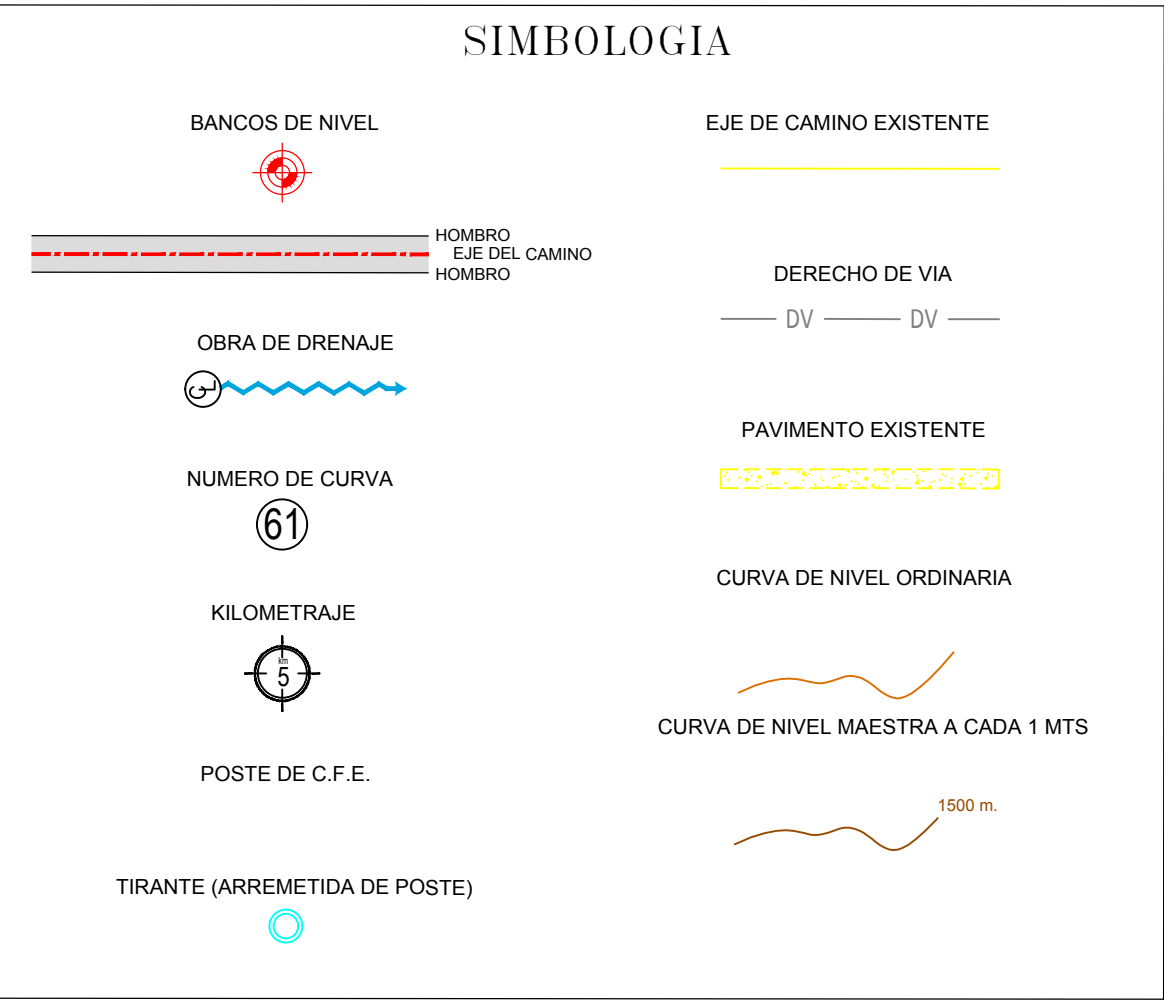
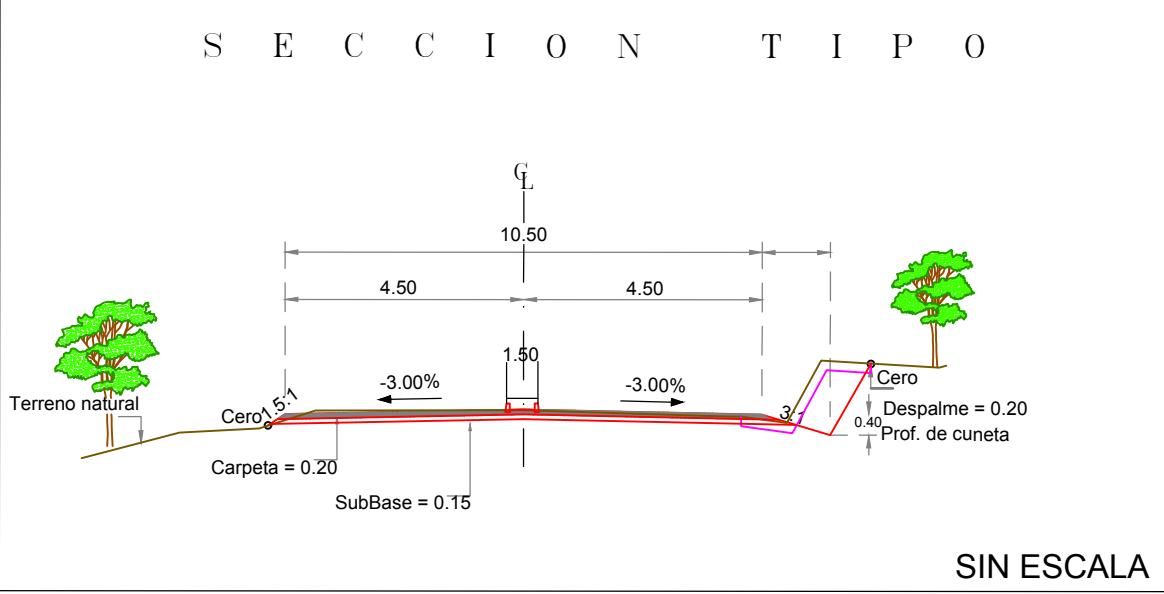


| DATOS DE PROYECTO | | |
|---------------------------------|-----------------------------|---------------------------------|
| CAMINO TIPO ARTESANAL | | |
| VELOCIDAD DE PROYECTO 30 kmh | ANCHO DE CORONA 10.50 m. | ANCHO DE CALZADA 10.50 m. |
| CURVATURA MAXIMA 60°00'00" | PENDIENTE MAXIMA 12.00 % | PENDIENTE GOBERNADORA 9.00 % |



Camino: MAGDALENA JALTEPEC - YUTANDUCHI DE GUERRERO

Tramo: DEL KM. 00+000.00 AL KM. 59+000.00

Subramo: DEL KM. 38+000.00 AL KM. 38+460.00

Origen: 0+000.00 MAGDALENA JALTEPEC

PLANTA SEÑALAMIENTO DEL KM. 38+000.0 AL KM. 38+460.00

PROYECTO:

DIRECCION DE PROYECTOS Y CONTROL DE CALIDAD

REVISÓ:

JEFE DE UNIDAD DE ESTUDIOS Y PROYECTOS

DIRECTOR DE PROYECTOS Y CONTROL DE CALIDAD

EL DIRECTOR GENERAL

Cédula Profesional 9652384
ING. JAIRO RAMÍREZ REYES

Cédula Profesional
ING. AYDAR FLORES HERNÁNDEZ

ING. MOISES SALAZAR MARTÍNEZ

| CAMINO: E.C. (NOCHIXTLAN - OAXACA) - YUTANDUCHI DE GUERRERO | | | | | | | | | | | |
|---|-------------|-----------|---|----|-------------|------------|---|----|---|-------------|-----------|
| TRAMO: DEL KM 0+000.00 AL KM 60+000.00 | | | | | | | | | | | |
| SUBTRAMO: DEL KM 38+000.00 AL KM 39+080.00 | | | | | | | | | | | |
| ORIGEN: 0+000.00 E.C. (NOCHIXTLAN - OAXACA) | | | | | | | | | | | |
| PROCESO ELECTRONICO | | | | | | | | | | | |
| GEOMETRIA DEL ALINEAMIENTO HORIZONTAL | | | | | | | | | | | |
| CURVA | TE o PC | E | N | EC | N | E | N | CE | E | N | ET o PT |
| 1 | 38+048.78 | | | | 1900962.781 | 680363.095 | | | | 38+131.27 | |
| 2 | 38+168.62 | | | | 1900962.781 | 680363.095 | | | | 38+211.50 | |
| 3 | 38+274.85 | | | | 1900773.346 | 680362.293 | | | | 38+295.44 | |
| 4 | 38+393.40 | | | | 1900665.021 | 680403.132 | | | | 38+423.04 | |
| 5 | 38+523.84 | | | | 1900562.828 | 680407.853 | | | | 38+558.18 | |
| 6 | 38+796.04 | | | | 1900387.121 | 680452.254 | | | | 38+834.39 | |
| 7 | 38+921.39 | | | | 1900163.011 | 680437.571 | | | | 38+955.82 | |
| | 1899962.891 | 680429.56 | | | 1899967.421 | 680428.423 | | | | 1899955.941 | 680441.93 |
| | | | | | 1899906.428 | 680460.332 | | | | | |

| CAMINO: E.C. (NOCHIXTLAN - OAXACA) - YUTANDUCHI DE GUERRERO | | | | | | | | | | | |
|---|--------|-------------|----------|----------------------|--|--|--|--|--|--|--|
| TRAMO: DEL KM 0+000.00 AL KM 60+000.00 | | | | | | | | | | | |
| SUBTRAMO: DEL KM 38+000.00 AL KM 39+080.00 | | | | | | | | | | | |
| ORIGEN: 0+000.00 E.C. (NOCHIXTLAN - OAXACA) | | | | | | | | | | | |
| RESUMEN GENERAL DE SEÑALAMIENTO | | | | | | | | | | | |
| CONCEPTO | SEÑAL | DIMENSIONES | CANTIDAD | DESCRIPCION | | | | | | | |
| SEÑALES | SP-6 | 71X71 | 6 | CURVA | | | | | | | |
| SEÑALES RESTRICTIVAS | SR-9 | 71X71 | 1 | VELOCIDAD | | | | | | | |
| SEÑALES RESTRICTIVAS | SIH-15 | 30 X 76 | 1 | KILOMETRAJE SIN RUTA | | | | | | | |
| SEÑALES DE INFORMACION DE DESTINO | | | | | | | | | | | |
| SEÑALES DE INFORMACION DE RECOMENDACION | | | | | | | | | | | |
| SEÑALES DE INFORMACION GENERAL | | | | | | | | | | | |
| TOTAL | | | 8 | | | | | | | | |

| UBICACION DE SEÑALAMIENTO VERTICAL | | | | | |
|------------------------------------|------------------------|-----------|---------------|------------------|----------------------|
| No. SEÑAL | CADENAMIENTO DE REFER. | | TIPO DE SEÑAL | DIMENSION (Cms.) | DESCRIPCION |
| | DERECHO | IZQUIERDO | | | |
| | 38+500.00 | 38+000.00 | SIH-15 | 30X76 | KILOMETRAJE SIN RUTA |
| | 38+138.62 | 38+000.00 | SR-9 | 71X71 | VELOCIDAD 30 km/h |
| | 38+241.50 | 38+241.50 | SP-6 | 71X71 | CURVA IZQ |
| | 38+244.85 | 38+241.50 | SP-6 | 71X71 | CURVA DER |
| | 38+345.60 | 38+345.60 | SP-6 | 71X71 | CURVA IZQ |
| | 38+363.40 | 38+345.60 | SP-6 | 71X71 | CURVA IZQ |
| | 38+453.04 | 38+453.04 | SP-6 | 71X71 | CURVA DER |

| CAMINOS BIENESTAR | | | | | | | | | | | | | | | | |
|---|-----------------|---------------------|------------|----------------------|-----------|-------------------------|-------|------------------|---------|--------------|-------|---------|--------|-------------|--------------|-------|
| REGISTRO DE CÁLCULO DE COORDENADAS DEL TRAZO | | | | | | | | | | | | | | | | |
| CAMINO: E.C. (NOCHIXTLAN - OAXACA) - YUTANDUCHI DE GUERRERO | | | | | | DE km | | 38+000.00 | | A km | | | | | | |
| TRAMO: DEL KM 0+000.00 AL KM 60+000.00 | | | | | | TIPO DE EJE: DERIVATIVO | | | | | | | | | | |
| SUBTRAMO: DEL KM 38+000.00 AL KM 39+080.00 | | | | | | | | | | | | | | | | |
| ORIGEN: 0+000.00 E.C. (NOCHIXTLAN - OAXACA) | | | | | | | | | | | | | | | | |
| ESTACIÓN | PUNTO OBSERVADO | SUBTANGENTE E ATRAS | TANGENTE E | SUBTANGENTE ADELANTE | DISTANCIA | DEFLEXIONES | | RUMBO | | PROYECCIONES | | | | COORDINADAS | | |
| | | | | | | ° ' " | ° ' " | ° ' " | ° ' " | COSENO | SENO | + N | - S | + E | - W | NORTE |
| 38+000.00 | 38+090.19 | 0.000 | 48.785 | 41.405 | 90.190 | 0° 00' 00.00" I | S | 08° 45' 38.00" W | 0.96305 | 0.17772 | 0.000 | 89.953 | 0.000 | 10.617 | 19002862.783 | |
| 38+090.19 | 38+190.22 | 41.405 | 37.345 | 21.602 | 100.352 | 12° 22' 23.30" IZQ | S | 09° 36' 45.30" E | 0.95521 | 0.09780 | 0.000 | 99.871 | 9.815 | 0.000 | 1900873.220 | |
| 38+190.22 | 38+295.44 | 21.602 | 63.347 | 20.594 | 105.543 | 17° 09' 08.26" IZQ | S | 22° 45' 53.56" E | 0.92210 | 0.38695 | 0.000 | 97.322 | 40.840 | 0.000 | 1900773.349 | |
| 38+295.44 | 38+408.30 | 20.594 | 77.798 | 14.903 | 113.295 | 20° 22' 34.88" DER | S | 02° 23' 18.58" E | 0.99913 | 0.04168 | 0.000 | 113.197 | 4.722 | 0.000 | 1900676.027 | |
| 38+408.30 | 38+592.02 | 14.903 | 100.906 | 68.077 | 183.886 | 14° 49' 12.45" IZQ | S | 17° 12' 31.03" E | 0.95523 | 0.29585 | 0.000 | 175.655 | 54.403 | 0.000 | 1900562.831 | |
| 38+592.02 | 38+815.63 | 68.077 | 138.761 | 18.686 | 225.523 | 23° 29' 31.25" DER | S | 06° 17' 00.22" W | 0.99399 | 0.10945 | 0.000 | 224.168 | 0.000 | 24.683 | 1900587.176 | |
| 38+815.63 | 39+021.39 | 18.686 | 161.616 | 25.472 | 205.773 | 03° 44' 08.88" IZQ | S | 02° 32' 51.34" W | 0.99901 | 0.04445 | 0.000 | 205.570 | 0.000 | 9.146 | 1900163.008 | |
| 39+021.39 | 39+080.00 | 25.472 | 34.694 | 0.000 | 60.165 | 34° 34' 17.30" IZQ | S | 32° 01' 25.96" E | 0.84783 | 0.53027 | 0.000 | 51.010 | 31.904 | 0.000 | 1899597.437 | |

| CAMINOS BIENESTAR | | | | | | | | | | | |
|--|-----------|-----------|-----------|--------|---------|-----------|--|--|--|--|--|
| CAMINO: MAGDALENA JALTEPEC - YUTANDUCHI DE GUERRERO | | | | | | | | | | | |
| TRAMO: DEL KM 0+000.00 AL KM 59+000.00 | | | | | | | | | | | |
| SUBTRAMO: DEL KM 38+000.00 AL KM 39+460.00 | | | | | | | | | | | |
| ORIGEN: 0+000.00 MAGDALENA JALTEPEC | | | | | | | | | | | |
| PINTURA EN ASFALTO | | | | | | | | | | | |
| CONCEPTO | ESTACION | ESTACION | DISTANCIA | PIEZAS | AREA | TOTAL | OBSERVACIONES | | | | |
| M-1.1 RAYA SEPARADORA DE CARRILES CONTINUA SENCILLA | 38+000.00 | 38+460.00 | 460.00 | 2 | 46.00 m | 92.00 M2 | RAYA SEPARADORA DE SENTIDOS DE CIRCULACION, CONTINUA SENCILLA (M-1.3), ESP. 0.10 AMARILLA RETRORREFLEJANTE | | | | |
| ANCHO 0.1 COLOR AMARILLA RETRORREFLEJANTE | | | | | | | | | | | |
| PINTURA AMARILLA PARA RAYA SEPARADORA DE CARRILES CONTINUA (M-1.1) | | | | | | 92.00 M2 | | | | | |
| PINTURA AMARILLA PARA RAYA SEPARADORA DE CARRILES CONTINUA (M-1.1) | | | | | | 92.00 M | | | | | |
| CONCEPTO | ANCHO | LARGO | PIEZAS | AREA | TOTAL | | | | | | |
| M-1.2 RAYA SEPARADORA DE CARRILES DISCONTINUA SENCILLA | | | | | | | 4.00 M. 0.40 M. 0.40 M. | | | | |
| LARGO ANCHO AREA COLOR AMARILLA RETRORREFLEJANTE | | | | | | | | | | | |
| PINTURA AMARILLA PARA RAYA CRUCE DE PEATONES (M-7.1) | | | | | | 160.00 M2 | RAYA PEATONAL (M-7.1) | | | | |
| PINTURA AMARILLA PARA RAYA CRUCE DE PEATONES (M-7.1) | | | | | | 160.00 M | | | | | |
| CONCEPTO | ESTACION | ESTACION | DISTANCIA | PIEZAS | AREA | TOTAL | RAYA EN LA ORILLA DERECHA, CONTINUA (M-3.1), ESP. 0.10 BLANCO RETRORREFLEJANTE | | | | |
| M-3.1 RAYA CONTINUA DOBLE | 38+000.00 | 38+460.00 | 460.00 | 2 | 46.00 m | 92.00 M2 | | | | | |
| ANCHO 0.1 COLOR BLANCA RETRORREFLEJANTE | | | | | | | | | | | |
| PINTURA BLANCA PARA RAYA EN LA ORILLA DERECHA CONTINUA (M-3.1) | | | | | | 92.00 M2 | | | | | |
| PINTURA BLANCA PARA RAYA EN LA ORILLA DERECHA CONTINUA (M-3.1) | | | | | | 92.00 M | | | | | |

