	SEÑAL DE VELOCIDAD (30 km/h)

RESUMEN DE SEÑALES VERTICALES

SEÑAL	DIMENSION	CANTIDAD	DESCRIPCION
PREVENTIVAS			
SP-07	71 X 71	4	CURVA CERRADA
SP-09	71 X 71	2	CURVA INVERSA CERRADA
SP-10	71 X 71	2	ZONA DE CURVAS
RESTRICTIVAS			
SP-9	71 X 71	2	VELOCIDAD MAXIMA 30 km/h
INFORMATIVAS			
SI-15	30 x 76	2	KILOMETRAJE SIN RUTA

RESUMEN DE MARCAS

MARCA	RAYA	DIMENSION	COLOR	CANTIDAD	DESCRIPCION
M-1.3	CONTINUA	100 mm	AMARILLA	3000 ml	M-1.3 Raya separadora de sentidos de circulación, raya continua sencilla.

DATA SEPARADORA DE SENTIDOS DE CIRCULACIÓN (M-1) Se utiliza para separar las sendas de circulación en carreteras y vías urbanas de dos sentidos, generalmente el centro del ancho vial, tanto en tangentes como en curvas. Debe ser amarilla reflejante, complementada con bolones reflejantes con un ancho de cabeza de 6.5 m, la raya separadora de sentidos de circulación debe ser de 10 cm de ancho.

A TLAHUITOLTEPEC

GEOMETRIA DEL ALINEAMIENTO HORIZONTAL

CURVA	PC/TE		EC	PI/PST		CE	PT/ET	
	X	Y		X	Y		X	Y
1	+0964.35			33.45 m antes del 0+000			+0974.36	
2	812,291.42 1,893,285.53			812,289.37 1,893,280.195			812,288.99 1,893,294.49	
3	812,282.46 1,893,300.03			11.76 m antes del 0+000			+0989.92	
4	812,284.49 1,893,320.37			812,277.946 1,893,300.535			812,282.47 1,893,317.03	
5	+0109.68			+0070.80			+0128.21	
6	812,284.49 1,893,320.37			812,287.271 1,893,324.651			812,288.28 1,893,329.15	
7	812,292.42 1,893,335.58			+0028.210			+0426.13	
8	+0056.84			812,296.031 1,893,342.873			812,295.87 1,893,351.20	
9	812,295.46 1,893,372.05			+0068.641			+0075.81	
10	+0044.33			812,295.203 1,893,384.707			812,307.40 1,893,388.09	
11	812,324.61 1,893,392.32			+0092.348			+0124.34	
12	+0127.26			812,327.481 1,893,393.660			812,332.00 1,893,395.86	
13	812,302.61 1,893,405.89			+0136.409			+0136.39	
14	+0148.90			812,302.871 1,893,405.910			812,360.84 1,893,416.91	
15	812,309.12 1,893,419.58			+0155.498			+0126.96	
16	812,316.90 1,893,432.43			812,312.716 1,893,424.965			812,378.50 1,893,431.48	
17	+0150.69			+0170.94			+0170.96	
18	812,376.00 1,893,449.58			812,379.296 1,893,438.041			812,383.55 1,893,442.41	
19	+0187.17			+0195.638			+0204.73	
20	812,391.23 1,893,450.38			812,397.313 1,893,450.38			812,405.80 1,893,457.58	
21	+0221.35			+0229.736			+0237.60	
22	812,423.32 1,893,459.98			812,431.423 1,893,461.108			812,467.14 1,893,466.77	
23	+0260.80			+0280.368			+0276.96	
24	812,436.39 1,893,483.79			812,461.229 1,893,488.229			812,467.14 1,893,491.49	
25	+0292.29			+0303.377			+0318.78	
26	812,425.11 1,893,498.55			812,491.859 1,893,503.080			812,497.49 1,893,511.81	
27	+0323.81			+0337.824			+0366.63	
28	812,503.25 1,893,520.31			812,510.734 1,893,532.349			812,508.54 1,893,545.52	
29	+0355.38			+0361.419			+0397.41	
30	812,504.93 1,893,551.00			812,503.014 1,893,556.754			812,500.00 1,893,562.98	
31	+0393.27			+0384.088			+0409.58	
32	812,493.84 1,893,572.52			812,491.421 1,893,576.878			812,486.72 1,893,581.60	
33	+0397.16			+0406.895			+0415.67	
34	812,487.12 1,893,588.72			812,483.814 1,893,587.943			812,481.49 1,893,606.68	
35	+0421.25			+0428.833			+0436.31	
36	812,490.90 1,893,611.66			812,494.243 1,893,618.413			812,499.46 1,893,623.91	
37	+0441.26			+0450.894			+0464.64	
38	812,503.06 1,893,627.71			812,509.254 1,893,634.351			812,512.83 1,893,642.82	
39	+0468.83			+0481.827			+0496.83	
40	812,503.31 1,893,667.86			812,525.942 1,893,673.605			812,525.94 1,893,677.13	
41	+0505.26			+0510.264			+0515.26	
42	812,535.76 1,893,684.76			812,532.867 1,893,689.291			812,535.44 1,893,693.60	
43	+0525.63			+0530.550			+0535.54	
44	812,540.97 1,893,702.44			812,543.242 1,893,706.751			812,546.42 1,893,710.62	
45	+0544.43			+0556.374			+0559.99	
46	812,552.39 1,893,717.83			812,556.299 1,893,722.502			812,561.35 1,893,729.84	
47	+0566.60			+0573.031			+0586.88	
48	812,559.30 1,893,731.15			812,576.420 1,893,735.794			812,584.82 1,893,739.31	
49	+0588.74			+0597.030			+0604.93	
50	812,580.96 1,893,734.68			812,568.962 1,893,734.509			812,605.86 1,893,729.91	
51	+0620.41			+0626.419			+0630.41	
52	812,618.75 1,893,721.33			812,622.933 1,893,718.561			812,626.86 1,893,715.49	

POLIGONAL DE CONTROL TERRESTRE

VERTICE	X	Y	Z	OBSERVACIONES
PA-01	812,289.187	1,893,319.265	2,351.77	
PA-02	812,275.466	1,893,414.680	2,368.77	S/VARILLA
PA-03	812,436.366	1,893,456.890	2,375.96	S/VARILLA
PA-04	812,515.751	1,893,541.344	2,387.14	S/VARILLA
PA-05	812,592.568	1,893,729.632	2,406.98	S/VARILLA
PA-06	812,666.013	1,893,604.646	2,406.98	S/VARILLA
PA-07	812,763.669	1,893,653.366	2,414.21	S/VARILLA
PA-08	812,812.846	1,893,699.012	2,416.60	S/VARILLA
PA-09	812,844.549	1,893,735.281	2,446.32	S/VARILLA
PA-10	812,826.623	1,893,735.281	2,446.32	S/VARILLA

GEOMETRIA DEL ALINEAMIENTO HORIZONTAL

CURVA	PC/TE		EC	PI		CE	PT/ET	
	X	Y		X	Y		X	Y
27	+641.36						0+641.36	
28	812,635.49 1,893,708.76						812,639.438 1,893,705.683	
29	812,652.05 1,893,697.49						812,656.245 1,893,694.762	
30	+676.16						0+676.16	
31	812,664.88 1,893,699.20						812,671.545 1,893,696.92	
32	+708.23						0+708.23	
33	812,694.22 1,893,685.77						812,698.214 1,893,685.77	
34	+725.43						0+725.43	
35	812,713.38 1,893,686.93						812,727.059 1,893,686.015	
36	+757.69						0+757.69	
37	812,739.51 1,893,671.20						812,746.36 1,893,665.289	
38	+770.54						0+770.54	
39	812,749.03 1,893,662.89						812,761.505 1,893,655.011	
40	+803.06						0+803.06	
41	812,779.36 1,893,665.85						812,784.084 1,893,668.710	
42	+820.26						0+820.26	
43	812,792.53 1,893,676.83						812,798.126 1,893,676.83	
44	+834.44						0+834.44	
45	812,803.57 1,893,688.65						812,806.911 1,893,691.369	
46	+873.82						0+873.82	
47	812,824.54 1,893,719.58						812,827.657 1,893,724.362	
48	+884.51						0+884.51	
49	812,833.68 1,893,724.22						812,838.89 1,893,729.43	
50	+894.31						0+894.31	
51	812,851.02 1,893,715.85						812,855.305 1,893,720.565	
52	+947.21						0+947.21	
53	812,864.83 1,893,699.24						812,869.085 1,893,699.24	
54	+953.36						0+953.36	
55	812,919.17 1,893,686.29						812,924.09 1,893,686.29	
56	+1077.67						0+1077.67	
57	812,953.12 1,893,684.30						812,964.273 1,893,684.30	
58	+1049.23						0+1049.23	
59	812,983.56 1,893,690.86						812,988.588 1,893,690.86	
60	+1079.71						0+1079.71	
61	813,001.07 1,893,715.01						813,004.085 1,893,715.01	
62	+1094.73						0+1094.73	
63	813,017.77 1,893,725.25						813,022.538 1,893,725.25	
64	+1120.00						0+1120.00	
65	813,028.24 1,893,745.22						813,030.59 1,893,745.22	
66	+1141.48						0+1141.48	
67	813,037.31 1,893,763.59						813,039.48 1,893,763.59	

DATOS DE CURVAS HORIZONTALES

CURVA	P.I.	Def. t	Gc	Rc	St/Stc	Lc	0e	Le	Xc	Yc	k	p
1	15.15 m antes del 0+000	93°15'10"	190°11'1"	80.249	5.017	10.012						
2	62°09'37"DER	78°52'30"	14.528	8.757	15.782							
3	62°09'37"DER	10°08'10"	113.002	5.005	10.003							
4	27°12'45°ZQ	33°41'48"	34.007	8.231	16.151							
5	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
6	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
7	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
8	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
9	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
10	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
11	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
12	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
13	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
14	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
15	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
16	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
17	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
18	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
19	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
20	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
21	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
22	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
23	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
24	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
25	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
26	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
27	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
28	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
29	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
30	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
31	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
32	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
33	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
34	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
35	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
36	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
37	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
38	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
39	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
40	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
41	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
42	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
43	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
44	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
45	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
46	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
47	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
48	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
49	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
50	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
51	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
52	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
53	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
54	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
55	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
56	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
57	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
58	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
59	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
60	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
61	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
62	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
63	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
64	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
65	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
66	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
67	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
68	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
69	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
70	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
71	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
72	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
73	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
74	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
75	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
76	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
77	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
78	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
79	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
80	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
81	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
82	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
83	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
84	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
85	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
86	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
87	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
88	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
89	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
90	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
91	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
92	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
93	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
94	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							
95	22°35'10°ZQ	28°01'30"	44.031	9.184	18.138							
96	15°58'56°ZQ	24°41'59"	46.394	7.081	14.054							
97	17°08'12°DER	35°01'44"	32.714	6.104	12.058							
98	38°01'44°DER	48°40'00"	24.554	8.462	16.298							
99	75°38'44°DER	70°16'12"	16.307	12.660	21.330							
100	10°28'48°ZQ	20°15'52"	54.922	5.021	10.014							