

Proyecto	Fichero	Fecha	Nº Revisión
BAIX	An-02 – Cartografía y Topografía.docx	30/11/22	4

ANEJO Nº 2.- CARTOGRAFÍA Y TOPOGRAFÍA

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1.- CARTOGRAFÍA

1.1.- OBJETO DE LOS TRABAJOS

El objeto de los trabajos ha sido el de la obtención de la Cartografía analítica a escala 1:1.000 para el desarrollo del “Proyecto de Trazado y Construcción: Mejora de la accesibilidad entre las carreteras del entorno de la Baix Llobregat” en Barcelona, de clave: 49-B-4620.

1.2.- INTRODUCCIÓN

Para la obtención de la Cartografía se ha procedido a la realización de un vuelo fotogramétrico y su posterior apoyo que cubriera la zona objeto del estudio así como la instauración en el terreno una Red Básica de Vértices Topográficos (Bases de Replanteo) con el fin de que sean utilizados durante el desarrollo de los trabajos.

Este trabajo se ha desarrollado en las siguientes fases:

- Instauración y observación de la Red Básica de Vértices Topográficos
- Nivelación Geométrica de dichos Vértices Topográficos
- Observación de los Puntos de Apoyo

1.3.- VUELO FOTOGRAMÉTRICO

El vuelo fotogramétrico del tramo del Baix Llobregat se realizó con fecha 24 de febrero de 2.009. Consta de tres pasadas y fue realizado a escala 1:5.000 con una cámara RC-30 de focal 153,94 mm.

Los fotogramas que componen el vuelo que cubre el tramo, y que están incluidos en cada pasada, son:

<u>PASADA</u>	<u>FOTOGRAMAS</u>
Nº 1	7745-7751
Nº 2	7711-7727
Nº 3	7728-7744

En la relación de apéndices, incluida al final, se adjuntan los siguientes documentos:

- Apéndice 3.1.1. GRÁFICO DE VUELO.
 Apéndice 3.1.2. MEMORIA DE VUELO Y CERTIFICADO DE CALIBRACIÓN DE LA CÁMARA.

1.4.- RED BÁSICA DE VÉRTICES TOPOGRÁFICOS Y DE NIVELACIÓN

1.4.1.- Metodología

En los trabajos cartográficos y topográficos elaborados para el proyecto: “Proyecto de Trazado: Mejora de la accesibilidad entre las carreteras del entorno del Baix Llobregat. Clave: T9-B-4620” se partió de la Red permanente de Estaciones GNSS (CATNET) del Instituto Cartográfico de Cataluña (www.icc.es), se ha implantado una Red Básica empleando para su observación técnicas GPS. La estación GPS utilizada y más próxima a la zona fue:

Vértice	X (ED50)	Y (ED50)	H
PLA	415435,870	4585918,360	270,700
	X (ETRS89)	Y (ETRS89)	
	415341,875	4585714,304	

Como los trabajos se realizaron en 2009 las coordenadas se obtuvieron en el sistema ED50, transformándose posteriormente según la NS 2/2010 al sistema ETRS89 mediante la calculadora geodésica del IGN. Las coordenadas obtenidas tras dicha transformación son las de la tabla adjunta anteriormente.

La transformación de coordenadas de ED50 a ETRS89 se deduce que la metodología empleada por los dos organismos IGN y ICC difiere entre ambos, y por tanto que las coordenadas transformadas de ED-50 por uno u otro organismo difieren. Por tanto, las coordenadas GPS que emite este vértice difieren de las consideradas en proyecto por de la diferente transformación que realizan el IGN y el ICC para pasar de ED50 a ETRS89. **Se plantea** como solución para el desarrollo del proyecto **que para la realización de las obras se trabaje con las coordenadas de proyecto apoyándose en las diferentes bases de replanteo implantadas como si se tratara de coordenadas “locales” y replantear las actuaciones conforme a estas. El proyecto incluye nota explicativa al respecto en los documentos contractuales.**

La Red Básica se compone de 4 vértices denominados correlativamente RB-1, RB-2, RB-3 y RB-4. Estos vértices se han materializado en el terreno de manera permanente, utilizando para ello clavos de acero o hitos prefabricados, según emplazamiento.

Para la obtención de cota de los vértices de la Red Básica se ha enlazado con la línea de Nivelación de Alta Precisión 231 – Barcelona - Tarragona que va por la A-7.

Se ha transmitido cota a los Vértices de la Red Básica mediante nivelación geométrica doble a partir del clavo SSK162,120 (2311008).

El método de nivelación empleado ha sido el del punto medio, con niveladas que no han superado nunca los 60 metros.

1.4.2.-Cálculo

Se ha utilizado la proyección Universal Transversa de Mercator (U.T.M.)

El elipsoide es el internacional, Madrid 1924, Datum Europeo, Posdam 1950, origen de longitudes Greenwich.

El origen de altitudes, es el del nivel medio del mar en Alicante.

La observación de la Red Básica se ha realizado mediante técnicas GPS en RTK, mediante enlace módem GSM/GPRS con la red permanente de estaciones GPS del Instituto de Cataluña, recibiendo correcciones en tiempo real, que aseguran unas precisiones céntimétricas.

Los parámetros de control de baselíneas han sido:

- Máscara de elevación: 15º
- Número de satélites mínimos: 5
- Tiempo de observación entre bases: proporcionalmente a la longitud, con un rango que oscila entre 10 y 30 minutos.

Obtenidas las coordenadas WGS84 de los Vértices Geodésicos, se realiza una transformación previa Helmert con los puntos comunes en coordenadas WGS84 y ED50.

Aunque el Cálculo inicial se ha realizado en el Sistema de Coordenadas ED50 HUSO 31, se ha procedido a recalcular dichas coordenadas del Sistema Oficial ETRS89 HUSO31. Por ello, se adjuntan en el Apéndice de RESEÑAS DE LA RED BÁSICA Y PUNTOS NIVELADOS ambos juegos de coordenadas

Los datos de las líneasbase obtenidas se incluyen en el anexo.

Se ha efectuado una reseña de cada vértice de la Red Básica con croquis, referencias y fotografías en color.

1.5.- APOYO FOTOGRÁMÉTRICO

Las observaciones de los puntos de la Red Básica, se han realizado con técnicas GPS en RTK, mediante enlace módem GSM/GPRS con la red permanente de estaciones GPS del Instituto de Cataluña.

El tiempo de observación empleado en cada baselínea ha variado en función de la calidad geométrica de la situación de los satélites (GDOP).

Los Vértices de la Red Básica se han materializado en el terreno de manera permanente, utilizando para ello clavo comercial taladrado en roca ó asfalto e hitos tipo feno.

Se han señalizado y medido con cinta tres referencias en cada uno de los Vértices, habiendo sido reflejado en la Reseña de Vértices.

También se ha tomado una fotografía en color de todos ellos.

Se han dado un mínimo de cinco puntos de apoyo por par estereoscópico, identificándose cada uno de los puntos de apoyo mediante pinchazo en el fotograma y el croquis correspondiente realizado en campo.

1.6.- PRECISIÓN ALCANZADA

La metodología utilizada en el trabajo se ha hecho de acuerdo con las prescripciones del P.P.T.P.

Todos los cálculos realizados, se encuentran dentro de las tolerancias marcadas en el P.P.T.P.

1.7.- INSTRUMENTOS UTILIZADOS

Para la ejecución de los trabajos de campo se ha utilizado el siguiente instrumental topográfico:

- 1 Receptor GPS bifrecuencia Trimble R6
- Nivel Digital DINI22 de Trimble con mira de códigos de barras
- Material diverso

1.8.- RESTITUCIÓN ANALÍTICA

Sobre la base del vuelo aero-fotogramétrico a escala 1/5.000 y al apoyo de los pares, se procedió a la restitución analítica a escala 1/1.000 y equidistancia entre curvas de nivel de 1 metro.

Previo al comienzo de los trabajos, se comprobó que el vuelo reúne las condiciones solicitadas respecto a:

- Características del vuelo
- Geometría del vuelo
- Calidad de la fotografía.

- | | |
|------------------|---|
| Apéndice 3.11.1 | Certificados de calibración de los equipos empleados. |
| Apéndice 3.11.2. | Fichas de ajuste de los pares restituidos. |
| Apéndice 3.15. | Librería de códigos utilizada. |

La restitución se ha realizado en el Sistema de Coordenas ED50 Huso 31 y posteriormente se ha realizado una transformación de la Cartografía al Sistema de Referencia Oficial ETRS89 Huso 31.

Con posterioridad a la restitución, durante la redacción del proyecto, se detectó en campo la remodelación de un vial en el Polígono de Pallejà, en la margen derecha del tramo del encauzamiento de la riera de Fonda adosado al ramal 0 de la actuación B, (concretamente el vial de acceso a "La Nau"). Este vial, que afecta a la reposición de caminos a proyectar, fue incorporado a la cartografía. Para ello, se realizó un taquimétrico de esa zona con fecha de 6-11-2012.

1.8.1.- Aparatos utilizados

Para la ejecución del trabajo se ha utilizado 2 aparatos digitales:

- 3 DIGI 3D

Se adjunta copia del certificado de calibración del escáner empleado en el escaneo de los negativos del vuelo en el apartado 3.11.1.

1.8.2.- Software utilizado

Para la captura de puntos se ha utilizado el software DIGI, muy adecuado para este tipo de trabajos.

La edición se ha realizado con estaciones de trabajo con software DIGI y AUTOCAD.

La entrega de los ficheros digitales se realizó en formato DWG 3D y 2D, además de ficheros ASCII de DIGI.

1.8.3.- Documentación de restitución

En la relación de apéndices, incluida al final, se adjuntan los siguientes documentos:

2.- TOPOGRAFÍA

2.1.- TRABAJOS REALIZADOS

Como trabajos topográficos complementarios a los realizados para la obtención de la cartografía, se han realizado los siguientes:

- Toma de puntos de bandas blancas de borde de calzada de la AP-2, de la A-2, de la B-24, así como de los ramales de enlaces de estas tres vías en las zonas de conexión de los viales proyectados en las actuaciones que forman parte de este proyecto. Los puntos se han tomado a una equidistancia aproximada de 20 m.

Se han observado los centros de las bandas blancas por técnica GPS y se han representado gráficamente.

Estos datos proporcionan mayor exactitud en el encaje del trazado que se proyecta, y se recogen en el Apéndice 3.12. Puntos Singulares.

- Taquimétrico para corrección de cartografía por la remodelación de un vial con posterioridad a la restitución.

Como se ha indicado en el apartado 1.8., durante la redacción del proyecto, con posterioridad a la obtención de la cartografía mediante restitución analítica, se produjo la remodelación del vial de acceso a "La Nau" en el polígono industrial de Pallejà, en la margen derecha del encauzamiento de la riera de Fonda. Se realizó un levantamiento topográfico de detalle para incorporar dicho vial y las modificaciones en sus márgenes a la cartografía. En la hoja 4 de 16 del apartado 3.17.1.- Minutas procedentes de la restitución se indica la zona corregida.

- Taquimétricos de estructuras y obras de drenaje.

Se han realizado levantamientos topográficos de detalle en diversas zonas de actuación del Proyecto. El método empleado utilizado ha sido tanto observaciones GPS, como el uso de estación total. Se han observado todos los puntos necesarios para la correcta representación gráfica de las zonas a levantar, utilizándose para observación de los puntos inaccesibles métodos de medición sin prisma. De todas las zonas topografiadas se ha confeccionado un Modelo Digital del Terreno en tres dimensiones. Se han empleado un GPS Trimble R6 y una estación total robotizada Trimble S6.

Posteriormente se ha procedido a la ampliación del taquimétrico existente en la zona de la Riera de Vallvidrera.

Tambien se han realizado taquimétricos de detalle en el Ramal 3 de la Actuación D, de Acceso a Molins de Rey desde la AP-2 y en el entorno del Puente Metalico existente en el Río Llobregat en la Actuación E.

Estos datos facilitan la implantación de las estructuras y obras de drenaje. En el Apéndice 3.12. Puntos Singulares se incluyen los listados de la toma de datos, y en el apéndice 3.17. Cartografía se incluyen los planos de dichos taquimétricos y el inventario realizado de estas obras de fábrica.

- Toma de líneas eléctricas existentes, líneas de catenaria de los FF.CC. existentes, pozos y arquetas de registro de los servicios existentes.

Se han tomado, también combinando técnicas GPS y de Estacion total, datos de los gálibos y alturas de torres de las líneas eléctricas existentes en las zonas de cruce sobre futuros viales con objeto de comprobar la necesidad de su reposición.

Asimismo se ha tomado lineas de la catenaria tanto de la via del AVE como de la Via Convencional en el entorno de la futura duplicación del Puente Metálico sobre el Rio Llobregat, con objeto de respetar los gálibos exigidos en las estructuras de paso sobre la líneas de ferrocarril existentes.

Finalmente se han tomado datos de los pozos y arquetas existentes de la red de abastecimiento de agua y saneamiento, arquetas de líneas telefónicas subterráneas, conducciones de salmuera, de gas, oleoductos y Canal de la Infanta que se puedan ver afectadas por la reposición de estos servicios.

Estos datos se recogen en el Apéndice 3.12. Puntos Singulares y se ha representado en planos en el apéndice 3.17.

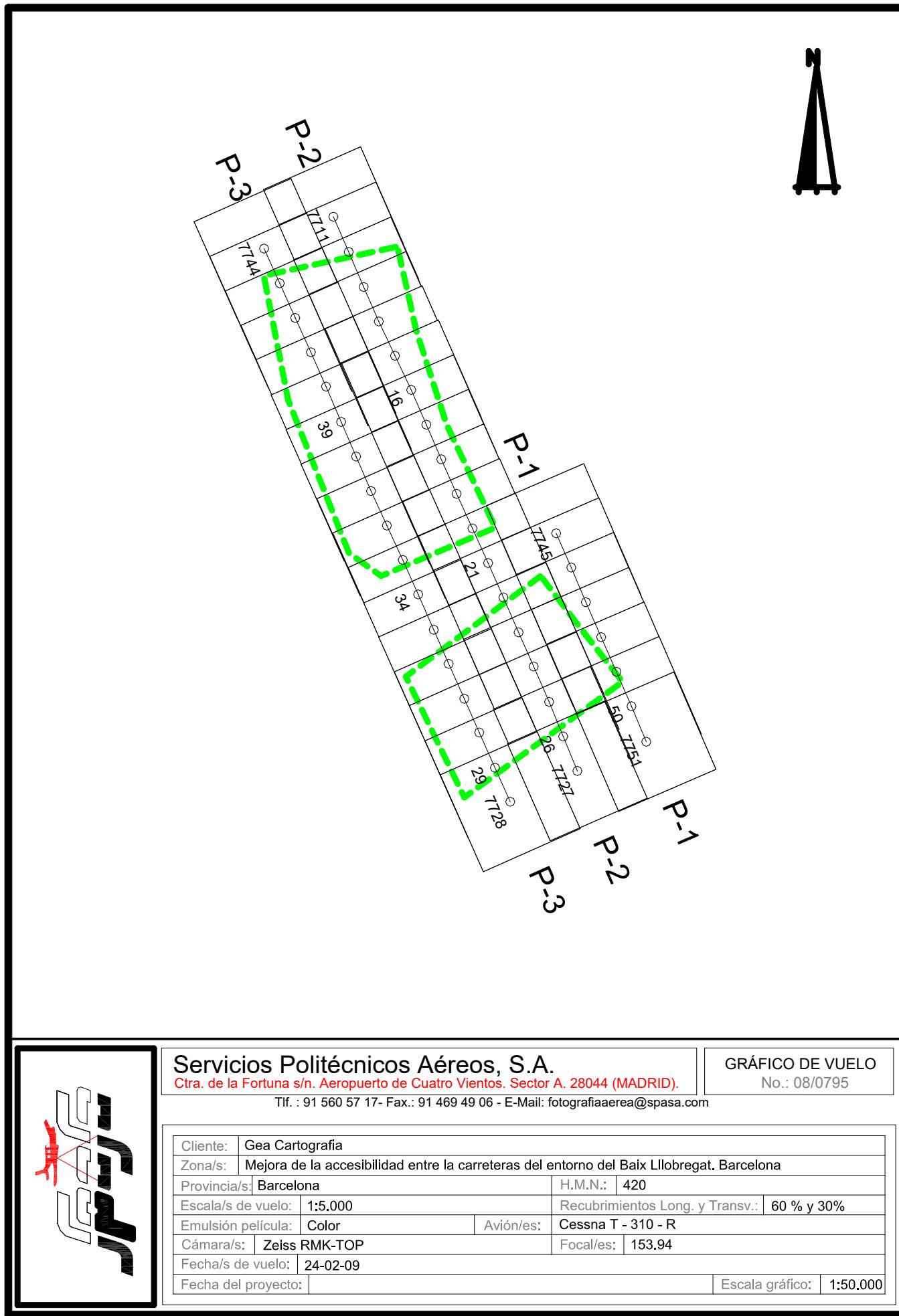
- Colocación de bases de replanteo y replanteo del eje.
- Todo lo referente a estos trabajos se ha agrupado en el Anejo nº 17, Replanteo.
- Transversales de campo

El presente proyecto corresponde a actuaciones en enlaces. Al no existir tronco, no se precisan transversales de campo. Los puntos de bandas blancas tomados y los taquimétricos realizados cubren prácticamente la totalidad de los viales proyectados

3.- APÉNDICES

3.1.- VUELO

3.1.1.- Gráfico de vuelo



3.1.2.- Memoria de vuelo y Certificado de calibración de la cámara



INFORME DE VUELO FOTOGRAMÉTRICO

ANALÓGICO

Nº DE O.T.: 08/0795

1. DENOMINACIÓN DEL VUELO:

MEJORA DE LA ACCESIBILIDAD ENTRE LAS CARRETERAS DEL ENTORNO DEL BAIX LLOBREGAT. BARCELONA

2. LOCALIZACIÓN DEL VUELO:

2.1. PROVINCIA/S: BARCELONA

2.2. HUSO/S: 31

2.3. H.MN./S: 420

3. MEDIOS UTILIZADOS:

3.1. AERONAVE/S: CESSNA T-310-R

2.1.1. MATRÍCULA/S: EC-ENH

3.2. CÁMARA/S: ZEISS RMK-TOP

2.2.1. FOCAL/ES: 153.94

3.3. EMULSIÓN/ES: COLOR

2.3.1. MARCA Y MOD.: AGFA AVIPHOT COLOR X-100 (COLOR)

4. DATOS DEL VUELO:

4.1. ESCALA O GSD: 5000

4.2. ALTURA/S MEDIA/S SOBRE EL TERRENO: 750 m.

4.3. RECUBRIMIENTOS:

3.3.1. RCTO. LONGITUDINAL: 60

3.3.1. RCTO. TRANSVERSAL: 30

4.4. N.º DE PASADAS: 3

4.5. FECHA/S DE VUELO: 24/02/09

5. IMÁGENES (VUELO DIGITAL):

5.1. PROCESADO DE IMÁGENES:

5.4. CANALES PROCESADOS:



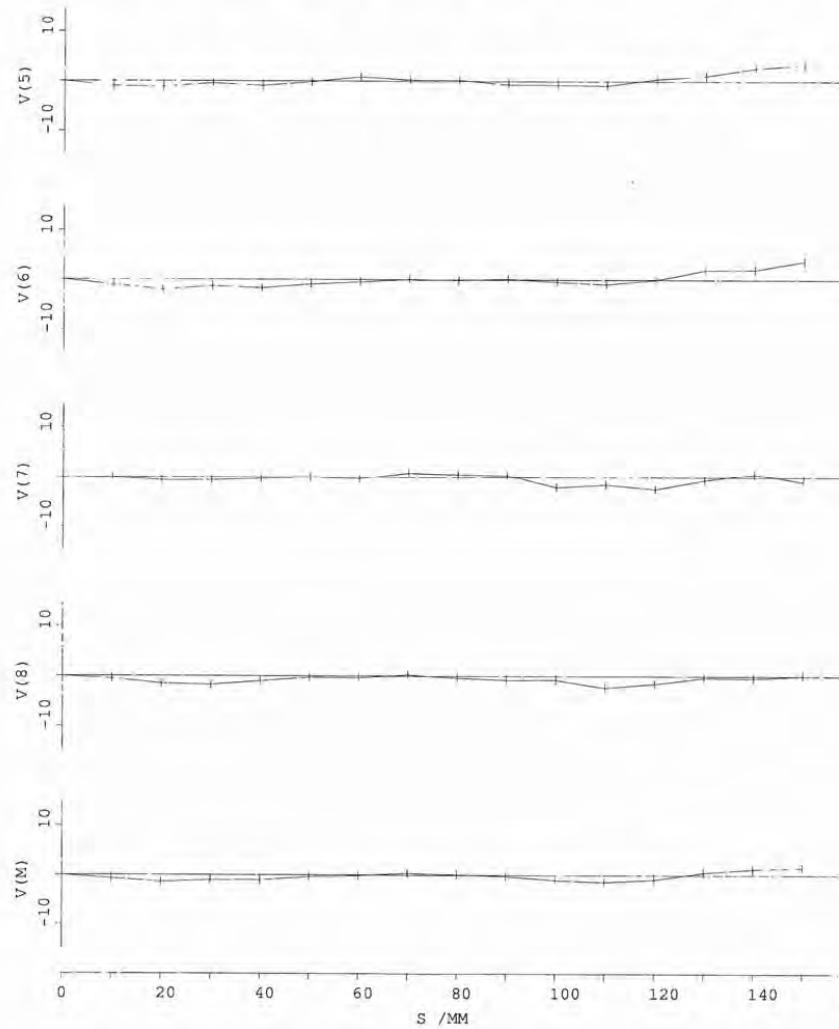
Servicios Politecnicos Aéreos, S.A.

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Page 3

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05201
2009-02

RMK TOP 15 NO. 141298
PLEOGON A3 4/153 NO. 141313
CFL=153.942 MM

DISTORTION /0.001 MM, REFERRING TO PPS



Ctra. de la Fortuna s/n-Aeropuerto de Cuatro Vientos, Sector A (28044 Madrid) Tlf 91 560 57 17 Fax 91 469 49 06
Web: www.spasa.com e-mail: fotografiaaerea@spasa.com

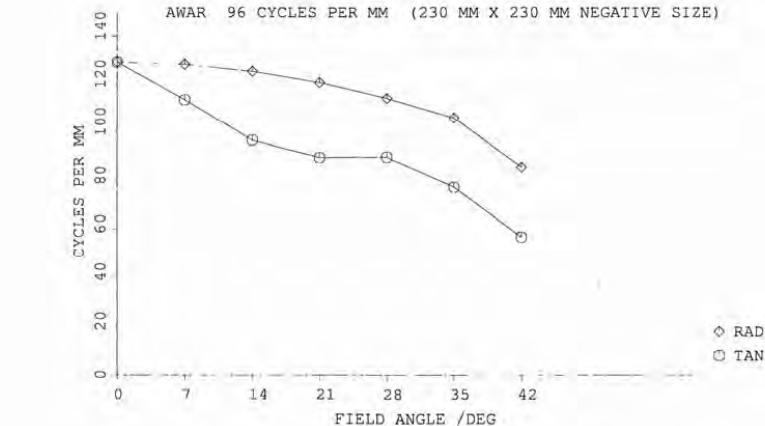
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Page 4

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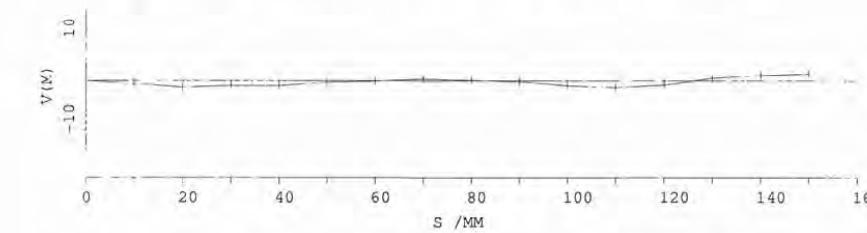
RMK TOP 15 NO. 141298

PHOTOGRAPHIC RESOLVING POWER

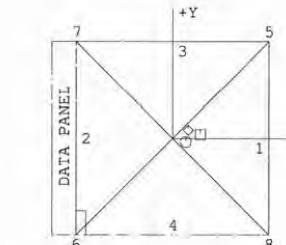
AWAR 96 CYCLES PER MM (230 MM X 230 MM NEGATIVE SIZE)



DEPARTURE OF AVERAGE DISTORTION FROM ZERO REFERENCE



PRINCIPAL POINT(PPA, PPS) AND FIDUCIAL CENTRE (FC)



COORDINATES, REFERRING TO PPS

	X /MM	Y /MM
○ PPA	0.007	-0.002
□ FC	0.014	0.002
◊ FCC	0.008	0.004

(CORNER FIDUCIAL CENTRE)

— 0.01 MM, X-AXIS AS DEFINED BY FIDUCIAL MARK COORDINATES
 $\alpha(6) = 0.0^\circ$ $\alpha(8) = \alpha(6)+90^\circ$

Ctra. de la Fortuna s/n-Aeropuerto de Cuatro Vientos, Sector A (28044 Madrid) Tlf 91 560 57 17 Fax 91 469 49 06
Web: www.spasa.com e-mail: fotografiaaerea@spasa.com

Reg. Mercantil. Tomo 555 Folio 142. Sección 3º Hoja 656331. C.I.F. A78/022381

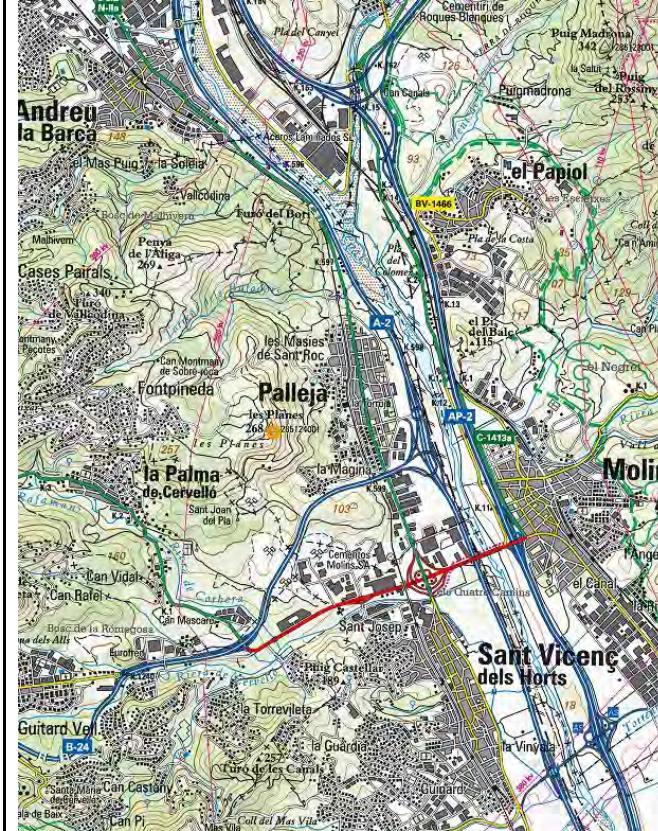
3.1.3.- Colección de contactos

(Esta colección se entrega en formato informático aparte)

3.2.- RESEÑAS ICC E IGN

**INSTITUTO CARTOGRÁFICO DE CATALUÑA
RED DE ESTACIONES PERMANENTES GPS - CATNET**

Marzo 2009

Base de Replanteo					
Señal	PLA		Municipio Provincia MTN50	Baix Llobregat Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 415435,870 4585918,360 270,700	ETRS89 415341,875 4585714,304 319,954	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50 1°59'17,1843" E 41°25'10,7385" N 0,999687864 0°40'10"	ETRS89 1°59'13,02623" E 41°25'6,68955" N 0,99968820 0°40'13"
Situación Les Planes, Pallejà (Baix Llobregat)					
Acceso					
Señal Pilar oficial ICC - Antena Trimble (Altura 0,054m) Horizonte G.P.S. Despejado Vértices Observables Referencias					
A:	B:	C:	Croquis de Detalle		
					
Plano de Situación			Fotografía		



Centro de Observaciones Geodésicas

Subdirección General de Astronomía, Geodesia y Geofísica

Reseña de Señal de Nivelación

21-mar-2009

Situación Geográfica:

Número: 231008
 Nombre: SSK162,120
 Línea o Ramal: 231. Barcelona - Tarragona

Municipio: Castellbisbal
 Provincia: Barcelona
 Hoja MTN50: 420
 Señal: Secundaria En posición: Vertical
 Señalizada: 07 de mayo de 2001
 Nivelada: 01 de febrero de 2004

Datos Geodésicos:

Altitud ortométrica: 56,5423 m.
 Geopotencial: 55,42763 u.g.p.
 Gravedad en superficie: 980284,07 mgals. Observada
 Cálculo: 01 de mayo de 2006

Coordenadas Geográficas ETR589:

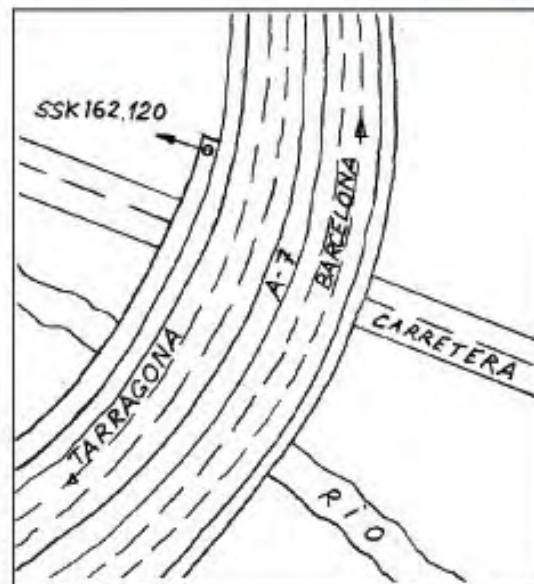
Longitud: 1° 58' 59,0"
 Latitud: 41° 27' 14,0"
 Altitud elipsoidal:
 Precisión: Coordenadas Gráficas del MTN

Reseña:

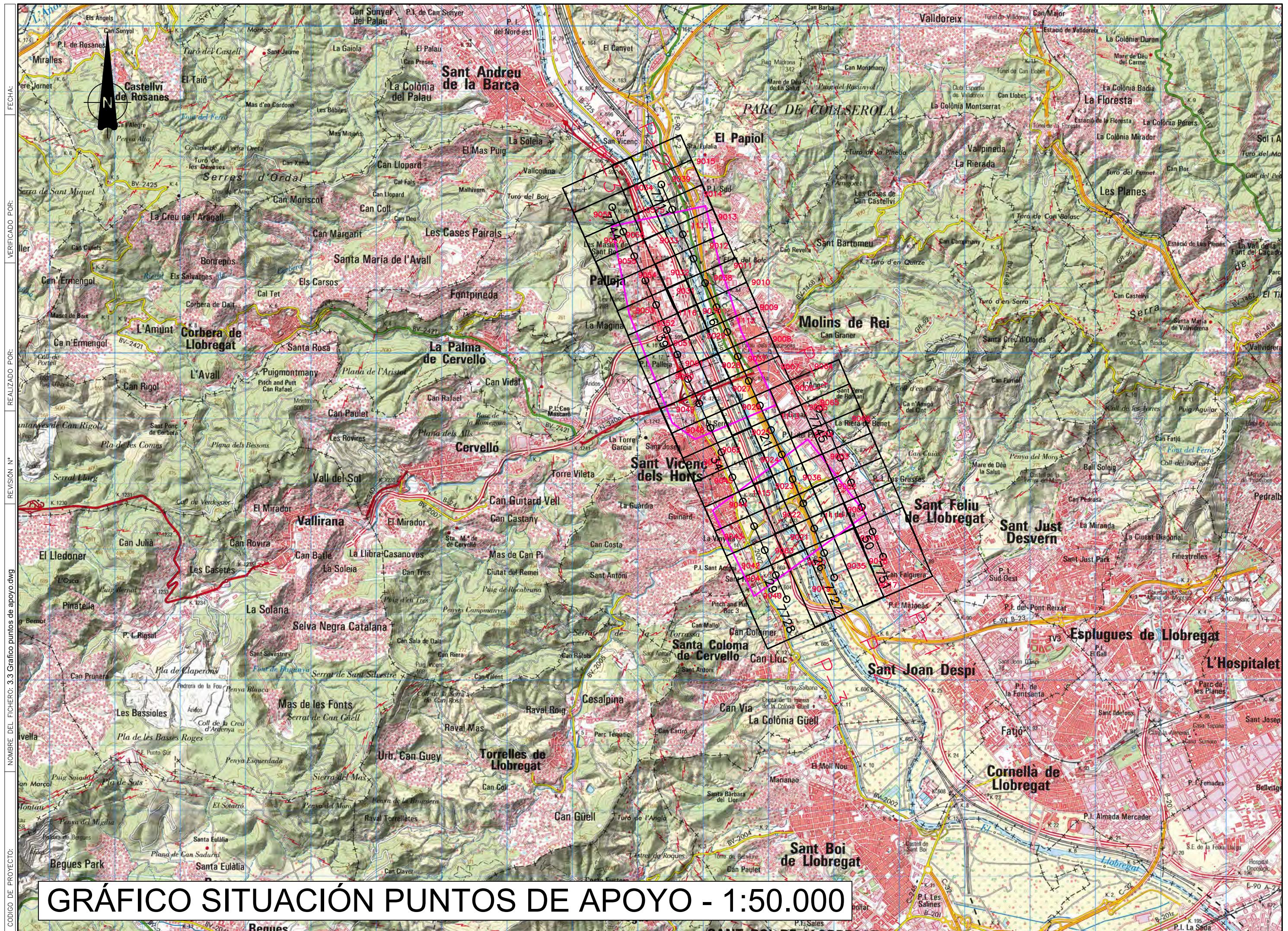
Clavo metálico semiesférico incrustado sobre la acera de hormigón del gran puente en su parte N.O que atraviesa por debajo una autopista, un río, etc; se encuentra próximo a un cartel indicador de EL VALLES OCCIDENTAL, de la autopista A-7 aproximadamente en el Km.162,120.

Observaciones:

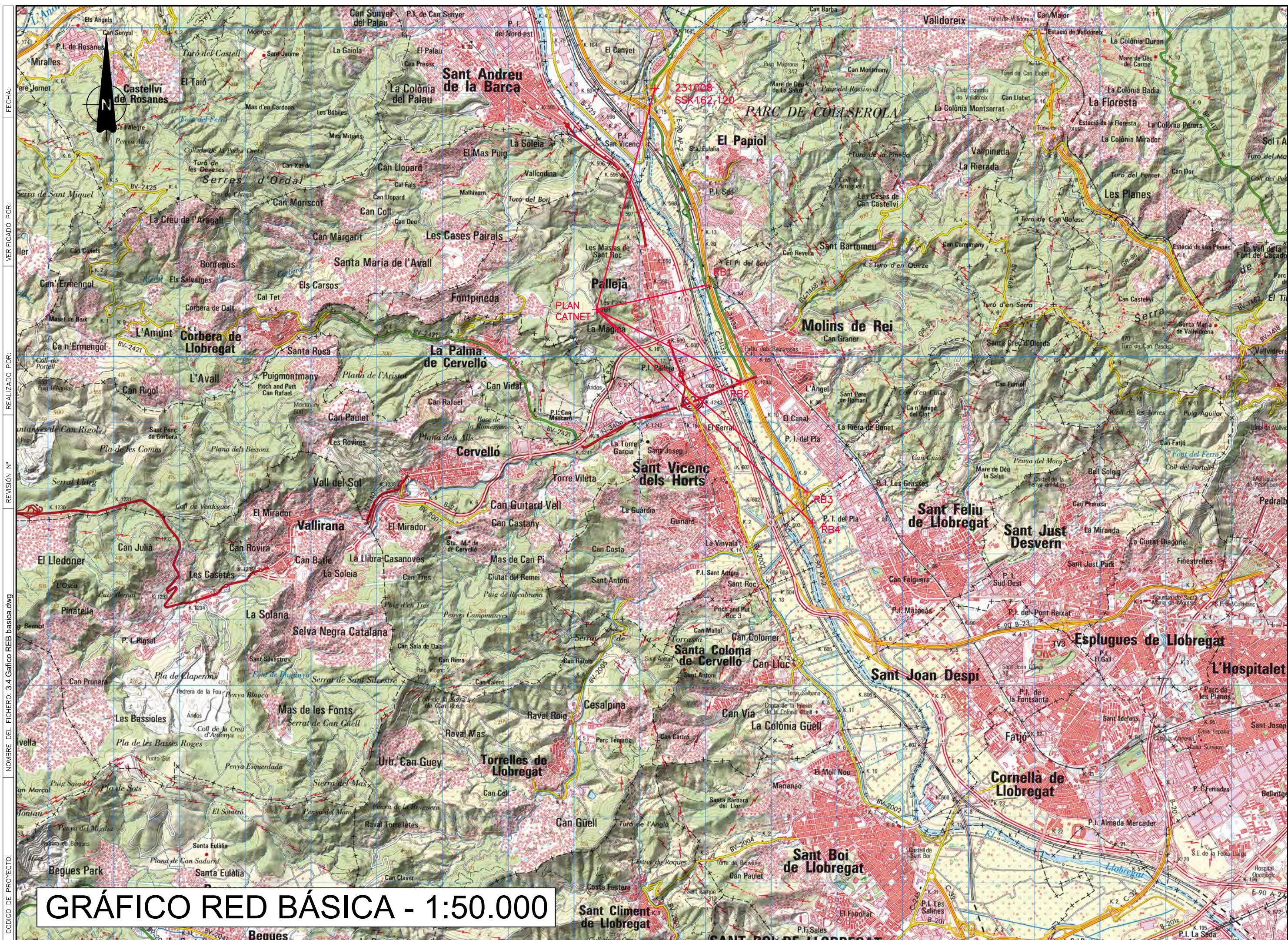
Enlaces:	
Anterior:	231007 - SSK160,9
Posterior:	231009 - SSK163,450
Agrupada con:	



3.3.- GRÁFICO DE PUNTOS DE APOYO



3.4.- GRÁFICO DE LA RED BÁSICA



3.5.- RESEÑAS DE PUNTOS DE APOYO

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 1
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9001	Esquina marmol Cota asfalto	FOTOGRAMA: 7724 PASADA Nº: 2 X= 419251,732 Y= 4582721,104 Z= 20,418 NOTA: _____
P.A. Nº: 9002	Esquina zapata de cartel Cota acera	FOTOGRAMA: 7723 PASADA Nº: 2 X= 419102,935 Y= 4583076,514 Z= 29,801 NOTA: _____
P.A. Nº: 9003	Esquin cebreado Cota asfalto	FOTOGRAMA: 7722 PASADA Nº: 2 X= 418989,358 Y= 4583533,785 Z= 22,082 NOTA: _____
P.A. Nº: 9004	Esquin cebreado Cota asfalto	FOTOGRAMA: 7721 PASADA Nº: 2 X= 418751,468 Y= 4583869,412 Z= 22,801 NOTA: _____

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 2
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9005	Punta de flecha de marca vial cota asfalto	FOTOGRAMA: 7720 PASADA Nº: 2 X= 418865,002 Y= 4584283,408 Z= 28,491 NOTA: _____
P.A. Nº: 9006	Parque → N → → →	Punta de flecha de marca vial cota asfalto FOTOGRAMA: 7719 PASADA Nº: 2 X= 418451,708 Y= 4584580,112 Z= 24,392 NOTA: _____
P.A. Nº: 9007	Estacion Altura a la acera 0,48	Esquina jardineria alcornoque Cota arriba Altura a la acera 0,48 FOTOGRAMA: 7718 PASADA Nº: 2 X= 418233,762 Y= 4564907,615 Z= 28,708 NOTA: _____
P.A. Nº: 9008	Esquina escalón Cota acera	Esquina escalón Cota acera FOTOGRAMA: 7717 PASADA Nº: 2 X= 418109,287 Y= 4585330,887 Z= 50,089 NOTA: _____

Nota: Las coordenadas indicadas son del Sistema ED50. En el apartado 3.10.2. se incluyen también las coordenadas transformadas al Sistema ETRS89.

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 3
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9009	Esquina arqueta Cota acera	FOTOGRAMA: 7716 PASADA Nº: 2 X= 417911,438 Y= 4585610,238 Z= 46,110 NOTA: _____
P.A. Nº: 9010	Esquina irrompible Cota asfalto	FOTOGRAMA: 7715 PASADA Nº: 2 X= 417786,341 Y= 4585198,309 Z= 32,420 NOTA: _____
P.A. Nº: 9011	Esquina sombreada Cota terreno	FOTOGRAMA: 7714 PASADA Nº: 2 X= 417912,389 Y= 4586453,844 Z= 44,797 NOTA: _____
P.A. Nº: 9012	Esquina exterior muro Cota terreno	FOTOGRAMA: 7713 PASADA Nº: 2 X= 417143,986 Y= 4586756,623 Z= 86,493 NOTA: _____

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 4
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9013	Final centro linea blanca Cota asfalto	FOTOGRAMA: 7712 PASADA Nº: 2 X= 417275,877 Y= 4587200,030 Z= 40,634 NOTA: _____
P.A. Nº: 9014	Esquina ceda el paso Cota asfalto	FOTOGRAMA: 7711 PASADA Nº: 2 X= 417052,343 Y= 4587580,782 Z= 36,204 NOTA: _____
P.A. Nº: 9015	Esquina acera Cota acera	FOTOGRAMA: 7711 PASADA Nº: 2 X= 416944,391 Y= 4588040,489 Z= 73,599 NOTA: _____
P.A. Nº: 9016	Esquina pintura paso de peatones Cota asfalto	FOTOGRAMA: 7725 PASADA Nº: 2 X= 416944,233 Y= 4582286,095 Z= 18,330 NOTA: _____

Nota: Las coordenadas indicadas son del Sistema ED50. En el apartado 3.10.2. se incluyen también las coordenadas transformadas al Sistema ETRS89.

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 5
FECHA : Abril 2009

CODIGOS:	RESERVA:	COORDENADAS:
P.A. Nº: 9017	Esquina marca vial Cota asfalto	FOTOGRAMA: 7727 PASADA Nº: 2 X= 419731,181 Y= 4561567,017 Z= 18,968 NOTA: _____
P.A. Nº: 9018	Esquina bordillo cota asfalto	FOTOGRAMA: 7728 PASADA Nº: 2 X= 419582,826 Y= 4561934,504 Z= 21,375 NOTA: _____
P.A. Nº: 9019	Esquina imposta obra de fábrica cota arriba	FOTOGRAMA: 7725 PASADA Nº: 2 X= 418712,187 Y= 4581506,977 Z= 17,700 NOTA: _____
P.A. Nº: 9020	Esquina de arqueta en balsa cota arriba	FOTOGRAMA: 7725 PASADA Nº: 2 X= 418637,284 Y= 4581910,080 Z= 15,384 NOTA: _____

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 8
FECHA : Abril 2009

CODIGOS:	RESERVA:	COORDENADAS:
P.A. Nº: 9021	Esquina arqueta de hormigón Cota arriba	FOTOGRAMA: 7724 PASADA Nº: 2 X= 418376,430 Y= 4582299,536 Z= 19,292 NOTA: _____
P.A. Nº: 9022	Esquina arqueta Cota arriba	FOTOGRAMA: 7724 PASADA Nº: 2 X= 418257,889 Y= 4582843,948 Z= 19,356 NOTA: _____
P.A. Nº: 9023	Esquina arqueta Cota arriba	FOTOGRAMA: 7722 PASADA Nº: 2 X= 418148,495 Y= 4583079,890 Z= 19,749 NOTA: _____
P.A. Nº: 9024	Esquina arqueta Cota arriba	FOTOGRAMA: 7721 PASADA Nº: 2 X= 417920,375 Y= 4583484,030 Z= 20,461 NOTA: _____

Nota: Las coordenadas indicadas son del Sistema ED50. En el apartado 3.10.2. se incluyen también las coordenadas transformadas al Sistema ETRS89.

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA N°: 7
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. N°: 9025	Centro pozo cota arriba	FOTOGRAMA: 7720 PASADA N°: 2 X= 417787,295 Y= 4583903,061 Z= 21,422 NOTA: _____
P.A. N°: 9026	Esquina arqueta pozo Cota arriba	FOTOGRAMA: 7718 PASADA N°: 2 X= 417641,205 Y= 4584269,309 Z= 22,860 NOTA: _____
P.A. N°: 9027	Esquina arqueta Cota arriba	FOTOGRAMA: 7718 PASADA N°: 2 X= 417493,960 Y= 4584569,302 Z= 22,634 NOTA: _____
P.A. N°: 9028	Esquina arqueta Cota arriba	FOTOGRAMA: 7717 PASADA N°: 2 X= 417352,639 Y= 4584828,346 Z= 25,343 NOTA: _____

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA N°: II
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. N°: 9029	Esquina arqueta cota arriba	FOTOGRAMA: 7716 PASADA N°: 2 X= 417100,384 Y= 4585379,514 Z= 28,117 NOTA: _____
P.A. N°: 9030	Esquina de muro cota arriba	FOTOGRAMA: 7715 PASADA N°: 2 X= 417035,962 Y= 4585758,034 Z= 28,428 NOTA: _____
P.A. N°: 9031	Punta de flecha de marca vial Cota asfalto	FOTOGRAMA: 7714 PASADA N°: 2 X= 416638,405 Y= 4586064,647 Z= 28,825 NOTA: _____
P.A. N°: 9032	Esquina pintura de paso de peatones Cota asfalto	FOTOGRAMA: 7713 PASADA N°: 2 X= 416548,834 Y= 4586347,963 Z= 30,412 NOTA: _____

Nota: Las coordenadas indicadas son del Sistema ED50. En el apartado 3.10.2. se incluyen también las coordenadas transformadas al Sistema ETRS89.

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 9
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9033	Esquina pintura en piso de peatones Cota asfalto	FOTOGRAMA: 7712 PASADA Nº: 2 X= 416380,048 Y= 458037,584 Z= 36,887
P.A. Nº: 10675	Centro linea discontinua Cota asfalto	FOTOGRAMA: 7711 PASADA Nº: 2 X= 416096,941 Y= 4587303,883 Z= 36,977
P.A. Nº: 9034	Esquina arqueta metálica Cota tapa	FOTOGRAMA: 7711 PASADA Nº: 2 X= 415993,095 Y= 4587645,485 Z= 34,515
P.A. Nº: 9035	Esquina muro Cota terreno	FOTOGRAMA: 7726 PASADA Nº: 2 X= 419248,208 Y= 4581888,899 Z= 19,023

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 10
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9036	Centro pozo Cota arriba	FOTOGRAMA: 7723 PASADA Nº: 2 X= 416587,104 Y= 4583110,898 Z= 23,277
P.A. Nº: 9037	Vertice cabreado Cota asfalto	FOTOGRAMA: 7710 PASADA Nº: 2 X= 417731,879 Y= 4585028,973 Z= 26,280
P.A. Nº: 9038	Vertice bordillo Cota asfalto	FOTOGRAMA: 7715 PASADA Nº: 2 X= 417205,005 Y= 4586255,996 Z= 37,884
P.A. Nº: 9039	Esquina acera centro de transformación Cota arriba	FOTOGRAMA: 7711 PASADA Nº: 2 X= 416586,638 Y= 4587778,327 Z= 32,763

Nota: Las coordenadas indicadas son del Sistema ED50. En el apartado 3.10.2. se incluyen también las coordenadas transformadas al Sistema ETRS89.

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 11
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9043	Esquina línea de parada de stop. Cota asfalto.	FOTOGRAMA: 7728 PASADA Nº: 3 X= 417963,152 Y= 4581401,308 Z= 38,129 NOTA: _____
P.A. Nº: 9041	Esquina cebreado. Cota asfalto.	FOTOGRAMA: 7728 PASADA Nº: 3 X= 417701,035 Y= 4581668,601 Z= 55,781 NOTA: _____
P.A. Nº: 9042	Esquina acera con bordillo. Cota acera.	FOTOGRAMA: 7729 PASADA Nº: 3 X= 417630,469 Y= 4581662,577 Z= 57,572 NOTA: _____
P.A. Nº: 9043	Esquina bordillo. Cota asfalto	FOTOGRAMA: 7730 PASADA Nº: 3 X= 417388,791 Y= 4582308,859 Z= 27,915 NOTA: _____

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 12
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9044	Esquina bollosa en parque cota acera	FOTOGRAMA: 7731 PASADA Nº: 3 X= 417438,355 Y= 4582794,336 Z= 24,082 NOTA: _____
P.A. Nº: 9045	Esgina paso de peatones. Cota asfalto.	FOTOGRAMA: 7732 PASADA Nº: 3 X= 417215,563 Y= 4583161,702 Z= 41,340 NOTA: _____
P.A. Nº: 9047	Esgina paso de peatones. Cota asfalto.	FOTOGRAMA: 7733 PASADA Nº: 3 X= 417077,874 Y= 4583443,667 Z= 32,686 NOTA: _____
P.A. Nº: 9048	Esquina muro. Cota acera.	FOTOGRAMA: 7734 PASADA Nº: 3 X= 416778,899 Y= 4583606,268 Z= 40,190 NOTA: _____

Nota: Las coordenadas indicadas son del Sistema ED50. En el apartado 3.10.2. se incluyen también las coordenadas transformadas al Sistema ETRS89.

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 13
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9048	Vertice ceda el paso Cota asfalto	FOTOGRAMA: 7735 PASADA Nº: 3 X= 416631,432 Y= 4584252,321 Z= 30,259 NOTA: _____
P.A. Nº: 9050	Vertice flecha marca vial. Cota asfalto.	FOTOGRAMA: 7738 PASADA Nº: 3 X= 416617,484 Y= 4584758,522 Z= 27,983 NOTA: _____
P.A. Nº: 9051	Esquina arqueta metálica Cota asfalto.	FOTOGRAMA: 7737 PASADA Nº: 3 X= 416589,454 Y= 4585288,159 Z= 27,844 NOTA: _____
P.A. Nº: 9052	Esquina acera. Cota acera	FOTOGRAMA: 7738 PASADA Nº: 3 X= 416330,458 Y= 4585572,912 Z= 39,153 NOTA: _____

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 14
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9053	Esquina bordillo. Cota asfalto.	FOTOGRAMA: 7739 PASADA Nº: 3 X= 416013,699 Y= 4585788,537 Z= 67,352 NOTA: _____
P.A. Nº: 9054	Esquina paso de peatones Cota asfalto	FOTOGRAMA: 7740 PASADA Nº: 3 X= 416048,765 Y= 4586307,804 Z= 56,398 NOTA: _____
P.A. Nº: 9055	Esquina bordillo con losa de hormigón. Cota solera.	FOTOGRAMA: 7741 PASADA Nº: 3 X= 415739,216 Y= 4588520,576 Z= 88,520 NOTA: _____
P.A. Nº: 9056	Esquina imbornal. Cota asfalto.	FOTOGRAMA: 7742 PASADA Nº: 3 X= 415862,240 Y= 4586922,858 Z= 71,414 NOTA: _____

Nota: Las coordenadas indicadas son del Sistema ED50. En el apartado 3.10.2. se incluyen también las coordenadas transformadas al Sistema ETRS89.

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 15
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9057	Esquina de muro con banco. Cota suelo	FOTOGRAMA: 7742 PASADA Nº: 3 X= 415425,561 Y= 4586838,622 Z= 115,407 NOTA: _____
P.A. Nº: 9058	Esquina zapata de toma electricidad. Cota hormigón.	FOTOGRAMA: 7742 PASADA Nº: 3 X= 415368,598 Y= 4587234,599 Z= 81,012 NOTA: _____
P.A. Nº: 9059	Esquina paso de peatones. Cota asfalto.	FOTOGRAMA: 7738 PASADA Nº: 3 X= 416780,579 Y= 4584905,023 Z= 26,555 NOTA: _____
P.A. Nº: 9060	Vértice flecha marca vial. Cota asfalto.	FOTOGRAMA: 7734 PASADA Nº: 3 X= 417336,260 Y= 4583836,203 Z= 23,727 NOTA: _____

PUNTOS DE APOYO

TRABAJO: MOLINS DE REI

HOJA Nº: 16
FECHA : Abril 2009

CROQUIS:	RESEÑA:	COORDENADAS:
P.A. Nº: 9063	Esquina isla de pasarela sobre canal. Cota isla	FOTOGRAMA: 7730 PASADA Nº: 3 X= 418143,140 Y= 4582091,806 Z= 18,716 NOTA: _____
P.A. Nº: 9064	Esquina imposta. Cota asfalto.	FOTOGRAMA: 7745 PASADA Nº: 1 X= 418748,304 Y= 4584913,005 Z= 80,727 NOTA: _____
P.A. Nº: 9065	Esquina paso de peatones. Cota asfalto.	FOTOGRAMA: 7745 PASADA Nº: 1 X= 418839,728 Y= 4584359,491 Z= 31,307 NOTA: _____
P.A. Nº: 9066	Centro pino pequeño. Cota terreno.	FOTOGRAMA: 7745 PASADA Nº: 1 X= 419320,471 Y= 4584112,273 Z= 95,409 NOTA: _____

Nota: Las coordenadas indicadas son del Sistema ED50. En el apartado 3.10.2. se incluyen también las coordenadas transformadas al Sistema ETRS89.

Reseñas de Puntos de Apoyo Aerotriangulados				
Punto de Apoyo		1111	Situación	Croquis
Coordenadas U.T.M.	(ED50)	(ETRS89)	Esquina caseta. Cota suelo.	
X	416855,350	416761,363		
Y	4587065,080	4586861,016		
Z	31,150			
Pasada	2			
Fotograma	7712		Altura Señal	
Punto de Apoyo		1112	Situación	Croquis
Coordenadas U.T.M.	(ED50)	(ETRS89)	Esquina paso de peatones. Cota suelo.	
X	417558,780	417464,774		
Y	4585612,760	4585408,682		
Z	28,650			
Pasada	2			
Fotograma	7716		Altura Señal	
Punto de Apoyo		1113	Situación	Croquis
Coordenadas U.T.M.	(ED50)	(ETRS89)	Esquina caseta. Cota suelo.	
X	418227,340	418133,316		
Y	4584146,911	4583942,813		
Z	24,883			
Pasada	2			
Fotograma	7720		Altura Señal	
Punto de Apoyo		1114	Situación	Croquis
Coordenadas U.T.M.	(ED50)	(ETRS89)	Centro poste. Cota arriba.	
X	418895,915	418801,872		
Y	4582627,833	4582423,709		
Z	18,826			
Pasada	2			
Fotograma	7724		Altura Señal	

Reseñas de Puntos de Apoyo Aerotriangulados

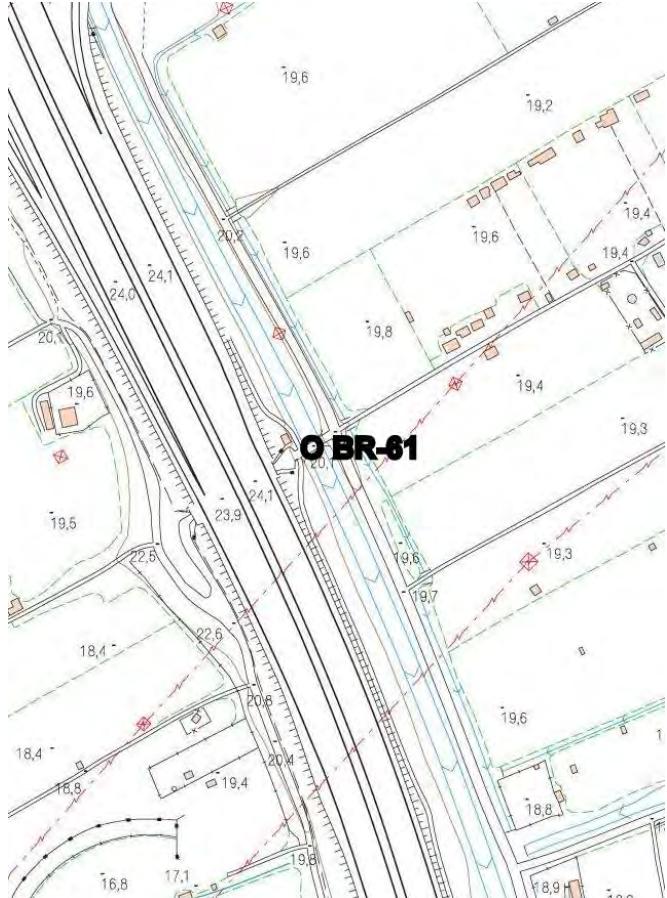
Punto de Apoyo		1115	Situación	Croquis		
Coordenadas U.T.M.	(ED50)	(ETRS89)	Vértice línea blanca. Cota suelo.			
X	417793,288	417699,252				
Y	4582974,616	4582770,515				
Z	20,368					
Pasada	3					
Fotograma	7731		Altura Señal			
Punto de Apoyo		1116	Situación	Croquis		
Coordenadas U.T.M.	(ED50)	(ETRS89)	Esquina caseta. Cota suelo.			
X	416660,722	416566,721				
Y	4585731,174	4585527,106				
Z	27,253					
Pasada	3					
Fotograma	7738		Altura Señal			
Punto de Apoyo			Situación	Croquis		
Coordenadas U.T.M.	(ED50)	(ETRS89)				
X						
Y						
Z						
Pasada						
Fotograma			Altura Señal			
Punto de Apoyo			Situación	Croquis		
Coordenadas U.T.M.						
X						
Y						
Z						
Pasada						
Fotograma			Altura Señal			
Punto de Apoyo			Situación	Croquis		
Coordenadas U.T.M.						
X						
Y						
Z						
Pasada						
Fotograma			Altura Señal			
Fotograma			Altura Señal			

3.6.- RESEÑAS DE LA RED BÁSICA Y PUNTOS NIVELADOS

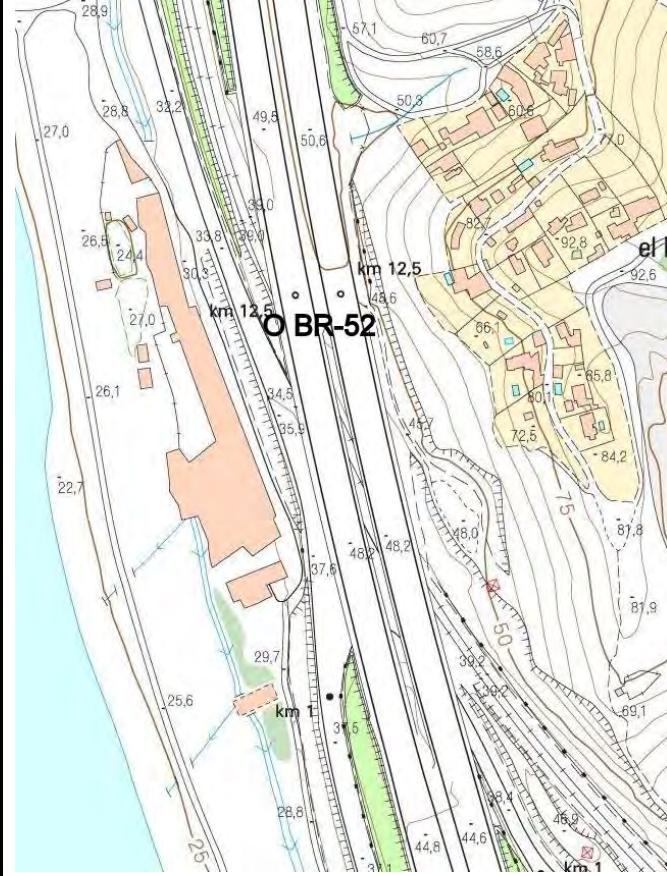
Reseñas Red Básica					
Vértice	RB-1		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 417102,204 4586287,313 36,660	ETRS89 417008,207 4586083,243	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50 2°0'28,77346" E 41°25'23,32556" N 0,999684435 0°39'23"	ETRS89 2°0'24,62285" E 41°25'19,28275" N 0,99968476 0°39'26"
Situación En borde de arcén de la carretera C-1413a.					
Acceso					
Señal Clavo de acero Horizonte G.P.S. Despejado Vértices Observables Referencias					
A:	B:	C:	Croquis de Detalle		
		Plano de Situación	Fotografía		

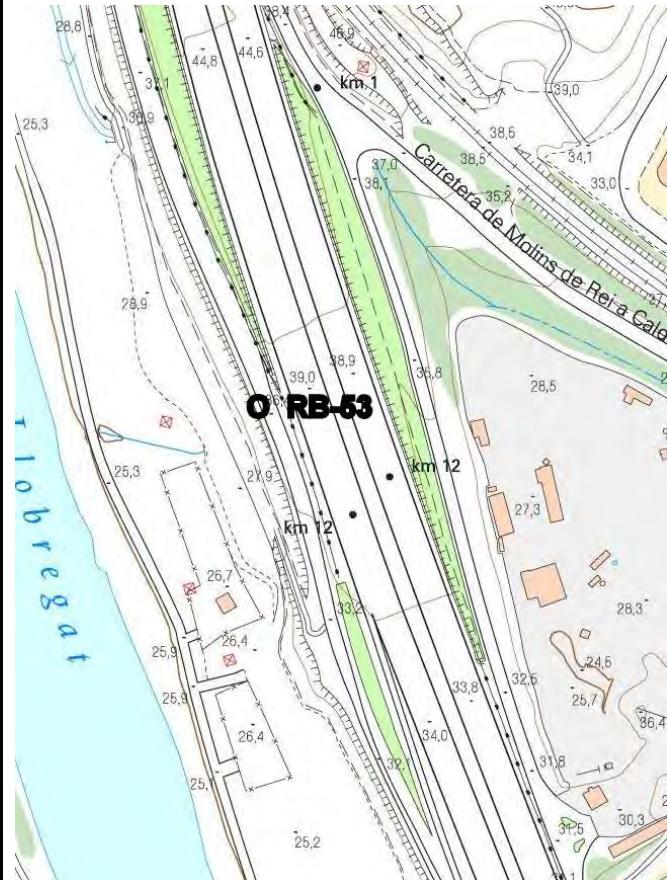
Reseña de Red Basica					
Base	RB-2		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 417623,753 4584823,172 32,260	ETRS89 417529,738 4584619,088	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50 2°0'51,95623" E 41°24'36,04896" N 0,999683376 0°39'07"	ETRS89 2°0'47,80633" E 41°24'32,00448" N 0,99968370 0°39'10"
Situación Sobre la acera de hormigón del puente de acceso a Molins de Rei.					
Acceso					
Señal Clavo de acero Horizonte G.P.S. Despejado Vértices Observables Referencias					
A:	B:	C:	Croquis de Detalle		
Plano de Situación			Fotografía		

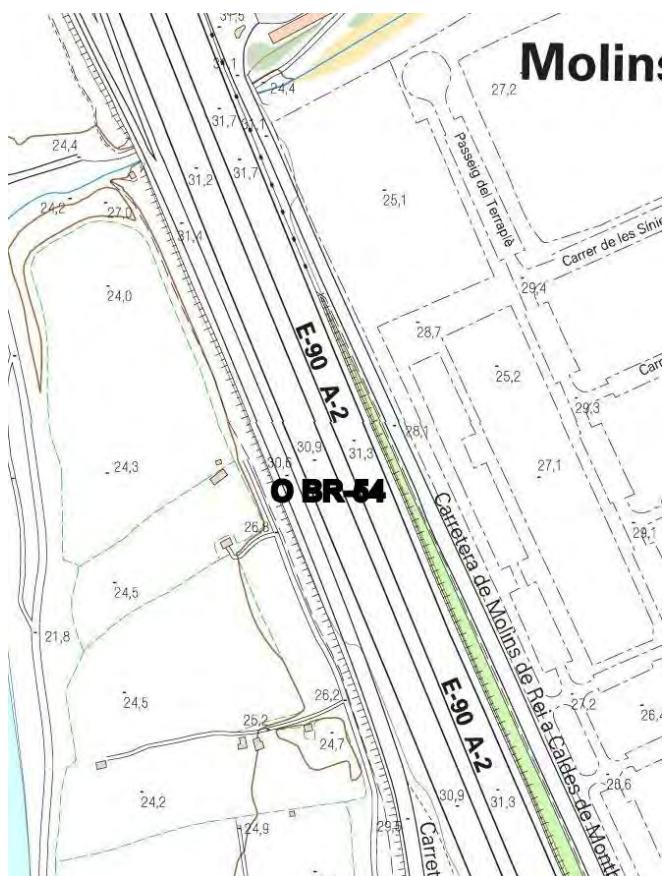
Reseña de Red Basica					
Base	RB-3		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 418641,257 4583144,236 27,837	ETRS89 418547,221 4582940,122	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50 2°1'36,58751" E 41°23'41,98799" N 0,999681329 0°38'37"	ETRS89 2°1'32,43889" E 41°23'37,94138" N 0,99968165 0°38'39"
Situación Sobre el bordillo de una canaleta de desagüe de la rotonda.					
Acceso Señal Clavo de acero Horizonte G.P.S. Despejado Vértices Observables Referencias					
A:	B:	C:	Croquis de Detalle		
 O BR-39					
Plano de Situación			Fotografía		

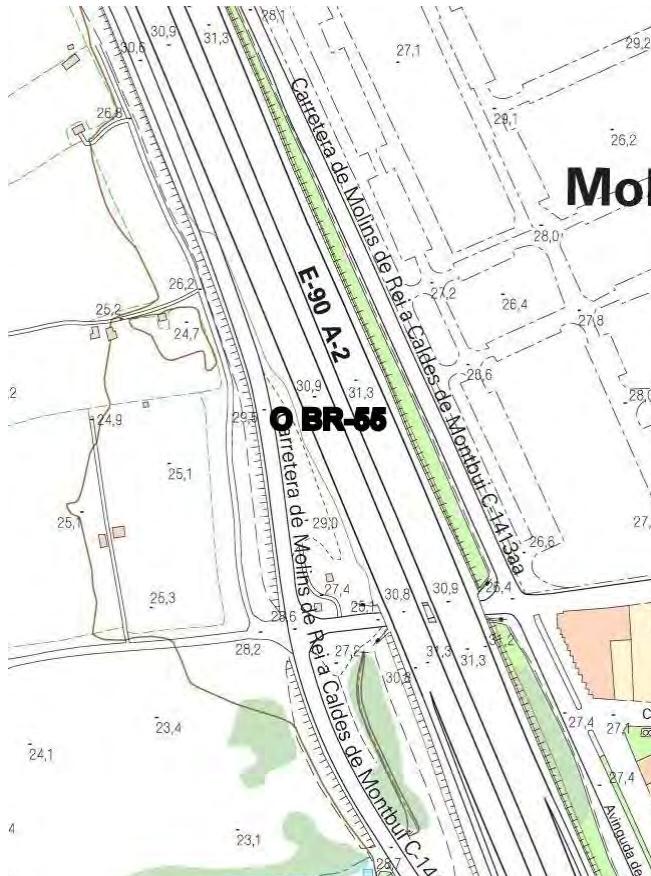
Reseña de Red Basica					
Base	RB-4		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 418722,533 4582672,683 20,493	ETRS89 418628,491 4582468,562	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50 2°1'40,34167" E 41°23'26,72897" N 0,999681166 0°38'34"	ETRS89 2°1'36,16619" E 41°23'22,68174" N 0,99968148 0°38'37"
Situación Sobre la losa de hormigón de un puente que cruza el canal paralelo a la Autopista.					
Acceso Señal Clavo de acero Horizonte G.P.S. Despejado Vértices Observables Referencias					
A:	B:	C:	Croquis de Detalle		
 Plano de Situación			 Fotografía		

Reseña Red Nivelación					
Base	N-51		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 30.554	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Borde arcén de la carretera C-1413a					
Acceso Senal Clavo de acero con cabeza esférica Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:					Croquis de Detalle
					
Plano de Situación			Fotografía		

Reseña de Red Nivelación					
Base	N-52		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Bloque de hormigón entre carretera C-1413a y puente de la A-2					
Acceso					
Senal Clavo de acero con arandela Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:					Croquis de Detalle
					
Plano de Situación			Fotografía		

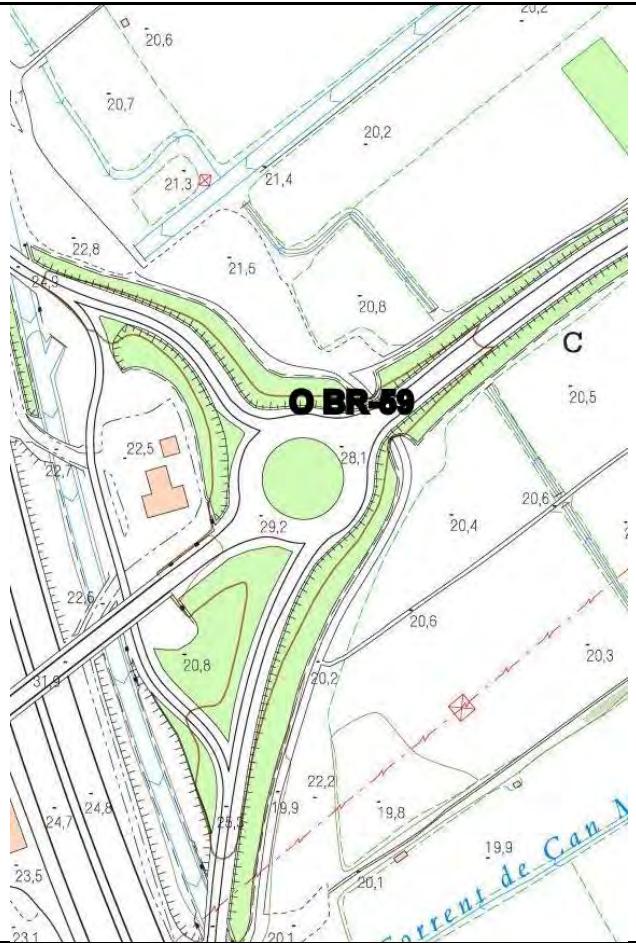
Reseña de Red Nivelación					
Base	N-53		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Borde arcén de la carretera C-1413a					
Acceso					
Señal Clavo de acero con cabeza esférica Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:					Croquis de Detalle
					
Plano de Situación			Fotografía		

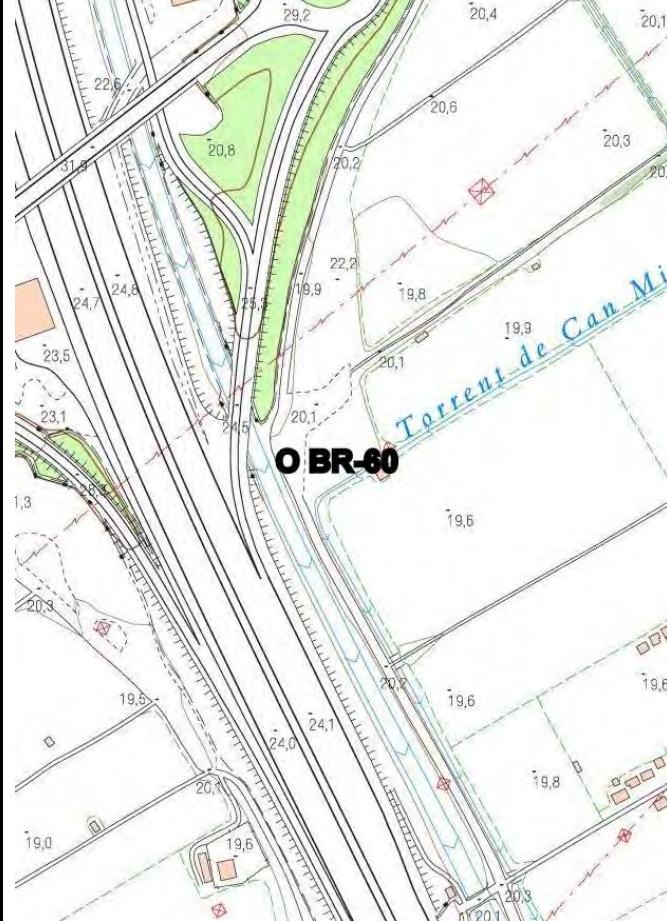
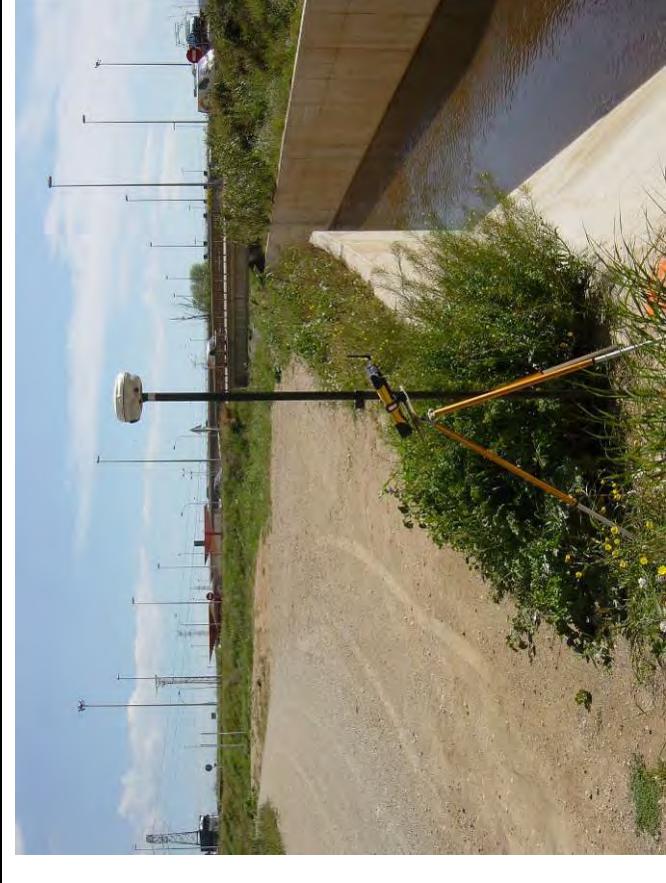
Reseña de Red Nivelación					
Base	N-54		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 30.324	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Bajante canaleta en la carretera C-1413a					
Acceso					
Senal Clavo de acero con arandela Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:					Croquis de Detalle
					
Plano de Situación			Fotografía		

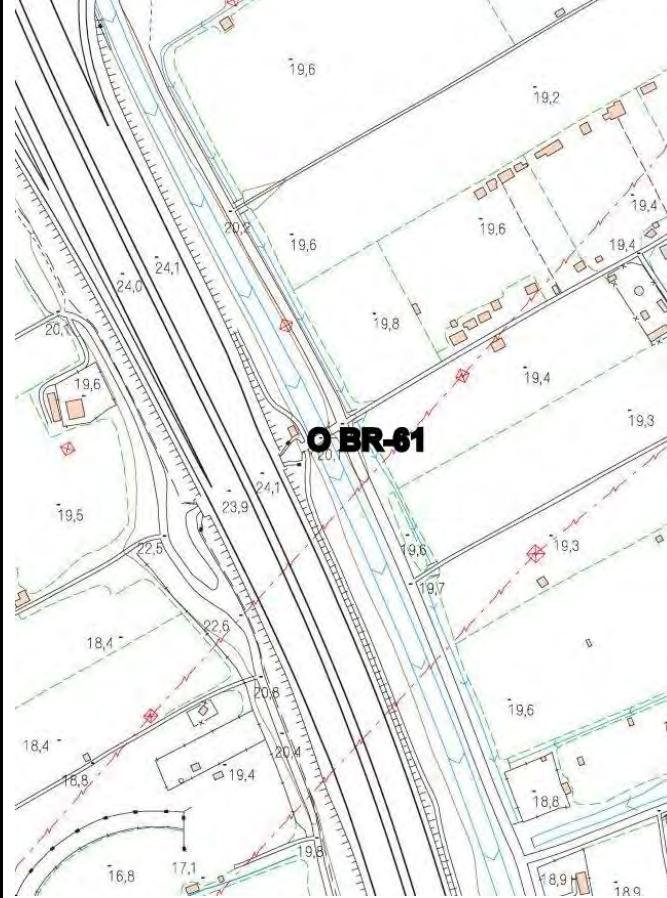
Reseña de Red Nivelación					
Base	N-55		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Borde arcén de la carretera C-1413a					
Acceso					
Senal Clavo de acero con cabeza esférica Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:					Croquis de Detalle
					
Plano de Situación			Fotografía		

Reseña de Red Nivelación					
Base	N-56		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Borde arcén de la carretera C-1413a					
Acceso					
Senal Clavo de acero con cabeza esférica Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:					Croquis de Detalle
					
Plano de Situación			Fotografía		

Reseña de Red Nivelación					
Base	N-57		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Acera de hormigón sobre puente de acceso a Molins de Rei					
Acceso					
Senal Clavo de acero con arandela Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:					Croquis de Detalle
					
Plano de Situación			Fotografía		

Reseña Red Nivelación					
Base	N-59		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 27.837	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Bordillo canaleta en rotonda					
Acceso Señal Clavo de acero con cabeza esférica Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:			Croquis de Detalle		
					
Plano de Situación			Fotografía		

Reseña de Red Nivelación					
Base	N-60		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 20.287	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Hormigón canal paralelo a A-2					
Acceso					
Señal Clavo de acero con cabeza esférica Horizonte G.P.S. Despejado Vértices Observables Referencias					
A:	B:	C:	Croquis de Detalle		
		Plano de Situación	Fotografía		

Reseña Red Nivelación					
Base	N-61		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 20.493	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Puente sobre canal paralelo a A-2					
Acceso					
Señal Clavo de acero con arandela Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:			Croquis de Detalle		
					
Plano de Situación			Fotografía		

Reseña de Red Nivelación					
Base	N-62		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 21.065	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Hormigón tapa de registro junto canal paralelo a A-2					
Acceso					
Señal Clavo de acero con cabeza esférica Horizonte G.P.S. Despejado Vértices Observables Referencias A: B: C:					Croquis de Detalle
					
Plano de Situación			Fotografía		

Reseña de Red Nivelación					
Base	N-63		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 21.494	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Hormigón canal paralelo a A-2					
Acceso					
Señal Clavo de acero con arandela Horizonte G.P.S. Despejado Vértices Observables Referencias					
A:	B:	C:	Croquis de Detalle		
 <p>Plano de Situación</p>	 <p>Fotografía</p>				

Reseña de Red Nivelación					
Base	N-64		Municipio Provincia MTN50	Molins de Rei Barcelona 420	Huso 31
Coordenadas U.T.M.			Coordenadas Geográficas		
S. Referencia X Y H Ortométrica H Elipsoidal	ED50 22.580	ETRS89	S. Referencia Longitud Latitud Factor Escala Convergencia	ED50	ETRS89
Situación Puente sobre canal paralelo a A-2					
Acceso					
Señal Clavo de acero con arandela Horizonte G.P.S. Despejado Vértices Observables Referencias					
A:	B:	C:	Croquis de Detalle		
					
Plano de Situación			Fotografía		

3.7.- LIBRETAS DE CAMPO DE NIVELACIÓN Y CÁLCULO

1	Principio Línea	AD	1							60	1	B	3	3	Rb	1.6774	HD	76.24	sR	0.0001	
2	1001		1			Z	100.0000			61	2	B	3	3	Rf	1.4970	HD	56.21	sR	0.0001	
3	1001		1	Sh	0.0000	dz	0.0000	Z	100.0000	62	2	B	3	3	Rb	1.4271	HD	77.02	sR	0.0002	
4	1001	0	1	Db	0.00	Df	0.00	Z	100.0000	63	3	B	3	3	Rf	1.6605	HD	74.59	sR	0.0002	
5	Final línea		1							64	3	B	3	3	Rb	1.6064	HD	77.14	sR	0.0003	
6	Principio Línea	AD	1							65	4	B	3	3	Rf	1.2889	HD	122.32	sR	0.0002	
7	61	B	1			Z	100.0000			66	4	B	3	3	Rb	1.9291	HD	60.11	sR	0.0001	
8	61	B	3	1	Rb	1.0457	HD	75.33	sR	0.0001	67	5	B	3	3	Rf	0.9271	HD	14.97	sR	0.0000
9	1	B	3	1	Rf	1.3000	HD	70.08	sR	0.0001	68	5	B	3	3	Rb	1.1296	HD	67.27	sR	0.0001
10	1	B	3	1	Rb	1.4981	HD	39.79	sR	0.0000	69	6	B	3	3	Rf	2.0363	HD	72.14	sR	0.0000
11	2	B	3	1	Rf	1.4492	HD	43.88	sR	0.0001	70	6	B	3	3	Rb	2.0910	HD	80.53	sR	0.0001
12	2	B	3	1	Rb	0.8919	HD	63.45	sR	0.0001	71	7	B	3	3	Rf	1.6360	HD	75.11	sR	0.0001
13	3	B	3	1	Rf	1.4536	HD	66.20	sR	0.0002	72	7	B	3	3	Rb	1.5793	HD	39.42	sR	0.0001
14	3	B	3	1	Rb	1.5919	HD	56.38	sR	0.0000	73	8	B	3	3	Rf	1.6350	HD	53.20	sR	0.0001
15	4	B	3	1	Rf	0.8933	HD	59.70	sR	0.0000	74	8	B	3	3	Rb	2.3506	HD	75.62	sR	0.0003
16	4	B	3	1	Rb	1.9075	HD	62.16	sR	0.0001	75	9	B	3	3	Rf	1.4860	HD	70.80	sR	0.0001
17	5	B	3	1	Rf	1.6875	HD	63.11	sR	0.0001	76	9	B	3	3	Rb	1.8150	HD	78.62	sR	0.0002
18	5	B	3	1	Rb	3.3050	HD	60.62	sR	0.0001	77	10	B	3	3	Rf	1.3084	HD	53.01	sR	0.0001
19	6	B	3	1	Rf	2.8853	HD	100.00	sR	0.0002	78	10	B	3	3	Rb	2.0723	HD	64.40	sR	0.0001
20	6	B	3	1	Rb	2.7375	HD	88.40	sR	0.0001	79	11	B	3	3	Rf	1.2120	HD	72.74	sR	0.0000
21	7	B	3	1	Rf	3.1479	HD	67.68	sR	0.0001	80	11	B	3	3	Rb	1.7276	HD	73.20	sR	0.0000
22	7	B	3	1	Rb	1.7173	HD	65.60	sR	0.0001	81	12	B	3	3	Rf	1.3438	HD	59.31	sR	0.0001
23	8	B	3	1	Rf	1.9473	HD	62.35	sR	0.0000	82	12	B	3	3	Rb	2.0479	HD	55.22	sR	0.0002
24	8	B	3	1	Rb	0.9476	HD	71.17	sR	0.0002	83	13	B	3	3	Rf	1.1256	HD	29.47	sR	0.0001
25	9	B	3	1	Rf	1.7227	HD	64.85	sR	0.0002	84	13	B	3	3	Rb	3.8582	HD	21.35	sR	0.0000
26	9	B	3	1	Rb	1.6006	HD	64.65	sR	0.0000	85	14	B	3	3	Rf	1.1003	HD	41.95	sR	0.0001
27	10	B	3	1	Rf	0.9633	HD	44.67	sR	0.0003	86	14	B	3	3	Rb	3.8854	HD	104.21	sR	0.0001
28	10	B	3	1	Rb	1.4666	HD	68.32	sR	0.0002	87	15	B	3	3	Rf	0.8601	HD	31.04	sR	0.0000
29	11	B	3	1	Rf	1.4576	HD	64.13	sR	0.0001	88	15	B	3	3	Rb	2.0150	HD	43.12	sR	0.0002
30	11	B	3	1	Rb	1.4275	HD	34.46	sR	0.0001	89	16	B	3	3	Rf	1.1471	HD	42.43	sR	0.0002
31	12	B	3	1	Rf	1.2296	HD	62.11	sR	0.0002	90	16	B	3	3	Rb	1.0751	HD	42.56	sR	0.0002
32	61	B	1	Sh	-0.0001	dz	0.0001	Z	100.0000	91	17	B	3	3	Rf	2.8889	HD	57.95	sR	0.0001	
33	61	B	12	1	Db	750.33	Df	768.76	Z	99.9999	92	17	B	3	3	Rb	0.2063	HD	51.22	sR	0.0001
34	Final línea		1							93	18	B	3	3	Rf	3.0656	HD	43.70	sR	0.0001	
35	Principio Línea	AD	2							94	18	B	3	3	Rb	0.8509	HD	4.62	sR	0.0000	
36	62	B	2			Z	100.0000			95	19	B	3	3	Rf	2.8131	HD	12.51	sR	0.0000	
37	62	B	3	2	Rb	2.4493	HD	55.85	sR	0.0000	96	19	B	3	3	Rb	1.4006	HD	32.05	sR	0.0000
38	1	B	3	2	Rf	0.3239	HD	51.40	sR	0.0001	97	20	B	3	3	Rf	2.2562	HD	59.08	sR	0.0001
39	1	B	3	2	Rb	2.4884	HD	29.03	sR	0.0001	98	20	B	3	3	Rb	1.3798	HD	48.51	sR	0.0001
40	2	B	3	2	Rf	0.5337	HD	27.29	sR	0.0000	99	21	B	3	3	Rf	1.7884	HD	72.95	sR	0.0002
41	2	B	3	2	Rb	2.8927	HD	37.16	sR	0.0003	100	21	B	3	3	Rb	1.3319	HD	76.41	sR	0.0002
42	3	B	3	2	Rf	0.4722	HD	29.17	sR	0.0001	101	22	B	3	3	Rf	1.9273	HD	60.89	sR	0.0002
43	3	B	3	2	Rb	1.8589	HD	17.04	sR	0.0001	102	22	B	3	3	Rb	1.3250	HD	31.54	sR	0.0002
44	4	B	3	2	Rf	1.5874	HD	13.05	sR	0.0001	103	23	B	3	3	Rf	1.9752	HD	74.34	sR	0.0003
45	4	B	3	2	Rb	1.5808	HD	13.02	sR	0.0001	104	23	B	3	3	Rb	1.2427	HD	74.89	sR	0.0002
46	5	B	3	2	Rf	1.8519	HD	17.22	sR	0.0001	105	24	B	3	3	Rf	1.5410	HD	69.43	sR	0.0002
47	5																				

119	31	B	3	3	Rf	1.7590 HD	71.26 sR	0.0000	178	7	B	3	5	Rb	0.4450 HD	80.67 sR	0.0001	
120	31	B	3	3	Rb	2.0819 HD	58.25 sR	0.0003	179	8	B	3	5	Rf	1.1718 HD	101.22 sR	0.0002	
121	32	B	3	3	Rf	1.7012 HD	47.10 sR	0.0001	180	8	B	3	5	Rb	1.4441 HD	74.48 sR	0.0003	
122	32	B	3	3	Rb	1.4866 HD	74.12 sR	0.0003	181	9	B	3	5	Rf	0.8159 HD	62.53 sR	0.0002	
123	33	B	3	3	Rf	1.6909 HD	72.09 sR	0.0002	182	9	B	3	5	Rb	2.7344 HD	59.90 sR	0.0002	
124	33	B	3	3	Rb	1.4959 HD	59.85 sR	0.0001	183	10	B	3	5	Rf	1.9317 HD	61.66 sR	0.0001	
125	34	B	3	3	Rf	1.7198 HD	77.09 sR	0.0001	184	10	B	3	5	Rb	0.0114 HD	77.61 sR	0.0002	
126	62	B				3 Sh	0.0047 dz	-0.0047 Z 100.0000	185	11	B	3	5	Rf	3.6195 HD	86.50 sR	0.0001	
127	62	B	34			3 Db	2018.26 Df	1961.89 Z 100.0047	186	11	B	3	5	Rb	2.7128 HD	52.48 sR	0.0001	
128	Final línea		3						187	12	B	3	5	Rf	0.0767 HD	32.35 sR	0.0000	
129	Principio Línea	AD	4						188	12	B	3	5	Rb	3.2765 HD	44.22 sR	0.0001	
130	57	B		4			Z 100.0000		189	13	B	3	5	Rf	0.4976 HD	47.09 sR	0.0000	
131	57	B	3	4	Rb	0.7084 HD	43.43 sR	0.0003	190	13	B	5	Sh	-4.3984 dz	4.3984 Z 100.0000			
132	1	B	3	4	Rf	3.6071 HD	47.60 sR	0.0001	191	13	B	5	Db	749.87 Df	854.66 Z 95.6016			
133	1	B	3	4	Rb	0.2321 HD	30.77 sR	0.0001	192	Final línea		5						
134	2	B	3	4	Rf	2.7376 HD	44.13 sR	0.0001	193	Principio Línea	AD	6						
135	2	B	3	4	Rb	2.7326 HD	59.34 sR	0.0002	194	53	B	6						
136	3	B	3	4	Rf	0.2957 HD	54.96 sR	0.0002	195	53	B	3	6	Rb	2.2172 HD	90.78 sR	0.0002	
137	3	B	3	4	Rb	2.8686 HD	66.89 sR	0.0001	196	1	B	3	6	Rf	2.1874 HD	87.68 sR	0.0002	
138	4	B	3	4	Rf	1.3502 HD	61.92 sR	0.0001	197	1	B	3	6	Rb	0.1767 HD	42.25 sR	0.0001	
139	4	B	3	4	Rb	0.4330 HD	51.64 sR	0.0003	198	2	B	3	6	Rf	2.5546 HD	49.36 sR	0.0001	
140	5	B	3	4	Rf	2.2931 HD	48.55 sR	0.0002	199	2	B	3	6	Rb	0.3354 HD	47.80 sR	0.0000	
141	5	B	3	4	Rb	1.3756 HD	37.16 sR	0.0001	200	3	B	3	6	Rf	2.5630 HD	46.04 sR	0.0003	
142	6	B	3	4	Rf	1.3013 HD	51.13 sR	0.0001	201	3	B	3	6	Rb	0.9354 HD	51.83 sR	0.0001	
143	6	B	3	4	Rb	1.5974 HD	85.76 sR	0.0001	202	4	B	3	6	Rf	2.4717 HD	97.32 sR	0.0001	
144	7	B	3	4	Rf	0.8706 HD	97.09 sR	0.0001	203	4	B	3	6	Rb	2.4715 HD	97.45 sR	0.0001	
145	7	B	3	4	Rb	1.4804 HD	82.78 sR	0.0002	204	5	B	3	6	Rf	0.9829 HD	49.45 sR	0.0002	
146	8	B	3	4	Rf	1.1129 HD	69.40 sR	0.0001	205	5	B	3	6	Rb	2.9819 HD	62.39 sR	0.0001	
147	8	B	3	4	Rb	1.6256 HD	83.44 sR	0.0001	206	6	B	3	6	Rf	0.6045 HD	37.58 sR	0.0001	
148	9	B	3	4	Rf	1.4180 HD	26.76 sR	0.0002	207	6	B	3	6	Rb	3.1016 HD	59.09 sR	0.0001	
149	9	B	3	4	Rb	1.9960 HD	70.08 sR	0.0001	208	7	B	3	6	Rf	0.8319 HD	28.23 sR	0.0001	
150	10	B	3	4	Rf	0.9419 HD	77.92 sR	0.0001	209	7	B	3	6	Rb	2.1721 HD	92.52 sR	0.0002	
151	10	B	3	4	Rb	1.8539 HD	77.98 sR	0.0002	210	8	B	3	6	Rf	2.2029 HD	86.55 sR	0.0003	
152	11	B	3	4	Rf	0.2244 HD	58.70 sR	0.0002	211	53	B	6	Sh	-0.0071 dz	0.0071 Z 100.0000			
153	11	B	3	4	Rb	3.5390 HD	66.59 sR	0.0001	212	53	B	8	6	Db	544.11 Df	482.21 Z 99.9929		
154	12	B	3	4	Rf	0.8613 HD	94.17 sR	0.0002	213	Final línea		6						
155	12	B	3	4	Rb	2.2124 HD	63.47 sR	0.0001	214	Principio Línea	AD	7						
156	13	B	3	4	Rf	1.2392 HD	54.67 sR	0.0002	215	51	B	7						
157	13	B	3	4	Rb	1.2389 HD	54.70 sR	0.0002	216	51	B	3	7	Rb	1.4550 HD	69.77 sR	0.0001	
158	14	B	3	4	Rf	2.1402 HD	59.55 sR	0.0001	217	1	B	3	7	Rf	1.0481 HD	74.13 sR	0.0001	
159	14	B		4	Sh	3.5004 dz	-3.5004 Z 100.0000		218	1	B	3	7	Rb	1.9300 HD	74.59 sR	0.0002	
160	14	B	14			4 Db	874.03 Df	846.55 Z 103.5004	219	2	B	3	7	Rf	1.2432 HD	79.06 sR	0.0002	
161	Final línea		4						220	2	B	3	7	Rb	2.2377 HD	78.19 sR	0.0001	
162	Principio Línea	AD	5				Z 100.0000		221	3	B	3	7	Rf	1.0343 HD	79.20 sR	0.0001	
163	53	B		5					222	3	B	3	7	Rb	1.6130 HD	116.59 sR	0.0001	
164	53	B	3	5	Rb	1.1110 HD	62.11 sR	0.0001	223	4	B	3	7	Rf	1.1783 HD	66.97 sR	0.0002	
165	1	B	3	5	Rf	2.1242 HD	59.87 sR	0.0000	224	4	B	3	7	Rb	2.2849 HD	88.59 sR	0.0002	
166	1	B	3	5	Rb	0.7084 HD	62.54 sR	0.0003	225	5	B	3	7	Rf	2.0946 HD	78.08 sR	0.0001	
167	2	B	3	5	Rf	3.0998 HD	80.29 sR	0.0001	226	5	B	3	7	Rb	1.3668 HD	79.91 sR	0.0002	
168	2	B	3	5	Rb	0.1799 HD	53.97 sR	0.0001	227	6	B	3	7	Rf	1.3260 HD	72.00 sR	0.0001	
169	3	B	3	5	Rf	1.9515 HD	76.81 sR	0.0002	228	6	B	3	7	Rb	1.5806 HD	81.83 sR	0.0001	
170	3	B	3	5	Rb													

237	11	B	3	7 Rf	1.6076 HD	112.98 sR	0.0002	296	1	B	3	9 Rb	1.4533 HD	63.44 sR	0.0001
238	11	B	3	7 Rb	1.0218 HD	79.19 sR	0.0003	297	2	B	3	9 Rf	0.1820 HD	59.83 sR	0.0001
239	12	B	3	7 Rf	2.2252 HD	78.11 sR	0.0002	298	2	B	3	9 Rb	2.6486 HD	97.07 sR	0.0002
240	12	B	3	7 Rb	1.2069 HD	77.65 sR	0.0003	299	3	B	3	9 Rf	0.3676 HD	20.52 sR	0.0001
241	13	B	3	7 Rf	1.9249 HD	80.25 sR	0.0003	300	3	B	3	9 Rb	2.8936 HD	48.64 sR	0.0002
242	13	B	3	7 Rb	1.1022 HD	77.86 sR	0.0001	301	4	B	3	9 Rf	0.6568 HD	27.28 sR	0.0001
243	14	B	3	7 Rf	1.4782 HD	61.38 sR	0.0002	302	4	B	3	9 Rb	2.2529 HD	12.45 sR	0.0000
244	50	B		7 Sh	-0.0019 dz	0.0019 Z	100.0000	303	5	B	3	9 Rf	1.5371 HD	25.46 sR	0.0001
245	50	B	14	7 Db	1117.79 Df	1072.56 Z	99.9981	304	5	B	3	9 Rb	3.3898 HD	15.82 sR	0.0001
246	Final línea			7				305	6	B	3	9 Rf	0.3331 HD	10.17 sR	0.0000
247	Principio Línea		AD	8				306	6	B	3	9 Rb	3.5596 HD	11.11 sR	0.0001
248	50	B		8		Z	100.0000	307	7	B	3	9 Rf	0.9166 HD	12.10 sR	0.0000
249	50	B	3	8 Rb	3.3419 HD	66.19 sR	0.0001	308	7	B	3	9 Rb	3.0407 HD	11.82 sR	0.0000
250	1	B	3	8 Rf	0.1222 HD	55.74 sR	0.0003	309	8	B	3	9 Rf	1.0554 HD	11.08 sR	0.0000
251	1	B	3	8 Rb	2.7588 HD	51.19 sR	0.0002	310	8	B	3	9 Rb	1.0554 HD	11.09 sR	0.0000
252	2	B	3	8 Rf	0.4752 HD	34.60 sR	0.0001	311	9	B	3	9 Rf	3.0410 HD	11.79 sR	0.0000
253	2	B	3	8 Rb	3.9086 HD	52.14 sR	0.0001	312	9	B	3	9 Rb	0.6308 HD	10.12 sR	0.0000
254	3	B	3	8 Rf	0.1100 HD	28.43 sR	0.0001	313	10	B	3	9 Rf	3.2795 HD	9.04 sR	0.0000
255	3	B	3	8 Rb	3.8097 HD	45.90 sR	0.0002	314	10	B	3	9 Rb	0.2259 HD	8.51 sR	0.0001
256	4	B	3	8 Rf	0.1615 HD	32.63 sR	0.0001	315	11	B	3	9 Rf	3.2760 HD	14.08 sR	0.0000
257	4	B	3	8 Rb	3.8333 HD	50.31 sR	0.0003	316	11	B	3	9 Rb	1.5574 HD	22.71 sR	0.0000
258	5	B	3	8 Rf	0.3128 HD	45.18 sR	0.0002	317	12	B	3	9 Rf	2.2736 HD	13.96 sR	0.0001
259	5	B	3	8 Rb	2.0967 HD	67.71 sR	0.0002	318	12	B	3	9 Rb	0.5949 HD	29.20 sR	0.0001
260	6	B	3	8 Rf	2.2914 HD	50.70 sR	0.0002	319	13	B	3	9 Rf	2.8320 HD	46.61 sR	0.0001
261	6	B	3	8 Rb	0.6133 HD	32.72 sR	0.0001	320	13	B	3	9 Rb	0.3833 HD	20.52 sR	0.0000
262	7	B	3	8 Rf	3.8151 HD	83.22 sR	0.0003	321	14	B	3	9 Rf	2.6636 HD	97.22 sR	0.0001
263	7	B	3	8 Rb	0.7423 HD	67.09 sR	0.0002	322	14	B	3	9 Rb	0.1877 HD	59.33 sR	0.0001
264	8	B	3	8 Rf	1.3187 HD	67.56 sR	0.0001	323	15	B	3	9 Rf	1.4586 HD	63.68 sR	0.0001
265	8	B	3	8 Rb	2.1660 HD	69.81 sR	0.0002	324	15	B	3	9 Rb	1.4097 HD	88.07 sR	0.0002
266	9	B	3	8 Rf	2.9164 HD	72.11 sR	0.0002	325	16	B	3	9 Rf	0.1472 HD	63.77 sR	0.0002
267	9	B	3	8 Rb	0.0743 HD	60.85 sR	0.0002	326	49	B	9	Sh	0.0015 dz	-0.0015 Z	100.0000
268	10	B	3	8 Rf	2.8612 HD	44.22 sR	0.0000	327	49	B	16	Db	571.04 Df	577.00 Z	100.0015
269	10	B	3	8 Rb	2.8271 HD	44.34 sR	0.0001	328	Final línea			9			
270	11	B	3	8 Rf	0.0415 HD	60.62 sR	0.0001		END						
271	11	B	3	8 Rb	2.8577 HD	74.31 sR	0.0001								
272	12	B	3	8 Rf	2.1084 HD	67.65 sR	0.0002								
273	12	B	3	8 Rb	1.3717 HD	65.68 sR	0.0001								
274	13	B	3	8 Rf	0.7958 HD	68.93 sR	0.0001								
275	13	B	3	8 Rb	3.2986 HD	65.34 sR	0.0002								
276	14	B	3	8 Rf	0.0966 HD	50.45 sR	0.0001								
277	14	B	3	8 Rb	2.2836 HD	49.58 sR	0.0001								
278	15	B	3	8 Rf	2.0890 HD	68.94 sR	0.0002								
279	15	B	3	8 Rb	0.4524 HD	41.71 sR	0.0001								
280	16	B	3	8 Rf	3.9736 HD	53.91 sR	0.0003								
281	16	B	3	8 Rb	0.0418 HD	34.71 sR	0.0001								
282	17	B	3	8 Rf	3.6888 HD	43.78 sR	0.0001								
283	17	B	3	8 Rb	0.1219 HD	28.35 sR	0.0000								
284	18	B	3	8 Rf	3.9226 HD	52.36 sR	0.0001								
285	18	B	3	8 Rb	0.8714 HD	26.56 sR	0.0001								
286	19	B	3	8 Rf	3.1558 HD	59.18 sR	0.0002								
287	19	B	3	8 Rb	0.2193 HD	51.69 sR	0.0003								
288	20	B	3	8 Rf	3.4381 HD	69.90 sR	0.0001								
289	50	B		8 Sh	-0.0043 dz	0.0043 Z	100.0000								
290	50	B	20	8 Db	1046.18 Df	1110.11 Z	99.9957								
291	Final línea			8											
292	Principio Línea		AD	9											
293	49	B		9		Z	100.0000								
294	49	B	3	9 Rb	0.2069 HD	61.14 sR	0.0002								
295	1	B	3	9 Rf	1.4689 HD	90.41 sR	0.0003								

CERTIFICADO DE CALIBRACION

SERVICIOS TECN. TOPOG.Y BATIMETRIA , SCCL
BOFARULL, 14 BAJOS
08027 BARCELONA

Nº CERTIFICADO: 30728

BARCELONA: 12-01-2009

IDENTIFICACION INSTRUMENTO

EQUIPO: NIVEL DIGITAL DINI22
MARCA: TRIMBLE

Nº SERIE: 702527A
MODELO: DINI22

Temperatura ambiental: 22°C

Sala de control totalmente antiestática.
Banco de pruebas JOHANSSON antivibratorio de granito.

IDENTIFICACION DE PATRONES

Colimador 0001, 0002, 0003 y 0004 marca STANDARD-TOPCON
CÓDIGO CEM 118-03-4793 / TRAZABILIDAD CEM-PT- 1.6-06
según certificado CEM-C-05/0211-1.6

INCERTIDUMBRE DE PATRONES DE MEDIDAS: U=±0,7 mgon (K=2) Ang. Vertical
U=±0,7 mgon (K=2) Ang. Horizontal

PROCEDIMIENTOS

Ajuste y revisado siguiendo el método de control MI-ALT-001.

REGISTRO DE MEDIDAS

	REGISTRO ENTRADA	TOLERANCIA 100m	REGISTRO SALIDA
DESVIACION HZ ESTANDAR mm	0.03	0.07	0.03

INCERTIDUMBRE DE LAS MEDIDAS: ±0.1mm en 1km

La desviación estándar de las medidas están referidas según la norma DIN 18723

ENTIDAD CERTIFICADORALaboratorio homologado según certificado 79/98-1.W., por la empresa TRIMBLE
según normas DIN EN ISO 9001:2000.

Número de registro de control metrológico: 02-D.73

Certificamos que el equipo arriba indicado ha superado las pruebas de control
que se realizan periódicamente garantizando que su funcionamiento cumple con
sus especificaciones técnicas.

PROXIMA REVISION RECOMENDADA: 12-01-2011

AL-TOP TOPOGRAFIA, S.A.
Fdo. DAVID LASHERAS



3.8.- CÁLCULOS Y COMPENSACIÓN DE LA NIVELACIÓN

Base	L. Atrás	L. Frente	Desniveles
BN 61	10457		
	14981	13000	
BN 60	8919	14492	-0,205
	15919	14536	
	19075	8933	
	33050	16875	
BN 62	27375	28853	0,777
	17173	31479	
	9476	19473	
	16006	17227	
BN 60	14666	9633	-0,778
	14275	14576	
BN 61		12296	0,207
Cierre tramo	201372	201373	0,000
Long. Tramo	1519,09		
BN 62	24493		
	24884	3239	
	28927	5337	
	18589	4722	
BN 59	15808	15874	6,772
	3245	18519	
	11478	31932	
	2940	26538	
BN 62		24191	-6,771
Cierre tramo	130364	130352	0,001
Long. Tramo	515,84		
BN 62	17433		
	16774	14938	
BN 63	14271	14970	0,430
	16064	16605	
	19291	12889	
BN 64	11296	9271	1,086

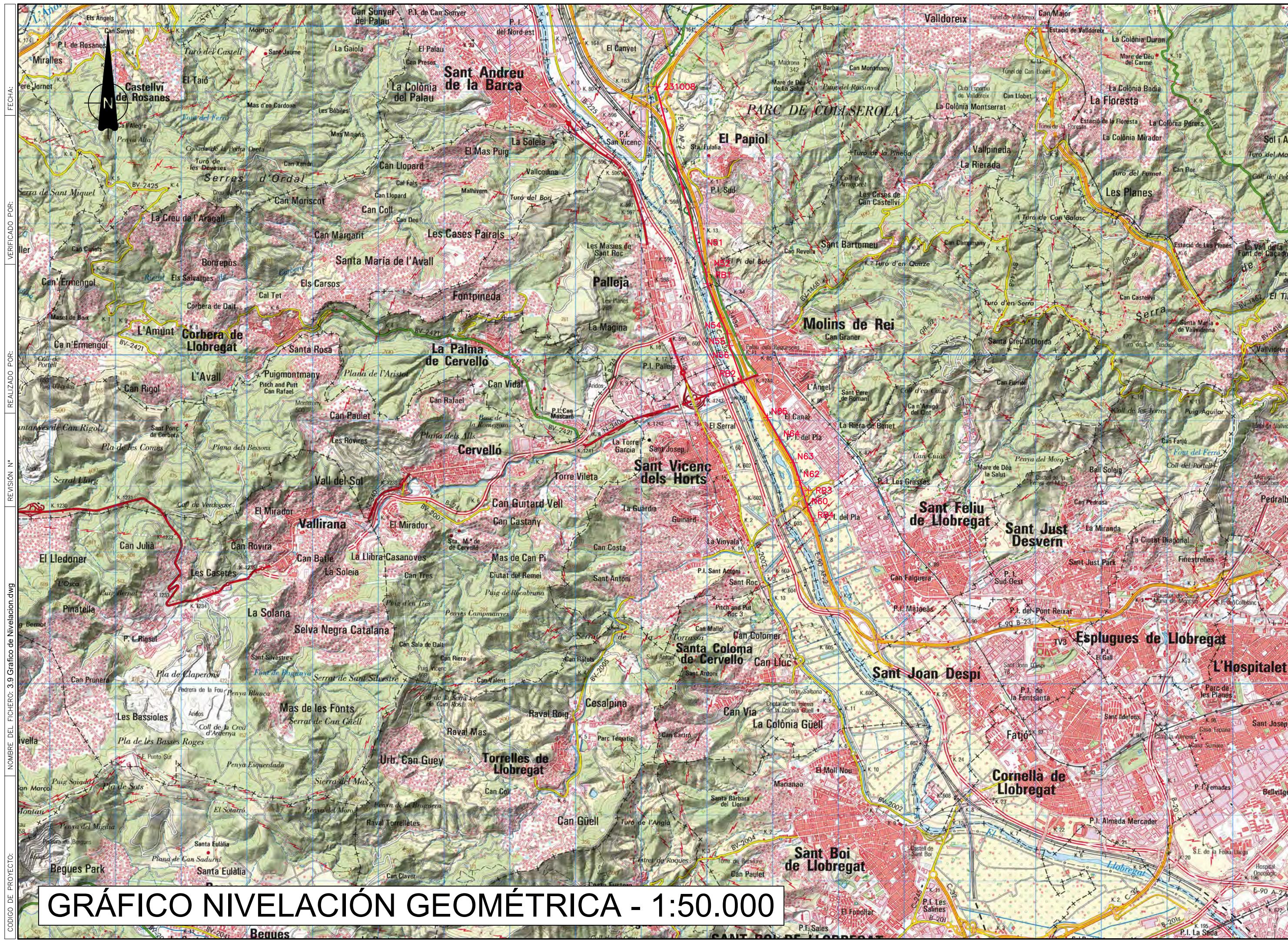
Base	L. Atrás	L. Frente	Desniveles
	20910	20363	
	15793	16360	
BN 65	23506	16350	-0,507
	18150	14860	
	20723	13084	
	17276	12120	
	20479	13438	
	38582	11256	
	38854	11003	
	20150	8601	
BR 57	10751	11471	10,189
	2063	28889	
	8509	30656	
	14006	28131	
	13798	22562	
	13319	17884	
	13250	19273	
	12427	19752	
	15219	15410	
BR 65	15656	22649	-10,186
	17797	16313	
	18023	22182	
	17442	10240	
BR 64	11193	15103	0,508
	15135	23405	
	20819	17590	
BR 63	14866	17012	-1,086
	14959	16909	
BN 62		17198	-0,428
Cierre tramo	578784	578737	0,005
Long. Tramo	3980,15		
BN 57	7084		
	2321	36071	
	27326	27376	
	28686	2957	
	4330	13502	
	13756	22931	

Base	L. Atrás	L. Frente	Desniveles
BN 56	15974	13013	-3,235
BN 55	14804	8706	0,727
	16256	11129	
BN 54	19960	14180	0,575
	18539	9419	
	35390	2244	
	22124	8613	
BN 53	11110	12392	6,335
	7084	21242	
	1799	30998	
	13089	19515	
	14044	20051	
BN 54	14992	18681	-6,336
	11973	17337	
BN 55	4450	15361	-0,573
BN 56	14441	11718	-0,727
	27344	8159	
	114	19317	
	27128	36195	
	32765	767	
BN 57		4976	3,238
Cierre tramo	406883	406850	0,003
Long. Tramo	3210,86		
BN 53	22172		
BN 52	1767	21874	0,030
	3354	25546	
	9354	25630	
BN 51	24715	24717	-6,142
	29819	9829	
	31016	6045	
BN 52	21721	8319	6,136
BN 53		22029	-0,031
Cierre tramo	143918	143989	-0,007
Long.	1026,32		

Base	L. Atrás	L. Frente	Desniveles
Tramo			
BN 51	14550		
	19300	10481	
	22377	12432	
	16130	10343	
	22849	11783	
	13668	20946	
	15806	13260	
BN 50	4131	4417	4,102
	13281	15522	
	21207	13699	
	11730	23115	
	10218	16076	
	12069	22252	
	11022	19249	
BN 51		14782	-4,104
Cierre tramo	208338	208357	-0,002
Long. Tramo	2190,35		
BN 50	33419		
	27588	1222	
	39086	4752	
	38097	1100	
	38333	1615	
	20967	3128	
	6133	22914	
	7423	38151	
	21660	13187	
	743	29164	
BN 49	28271	28612	8,960
	28577	415	
	13717	21084	
	32986	7958	
	22836	966	
	4524	20890	
	418	39736	
	1219	36888	

Base	L. Atrás	L. Frente	Desniveles
	8714	39226	
	2193	31558	
BN 50		34381	-8,965
Cierre tramo	376904	376947	-0,004
Long. Tramo	2156,29		
BN 49	2069		
	14533	14689	
	26486	1820	
	28936	3676	
	22529	6568	
	33898	15371	
	35596	3331	
	30407	9166	
NAP	10554	10554	12,928
	6308	30410	
	2259	32795	
	15574	32760	
	5949	22736	
	3833	28320	
	1877	26636	
	14097	14586	
BN 49		1472	-12,926
Cierre tramo	254905	254890	0,002
Long. Tramo	1148,04		
Long. Total	15746,94		

3.9.- GRÁFICO DE NIVELACIÓN



3.10.- OBSERVACIONES GPS

3.10.1.- Líneas base, cálculo y ajuste

OBSERVACIONES GPS – PUNTOS DE APOYO

TRAB

Trabajo Molins de Rei

ELILOC

Rad local 6378388.000 Acha. 296.9999996135

LOCAL

Lat proy <nulo> D.eje norte 0.000

Long proy <nulo> D.eje este 0.000

Alt proy 0.000 Escala 1.0000000000

PROY

Mercator Transversa

Lat orig 0°00'00.00000"N Nrte orig 0.000

Lng orig 3°00'00.00000"E Este orig 500000.000

Alt orig <nulo> Elev orig <nulo>

Orient 1 <nulo> Orient 2 <nulo>

Escala 0.9996000000

DATUM

Siete parámetros

Rad orig 6378137.000 Acha orig 298.2572229329

Rotn X -0°00'02.093088" Rotn Y -0°00'00.001406"

Rotn Z -0°00'00.107709" Tras X 136.654

Tras Y 141.463 Tras Z 167.298

Escala -11.54597600

PLANO

Nrte orig <nulo> Este orig <nulo>

Tras N <nulo> Tras E <nulo>

Rotación <nulo> Escala <nulo>

AJUSALT

Modelo geoidal

Nrte orig 0.000 Pendiente N 0.000

Este orig 0.000 Pendiente E 0.000

Const ajuste 0.000

Geoide CAT70260

COORD

Nombre sistema Spain (UTM)

Nombre zona Catalunya (ICC)

Nombre datum ED 50 (Catalunya ICC 2006)

Opción sist coord Elegido de la biblioteca

VECGPS TP

ID punto 9001 DX 1763.737 DY 3917.729

Clase Normal DZ -2530.365 Código pa

Obs Area ancha fija Pr.H 0.006 Pr.V 0.009

GPSQC1 NM

Mín SVs 7 PDOP máx 1.2

DOPs relativas Sí Máx HDOP 0.6

Total pos GPS 16 Máx VDOP 1.0

Estado monitor Not monitored RMS 22.8

DT horz DT vert

Sem inic 1526 seg 126876.0 Sem fin 1526 seg 126895.0

VECGPS TP

ID punto 9002 DX 1535.484 DY 3756.728

Clase Normal DZ -2264.781 Código pa

Obs Area ancha fija Pr.H 0.006 Pr.V 0.011

GPSQC1 NM

Mín SVs 6 PDOP máx 1.3

DOPs relativas Sí Máx HDOP 0.6

Total pos GPS 16 Máx VDOP 1.1

Estado monitor Not monitored RMS 22.3

DT horz DT vert

Sem inic 1526 seg 132756.0 Sem fin 1526 seg 132771.0

VECGPS TP

ID punto 9003 DX 1239.391 DY 3627.434

Clase Normal DZ -1921.622 Código pa

Obs Area ancha fija Pr.H 0.006 Pr.V 0.011

GPSQC1 NM

Mín SVs 7 PDOP máx 1.3

DOPs relativas Sí Máx HDOP 0.6

Total pos GPS 5 Máx VDOP 1.1

Estado monitor Not monitored RMS 19.7

DT horz DT vert

Sem inic 1526 seg 133645.0 Sem fin 1526 seg 133651.0

VECGPS TP

ID punto 9004 DX 1028.375 DY 3378.093

Clase Normal DZ -1671.320 Código pa

Obs Area ancha fija Pr.H 0.006 Pr.V 0.011

GPSQC1 NM

Mín SVs 7 PDOP máx 1.2

DOPs relativas Sí Máx HDOP 0.6

Total pos GPS 6 Máx VDOP 1.1

Estado monitor Not monitored RMS 23.5

DT horz DT vert

Sem inic 1526 seg 134403.0 Sem fin 1526 seg 134410.0

VECGPS TP
 ID punto 9005 DX 761.314 DY 3277.447
 Clase Normal DZ -1358.990 Código pa
 Obs Area ancha fija Pr.H 0.005 Pr.V 0.010

GPSQC1 NM
 Mín SVs 7 PDOP máx 1.2
 DOPs relativas Sí Máx HDOP 0.5
 Total pos GPS 10 Máx VDOP 1.1
 Estado monitor Not monitored RMS 17.8
 DT horz DT vert
 Sem inic 1526 seg 135373.0 Sem fin 1526 seg 135385.0

VECGPS TP
 ID punto 9006 DX 572.821 DY 3053.957
 Clase Normal DZ -1139.574 Código pa
 Obs Area ancha fija Pr.H 0.009 Pr.V 0.015

GPSQC1 NM
 Mín SVs 5 PDOP máx 1.8
 DOPs relativas Sí Máx HDOP 0.9
 Total pos GPS 11 Máx VDOP 1.6
 Estado monitor Not monitored RMS 21.6
 DT horz DT vert
 Sem inic 1526 seg 136158.0 Sem fin 1526 seg 136168.0

VECGPS TP
 ID punto 9007 DX 369.033 DY 2824.944
 Clase Normal DZ -892.805 Código pa
 Obs Area ancha fija Pr.H 0.006 Pr.V 0.017

GPSQC1 NM
 Mín SVs 6 PDOP máx 1.9
 DOPs relativas Sí Máx HDOP 0.7
 Total pos GPS 10 Máx VDOP 1.8
 Estado monitor Not monitored RMS 10.5
 DT horz DT vert
 Sem inic 1526 seg 137202.0 Sem fin 1526 seg 137211.0

VECGPS TP
 ID punto 9008 DX 110.602 DY 2686.433
 Clase Normal DZ -562.246 Código pa
 Obs Area ancha fija Pr.H 0.006 Pr.V 0.013

GPSQC1 NM
 Mín SVs 6 PDOP máx 1.5
 DOPs relativas Sí Máx HDOP 0.6
 Total pos GPS 13 Máx VDOP 1.3
 Estado monitor Not monitored RMS 9.5
 DT horz DT vert
 Sem inic 1526 seg 140029.0 Sem fin 1526 seg 140042.0

VECGPS TP
 ID punto 9009 DX -204.689 DY 2471.794
 Clase Normal DZ -202.480 Código pa
 Obs Area ancha fija Pr.H 0.005 Pr.V 0.007

GPSQC1 NM
 Mín SVs 8 PDOP máx 0.8
 DOPs relativas Sí Máx HDOP 0.5
 Total pos GPS 8 Máx VDOP 0.7
 Estado monitor Not monitored RMS 22.8
 DT horz DT vert
 Sem inic 1526 seg 141210.0 Sem fin 1526 seg 141218.0

VECGPS TP
 ID punto 9010 DX -462.125 DY 2333.181
 Clase Normal DZ 73.989 Código pa
 Obs Area ancha fija Pr.H 0.004 Pr.V 0.005

GPSQC1 NM
 Mín SVs 9 PDOP máx 0.7
 DOPs relativas Sí Máx HDOP 0.4
 Total pos GPS 15 Máx VDOP 0.5
 Estado monitor Not monitored RMS 22.8
 DT horz DT vert
 Sem inic 1526 seg 142182.0 Sem fin 1526 seg 142197.0

VECGPS TP
 ID punto 9011 DX -610.065 DY 2050.874
 Clase Normal DZ 271.500 Código pa
 Obs Area ancha fija Pr.H 0.004 Pr.V 0.005

GPSQC1 NM
 Mín SVs 9 PDOP máx 0.6
 DOPs relativas Sí Máx HDOP 0.4
 Total pos GPS 6 Máx VDOP 0.5
 Estado monitor Not monitored RMS 21.9
 DT horz DT vert
 Sem inic 1526 seg 143300.0 Sem fin 1526 seg 143309.0

VECGPS TP
 ID punto 9012 DX -763.249 DY 1673.307
 Clase Normal DZ 523.025 Código pa
 Obs Area ancha fija Pr.H 0.004 Pr.V 0.006

GPSQC1 NM
 Mín SVs 8 PDOP máx 0.8
 DOPs relativas Sí Máx HDOP 0.5
 Total pos GPS 11 Máx VDOP 0.6
 Estado monitor Not monitored RMS 13.5
 DT horz DT vert
 Sem inic 1526 seg 145683.0 Sem fin 1526 seg 145693.0

VECGPS TP
ID punto 9013 DX -1096.348 DY 1788.553
Clase Normal DZ 826.361 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.008

GPSQC1 NM
Mín SVs 8 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 7 Máx VDOP 0.9
Estado monitor Not monitored RMS 14.9
DT horz DT vert
Sem inic 1526 seg 146722.0 Sem fin 1526 seg 146731.0

VECGPS TP
ID punto 9014 DX -1322.771 DY 1552.864
Clase Normal DZ 1083.892 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.011

GPSQC1 NM
Mín SVs 7 PDOP máx 1.2
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 10 Máx VDOP 1.1
Estado monitor Not monitored RMS 14.6
DT horz DT vert
Sem inic 1526 seg 147214.0 Sem fin 1526 seg 147223.0

VECGPS TP
ID punto 9015 DX -1619.111 DY 1428.712
Clase Normal DZ 1482.337 Código pa
Obs Area ancha fija Pr.H 0.006 Pr.V 0.016

GPSQC1 NM
Mín SVs 7 PDOP máx 1.7
DOPs relativas Sí Máx HDOP 0.6
Total pos GPS 11 Máx VDOP 1.6
Estado monitor Not monitored RMS 20.3
DT horz DT vert
Sem inic 1526 seg 148192.0 Sem fin 1526 seg 148202.0

VECGPS TP
ID punto 9016 DX 2042.444 DY 4130.159
Clase Normal DZ -2856.641 Código pa
Obs Area ancha fija Pr.H 0.007 Pr.V 0.008

GPSQC1 NM
Mín SVs 7 PDOP máx 1.1
DOPs relativas Sí Máx HDOP 0.7
Total pos GPS 10 Máx VDOP 0.9
Estado monitor Not monitored RMS 24.6
DT horz DT vert
Sem inic 1526 seg 196215.0 Sem fin 1526 seg 196234.0

VECGPS TP
ID punto 9017 DX 2503.928 DY 4436.759
Clase Normal DZ -3393.016 Código pa
Obs Area ancha fija Pr.H 0.006 Pr.V 0.011

GPSQC1 NM
Mín SVs 6 PDOP máx 1.3
DOPs relativas Sí Máx HDOP 0.7
Total pos GPS 10 Máx VDOP 1.1
Estado monitor Not monitored RMS 20.7
DT horz DT vert
Sem inic 1526 seg 197538.0 Sem fin 1526 seg 197550.0

VECGPS TP
ID punto 9018 DX 2269.799 DY 4275.865
Clase Normal DZ -3117.295 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.008

GPSQC1 NM
Mín SVs 9 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 10 Máx VDOP 0.8
Estado monitor Not monitored RMS 17.2
DT horz DT vert
Sem inic 1526 seg 198519.0 Sem fin 1526 seg 198532.0

VECGPS TP
ID punto 9019 DX 2586.748 DY 3420.446
Clase Normal DZ -3447.846 Código pa
Obs Area ancha fija Pr.H 0.006 Pr.V 0.009

GPSQC1 NM
Mín SVs 9 PDOP máx 1.1
DOPs relativas Sí Máx HDOP 0.6
Total pos GPS 6 Máx VDOP 0.9
Estado monitor Not monitored RMS 29.1
DT horz DT vert
Sem inic 1526 seg 201859.0 Sem fin 1526 seg 201868.0

VECGPS TP
ID punto 9020 DX 2321.954 DY 3331.597
Clase Normal DZ -3147.502 Código pa
Obs Area ancha fija Pr.H 0.007 Pr.V 0.009

GPSQC1 NM
Mín SVs 7 PDOP máx 1.2
DOPs relativas Sí Máx HDOP 0.7
Total pos GPS 8 Máx VDOP 0.9
Estado monitor Not monitored RMS 28.2
DT horz DT vert
Sem inic 1526 seg 202752.0 Sem fin 1526 seg 202761.0

VECGPS TP
 ID punto 9021 DX 2078.821 DY 3057.531
 Clase Normal DZ -2854.833 Código pa
 Obs Area ancha fija Pr.H 0.007 Pr.V 0.008

GPSQC1 NM
 Mín SVs 8 PDOP máx 1.1
 DOPs relativas Sí Máx HDOP 0.7
 Total pos GPS 14 Máx VDOP 0.9
 Estado monitor Not monitored RMS 19.1
 DT horz DT vert
 Sem inic 1526 seg 203634.0 Sem fin 1526 seg 203648.0

VECGPS TP
 ID punto 9022 DX 1856.377 DY 2927.153
 Clase Normal DZ -2597.394 Código pa
 Obs Area ancha fija Pr.H 0.007 Pr.V 0.007

GPSQC1 NM
 Mín SVs 8 PDOP máx 1.0
 DOPs relativas Sí Máx HDOP 0.7
 Total pos GPS 8 Máx VDOP 0.7
 Estado monitor Not monitored RMS 18.4
 DT horz DT vert
 Sem inic 1526 seg 204478.0 Sem fin 1526 seg 204487.0

VECGPS TP
 ID punto 9023 DX 1573.458 DY 2802.742
 Clase Normal DZ -2270.853 Código pa
 Obs Area ancha fija Pr.H 0.007 Pr.V 0.007

GPSQC1 NM
 Mín SVs 8 PDOP máx 1.0
 DOPs relativas Sí Máx HDOP 0.7
 Total pos GPS 12 Máx VDOP 0.7
 Estado monitor Not monitored RMS 17.7
 DT horz DT vert
 Sem inic 1526 seg 205562.0 Sem fin 1526 seg 205579.0

VECGPS TP
 ID punto 9024 DX 1316.760 DY 2560.793
 Clase Normal DZ -1969.062 Código pa
 Obs Area ancha fija Pr.H 0.007 Pr.V 0.007

GPSQC1 NM
 Mín SVs 7 PDOP máx 1.0
 DOPs relativas Sí Máx HDOP 0.7
 Total pos GPS 15 Máx VDOP 0.7
 Estado monitor Not monitored RMS 20.5
 DT horz DT vert
 Sem inic 1526 seg 206350.0 Sem fin 1526 seg 206364.0

VECGPS TP
 ID punto 9025 DX 1046.368 DY 2413.317
 Clase Normal DZ -1655.193 Código pa
 Obs Area ancha fija Pr.H 0.006 Pr.V 0.009

GPSQC1 NM
 Mín SVs 7 PDOP máx 1.1
 DOPs relativas Sí Máx HDOP 0.6
 Total pos GPS 10 Máx VDOP 0.9
 Estado monitor Not monitored RMS 21.0
 DT horz DT vert
 Sem inic 1526 seg 208053.0 Sem fin 1526 seg 208063.0

VECGPS TP
 ID punto 9026 DX 798.446 DY 2253.983
 Clase Normal DZ -1365.645 Código pa
 Obs Area ancha fija Pr.H 0.005 Pr.V 0.010

GPSQC1 NM
 Mín SVs 6 PDOP máx 1.2
 DOPs relativas Sí Máx HDOP 0.5
 Total pos GPS 14 Máx VDOP 1.1
 Estado monitor Not monitored RMS 9.7
 DT horz DT vert
 Sem inic 1526 seg 209099.0 Sem fin 1526 seg 209114.0

VECGPS TP
 ID punto 9027 DX 619.555 DY 2097.129
 Clase Normal DZ -1156.988 Código pa
 Obs Area ancha fija Pr.H 0.005 Pr.V 0.010

GPSQC1 NM
 Mín SVs 6 PDOP máx 1.2
 DOPs relativas Sí Máx HDOP 0.5
 Total pos GPS 7 Máx VDOP 1.1
 Estado monitor Not monitored RMS 11.1
 DT horz DT vert
 Sem inic 1526 seg 209797.0 Sem fin 1526 seg 209806.0

VECGPS TP
 ID punto 9028 DX 391.218 DY 1923.448
 Clase Normal DZ -887.215 Código <sin texto>
 Obs Area ancha fija Pr.H 0.004 Pr.V 0.007

GPSQC1 NM
 Mín SVs 8 PDOP máx 0.8
 DOPs relativas Sí Máx HDOP 0.4
 Total pos GPS 12 Máx VDOP 0.7
 Estado monitor Not monitored RMS 21.1
 DT horz DT vert
 Sem inic 1526 seg 211071.0 Sem fin 1526 seg 211084.0

VECGPS TP
ID punto 9029 DX 105.049 DY 1675.888
Clase Normal DZ -548.918 Código <sin texto>
Obs Area ancha fija Pr.H 0.004 Pr.V 0.007

GPSQC1 NM
Mín SVs 8 PDOP máx 0.8
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 10 Máx VDOP 0.7
Estado monitor Not monitored RMS 14.2
DT horz DT vert
Sem inic 1526 seg 211873.0 Sem fin 1526 seg 211882.0

VECGPS TP
ID punto 9030 DX -143.629 DY 1598.353
Clase Normal DZ -266.650 Código <sin texto>
Obs Area ancha fija Pr.H 0.004 Pr.V 0.006

GPSQC1 NM
Mín SVs 7 PDOP máx 0.8
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 14 Máx VDOP 0.7
Estado monitor Not monitored RMS
DT horz DT vert
Sem inic 1526 seg 212957.0 Sem fin 1526 seg 212973.0

VECGPS TP
ID punto 9031 DX -327.620 DY 1188.573
Clase Normal DZ -38.651 Código <sin texto>
Obs Area ancha fija Pr.H 0.003 Pr.V 0.005

GPSQC1 NM
Mín SVs 8 PDOP máx 0.6
DOPs relativas Sí Máx HDOP 0.3
Total pos GPS 9 Máx VDOP 0.5
Estado monitor Not monitored RMS 13.3
DT horz DT vert
Sem inic 1526 seg 214368.0 Sem fin 1526 seg 214378.0

VECGPS TP
ID punto 9032 DX -509.659 DY 1089.205
Clase Normal DZ 174.186 Código <sin texto>
Obs Area ancha fija Pr.H 0.004 Pr.V 0.006

GPSQC1 NM
Mín SVs 7 PDOP máx 0.8
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 13 Máx VDOP 0.7
Estado monitor Not monitored RMS 17.6
DT horz DT vert
Sem inic 1526 seg 219338.0 Sem fin 1526 seg 219350.0

VECGPS TP
ID punto 9033 DX -821.439 DY 905.729
Clase Normal DZ 544.309 Código <sin texto>
Obs Area ancha fija Pr.H 0.003 Pr.V 0.007

GPSQC1 NM
Mín SVs 7 PDOP máx 0.8
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 13 Máx VDOP 0.7
Estado monitor Not monitored RMS 16.8
DT horz DT vert
Sem inic 1526 seg 220086.0 Sem fin 1526 seg 220098.0

VECGPS RP
ID punto 10575 DX -1118.398 DY 608.621
Clase Normal DZ 890.999 Código <sin texto>
Obs Area ancha fija Pr.H 0.012 Pr.V 0.019

GPSQC1 NM
Mín SVs 8 PDOP máx 2.1
DOPs relativas No Máx HDOP 1.1
Total pos GPS 1 Máx VDOP 1.8
Estado monitor Not monitored RMS 18.7
DT horz DT vert
Sem inic 1526 seg 220968.2 Sem fin 1526 seg 220968.2

VECGPS TP
ID punto 9034 DX -1340.836 DY 490.968
Clase Normal DZ 1145.296 Código <sin texto>
Obs Area ancha fija Pr.H 0.004 Pr.V 0.007

GPSQC1 NM
Mín SVs 7 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 10 Máx VDOP 0.9
Estado monitor Not monitored RMS 17.3
DT horz DT vert
Sem inic 1526 seg 221836.0 Sem fin 1526 seg 221850.0

VECGPS TP
ID punto 9035 DX 2332.405 DY 3942.011
Clase Normal DZ -3178.401 Código <sin texto>
Obs Area ancha fija Pr.H 0.007 Pr.V 0.016

GPSQC1 NM
Mín SVs 7 PDOP máx 1.8
DOPs relativas Sí Máx HDOP 0.7
Total pos GPS 9 Máx VDOP 1.6
Estado monitor Not monitored RMS 14.9
DT horz DT vert
Sem inic 1526 seg 224076.0 Sem fin 1526 seg 224085.0

VECGPS TP
 ID punto 9036 DX 1471.668 DY 3216.651
 Clase Normal DZ -2166.683 Código <sin texto>
 Obs Area ancha fija Pr.H 0.006 Pr.V 0.013

GPSQC1 NM
 Mín SVs 8 PDOP máx 1.4
 DOPs relativas Sí Máx HDOP 0.6
 Total pos GPS 9 Máx VDOP 1.3
 Estado monitor Not monitored RMS 19.1
 DT horz DT vert
 Sem inic 1526 seg 224920.0 Sem fin 1526 seg 224929.0

VECGPS TP
 ID punto 9037 DX 308.398 DY 2318.882
 Clase Normal DZ -807.695 Código <sin texto>
 Obs Area ancha fija Pr.H 0.006 Pr.V 0.011

GPSQC1 NM
 Mín SVs 6 PDOP máx 1.3
 DOPs relativas Sí Máx HDOP 0.6
 Total pos GPS 14 Máx VDOP 1.1
 Estado monitor Not monitored RMS 14.4
 DT horz DT vert
 Sem inic 1526 seg 226286.0 Sem fin 1526 seg 226300.0

VECGPS TP
 ID punto 9038 DX -478.418 DY 1751.072
 Clase Normal DZ 123.857 Código <sin texto>
 Obs Area ancha fija Pr.H 0.005 Pr.V 0.008

GPSQC1 NM
 Mín SVs 7 PDOP máx 1.0
 DOPs relativas Sí Máx HDOP 0.5
 Total pos GPS 10 Máx VDOP 0.8
 Estado monitor Not monitored RMS 18.1
 DT horz DT vert
 Sem inic 1526 seg 227284.0 Sem fin 1526 seg 227294.0

VECGPS TP
 ID punto 9039 DX -1454.356 DY 1059.512
 Clase Normal DZ 1248.724 Código <sin texto>
 Obs Area ancha fija Pr.H 0.004 Pr.V 0.005

GPSQC1 NM
 Mín SVs 8 PDOP máx 0.7
 DOPs relativas Sí Máx HDOP 0.4
 Total pos GPS 10 Máx VDOP 0.6
 Estado monitor Not monitored RMS 21.5
 DT horz DT vert
 Sem inic 1526 seg 228231.0 Sem fin 1526 seg 228241.0

VECGPS TP
 ID punto 9040 DX 2703.834 DY 2676.090
 Clase Normal DZ -3520.022 Código <sin texto>
 Obs Area ancha fija Pr.H 0.007 Pr.V 0.009

GPSQC1 NM
 Mín SVs 8 PDOP máx 1.6
 DOPs relativas Sí Máx HDOP 1.0
 Total pos GPS 10 Máx VDOP 1.2
 Estado monitor Not monitored RMS 20.6
 DT horz DT vert
 Sem inic 1526 seg 230688.0 Sem fin 1526 seg 230698.0

VECGPS TP
 ID punto 9041 DX 2551.742 DY 2405.352
 Clase Normal DZ -3309.963 Código <sin texto>
 Obs Area ancha fija Pr.H 0.006 Pr.V 0.008

GPSQC1 NM
 Mín SVs 8 PDOP máx 1.1
 DOPs relativas Sí Máx HDOP 0.6
 Total pos GPS 10 Máx VDOP 0.9
 Estado monitor Not monitored RMS 21.8
 DT horz DT vert
 Sem inic 1526 seg 231554.0 Sem fin 1526 seg 231565.0

VECGPS TP
 ID punto 9042 DX 2428.147 DY 2328.167
 Clase Normal DZ -3163.521 Código pa
 Obs Area ancha fija Pr.H 0.007 Pr.V 0.008

GPSQC1 NM
 Mín SVs 8 PDOP máx 1.1
 DOPs relativas Sí Máx HDOP 0.7
 Total pos GPS 7 Máx VDOP 0.8
 Estado monitor Not monitored RMS 23.9
 DT horz DT vert
 Sem inic 1526 seg 282529.0 Sem fin 1526 seg 282537.0

VECGPS TP
 ID punto 9043 DX 2122.179 DY 2048.418
 Clase Normal DZ -2850.644 Código pa
 Obs Area ancha fija Pr.H 0.006 Pr.V 0.009

GPSQC1 NM
 Mín SVs 7 PDOP máx 1.1
 DOPs relativas Sí Máx HDOP 0.6
 Total pos GPS 10 Máx VDOP 0.9
 Estado monitor Not monitored RMS 22.8
 DT horz DT vert
 Sem inic 1526 seg 283773.0 Sem fin 1526 seg 283786.0

VECGPS TP
ID punto 9044 DX 1796.284 DY 2104.062
Clase Normal DZ -2487.712 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.008

GPSQC1 NM
Mín SVs 9 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 9 Máx VDOP 0.8
Estado monitor Not monitored RMS 19.1
DT horz DT vert
Sem inic 1526 seg 285980.0 Sem fin 1526 seg 285991.0

VECGPS TP
ID punto 9045 DX 1575.418 DY 1868.153
Clase Normal DZ -2203.137 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.008

GPSQC1 NM
Mín SVs 8 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 8 Máx VDOP 0.9
Estado monitor Not monitored RMS 24.9
DT horz DT vert
Sem inic 1526 seg 286974.0 Sem fin 1526 seg 286984.0

VECGPS TP
ID punto 9046 DX 1392.926 DY 1690.994
Clase Normal DZ -1993.153 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.008

GPSQC1 NM
Mín SVs 6 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.6
Total pos GPS 13 Máx VDOP 0.9
Estado monitor Not monitored RMS 18.3
DT horz DT vert
Sem inic 1526 seg 289090.0 Sem fin 1526 seg 289102.0

VECGPS TP
ID punto 9047 DX 1388.516 DY 1720.531
Clase Normal DZ -1998.449 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.007

GPSQC1 NM
Mín SVs 6 PDOP máx 0.9
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 7 Máx VDOP 0.7
Estado monitor Not monitored RMS 20.2
DT horz DT vert
Sem inic 1526 seg 289264.0 Sem fin 1526 seg 289273.0

VECGPS TP
ID punto 9048 DX 1082.097 DY 1404.919
Clase Normal DZ -1627.196 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.006

GPSQC1 NM
Mín SVs 8 PDOP máx 0.8
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 6 Máx VDOP 0.6
Estado monitor Not monitored RMS 17.5
DT horz DT vert
Sem inic 1526 seg 290181.0 Sem fin 1526 seg 290188.0

VECGPS TP
ID punto 9049 DX 871.464 DY 1246.307
Clase Normal DZ -1397.171 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.005

GPSQC1 NM
Mín SVs 8 PDOP máx 0.7
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 6 Máx VDOP 0.5
Estado monitor Not monitored RMS 26.7
DT horz DT vert
Sem inic 1526 seg 291333.0 Sem fin 1526 seg 291339.0

VECGPS TP
ID punto 9050 DX 537.197 DY 1214.852
Clase Normal DZ -1020.525 Código pa
Obs Area ancha fija Pr.H 0.006 Pr.V 0.007

GPSQC1 NM
Mín SVs 6 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.7
Total pos GPS 13 Máx VDOP 0.7
Estado monitor Not monitored RMS 19.2
DT horz DT vert
Sem inic 1526 seg 292270.0 Sem fin 1526 seg 292283.0

VECGPS TP
ID punto 9051 DX 201.511 DY 1169.190
Clase Normal DZ -638.536 Código pa
Obs Area ancha fija Pr.H 0.006 Pr.V 0.008

GPSQC1 NM
Mín SVs 6 PDOP máx 1.1
DOPs relativas Sí Máx HDOP 0.6
Total pos GPS 16 Máx VDOP 0.9
Estado monitor Not monitored RMS 12.2
DT horz DT vert
Sem inic 1526 seg 293405.0 Sem fin 1526 seg 293420.0

VECGPS TP
ID punto 9052 DX 18.283 DY 900.024
Clase Normal DZ -403.187 Código pa
Obs Area ancha fija Pr.H 0.004 Pr.V 0.007

GPSQC1 NM
Mín SVs 7 PDOP máx 0.8
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 11 Máx VDOP 0.7
Estado monitor Not monitored RMS 22.1
DT horz DT vert
Sem inic 1526 seg 294152.0 Sem fin 1526 seg 294164.0

VECGPS TP
ID punto 9053 DX -76.406 DY 577.425
Clase Normal DZ -240.540 Código pa
Obs Area ancha fija Pr.H 0.004 Pr.V 0.007

GPSQC1 NM
Mín SVs 6 PDOP máx 0.9
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 10 Máx VDOP 0.8
Estado monitor Not monitored RMS 19.7
DT horz DT vert
Sem inic 1526 seg 294817.0 Sem fin 1526 seg 294831.0

VECGPS TP
ID punto 9054 DX -440.279 DY 593.587
Clase Normal DZ 158.998 Código pa
Obs Area ancha fija Pr.H 0.004 Pr.V 0.008

GPSQC1 NM
Mín SVs 6 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 13 Máx VDOP 0.9
Estado monitor Not monitored RMS 9.3
DT horz DT vert
Sem inic 1526 seg 295409.0 Sem fin 1526 seg 295423.0

VECGPS TP
ID punto 9055 DX -545.903 DY 276.616
Clase Normal DZ 335.149 Código pa
Obs Area ancha fija Pr.H 0.004 Pr.V 0.008

GPSQC1 NM
Mín SVs 6 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 11 Máx VDOP 0.9
Estado monitor Not monitored RMS 15.6
DT horz DT vert
Sem inic 1526 seg 296216.0 Sem fin 1526 seg 296230.0

VECGPS TP
ID punto 9056 DX -829.906 DY 386.186
Clase Normal DZ 626.630 Código pa
Obs Area ancha fija Pr.H 0.004 Pr.V 0.007

GPSQC1 NM
Mín SVs 6 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 19 Máx VDOP 0.9
Estado monitor Not monitored RMS 15.1
DT horz DT vert
Sem inic 1526 seg 297141.0 Sem fin 1526 seg 297162.0

VECGPS TP
ID punto 9057 DX -726.964 DY 53.795
Clase Normal DZ 589.622 Código pa
Obs Area ancha fija Pr.H 0.003 Pr.V 0.005

GPSQC1 NM
Mín SVs 8 PDOP máx 0.6
DOPs relativas Sí Máx HDOP 0.3
Total pos GPS 13 Máx VDOP 0.6
Estado monitor Not monitored RMS 25.1
DT horz DT vert
Sem inic 1526 seg 298327.0 Sem fin 1526 seg 298346.0

VECGPS TP
ID punto 9058 DX -1007.761 DY -119.603
Clase Normal DZ 862.445 Código pa
Obs Area ancha fija Pr.H 0.003 Pr.V 0.005

GPSQC1 NM
Mín SVs 7 PDOP máx 0.8
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 25 Máx VDOP 0.7
Estado monitor Not monitored RMS 16.0
DT horz DT vert
Sem inic 1526 seg 300426.0 Sem fin 1526 seg 300454.0

VECGPS TP
ID punto 9059 DX -1006.539 DY -119.191
Clase Normal DZ 861.035 Código pa
Obs Area ancha fija Pr.H 0.004 Pr.V 0.005

GPSQC1 NM
Mín SVs 7 PDOP máx 0.8
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 19 Máx VDOP 0.7
Estado monitor Not monitored RMS 17.7
DT horz DT vert
Sem inic 1526 seg 300693.0 Sem fin 1526 seg 300718.0

VECGPS TP
ID punto 9060 DX -1006.180 DY -121.023
Clase Normal DZ 860.758 Código pa
Obs Area ancha fija Pr.H 0.003 Pr.V 0.006

GPSQC1 NM
Mín SVs 7 PDOP máx 0.7
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 17 Máx VDOP 0.6
Estado monitor Not monitored RMS 17.1
DT horz DT vert
Sem inic 1526 seg 300742.0 Sem fin 1526 seg 300762.0

VECGPS TP
ID punto 9061 DX 397.494 DY 1359.891
Clase Normal DZ -870.115 Código pa
Obs Area ancha fija Pr.H 0.004 Pr.V 0.006

GPSQC1 NM
Mín SVs 8 PDOP máx 0.7
DOPs relativas Sí Máx HDOP 0.4
Total pos GPS 20 Máx VDOP 0.6
Estado monitor Not monitored RMS 18.8
DT horz DT vert
Sem inic 1526 seg 306285.0 Sem fin 1526 seg 306304.0

VECGPS TP
ID punto 9062 DX 1243.604 DY 1971.858
Clase Normal DZ -1857.704 Código pa
Obs Area ancha fija Pr.H 0.004 Pr.V 0.008

GPSQC1 NM
Mín SVs 8 PDOP máx 1.0
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 13 Máx VDOP 0.8
Estado monitor Not monitored RMS 15.4
DT horz DT vert
Sem inic 1526 seg 307190.0 Sem fin 1526 seg 307202.0

VECGPS TP
ID punto 9063 DX 2225.564 DY 2831.559
Clase Normal DZ -3013.087 Código pa
Obs Area ancha fija Pr.H 0.006 Pr.V 0.012

GPSQC1 NM
Mín SVs 8 PDOP máx 1.4
DOPs relativas Sí Máx HDOP 0.6
Total pos GPS 16 Máx VDOP 1.2
Estado monitor Not monitored RMS 17.3
DT horz DT vert
Sem inic 1526 seg 308265.0 Sem fin 1526 seg 308281.0

VECGPS TP
ID punto 9064 DX 382.384 DY 3340.339
Clase Normal DZ -850.067 Código pa
Obs Area ancha fija Pr.H 0.005 Pr.V 0.008

GPSQC1 NM
Mín SVs 8 PDOP máx 0.9
DOPs relativas Sí Máx HDOP 0.5
Total pos GPS 5 Máx VDOP 0.8
Estado monitor Not monitored RMS 22.0
DT horz DT vert
Sem inic 1527 seg 298568.0 Sem fin 1527 seg 298573.0

VECGPS TP
ID punto 9065 DX 707.174 DY 3449.558
Clase Normal DZ -1297.252 Código pa
Obs Area ancha fija Pr.H 0.006 Pr.V 0.010

GPSQC1 NM
Mín SVs 8 PDOP máx 1.2
DOPs relativas Sí Máx HDOP 0.6
Total pos GPS 7 Máx VDOP 1.0
Estado monitor Not monitored RMS 20.3
DT horz DT vert
Sem inic 1527 seg 299979.0 Sem fin 1527 seg 299987.0

VECGPS TP
ID punto 9066 DX 875.482 DY 3939.470
Clase Normal DZ -1456.150 Código pa
Obs Area ancha fija Pr.H 0.006 Pr.V 0.009

GPSQC1
NM Mín SVs 8 PDOP máx 1.1
DOPs relativas Sí Máx HDOP 0.6
Total pos GPS 7 Máx VDOP 0.9
Estado monitor Not monitored RMS 27.1
DT horz DT vert
Sem inic 1527 seg 302982.0 Sem fin 1527 seg 302994.

OBSERVACIONES GPS – RED BÁSICA

TRAB

Trabajo Molins de Rei

ELIPLOC

Rad local 6378388.000 Acha. 296.9999996135

LOCAL

Lat proy <nulo> D.eje norte 0.000

Long proy <nulo> D.eje este 0.000

Alt proy 0.000 Escala 1.0000000000

PROY

Mercator Transversa

Lat orig 0°00'00.00000"N Nrte orig 0.000

Lng orig 3°00'00.00000"E Este orig 500000.000

Alt orig <nulo> Elev orig <nulo>

Orient 1 <nulo> Orient 2 <nulo>

Escala 0.9996000000

DATUM

Siete parámetros

Rad orig 6378137.000 Acha orig 298.2572229329

Rotn X -0°00'02.093088" Rotn Y -0°00'00.001406"

Rotn Z -0°00'00.107709" Tras X 136.654

Tras Y 141.463 Tras Z 167.298

Escala -11.54597600

PLANO

Nrte orig <nulo> Este orig <nulo>

Tras N <nulo> Tras E <nulo>

Rotación <nulo> Escala <nulo>

AJUSALT

Modelo geoidal

Nrte orig 0.000 Pendiente N 0.000

Este orig 0.000 Pendiente E 0.000

Const ajuste 0.000

Geoide CAT70260

COORD

Nombre sistema Spain (UTM)

Nombre zona Catalunya (ICC)

Nombre datum ED 50 (Catalunya ICC 2006)

Opción sist coord Elegido de la biblioteca

VECGPS TP

ID punto 53 DX -488.496 DY 1646.498

Clase Normal DZ 137.785 Código br

Obs Area ancha fija Pr.H 0.003 Pr.V 0.004

GPSQC1 NM

Mín SVs 7 PDOP máx 0.7

DOPs relativas Sí Máx HDOP 0.4

Total pos GPS 120 Máx VDOP 0.6

Estado monitor Not monitored RMS 19.0

DT horz DT vert

Sem inic 1527 seg 469103.0 Sem fin 1527 seg 469250.0

VECGPS TP

ID punto 57 DX 453.594 DY 2218.310

Clase Normal DZ -958.954 Código 2

Obs Area ancha fija Pr.H 0.004 Pr.V 0.005

GPSQC1 NM

Mín SVs 8 PDOP máx 0.9

DOPs relativas Sí Máx HDOP 0.5

Total pos GPS 62 Máx VDOP 0.7

Estado monitor Not monitored RMS 27.0

DT horz DT vert

Sem inic 1527 seg 474189.0 Sem fin 1527 seg 474259.0

VECGPS TP

ID punto 59 DX 1516.030 DY 3293.189

Clase Normal DZ -2212.979 Código br

Obs Area ancha fija Pr.H 0.005 Pr.V 0.010

GPSQC1 NM

Mín SVs 8 PDOP máx 1.4

DOPs relativas Sí Máx HDOP 0.6

Total pos GPS 68 Máx VDOP 1.2

Estado monitor Not monitored RMS 19.5

DT horz DT vert

Sem inic 1527 seg 479852.0 Sem fin 1527 seg 479927.0

VECGPS TP

ID punto 61 DX 1818.601 DY 3390.543

Clase Normal DZ -2570.954 Código br

Obs Area ancha fija Pr.H 0.005 Pr.V 0.011

GPSQC1 NM

Mín SVs 7 PDOP máx 1.5

DOPs relativas Sí Máx HDOP 0.6

Total pos GPS 54 Máx VDOP 1.3

Estado monitor Not monitored RMS 27.6

DT horz DT vert

Sem inic 1527 seg 481642.0 Sem fin 1527 seg 481711.0

3.10.2.- Listado de coordenadas

Listado de coordenadas de puntos de apoyo

Punto	Coordenadas ED50		Coordenadas ETRS89		Z	Código
	X	Y	X	Y		
9001	419251,732	4582721,104	419157.689	4582516.974	20,416	PA
9002	419102,935	4583076,514	419008.897	4582872.391	20,601	PA
9003	418989,358	4583533,785	418895.325	4583329.669	22,092	PA
9004	418751,468	4583869,412	418657.439	4583665.304	22,801	PA
9005	418665,002	4584283,408	418570.978	4584079.305	26,491	PA
9006	418451,708	4584580,112	418357.688	4584376.015	24,392	PA
9007	418233,782	4584907,615	418139.766	4584703.524	28,798	PA
9008	418109,287	4585330,887	418015.276	4585126.801	50,089	PA
9009	417911,438	4585816,238	417817.433	4585612.158	46,110	PA
9010	417786,341	4586198,309	417692.341	4585994.233	32,426	PA
9011	417512,389	4586453,844	417418.393	4586249.772	44,797	PA
9012	417143,986	4586756,623	417049.995	4586552.556	86,496	PA
9013	417275,877	4587200,030	417181.890	4586995.965	40,634	PA
9014	417052,343	4587550,782	416958.361	4587346.720	35,204	PA
9015	416944,391	4588049,469	416850.415	4587845.410	73,598	PA
9016	419449,223	4582285,095	419355.174	4582080.958	19,330	PA
9017	419731,181	4581567,617	419637.120	4581363.476	18,968	PA
9018	419582,826	4581934,504	419488.771	4581730.365	21,375	PA
9019	418712,167	4581506,977	418618.107	4581302.856	17,760	PA
9020	418637,284	4581910,080	418543.231	4581705.960	15,384	PA
9021	418376,430	4582299,536	418282.384	4582095.420	19,292	PA
9022	418257,899	4582643,946	418163.858	4582439.834	19,356	PA
9023	418148,495	4583079,890	418054.460	4582875.784	19,749	PA
9024	417920,375	4583484,030	417826.345	4583279.931	20,461	PA
9025	417787,295	4583903,001	417693.270	4583698.908	21,422	PA
9026	417641,205	4584289,309	417547.184	4584085.221	22,860	PA
9027	417493,960	4584569,302	417399.943	4584365.218	22,634	PA
9028	417332,539	4584928,348	417238.526	4584724.268	25,343	PA
9029	417100,384	4585379,514	417006.377	4585175.439	28,117	PA
9030	417035,962	4585758,034	416941.960	4585553.962	26,428	PA
9031	416636,495	4586064,647	416542.498	4585860.580	28,625	PA
9032	416546,834	4586347,863	416452.840	4586143.798	30,412	PA
9033	416380,048	4586837,584	416286.060	4586633.522	36,857	PA
9034	415993,095	4587645,495	415899.118	4587441.437	34,515	PA
9035	419246,208	4581858,899	419152.152	4581654.767	19,023	PA
9036	418567,104	4583210,886	418473.069	4583006.774	23,277	PA
9037	417731,679	4585028,973	417637.666	4584824.889	26,280	PA
9038	417206,095	4586266,596	417112.098	4586062.526	37,884	PA

Punto	Coordenadas ED50		Coordenadas ETRS89		Z	Código
	X	Y	X	Y		
9039	416566,638	4587778,327	416472.660	4587574.267	32,763	PA
9040	417963,152	4581401,308	417869.093	4581197.203	38,129	PA
9041	417701,035	4581668,601	417606.982	4581464.501	55,781	PA
9042	417630,469	4581862,677	417536.419	4581658.578	57,872	PA
9043	417366,791	4582308,959	417272.749	4582104.863	27,915	PA
9044	417439,355	4582794,336	417345.318	4582590.240	24,982	PA
9045	417215,593	4583161,702	417121.561	4582957.613	41,340	PA
9046	417048,233	4583445,769	416954.205	4583241.684	38,717	PA
9047	417077,874	4583443,687	416983.846	4583239.602	32,685	PA
9048	416778,899	4583935,288	416684.877	4583731.210	40,190	PA
9049	416631,432	4584252,321	416537.414	4584048.247	30,259	PA
9050	416617,484	4584756,522	416523.472	4584552.450	27,983	PA
9051	416589,454	4585266,159	416495.448	4585062.089	27,844	PA
9052	416330,455	4585572,912	416236.453	4585368.846	39,153	PA
9053	416013,699	4585768,537	415919.700	4585564.475	67,352	PA
9054	416048,765	4586307,804	415954.772	4586103.743	59,398	PA
9055	415738,216	4586520,576	415644.227	4586316.518	88,520	PA
9056	415862,240	4586922,858	415768.255	4586718.799	71,414	PA
9057	415525,581	4586838,622	415431.596	4586634.565	115,407	PA
9058	415366,698	4587234,599	415272.719	4587030.544	81,012	PA
9059	415367,045	4587232,721	415273.066	4587028.666	81,005	PA
9060	415365,199	4587232,339	415271.220	4587028.284	81,043	PA
9061	416769,579	4584956,523	416675.569	4584752.450	26,555	PA
9062	417336,260	4583636,203	417242.233	4583432.115	23,727	PA
9063	418143,140	4582091,806	418049.092	4581887.696	18,716	PA
9064	418748,304	4584913,005	418654.287	4584708.908	80,727	PA
9065	418839,728	4584359,491	418745.704	4584155.387	31,307	PA
9066	419320,471	4584112,273	419226.443	4583908.159	65,409	PA
10575	416098,941	4587303,883	416004.960	4587099.824	35,977	PA
1111	416855,350	4587065,080	416761.363	4586861.016	31,150	PA-AE
1112	417558,780	4585612,760	417464.774	4585408.682	28,650	PA-AE
1113	418227,340	4584146,911	418133.316	4583942.813	24,883	PA-AE
1114	418895,915					

Listado de coordenadas de la red básica

Punto	X	Y	Z	Código
RB53	417008,207	4586083,243	36,66	RB-1
RB57	417529,738	4584619,088	32,26	RB-2
RB59	418547,221	4582940,122	27,837	RB-3
RB61	418628,491	4582468,562	27,837	RB-4

3.11.- RESTITUCIÓN

3.11.1.-Certificado de calibración del equipo



**PROTOCOLO DE VERIFICACIÓN Y CONTROL
ESCANER FOTOGRAFÉTRICO Leica Geosystems Geospatial Imaging
DSW200**

Cliente: **CARIBERSA S.L. (Madrid)**
Nº de Serie: **0-133**

TOLERANCIAS

Error Medio Cuadrático Residual Placa	=	<	3	micras
Error Medio Cuadrático Residual Geométrico	=	<	3	micras
Tamaño del Pixel	=	±	0.1	micras

VALORES ACTUALES

Error Medio Cuadrático Residual Placa

<input type="text" value="X"/> = 1.6	micras	<input type="text" value="Y"/> = 1.0	micras
---	--------	---	--------

Error Medio Cuadrático Residual Geométrico

<input type="text" value="X"/> = 1.40	mícras	<input type="text" value="Y"/> = 1.40	mícras
--	--------	--	--------

Tamaño del Pixel

<input type="text" value="14.007"/>	micras
-------------------------------------	--------

Este Instrumento ha sido Chequeado, Verificado y Calibrado por personal cualificado y siguiendo normas de **Leica Geosystems Geospatial Imaging**

Fecha de Calibración: 10 de Octubre de 2006



Fdo: Francisco Fernández
Manager Dpto. Asistencia Técnica

- when it has to be right



3.11.2.- Partes de orientación de la Restitución

ORIENTACIÓN ABSOLUTA

416622.851 4587404.538 832.949
 5.587348892220167
 -0.495070204018200 -0.868583244423429 0.021648108468147 Omega: 0.9966
 0.865946570224784 -0.495297209088464 -0.069406139390628 Phi: 4.5243
 0.071007257441134 -0.015614806308387 0.997353571816254 Kappa: -133.0634

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9014	417052.34	4587550.78	35.20	-25.548	-77.510	-142.559	-0.096	0.069	0.048
9033	416380.05	4586837.58	36.86	-76.474	90.215	-136.006	-0.069	-0.028	0.021
9013	417275.88	4587200.03	40.63	-99.613	-81.165	-136.348	0.076	-0.037	-0.068
10575	416098.94	4587303.88	35.98	20.702	92.612	-143.034	0.109	0.008	-0.039
1111	416855.35	4587065.08	31.15	-83.401	-3.815	-138.012	-0.020	-0.013	0.038

EM. = 0.078

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2\7712-7713.abs2

Fecha: 26/5/2009 19:34

ORIENTACIÓN ABSOLUTA

416949.045 4586649.596 825.995
 5.317993921496414
 0.516813931429187 0.853642226787743 0.064794358748043 Omega: 1.4391
 -0.851597381870314 0.520372872324769 -0.063197887148990 Phi: -5.5881
 -0.087665611686305 -0.022517157754312 0.995895435341649 Kappa: 65.2749

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9012	417143.99	4586756.62	86.50	14.005	44.894	-137.387	-0.010	0.039	0.034
9032	416546.83	4586347.86	30.41	22.350	-90.718	-150.294	-0.026	0.018	-0.047
9031	416636.50	4586064.65	28.63	76.436	-104.036	-146.188	0.038	-0.013	0.047
9038	417206.09	4586266.60	37.88	99.300	7.115	-139.902	0.034	0.004	-0.025
9011	417512.39	4586453.84	44.80	98.968	74.591	-137.102	-0.036	-0.048	-0.009

EM. = 0.044

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2\7714-7715.abs2

Fecha: 26/5/2009 19:53

ORIENTACIÓN ABSOLUTA

416785.445 4587024.693 828.551
 5.747413697806625
 0.489871948054773 0.870707860715314 0.043512019001453 Omega: 0.5545
 -0.868720609657483 0.491723882811747 -0.059431687077435 Phi: -4.6606
 -0.073143536046268 -0.008685871349565 0.997283599972218 Kappa: 67.3126

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9012	417143.99	4586756.62	86.50	80.500	32.496	-123.251	0.096	-0.080	-0.141
9033	416380.05	4586837.58	36.86	3.808	-76.218	-138.487	-0.066	0.002	-0.118
9013	417275.88	4587200.03	40.63	25.334	90.497	-134.828	-0.054	0.015	0.059
9032	416546.83	4586347.86	30.41	92.132	-92.858	-133.319	0.023	0.066	0.115
1111	416855.35	4587065.08	31.15	10.002	15.251	-138.267	0.001	-0.004	0.085

EM. = 0.103

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2nuevo\7713-7714.abs2

Fecha: 26/5/2009 19:40

ORIENTACIÓN ABSOLUTA

417123.981 4586277.418 824.327
 5.258320493469526
 0.471945433277047 0.881466875047871 0.016842096136788 Omega: -1.2161
 -0.878749937103530 0.471861329571458 -0.071731678466334 Phi: -4.5351
 -0.071176232335533 0.019053447152590 0.997281760638447 Kappa: 68.6237

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9010	417786.34	4586198.31	32.43	83.388	101.055	-146.984	0.045	0.028	-0.028
9030	417035.96	4585758.03	26.43	89.695	-64.261	-144.530	0.042	0.003	0.028
9011	417512.39	4586453.84	44.80	15.926	78.137	-149.022	-0.085	-0.067	0.078
9031	416636.50	4586064.65	28.63	2.587	-103.690	-149.571	-0.053	0.042	0.009
9038	417206.09	4586266.60	37.88	19.817	9.936	-148.728	0.053	-0.004	-0.088

EM. = 0.070

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2nuevo\7715-7716.abs2

Fecha: 26/5/2009 19:54

ORIENTACIÓN ABSOLUTA

417298.711 4585907.318 821.659

5.320850816490391

0.431127328589007	0.902259293950837	0.007575818308445	Omega:	-1.6719
-0.899387244776795	0.430397751841645	-0.076552982583721	Phi:	-4.6088
-0.072331255184134	0.026190488521479	0.997036733442903	Kappa:	71.5433

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9009	417911.44	4585816.24	46.11	75.584	92.721	-143.148	-0.023	-0.019	0.032
9029	417100.38	4585379.51	28.12	83.931	-80.230	-141.380	0.005	-0.006	-0.026
9010	417786.34	4586198.31	32.43	1.057	102.337	-151.375	0.009	0.030	-0.030
9030	417035.96	4585758.03	26.43	14.754	-60.547	-147.245	0.015	0.002	0.032
1112	417558.78	4585612.76	28.65	81.641	16.372	-143.987	-0.006	-0.008	-0.008

EM. = 0.027

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2nuevo\7716-7717.abs2

Fecha: 26/5/2009 20:04

ORIENTACIÓN ABSOLUTA

417626.413 4585155.075 823.008

5.550271396612502				
0.450532349920563	0.892543827840121	0.019649861565936	Omega:	-0.1144
-0.891515636659996	0.450957086778820	-0.042866950844224	Phi:	-3.0010
-0.047121876721719	0.001794789253541	0.998887534943628	Kappa:	70.2111

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9008	418109.29	4585330.89	50.09	17.516	91.701	-138.760	-0.067	-0.052	0.048
9028	417332.54	4584928.35	25.34	19.343	-65.939	-142.837	-0.012	0.042	-0.047
9007	418233.78	4584907.62	28.80	95.791	77.298	-138.865	0.058	0.018	-0.046
9027	417493.96	4584569.30	22.63	90.131	-69.149	-139.999	-0.009	-0.025	0.056
9037	417731.68	4585028.97	26.28	35.564	6.418	-142.040	0.033	0.016	-0.007

EM. = 0.055

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2nuevo\7718-7719.abs2

Fecha: 26/5/2009 20:13

ORIENTACIÓN ABSOLUTA

417463.178 4585530.221 820.516

5.155165340887640

0.435691425236306	0.899925574777507	0.017519755618423	Omega:	-0.7914
-0.897691948914172	0.435867051878666	-0.064568397388167	Phi:	-4.1884
-0.065743036363045	0.012404553517673	0.997759480146290	Kappa:	71.2340

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9008	418109.29	4585330.89	50.09	99.148	94.088	-144.424	-0.039	0.013	0.021
9028	417332.54	4584928.35	25.34	103.907	-75.601	-146.803	-0.029	-0.009	-0.025
9009	417911.44	4585816.24	46.11	-2.043	100.563	-151.932	0.032	0.029	-0.049
9029	417100.38	4585379.51	28.12	5.680	-77.983	-152.711	0.025	-0.028	-0.001
1112	417558.78	4585612.76	28.65	3.804	21.760	-153.981	0.015	-0.005	0.051

EM. = 0.039

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2nuevo\7717-7718.abs2

Fecha: 26/5/2009 20:06

ORIENTACIÓN ABSOLUTA

417793.370 4584781.975 832.403

5.600227664129962				
0.440210965985271	0.897429695966211	0.028883320867065	Omega:	0.1799
-0.895904445152469	0.441148486411847	-0.052375930469854	Phi:	-3.8058
-0.059745548640562	-0.002820236609056	0.998209655174256	Kappa:	70.9249

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9027	417493.96	4584569.30	22.63	19.112	-64.329	-143.906	0.056	-0.068	0.069
9006	418451.71	4584580.11	24.39	92.668	90.007	-138.743	-0.029	0.014	0.016
9007	418233.78	4584907.62	28.80	23.075	80.877	-142.142	0.043	-0.083	-0.003
9026	417641.21	4584289.31	22.86	75.494	-62.788	-140.464	0.007	0.028	-0.053
9037	417731.68	4585028.97	26.28	-35.740	9.980	-146.308	-0.073	0.107	-0.032

EM. = 0.074

Nombre del modelo: C:\Trabajos\Llobregat\P-2\7719-7720.abs2

Fecha: 26/5/2009 20:13

ORIENTACIÓN ABSOLUTA

417964.203 4584404.927 835.144

5.679137033718600

0.448752337266270	0.893636202376722	0.005973072891669	Omega:	-1.4882
-0.891656598619315	0.448185118180240	-0.063863995963285	Phi:	-3.8060
-0.059748221201084	0.023333187597797	0.997940735925652	Kappa:	70.3165

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9006	418451.71	4584580.11	24.39	19.550	87.215	-143.922	-0.059	-0.005	-0.006
9026	417641.21	4584289.31	22.86	1.184	-63.286	-141.775	-0.024	0.039	0.005
9005	418665.00	4584283.41	26.49	82.955	97.359	-139.995	0.030	-0.032	0.007
9025	417787.29	4583903.00	21.42	73.383	-70.796	-137.529	0.035	-0.010	-0.003
1113	418227.34	4584146.91	24.88	69.827	17.711	-139.201	0.018	0.009	-0.004

EM. = 0.034

Nombre del modelo: C:\Trabajos\Llobregat\P-2\7720-7721.abs2

Fecha: 26/5/2009 20:27

ORIENTACIÓN ABSOLUTA

418133.816 4584029.734 832.477

5.491876208351333

0.451009905722642	0.892504775184025	0.005029037061525	Omega:	-1.7799
-0.890051536374716	0.450174620464364	-0.071770980812399	Phi:	-4.2252
-0.066319887945180	0.027893321126726	0.997408459508671	Kappa:	70.1418

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9004	418751.47	4583869.41	22.80	86.483	83.123	-144.379	0.001	-0.002	-0.054
9024	417920.38	4583484.03	20.46	80.712	-83.548	-140.548	0.039	-0.022	0.051
9025	417787.29	4583903.00	21.42	1.885	-70.827	-145.951	0.002	0.059	-0.051
9005	418665.00	4584283.41	26.49	12.241	103.021	-149.217	0.028	-0.006	0.049
1113	418227.34	4584146.91	24.88	-1.557	20.716	-148.118	-0.070	-0.030	0.005

EM. = 0.053

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2nuevo\7721-7722.abs2

Fecha: 26/5/2009 20:29

ORIENTACIÓN ABSOLUTA

418299.641 4583655.715 831.708

5.691216588211105									
0.443339198120757	0.896232107023630	0.014777203714797	Omega:	-1.1279					
-0.893696059499370	0.443233161029081	-0.069654276246817	Phi:	-4.3946					
-0.068976145477571	0.017674142246612	0.997461736634997	Kappa:	70.6836					

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9024	417920.38	4583484.03	20.46	7.255	-75.626	-141.081	0.035	0.057	0.092
9004	418751.47	4583869.41	22.80	11.441	85.282	-143.200	0.009	-0.006	-0.081
9003	418989.36	4583533.79	22.09	82.694	96.610	-138.617	-0.048	0.017	0.025
9023	418148.50	4583079.89	19.75	88.476	-71.157	-135.626	-0.031	-0.084	-0.153
9036	418567.10	4583210.89	23.28	100.486	4.958	-135.570	0.035	0.015	0.116

EM. = 0.093

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2nuevo\7722-7723.abs2

Fecha: 12/5/2009 15:08

ORIENTACIÓN ABSOLUTA

418465.260 4583278.452 829.944

5.634093523930940									
0.439458941298865	0.897917267960797	0.024908207689416	Omega:	-0.6994					
-0.894792975133391	0.440028005145770	-0.075636541032556	Phi:	-5.0266					
-0.078875665223288	0.010951464982022	0.996824304905499	Kappa:	70.9367					

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9036	418567.10	4583210.89	23.28	29.971	9.393	-141.363	-0.043	0.001	-0.005
9003	418989.36	4583533.79	22.09	11.638	101.908	-144.052	-0.049	-0.029	0.057
9023	418148.50	4583079.89	19.75	18.167	-67.573	-142.070	0.040	0.006	-0.059
9022	418257.90	4582643.95	19.36	95.950	-84.174	-135.824	-0.036	0.012	0.060
9002	419102.94	4583076.51	20.60	93.135	84.268	-137.655	0.087	0.013	-0.056

EM. = 0.061

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-2nuevo\7723-7724.abs2

Fecha: 26/5/2009 20:35

ORIENTACIÓN ABSOLUTA

418631.456 4582902.261 824.988

5.130240014798099

0.436674290481357	0.899091930432083	0.030810138988873	Omega:	-0.4129
-0.895725539949331	0.437712159454353	-0.077998862480720	Phi:	-5.3293
-0.083614120309205	0.006462669550400	0.996477251515156	Kappa:	71.1226

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9001	419251.73	4582721.10	20.42	97.537	92.236	-149.788	0.001	-0.007	-0.049
9021	418376.43	4582299.54	19.29	96.647	-97.137	-148.876	0.043	-0.050	0.062
9022	418257.90	4582643.95	19.36	26.450	-88.521	-154.786	-0.037	0.072	-0.059
9002	419102.94	4583076.51	20.60	22.816	96.490	-156.070	-0.031	-0.028	0.057
1114	418895.91	4582627.83	18.83	83.563	21.912	-150.823	0.024	0.011	-0.011

EM. = 0.058

Nombre del modelo: C:\Trabajos\Llobregat\7724-7725.abs2

Fecha: 26/5/2009 20:46

ORIENTACIÓN ABSOLUTA

417878.044 4582555.495 833.718

4.771591671056399

-0.353367514429822	-0.935206265862906	-0.022817537913848	Omega:	0.1432
0.933652609303780	-0.354096308584051	0.053931524986706	Phi:	-3.7274
-0.058516706041380	-0.002246004877190	0.998283902793268	Kappa:	-123.0340

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9022	418257.90	4582643.95	19.36	-0.842	-80.620	-171.210	0.034	0.045	0.081
9021	418376.43	4582299.54	19.29	-76.996	-78.304	-175.653	0.011	-0.041	-0.058
9063	418143.14	4582091.81	18.72	-100.384	-17.163	-177.007	-0.024	0.075	-0.059
9042	417630.47	4581862.68	57.87	-107.720	100.284	-168.985	-0.093	0.002	0.095
9043	417366.79	4582308.96	27.91	-0.475	118.885	-168.912	0.071	-0.084	-0.066

EM. = 0.086

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-3\7731-7730.abs2

Fecha: 26/5/2009 21:05

ORIENTACIÓN ABSOLUTA

417711.339 4582929.933 832.890

5.136164019983225									
-0.364384209195980	-0.931076254581685	-0.017920832646989	Omega:	-0.4707					
0.928768934697645	-0.364750044808949	0.065921701680642	Phi:	-4.3269					
-0.067914755607466	0.007376514489315	0.997663857722012	Kappa:	-123.8018					

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9043	417366.79	4582308.96	27.91	-77.214	105.390	-163.135	-0.081	0.035	0.028
9044	417439.35	4582794.34	24.98	5.476	57.779	-157.720	0.056	-0.073	-0.004
9022	418257.90	4582643.95	19.36	-79.737	-79.933	-163.595	0.019	0.026	-0.032
9023	418148.50	4583079.89	19.75	6.848	-91.066	-157.562	-0.023	0.034	0.071
1115	417793.29	4582974.62	20.37	13.015	-19.192	-157.526	0.029	-0.022	-0.064

EM. = 0.063

Nombre del modelo: C:\Trabajos\Llobregat\P-3\7732-7731.abs2

Fecha: 26/5/2009 21:05

ORIENTACIÓN ABSOLUTA

417545.342 4583304.434 833.337

5.005593272569628									
-0.365952640919368	-0.930396406177633	-0.021004570357075	Omega:	-0.2488					
0.928205542617636	-0.366534206480081	0.063930791751065	Phi:	-4.2800					
-0.067179872417567	0.003899083451629	0.997733261894278	Kappa:	-123.9080					

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9023	418148.50	4583079.89	19.75	-74.817	-96.291	-167.570	0.039	0.029	0.018
9044	417439.35	4582794.34	24.98	-76.001	56.420	-167.195	-0.027	0.039	-0.000
9024	417920.38	4583484.03	20.46	16.805	-83.497	-161.303	-0.004	-0.059	-0.008
9045	417215.59	4583161.70	41.34	8.272	71.119	-158.305	-0.026	-0.023	0.011
1115	417793.29	4582974.62	20.37	-68.377	-22.565	-167.293	0.014	0.012	-0.020

EM. = 0.036

Nombre del modelo: C:\Trabajos\Llobregat\P-3\7733-7732.abs2

Fecha: 26/5/2009 21:05

ORIENTACIÓN ABSOLUTA

416542.993 4585552.164 842.074

5.725498806020460

-0.358307191926969	-0.933555688418974	-0.009472741629798	Omega:	-1.6623
0.928856167093127	-0.357488721857587	0.097098066910175	Phi:	-5.9952
-0.094032850996204	0.025992121214004	0.995229738587188	Kappa:	-123.4380

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9061	416769.58	4584956.52	26.56	-97.416	-3.453	-152.233	0.025	-0.003	-0.001
9052	416330.46	4585572.91	39.15	29.852	29.716	-138.856	0.006	0.008	-0.044
9029	417100.38	4585379.51	28.12	-49.525	-83.816	-145.327	-0.094	-0.030	-0.047
9030	417035.96	4585758.03	26.43	15.936	-96.925	-139.109	0.045	0.069	0.027
9051	416589.45	4585266.16	27.84	-35.929	6.585	-146.469	0.006	-0.023	0.054
1116	416660.72	4585731.17	27.25	35.060	-34.071	-138.796	0.012	-0.020	0.012

EM. = 0.049

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-3\7739-7738.abs2

Fecha: 26/5/2009 21:31

ORIENTACIÓN ABSOLUTA

416379.524 4585936.594 832.525

4.721908875886582

-0.362424416167021	-0.930780154722543	-0.047925422696864	Omega:	1.5328
0.929365990961230	-0.364789770730561	0.056632835131185	Phi:	-4.4725
-0.070195423003535	-0.024015135748604	0.997244140541488	Kappa:	-123.6714

POINT	-XT-	-YT-	-ZT-	-xi-	-yi-	-zi-	-Ex-	-Ey-	-Ez-
9052	416330.46	4585572.91	39.15	-56.016	41.815	-171.399	0.061	-0.001	-0.097
9030	417035.96	4585758.03	26.43	-73.534	-111.515	-179.062	-0.040	-0.066	0.068
9031	416636.50	4586064.65	28.63	17.415	-56.459	-170.840	-0.028	0.064	-0.063
9053	416013.70	4585768.54	67.35	6.378	88.982	-159.923	-0.019	-0.008	0.092
1116	416660.72	4585731.17	27.25	-50.043	-35.458	-175.387	0.027	0.010	0.000

EM. = 0.073

Nombre del modelo: C:\Trabajos\LLOBREGAT\P-3\7740-7739.abs2

Fecha: 26/5/2009 21:34

3.12.- PUNTOS SINGULARES

3.12.1.- Bandas blancas

Punto	X	Y	Z	Código
2001	417628,527	4584818,398	26,731	LB
2002	417638,840	4584805,562	26,243	LB
2003	417648,350	4584793,748	26,023	LB
2004	417658,719	4584780,775	26,076	LB
2005	417668,189	4584769,100	26,156	LB
2006	417679,339	4584755,257	26,207	LB
2007	417689,797	4584742,313	26,324	LB
2008	417699,787	4584729,894	26,350	LB
2009	417708,409	4584719,147	26,333	LB
2010	417714,445	4584711,686	26,336	LB
2011	417718,263	4584706,049	26,429	LB
2012	417720,702	4584698,443	26,598	LB
2013	417720,663	4584690,528	26,734	LB
2014	417718,749	4584684,620	26,950	LB
2015	417717,483	4584683,817	27,007	LB
2016	417705,276	4584679,065	27,450	LB
2017	417692,091	4584673,893	28,045	LB
2018	417678,473	4584668,504	28,617	LB
2019	417661,963	4584661,924	29,169	LB
2020	417657,947	4584672,930	29,445	LB
2021	417666,925	4584676,853	29,105	LB
2022	417675,683	4584682,499	28,548	LB
2023	417683,213	4584690,915	27,782	LB
2024	417687,986	4584701,192	27,111	LB
2025	417689,399	4584713,560	26,378	LB
2026	417687,197	4584725,671	25,749	LB
2027	417679,368	4584736,012	25,062	LB
2028	417670,033	4584740,750	24,546	LB
2029	417670,964	4584748,219	24,996	LB
2030	417681,133	4584743,958	25,428	LB
2031	417689,262	4584736,346	25,836	LB
2032	417695,007	4584726,050	26,302	LB
2033	417697,172	4584715,677	26,740	LB
2034	417696,802	4584704,274	27,180	LB
2035	417693,669	4584692,961	27,767	LB
2036	417687,401	4584682,792	28,262	LB
2037	417679,655	4584675,447	28,725	LB
2038	417670,609	4584670,437	29,191	LB
2039	417660,326	4584666,279	29,498	LB
2040	417610,355	4584653,955	30,732	LB
2041	417594,203	4584647,541	31,145	LB
2042	417584,427	4584643,589	31,306	LB

Punto	X	Y	Z	Código
2043	417574,801	4584639,299	31,435	LB
2044	417565,883	4584634,540	31,427	LB
2045	417559,013	4584630,325	31,557	LB
2046	417544,763	4584621,212	31,813	LB
2047	417554,955	4584628,860	31,574	LB
2048	417562,510	4584636,768	31,343	LB
2049	417567,849	4584646,180	31,062	LB
2050	417570,490	4584656,262	30,802	LB
2051	417571,011	4584668,105	30,508	LB
2052	417569,453	4584679,967	30,040	LB
2053	417566,543	4584691,834	29,469	LB
2054	417563,261	4584702,838	28,937	LB
2055	417559,757	4584714,220	28,360	LB
2056	417555,867	4584726,657	27,747	LB
2057	417551,624	4584740,063	27,236	LB
2058	417546,850	4584754,467	26,944	LB
2059	417541,163	4584770,960	26,900	LB
2060	417535,809	4584786,385	27,157	LB
2061	417530,767	4584800,699	27,444	LB
2062	417526,903	4584800,512	27,541	LB
2063	417531,682	4584786,651	27,182	LB
2064	417536,730	4584771,985	26,856	LB
2065	417536,725	4584771,997	26,850	LB
2066	417541,423	4584758,329	26,886	LB
2067	417541,411	4584758,317	26,871	LB
2068	417544,730	4584748,332	26,963	LB
2069	417547,950	4584738,320	27,224	LB
2070	417551,307	4584727,732	27,606	LB
2071	417554,382	4584717,718	28,053	LB
2072	417557,837	4584706,486	28,565	LB
2073	417560,931	4584696,340	29,044	LB
2074	417564,040	4584685,370	29,602	LB
2075	417566,154	4584675,294	30,099	LB
2076	417566,887	4584664,463	30,518	LB
2077	417565,779	4584653,577	30,855	LB
2078	417561,884	4584642,911	31,121	LB
2079	417555,684	4584634,374	31,365	LB
2080	417546,948	4584626,849	31,595	LB
2081	417538,062	4584620,948	31,846	LB
2082	417538,051	4584620,947	31,850	LB
2083	417527,796	4584615,443	32,174	LB
2084	417515,899	4584610,282	32,446	LB

Punto	X	Y	Z	Código
2085	417504,041	4584605,527	32,642	LB
2086	417504,019	4584605,509	32,642	LB
2087	417493,705	4584601,381	32,865	LB
2088	417482,285	4584596,869	33,117	LB
2089	417471,293	4584592,523	33,336	LB
2090	417471,157	4584564,997	33,537	LB
2091	417481,946	4584569,325	33,344	LB
2092	417493,812	4584574,051	33,096	LB
2093	417505,558	4584578,720	32,823	LB
2094	417519,102	4584584,116	32,561	LB
2095	417528,188	4584587,724	32,371	LB
2096	417538,127	4584591,577	32,154	LB
2097	417549,599	4584594,637	31,871	LB
2098	417549,561	4584594,640	31,870	LB
2099	417561,150	4584596,338	31,580	LB
2100	417561,153	4584596,321	31,611	LB
2101	417572,850	4584595,684	31,295	LB
2102	417584,387	4584591,939	30,917	LB
2103	417594,676	4584585,884	30,590	LB
2104	417604,465	4584574,852	30,251	LB
2105	417612,160	4584562,671	29,900	LB
2106	417620,223	4584549,253	29,490	LB
2107	417628,656	4584535,271	28,984	LB
2108	417637,569	4584520,427	28,486	LB
2109	417646,126	4584506,089	27,947	LB
2110	417654,412	4584492,163	27,516	LB
2111	417662,588	4584478,238	27,027	LB
2112	417670,412	4584464,615	26,610	LB
2113	417678,652	4584449,719	26	

Punto	X	Y	Z	Código
2169	417729,775	4584704,332	26,324	LB
2170	417729,752	4584704,318	26,350	LB
2171	417721,610	4584714,194	26,294	LB
2172	417713,217	4584724,497	26,256	LB
2173	417713,228	4584724,491	26,259	LB
2174	417702,638	4584737,493	26,210	LB
2175	417692,820	4584749,650	26,099	LB
2176	417692,793	4584749,663	26,102	LB
2177	417682,892	4584761,997	26,058	LB
2178	417682,911	4584761,964	26,092	LB
2179	417672,966	4584774,411	25,966	LB
2180	417662,103	4584788,513	25,847	LB
2181	417662,103	4584788,507	25,846	LB
2182	417651,173	4584803,502	25,888	LB
2183	417642,576	4584816,072	26,047	LB
2184	417633,700	4584829,261	26,281	LB
2185	417625,322	4584842,028	26,518	LB
2186	417616,658	4584855,499	26,618	LB
2187	417607,459	4584870,466	26,631	LB
2188	417375,551	4585380,228	26,649	LB
2189	417366,131	4585398,440	26,895	LB
2190	417356,808	4585416,511	27,099	LB
2191	417347,683	4585433,927	27,291	LB
2192	417336,637	4585454,920	27,641	LB
2193	417345,552	4585435,112	27,382	LB
2194	417353,798	4585416,833	27,132	LB
2195	417362,403	4585397,824	26,970	LB
2196	417371,385	4585377,933	26,742	LB
2197	417381,411	4585379,986	26,791	LB
2198	417378,520	4585382,726	26,761	LB
2199	417376,073	4585386,709	26,797	LB
2200	417368,718	4585401,151	26,888	LB
2201	417361,174	4585415,794	27,037	LB
2202	417353,580	4585430,394	27,223	LB
2203	417346,114	4585444,714	27,399	LB
2204	417338,781	4585458,782	27,648	LB
2205	417331,413	4585472,969	27,867	LB
2206	417324,271	4585486,815	28,027	LB
2207	417317,366	4585500,791	28,230	LB
2208	417309,452	4585517,021	28,432	LB
2209	417309,463	4585517,014	28,423	LB
2210	417302,662	4585531,030	28,645	LB

Punto	X	Y	Z	Código
2211	417297,620	4585541,863	28,732	LB
2212	417297,368	4585541,712	28,728	LB
2213	417288,931	4585560,302	28,971	LB
2214	417288,950	4585560,295	28,984	LB
2215	417280,978	4585577,922	29,186	LB
2216	417280,964	4585577,937	29,193	LB
2217	417272,456	4585596,694	29,425	LB
2218	417263,980	4585615,612	29,668	LB
2219	417255,844	4585633,694	29,877	LB
2220	417247,582	4585652,115	30,101	LB
2221	417239,564	4585670,080	30,323	LB
2222	417206,953	4585753,409	31,255	LB
2223	417202,060	4585767,350	31,441	LB
2224	417196,673	4585783,145	31,727	LB
2225	417191,423	4585799,330	31,977	LB
2226	417191,423	4585799,319	31,955	LB
2227	417186,533	4585815,334	32,218	LB
2228	417181,034	4585834,629	32,614	LB
2229	417176,813	4585849,929	32,965	LB
2230	417173,009	4585864,255	33,200	LB
2231	417168,756	4585880,463	33,573	LB
2232	417164,397	4585896,786	33,998	LB
2233	417160,008	4585913,141	34,425	LB
2234	417155,482	4585929,362	34,866	LB
2235	417151,080	4585944,702	35,258	LB
2236	417146,403	4585960,283	35,789	LB
2237	417141,405	4585976,086	36,286	LB
2238	417136,403	4585991,173	36,748	LB
2239	417130,953	4586007,117	37,150	LB
2240	417125,892	4586021,378	37,373	LB
2241	417119,790	4586038,378	37,568	LB
2242	417120,086	4586038,500	37,548	LB
2243	417118,403	4586043,369	37,618	LB
2244	417117,068	4586048,882	37,703	LB
2245	417117,063	4586048,874	37,697	LB
2246	417117,056	4586054,058	37,723	LB
2247	417120,444	4586058,805	37,682	LB
2248	417126,330	4586060,436	37,527	LB
2249	417131,053	4586058,743	37,245	LB
2250	416985,868	4586207,316	36,859	LB
2251	416986,772	4586193,059	37,055	LB
2252	416988,013	4586177,743	37,142	LB

Punto	X	Y	Z	Código
2253	416990,130	4586161,946	37,128	LB
2254	416993,181	4586146,503	37,018	LB
2255	416996,677	4586131,311	36,896	LB
2256	417000,913	4586114,456	36,757	LB
2257	417005,256	4586098,078	36,658	LB
2258	417009,618	4586082,766	36,632	LB
2259	417014,523	4586066,725	36,558	LB
2260	417019,447	4586052,068	36,553	LB
2261	417024,990	4586036,754	36,454	LB
2262	417031,889	4586018,682	36,304	LB
2263	417037,660	4586004,568	36,152	LB
2264	417043,721	4585990,364	35,958	LB
2265	417049,938	4585976,117	35,764	LB
2266	417056,095	4585962,200	35,597	LB
2267	417062,918	4585946,546	35,435	LB
2268	417062,917	4585946,546	35,413	LB
2269	417068,617	4585933,094	35,275	LB
2270	417074,543	4585918,422	35,090	LB
2271	417080,023	4585903,658	34,756	LB
2272	417084,783	4585889,647	34,431	LB
2273	417089,368	4585875,132	34,257	LB
2274	417089,369	4585875,135	34,204	LB
2275	417093,858	4585859,964	33,781	LB
2276	417097,585	4585846,555	33,497	LB
2277	417103,370	4585851,876	33,720	LB
2278	417099,158	4585867,123	34,206	LB
2279	417094,587	4585882,325	34,634	LB
2280	417089,948	4585896,774	35,011	LB
2281	417084,428	4585912,329	35	

Punto	X	Y	Z	Código
2337	417296,358	4585526,423	28,575	LB
2338	417297,637	4585523,507	28,562	LB
2339	417305,766	4585505,750	28,366	LB
2340	417313,561	4585488,565	28,091	LB
2341	417321,184	4585471,660	27,902	LB
2342	417329,311	4585453,634	27,686	LB
2343	417337,470	4585435,668	27,420	LB
2344	417345,534	4585417,863	27,195	LB
2345	417353,468	4585400,204	26,943	LB
2346	417367,373	4585369,507	26,701	LB
2347	418308,262	4582727,007	31,729	LB
2348	418308,245	4582731,704	31,667	LB
2349	418307,692	4582737,414	31,619	LB
2350	418308,126	4582743,535	31,617	LB
2351	418309,967	4582751,580	31,665	LB
2352	418309,968	4582751,591	31,633	LB
2353	418310,821	4582758,392	31,704	LB
2354	418310,545	4582766,982	31,669	LB
2355	418308,949	4582774,898	31,523	LB
2356	418303,725	4582782,207	31,187	LB
2357	418305,705	4582783,242	31,093	LB
2358	418300,831	4582792,028	30,664	LB
2359	418297,072	4582801,918	30,226	LB
2360	418295,169	4582812,461	29,742	LB
2361	418295,522	4582824,391	29,218	LB
2362	418298,095	4582835,623	28,695	LB
2363	418303,409	4582846,004	28,215	LB
2364	418310,773	4582854,804	27,681	LB
2365	418318,581	4582861,586	27,138	LB
2366	418328,604	4582869,400	26,465	LB
2367	418337,038	4582875,990	25,871	LB
2368	418661,810	4582995,405	23,567	LB
2369	418648,901	4582985,655	23,984	LB
2370	418637,123	4582976,699	24,364	LB
2371	418623,678	4582966,326	24,911	LB
2372	418610,711	4582956,302	25,561	LB
2373	418597,749	4582946,504	26,185	LB
2374	418591,065	4582942,063	26,571	LB
2375	418584,562	4582938,916	26,809	LB
2376	418577,114	4582937,095	27,003	LB
2377	418569,222	4582936,876	27,242	LB
2378	418578,420	4582927,713	27,245	LB

Punto	X	Y	Z	Código
2379	418576,782	4582929,640	27,251	LB
2380	418584,194	4582931,383	27,053	LB
2381	418591,601	4582934,485	26,814	LB
2382	418600,293	4582939,891	26,335	LB
2383	418609,389	4582946,446	25,856	LB
2384	418621,794	4582955,927	25,275	LB
2385	418634,754	4582965,974	24,678	LB
2386	418647,355	4582975,732	24,112	LB
2387	418659,050	4582984,582	23,631	LB
2388	418515,552	4582954,323	27,421	LB
2389	418509,564	4582963,241	27,026	LB
2390	418502,269	4582971,659	26,509	LB
2391	418493,757	4582978,354	25,971	LB
2392	418484,095	4582983,375	25,511	LB
2393	418473,865	4582987,140	25,116	LB
2394	418461,761	4582991,037	24,769	LB
2395	418448,698	4582995,635	24,470	LB
2396	418436,762	4583000,983	24,155	LB
2397	418424,475	4583008,190	24,093	LB
2398	418415,327	4583016,133	23,917	LB
2399	418397,959	4583039,819	23,599	LB
2400	418393,496	4583052,301	23,778	LB
2401	418387,611	4583073,434	23,981	LB
2402	418385,860	4583064,405	24,034	LB
2403	418389,481	4583051,608	23,933	LB
2404	418393,723	4583039,468	23,792	LB
2405	418399,162	4583028,956	23,893	LB
2406	418405,841	4583019,856	24,066	LB
2407	418413,524	4583011,829	24,197	LB
2408	418423,178	4583004,361	24,383	LB
2409	418431,506	4582999,203	24,362	LB
2410	418438,522	4582994,806	24,431	LB
2411	418443,556	4582990,892	24,467	LB
2412	418448,949	4582986,334	24,475	LB
2413	418453,132	4582986,834	24,564	LB
2414	418449,854	4582990,647	24,532	LB
2415	418465,121	4582985,662	24,761	LB
2416	418478,531	4582981,243	25,119	LB
2417	418488,428	4582976,799	25,551	LB
2418	418497,345	4582970,684	26,097	LB
2419	418504,620	4582963,025	26,673	LB
2420	418510,332	4582954,919	27,157	LB

Punto	X	Y	Z	Código
2421	417593,475	4584771,610	25,816	LB
2422	417585,600	4584790,573	26,410	LB
2423	417577,422	4584810,170	27,032	LB
2424	417569,336	4584829,619	27,660	LB
2425	417560,837	4584850,173	28,321	LB
2426	417552,799	4584869,737	28,866	LB
2427	417544,345	4584890,598	29,432	LB
2428	417536,200	4584910,948	29,941	LB
2429	417527,955	4584931,745	30,344	LB
2430	417520,016	4584951,838	30,695	LB
2431	417511,396	4584973,650	30,960	LB
2432	417503,190	4584994,406	31,176	LB
2433	417495,138	4585014,871	31,286	LB
2434	417486,355	4585037,050	31,298	LB
2435	417477,719	4585058,893	31,348	LB
2436	417471,114	4585075,524	31,346	LB
2437	417462,655	4585096,561	31,319	LB
2438	417454,760	4585115,941	31,320	LB
2439	417469,815	4585092,671	31,250	LB
2440	417469,809	4585092,669	31,242	LB
2441	417461,756	4585110,834	31,207	LB
2442	417453,404	4585130,198	31,222	LB
2443	417445,358	4585149,239	31,214	LB
2444	417445,366	4585149,240	31,206	LB
2445	417436,939	4585169,633	31,158	LB
2446	417436,902	4585169,610	31,163	LB
2447	417428,225	4585190,564	31,134	LB
2448	417419,813	4585210,812	31,119	LB
2449	417419,829	4585210,804	31	

Punto	X	Y	Z	Código
2505	417024,923	4586131,376	44,763	LB
2506	417030,760	4586108,898	44,351	LB
2508	417036,473	4586087,635	43,718	LB
2509	417036,475	4586087,615	43,748	LB
2510	417041,624	4586068,628	43,241	LB
2511	417047,298	4586048,597	42,676	LB
2512	417047,308	4586048,604	42,687	LB
2513	417053,625	4586027,393	42,011	LB
2514	417059,674	4586007,979	41,290	LB
2515	417065,930	4585988,497	40,450	LB
2516	417072,472	4585968,795	39,645	LB
2517	417072,463	4585968,812	39,649	LB
2518	417072,476	4585968,816	39,654	LB
2519	417079,593	4585947,875	38,811	LB
2520	417079,601	4585947,882	38,793	LB
2521	417086,531	4585927,551	37,944	LB
2522	417086,531	4585927,557	37,940	LB
2523	417092,104	4585907,618	36,787	LB
2524	417093,135	4585908,303	37,218	LB
2525	417093,139	4585908,311	37,209	LB
2526	417099,765	4585888,940	36,548	LB
2527	417099,743	4585888,953	36,550	LB
2528	417106,253	4585869,881	35,912	LB
2529	417112,863	4585850,693	35,300	LB
2530	417118,147	4585835,058	34,806	LB
2531	417931,409	4582431,152	28,099	LB
2532	417916,266	4582419,445	27,071	LB
2533	417900,712	4582407,409	26,002	LB
2534	417883,082	4582393,782	24,841	LB
2535	417868,139	4582382,249	24,069	LB
2536	417852,796	4582370,402	23,483	LB
2537	417837,015	4582358,240	23,037	LB
2538	417837,017	4582358,237	23,025	LB
2539	417820,952	4582345,781	22,790	LB
2540	417804,912	4582333,392	22,768	LB
2541	417796,141	4582326,655	22,843	LB
2542	417787,507	4582319,913	22,954	LB
2543	417779,142	4582312,964	23,073	LB
2544	417770,742	4582305,163	23,182	LB
2545	417762,506	4582296,533	23,253	LB
2546	417754,778	4582287,390	23,305	LB
2547	417747,298	4582277,492	23,373	LB

Punto	X	Y	Z	Código
2548	417747,305	4582277,508	23,376	LB
2549	417739,853	4582266,217	23,445	LB
2550	417733,770	4582255,562	23,480	LB
2551	417728,735	4582245,212	23,542	LB
2552	417723,634	4582233,303	23,603	LB
2553	417720,053	4582223,038	23,661	LB
2554	417715,574	4582208,211	23,772	LB
2555	417711,268	4582193,009	23,915	LB
2556	417707,015	4582178,163	24,072	LB
2557	417704,027	4582169,777	24,228	LB
2558	417701,692	4582165,115	24,347	LB
2559	417697,650	4582160,642	24,434	LB
2560	417690,671	4582158,219	24,527	LB
2561	417683,790	4582159,170	24,576	LB
2562	417706,888	4582135,999	24,822	LB
2563	417705,822	4582141,814	24,722	LB
2564	417705,353	4582145,854	24,633	LB
2565	417706,574	4582151,977	24,476	LB
2566	417709,428	4582157,993	24,272	LB
2567	417713,137	4582165,660	24,012	LB
2568	417716,511	4582175,602	23,768	LB
2569	417718,669	4582185,735	23,602	LB
2570	417720,144	4582194,316	23,499	LB
2571	417726,725	4582221,138	23,362	LB
2572	417730,602	4582231,781	23,276	LB
2573	417735,658	4582243,572	23,214	LB
2574	417742,303	4582256,405	23,176	LB
2575	417749,841	4582268,687	23,066	LB
2576	417758,603	4582280,876	22,993	LB
2577	417767,261	4582291,194	22,936	LB
2578	417775,540	4582299,905	22,882	LB
2579	417786,511	4582309,905	22,876	LB
2580	417799,204	4582320,005	22,818	LB
2581	417815,761	4582332,728	22,753	LB
2582	417815,741	4582332,767	22,769	LB
2583	417832,149	4582345,471	22,892	LB
2584	417847,779	4582357,565	23,225	LB
2585	417863,905	4582369,994	23,730	LB
2586	417880,187	4582382,622	24,500	LB
2587	417895,102	4582394,150	25,362	LB
2588	417895,106	4582394,150	25,352	LB
2589	417911,063	4582406,478	26,423	LB

Punto	X	Y	Z	Código
2590	417928,622	4582420,084	27,640	LB
2591	417983,886	4582422,675	29,636	LB
2592	417988,762	4582411,699	29,496	LB
2593	417993,585	4582400,044	29,227	LB
2594	417998,625	4582388,008	28,813	LB
2595	418003,667	4582376,116	28,337	LB
2596	418010,168	4582361,105	27,624	LB
2597	418016,833	4582346,306	26,867	LB
2598	418023,899	4582331,162	26,152	LB
2599	418031,589	4582315,572	25,403	LB
2600	418039,157	4582300,912	24,653	LB
2601	418046,889	4582286,369	23,946	LB
2602	418054,601	4582272,460	23,405	LB
2603	418062,000	4582259,622	22,986	LB
2604	418070,656	4582244,987	22,578	LB
2605	418080,096	4582229,410	22,336	LB
2606	418088,623	4582214,911	22,207	LB
2607	418096,688	4582200,643	22,183	LB
2608	418105,059	4582185,227	22,166	LB
2609	418112,533	4582171,008	22,143	LB
2610	418120,762	4582154,824	22,153	LB
2611	418130,134	4582135,485	22,109	LB
2612	418139,326	4582116,086	22,057	LB
2613	418147,709	4582098,365	22,029	LB
2614	417115,203	4584897,810	27,973	LB
2615	417107,193	4584915,995	28,198	LB
2616	417098,691	4584934,659	28,373	LB
2617	417090,116	4584954,826	28,603	LB
2618	417089,384	4584954,448	28	

Punto	X	Y	Z	Código
2674	416772,619	4585780,884	35,597	LB
2675	416771,734	4585786,851	35,887	LB
2676	416771,255	4585792,782	36,176	LB
2677	416770,257	4585802,342	36,655	LB
2678	416768,114	4585813,080	37,098	LB
2679	416765,774	4585823,453	37,439	LB
2680	416763,921	4585834,133	37,706	LB
2681	416763,725	4585844,587	37,838	LB
2682	416765,134	4585852,591	37,934	LB
2683	416766,367	4585860,759	37,977	LB
2684	416755,874	4585833,582	37,791	LB
2685	416757,722	4585836,017	37,821	LB
2686	416759,694	4585823,596	37,530	LB
2687	416762,959	4585808,269	36,870	LB
2688	416766,030	4585793,078	36,124	LB
2689	416769,282	4585777,045	35,329	LB
2690	416772,394	4585761,563	34,601	LB
2691	416775,374	4585746,604	33,870	LB
2692	416778,477	4585730,983	33,139	LB
2693	416781,590	4585715,076	32,528	LB
2694	416784,627	4585699,493	32,422	LB
2695	416787,627	4585683,615	32,537	LB
2696	416790,527	4585668,222	32,820	LB
2697	416793,247	4585653,512	33,345	LB
2698	416305,367	4586814,187	32,870	LB
2699	416318,668	4586797,481	32,847	LB
2700	416331,314	4586781,670	32,824	LB
2701	416343,844	4586765,896	32,800	LB
2702	416356,655	4586749,574	32,796	LB
2703	416369,856	4586732,452	32,829	LB
2704	416382,874	4586715,206	32,826	LB
2705	416395,981	4586697,306	32,822	LB
2706	416408,041	4586680,195	32,816	LB
2707	416420,050	4586662,400	32,846	LB
2708	416430,970	4586645,424	32,887	LB
2709	416441,965	4586627,612	32,977	LB
2710	416453,186	4586608,452	32,976	LB
2711	416463,651	4586589,718	32,982	LB
2712	416473,412	4586571,262	32,938	LB
2713	416482,593	4586552,969	32,924	LB
2714	416491,483	4586534,279	32,891	LB
2715	416499,961	4586515,458	32,856	LB

Punto	X	Y	Z	Código
2716	416507,971	4586496,627	32,818	LB
2717	416515,414	4586477,966	32,733	LB
2718	416522,616	4586459,061	32,708	LB
2719	416529,784	4586439,125	32,704	LB
2720	416537,844	4586415,408	32,611	LB
2721	416537,457	4586415,295	32,591	LB
2722	416542,675	4586400,699	32,567	LB
2723	416542,252	4586400,535	32,536	LB
2724	416548,115	4586381,635	32,506	LB
2725	416553,609	4586362,567	32,414	LB
2726	416558,924	4586343,118	32,344	LB
2727	416564,124	4586323,695	32,359	LB
2728	416569,218	4586304,756	32,223	LB
2729	416574,382	4586285,770	32,091	LB
2730	416580,252	4586265,412	31,976	LB
2731	416586,824	4586243,606	31,824	LB
2732	416592,638	4586224,480	31,745	LB
2733	416598,281	4586205,982	31,669	LB
2734	416604,135	4586186,805	31,533	LB
2735	416609,924	4586167,454	31,405	LB
2736	416615,796	4586146,328	31,250	LB
2737	416620,878	4586126,282	31,131	LB
2738	416625,349	4586106,966	30,999	LB
2739	416629,363	4586088,663	30,890	LB
2740	416632,306	4586074,204	30,782	LB
2741	416635,046	4586059,554	30,857	LB
2742	416637,576	4586045,015	31,158	LB
2743	416640,234	4586029,473	31,665	LB
2744	416642,857	4586014,827	32,213	LB
2745	416645,680	4586000,353	32,881	LB
2746	416648,767	4585985,601	33,523	LB
2747	416652,026	4585971,420	34,148	LB
2748	416655,761	4585955,818	34,863	LB
2749	416656,843	4585950,231	35,130	LB
2750	416657,433	4585944,449	35,413	LB
2751	416658,423	4585937,687	35,723	LB
2752	416660,225	4585930,579	36,012	LB
2753	416663,410	4585919,818	36,399	LB
2754	416666,626	4585909,467	36,674	LB
2755	416669,358	4585899,810	36,765	LB
2756	416670,974	4585889,714	36,800	LB
2757	416670,237	4585879,025	36,732	LB

Punto	X	Y	Z	Código
2758	416679,375	4585894,927	36,956	LB
2759	416677,412	4585892,275	36,937	LB
2760	416674,822	4585902,884	36,753	LB
2761	416671,753	4585913,191	36,523	LB
2762	416668,860	4585923,000	36,214	LB
2763	416665,800	4585933,761	35,822	LB
2764	416662,721	4585945,193	35,326	LB
2765	416659,913	4585956,043	34,797	LB
2766	416657,285	4585966,704	34,304	LB
2767	416654,868	4585976,892	33,867	LB
2768	416651,670	4585991,504	33,185	LB
2769	416648,565	4586006,521	32,502	LB
2770	416645,795	4586021,256	31,877	LB
2771	416643,045	4586037,118	31,360	LB
2772	416640,320	4586052,772	31,022	LB
2773	416637,569	4586068,124	30,873	LB
2774	416634,619	4586083,164	30,906	LB
2775	416631,490	4586097,899	31,000	LB
2776	416628,078	4586112,864	31,116	LB
2777	416624,310	4586128,299	31,199	LB
2778	416672,479	4585835,120	36,488	LB
2779	416679,874	4585831,117	36,665	LB
2780	416686,364	4585826,118	36,776	LB
2781	416693,425	4585821,180	36,853	LB
2782	416700,801	4585817,773	36,989	LB
2783	416708,378	4585815,704	37,116	LB
2784	416691,388	4585689,087	28,879	LB
2785	416693,346	4585673,970	28,610	LB
2786	416695,957	4585658,244	28	

Punto	X	Y	Z	Código
2842	416676,939	4585471,143	36,898	LB
2843	416687,123	4585483,447	36,719	LB
2844	416696,434	4585495,941	36,669	LB
2845	416704,484	4585508,141	36,555	LB
2846	416711,846	4585521,015	36,474	LB
2847	416718,435	4585534,318	36,327	LB
2848	416723,897	4585547,726	36,007	LB
2849	416728,482	4585561,799	35,425	LB
2850	416731,143	4585572,152	34,936	LB
2851	416735,218	4585571,803	35,124	LB
2852	416731,379	4585557,316	35,809	LB
2853	416726,570	4585543,166	36,269	LB
2854	416720,770	4585529,602	36,556	LB
2855	416713,880	4585516,184	36,699	LB
2856	416706,295	4585503,329	36,793	LB
2857	416698,078	4585491,263	36,844	LB
2858	416689,049	4585479,542	36,989	LB
2859	416679,419	4585468,279	37,128	LB
2860	416668,774	4585457,062	37,242	LB
2861	416657,538	4585446,289	37,332	LB
2862	416646,389	4585436,529	37,461	LB
2863	416634,738	4585427,218	37,408	LB
2864	416622,635	4585418,211	37,175	LB
2865	416609,879	4585409,259	36,764	LB
2866	416597,703	4585401,015	36,356	LB
2867	416584,758	4585392,809	36,149	LB
2868	416570,579	4585384,693	36,073	LB
2869	416570,687	4585384,529	36,069	LB
2870	416584,027	4585391,347	36,100	LB
2871	416597,839	4585398,627	36,441	LB
2872	416597,861	4585398,603	36,427	LB
2873	416611,892	4585406,260	36,944	LB
2874	416624,664	4585413,636	37,653	LB
2875	416637,997	4585421,855	38,479	LB
2876	416651,543	4585430,869	39,339	LB
2877	416664,378	4585439,945	40,159	LB
2878	416677,810	4585450,110	41,052	LB
2879	416691,034	4585460,669	41,911	LB
2880	416702,332	4585470,052	42,467	LB
2881	416715,219	4585480,971	42,792	LB
2882	416726,696	4585490,711	42,849	LB
2883	416740,830	4585502,257	42,630	LB

Punto	X	Y	Z	Código
2884	416745,795	4585497,172	42,389	LB
2885	416733,473	4585487,217	42,741	LB
2886	416721,284	4585476,871	42,945	LB
2887	416709,375	4585466,761	42,731	LB
2888	416697,669	4585457,042	42,269	LB
2889	416685,504	4585447,213	41,555	LB
2890	416673,806	4585438,191	40,856	LB
2891	416661,784	4585429,441	40,156	LB
2892	416649,329	4585420,880	39,398	LB
2893	416635,791	4585412,220	38,524	LB
2894	416622,102	4585404,052	37,620	LB
2895	416608,007	4585396,092	36,888	LB
2896	416593,396	4585388,311	36,330	LB
2897	416578,621	4585380,697	36,162	LB
2898	416565,292	4585373,913	36,236	LB
2899	416550,776	4585366,608	36,410	LB
2900	416536,646	4585359,528	36,631	LB
2901	416522,807	4585352,608	36,972	LB
2902	416505,269	4585343,805	37,468	LB
2903	416487,286	4585334,828	38,096	LB
2904	416469,362	4585325,844	38,830	LB
2905	416456,100	4585319,200	39,387	LB
2906	416530,737	4585348,907	36,811	LB
2907	416545,329	4585354,966	36,461	LB
2908	416561,437	4585360,544	36,083	LB
2909	416576,171	4585364,484	35,723	LB
2910	416590,913	4585367,136	35,372	LB
2911	416606,279	4585368,722	35,096	LB
2912	416622,697	4585369,135	35,063	LB
2913	416639,161	4585368,200	35,256	LB
2914	416654,956	4585366,045	35,729	LB
2915	416670,368	4585362,715	36,415	LB
2916	416685,148	4585358,319	37,261	LB
2917	416700,541	4585352,398	38,294	LB
2918	416714,822	4585345,544	39,231	LB
2919	416728,272	4585337,949	40,135	LB
2920	416728,286	4585337,940	40,136	LB
2921	416743,596	4585328,067	41,186	LB
2922	416756,451	4585319,240	41,864	LB
2923	416772,363	4585308,203	42,376	LB
2924	416784,399	4585300,803	42,511	LB
2925	416797,785	4585294,498	42,413	LB

Punto	X	Y	Z	Código
2926	416812,606	4585290,579	42,192	LB
2927	416821,467	4585289,814	42,063	LB
2928	416821,367	4585285,766	42,341	LB
2929	416806,653	4585287,515	42,593	LB
2930	416806,678	4585287,507	42,596	LB
2931	416792,888	4585291,957	42,696	LB
2932	416777,505	4585299,976	42,610	LB
2933	416767,630	4585306,416	42,395	LB
2934	416755,745	4585314,721	41,920	LB
2935	416743,792	4585323,017	41,275	LB
2936	416731,041	4585331,389	40,386	LB
2937	416718,604	4585338,862	39,510	LB
2938	416704,796	4585345,974	38,532	LB
2939	416690,372	4585352,098	37,546	LB
2940	416676,337	4585356,836	36,650	LB
2941	416661,192	4585360,686	35,839	LB
2942	416646,295	4585363,269	35,260	LB
2943	416630,880	4585364,731	34,902	LB
2944	416614,139	4585364,985	34,833	LB
2945	416597,223	4585363,849	35,015	LB
2946	416581,192	4585361,369	35,383	LB
2947	416564,541	4585357,327	35,804	LB
2948	416549,592	4585352,491	36,227	LB
2949	416534,847	4585346,623	36,665	LB
2950	416521,069	4585340,372	37,008	LB
2951	416508,023	4585334,078	37,385	LB
2952	416490,630	4585325,407	38,006	LB
2953	416473,167	4585316,703	38,696	LB
2954	416459,465	4585309,775	39	

Punto	X	Y	Z	Código
3011	417202,507	4585614,071	30,925	LB
3012	417195,310	4585631,601	31,014	LB
3013	417188,119	4585649,405	31,087	LB
3014	417174,953	4585658,710	31,209	LB
3015	417180,987	4585645,931	31,142	LB
3016	417187,297	4585631,884	30,997	LB
3017	417193,382	4585617,676	30,957	LB
3018	417201,093	4585599,052	30,788	LB
3019	417208,484	4585580,995	30,721	LB
3020	417215,938	4585562,921	30,611	LB
3021	417223,588	4585544,477	30,508	LB
3022	417231,069	4585526,327	30,341	LB
3023	417238,334	4585508,734	30,298	LB
3024	417246,017	4585490,225	30,197	LB
3025	417253,317	4585472,245	30,120	LB
3026	417261,013	4585453,013	30,125	LB
3027	417268,174	4585434,560	30,053	LB
3028	417273,726	4585420,043	29,956	LB
3029	417278,928	4585405,925	29,871	LB
3030	417283,907	4585392,207	29,818	LB
3031	417289,154	4585377,830	29,729	LB
3032	417294,276	4585363,596	29,628	LB
3033	417298,991	4585349,952	29,520	LB
3034	417303,332	4585335,715	29,391	LB
3035	417307,108	4585320,792	29,222	LB
3036	417310,153	4585306,451	29,182	LB
3037	417312,745	4585291,227	29,170	LB
3038	417314,663	4585276,426	29,116	LB
3039	417315,867	4585265,000	29,133	LB
3040	416906,014	4585207,178	30,864	LB
3041	416917,104	4585190,210	30,589	LB
3042	416928,059	4585173,031	30,225	LB
3043	416938,719	4585156,145	29,889	LB
3044	416949,249	4585139,197	29,602	LB
3045	416959,780	4585122,219	29,308	LB
3046	416971,016	4585103,892	29,016	LB
3047	416981,420	4585086,792	28,785	LB
3048	416991,707	4585069,873	28,557	LB
3049	417001,999	4585052,775	28,345	LB
3050	417012,440	4585035,220	28,089	LB
3051	417022,366	4585018,020	27,871	LB
3052	417031,965	4585000,861	27,732	LB

Punto	X	Y	Z	Código
3053	417031,973	4585000,872	27,725	LB
3054	417041,950	4584982,713	27,554	LB
3055	417051,641	4584964,832	27,402	LB
3056	417058,591	4584951,721	27,296	LB
3057	417062,998	4584943,110	27,237	LB
3058	417063,627	4584943,296	27,290	LB
3059	417072,172	4584923,988	27,068	LB
3060	417072,437	4584924,080	27,128	LB
3061	417080,936	4584905,375	26,965	LB
3062	417089,384	4584885,846	26,803	LB
3063	417097,538	4584866,354	26,663	LB
3064	417105,769	4584846,226	26,505	LB
3065	417113,116	4584827,746	26,348	LB
3066	417120,502	4584808,694	26,223	LB
3067	417127,755	4584789,875	26,119	LB
3068	417134,848	4584770,887	25,982	LB
3069	417142,250	4584751,021	25,867	LB
3070	417149,389	4584731,401	25,714	LB
3071	417149,450	4584731,377	25,722	LB
3072	417157,074	4584710,756	25,511	LB
3073	417164,339	4584691,135	25,433	LB
3074	417171,677	4584671,462	25,305	LB
3075	417178,766	4584652,569	25,206	LB
3076	417186,357	4584632,481	25,093	LB
3077	417193,649	4584613,383	24,998	LB
3079	417200,975	4584594,363	24,951	LB
3080	417208,303	4584575,492	24,933	LB
3081	417208,297	4584575,396	24,890	LB
3082	417215,690	4584556,402	24,851	LB
3083	417223,275	4584536,844	24,797	LB
3084	417232,144	4584514,236	24,760	LB
3085	417251,436	4584465,532	24,717	LB
3086	417258,643	4584447,193	24,727	LB
3087	417265,750	4584428,851	24,756	LB
3088	417273,034	4584409,772	24,796	LB
3089	417280,089	4584391,087	24,846	LB
3090	417287,318	4584371,723	24,896	LB
3091	416733,036	4585910,315	37,855	LB
3092	416736,459	4585909,025	37,896	LB
3093	416733,125	4585918,732	37,634	LB
3094	416728,870	4585932,819	37,000	LB
3095	416723,576	4585949,532	36,121	LB

Punto	X	Y	Z	Código
3096	416718,794	4585963,814	35,368	LB
3097	416713,646	4585978,490	34,546	LB
3098	416707,956	4585993,886	33,684	LB
3099	416702,430	4586008,218	32,946	LB
3100	416696,815	4586022,144	32,371	LB
3101	416691,018	4586035,717	31,962	LB
3102	416684,672	4586050,094	31,617	LB
3103	416678,608	4586063,673	31,489	LB
3104	416672,123	4586078,626	31,497	LB
3105	416666,104	4586093,050	31,547	LB
3106	416660,646	4586106,824	31,600	LB
3107	416655,491	4586120,351	31,673	LB
3108	416669,731	4586094,819	31,559	LB
3109	416675,443	4586081,164	31,401	LB
3110	416681,942	4586066,180	31,424	LB
3111	416688,450	4586051,504	31,675	LB
3112	416694,819	4586037,107	32,034	LB
3113	416700,822	4586022,920	32,475	LB
3114	416706,865	4586007,997	33,137	LB
3115	416712,625	4585992,999	33,925	LB
3116	416717,970	4585978,426	34,726	LB
3117	416723,067	4585963,875	35,517	LB
3118	416727,934	4585949,206	36,298	LB
3119	416731,783	4585937,031	36,926	LB
3120	416736,261	4585922,996	37,490	LB
3121	416738,562	4585917,232	37,683	LB
3122	416741,479	4585911,616	37,819	LB
3123	416745,161	4585906,309	37,901	LB
3124	416749,392	4585901,402	37	

Punto	X	Y	Z	Código	Punto	X	Y	Z	Código	Punto	X	Y	Z	Código	Punto	X	Y	Z	Código
75	416286,375	4585219,444	45,954	base	1041	416114,422	4585156,944	52,122	lb	1083	416671,943	4585765,237	30,122	lb	1125	416727,935	4586011,219	28,335	cam
77	416873,083	4585505,750	34,539	lb	1042	416130,234	4585161,053	51,662	lb	1084	416666,288	4585777,659	30,357	lb	1126	416732,423	4585999,334	29,314	cam
1001	416259,979	4585242,009	43,329	of-600	1043	416146,368	4585165,501	51,154	lb	1085	416658,939	4585788,486	30,648	lb	1127	416673,002	4586166,643	28,182	cam
1002	416261,513	4585238,284	45,520	sum	1044	416162,218	4585170,336	50,707	lb	1086	416650,645	4585797,222	30,912	lb	1128	416669,032	4586176,360	28,376	cam
1003	416275,785	4585240,841	45,615	lb	1045	416177,884	4585175,434	50,214	lb	1087	416639,911	4585805,010	31,090	lb	1129	416664,050	4586186,567	28,315	cam
1004	416257,100	4585231,641	46,143	lb	1046	416193,672	4585181,098	49,680	lb	1088	416640,007	4585805,468	31,112	lb	1130	416659,022	4586197,791	28,335	cam
1005	416239,405	4585223,172	46,636	lb	1047	416209,715	4585187,295	49,118	lb	1089	416632,191	4585808,604	31,227	lb	1131	416655,092	4586208,726	27,976	cam
1006	416222,472	4585215,272	47,102	lb	1048	416225,498	4585194,101	48,439	lb	1090	416632,340	4585808,951	31,253	lb	1132	416651,684	4586219,241	27,784	cam
1007	416203,913	4585206,761	47,683	lb	1049	416242,768	4585202,066	47,711	lb	1091	416626,276	4585810,728	31,267	lb	1133	416648,038	4586231,385	27,748	cam
1008	416186,111	4585198,866	48,350	lb	1050	416257,653	4585209,121	47,118	lb	1092	416626,311	4585811,042	31,282	lb	1134	416643,815	4586243,947	27,683	cam
1009	416172,534	4585193,282	48,856	lb	1051	416271,678	4585215,933	46,503	lb	1093	416614,611	4585813,555	30,908	lb	1135	416640,349	4586255,034	27,631	cam
1010	416158,807	4585188,484	49,398	lb	1052	416285,713	4585222,850	45,898	lb	1094	416601,751	4585814,075	29,914	lb	1136	416632,465	4586252,931	27,483	cam
1011	416158,932	4585188,137	49,408	lb	1053	416273,910	4585212,409	44,710	sum	1095	416590,102	4585812,766	28,869	lb	1137	416635,743	4586241,890	27,532	cam
1012	416142,407	4585183,473	50,054	lb	1054	416564,736	4585817,754	27,829	lb	1096	416580,094	4585810,832	28,304	lb	1138	416639,261	4586229,585	27,637	cam
1013	416142,569	4585183,133	50,058	lb	1055	416574,875	4585819,768	28,227	lb	1097	416565,278	4585808,145	27,814	lb	1139	416641,690	4586219,561	27,808	cam
1014	416127,532	4585178,943	50,636	lb	1056	416586,184	4585822,608	28,823	lb	1098	416676,138	4585735,816	28,460	of400	1140	416644,686	4586209,042	27,893	cam
1015	416112,485	4585175,041	51,174	lb	1057	416597,458	4585825,666	29,768	lb	1099	416714,816	4585590,751	26,342	sum	1141	416649,507	4586197,280	28,078	cam
1016	416115,161	4585168,451	51,511	lb	1058	416607,937	4585828,642	30,887	lb	1100	416737,022	4586001,427	29,279	cam	1142	416653,216	4586187,280	28,154	cam
1017	416130,039	4585172,318	51,041	lb	1059	416617,319	4585831,462	31,878	lb	1101	416733,252	4586010,818	28,349	cam	1143	416656,523	4586176,587	28,349	cam
1018	416146,144	4585176,887	50,475	lb	1060	416619,305	4585824,682	31,842	lb	1102	416729,843	4586021,434	27,833	cam	1144	416659,613	4586166,073	28,186	cam
1019	416161,661	4585181,636	49,924	lb	1061	416608,264	4585821,364	30,658	lb	1103	416727,300	4586031,606	27,617	cam	1145	416660,653	4586162,694	28,024	cam
1020	416176,953	4585186,722	49,383	lb	1062	416596,523	4585817,869	29,523	lb	1104	416725,631	4586043,239	27,619	cam	1146	416660,276	4586160,527	27,724	cam
1021	416191,716	4585192,063	48,867	lb	1063	416607,300	4585818,165	30,486	lb	1105	416724,596	4586052,572	27,549	cam	1147	416658,509	4586158,762	27,630	cam
1022	416206,849	4585197,921	48,380	lb	1064	416618,054	4585817,068	31,162	lb	1106	416722,364	4586062,893	27,492	cam	1148	416665,095	4586170,501	28,350	cam
1023	416221,977	4585204,054	47,861	lb	1065	416629,122	4585814,331	31,440	lb	1107	416719,071	4586074,359	27,489	cam	1149	416663,256	4586169,934	28,397	cam
1024	416236,458	4585210,279	47,398	lb	1066	416639,997	4585809,910	31,333	lb	1108	416715,289	4586073,241	27,634	cam	1150	416663,727	4586168,104	28,325	cam
1025	416251,486	4585217,199	46,835	lb	1067	416651,083	4585803,219	31,109	lb	1109	416715,296	4586073,242	27,624	cam	1151	416665,529	4586168,362	28,321	cam
1026	416266,127	4585224,270	46,333	lb	1068	416659,386	4585796,397	31,021	lb	1110	416718,169	4586063,752	27,594	cam	1152	416664,475	4586169,279	28,744	pozsan
1027	416280,938	4585231,555	45,787	lb	1069	416655,140	4585797,011	30,952	pozsan	1111	416720,004	4586054,070	27,608	cam	1153	416600,228	4586150,180	28,191	cam
1028	416282,294	4585228,993	45,823	lb	1070	416664,974	4585790,546	30,851	lb	1112	416720,586	4586049,680	27,673	cam	1154	416595,510	4586153,029	28,774	cam
1029	416268,836	4585223,333	46,217	sum	1071	416672,254	4585780,474	30,675	lb	1113	416719,649	4586046,768	27,701	cam	1155	416591,132	4586153,695	28,938	cam
1030	416269,095	4585222,464	46,301	lb	1072	416678,128													

Punto	X	Y	Z	Código
1167	416528,377	4586141,541	29,138	cam
1168	416526,013	4586140,545	29,288	cam
1169	416517,882	4586138,581	29,332	cam
1170	416513,355	4586137,930	29,354	cam
1171	416511,459	4586138,224	29,301	cam
1172	416508,638	4586140,009	29,395	cam
1173	416507,863	4586135,743	29,466	cam
1174	416511,619	4586134,736	29,341	cam
1175	416515,519	4586134,732	29,313	cam
1176	416521,832	4586135,611	29,277	cam
1177	416530,739	4586137,356	29,260	cam
1178	416540,034	4586139,428	29,212	cam
1179	416550,564	4586141,998	29,236	cam
1180	416561,537	4586144,254	29,200	cam
1181	416567,054	4586145,310	29,163	cam
1182	416569,716	4586145,182	29,064	cam
1183	416571,649	4586144,157	28,836	cam
1184	416573,083	4586141,941	28,624	cam
1185	416575,700	4586134,713	28,307	cam
1186	416578,869	4586124,049	28,102	cam
1187	416580,751	4586114,196	28,049	cam
1188	416582,506	4586103,677	27,954	cam
1189	416584,205	4586093,248	27,933	cam
1190	416586,479	4586093,269	27,918	cam
1191	416584,777	4586103,705	27,972	cam
1192	416582,969	4586114,122	28,015	cam
1193	416581,220	4586123,513	28,099	cam
1194	416578,705	4586133,385	28,216	cam
1195	416575,977	4586141,714	28,509	cam
1196	416575,154	4586143,903	28,705	cam
1197	416575,319	4586145,869	28,943	cam
1198	416577,842	4586146,746	28,954	cam
1199	416584,997	4586148,472	28,921	cam
1200	416591,324	4586148,774	28,670	cam
1201	416595,293	4586148,209	28,312	cam
1202	416599,281	4586146,040	27,831	cam
1203	416601,838	4586142,234	27,325	cam
1204	416660,407	4585501,664	26,465	cam
1205	416664,291	4585517,918	26,497	cam
1206	416666,786	4585528,922	26,395	cam
1207	416669,907	4585541,801	26,288	cam
1208	416673,416	4585558,707	25,899	cam
1209	416674,867	4585568,567	25,946	cam
1210	416675,599	4585578,508	25,942	cam
1211	416677,698	4585590,281	25,996	cam
1212	416679,099	4585601,215	26,145	cam
1213	416679,388	4585611,169	26,019	cam
1214	416679,360	4585620,160	26,035	cam
1215	416678,978	4585630,191	25,751	cam
1216	416678,478	4585639,915	25,722	cam
1217	416678,498	4585652,504	25,678	cam
1218	416678,432	4585663,148	25,698	cam
1219	416678,001	4585673,942	25,474	cam
1220	416677,254	4585686,720	25,442	cam
1221	416674,528	4585685,371	25,939	cam
1222	416674,543	4585685,341	25,854	cam
1223	416674,931	4585676,538	25,845	cam
1224	416675,416	4585663,917	25,781	cam
1225	416675,555	4585654,133	25,741	cam
1226	416675,926	4585640,571	25,792	cam
1227	416675,939	4585640,566	25,907	cam
1228	416676,321	4585628,294	25,957	cam
1229	416676,354	4585618,143	25,963	cam
1230	416676,352	4585618,140	25,931	cam
1231	416676,412	4585610,099	25,934	cam
1232	416676,411	4585610,096	25,914	cam
1233	416675,999	4585599,062	25,998	cam
1234	416671,766	4585599,404	25,961	cam
1235	416672,704	4585591,482	26,143	cam
1236	416672,483	4585580,736	26,358	cam
1237	416671,387	4585569,511	26,250	cam
1238	416669,636	4585558,900	26,411	cam
1239	416667,822	4585548,096	26,465	cam
1240	416665,911	4585538,057	26,497	cam
1241	416663,407	4585527,548	26,395	cam
1242	416660,617	4585517,431	26,288	cam
1243	416793,229	4585356,995	24,779	muro
1244	416792,139	4585354,549	24,683	muro
1245	416794,107	4585352,947	24,665	muro
1246	416796,333	4585354,459	24,803	muro
1247	416793,215	4585353,629	26,942	muro
1248	416740,615	4585289,343	23,834	of-1800
1249	416879,707	4585251,411	31,712	lb
1250	416889,192	4585238,513	31,429	lb
1251	416895,174	4585230,118	31,257	lb
1252	416897,398	4585229,493	31,192	lb
1253	416887,954	4585245,703	31,449	lb
1254	416879,120	4585261,311	31,663	lb
1255	416869,609	4585278,600	31,822	lb
1256	416864,227	4585288,696	31,886	lb
1257	416854,183	4585308,642	31,967	lb
1258	416853,713	4585308,291	31,997	lb
1259	416846,610	4585321,178	32,117	lb
1260	416839,095	4585334,884	32,231	lb
1261	416832,022	4585348,777	32,339	lb
1262	416825,684	4585362,789	32,370	lb
1263	416818,854	4585379,319	32,384	lb
1264	416812,519	4585395,248	32,390	lb
1265	416806,572	4585410,834	32,430	lb
1266	416801,113	4585425,265	32,457	lb
1267	416795,143	4585441,177	32,480	lb
1268	416789,301	4585455,973	32,514	lb
1269	416914,992	4585398,485	31,086	lb
1270	416912,942	4585398,111	31,015	lb
1271	416909,643	4585412,654	31,161	lb
1272	416905,276	4585427,257	31,326	lb
1273	416900,252	4585441,433	31,592	lb
1274	416893,944	4585456,860	32,034	lb
1275	416887,403	4585470,892	32,619	lb
1276	416880,863	4585483,565	33,198	lb
1277	416875,694	4585492,890	33,784	lb
1278	416870,354	4585502,568	34,465	lb
1279	416864,736	4585512,899	34,962	lb
1280	416859,436	4585522,730	35,366	lb
1281	416853,076	4585534,915	35,697	lb
1282	416847,555	4585545,767	35,911	lb
1283	416841,657	4585557,684	35,993	lb
1284	416836,231	4585569,120	35,966	lb
1285	416831,722	4585579,077	35,861	lb
1286	416826,807	4585590,409	35,629	lb
1287	416822,145	4585601,655	35,277	lb
1288				

Punto	X	Y	Z	Código
1335	416843,016	4585513,747	36,115	lb
1336	416840,073	4585507,335	35,698	lb
1337	416849,827	4585501,112	34,815	lb
1338	416858,596	4585493,599	34,026	lb
1339	416866,837	4585484,086	33,172	lb
1340	416873,812	4585473,597	32,449	lb
1341	416879,502	4585462,927	31,910	lb
1342	416884,986	4585451,040	31,412	lb
1343	416889,818	4585439,380	31,034	lb
1344	416894,319	4585426,812	30,746	lb
1345	416898,262	4585414,324	30,579	lb
1346	416901,318	4585403,090	30,533	lb
1347	416904,215	4585390,710	30,524	lb
1348	417091,932	4584949,115	28,498	lb
1349	417101,146	4584929,277	28,316	lb
1350	417110,271	4584909,036	28,130	lb
1351	417118,847	4584889,313	27,875	lb
1352	417128,018	4584867,208	27,619	lb
1353	417136,253	4584846,566	27,377	lb
1354	417143,964	4584826,361	27,099	lb
1355	417151,201	4584806,032	26,880	lb
1356	417157,855	4584786,143	26,720	lb
1357	417165,067	4584764,490	26,375	lb
1358	417172,437	4584742,469	26,067	lb
1359	417179,644	4584721,697	25,761	lb
1360	417186,860	4584700,954	25,545	lb
1361	417194,578	4584680,359	25,332	lb
1362	417202,972	4584657,948	25,193	lb
1363	417210,651	4584637,698	25,110	lb
1364	417218,574	4584616,973	25,030	lb
1365	417226,483	4584596,394	24,967	lb
1366	417235,362	4584573,506	24,927	lb
1367	417243,424	4584553,063	24,876	lb
1368	417251,553	4584532,348	24,882	lb
1369	417014,562	4584997,197	24,901	cam
1370	417017,478	4584998,337	24,780	cam
1371	417017,493	4584998,338	24,797	cam
1372	417024,644	4584985,061	24,769	cam
1373	417021,086	4584983,168	24,888	cam
1374	417027,316	4584969,602	24,822	cam
1375	417031,732	4584970,841	24,730	cam
1376	417038,396	4584957,085	24,855	cam
1377	417033,997	4584954,968	24,763	cam
1378	417040,990	4584941,842	24,806	cam
1379	417044,527	4584943,420	24,779	cam
1380	417050,947	4584929,183	24,996	cam
1381	417047,757	4584928,110	25,069	cam
1382	417052,646	4584916,774	25,708	cam
1383	417055,838	4584917,224	25,718	cam
1384	417057,982	4584912,395	26,119	cam
1385	417054,386	4584911,550	26,159	cam
1386	417054,959	4584907,003	26,334	cam
1387	417060,222	4584905,704	26,276	cam
1388	417059,130	4584901,463	26,390	cam
1389	417053,665	4584897,866	26,462	cam
1390	417051,398	4584902,297	26,501	cam
1391	417042,676	4584897,333	26,249	cam
1392	417043,646	4584893,938	26,303	cam
1393	417030,121	4584889,930	26,428	cam
1394	417029,334	4584893,007	26,395	cam
1395	417017,453	4584889,806	26,344	cam
1396	417017,342	4584886,042	26,323	cam
1397	417006,640	4584883,975	26,197	cam
1398	417006,217	4584888,401	26,330	cam
1399	416993,418	4584891,895	26,249	cam
1400	416991,660	4584888,312	26,282	cam
74	416528,746	4585341,523	36,789	base
75	416286,344	4585219,458	45,974	lb
1784	416271,418	4585215,816	46,504	lb
1807	416285,225	4585222,619	45,907	lb
1811	416303,610	4585231,752	45,045	lb
1814	416319,581	4585239,744	44,407	lb
1815	416337,951	4585248,974	43,736	lb
1820	416356,909	4585258,454	43,029	lb
1825	416377,064	4585268,542	42,32	lb
1826	416394,685	4585277,366	41,635	lb
1831	416413,245	4585286,649	40,964	lb
1832	416430,849	4585295,495	40,319	lb
1837	416448,629	4585304,363	39,676	lb
7000	416270,352	4585238,189	45,726	lb
7001	416284,221	4585245,110	45,273	lb
7002	416298,969	4585252,455	44,767	lb
7003	416314,263	4585260,114	44,192	lb
7004	416329,819	4585267,897	43,618	lb
7005	416345,127	4585275,573	43,072	lb
7006	416361,677	4585283,841	42,434	lb
7007	416361,681	4585283,846	42,431	lb
7008	416360,739	4585285,879	42,348	lb
7009	416376,077	4585291,069	41,889	lb
7010	416389,458	4585297,764	41,411	lb
7011	416403,973	4585305,012	40,907	lb
7012	416418,920	4585312,491	40,376	lb
7013	416433,420	4585319,739	39,845	lb
7014	416445,865	4585325,964	39,408	lb
7015	416452,179	4585329,147	39,126	lb
7016	416451,378	4585331,216	39,083	lb
7017	416465,582	4585335,866	38,576	lb
7018	416479,388	4585342,746	38,031	lb
7019	416484,109	4585333,219	38,239	lb
7020	416470,083	4585326,175	38,799	lb
7021	416455,897	4585319,085	39,375	lb
7022	416456,225	4585318,193	39,388	lb
7023	416449,879	4585316,113	39,606	lb
7024	416438,151	4585310,252	40,034	lb
7025	416424,197	4585303,265	40,542	lb
7026	416410,315	4585296,311	41,074	lb
7027	416395,772	4585289,027	41,616	lb
7028	416381,024	4585281,672	42,144	lb
7029	416366,045	4585274,141	42,663	lb
7030	416366,502	4585273,213	42,718	lb
7031	416350,429	4585266,360	43,243	lb
7032	416335,880	4585259,081	43,731	lb
7033	416322,417	4585252,340	44,208	lb
7034	416307,711	4585244,978	44,748	lb
7035	416292,670	4585237,443	45,314	lb
7036	416280,914	4585231,573	45,739	lb
7037	416281,429	4585230,641	45,762	lb
7038	416281,759	4585229,983	45,758	lb
7039	416281,762	4585229,982	45,744	lb
7040	416282,296	4585229,041	45,769	lb
7041	416295,900	4585235,803	45,282	lb
7042	416310,545			

Punto	X	Y	Z	Código
7091	416853,958	4585184,560	25,984	cam
7092	416858,084	4585179,117	25,887	cam
7093	416861,358	4585171,563	25,795	cam
7094	416866,040	4585162,185	25,689	cam
7095	416863,277	4585160,637	25,732	cam
7096	416848,966	4585154,656	25,748	cam
7097	416847,539	4585146,758	25,758	cam
7098	416874,612	4585156,534	25,692	cam
7099	416874,592	4585156,559	25,681	cam
7100	416870,460	4585164,722	25,717	cam
7101	416866,726	4585172,358	25,806	cam
7102	416862,930	4585179,716	25,889	cam
7103	416857,129	4585187,267	26,013	cam
7104	416847,950	4585197,229	26,17	cam
7105	416844,191	4585194,011	26,154	cam
62	418411,625	4583091,179	21,090	lb
70	417687,532	4584675,220	28,511	lb
1500	417068,895	4585672,478	24,701	cam
1501	417074,704	4585675,379	24,710	cam
1502	417070,410	4585687,896	24,730	cam
1503	417064,987	4585686,261	24,694	cam
1504	417060,385	4585699,896	24,866	cam
1505	417065,860	4585702,272	24,858	cam
1506	417062,313	4585713,330	24,901	cam
1507	417056,269	4585712,590	24,861	cam
1508	417052,689	4585725,717	25,025	cam
1509	417058,123	4585727,822	25,108	cam
1510	417054,758	4585738,633	25,181	cam
1511	417048,528	4585737,734	25,123	cam
1512	417044,818	4585749,037	25,208	cam
1513	417050,837	4585751,192	25,330	cam
1514	417047,646	4585762,354	25,288	cam
1515	417041,376	4585760,964	25,297	cam
1516	417038,399	4585771,434	25,480	cam
1517	417043,770	4585773,147	25,330	cam
1518	417040,643	4585784,060	25,534	cam
1519	417035,372	4585782,835	25,629	cam
1520	417031,355	4585793,504	25,807	cam
1521	417037,161	4585795,872	25,868	cam
1522	417033,250	4585806,983	25,895	cam
1523	417026,014	4585805,691	25,832	cam
1524	417022,359	4585814,923	25,761	cam
1525	417029,571	4585816,880	25,773	cam
1526	417026,389	4585826,322	25,589	cam
1527	417018,508	4585824,781	25,321	cam
1528	417015,459	4585835,552	25,139	cam
1529	417022,103	4585837,480	25,385	cam
1530	417029,131	4585823,634	25,710	cam
1531	417033,381	4585820,989	25,579	cam
1532	417037,541	4585816,253	25,532	cam
1533	417041,107	4585809,183	25,527	cam
1534	417044,134	4585804,558	25,447	cam
1535	417048,169	4585801,901	25,543	cam
1536	417053,186	4585801,423	25,557	cam
1537	417061,011	4585803,191	25,693	cam
1538	417066,008	4585806,832	25,756	cam
1539	417070,170	4585811,904	25,887	cam
1540	417072,824	4585817,601	26,063	cam
1541	417075,895	4585827,191	26,478	cam
1542	417076,748	4585834,632	27,019	cam
1543	417075,772	4585844,012	27,377	cam
1544	417073,345	4585853,578	27,642	cam
1545	417070,779	4585862,528	27,755	cam
1546	417067,519	4585871,318	27,849	cam
1547	417063,564	4585879,604	27,713	cam
1548	417058,413	4585888,265	27,673	cam
1549	417054,045	4585897,660	27,703	cam
1550	417049,230	4585908,415	27,824	cam
1551	417045,282	4585918,588	27,985	cam
1552	417041,380	4585929,326	28,126	cam
1553	417035,887	4585940,422	28,245	cam
1554	417031,534	4585950,458	28,461	cam
1555	417027,396	4585960,449	28,485	cam
1556	417022,627	4585972,047	28,663	cam
1557	417019,759	4585981,172	28,652	cam
1558	417022,523	4585982,166	28,635	cam
1559	417025,774	4585972,682	28,605	cam
1560	417031,736	4585962,158	28,529	cam
1561	417036,836	4585950,466	28,561	cam
1562	417042,025	4585938,687	28,327	cam
1563	417047,376	4585927,648	28,160	cam
1564	417052,961	4585916,852	28,052	cam
1565	417058,066	4585905,811	27,832	cam
1566	417064,248	4585892,135	27,853	cam
1567	417065,390	4585881,796	27,848	cam
1568	417069,349	4585873,883	27,871	cam
1569	417072,480	4585865,674	27,785	cam
1570	417075,333	4585856,168	27,726	cam
1571	417077,745	4585847,063	27,502	cam
1572	417079,124	4585838,034	27,207	cam
1573	417079,188	4585830,830	26,871	cam
1574	417077,040	4585821,836	26,285	cam
1575	417075,343	4585815,229	26,047	cam
1576	417074,416	4585809,229	25,869	cam
1577	417075,119	4585803,481	25,914	cam
1578	417076,913	4585797,979	25,898	cam
1579	417081,205	4585790,747	25,875	cam
1580	417072,375	4585786,079	25,735	cam
1581	417068,595	4585794,281	25,751	cam
1582	417067,462	4585796,671	25,725	cam
1583	417064,788	4585798,138	25,703	cam
1584	417062,484	4585798,459	25,647	cam
1585	417058,680	4585797,252	25,675	cam
1586	417048,997	4585793,766	25,579	cam
1587	417044,561	4585793,726	25,548	cam
1588	417041,402	4585795,471	25,589	cam
1589	417039,510	4585798,682	25,651	cam
1590	417037,306	4585803,450	25,734	cam
1591	417034,520	4585810,945	25,747	cam
1592	417033,111	4585815,517	25,605	cam
1593	417031,427	4585817,765	25,596	cam
1594	417030,428	4585817,631	25,746	cam
1595	417029,424	4585817,258	25,804	cam
1596	417129,964	4585748,874	31,889	lb
1597	417136,404	4585735,943	31,730	lb
1598	417143,539	4585722,017	31,604	lb
1599	417151,091	4585707,458	31,432	lb
1600	417157,598	4585694,646	31,417	lb
1601	417164,560	4585680,454	31,298	lb
1602	417171,687	4585665,553	31,241	lb
1603	417178,808	4585650,590	31,184	lb
1604	417187,806			

Punto	X	Y	Z	Código
1651	417407,501	4585130,902	31,293	lb
1652	417414,057	4585113,380	31,297	lb
1653	417419,614	4585098,588	31,353	lb
1654	417143,127	4585761,333	32,673	lb
1655	417148,556	4585745,441	32,286	lb
1656	417153,941	4585729,854	31,956	lb
1657	417159,161	4585714,873	31,698	lb
1658	417164,878	4585698,955	31,483	lb
1659	417170,535	4585683,996	31,352	lb
1660	417177,434	4585666,271	31,271	lb
1661	417175,658	4585665,467	31,314	lb
1662	417167,716	4585681,957	31,380	lb
1663	417160,680	4585696,253	31,433	lb
1664	417153,716	4585710,306	31,502	lb
1665	417145,721	4585725,908	31,593	lb
1666	417138,030	4585740,903	31,658	lb
1667	417131,551	4585754,426	31,787	lb
1668	417296,924	4585324,479	25,783	cam
1669	417294,965	4585334,863	26,012	cam
1670	417291,661	4585345,432	26,165	cam
1671	417288,252	4585356,026	26,258	cam
1672	417284,793	4585366,516	26,546	cam
1673	417281,473	4585376,355	26,845	cam
1674	417278,733	4585383,035	27,057	calz
1675	417274,955	4585392,021	26,879	calz
1676	417270,615	4585401,077	26,683	calz
1677	417266,203	4585410,571	26,626	calz
1678	417261,909	4585420,211	26,655	calz
1679	417257,640	4585429,909	26,688	calz
1680	417253,566	4585439,500	26,600	calz
1681	417249,935	4585449,283	26,542	calz
1682	417248,966	4585452,541	26,513	calz
1683	417245,309	4585450,924	26,453	calz
1684	417249,248	4585453,331	26,547	cam
1685	417245,810	4585463,009	26,257	cam
1686	417241,033	4585474,317	25,616	cam
1687	417235,857	4585485,771	25,398	cam
1688	417233,153	4585492,454	25,419	cam
1689	417227,989	4585501,059	25,277	cam
1690	417228,009	4585501,060	25,232	cam
1691	417225,714	4585498,962	24,978	cam
1692	417231,263	4585490,150	25,454	cam
1693	417236,008	4585478,852	25,469	cam
1694	417240,319	4585468,347	25,779	cam
1695	417241,288	4585464,144	26,213	cam
1696	417241,932	4585461,461	26,298	cam
1697	417244,043	4585456,516	26,450	cam
1698	417245,894	4585451,466	26,428	cam
1699	417245,361	4585446,379	26,504	calz
1700	417248,136	4585444,266	26,569	calz
1701	417254,026	4585430,582	26,769	calz
1702	417258,851	4585419,453	26,759	calz
1703	417264,025	4585407,824	26,678	calz
1704	417269,765	4585394,740	26,765	calz
1705	417275,547	4585381,714	26,862	calz
1706	417276,016	4585380,680	26,831	cam
1707	417275,108	4585378,086	26,629	cam
1708	417272,374	4585374,871	26,312	cam
1709	417265,461	4585371,603	25,729	cam
1710	417267,142	4585368,868	25,841	cam
1711	417273,717	4585371,551	26,232	cam
1712	417275,974	4585371,921	26,247	cam
1713	417278,672	4585371,228	26,450	cam
1714	417280,377	4585369,235	26,548	cam
1715	417281,818	4585365,394	26,553	cam
1716	417285,365	4585354,414	26,379	cam
1717	417288,893	4585343,396	26,297	cam
1718	417290,810	4585337,390	26,221	cam
1719	417293,220	4585327,183	25,784	cam
1720	417294,078	4585322,857	25,701	cam
1721	417684,056	4584731,220	25,429	lb
1722	417678,509	4584736,635	25,034	lb
1723	417671,082	4584740,469	24,638	lb
1724	417671,085	4584740,474	24,630	lb
1725	417663,410	4584741,592	24,269	lb
1726	417654,763	4584739,984	23,928	lb
1727	417646,991	4584735,043	23,635	lb
1728	417641,807	4584728,508	23,376	lb
1729	417638,639	4584719,880	23,177	lb
1730	417638,400	4584709,700	23,028	lb
1731	417639,992	4584701,079	22,928	lb
1732	417642,955	4584691,812	22,944	lb
1733	417646,298	4584683,626	22,918	lb
1734	417631,368	4584710,668	23,420	lb
1735	417631,692	4584718,382	23,535	lb
1736	417633,968	4584728,434	23,720	lb
1737	417637,797	4584735,529	23,836	lb
1738	417643,142	4584741,281	24,087	lb
1739	417651,029	4584746,294	24,342	lb
1740	417659,720	4584748,704	24,598	lb
1741	417668,226	4584748,767	24,879	lb
1742	417676,566	4584746,365	25,321	lb
1743	417684,829	4584741,112	25,630	lb
1744	417690,234	4584735,067	25,947	lb
1745	417700,285	4584593,851	27,632	lb
1746	417704,008	4584580,807	27,436	lb
1747	417707,913	4584567,363	27,212	lb
1748	417712,185	4584552,803	26,960	lb
1749	417717,760	4584534,187	26,673	lb
1750	417721,856	4584521,043	26,396	lb
1751	417726,221	4584507,143	26,151	lb
1752	417730,683	4584493,349	25,958	lb
1753	417735,319	4584479,377	25,853	lb
1754	417739,142	4584480,676	25,777	lb
1755	417734,424	4584494,904	25,895	lb
1756	417730,039	4584508,627	26,030	lb
1757	417725,830	4584521,953	26,220	lb
1758	417721,542	4584535,866	26,471	lb
1759	417717,039	4584550,895	26,780	lb
1760	417712,940	4584564,963	27,035	lb
1761	417708,954	4584578,772	27,214	lb
1762	417704,810	4584593,413	27,501	lb
1763	418436,065	4583049,814	21,517	cam
1764	418440,463	4583052,377	21,704	cam
1765	418447,644	4583043,587	21,813	cam
1766	418444,391	4583040,362	21,596	cam
1767	418452,855	4583031,792	21,765	cam
1768	418456,130	4583034,829	21,839	cam
1769	418464,700	4583025,763	22,002	cam
1770	418461,073	4583022,552	21,852	cam
1771	418469,683	4583013,606	22,005	cam

Punto	X	Y	Z	Código
1855	417937,101	4582539,026	28,940	lb
1856	417933,403	4582549,583	28,467	lb
1862	417930,224	4582558,956	27,983	lb
1863	417927,016	4582568,784	27,462	lb
1864	417923,877	4582580,733	26,806	lb
1865	417921,161	4582592,233	26,177	lb
1866	417917,663	4582605,204	25,481	lb
1867	417914,523	4582616,669	24,883	lb
1868	417911,546	4582628,079	24,374	lb
1869	417908,566	4582639,984	23,929	lb
1870	417905,588	4582652,661	23,539	lb
1871	417902,596	4582665,904	23,203	lb
1872	417899,546	4582679,466	23,021	lb
1873	417896,300	4582693,260	22,976	lb
1874	417892,946	4582706,592	23,078	lb
1875	417896,954	4582707,370	23,136	lb
1876	417900,094	4582694,864	23,067	lb
1877	417902,978	4582682,649	23,065	lb
1878	417906,052	4582668,958	23,179	lb
1879	417909,015	4582655,861	23,388	lb
1880	417912,000	4582642,792	23,784	lb
1881	417915,185	4582630,057	24,252	lb
1882	417918,304	4582618,115	24,790	lb
1883	417921,573	4582606,246	25,413	lb
1884	417925,205	4582594,088	26,066	lb
1885	417925,210	4582594,090	26,065	lb
1886	417929,006	4582582,025	26,724	lb
1887	417933,050	4582569,706	27,401	lb
1888	417937,544	4582556,378	28,108	lb
1889	417941,887	4582543,804	28,694	lb
1890	417946,308	4582531,491	29,149	lb
1891	417950,810	4582519,355	29,511	lb
1892	417955,077	4582508,044	29,784	lb
1893	417956,395	4582503,509	29,824	lb
1894	417959,198	4582507,693	29,873	lb
1895	417962,058	4582511,201	29,931	lb
1900	417919,569	4582472,128	19,929	cam
1901	417920,279	4582482,168	19,842	cam
1902	417920,051	4582492,587	19,879	cam
1903	417917,589	4582502,731	19,800	cam
1904	417915,580	4582514,045	19,795	cam
1905	417910,159	4582513,329	19,813	cam
1906	417912,257	4582502,540	19,849	cam
1907	417913,675	4582491,447	19,852	cam
1908	417913,431	4582481,153	19,886	cam
1909	417912,724	4582475,572	20,004	cam
769	418725,036	4583052,793	19,855	cam
770	418726,061	4583050,889	19,892	cam
771	418722,268	4583048,509	19,829	cam
772	418721,121	4583050,295	19,778	cam
773	418713,521	4583044,663	19,902	cam
774	418714,638	4583042,736	19,916	cam
775	418707,226	4583037,094	19,966	cam
776	418705,816	4583038,847	19,986	cam
777	418698,058	4583033,532	19,915	cam
778	418699,324	4583031,320	19,926	cam
779	418691,358	4583026,155	19,955	cam
780	418689,796	4583028,152	19,878	cam
781	418681,419	4583023,087	20,041	cam
782	418682,686	4583020,792	20,150	cam
783	418674,234	4583015,562	20,016	cam
784	418672,557	4583017,717	19,948	cam
785	418664,129	4583012,090	19,945	cam
786	418665,221	4583009,783	19,969	cam
787	418653,739	4583002,152	20,012	cam
788	418652,226	4583004,354	19,942	cam
789	418640,751	4582996,602	19,987	cam
790	418642,119	4582994,254	20,086	cam
791	418629,573	4582986,113	20,162	cam
792	418628,291	4582988,423	20,082	cam
793	418621,992	4582983,895	20,601	cam
794	418623,003	4582981,568	20,697	cam
795	418620,584	4582979,675	20,754	cam
796	418619,134	4582981,841	20,634	cam
797	418613,688	4582977,972	20,466	cam
798	418614,900	4582975,475	20,541	cam
1	416864,507	4585497,763	34,290	LB
2	416861,012	4585501,062	34,590	LB
3	416856,843	4585504,605	34,920	LB
4	416852,302	4585508,035	35,310	LB
5	416847,670	4585511,113	35,700	LB
6	416843,182	4585513,650	36,050	LB
7	416842,916	4585513,920	36,120	JD
8	416842,650	4585514,072	36,130	JD
9	416843,528	4585515,828	36,260	JD
10	416843,800	4585515,679	36,220	JD
11	416838,495	4585515,891	36,370	LB
12	416833,813	4585517,927	36,670	LB
13	416828,961	4585519,690	37,030	LB
14	416824,153	4585521,151	37,370	LB
15	416817,802	4585522,577	37,830	LB
16	416812,910	4585523,406	38,170	LB
17	416807,632	4585523,994	38,520	LB
18	416802,082	4585524,253	38,860	LB
19	416796,772	4585524,172	39,200	LB
20	416791,117	4585523,737	39,600	LB
776	418705,816	4583038,847	19,986	cam
777	418698,058	4583033,532	19,915	cam
778	418699,324	4583031,320	19,926	cam
779	418691,358	4583026,155	19,955	cam
780	418689,796	4583028,152	19,878	cam
781	418681,419	4583023,087	20,041	cam
782	418682,686	4583020,792	20,150	cam
783	418674,234	4583015,562	20,016	cam
784	418672,557	4583017,717	19,948	cam
785	418664,129	4583012,090	19,945	cam
786	418665,221	4583009,783	19,969	cam
787	418653,739	4583002,152	20,012	cam
788	418652,226	4583004,354	19,942	cam
789	418640,751	4582996,602	19,987	cam
790	418642,119	4582994,254	20,086	cam
791	418629,573	4582986,113	20,162	cam
792	418628,291	4582988,423	20,082	cam
793	418621,992	4582983,895	20,601	cam
794	418623,003	4582981,568	20,697	cam
795	418620,584	4582979,675	20,754	cam
796	418619,134	4582981,841	20,634	cam
797	418613,688	4582977,972	20,466	cam
798	418614,900	4582975,475	20,541	cam
799	418725,036	4583052,793	19,855	cam
770	418726,061	4583050,889	19,892	cam
771	418722,268	4583048,509	19,829	cam
772	418721,121	4583050,295	19,778	cam

Punto	X	Y	Z	Código
63	416828,402	4585512,421	36,560	LB
64	416833,068	4585510,621	36,200	LB
65	416837,681	4585508,543	35,860	LB
66	416840,049	4585507,310	35,690	LB
67	416839,569	4585507,585	35,710	JD
68	416839,250	4585507,733	35,710	JD
69	416838,941	4585507,144	35,680	JD
70	416839,252	4585506,977	35,650	JD
71	416844,063	4585504,993	35,310	LB
72	416848,346	4585502,146	34,930	LB
73	416852,449	4585499,033	34,580	LB
74	416856,351	4585495,719	34,230	LB
75	416859,599	4585492,555	33,920	LB
320	417587,773	4584612,722	31,260	LB
321	417587,496	4584615,245	31,270	LB
322	417587,433	4584618,041	31,310	LB
323	417580,287	4584615,266	31,470	LB
324	417572,433	4584612,205	31,690	LB
325	417564,944	4584609,313	31,820	LB
326	417558,182	4584606,774	31,910	LB
327	417551,462	4584604,231	32,010	LB
328	417551,787	4584603,278	31,970	LB
329	417547,442	4584602,256	32,080	LB
330	417547,301	4584602,649	32,080	LB
331	417542,194	4584600,736	32,200	LB
332	417542,227	4584600,572	32,210	LB
333	417534,485	4584597,660	32,320	LB
334	417534,435	4584597,798	32,310	LB
335	417524,778	4584594,089	32,510	LB
336	417524,835	4584593,910	32,500	LB
337	417518,334	4584591,413	32,640	LB
338	417518,218	4584591,535	32,630	LB
339	417506,537	4584586,889	32,900	LB
340	417506,582	4584586,776	32,910	LB
341	417505,557	4584590,276	32,950	LB
342	417513,419	4584593,450	32,790	LB
343	417519,421	4584595,867	32,670	LB
344	417526,877	4584598,819	32,500	LB
345	417534,518	4584601,769	32,400	LB
346	417541,939	4584604,606	32,270	LB
347	417549,373	4584607,450	32,090	LB
348	417548,611	4584607,326	32,090	LB-SÑH
349	417549,073	4584607,519	32,070	LB-SÑH
350	417550,350	4584608,025	32,030	LB-SÑH
351	417550,883	4584608,227	32,020	LB-SÑH
352	417552,358	4584608,726	31,990	LB-SÑH
353	417552,818	4584608,960	31,990	LB-SÑH
354	417553,578	4584609,008	31,970	LB
355	417560,243	4584611,475	31,860	LB
356	417567,025	4584613,986	31,760	LB
357	417574,525	4584616,747	31,650	LB
358	417581,965	4584619,609	31,450	LB
359	417587,781	4584621,878	31,320	LB
360	417588,740	4584624,985	31,310	LB
361	417590,833	4584628,317	31,210	LB
362	417593,940	4584630,961	31,120	LB
363	417598,044	4584632,967	31,010	LB
365	417602,168	4584634,619	30,920	LB
366	417601,287	4584637,826	30,810	LB
367	417594,434	4584635,081	30,970	LB
368	417588,256	4584632,535	31,130	LB
369	417589,324	4584629,449	31,240	LB
370	417582,524	4584626,543	31,450	LB
371	417580,884	4584629,427	31,380	LB
372	417574,216	4584626,699	31,540	LB
373	417575,441	4584623,550	31,660	LB
374	417568,432	4584620,432	31,840	LB
375	417566,760	4584623,353	31,800	LB
376	417559,390	4584620,102	31,970	LB
377	417560,656	4584616,986	31,940	LB
378	417553,428	4584613,612	32,020	LB
379	417551,528	4584616,368	32,000	LB
380	417544,962	4584613,125	32,110	LB
381	417546,282	4584610,472	32,100	LB
382	417539,257	4584607,402	32,240	LB
383	417537,976	4584609,929	32,240	LB
384	417531,625	4584607,220	32,360	LB
385	417532,753	4584604,831	32,370	LB
386	417526,390	4584602,210	32,530	LB
387	417528,357	4584605,822	32,430	LB
388	417520,867	4584602,862	32,600	LB
389	417521,733	4584600,378	32,650	LB
390	417513,756	4584597,200	32,820	LB
391	417508,292	4584595,017	32,930	LB
392	417506,727	4584597,101	32,910	LB
393	417497,853	4584593,522	33,090	LB
394	417498,567	4584591,196	33,140	LB
397	417554,227	4584609,435	32,020	LB-SÑH
398	417556,113	4584610,115	31,990	LB-SÑH
399	417558,052	4584610,849	31,930	LB-SÑH
400	417559,945	4584611,563	31,910	LB-SÑH
401	417561,934	4584612,280	31,890	LB-SÑH
402	417563,829	4584612,979	31,880	LB-SÑH
403	417565,715	4584613,666	31,840	LB-SÑH
404	417567,629	4584614,361	31,820	LB-SÑH
405	417569,574	4584615,075	31,800	LB-SÑH
406	417571,522	4584615,815	31,760	LB-SÑH
407	417573,309	4584616,515	31,730	LB-SÑH
408	417575,241	4584617,273	31,690	LB-SÑH
409	417577,162	4584617,971	31,640	LB-SÑH
410	417579,011	4584618,711	31,590	LB-SÑH
411	417580,826	4584619,384	31,530	LB-SÑH
412	417582,725	4584620,154	31,490	LB-SÑH
413	417584,655	4584620,912	31,450	LB-SÑH
414	417586,555	4584621,553	31,400	LB-SÑH
415	417587,687	4584622,214	31,380	LB-SÑH
416	417587,786	4584622,472	31,390	LB-SÑH
417	417587,057	4584622,971	31,410	LB-SÑH
418	417586,567	4584623,579	31,440	LB-SÑH
421	417586,829	4584625,992	31,400	LB-SÑH
422	417587,949	4584623,557	31,380	LB-SÑH
423	417588,185	4584624,174	31,370	LB-SÑH
424	417588,662	4584625,300	31,370	LB-SÑH
425	417588,874	4584625,771	31,330	LB-SÑH
426	417589,466	4584626,794	31,270	LB-SÑH
427	417589,756	4584627,290	31,260	LB-SÑH
428	417590,598	4584628,346	31,230	LB-SÑH
429	417590,990	4584628,802	31,220	LB-SÑH
430	417590,995	4584629,296	31,200	LB-SÑH
431	417590,639	4584629,043	31,220	LB-SÑH
432	417589,933	4584629,324	31,220	LB-SÑH
433	417590,439	45846		

Punto	X	Y	Z	Código
481	417563,923	4584615,596	31,810	LB-SÑH
482	417567,747	4584617,055	31,780	LB-SÑH
483	417571,548	4584618,631	31,710	LB-SÑH
484	417575,300	4584620,301	31,630	LB-SÑH
485	417578,771	4584621,853	31,570	LB-SÑH
486	417580,868	4584622,516	31,530	LB-SÑH
487	417582,117	4584623,470	31,490	LB-SÑH
488	417622,104	4584832,213	27,290	LB
489	417619,304	4584829,849	27,330	LB
490	417614,413	4584835,898	27,690	LB
491	417617,106	4584838,407	27,620	LB
492	417612,399	4584844,414	27,980	LB
493	417609,559	4584842,091	28,030	LB
494	417604,770	4584848,058	28,360	LB
495	417607,118	4584850,994	28,330	LB
496	417602,420	4584856,903	28,630	LB
497	417599,487	4584854,751	28,730	LB
498	417594,253	4584861,352	29,040	LB
499	417596,933	4584863,874	29,010	LB
500	417592,207	4584869,924	29,310	LB
501	417589,417	4584867,630	29,340	LB
502	417584,457	4584873,970	29,610	LB
503	417587,257	4584876,255	29,560	LB
504	417582,403	4584882,687	29,840	LB
505	417579,575	4584880,456	29,870	LB
506	417575,167	4584886,330	30,090	LB
507	417578,050	4584888,504	30,070	LB
508	417573,534	4584894,719	30,260	LB
509	417570,629	4584892,571	30,360	LB
510	417565,849	4584899,297	30,590	LB
511	417568,581	4584901,720	30,480	LB
512	417564,304	4584907,996	30,630	LB
513	417561,352	4584905,918	30,780	LB
514	417557,234	4584912,031	31,000	LB
515	417560,202	4584914,146	30,850	LB
516	417555,863	4584920,821	31,020	LB
517	417552,860	4584918,795	31,140	LB
518	417548,793	4584925,333	31,280	LB
519	417551,740	4584927,348	31,160	LB
520	417548,013	4584933,596	31,310	LB
521	417544,946	4584931,748	31,390	LB
522	417540,801	4584938,864	31,500	LB
523	417543,744	4584940,811	31,410	LB
524	417539,977	4584947,481	31,500	LB
525	417536,989	4584945,474	31,600	LB
526	417532,782	4584952,799	31,690	LB
527	417536,029	4584954,379	31,640	LB
528	417532,312	4584961,133	31,680	LB
529	417529,182	4584959,310	31,730	LB
531	417525,424	4584966,189	31,790	LB
532	417528,405	4584968,153	31,780	LB
533	417524,745	4584975,063	31,810	LB
534	417521,731	4584973,110	31,810	LB
535	417517,863	4584980,461	31,800	LB
536	417521,132	4584981,971	31,770	LB
537	417517,298	4584989,623	31,750	LB
538	417514,144	4584987,916	31,810	LB
539	417510,519	4584995,095	31,790	LB
540	417513,741	4584996,733	31,720	LB
541	417510,058	4585004,562	31,740	LB
542	417506,940	4585002,490	31,770	LB
543	417503,281	4585010,111	31,760	LB
544	417506,437	4585011,871	31,710	LB
545	417502,961	4585019,469	31,690	LB
546	417499,714	4585017,767	31,720	LB
547	417496,128	4585025,523	31,720	LB
548	417499,203	4585027,633	31,660	LB
549	417495,420	4585036,084	31,630	LB
550	417492,199	4585034,419	31,680	LB
551	417488,197	4585043,196	31,640	LB
552	417491,551	4585044,491	31,600	LB
553	417487,859	4585052,651	31,540	LB
554	417484,721	4585050,907	31,580	LB
555	417480,804	4585059,583	31,510	LB
556	417483,728	4585061,828	31,480	LB
557	417479,913	4585070,325	31,410	LB
558	417476,533	4585069,271	31,420	LB
559	417475,503	4585080,021	31,310	LB
560	417472,368	4585078,409	31,350	LB
561	417468,554	4585086,886	31,290	LB
562	417471,596	4585088,684	31,270	LB
563	417468,495	4585095,560	31,260	LB
564	417465,365	4585094,330	31,320	LB
565	417462,405	4585100,804	31,290	LB
566	417465,622	4585101,996	31,240	LB
567	417011,293	4586350,439	48,550	LB
568	417009,327	4586360,120	48,650	LB
570	417007,322	4586369,977	48,780	LB
571	417005,612	4586378,469	48,870	LB
572	417003,717	4586387,879	48,940	LB
573	417002,050	4586396,870	49,010	LB
574	417000,293	4586405,856	49,100	LB
575	416998,633	4586414,891	49,150	LB
576	416996,813	4586424,312	49,170	LB
577	416995,141	4586433,808	49,230	LB
578	416993,459	4586443,245	49,260	LB
579	416991,801	4586452,805	49,290	LB
580	416990,117	4586462,814	49,320	LB
581	416988,620	4586472,023	49,330	LB
582	416987,083	4586480,942	49,360	LB
583	416985,580	4586490,417	49,380	LB
584	416984,031	4586500,274	49,380	LB
585	416982,673	4586508,983	49,420	LB
586	416981,007	4586519,801	49,420	LB
587	416979,671	4586528,649	49,360	LB
588	416978,579	4586536,053	49,370	LB
589	416977,256	4586545,379	49,350	LB
590	416975,864	4586554,688	49,330	LB
591	416974,593	4586563,774	49,320	LB
592	416973,339	4586572,515	49,300	LB
593	416972,146	4586580,978	49,240	LB
594	418812,045	4583067,138	21,470	LB
595	418813,697	4583059,852	21,230	LB
596	418807,292	4583058,318	21,190	LB
597	418805,010	4583065,211	21,490	LB
598	418798,415	4583063,328	21,480	LB
599	418800,640	4583056,619	21,170	LB
600	418793,694	4583054,659	21,160	LB
601	418791,412	4583061,243	21,440	LB
602	418783,969	4583058,850	21,430	LB
603	418786,036	4583052,313	21,190	LB
604	418778,280	4583049,608	21,220	LB
605	418776,184	4583056,320	21,500	LB

Punto	X	Y	Z	Código
136	417857.412	4584153.306	25.902	lb
137	417865.814	4584132.211	25.715	lb
140	417872.887	4584114.553	25.615	lb
141	417879.441	4584098.170	25.534	lb
144	417885.753	4584082.457	25.480	lb
145	417894.645	4584060.621	25.438	lb
148	417900.278	4584047.104	25.465	lb
149	417906.642	4584032.120	25.464	lb
152	417913.897	4584015.551	25.489	lb
153	417921.282	4583999.027	25.521	lb
156	417928.891	4583982.357	25.550	lb
157	417936.486	4583966.188	25.586	lb
160	417944.403	4583949.911	25.599	lb
161	417952.558	4583933.799	25.596	lb
164	417960.335	4583918.721	25.590	lb
165	417969.466	4583901.357	25.579	lb
168	417976.663	4583888.029	25.537	lb
169	417983.016	4583876.412	25.519	lb
172	417990.950	4583862.154	25.483	lb
173	418000.753	4583844.852	25.418	lb
176	418009.151	4583830.394	25.387	lb
177	418018.855	4583814.046	25.288	lb
341	417718.239	4584546.047	26.686	lb
342	417722.872	4584530.458	26.488	lb
345	417727.070	4584516.922	26.177	lb
346	417731.623	4584502.549	25.945	lb
349	417735.456	4584490.817	25.832	lb
350	417740.423	4584476.001	25.743	lb
353	417745.330	4584462.028	25.735	lb
354	417750.917	4584446.030	25.892	lb
357	417756.088	4584431.412	26.097	lb
358	417760.275	4584419.469	26.272	lb
359	417760.240	4584419.683	26.276	lb
362	417765.876	4584403.056	26.439	lb
363	417773.497	4584380.368	26.648	lb
366	417781.111	4584358.866	26.823	lb
367	417783.311	4584352.793	26.863	lb
370	417786.889	4584342.745	26.947	lb
371	417790.372	4584332.882	26.967	lb
374	417796.173	4584316.018	27.003	lb
375	417802.182	4584298.716	26.977	lb
377	417803.827	4584294.183	26.968	lb

Punto	X	Y	Z	Código
378	417803.459	4584294.054	26.973	lb
379	417808.278	4584280.922	26.870	lb
380	417808.611	4584281.094	26.868	lb
383	417813.931	4584265.571	26.773	lb
384	417820.991	4584246.739	26.632	lb
387	417826.968	4584230.861	26.526	lb
388	417834.094	4584212.315	26.344	lb
389	417834.104	4584212.315	26.352	lb
392	417839.882	4584197.598	26.244	lb
393	417847.184	4584179.031	26.121	lb
396	417853.070	4584164.130	25.990	lb

3.12.2.- Taquimétricos

Actuación B - Marco Ramal 4 P.K. 4+200

1	416441.878	4586586.404	30.235	pm	363	416472.411	4586602.831	33.877	lb	436	416502.634	4586599.929	29.482	alambrada	509	416525.051	4586575.556	28.813	hormigón
14	416447.408	4586611.076	33.040	farola	364	416471.706	4586602.711	33.826	b-ctra	437	416496.232	4586609.731	29.688	alambrada	510	416527.013	4586575.468	28.777	hormigón
15	416470.792	4586568.178	32.915	farola	365	416471.661	4586602.672	33.780	cuneta	438	416489.797	4586620.565	30.092	alambrada	511	416527.044	4586571.290	28.775	hormigón
293	416512.068	4586559.409	34.570	ct	366	416471.404	4586602.490	33.769	cuneta	439	416486.430	4586625.530	30.395	alambrada	512	416524.994	4586571.338	28.759	hormigón
294	416510.017	4586559.033	34.710	arq-dgt	367	416471.407	4586602.497	33.759	pretil	440	416486.890	4586625.861	30.308	camino	513	416526.409	4586571.956	28.779	rg
295	416510.579	4586559.331	34.706	arq-dgt	368	416467.026	4586610.326	33.753	pretil	441	416486.368	4586626.786	30.316	camino	514	416527.091	4586571.290	28.774	ct
296	416510.271	4586559.878	34.728	arq-dgt	369	416467.047	4586610.319	33.752	cuneta	442	416490.201	4586621.439	29.988	camino	515	416528.632	4586570.190	28.739	ct
297	416509.748	4586559.574	34.732	arq-dgt	370	416467.307	4586610.442	33.770	cuneta	443	416495.812	4586614.457	29.196	camino	516	416531.206	4586569.602	28.656	ct
298	416507.355	4586568.735	34.543	ct	371	416467.302	4586610.452	33.778	cuneta	444	416498.720	4586610.829	28.934	camino	517	416531.228	4586568.157	28.493	ct
299	416502.920	4586577.866	34.471	ct	372	416467.366	4586610.474	33.830	b-ctra	445	416501.608	4586606.715	28.611	camino	518	416530.813	4586568.742	28.252	pt
300	416500.018	4586582.744	34.534	ct	373	416468.137	4586610.428	33.866	lb	446	416505.080	4586601.356	28.048	camino	519	416528.775	4586569.294	28.188	pt
301	416499.585	4586582.220	34.727	farola	374	416464.819	4586611.116	33.685	pretil	447	416507.855	4586597.040	27.396	camino	520	416526.784	4586570.882	28.214	pt
302	416496.734	4586589.796	34.572	ct	375	416469.752	4586602.304	33.681	pretil	448	416508.628	4586594.790	27.274	camino	521	416524.950	4586571.250	28.114	pt
303	416494.102	4586595.152	34.558	ct	376	416474.780	4586593.078	33.691	pretil	449	416508.878	4586592.080	27.073	camino	522	416523.770	4586573.252	27.863	pt
304	416489.427	4586603.379	34.605	ct	377	416479.653	4586583.923	33.699	pretil	450	416508.662	4586590.174	26.780	camino	523	416520.726	4586578.424	27.205	pt
305	416486.139	4586609.735	34.593	ct	378	416484.636	4586574.341	33.684	pretil	451	416507.551	4586588.584	26.560	camino	524	416518.540	4586583.268	26.541	pt
306	416483.383	4586614.729	34.554	ct	379	416489.493	4586564.768	33.668	pretil	452	416505.357	4586588.727	26.424	camino	525	416523.796	4586572.830	27.927	pt
307	416480.834	4586614.291	34.676	bionda	380	416493.915	4586555.798	33.647	pretil	453	416505.800	4586592.538	28.437	pm	526	416524.618	4586571.155	28.136	pt
308	416484.336	4586607.890	34.685	bionda	381	416496.203	4586551.056	33.635	pretil	454	416503.760	4586592.723	28.281	ct	527	416526.128	4586570.021	28.184	pt
309	416487.923	4586601.216	34.687	bionda	382	416495.046	4586551.031	33.569	lb	455	416505.122	4586592.303	28.506	ct	528	416528.307	4586569.020	28.203	pt
310	416495.032	4586587.957	34.682	bionda	383	416490.613	4586560.158	33.595	lb	456	416507.484	4586591.883	28.242	ct	529	416530.574	4586568.535	28.285	pt
311	416500.268	4586577.797	34.658	bionda	384	416485.987	4586569.447	33.602	lb	457	416506.957	4586594.474	28.562	ct	530	416534.691	4586572.016	28.637	hormigón
312	416505.738	4586566.617	34.644	bionda	385	416481.253	4586578.691	33.625	lb	458	416510.838	4586581.110	26.456	camino	531	416534.768	4586573.971	28.627	hormigón
313	416510.357	4586557.171	34.626	bionda	386	416476.402	4586587.895	33.633	lb	459	416512.479	4586580.798	26.570	camino	532	416536.792	4586573.884	28.607	hormigón
314	416510.294	4586557.061	34.648	b-ctra	387	416471.611	4586596.819	33.621	lb	460	416513.973	4586579.966	26.627	camino	533	416536.669	4586571.889	28.558	hormigón
315	416505.186	4586567.653	34.665	b-ctra	388	416466.504	4586605.995	33.624	lb	461	416515.098	4586579.073	27.101	camino	534	416536.096	4586573.302	28.667	rg
316	416500.603	4586576.802	34.679	b-ctra	389	416461.435	4586614.928	33.615	lb	462	416518.388	4586574.848	27.681	camino	535	416540.210	4586565.615	28.542	alambrada
317	416495.664	4586586.462	34.695	b-ctra	390	416461.654	4586616.647	33.677	pretil	463	416521.788	4586569.103	28.295	camino	536	416535.625	4586560.507	28.868	alambrada
318	416490.838	4586595.657	34.698	b-ctra	391	416451.043	4586612.326	32.947	lb	464	416525.559	4586562.437	28.854	camino	537	416535.695	4586557.892	28.955	alambrada
319	416485.903	4586604.821	34.705	b-ctra	392	416456.153	4586603.493	32.948	lb	465	416528.011	4586553.561	29.163	camino	538	416540.397	4586547.233	28.947	alambrada
320	416483.256	4586609.647	34.698	b-ctra	393	416461.007	4586594.743	32.960	lb	466	416532.408	4586544.103	29.088	camino	539	416514.709	4586576.478	28.404	of
321	416479.784	4586615.874	34.687	b-ctra</															

582	416456.097	4586579.224	28.221	cunet.hor.	659	416452.125	4586574.000	29.917	ct
583	416456.377	4586577.687	28.605	cunet.hor.	660	416455.834	4586567.179	29.778	ct
584	416456.012	4586577.557	28.294	cunet.hor.	661	416459.825	4586558.634	29.648	ct
585	416454.121	4586577.329	28.303	cunet.hor.	662	416463.441	4586552.046	29.428	ct
586	416453.654	4586577.220	28.689	cunet.hor.	663	416458.147	4586552.960	29.486	alambrada
587	416455.637	4586571.105	28.684	cunet.hor.	664	416453.973	4586561.514	29.811	alambrada
588	416456.148	4586571.223	28.358	cunet.hor.	665	416451.545	4586566.369	29.724	alambrada
589	416457.825	4586571.661	28.303	cunet.hor.	666	416443.430	4586574.541	29.880	alambrada
590	416458.298	4586571.760	28.677	cunet.hor.	667	416449.026	4586574.609	29.988	hormigón
591	416462.582	4586556.970	28.613	cunet.hor.	668	416450.937	4586574.632	29.973	hormigón
592	416463.073	4586557.151	28.203	cunet.hor.	669	416451.039	4586571.451	29.960	hormigón
593	416464.452	4586557.637	28.220	cunet.hor.	670	416448.982	4586571.326	29.988	hormigón
594	416465.069	4586557.932	28.706	cunet.hor.	671	416449.892	4586571.862	29.985	rg
595	416466.471	4586548.179	28.533	cunet.hor.					
596	416466.916	4586548.437	28.140	cunet.hor.					
597	416468.403	4586548.814	28.171	cunet.hor.					
598	416468.868	4586549.020	28.502	cunet.hor.					
599	416471.289	4586549.755	29.834	alambrada					
600	416465.735	4586562.285	30.130	alambrada					
601	416461.115	4586571.824	29.862	alambrada					
602	416457.459	4586577.697	28.521	alambrada					
603	416459.596	4586579.038	27.995	alambrada					
604	416458.137	4586578.024	28.509	of					
605	416458.208	4586578.032	29.375	of					
606	416458.443	4586577.606	29.358	of					
607	416463.204	4586580.085	32.033	of					
608	416462.832	4586580.781	31.996	of					
609	416463.288	4586580.080	32.150	of					
610	416463.769	4586580.271	32.340	of					
611	416457.395	4586592.051	32.292	of					
612	416456.967	4586591.877	32.185	of					
613	416457.210	4586591.218	32.030	of					
614	416456.612	4586591.576	32.003	of					
615	416456.934	4586591.952	32.064	of					
616	416451.507	4586595.009	30.326	of					
617	416451.276	4586594.608	30.341	of					
618	416451.469	4586595.089	29.797	of					
619	416451.140	4586594.599	29.293	of					
620	416451.403	4586594.360	28.989	alambrada					
621	416447.379	4586596.601	28.685	alambrada					
622	416443.561	4586604.444	29.920	alambrada					
623	416441.913	4586608.231	30.372	alambrada					
624	416439.604	4586607.209	29.510	cunet.hor.					
625	416439.142	4586607.169	29.092	cunet.hor.					
626	416438.069	4586606.778	29.077	cunet.hor.					
627	416437.567	4586606.648	29.597	cunet.hor.					
628	416441.442	4586599.920	29.167	cunet.hor.					
629	416441.891	4586600.058	28.695	cunet.hor.					
630	416443.055	4586600.625	28.701	cunet.hor.					
631	416443.349	4586600.908	29.105	cunet.hor.					
632	416446.255	4586596.389	28.693	cunet.hor.					
633	416445.755	4586596.347	28.292	cunet.hor.					
634	416444.502	4586595.709	28.332	cunet.hor.					
635	416444.068	4586595.497	28.808	cunet.hor.					
636	416445.612	4586592.963	28.463	cunet.hor.					
637	416446.013	4586593.052	28.068	cunet.hor.					
638	416447.630	4586594.015	28.028	cunet.hor.					
639	416448.033	4586594.211	28.419	cunet.hor.					
640	416446.187	4586592.218	28.054	cunet.hor.					
641	416447.195	4586591.160	28.122	cunet.hor.					
642	416447.970	4586591.650	27.762	cunet.hor.					
643	416448.923	4586592.844	27.826	cunet.hor.					
644	416449.861	4586592.752	28.127	cunet.hor.					
645	416449.627	4586592.376	27.773	cunet.hor.					
646	416449.451	4586591.400	27.628	cunet.hor.					
647	416449.345	4586590.758	27.816	cunet.hor.					
648	416453.929	4586589.372	27.112	cunet.hor.					
649	416454.245	4586590.135	26.997	cunet.hor.					
650	416454.905	4586591.203	27.478	cunet.hor.					
651	416447.364	4586589.163	28.439	hierro					
652	416441.894	4586587.495	30.465	ct					
653	416441.747	4586590.062	30.196	ct					
654	416439.791	4586597.402	30.522	ct					
655	416438.607	4586601.557	30.413	ct					
656	416436.136	4586606.188	30.512	ct					
657	416445.853	4586576.345	29.968	ct					
658	416450.367	4586575.392	29.817	ct					

Actuación B - Marco Ramal 4 P.K. 4+480

1255	416550.438	4586331.699	28.524	muro	2554	416553.673	4586347.004	31.946	bord
1258	416559.010	4586326.525	32.097	muro	2555	416555.070	4586346.984	32.136	bord
1259	416562.470	4586313.657	32.002	muro	2556	416555.596	4586347.078	32.260	calz
1262	416555.103	4586312.262	28.042	muro	2557	416554.495	4586348.260	32.361	ct
2483	416550.183	4586324.377	27.149	cam	2558	416554.903	4586346.780	32.310	ct
2484	416549.935	4586321.898	27.191	cun	2559	416554.438	4586344.812	32.398	farola
2485	416549.645	4586322.985	27.204	cun	2560	416558.609	4586336.112	32.288	calz
2486	416552.825	4586318.886	27.236	rell	2561	416558.005	4586336.143	32.105	bord
2487	416557.424	4586313.873	26.993	rell	2562	416557.798	4586336.000	32.391	ct
2488	416562.157	4586314.409	26.946	rell	2563	416555.983	4586335.299	32.220	ct
2489	416559.169	4586320.510	26.991	rell	2564	416559.320	4586327.730	32.251	ct
2490	416559.136	4586325.844	27.134	rell	2565	416560.015	4586327.946	32.372	ct
2491	416552.537	4586326.561	27.267	rell	2566	416560.230	4586327.995	32.129	bord
2492	416552.743	4586330.115	27.394	ct	2567	416560.762	4586328.155	32.277	calz
2493	416549.657	4586329.558	27.288	ct	2569	416559.185	4586325.877	32.036	muro
2494	416547.018	4586330.570	27.035	ct	2570	416562.269	4586314.369	31.960	muro
2495	416544.540	4586332.025	27.028	ct	2571	416563.285	4586312.987	32.218	ct
2496	416543.742	4586333.364	27.036	ct	2572	416563.978	4586313.338	32.248	ct
2497	416549.404	4586331.363	27.953	ct	2573	416564.502	4586311.341	32.248	ct
2498	416548.489	4586330.986	27.717	ct	2574	416563.313	4586310.467	31.948	ct
2499	416546.592	4586333.083	28.067	ct	2575	416564.742	4586311.272	32.008	bord
2500	416548.030	4586333.822	28.215	ct	2576	416564.732	4586311.267	32.024	bord
2501	416544.927	4586341.785	28.366	ct	2577	416563.533	4586310.232	31.811	bord
2502	416543.772	4586341.141	28.000	ct	2578	416563.715	4586310.043	31.834	bord
2503	416542.175	4586340.957	27.202	ct	2579	416565.055	4586310.089	31.990	bord
2504	416542.081	4586350.691	28.515	ct	2580	416565.639	4586310.148	32.183	calz
2505	416540.934	4586350.214	28.074	ct	2581	416564.905	4586309.848	32.205	ct
2506	416539.234	4586349.820	27.087	ct	2582	416563.407	4586309.268	31.946	ct
2507	416538.266	4586349.542	27.077	ct	2583	416563.868	4586304.358	32.079	ct
2508	416536.370	4586348.956	28.120	ct	2584	416565.904	4586302.043	32.258	farola
2509	416535.043	4586348.906	28.221	alambr	2585	416566.031	4586296.652	32.045	ct
2510	416537.940	4586339.542	28.150	alambr	2586	416568.324	4586297.098	32.160	ct
2511	416538.720	4586339.000	27.943	ct	2587	416568.506	4586297.341	31.917	bord
2512	416540.821	4586339.358	27.055	ct	2588	416569.059	4586297.435	32.096	calz
2513	416540.259	4586331.575	28.202	alambr	2589	416523.107	4586313.028	27.850	ct
2514	416541.072	4586331.819	27.966	ct	2590	416545.953	4586314.027	27.910	ct
2515	416542.534	4586332.460	27.102	ct	2591	416555.094	4586312.299	26.960	ct
2516	416543.356	4586330.192	27.196	ct	2592	416526.318	4586307.107	27.800	rell
2517	416543.717	4586328.058	27.325	ct	2593	416529.693	4586293.583	27.680	rell
2518	416541.555	4586327.201	28.162	alambr	2594	416546.117	4586296.606	27.682	rell
2519	416527.682	4586325.210	28.305	alambr	2595	416546.302	4586303.919	27.710	rell
2520	416527.391	4586320.020	28.160	cam	2596	416543.649	4586304.391	27.730	rell
2521	416535.378	4586321.279	28.017	cam	2597	416542.076	4586299.642	27.660	rell
2522	416537.877	4586322.559	28.142	post elect	2598	416544.179	4586344.125	28.410	ct
2523	416542.560	4586322.782	27.803	cam	2599	416544.086	4586344.417	28.420	ct
2526	416515.304	4586317.230	27.937	cun	2600	416554.384	4586307.330	27.600	ct
2527	416515.982	4586316.040	27.946	cun	2601	416554.427	4586307.097	27.590	ct
2528	416515.345	4586318.121	28.620	cam					
2529	416515.442	4586323.254	28.527	alambr					
2530	416552.346	4586310.948	26.944	cun					
2531	416550.308	4586310.879	26.997	cun					
2532	416553.958	4586309.634	27.789	ct					
2533	416536.261	4586314.193	27.887	ct					
2534	416542.245	4586314.786	27.919	ct					
2535	416547.581	4586310.670	27.921	ct					
2536	416545.444	4586308.995	27.784	rell					
2537	416546.193	4586303.830	28.307	arqueton					
2538	416545.501	4586299.401	28.293	arqueton					
2539	416542.171	4586299.689	28.329	arqueton					
2540	416543.688	4586304.225	28.302	arqueton					
2541	416545.553	4586299.296	27.649	rell					
2542	416551.485	4586297.306	27.700	ct					
2543	416553.059	4586297.683	26.862	ct					
2544	416555.311	4586298.255	26.923	ct					
2545	416556.083	4586298.141	27.308	ct					
2546	416550.542	4586353.107	32.309	ct					
2547	416553.021	4586353.788	32.361	ct					
2548	416553.215	4586353.902	32.139	bord					
2549	416553.674	4586354.068	32.307	calz					

Actuación B - Marco Ramal 4 P.K. 4+660

2148	416653.561	4586178.300	28.337	ct	2222	416653.598	4586155.979	30.658	muro	2372	416589.122	4586149.097	28.784	cam	2446	416600.612	4586161.763	28.173	ct
2149	416655.522	4586171.018	28.561	ct	2223	416658.519	4586160.403	28.013	muro	2373	416589.224	4586147.940	28.615	ct	2447	416601.660	4586156.749	28.711	ct
2150	416658.198	4586164.107	28.600	ct	2224	416663.245	4586146.272	27.757	muro	2374	416593.683	4586147.635	28.285	ct	2448	416603.422	4586150.928	28.180	ct
2151	416658.831	4586162.427	28.508	ct	2300	416608.728	4586135.682	27.337	ct	2375	416593.758	4586148.678	28.417	cam	2449	416603.343	4586171.128	31.361	ct
2152	416659.164	4586164.252	28.488	ct	2301	416606.575	4586133.319	27.771	ct	2376	416596.403	4586147.747	28.165	cam	2450	416605.609	4586171.613	31.453	ct
2153	416657.998	4586168.744	28.621	ct	2302	416607.886	4586127.047	28.061	ct	2377	416594.843	4586146.715	28.269	ct	2451	416605.794	4586171.717	31.229	bord
2154	416657.033	4586171.558	28.394	ct	2303	416608.735	4586122.766	28.134	ct	2378	416598.896	4586146.508	27.828	cam	2452	416606.355	4586171.926	31.361	calz
2155	416658.487	4586169.478	28.322	ct	2304	416607.843	4586122.700	27.836	ct	2379	416600.376	4586144.756	27.564	cam	2453	416607.073	4586160.987	31.215	ct
2156	416659.394	4586166.619	28.193	ct	2305	416607.006	4586126.811	27.914	ct	2380	416602.045	4586142.184	27.346	cam	2454	416609.665	4586160.431	31.272	calz
2157	416660.630	4586163.017	28.023	ct	2306	416605.485	4586131.809	27.667	ct	2381	416605.982	4586139.181	27.314	cam	2455	416609.076	4586160.222	31.117	bord
2158	416660.203	4586160.707	27.770	ct	2307	416605.103	4586135.585	27.617	ct	2382	416611.498	4586138.754	27.318	cam	2456	416609.121	4586160.223	31.125	bord
2159	416658.719	4586159.950	27.722	ct	2308	416605.210	4586135.090	27.546	ct	2383	416611.094	4586145.582	27.357	cam	2457	416608.907	4586160.273	31.400	ct
2160	416659.132	4586156.832	27.530	rell	2309	416605.954	4586136.330	27.333	ct	2384	416604.279	4586147.690	27.411	cam	2458	416607.884	4586159.560	31.027	bord
2161	416655.860	4586154.552	27.443	rell	2310	416605.906	4586136.623	27.296	cun	2385	416601.696	4586149.039	27.889	cam	2459	416607.970	4586159.329	31.011	bord
2162	416656.882	4586149.758	27.420	rell	2311	416604.866	4586135.360	27.283	cun	2386	416598.315	4586151.433	28.428	cam	2460	416609.458	4586159.011	31.114	bord
2163	416663.195	4586151.667	27.625	rell	2312	416604.595	4586133.631	27.263	cun	2387	416593.285	4586153.673	28.912	cam	2461	416610.022	4586159.131	31.264	calz
2164	416668.411	4586153.170	27.855	rell	2313	416604.902	4586131.657	27.249	cun	2388	416597.155	4586155.031	28.683	ct	2462	416609.282	4586158.790	31.343	ct
2165	416668.325	4586161.484	28.084	rell	2314	416605.745	4586127.655	27.230	cun	2389	416594.199	4586155.368	28.938	ct	2463	416607.690	4586158.486	31.117	ct
2166	416664.130	4586162.910	28.109	rell	2315	416607.150	4586121.591	27.205	cun	2390	416590.180	4586154.161	28.897	ct	2464	416610.901	4586148.808	31.133	ct
2167	416661.244	4586172.968	28.386	rell	2316	416605.800	4586121.169	27.168	cun	2391	416590.228	4586153.432	28.974	cam	2465	416611.987	4586149.065	31.236	ct
2168	416665.851	4586174.978	28.332	rell	2317	416604.868	4586126.082	27.232	cun	2392	416579.560	4586151.371	29.045	cam	2466	416612.191	4586149.123	31.006	bord
2169	416671.680	4586178.222	28.335	rell	2318	416603.871	4586130.222	27.219	cun	2393	416579.353	4586152.132	29.037	ct	2467	416612.696	4586149.319	31.189	calz
2170	416675.136	4586172.527	28.195	rell	2319	416602.769	4586134.102	27.265	cun	2394	416579.175	4586152.968	27.740	ct	2468	416611.163	4586147.345	31.013	muro
2171	416670.815	4586173.118	28.390	cam	2320	416601.583	4586136.696	27.342	cun	2395	416569.071	4586150.713	27.767	ct	2469	416613.369	4586139.267	31.007	muro
2172	416672.335	4586168.557	28.206	cam	2321	416600.183	4586139.773	27.342	cun	2396	416568.940	4586149.637	28.988	ct	2470	416614.625	4586138.882	31.238	ct
2173	416673.028	4586167.647	28.210	cam	2322	416600.115	4586140.740	27.340	ct	2397	416569.089	4586149.250	29.078	cam	2471	416613.968	4586137.181	31.068	ct
2174	416677.901	4586170.374	28.145	cam	2323	416599.343	4586143.781	27.520	ct	2398	416561.420	4586147.580	29.163	cam	2472	416615.201	4586137.660	30.978	bord
2175	416681.059	4586167.356	28.132	cam	2324	416604.899	4586121.119	27.701	ct	2399	416561.238	4586148.053	29.053	ct	2473	416615.787	4586137.882	31.132	calz
2176	416675.515	4586162.965	28.079	cam	2325	416604.139	4586120.972	27.781	ct	2400	416561.171	4586149.021	27.811	ct	2474	416616.002	4586129.113	31.254	farola
2177	416673.747	4586161.286	28.053	cam	2326	416603.590	4586120.703	27.713	ct	2401	416561.404	4586144.394	29.163	cam	2475	416615.691	4586128.261	31.044	ct
2178	416673.296	4586159.858	28.004	cam	2327	416599.894	4586120.445	27.507	rell	2402	416561.612	4586143.290	29.174	ct	2476	416617.221	4586128.699	31.094	ct
2179	416673.643	4586154.819</td																	

2520	416656.266	4586148.544	27.420	muro
2521	416653.984	4586154.904	27.460	muro
2522	416653.615	4586155.976	27.460	muro
2523	416658.536	4586160.379	27.720	muro
2524	416665.057	4586170.437	28.650	arqueton
2525	416665.470	4586168.403	28.650	arqueton
2526	416663.771	4586168.132	28.650	arqueton
2527	416663.316	4586169.900	28.650	arqueton

Actuación B - Marco Ramal 4 P.K. 4+960

184	416667.844	4585900.293	36.881	base	1654	416645.303	4585811.995	30.522	ct	1728	416666.331	4585866.564	36.585	bord	1802	416640.020	4585894.195	26.165	ct
185	416688.455	4585820.217	36.747	base	1655	416641.253	4585814.624	30.411	arqueton	1729	416667.216	4585874.772	36.608	bord	1803	416638.257	4585891.612	26.127	ct
1582	416694.912	4585817.866	36.828	bord	1656	416639.993	4585814.399	30.392	arqueton	1730	416667.035	4585874.717	36.743	ct	1804	416638.883	4585884.794	26.280	ct
1583	416694.441	4585815.845	37.074	ct	1657	416638.688	4585814.592	30.361	arqueton	1731	416664.780	4585875.018	36.569	ct	1805	416641.037	4585884.909	26.045	ct
1584	416693.571	4585811.992	36.988	ct	1658	416639.071	4585816.884	30.397	arqueton	1732	416665.757	4585883.600	36.613	ct	1806	416642.183	4585884.731	25.476	cun
1585	416687.340	4585815.830	36.823	ct	1659	416642.757	4585816.636	30.409	arqueton	1733	416668.428	4585883.255	36.808	ct	1807	416644.221	4585885.059	25.447	cun
1586	416688.597	4585818.816	36.928	ct	1660	416641.852	4585816.498	30.397	pozsan	1734	416668.579	4585883.271	36.707	bord	1808	416643.828	4585875.100	25.553	cun
1587	416689.385	4585820.508	36.762	bord	1661	416639.384	4585815.219	30.380	pozsan	1735	416667.652	4585885.666	36.930	farola	1809	416641.729	4585875.261	25.442	cun
1588	416684.597	4585823.373	36.736	bord	1662	416635.610	4585816.382	30.453	ct	1736	416669.051	4585893.497	36.775	bord	1810	416640.691	4585875.475	26.071	ct
1589	416684.485	4585823.281	36.856	ct	1663	416628.771	4585818.623	30.639	ct	1737	416668.891	4585893.383	36.828	ct	1811	416638.029	4585875.379	26.112	ct
1590	416682.655	4585822.278	36.731	ct	1664	416621.113	4585820.150	31.015	ct	1738	416666.647	4585893.449	36.784	ct	1812	416633.984	4585867.666	26.199	ct
1591	416682.136	4585824.486	36.871	farola	1665	416619.888	4585820.765	31.077	ct	1739	416666.795	4585899.155	36.734	ct	1813	416635.634	4585865.465	25.976	ct
1592	416681.230	4585827.409	36.672	bord	1666	416629.612	4585821.385	30.825	ct	1740	416667.277	4585899.545	36.762	ct	1814	416636.076	4585864.457	25.353	cun
1593	416681.116	4585827.289	36.795	ct	1667	416631.168	4585819.766	30.698	rell	1741	416668.417	4585898.615	36.862	ct	1815	416637.807	4585862.951	25.355	cun
1594	416679.698	4585825.812	36.679	ct	1668	416643.856	4585823.268	30.743	ct	1742	416668.574	4585898.700	36.789	bord	1816	416632.876	4585857.433	25.328	cun
1595	416675.058	4585829.924	36.514	ct	1669	416643.559	4585819.043	30.632	rell	1743	416667.348	4585899.769	36.641	bord	1817	416629.845	4585858.428	25.358	cun
1596	416676.238	4585831.653	36.686	ct	1670	416651.343	4585814.117	30.532	rell	1744	416666.413	4585899.534	36.504	bord	1818	416627.033	4585853.076	25.478	cun
1597	416676.366	4585831.786	36.609	bord	1671	416652.788	4585818.838	30.475	rell	1745	416666.350	4585899.784	36.538	bord	1819	416626.893	4585852.865	25.617	muro
1598	416668.397	4585835.521	36.318	bord	1672	416652.287	4585824.835	30.795	ct	1746	416667.903	4585900.196	36.744	bord	1820	416627.687	4585850.446	25.339	muro
1599	416667.124	4585834.991	36.217	bord	1673	416660.034	4585824.052	30.729	ct	1747	416668.270	4585900.806	36.760	bord	1821	416630.085	4585851.184	25.235	muro
1600	416666.602	4585833.701	35.988	bord	1674	416666.338	4585822.068	30.828	ct	1748	416666.312	4585899.991	36.636	ct	1822	416629.604	4585852.659	25.761	muro
1601	416667.071	4585833.807	36.214	ct	1675	416673.269	4585817.510	30.875	ct	1749	416667.887	4585900.362	36.857	ct	1823	416630.949	4585853.660	25.468	bord
1602	416666.406	4585833.921	36.061	bord	1676	416679.065	4585809.856	30.882	ct	1750	416668.086	4585900.775	36.878	ct	1824	416628.903	4585851.282	25.222	rell
1603	416666.216	4585833.926	36.138	ct	1677	416683.388	4585804.622	30.728	ct	1751	416667.078	4585905.890	36.765	bord	1825	416631.750	4585861.244	25.811	ct
1604	416666.888	4585835.172	36.220	bord	1678	416689.461	4585801.282	30.666	ct	1752	416666.884	4585905.749	36.815	ct	1826	416628.986	4585861.749	25.980	ct
1605	416666.381	4585835.943	36.216	bord	1679	416695.121	4585799.262	30.620	ct	1753	416665.182	4585905.650	36.658	ct	1827	416621.891	4585856.447	26.460	ct
1606	416666.397	4585835.777	36.283	ct	1680	416690.731	4585791.905	30.479	rell	1754	416605.781	4585861.468	29.448	bord	1828	416623.470	4585854.095	26.427	ct
1607	416665.728	4585834.464	36.216	ct	1681	416684.994	4585784.579	30.633	rell	1755	416605.797	4585861.278	29.536	ct	1829	416623.674	4585853.720	26.001	cun
1608	416659.599	4585836.171	35.721	bord	1682	416676.492	4585791.939	30.588	rell	1756	416609.039	4585855.272	29.493	ct	1830	416623.818	4585853.479	26.012	cun
1609	416659.658	4585835.938	35.807	ct	1683	416679.384	4585800.606	30.632	rell	1757	416620.088	4585861.992	29.584	ct	1831	416626.328	4585854.788	25.953	cun
1610	416659.884	4585834.331	35.723	ct	1684	416670.265	4585811.318	30.670	rell	1758	416619.338	4585864.458	29.494	ct	1832	416626.445	4585854.014	25.978	cun
1611	416655.706	458583																	

Actuación B – Estructura existente en B-24 Ramal 0

174	416528.752	4585341.513	36.821	base	1858	416491.773	4585323.168	37.972	calz	1938	416497.499	4585310.520	28.309	pozsan	3609	416375.914	4585314.331	29.890	rell
175	416286.337	4585219.453	45.970	base	1859	416493.858	4585324.201	37.897	bord	1939	416505.652	4585314.897	28.157	rell	3610	416449.558	4585333.790	38.935	estribo
1784	416271.418	4585215.816	46.504	lb	1860	416497.087	4585324.427	37.837	farola	1940	416513.402	4585320.383	27.979	pozsan	3611	416450.472	4585331.563	37.431	estribo
1785	416272.446	4585212.929	46.621	calz	1861	416505.826	4585328.361	37.496	arqal	1941	416516.635	4585316.869	28.167	muro	3612	416452.373	4585326.221	37.402	estribo
1786	416272.560	4585212.536	46.310	cun	1862	416506.872	4585330.126	37.550	pozsan	1942	416529.414	4585323.025	27.809	muro	3613	416452.901	4585327.339	37.934	estribo
1787	416272.930	4585211.456	46.198	cun	1863	416507.257	4585329.048	37.468	ct	1943	416528.177	4585326.725	27.832	rell	3614	416454.285	4585320.974	37.504	estribo
1788	416273.904	4585212.425	46.153	sum	1864	416506.601	4585330.634	37.423	bord	1944	416541.531	4585331.909	27.744	rell	3615	416454.299	4585320.968	37.657	estribo
1790	416273.244	4585209.968	46.717	ct	1865	416506.557	4585330.785	37.458	calz	1945	416543.833	4585330.123	27.770	pozsan	3616	416456.187	4585315.785	37.651	estribo
1791	416274.076	4585207.380	46.574	ct	1866	416520.963	4585336.082	36.999	ct	1946	416539.379	4585326.566	28.029	muro	3617	416456.182	4585315.782	37.599	estribo
1792	416277.583	4585202.052	50.835	ct	1867	416520.183	4585337.273	36.988	bord	1947	416546.002	4585328.672	27.835	muro	3618	416458.100	4585310.528	37.600	estribo
1793	416281.368	4585205.997	48.685	ct	1868	416520.108	4585337.421	37.026	calz	1948	416549.346	4585333.892	27.632	pozsan	3619	416458.096	4585310.527	37.515	estribo
1794	416284.534	4585208.139	47.279	ct	1869	416533.676	4585343.685	36.631	calz	1949	416554.774	4585329.859	27.683	muro	3620	416460.010	4585305.281	37.517	estribo
1795	416285.682	4585212.008	46.163	ct	1870	416533.834	4585343.511	36.603	bord	1950	416563.344	4585331.079	27.668	muro	3621	416460.006	4585305.284	37.416	estribo
1796	416280.452	4585210.237	46.372	ct	1871	416534.606	4585342.359	36.656	ct	1951	416567.698	4585335.933	27.546	rell	3622	416461.925	4585300.030	37.412	estribo
1797	416278.613	4585212.829	46.369	ct	1872	416536.653	4585343.473	36.597	arqal	1952	416577.098	4585329.280	27.630	muro	3623	416462.733	4585300.493	39.116	estribo
1798	416284.486	4585215.834	45.999	ct	1873	416537.063	4585343.616	36.639	farola	1953	416585.035	4585328.243	27.544	muro	3625	416442.677	4585292.596	29.097	bord
1799	416286.357	4585212.105	46.120	muro	1874	416550.980	4585349.822	36.308	pozsan	1954	416585.845	4585335.060	27.483	rell	3629	416439.835	4585291.558	29.048	bord
1800	416290.364	4585214.090	45.867	muro	1875	416550.104	4585348.393	36.211	ct	1955	416592.504	4585335.452	27.524	pozsan	3620	416439.190	4585291.649	29.072	bord
1801	416287.730	4585218.826	45.841	muro	1876	416549.517	4585349.926	36.193	bord	1956	416595.740	4585326.233	27.589	rell	3661	416438.485	4585292.417	29.120	bord
1802	416285.656	4585217.799	45.845	muro	1877	416549.405	4585350.092	36.230	calz	1957	416595.744	4585326.213	27.583	muro	3662	416434.062	4585304.316	29.193	bord
1803	416285.366	4585218.350	45.952	muro	1878	416563.224	4585354.672	35.795	calz	1958	416596.450	4585334.840	27.364	rell	3663	416436.892	4585307.614	29.465	acera
1804	416287.377	4585219.353	45.947	muro	1879	416563.157	4585344.443	35.754	bord	2258	416570.077	4585340.839	27.892	muro	3664	416442.074	4585293.635	29.354	acera
1805	416287.556	4585219.469	45.930	acera	1880	416563.896	4585352.881	35.742	ct	2259	416568.027	4585340.843	27.913	muro	3665	416442.460	4585292.699	29.240	acera
1806	416286.919	4585219.547	45.948	cam	1881	416567.885	4585355.157	35.795	pozsan	2284	416566.506	4585340.854	28.650	muro	3666	416439.570	4585298.080	29.400	rell
1807	416285.225	4585222.619	45.907	lb	1882	416574.470	4585356.237	35.465	arqal	2305	416479.241	4585297.574	28.709	rell	3667	416437.644	4585303.303	29.432	rell
1808	416287.889	4585218.919	46.088	muro	1883	416574.895	4585356.276	35.553	farola	2306	416463.599	4585296.605	28.672	rell	3668	416435.688	4585308.548	29.461	rell
1809	416305.670	4585227.824	45.093	muro	1884	416579.606	4585358.719	35.355	calz	2307	416501.997	4585316.227	28.104	rell	3669	416433.758	4585313.758	29.501	rell
1810	416305.333	4585228.321	44.980	calz	1885	416579.549	4585358.532	35.282	bord	2309	416494.805	4585315.880	33.719	muro	3670	416431.817	4585319.040	29.535	rell
1811	416303.610	4585231.752	45.045	lb	1886	416580.328	4585357.032	35.306	ct	2310	416493.407	4585315.199	34.476	muro	3671	416449.218	4585333.760	29.221	rell
1812	416321.551	4585235.783	44.467	muro	1887	416595.908	4585358.541	34.743	ct	2311	416477.608	4585307.514	34.536	muro	3672	416451.472	4585327.425	30.366	rell
1813	416321.390	4585236.366	44.327	calz	1888	416595.689	4585361.188	34.904	bord	2312	416475.911	4585306.712	35.306	muro	3673	416453.564	4585321.597</td		

3739	416419.703	4585269.088	28.976	cam	3829	416386.595	4585267.079	29.904	rell	3942	416338.150	4585246.417	32.145	rell
3740	416421.625	4585269.300	29.002	cam	3830	416384.996	4585270.701	30.807	rell	3943	416341.222	4585242.594	32.361	rell
3741	416422.844	4585267.292	28.883	cam	3831	416383.574	4585274.878	30.927	rell	3944	416342.904	4585239.643	32.271	rell
3742	416425.921	4585306.258	29.317	semaf	3832	416382.670	4585277.890	30.135	rell	3945	416348.508	4585232.161	32.405	rell
3743	416405.316	4585296.902	29.799	rell	3833	416382.307	4585279.146	29.723	rell	3946	416350.995	4585234.171	31.992	rell
3744	416401.928	4585295.878	30.086	rell	3834	416381.470	4585281.894	29.721	rell	3947	416338.609	4585227.836	32.903	rell
3745	416398.659	4585294.291	29.908	rell	3835	416385.210	4585282.987	29.654	rell	3948	416336.700	4585233.236	32.805	rell
3746	416396.432	4585293.420	29.561	rell	3836	416386.491	4585280.067	29.700	rell	3949	416335.388	4585235.633	32.679	rell
3747	416391.795	4585291.559	29.537	rell	3837	416387.559	4585276.635	30.787	rell	3950	416332.901	4585239.518	32.686	rell
3748	416384.075	4585295.152	30.202	rell	3838	416388.382	4585274.376	30.925	rell	3951	416330.739	4585243.416	32.403	rell
3749	416386.336	4585289.921	29.791	rell	3839	416389.249	4585272.116	30.735	rell	3952	416327.810	4585248.524	32.347	rell
3750	416388.361	4585285.091	30.156	rell	3840	416390.905	4585269.134	29.861	rell	3953	416325.426	4585253.389	32.126	rell
3751	416393.850	4585287.051	29.520	rell	3841	416393.892	4585266.344	29.167	rell	3954	416323.921	4585256.169	31.660	rell
3752	416403.302	4585289.879	29.519	rell	3842	416395.671	4585263.453	29.080	rell	3955	416322.602	4585258.179	31.668	rell
3753	416406.486	4585290.909	29.532	rell	3861	416372.578	4585251.261	29.539	rell	3956	416319.580	4585262.964	31.587	rell
3754	416407.680	4585285.156	30.022	rell	3862	416371.565	4585255.785	29.657	rell	3957	416318.984	4585259.094	31.924	ct
3755	416400.876	4585284.424	29.540	rell	3863	416369.479	4585259.883	30.726	rell	3958	416323.804	4585249.387	32.456	ct
3756	416396.668	4585282.258	29.501	rell	3864	416367.650	4585263.518	31.923	rell	3959	416329.825	4585238.968	32.958	ct
3757	416393.671	4585281.122	30.385	rell	3865	416365.752	4585267.342	31.809	rell	3960	416331.369	4585230.047	33.802	ct
3758	416390.698	4585279.892	30.517	rell	3866	416363.365	4585272.146	30.991	rell	3980	416310.597	4585253.402	35.287	ct
3759	416392.674	4585274.772	30.298	rell	3867	416362.366	4585274.535	30.142	rell	3981	416309.636	4585252.884	35.353	ct
3760	416396.733	4585277.116	29.979	rell	3868	416361.287	4585276.856	30.155	rell	3982	416312.754	4585247.448	35.158	ct
3761	416398.455	4585278.120	29.415	rell	3869	416355.957	4585275.446	30.355	rell	3983	416313.736	4585247.770	35.358	ct
3762	416400.819	4585278.977	29.375	rell	3870	416357.092	4585272.964	30.395	rell	3984	416318.366	4585239.316	35.573	ct
3763	416403.793	4585280.310	29.746	rell	3871	416359.689	4585269.370	31.406	rell	3985	416316.960	4585238.433	35.200	ct
3764	416407.301	4585281.778	30.044	rell	3872	416360.606	4585265.961	32.041	rell	3986	416324.030	4585225.199	34.950	ct
3765	416411.311	4585278.735	29.618	rell	3873	416362.926	4585261.834	32.073	rell	3987	416326.006	4585225.755	34.916	ct
3766	416413.063	4585274.670	29.145	rell	3874	416363.815	4585258.610	31.117	rell	3988	416328.427	4585219.912	34.976	ct
3767	416407.879	4585271.609	29.141	rell	3875	416366.264	4585252.986	29.841	rell	3989	416327.152	4585219.540	35.011	ct
3768	416405.754	4585275.210	29.327	rell	3876	416367.426	4585248.845	29.828	rell	3990	416322.167	4585216.831	35.106	cam
3769	416400.677	4585273.185	29.255	rell	3877	416364.839	4585248.049	29.954	rell	3991	416319.450	4585215.241	35.246	alamb
3770	416402.351	4585268.314	29.140	rell	3878	416363.063	4585251.306	29.916	rell	3992	416311.808	4585229.437	35.415	alamb
3771	416402.360	4585268.311	29.140	rell	3879	416361.325	4585255.089	30.800	rell	3993	416313.985	4585230.620	35.321	cam
3772	416397.603	4585266.196	29.049	rell	3880	416359.612	4585258.541	31.343	rell	3994	416304.699	4585249.074	35.472	cam
3773	416395.185	4585269.264	29.533	rell	3881	416356.964	4585262.917	31.467	rell	3995	416301.321	4585249.901	35.459	alamb
3778	416395.214	4585285.443	29.515	rell	3882	416354.995	4585266.049	31.190	rell	4021	416290.403	4585214.076	45.936	estribo
3779	416388.569	4585282.462	29.576	rell	3883	416353.267	4585268.588	30.548	rell	4022	416291.095	4585214.448	44.155	estribo
3789	416383.071	4585280.704	29.684	rell	3884	416351.585	4585270.812	30.509	rell	4023	416289.435	4585217.591	44.151	estribo
3790	416379.351	4585283.347	30.052	rell	3885	416349.053	4585268.417	30.780	rell	4024	416285.823	4585224.183	44.102	estribo
3791	416383.588	4585284.633	30.232	rell	3886	416351.210	4585265.254	30.695	rell	4025	416285.824	4585224.183	44.041	estribo
3792	416383.066	4585286.825	30.453	rell	3887	416352.366	4585262.399	31.549	rell	4026	416283.160	4585229.041	44.039	estribo
3793	416378.785	4585286.835	30.338	rell	3888	416354.185	4585259.442	32.022	rell	4027	416280.489	4585233.882</td		

Actuación B – Estructura de la B-24 Ramal 0 sobre la A-2, el AVE y el río Llobregat.

176	416743.012	4585493.108	42.498	base	1069	416781.825	4585429.063	24.809	muro	1146	416783.235	4585486.997	32.270	calz	1330	416938.322	4585540.772	25.426	cun
177	416873.071	4585505.774	34.566	base	1070	416781.829	4585429.058	25.217	muro	1147	416780.687	4585494.212	32.224	arql	1331	416938.489	4585540.826	25.705	cun
182	416971.718	4585492.152	25.624	base	1071	416781.300	4585428.322	24.818	ct	1148	416778.963	4585505.312	32.132	calz	1332	416939.122	4585541.146	26.028	ct
183	416938.914	4585584.363	26.441	base	1072	416784.631	4585419.000	24.971	ct	1149	416743.914	4585495.123	42.440	calz	1333	416942.868	4585535.694	25.921	ct
186	417072.291	4585737.284	27.872	base	1073	416787.863	4585410.149	24.936	ct	1150	416745.132	4585494.000	42.018	ct	1334	416942.423	4585535.394	25.747	cun
188	417229.557	4585696.612	30.779	base	1074	416779.498	4585408.461	24.751	rell	1151	416743.958	4585491.424	42.171	ct	1335	416942.294	4585535.308	25.460	cun
1001	416727.460	4585406.207	29.003	rell	1075	416776.378	4585418.547	24.669	rell	1152	416739.557	4585486.097	42.316	ct	1336	416941.888	4585535.029	25.425	cun
1002	416729.773	4585398.206	28.783	rell	1076	416773.727	4585428.221	24.813	rell	1153	416736.509	4585489.092	42.660	calz	1337	416941.763	4585534.879	25.715	cun
1003	416729.718	4585398.269	28.786	rell	1077	416770.656	4585438.417	24.865	rell	1154	416725.805	4585479.891	42.872	calz	1338	416941.529	4585534.798	25.781	alam
1004	416724.992	4585406.533	29.303	rell	1078	416766.867	4585449.013	25.459	rell	1155	416727.950	4585475.976	42.453	ct	1339	416946.347	4585529.521	25.991	ct
1005	416724.963	4585406.504	29.305	rell	1079	416764.666	4585459.977	26.257	rell	1156	416718.621	4585468.378	42.429	ct	1340	416945.706	4585529.228	25.768	cun
1006	416730.870	4585411.387	28.494	rell	1080	416763.548	4585467.747	26.609	rell	1157	416715.708	4585471.160	42.872	calz	1341	416945.568	4585529.172	25.444	cun
1007	416722.166	4585417.474	29.269	rell	1081	416757.105	4585458.642	26.449	rell	1158	416703.486	4585460.780	42.515	calz	1342	416945.169	4585528.920	25.383	cun
1008	416713.683	4585415.592	30.244	rell	1082	416757.098	4585458.651	26.425	rell	1159	416705.152	4585457.820	42.261	ct	1343	416945.018	4585528.773	25.655	cun
1009	416706.981	4585421.446	30.278	rell	1083	416758.091	4585449.169	25.825	rell	1160	416694.425	4585448.587	41.645	ct	1344	416944.862	4585528.670	25.759	alam
1010	416712.532	4585426.848	29.615	rell	1084	416760.008	4585439.024	24.992	rell	1161	416692.099	4585451.445	41.977	calz	1345	416947.416	4585522.145	25.743	alam
1011	416697.776	4585429.857	30.578	ct	1085	416761.245	4585428.367	24.998	rell	1162	416681.016	4585442.793	41.302	calz	1346	416947.645	4585522.215	25.653	cun
1012	416704.899	4585433.944	30.073	ct	1086	416764.434	4585418.432	25.039	rell	1163	416681.027	4585442.796	41.306	calz	1347	416947.772	4585522.247	25.409	cun
1013	416713.224	4585438.373	29.249	ct	1087	416766.920	4585410.008	25.088	rell	1164	416682.062	4585439.929	41.040	ct	1348	416948.224	4585522.450	25.356	cun
1014	416713.066	4585435.195	29.272	ct	1088	416761.674	4585407.545	25.214	rell	1165	416669.975	4585430.006	40.176	ct	1349	416948.398	4585522.522	25.683	cun
1015	416716.309	4585431.972	29.009	ct	1089	416758.483	4585417.974	25.107	rell	1166	416667.845	4585432.867	40.559	calz	1350	416948.941	4585522.760	25.893	ct
1016	416723.642	4585426.680	28.868	ct	1090	416752.915	4585427.725	25.040	rell	1276	416939.498	4585594.353	26.540		1351	416942.797	4585507.646	25.839	ct
1017	416732.178	4585420.570	28.166	ct	1091	416748.360	4585437.975	25.228	rell	1277	416942.466	4585590.123	26.561		1352	416954.139	4585507.350	25.626	cun
1018	416736.892	4585415.558	28.087	ct	1092	416742.853	4585445.463	25.887	rell	1279	416910.363	4585626.569	26.389	alam	1353	416953.971	4585507.306	25.328	cun
1019	416742.437	4585410.015	27.871	ct	1093	416742.852	4585445.464	25.908	rell	1280	416910.549	4585626.732	26.256	cun	1354	416953.541	4585507.112	25.304	cun
1020	416747.471	4585404.211	28.204	ct	1094	416734.563	4585440.608	25.959	rell	1281	416910.719	4585626.789	26.010	cun	1355	416953.389	4585507.001	25.592	cun
1021	416752.447	4585407.526	24.971	cun	1095	416740.986	4585430.761	25.410	rell	1282	416911.149	4585627.012	26.002	cun	1356	416953.236	4585506.975	25.622	alam
1022	416752.447	4585407.528	24.973	cun	1096	416750.285	4585421.442	25.144	rell	1283	416911.295	4585627.094	26.292	cun	1357	416960.603	4585492.153	25.717	ct
1023	416753.498	4585408.796	24.886	cun	1097	416789.799	4585431.541	29.668	muro	1284	416911.809	4585627.359	26.501	ct	1358	416959.801	4585491.807	25.516	cun
1024	416754.010	4585408.916	25.241	ct	1098	416789.993	4585431.564	29.686	muro	1285	416916.793	4585614.099	26.480	ct	1359	416959.640	4585491.766	25.180	cun
1025	416748.490	4585414.501	25.215	ct	1100	416790.181	4585431.002	30.310	muro	1286	416915.979	4585613.990	26.159	cun	1360	416959.190	4585491.598	25.154	cun
1026	416747.955	4																	

1404	416976.983	4585452.173	25.083	cun	1483	416942.335	4585555.158	25.993	cam	1561	416994.447	4585562.949	22.724	rell	1899	417078.534	4585611.737	24.514	ct
1405	416974.202	4585451.273	25.521	ct	1484	416947.426	4585557.545	25.989	cam	1562	417003.780	4585565.698	22.365	rell	1900	417079.127	4585606.065	24.500	ct
1406	416979.157	4585437.129	25.312	ct	1485	416941.887	4585573.285	26.269	cam	1563	417000.364	4585582.010	22.504	rell	1901	417085.135	4585605.845	24.343	ct
1407	416980.742	4585437.556	24.945	cun	1486	416936.093	4585571.768	26.209	cam	1564	416992.122	4585580.744	22.975	rell	1902	417084.781	4585609.553	24.402	ct
1408	416980.831	4585437.668	24.714	cun	1487	416938.881	4585584.731	26.412	pozsan	1565	416986.470	4585579.991	23.618	ct	1903	417083.380	4585614.696	24.337	ct
1409	416981.341	4585437.744	24.707	cun	1488	416936.238	4585590.741	26.392	cam	1566	416987.340	4585598.243	23.094	ct	1904	417085.741	4585621.127	24.501	ct
1410	416981.449	4585437.867	24.966	cun	1489	416929.739	4585589.682	26.346	cam	1567	416992.380	4585592.039	22.659	rell	1905	417085.066	4585615.983	24.037	ct
1411	416981.708	4585438.029	25.066	ct	1490	416924.679	4585604.302	26.400	cam	1568	416996.980	4585594.067	22.464	rell	1906	417086.124	4585609.911	23.772	ct
1412	416981.921	4585432.687	25.070	cun	1491	416930.693	4585606.776	26.408	cam	1569	417000.445	4585604.118	21.546	ct	1907	417087.334	4585607.400	23.133	ct
1413	416982.069	4585432.727	24.713	cun	1492	416924.494	4585626.209	26.542	cam	1570	417002.128	4585605.034	20.865	ct	1908	417088.456	4585603.436	22.894	ct
1414	416982.598	4585432.938	24.692	cun	1493	416917.812	4585624.236	26.523	cam	1571	417005.227	4585594.756	21.059	ct	1909	417087.364	4585601.143	22.581	ct
1415	416982.743	4585432.983	24.963	cun	1494	416947.286	4585585.973	26.525	ct	1572	417003.921	4585593.930	21.530	ct	1910	417090.549	4585599.123	22.870	ct
1416	416983.261	4585433.052	25.108	ct	1495	416949.530	4585581.817	26.605	ct	1573	417008.039	4585584.120	21.575	ct	1911	417093.929	4585602.120	22.978	ct
1417	416982.061	4585432.610	24.717	cun	1496	416950.646	4585580.085	26.196	tat	1574	417009.530	4585585.066	21.116	ct	1912	417094.433	4585603.845	23.060	ct
1418	416979.341	4585432.481	25.732	ct	1497	416954.208	4585574.352	26.306	ct	1575	417012.505	4585577.515	21.378	ct	1913	417096.503	4585601.295	23.837	ct
1419	416976.758	4585430.860	26.978	cun	1498	416948.389	4585571.154	26.399	rell	1576	417013.949	4585577.841	20.916	ct	1914	417095.324	4585598.650	24.090	ct
1420	416976.726	4585430.737	26.645	cun	1499	416944.530	4585579.294	26.379	rell	1577	417017.742	4585571.331	20.905	ct	1915	417092.235	4585596.661	23.802	ct
1421	416976.907	4585430.267	26.621	cun	1500	416941.324	4585587.616	26.569	rell	1578	417016.447	4585571.027	21.609	ct	1916	417091.158	4585595.721	23.719	ct
1422	416976.994	4585430.152	26.957	cun	1501	416960.911	4585562.331	26.316	ct	1579	417015.087	4585528.136	22.591	rell	1917	417091.494	4585594.646	23.615	ct
1423	416982.088	4585431.916	25.087	cun	1502	416955.497	4585558.551	26.384	rell	1580	417028.343	4585527.844	21.353	ct	1918	417093.425	4585596.215	23.756	ct
1424	416982.073	4585431.933	25.071	cun	1503	416962.236	4585546.386	26.046	rell	1581	417029.547	4585528.055	20.952	ct	1919	417095.390	4585596.971	24.138	ct
1425	416982.228	4585432.104	24.670	cun	1504	416969.830	4585548.626	25.875	ct	1583	417047.460	4585700.805	22.281	ct	1920	417096.883	4585595.930	24.064	ct
1426	416983.268	4585428.008	25.011	cun	1505	416977.181	4585531.479	25.900	ct	1584	417053.935	4585677.493	22.229	ct	1921	417098.365	4585591.537	23.867	ct
1427	416983.408	4585427.832	24.795	cun	1506	416966.759	4585528.726	25.864	rell	1585	417058.717	4585663.583	22.288	ct	1922	417098.734	4585587.520	23.539	ct
1428	416978.657	4585426.502	26.067	cun	1507	416980.186	4585531.558	24.910	cam	1586	417063.117	4585649.030	22.387	ct	1923	417098.291	4585586.070	23.439	ct
1429	416978.655	4585426.421	25.749	cun	1508	416984.432	4585532.961	24.819	cam	1587	417066.188	4585634.866	22.266	ct	1924	417097.938	4585586.875	23.380	ct
1430	416978.767	4585425.910	25.739	cun	1509	416986.774	4585533.747	25.035	ct	1588	417069.516	4585620.096	22.119	ct	1925	417097.602	4585590.281	23.404	ct
1431	416978.942	4585425.886	26.106	cun	1510	416988.378	4585534.316	24.950	ct	1589	417070.543	4585607.583	22.003	ct	1926	417096.659	4585593.642	23.454	ct
1432	416983.589	4585427.320	25.231	cun	1511	416976.127	4585537.648	25.145	tat	1590	417076.639	4585606.604	23.194	ct	1927	417095.651	4585595.072	23.515	ct
1433	416983.534	4585427.394	24.870	cun	1512	416977.156	4585538.012	24.644	cam	1591	417076.640	4585614.675	23.345	ct	1928	417094.007	4585594.850	23.587	ct
1434	416983.880	4585427.451	24.889	cun	1513	416982.276	4585540.226	24.546	cam	1592	417079.300	4585616.571	23.610	ct	1929	417091.684	4585593.942	23.514	ct
1435	416983.951	4585427.391	25.119	cun	1514	416983.689	4585541.87												

1977	417090.578	4585643.383	24.870	cam	2058	417122.497	4585706.174	25.529	cam	2135	417109.190	4585752.556	25.809	rell	2213	417139.933	4585636.312	23.630	ct
1978	417087.166	4585645.752	24.789	cam	2059	417115.297	4585720.405	25.553	cam	2136	417115.039	4585740.404	25.877	rell	2214	417135.967	4585636.815	23.675	ct
1979	417084.111	4585647.835	24.790	cam	2060	417109.050	4585733.863	25.569	cam	2137	417118.990	4585745.976	26.105	ct	2215	417135.536	4585635.488	23.464	ct
1980	417084.940	4585648.471	24.673	ct	2061	417102.232	4585746.882	25.591	cam	2138	417124.103	4585735.406	25.852	ct	2216	417130.345	4585637.116	23.362	ct
1981	417086.180	4585648.711	23.782	cun	2062	417098.025	4585757.436	25.663	cam	2139	417120.435	4585724.067	25.719	rell	2217	417130.938	4585634.085	23.694	ct
1982	417086.488	4585648.905	23.803	cun	2063	417094.049	4585767.393	25.718	cam	2140	417126.553	4585715.540	25.588	rell	2218	417121.289	4585632.961	23.780	ct
1983	417087.118	4585649.254	24.361	cun	2064	417090.025	4585764.972	25.611	cam	2141	417136.957	4585712.195	26.090	ct	2219	417122.101	4585630.153	23.585	ct
1984	417089.072	4585647.741	24.447	cun	2065	417095.984	4585751.030	25.586	cam	2142	417134.470	4585710.725	25.489	rell	2220	417135.615	4585634.816	24.018	ct
1985	417088.759	4585647.146	24.166	cun	2066	417103.048	4585737.489	25.478	cam	2143	417131.808	4585703.315	25.528	rell	2221	417130.161	4585632.292	24.534	ct
1986	417088.379	4585646.666	24.142	cun	2067	417109.519	4585724.154	25.540	cam	2144	417139.237	4585702.337	25.779	ct	2222	417122.637	4585627.807	24.257	ct
1987	417087.551	4585645.751	24.762	cun	2068	417116.123	4585710.706	25.448	cam	2145	417136.895	4585700.185	25.482	rell	2223	417115.654	4585623.049	24.181	ct
1988	417091.117	4585643.985	24.833	cun	2069	417122.653	4585697.898	25.468	cam	2146	417141.949	4585684.563	25.422	rell	2224	417111.523	4585619.667	24.227	ct
1989	417091.990	4585644.817	24.244	cun	2070	417128.830	4585685.727	25.362	cam	2147	417147.091	4585684.751	25.568	ct	2225	417104.299	4585611.231	24.196	ct
1990	417092.339	4585645.478	24.280	cun	2071	417130.352	4585681.247	25.346	cam	2148	417145.248	4585682.556	25.019	rell	2226	417099.454	4585605.578	24.145	ct
1991	417092.794	4585646.065	24.677	cun	2072	417129.832	4585675.654	25.202	cam	2149	417146.656	4585675.048	25.245	rell	2227	417098.969	4585609.369	23.363	ct
1992	417097.431	4585644.497	24.753	cun	2073	417127.553	4585668.693	25.171	cam	2150	417149.854	4585675.715	25.234	rell	2228	417102.550	4585614.765	23.163	ct
1993	417097.484	4585643.772	24.331	cun	2074	417125.102	4585662.166	25.018	cam	2151	417153.938	4585674.227	25.600	ct	2229	417105.673	4585617.761	23.286	ct
1994	417097.475	4585643.011	24.337	cun	2075	417121.459	4585653.787	24.980	cam	2152	417160.457	4585664.102	25.366	ct	2230	417105.609	4585620.071	23.263	ct
1995	417097.589	4585642.293	24.758	cun	2076	417118.894	4585648.540	24.832	cam	2153	417160.972	4585663.548	25.446	muro	2231	417101.866	4585617.375	23.244	ct
1996	417103.675	4585642.602	24.699	cun	2077	417096.954	4585665.733	25.028	ct	2154	417164.014	4585656.535	24.544	muro	2232	417097.027	4585614.736	23.172	ct
1997	417103.674	4585643.382	24.325	cun	2078	417095.431	4585671.002	25.049	ct	2155	417162.750	4585656.421	24.500	ct	2233	417094.910	4585616.132	24.502	ct
1998	417103.717	4585644.194	24.293	cun	2079	417092.739	4585675.080	24.997	ct	2156	417157.041	4585656.941	24.838	ct	2234	417094.105	4585619.657	24.483	ct
1999	417103.728	4585644.807	24.635	cun	2080	417090.800	4585676.004	25.077	ct	2157	417154.566	4585656.959	25.119	ct	2235	417105.319	4585624.519	24.379	ct
2000	417114.599	4585645.451	24.783	cun	2081	417090.812	4585675.996	25.058	ct	2158	417151.434	4585657.973	25.260	ct	2236	417110.445	4585630.224	24.571	ct
2001	417114.484	4585645.882	24.511	cun	2082	417086.179	4585674.757	24.915	ct	2159	417153.501	4585663.585	25.297	rell	2237	417106.446	4585633.556	24.878	rell
2002	417113.897	4585647.065	24.448	cun	2083	417083.201	4585671.672	24.902	ct	2160	417148.383	4585663.485	25.121	ct	2238	417106.398	4585633.560	24.881	rell
2003	417113.695	4585647.554	24.813	cun	2084	417084.401	4585666.401	25.008	ct	2161	417149.437	4585659.909	25.011	ct	2239	417120.503	4585634.432	24.087	ct
2004	417115.827	4585645.741	24.853	ct	2085	417085.946	4585662.904	25.162	ct	2162	417151.165	4585656.591	24.877	ct	2240	417116.539	4585637.665	24.620	rell
2005	417115.851	4585648.417	24.879	ct	2086	417088.665	4585660.612	25.040	ct	2163	417153.133	4585654.634	24.570	ct	2241	417126.880	4585637.699	24.179	ct
2006	417124.618	4585644.111	25.003	cam	2087	417092.433	4585660.664	24.924	ct	2164	417159.316	4585654.259	24.496	ct	2242	417126.164	4585640.520	24.486	rell
2007	417132.952	4585647.422	24.999	cam	2088	417096.797	4585664.144	24.920	ct	2165	417162.698	4585655.447	24.433	ct	2243	417140.509	4585646.791	24.504	rell
2008	417133.201	4585646.957	25.136	muro	2089	417092.404	4585665.959</												

2307	417112.378	4585785.983	32.340	calz	2565	417210.122	4585722.488	31.039	muro	2642	417223.354	4585716.194	30.797	bord	2746	417288.784	4585713.310	25.333	rell
2308	417107.671	4585785.478	32.026	ct	2566	417204.588	4585736.818	31.230	muro	2643	417223.908	4585716.911	30.833	bord	2747	417290.413	4585709.647	24.868	rell
2310	417159.098	4585649.429	24.564	dest	2567	417204.831	4585736.893	31.274	calz	2644	417227.209	4585718.839	30.737	bord	2748	417283.663	4585706.649	24.651	rell
2311	417143.397	4585642.408	24.521	dest	2568	417205.401	4585737.150	31.266	lb	2645	417228.149	4585719.046	30.700	bord	2749	417282.042	4585710.244	25.215	rell
2312	417144.532	4585663.974	25.101	dest	2569	417199.985	4585751.784	31.448	lb	2646	417228.735	4585718.669	30.633	bord	2750	417273.965	4585706.589	25.180	rell
2313	417138.355	4585651.960	24.847	dest	2570	417199.203	4585751.563	31.451	calz	2647	417228.745	4585718.261	30.642	bord	2751	417260.752	4585701.203	25.131	rell
2314	417168.361	4585646.238	25.630	marco	2571	417198.933	4585751.460	31.391	muro	2648	417227.598	4585716.350	30.768	bord	2752	417262.806	4585694.976	24.527	rell
2316	417174.321	4585649.385	28.676	marco	2572	417193.472	4585765.672	31.643	muro	2649	417225.842	4585713.271	30.804	bord	2755	417253.779	4585688.441	24.825	rell
2317	417174.346	4585649.392	28.813	marco	2573	417193.805	4585765.818	31.717	calz	2651	417224.813	4585712.590	30.797	bord	2756	417248.811	4585691.628	24.914	rell
2319	417174.588	4585649.508	29.296	marco	2574	417194.946	4585766.161	31.662	lb	2652	417224.290	4585712.569	30.779	bord	2757	417246.888	4585695.622	25.425	rell
2320	417169.775	4585659.430	29.298	marco	2575	417190.265	4585780.030	31.898	lb	2653	417223.937	4585713.309	30.816	bord	2758	417253.161	4585699.916	25.516	rell
2321	417168.728	4585658.916	28.275	marco	2576	417188.603	4585779.584	31.926	calz	2654	417236.006	4585719.881	30.337	bord	2759	417254.699	4585699.290	25.131	rell
2322	417164.490	4585656.816	25.657	marco	2577	417188.223	4585779.375	31.780	muro	2655	417232.717	4585716.804	30.521	bord	2760	417259.473	4585700.906	25.107	rell
2323	417164.015	4585656.559	25.637	marco	2578	417182.560	4585794.344	32.039	muro	2656	417230.007	4585712.973	30.592	bord	2761	417243.904	4585684.329	24.435	rell
2324	417162.533	4585659.969	25.626	marco	2579	417183.581	4585794.851	32.207	calz	2657	417228.793	4585708.976	30.609	bord	2762	417237.684	4585683.372	24.487	rell
2502	417236.798	4585653.240	30.606	muro	2580	417185.273	4585795.220	32.137	lb	2658	417228.419	4585699.308	30.623	bord	2763	417235.516	4585687.291	24.886	rell
2503	417236.286	4585652.998	30.733	calz	2581	417181.748	4585806.549	32.325	lb	2659	417228.915	4585697.683	30.593	bord	2764	417239.718	4585689.845	25.003	rell
2504	417233.980	4585651.805	30.896	lb	2582	417180.118	4585806.094	32.358	calz	2660	417230.046	4585695.436	30.580	bord	2765	417238.612	4585681.781	24.432	ct
2505	417228.441	4585665.698	31.006	lb	2583	417178.464	4585805.267	32.271	muro	2661	417231.406	4585693.128	30.355	ct	2766	417243.934	4585682.058	24.906	rell
2506	417230.579	4585667.084	30.880	calz	2584	417179.273	4585808.316	32.292	cun	2662	417230.227	4585696.881	30.535	ct	2767	417280.977	4585724.789	29.834	ct
2507	417231.077	4585667.390	30.751	muro	2585	417178.971	4585808.213	32.272	cun	2663	417229.942	4585699.600	30.476	ct	2768	417231.165	4585720.207	29.845	ct
2508	417228.287	4585666.132	31.028	lb	2586	417175.184	4585820.684	32.408	cun	2664	417228.080	4585697.120	30.703	lb	2769	417266.706	4585715.282	29.904	ct
2509	417227.552	4585674.264	30.972	sum	2587	417175.514	4585820.779	32.407	cun	2665	417228.898	4585697.278	30.641	calz	2770	417263.049	4585713.608	29.987	ct
2510	417225.646	4585681.124	30.928	muro	2588	417175.897	4585820.810	32.588	calz	2666	417231.019	4585691.808	30.575	calz	2771	417260.593	4585714.216	30.100	ct
2511	417225.112	4585680.981	31.051	calz	2589	417177.393	4585821.386	32.562	lb	2667	417233.932	4585685.934	30.515	calz	2772	417258.171	4585715.828	30.150	ct
2513	417222.746	4585679.983	31.200	lb	2590	417189.448	4585820.032	32.080	ct	2668	417236.571	4585680.532	30.425	calz	2773	417256.028	4585717.479	30.152	ct
2514	417217.156	4585694.132	31.375	lb	2591	417187.796	4585819.675	32.316	ct	2669	417235.297	4585679.860	30.495	lb	2774	417249.063	4585713.327	30.193	ct
2515	417219.506	4585695.227	31.265	calz	2592	417186.997	4585819.580	32.307	calz	2671	417231.841	4585691.687	30.414	muro	2775	417240.164	4585708.692	30.293	ct
2516	417220.051	4585695.412	31.138	muro	2593	417185.360	4585819.190	32.427	lb	2672	417238.038	4585681.372	30.389	muro	2776	417234.733	4585704.700	30.462	ct
2517	417218.614	4585696.925	31.296	sum	2594	417189.594	4585805.090	32.160	lb	2675	417238.079	4585681.064	30.123	ct	2777	417255.596	4585709.086	26.832	rell
2518	417214.025	4585710.957	31.298	muro	2595	417191.150	4585805.333	32.089	calz	2676	417237.165	4585679.173	30.434	calz	2778	417252.768	4585708.933	26.629	rell
2519	417213.452	4585710.755	31.414	calz	2596</td														

2940	416950.322	4585356.492	25.468	rell	3017	416888.059	4585520.348	29.751	cam	3094	416865.486	4585538.668	33.034	ct	3171	416931.390	4585331.413	30.300	rell
2941	416950.866	4585360.118	25.084	rell	3018	416890.156	4585521.399	29.721	rell	3095	416863.857	4585537.751	32.731	rell	3172	416928.716	4585345.203	30.031	rell
2942	416948.078	4585362.336	25.504	rell	3019	416892.529	4585522.294	29.608	cun	3096	416871.361	4585525.189	32.674	ct	3173	416934.263	4585347.365	29.620	rell
2943	416948.294	4585354.156	26.240	cun	3020	416892.662	4585522.410	29.317	cun	3097	416869.732	4585525.477	32.605	ct	3174	416938.353	4585348.638	29.203	rell
2944	416947.973	4585354.009	25.878	cun	3021	416893.108	4585522.651	29.331	cun	3098	416865.965	4585532.140	32.691	ct	3175	416938.364	4585348.645	29.209	ct
2945	416947.309	4585353.748	25.874	cun	3022	416893.247	4585522.694	29.604	cun	3099	416858.863	4585545.811	32.839	ct	3176	416933.336	4585364.502	28.669	ct
2946	416946.902	4585353.616	26.187	cun	3023	416893.570	4585522.715	29.745	alamb	3100	416850.256	4585563.103	32.962	ct	3177	416930.765	4585364.327	29.109	rell
2947	416946.266	4585355.587	26.188	cun	3024	416882.569	4585535.900	29.885	cam	3101	416843.384	4585579.126	32.856	ct	3178	416927.422	4585363.692	29.415	rell
2948	416946.586	4585355.668	25.952	cun	3025	416884.580	4585536.798	29.871	rell	3102	416835.832	4585595.010	32.505	ct	3179	416926.274	4585377.734	29.009	rell
2949	416947.026	4585355.854	25.920	cun	3026	416887.162	4585537.818	29.800	cun	3103	416829.700	4585610.706	32.214	ct	3180	416928.680	4585378.531	28.488	ct
2950	416947.337	4585355.997	26.129	cun	3027	416887.303	4585537.874	29.513	cun	3104	416824.030	4585626.253	31.485	ct	3181	416924.992	4585391.311	28.621	ct
2951	416944.257	4585364.333	26.131	cun	3028	416887.762	4585538.099	29.513	cun	3105	416819.833	4585639.299	30.709	ct	3182	416923.317	4585396.557	28.570	ct
2952	416943.884	4585364.219	25.939	cun	3029	416887.888	4585538.149	29.807	cun	3106	416833.753	4585646.363	30.441	ct	3183	416924.420	4585334.329	30.519	calz
2953	416943.357	4585364.065	26.008	cun	3030	416888.161	4585538.221	29.882	alamb	3107	416834.829	4585646.767	30.385	cun	3184	416926.792	4585334.806	30.473	ct
2954	416943.066	4585363.913	26.242	cun	3031	416877.193	4585551.597	30.014	cam	3108	416835.530	4585647.011	30.035	cun	3185	416926.119	4585342.773	30.449	ct
2955	416939.875	4585378.176	26.443	cun	3032	416879.369	4585552.537	30.014	rell	3109	416836.225	4585647.497	30.310	cun	3186	416923.101	4585347.177	30.668	calz
2956	416940.056	4585378.190	26.157	cun	3033	416881.818	4585553.541	29.961	cun	3110	416842.477	4585649.084	30.542	ct	3187	416924.727	4585347.292	30.435	ct
2957	416940.530	4585378.316	26.196	cun	3034	416881.974	4585553.598	29.678	cun	3111	416847.908	4585634.038	30.522	ct	3188	416926.626	4585347.810	29.838	ct
2958	416940.651	4585378.437	26.479	cun	3035	416882.424	4585553.769	29.675	cun	3112	416843.377	4585631.700	30.465	cun	3189	416923.243	4585355.009	30.730	arqal
2959	416940.956	4585378.602	26.601	alamb	3036	416882.546	4585553.818	29.951	cun	3113	416841.849	4585631.088	29.973	cun	3190	416923.206	4585355.497	30.697	farola
2960	416940.958	4585378.601	26.593	alamb	3037	416882.796	4585553.735	30.017	alamb	3114	416841.143	4585630.700	30.329	cun	3191	416920.789	4585364.560	30.813	calz
2961	416937.428	4585376.701	26.489	rell	3038	416871.268	4585567.731	30.210	cam	3115	416840.143	4585630.191	30.480	ct	3192	416922.468	4585364.829	30.594	ct
2962	416940.587	4585364.223	26.324	rell	3039	416873.531	4585568.915	30.126	rell	3116	416846.206	4585614.478	30.511	ct	3193	416926.201	4585365.100	29.419	ct
2963	416944.570	4585352.531	26.282	rell	3040	416875.799	4585570.139	30.074	cun	3117	416847.001	4585614.747	30.379	cun	3194	416918.392	4585380.786	30.927	calz
2964	416948.139	4585342.754	26.295	rell	3041	416875.920	4585570.206	29.817	cun	3118	416847.976	4585615.293	29.960	cun	3195	416920.282	4585381.139	30.815	ct
2965	416932.458	4585392.080	26.806	rell	3042	416876.379	4585570.443	29.777	cun	3119	416849.179	4585631.580	30.430	cun	3196	416925.129	4585381.838	28.867	ct
2966	416935.683	4585393.465	26.844	cun	3043	416876.531	4585570.494	30.057	cun	3120	416853.807	4585616.922	30.580	ct	3197	416917.338	4585394.266	31.097	arqal
2967	416935.858	4585393.491	26.549	cun	3044	416876.787	4585570.469	30.193	alamb	3121	416859.044	4585601.388	30.556	ct	3198	416917.342	4585394.298	31.092	arqal
2968	416936.320	4585393.614	26.572	cun	3045	416865.028	4585585.185	30.259	cam	3122	416854.852	4585599.314	30.457	ct	3199	416917.279	4585394.780	31.095	farola
2969	416936.432	4585393.700	26.841	cun	3046	416867.141	4585586.243	30.251	rell	3123	416854.665	4585599.289	30.363	cun	3200	416914.830	4585400.845	31.138	calz
2970	416936.757	4585393.918	26.927	alamb	3047	416869.757	4585586.788	30.150	cun	3124	416853.294	4585598.525	29.917	cun	3201	416917.384	4585401.367	31.039	ct
2971	416932.783	4585396.025	26.936	pozsan	3048	41686													

3250	416839.851	4585567.059	35.895	calz	3329	416860.260	4585490.804	33.745	calz	3406	416832.229	4585500.000	29.405	bord	3484	416828.651	4585467.763	29.243	cun
3251	416839.939	4585567.103	35.843	bord	3330	416860.090	4585490.651	33.669	bord	3407	416832.081	4585499.980	29.456	calz	3485	416826.529	4585467.697	29.102	bord
3252	416841.953	4585568.355	35.756	ct	3331	416860.114	4585488.076	33.273	bord	3408	416835.742	4585489.339	29.722	bord	3486	416826.454	4585467.948	29.108	bord
3253	416836.925	4585576.683	35.808	arql	3332	416859.048	4585487.045	32.515	bord	3409	416835.589	4585489.294	29.784	calz	3487	416826.175	4585469.313	29.551	cun
3254	416836.725	4585577.103	35.821	farola	3333	416859.301	4585486.921	32.556	bord	3410	416836.622	4585486.513	29.866	calz	3488	416826.946	4585469.838	29.488	cun
3255	416830.976	4585586.719	35.633	calz	3334	416860.306	4585487.950	33.266	bord	3411	416836.749	4585486.601	29.814	bord	3489	416827.780	4585469.753	29.539	cun
3256	416831.096	4585586.755	35.585	bord	3335	416860.689	4585487.723	33.393	ct	3412	416837.475	4585488.099	29.713	ct	3490	416827.002	4585472.785	29.708	ct
3257	416833.458	4585587.650	35.512	ct	3336	416862.086	4585488.500	33.463	bord	3413	416843.331	4585475.948	30.395	ct	3491	416824.804	4585471.579	29.774	ct
3258	416828.690	4585592.414	35.417	bord	3337	416867.922	4585478.558	32.752	ct	3414	416841.875	4585475.016	30.297	bord	3492	416824.783	4585471.590	29.739	ct
3259	416829.491	4585594.818	35.221	bord	3338	416869.290	4585479.003	32.724	bord	3415	416841.768	4585474.946	30.350	calz	3493	416825.209	4585477.524	30.144	ct
3260	416831.305	4585595.623	34.674	bord	3339	416869.403	4585479.173	32.783	calz	3416	416848.905	4585465.204	30.927	farola	3494	416822.474	4585478.005	30.191	ct
3261	416831.176	4585595.842	34.694	bord	3340	416869.404	4585479.173	32.783	calz	3417	416850.438	4585464.344	30.959	ct	3495	416910.881	4585450.495	28.612	ct
3262	416829.418	4585595.092	35.247	bord	3341	416873.997	4585468.589	32.159	ct	3418	416848.645	4585463.231	30.965	calz	3496	416910.344	4585450.273	28.298	cun
3263	416827.573	4585595.146	35.395	bord	3342	416875.181	4585469.201	32.110	bord	3419	416848.777	4585463.294	30.913	bord	3497	416909.837	4585450.023	28.323	cun
3264	416831.066	4585594.587	35.153	ct	3343	416875.364	4585469.230	32.167	calz	3420	416850.058	4585463.189	30.860	bord	3601	416932.809	4585396.055	26.907	pozsan
3265	416830.355	4585595.922	35.087	ct	3344	416880.803	4585458.207	31.618	calz	3421	416851.551	4585464.255	30.490	bord	3602	416934.017	4585399.354	26.906	cun
3266	416827.143	4585595.737	35.448	calz	3345	416880.662	4585458.175	31.567	bord	3422	416851.657	4585464.052	30.489	bord	3603	416934.166	4585399.377	26.617	cun
3267	416821.644	4585609.442	34.951	calz	3346	416879.509	4585457.314	31.526	ct	3423	416850.213	4585462.950	30.874	bord	3604	416934.621	4585399.585	26.624	cun
3268	416821.796	4585609.438	34.898	bord	3347	416872.389	4585452.027	26.334	ct	3424	416851.557	4585463.166	31.024	ct	3605	416934.764	4585399.612	26.911	cun
3269	416824.846	4585610.497	34.814	ct	3348	416871.299	4585451.468	26.356	cun	3425	416850.414	4585460.861	31.065	bord	3609	416938.857	4585584.776	26.407	pozsan
3270	416821.408	4585613.574	34.738	arql	3349	416870.963	4585451.278	25.920	cun	3426	416859.731	4585450.852	31.799	ct	3610	416931.783	4585576.966	26.350	clh
3271	416821.275	4585613.932	34.681	farola	3350	416870.666	4585451.014	25.929	cun	3427	416858.152	4585449.579	31.765	bord	3615	416957.644	4585533.197	25.794	pozsan
3272	416816.491	4585622.798	34.347	calz	3351	416870.378	4585450.800	26.360	cun	3428	416858.038	4585449.508	31.806	calz	3616	416971.845	4585491.829	25.600	pozsan
3273	416816.622	4585622.879	34.299	bord	3352	416869.571	4585450.451	26.371	ct	3429	416865.288	4585438.118	32.532	calz	3618	416985.676	4585391.040	25.237	pozsan
3274	416819.439	4585624.370	34.151	ct	3353	416866.921	4585460.824	26.778	ct	3430	416865.465	4585438.157	32.492	bord	3619	416990.286	4585411.792	25.269	pozsan
3275	416816.416	4585626.749	34.004	arqdt	3354	416865.933	4585459.249	26.525	cun	3431	416867.925	4585439.607	32.200	ct	3620	416996.123	4585409.710	25.295	arqueton
3276	416811.751	4585635.998	33.631	calz	3355	416865.651	4585458.973	26.112	cun	3432	416852.678	4585438.558	32.445	calz	3621	416997.109	4585406.582	25.228	arqueton
3277	416811.892	4585636.030	33.583	bord	3356	416865.263	4585458.842	26.128	cun	3433	416850.231	4585436.672	32.152	ct	3622	417000.013	4585407.634	25.329	arqueton
3278	416815.523	4585636.885	33.430	ct	3357	416865.078	4585458.564	26.489	cun	3434	416841.721	4585449.601	31.722	ct	3623	416999.001	4585410.645	25.276	arqueton
3279	416815.530	4585636.861	33.429	ct	3358	416864.363	4585458.124	26.757	ct	3435	416843.614	4585451.111	31.792	calz	3624	416998.998	4585410.652	25.271	arqueton
3280	416809.230	4585621.569	34.625	calz	3359	416857.288	4585467.697	27.293	ct	3436	416835.833	4585463.318	31.197	calz	3625	417001.119	4585409.273	25.365	pozsan
3281	416814.765	4585606.997</td																	

3746	416964.034	4585571.186	23.800	edif	4024	417163.270	4585630.688	25.397	ct	4102	417137.123	4585598.453	24.010	rell
3747	416961.844	4585570.277	23.850	edif	4025	417159.474	4585634.370	24.982	ct	4103	417147.832	4585604.207	24.020	rell
3748	416962.907	4585571.924	23.900	edif	4026	417155.871	4585637.177	25.119	ct	4104	417117.189	4585601.329	25.750	ct
3749	416962.336	4585574.411	23.900	edif	4027	417149.629	4585633.942	25.074	ct	4105	417115.972	4585596.427	25.810	ct
3750	416960.579	4585574.022	23.900	edif	4028	417142.863	4585630.633	25.166	ct	4106	417115.842	4585588.618	25.750	ct
3751	416965.184	4585570.004	23.803	rell	4029	417134.794	4585625.940	24.926	ct					
3752	416718.903	4585437.181	25.730	muro	4030	417124.272	4585619.057	25.194	ct					
3753	416721.284	4585439.661	25.250	muro	4031	417118.525	4585614.533	25.078	ct					
3754	416719.403	4585441.031	25.280	muro	4032	417118.403	4585614.575	25.083	ct					
3755	416717.458	4585439.003	25.270	muro	4033	417113.683	4585610.369	25.677	ct					
3756	416718.911	4585437.184	25.230	muro	4034	417111.296	4585605.838	26.029	ct					
3757	416660.509	4585494.744	25.810	muro	4035	417108.958	4585602.040	25.242	ct					
3758	416662.032	4585493.597	25.800	muro	4036	417108.315	4585599.214	25.341	ct					
3759	416662.228	4585493.996	25.800	muro	4037	417111.360	4585587.804	25.123	ct					
3760	416663.761	4585495.449	25.800	muro	4038	417114.698	4585588.310	25.816	ct					
3761	416661.954	4585498.949	26.380	muro	4039	417113.636	4585595.704	25.830	ct					
3762	416786.944	4585440.660	29.640	muro	4040	417113.251	4585599.406	25.640	ct					
3763	416789.798	4585431.545	24.600	muro	4041	417114.166	4585600.173	25.459	tat					
3764	416789.987	4585431.566	24.600	muro	4042	417113.687	4585601.334	25.349	tat					
3765	416776.836	4585446.419	25.150	muro	4043	417113.513	4585601.791	25.205	ct					
3766	416787.264	4585439.691	25.340	canaleta	4044	417113.972	4585604.259	25.493	ct					
3767	416787.271	4585439.671	24.600	canaleta	4045	417116.913	4585606.920	26.048	ct					
3768	416779.515	4585444.823	25.010	muro	4046	417115.716	4585609.403	25.691	ct					
3769	416786.551	4585440.607	25.340	muro	4047	417115.986	4585610.772	25.525	ct					
3770	416786.942	4585440.656	25.340	muro	4048	417118.058	4585612.529	25.513	ct					
3771	416951.216	4585362.738	25.080	muro	4049	417122.561	4585616.572	25.462	ct					
3772	416952.586	4585359.037	25.080	muro	4050	417132.608	4585622.735	25.156	ct					
3773	416946.223	4585363.731	25.500	muro	4051	417137.359	4585625.481	25.115	ct					
3774	416949.348	4585355.300	25.470	muro	4052	417141.834	4585627.651	25.231	ct					
3775	416933.900	4585557.517	25.250	cun	4053	417148.923	4585630.973	25.108	ct					
3776	416971.943	4585470.202	24.960	cun	4054	417153.658	4585634.512	25.132	ct					
3777	416960.699	4585569.812	23.850	ct	4055	417158.278	4585630.943	24.975	ct					
3778	416961.134	4585571.517	23.900	edif	4056	417160.727	4585627.343	25.633	ct					
3779	416955.704	4585581.317	24.380	transf	4057	417163.476	4585623.741	25.570	ct					
3780	416958.467	4585581.650	23.950	losa	4058	417156.834	4585631.329	24.742	ct					
3781	416957.364	4585586.590	23.950	losa	4059	417154.464	4585633.903	24.812	ct					
3782	416970.300	4585560.256	24.160	hornacina	4060	417149.688	4585630.169	24.600	ct					
3783	417106.220	4585582.675	23.970	cam	4061	417150.493	4585628.020	24.808	ct					
3784	417174.315	4585642.197	25.650	muro	4062	417143.618	4585624.631	24.544	ct					
3785	417171.534	4585647.925	24.680	marco	4063	417142.393	4585626.362	24.593	ct					
3786	417174.557	4585649.526	24.610	marco	4064	417134.223	4585622.296	24.685	ct					
3787	417169.770	4585659.419	24.640	marco	4065	417135.560	4585620.631	24.778	ct					
3788	417174.420	4585649.809	24.580	ct	4066	417126.841	4585615.587	25.087	ct					
3789	417174.147	4585650.371	24.280	ct	4067	417125.187	4585617.014	24.957	ct					
3790	417172.670	4585653.426	24.250	ct	4068	417118.601	4585611.843	25.045	ct					
3791	417172.078	4585654.649	24.560	ct	4069	417118.807	4585610.008	24.949	ct					
3792	417231.860	4585691.687	24.900	muro	4070	417120.526	4585605.090	25.709	ct					
3793	417234.770	4585686.860	24.900	muro	4071	417124.436	4585608.741	26.412	ct					
3794	417237.077	4585683.001	24.500	muro	4072	417123.988	4585610.426	26.599	ct					
3795	417237.873	4585681.653	24.500	muro	4073	417132.610	4585616.055	26.510	ct					
3796	417246.870	4585681.915	26.050	muro	4074	417134.661	4585614.841	26.564	ct					
3797	417246.868	4585681.922	25.150	muro	4075	417142.373	4585619.969	26.26						

Actuación B - Estructura Ramal 1 P.K. 1+400 y Ramal 3 y Ramal 2 P.K. 2+150

173	416795.635	4585288.552	42.839	base	1973	416869.688	4585246.217	30.938	bord	2047	416856.348	4585245.815	24.822	cam	2121	416869.709	4585154.594	25.646	rell
1724	416857.684	4585248.413	25.542	muro	1974	416869.406	4585246.046	29.922	bord	2048	416855.585	4585245.807	24.856	ct	2122	416878.218	4585156.479	25.699	rell
1725	416862.969	4585250.409	28.838	muro	1975	416869.565	4585245.810	29.912	bord	2049	416851.298	4585242.135	25.135	ct	2123	416887.720	4585159.819	25.765	rell
1726	416863.324	4585250.547	28.863	muro	1976	416869.858	4585246.030	30.955	bord	2050	416847.505	4585239.737	24.994	ct	2124	416896.539	4585163.136	25.765	rell
1727	416853.417	4585263.105	29.037	muro	1977	416872.436	4585248.223	31.866	bord	2051	416838.914	4585240.679	24.825	ct	2125	416905.981	4585166.119	25.902	ct
1729	416853.272	4585263.111	29.417	muro	1978	416874.004	4585248.211	31.888	bord	2052	416842.672	4585241.858	24.505	ct	2126	416899.737	4585176.943	25.871	ct
1730	416845.041	4585264.201	29.420	muro	1979	416874.100	4585248.280	31.928	calz	2053	416849.888	4585246.318	23.805	ct	2127	416890.926	4585172.859	25.852	rell
1731	416843.468	4585264.385	30.195	muro	1980	416874.046	4585245.994	31.930	farola	2054	416857.066	4585249.753	23.340	ct	2128	416881.464	4585169.043	25.801	rell
1732	416828.523	4585264.560	30.139	muro	1981	416880.844	4585236.014	31.733	ct	2055	416857.653	4585248.456	23.501	muro	2129	416870.670	4585165.625	25.766	rell
1733	416826.998	4585264.517	30.883	muro	1982	416882.365	4585236.939	31.615	bord	2056	416857.411	4585257.256	23.277	ct	2130	416865.560	4585174.682	25.846	rell
1734	416815.908	4585263.872	30.846	muro	1983	416882.483	4585236.999	31.649	calz	2057	416847.914	4585252.351	23.689	ct	2131	416874.905	4585179.741	25.988	rell
1735	416813.400	4585263.696	30.839	muro	1984	416891.332	4585224.572	31.319	calz	2058	416843.573	4585249.582	23.846	ct	2132	416886.793	4585180.123	25.990	rell
1736	416802.355	4585286.229	42.812	calz	1985	416891.220	4585224.482	31.291	bord	2059	416837.201	4585247.277	24.475	ct	2133	416893.260	4585181.603	25.980	rell
1737	416801.504	4585284.058	42.588	ct	1986	416889.916	4585222.791	31.366	ct	2060	416832.117	4585248.172	25.074	ct	2134	416896.243	4585181.338	25.990	ct
1738	416808.415	4585281.704	42.354	ct	1987	416896.728	4585212.759	31.120	ct	2061	416835.460	4585248.334	25.290	ct	2135	416890.102	4585191.233	26.282	ct
1739	416809.367	4585284.686	42.714	calz	1988	416898.508	4585213.925	31.032	bord	2062	416840.531	4585250.746	25.513	ct	2136	416881.014	4585188.344	26.150	rell
1740	416818.259	4585283.654	42.476	calz	1989	416898.639	4585214.010	31.081	calz	2063	416846.367	4585255.071	25.560	ct	2137	416871.205	4585183.992	26.090	rell
1741	416814.895	4585280.329	42.186	ct	1990	416897.993	4585212.383	31.131	farola	2064	416850.366	4585256.329	24.983	ct	2138	416861.622	4585180.244	25.932	rell
1742	416817.551	4585280.463	42.140	ct	1991	416907.775	4585200.277	30.820	calz	2065	416854.405	4585257.491	24.339	ct	2139	416853.324	4585188.440	26.055	rell
1743	416818.594	4585281.727	42.446	ct	1992	416907.681	4585200.205	30.786	bord	2066	416828.266	4585249.593	25.402	cam	2140	416861.083	4585192.831	25.928	rell
1744	416818.560	4585282.916	42.650	ct	1993	416905.964	4585198.913	30.781	ct	2067	416819.575	4585253.169	25.611	cam	2141	416873.226	4585197.816	26.111	rell
1745	416821.493	4585283.533	42.468		1994	416914.367	4585186.748	30.630	ct	2068	416812.028	4585255.233	25.872	cam	2142	416878.939	4585200.949	26.189	rell
1746	416821.565	4585283.552	42.468	acera	1995	416915.869	4585187.591	30.551	bord	2069	416804.010	4585256.108	25.922	cam	2143	416882.666	4585202.123	26.260	ct
1747	416821.687	4585290.598	42.097	acera	1996	416915.962	4585187.678	30.603	calz	2070	416794.623	4585257.623	25.874	cam	2144	416882.642	4585202.120	26.269	ct
1748	416820.925	4585283.522	42.483	calz	1997	416924.146	4585174.927	30.333	calz	2071	416783.306	4585259.818	26.049	cam	2145	416876.679	4585210.882	25.985	ct
1749	416829.054	4585283.805	42.215	calz	1998	416923.992	4585174.841	30.283	bord	2072	416776.313	4585261.746	26.052	cam	2146	416872.806	4585208.673	26.039	rell
1750	416835.772	4585284.610	41.907	calz	1999	416922.674	4585173.374	30.221	ct	2073	416765.665	4585265.783	26.144	cam	2147	416868.106	4585216.287	26.073	rell
1751	416835.921	4585283.951	42.214	muro	2000	416921.307	4585176.986	30.379	farola	2074	416766.672	4585265.528	26.083	pozsan	2148	416871.856	4585218.969	26.021	ct
1752	416829.346	4585283.093	42.478	muro	2001	416857.119	4585247.230	24.732	cun	2075	416756.612	4585271.499	26.118	cam	2149	416869.561	4585221.734	26.031	ct
1753	416821.605	4585282.816	42.733	muro	2002	416856.896	4585246.946	24.337	cun	2076	416753.197	4585265.568	25.991	cam	2150	416868.361	4585222.298	26.134	ct
1754	416839.385	4585278.639	31.499	ct	2003	416856.182	4585246.413	24.725	cun	2077	416762.652	4585260.412	25.936	cam	2151	416867.290	4585221.863	26.098	ct
1755</td																			

2195	416848.115	4585216.260	26.187	rell	2294	416853.737	4585262.681	23.140	muro	3268	416956.513	4585216.008	29.693	ct	3345	416967.024	4585219.300	24.121	arqueton
2196	416843.974	4585212.148	26.215	rell	2295	416843.914	4585263.057	23.186	of-1000	3269	416946.705	4585246.996	28.674	muro	3346	416966.089	4585220.606	24.120	arqueton
2197	416839.536	4585208.815	26.212	rell	2296	416836.980	4585260.019	23.232	of-600	3270	416950.650	4585235.578	28.751	muro	3347	416967.807	4585224.035	24.071	arqueton
2198	416834.997	4585203.381	26.420	rell	2297	416824.740	4585259.511	23.197		3271	416949.771	4585271.871	27.644	rell	3348	416969.515	4585223.147	24.100	arqueton
2199	416864.556	4585193.500	25.971	ct	2298	416809.325	4585258.583	23.273		3272	416958.568	4585274.601	26.748	rell	3349	416970.323	4585220.690	24.111	arqueton
2200	416867.809	4585193.431	26.024	ct	2299	416796.768	4585258.539	23.325		3273	416964.237	4585265.736	25.784	rell	3350	416969.390	4585221.697	24.902	pozsan
2201	416869.454	4585199.984	26.101	ct	2300	416784.326	4585260.443	23.389		3274	416958.202	4585263.764	26.390	rell	3351	416957.914	4585240.279	22.902	
2202	416869.863	4585204.618	26.141	ct	2301	416772.294	4585264.287	23.433		3275	416953.242	4585261.452	26.834	rell	3354	416941.885	4585238.192	23.752	canaleta
2203	416866.744	4585210.749	26.046	ct	2302	416761.085	4585269.980	23.491		3276	416955.705	4585254.095	25.880	rell	3355	416941.755	4585238.237	22.946	cam
2204	416862.871	4585216.892	26.110	ct	2303	416773.732	4585267.883	23.419		3277	416963.061	4585254.852	25.376	rell	3357	416946.340	4585246.822	23.099	muro
2205	416857.664	4585223.188	26.229	ct	2304	416785.184	4585264.222	23.353		3278	416970.568	4585256.018	25.320	rell	3358	416946.312	4585246.830	26.859	muro
2206	416852.810	4585226.032	26.323	ct	2302	416952.009	4585249.071	25.152	ct	3279	416973.425	4585247.857	24.822	rell	3362	416950.667	4585235.582	23.831	muro
2207	416847.410	4585226.812	26.373	ct	3203	416952.759	4585249.221	24.928	ct	3280	416966.503	4585247.242	24.619	rell	3363	416950.242	4585236.781	23.775	muro
2208	416841.037	4585226.171	26.459	ct	3204	416953.199	4585250.015	25.543	ct	3281	416954.693	4585248.046	24.820	ct	3364	416950.236	4585236.799	23.038	muro
2209	416833.641	4585217.699	27.716	ct	3205	416950.812	4585257.627	26.714	ct	3282	416960.285	4585244.075	23.916	ct	3365	416942.771	4585236.912	24.922	muro
2210	416831.931	4585217.546	27.623	ct	3206	416950.064	4585256.525	26.310	ct	3283	416967.562	4585242.251	23.847	ct	3366	416935.484	4585248.681	24.924	muro
2211	416832.583	4585218.761	27.634	ct	3207	416948.954	4585256.273	26.731	ct	3284	416972.468	4585241.106	24.125	ct	3370	416947.171	4585260.333	26.750	cun
2212	416836.194	4585221.128	27.641	ct	3208	416948.039	4585267.607	27.573	ct	3285	416972.553	4585240.750	24.019	arqueton	3371	416947.345	4585260.085	26.760	cun
2213	416837.073	4585220.136	27.630	ct	3209	416945.667	4585266.985	26.779	ct	3286	416973.168	4585238.310	24.002	arqueton	3372	416955.231	4585231.770	23.530	canaleta
2214	416844.050	4585222.959	27.612	ct	3210	416944.511	4585266.785	27.159	ct	3287	416975.468	4585238.925	24.024	arqueton	3373	416947.085	4585245.052	23.020	cun
2215	416843.915	4585224.245	27.593	ct	3211	416947.550	4585259.806	26.838	cun	3288	416975.075	4585240.469	24.003	arqueton	3374	416947.284	4585244.503	23.120	cam
2216	416850.659	4585224.440	27.448	ct	3212	416947.010	4585260.570	26.903	cun	3289	416973.718	4585240.863	24.020	pozsan	3375	416937.777	4585259.491	30.100	ct
2217	416850.090	4585222.828	27.459	ct	3213	416943.091	4585259.540	28.164	cun	3290	416963.317	4585246.457	24.349	arqueton	3376	416960.561	4585220.486	26.420	ct
2218	416854.772	4585220.433	27.358	ct	3214	416943.225	4585259.279	28.006	cun	3291	416961.649	4585247.105	24.369	arqueton	3377	416962.733	4585216.997	26.350	ct
2219	416855.782	4585221.935	27.322	ct	3215	416943.283	4585259.057	28.003	cun	3292	416960.532	4585244.324	23.993	arqueton	3378	416862.865	4585240.944	24.780	cun
2220	416860.117	4585216.508	27.272	ct	3216	416943.357	4585258.706	28.313	cun	3293	416962.196	4585243.683	23.887	arqueton	3379	416863.057	4585240.734	24.780	cun
2221	416859.092	4585215.325	27.358	ct	3217	416939.782	4585257.809	29.995	cun	3294	416975.221	4585236.109	22.726	cun	3380	416864.441	4585226.257	25.450	ct
2222	416862.537	4585209.228	27.613	ct	3218	416939.757	4585257.895	29.874	cun	3295	416975.343	4585235.563	22.721	cun	3381	416863.441	4585222.831	25.500	ct
2223	416863.866	4585209.604	27.488	ct	3219	416939.661	4585258.121	29.882	cun	3296	416975.328	4585234.954	22.866	cam	3382	416864.732	4585220.843	25.515	ct
2224	416864.873	4585205.316	27.636	ct	3220	416939.678	4585258.217	29.983	cun	3297	416966.455	4585238.287	23.041	cam	3383	416868.360	4585223.248	25.360	ct
2225	416866.277	4585205.644	27.518	ct	3221	416939.623	4585258.235	29.908	bord	3298	416966.571	4585238.663	22.955	cun	3384	416857.639	4585257.667	24.110	muro
2226	416867.023	4585202.141	27.415	ct	3222	41													

3613	416790.707	4585226.855	26.592	cam	3690	416973.338	4585193.787	27.355	ct	3767	416989.928	4585237.395	22.862	cun	3845	416971.203	4585186.283	29.806	ct
3614	416784.468	4585221.533	26.693	cam	3691	416973.825	4585194.071	27.454	ct	3768	416990.002	4585237.481	22.964	cun	3846	416969.593	4585185.018	29.829	bord
3615	416776.832	4585216.797	26.697	cam	3692	416972.479	4585197.181	27.230	ct	3769	416988.786	4585239.848	23.394	cun	3847	416969.475	4585184.944	29.871	calz
3616	416769.833	4585212.408	26.625	cam	3693	416974.182	4585210.825	25.191	rell	3770	416988.333	4585239.817	22.882	cun	3848	416971.086	4585184.182	30.010	arqal
3617	416773.052	4585208.233	26.570	cam	3694	416978.655	4585213.394	24.831	rell	3771	416987.866	4585239.583	22.966	cun	3849	416978.849	4585171.409	29.937	ct
3618	416780.605	4585214.003	26.723	cam	3695	416984.606	4585209.025	25.012	rell	3772	416987.559	4585239.398	23.324	cam	3850	416977.131	4585170.056	29.964	bord
3619	416787.876	4585219.165	26.792	cam	3696	416979.328	4585204.205	25.524	rell	3773	416985.622	4585243.195	23.659	cam	3851	416976.998	4585170.034	30.011	calz
3620	416794.825	4585225.835	26.579	cam	3697	416989.626	4585200.329	25.624	rell	3774	416986.087	4585243.305	23.177	cun	3852	416997.575	4585210.147	25.500	cun
3621	416799.530	4585230.319	26.630	cam	3698	416993.481	4585203.667	25.565	rell	3775	416986.535	4585243.446	23.098	cun	3853	416826.120	4585211.760	26.500	cam
3622	416804.616	4585232.011	26.565	cam	3699	416999.188	4585193.849	26.654	rell	3776	416987.003	4585243.634	23.664	cun	3854	416818.324	4585221.142	26.560	cam
3623	416808.641	4585231.250	26.639	cam	3700	417003.409	4585183.947	27.562	rell	3777	416987.293	4585243.869	23.750	alamb					
3624	416812.090	4585228.809	26.721	cam	3701	417007.513	4585185.010	27.558	cam	3778	416984.984	4585252.303	24.487	alamb					
3625	416805.119	4585220.389	26.611	rell	3702	417012.097	4585186.972	27.543	cam	3779	416984.741	4585252.181	24.439	cun					
3626	416796.871	4585214.553	26.669	rell	3703	417012.576	4585187.262	27.009	cun	3780	416984.222	4585251.979	23.921	cun					
3627	416789.603	4585202.842	26.600	rell	3704	417013.020	4585187.438	27.045	cun	3781	416983.785	4585251.856	23.918	cun					
3628	416798.827	4585199.729	26.470	rell	3705	417013.575	4585187.603	27.517	cun	3782	416983.268	4585251.716	24.413	cam					
3629	416803.993	4585207.409	26.532	rell	3706	417013.928	4585187.713	27.506	alamb	3783	416981.036	4585260.469	25.000	cam					
3630	416811.942	4585204.339	26.520	rell	3707	417009.563	4585196.858	27.182	alamb	3784	416981.495	4585260.703	24.504	cun					
3631	416817.113	4585212.747	26.557	rell	3708	417009.474	4585196.858	27.152	alamb	3785	416981.980	4585260.846	24.498	cun					
3632	416813.110	4585219.406	26.604	rell	3709	417009.146	4585196.745	27.016	cun	3786	416982.498	4585261.048	24.967	cun					
3633	416842.341	4585195.888	26.152	rell	3710	417008.738	4585196.389	26.499	cun	3787	416982.790	4585261.132	25.035	alamb					
3634	416817.349	4585195.792	26.208	rell	3711	417008.303	4585196.199	26.532	cun	3788	416980.406	4585268.603	25.154	alamb					
3635	416823.713	4585194.075	26.435	rell	3712	417007.824	4585195.989	27.062	cam	3789	416980.136	4585268.606	25.154	cun					
3636	416829.071	4585192.928	26.453	rell	3713	417003.425	4585193.867	26.993	cam	3790	416979.668	4585268.456	24.586	cun					
3637	416830.521	4585197.725	26.398	rell	3714	416998.451	4585201.790	26.117	cam	3791	416979.193	4585268.288	24.641	cun					
3638	416843.852	4585188.951	26.132	rell	3715	417002.098	4585205.299	26.116	cam	3792	416978.637	4585268.303	25.121	cun					
3639	416847.321	4585187.085	26.093	rell	3716	417002.428	4585205.810	25.540	cun	3793	416975.090	4585278.371	25.325	cam					
3640	416854.570	4585181.250	25.872	rell	3717	417002.797	4585206.087	25.585	cun	3794	416975.605	4585278.609	24.810	cun					
3641	416858.683	4585170.907	25.746	rell	3718	417003.209	4585206.458	26.096	cun	3795	416976.078	4585278.744	24.780	cun					
3642	416861.686	4585160.337	25.618	rell	3719	417003.417	4585206.620	26.152	alamb	3796	416976.565	4585278.950	25.326	cam					
3643	416796.365	4585234.137	26.478	ct	3720	416997.216	4585209.901	25.520	cam	3797	416976.930	4585279.088	25.336	alamb					
3644	416798.582	4585238.567	26.465	ct	3721	416992.091	4585215.814	24.589	cam	3798	416970.412	4585277.531	25.522	cam					
3645	416799.118	4585240.804	26.419	ct	3722	416988.917	4585218.464	24.410	cam	3799	416972.470	4585268.229	25.329	cam					
3646	416797.071	4585243.046	26.577	ct	3723	416985.460	4585220.599	24.209	cam	3800	416974.989	4585258.989	25.075	cam					
3647	416793.669	4585245.912	26.608	ct	3724	416984.658	4585221.677	23.991	cam	3801	416977.169	4585252.218	24.713	cam					
3648	416789.555	4585248.289	26.665	ct	3725	416984.752</													

Actuación B - Marco Ramal 1 P.K. 1+800

3001	417068.843	4584925.975	26.922	bord	3075	417074.152	4584915.126	26.888	calz	3149	417076.545	4584902.280	23.194	cun
3002	417066.279	4584925.202	26.866	ct	3076	417069.529	4584925.241	26.975	calz	3150	417076.557	4584903.722	23.814	cun
3003	417070.439	4584916.695	26.753	ct	3077	417054.560	4584924.601	25.250	ct	3151	417068.067	4584889.079	26.772	ct
3004	417072.973	4584916.979	26.839	bord	3078	417053.129	4584923.979	25.339	cam	3152	417068.827	4584888.749	26.726	ct
3005	417072.541	4584915.605	26.769	bord	3079	417049.900	4584922.840	25.353	cam	3153	417074.017	4584891.043	26.460	ct
3006	417068.622	4584926.065	27.084	ct	3080	417047.603	4584921.932	25.727	ct	3154	417073.475	4584892.070	26.390	ct
3007	417072.765	4584916.926	26.983	ct	3081	417050.561	4584913.190	26.084	ct	3155	417072.759	4584891.184	26.557	gas nat
3008	417072.356	4584915.682	26.836	ct	3082	417051.170	4584914.260	26.606	pozsan	3156	417079.321	4584895.422	25.995	ct
3009	417069.852	4584914.240	26.052	ct	3083	417053.767	4584914.893	25.825	cam	3157	417079.776	4584892.995	25.977	ct
3010	417069.748	4584914.362	26.048	ct	3084	417056.464	4584915.938	25.788	cam	3158	417078.244	4584890.473	25.069	ct
3011	417069.848	4584914.131	25.981	bord	3085	417057.442	4584916.363	25.780	ct	3159	417074.149	4584888.073	25.048	ct
3012	417069.723	4584914.265	25.137	muro	3086	417054.863	4584909.309	26.269	cam	3160	417072.319	4584887.192	25.032	ct
3013	417068.721	4584913.694	25.147	muro	3087	417053.269	4584908.508	26.326	ct	3161	417078.370	4584888.974	24.421	cun
3014	417068.523	4584913.444	25.144	muro	3088	417053.980	4584905.344	26.649	ct	3162	417078.162	4584888.748	23.935	cun
3015	417067.421	4584912.869	24.975	muro	3089	417054.452	4584905.121	26.581	cam	3163	417078.003	4584888.681	23.943	cun
3016	417067.365	4584912.924	25.063	ct	3090	417053.103	4584903.525	26.847	cam	3164	417077.709	4584888.049	24.423	cun
3017	417065.962	4584912.175	24.177	ct	3091	417050.128	4584901.894	26.386	cam	3165	417077.602	4584886.810	24.836	ct
3018	417066.043	4584912.082	24.167	muro	3092	417051.519	4584903.199	26.470	ct	3166	417076.852	4584884.297	24.988	ct
3019	417066.205	4584911.791	24.166	muro	3093	417046.898	4584910.982	26.322	ct	3167	417078.712	4584884.325	24.821	ct
3020	417066.304	4584911.727	24.322	ct	3094	417044.280	4584910.173	26.340	rell	3168	417081.256	4584878.453	24.402	ct
3021	417067.621	4584912.459	25.023	ct	3095	417040.237	4584917.512	26.272	rell	3169	417079.663	4584877.136	24.813	ct
3022	417067.604	4584912.559	24.968	muro	3096	417042.705	4584919.282	26.187	ct	3170	417083.587	4584874.609	24.354	cun
3023	417068.764	4584913.193	25.162	muro	3097	417044.462	4584920.114	26.933	ct	3171	417083.912	4584874.709	23.990	cun
3024	417069.041	4584913.200	25.154	muro	3098	417045.436	4584920.734	26.883	ct	3172	417084.182	4584874.832	23.964	cun
3025	417070.021	4584913.749	25.134	muro	3099	417048.629	4584912.786	27.016	ct	3173	417084.460	4584875.011	24.343	cun
3026	417068.798	4584912.937	25.332	ct	3100	417047.966	4584912.255	27.020	ct	3174	417080.230	4584881.636	24.315	cun
3027	417070.180	4584913.671	25.956	ct	3101	417052.287	4584904.316	27.194	ct	3175	417080.519	4584881.820	23.927	cun
3028	417070.064	4584913.735	26.035	muro	3102	417053.026	4584904.736	27.250	ct	3176	417080.751	4584881.930	23.984	cun
3029	417069.980	4584913.896	25.989	muro	3103	417050.208	4584893.554	26.475	ct	3177	417081.178	4584882.159	24.570	cun
3030	417071.094	4584914.500	26.387	muro	3104	417049.748	4584895.884	26.482	cam	3178	417079.270	4584884.012	24.363	cun
3031	417071.153	4584914.453	26.489	ct	3105	417056.592	4584899.065	26.535	cam	3179	417079.540	4584884.181	23.884	cun
3032	417072.762	4584915.178	26.847	ct	3106	417061.728	4584901.165	26.349	cam	3180	417079.774	4584884.348	23.897	cun
3033	417072.677	4584915.346	26.763	bord	3107	417061.398	4584903.672	26.209	cam	3181	417080.081	4584884.414	24.377	cun
3034	417073.164	4584915.469	26.799	bord	3108	417058.291	4584911.386	26.160	cam	3182	417072.326	4584897.720	23.826	rell
3035	417073.788	4584915.153	26.830	bord	3109	417058.978	4584911.734	26.125	ct	3183	417061.734	4584893.290	24.304	rell
3036	417073.190	4584915.281	26.924	ct	3110	417062.046	4584905.264	26.101	ct	3185	417079.858	4584896.448	22.756	cun
3037	417073.639	4584915.042	27.011	ct	3111	417065.493	4584901.133	26.274	ct	3186	417076.815	4584903.200	22.874	cun
3038	417072.272	4584913.837	26.760	ct	3112	417064.213	4584898.474	26.416	ct	3188	417081.513	4584904.505	24.166	
3039	417075.511	4584906.059	26.774	ct	3113	417063.412	4584899.138	26.640	ct	3194	417083.896	4584896.914	23.842	
3040	417077.513	4584906.926	26.767	bord	3114	417062.772	4584900.540	26.654	ct	3202	417081.293	4584881.910	24.550	CUN
3041	417076.713	4584905.542	26.917	farola	3115	417057.408	4584898.467	26.767	ct	3203	417077.449	4584906.832	26.910	ct
3042	417075.413	4584904.425	25.825	muro	3116	417057.704	4584897.263	26.803	ct					

Actuación B - Ramal 9 P.K. 9+205

76	416707.245	4585370.906	33.550	1i	150	416781.856	4585336.064	32.740	11f	224	416707.745	4585375.838	33.770	8	298	416794.641	4585380.078	25.020	18
77	416706.734	4585368.661	33.410	8i	151	416781.347	4585335.613	32.550	7f	225	416707.614	4585374.975	33.750	1	299	416789.683	4585374.762	24.960	18
78	416705.346	4585368.561	33.330	11i	152	416780.848	4585334.838	32.760	19f	226	416700.363	4585376.608	33.830	1	300	416793.752	4585368.940	24.790	18
79	416706.144	4585368.355	33.320	6i	153	416778.984	4585331.378	32.480	18	227	416700.759	4585377.426	33.860	8	301	416786.213	4585376.642	24.600	18
80	416706.176	4585367.557	33.090	7i	154	416776.996	4585327.433	32.480	16i	228	416700.564	4585377.920	33.770	11	302	416784.287	4585377.680	25.340	18
81	416706.099	4585366.781	33.270	19i	155	416774.258	4585328.917	32.780	3i	229	416700.852	4585380.026	33.590	14	303	416784.373	4585382.854	24.710	18
82	416712.695	4585364.934	33.200	19	156	416773.958	4585329.033	32.690	4i	230	416694.231	4585381.533	33.640	14f	304	416779.569	4585379.543	24.900	18
83	416712.970	4585365.759	33.000	7	157	416773.624	4585329.163	32.730	16	231	416692.998	4585379.306	33.900	11f	305	416769.139	4585380.124	27.880	14i
84	416712.406	4585366.678	33.290	6	158	416767.849	4585336.689	32.720	18	232	416693.294	4585378.903	34.000	8f	306	416764.199	4585379.040	28.560	14
85	416712.806	4585366.635	33.250	11	159	416765.437	4585334.108	32.860	16	233	416693.388	4585377.933	33.960	1f	307	416758.796	4585379.369	28.540	14f
86	416713.089	4585367.022	33.330	9	160	416757.639	4585338.534	32.970	16	234	416691.612	4585385.186	32.010	16i	308	416759.477	4585381.789	29.250	14i
87	416713.841	4585369.222	33.450	1	161	416757.115	4585342.895	32.940	18	235	416692.580	4585392.012	31.740	18	309	416761.971	4585383.544	29.770	14
88	416719.240	4585367.711	33.400	1	162	416750.612	4585346.283	33.000	18	236	416702.739	4585390.033	31.310	18	310	416765.239	4585382.191	29.270	14f
89	416718.759	4585365.310	33.250	9	163	416748.082	4585343.927	33.030	16	237	416702.543	4585383.847	31.430	16	311	416761.998	4585385.689	28.700	14i
90	416720.414	4585364.338	33.140	11	164	416737.753	4585348.209	33.440	16	238	416712.229	4585383.142	30.410	16	312	416756.207	4585392.224	28.700	14
91	416720.196	4585364.496	33.180	6	165	416735.695	4585351.299	33.190	18	239	416713.535	4585389.265	30.360	18	313	416750.910	4585398.692	28.640	14
92	416719.649	4585363.736	32.990	7	166	416729.748	4585352.040	33.290	16	240	416723.570	4585387.251	29.380	18	314	416747.427	4585403.621	28.380	14f
93	416719.674	4585363.741	32.990	7	167	416726.100	4585353.566	33.340	16	241	416723.993	4585381.947	29.470	16	315	416741.516	4585396.842	28.620	18
94	416719.699	4585362.916	33.140	19	168	416717.659	4585357.387	33.360	16	242	416733.708	4585384.405	28.660	18	316	416739.055	4585390.422	28.730	18
95	416727.474	4585360.454	33.110	19	169	416705.936	4585361.615	33.590	16	243	416733.077	4585380.045	29.080	16	317	416748.899	4585387.010	28.760	18
96	416727.706	4585361.270	32.950	7	170	416699.176	4585363.452	33.750	16f	244	416741.836	4585377.342	28.790	16	318	416734.835	4585397.772	28.780	18
97	416727.841	4585362.238	33.190	6	171	416697.097	4585357.191	37.780	14i	245	416746.264	4585382.184	28.380	18	319	416724.180	4585393.003	29.360	18
98	416728.008	4585361.866	33.100	11	172	416706.588	4585353.106	38.460	14	246	416754.770	4585378.040	28.370	18	929	416792.924	4585357.197	24.840	6i
99	416728.202	4585362.320	33.200	9	173	416715.777	4585348.239	39.110	14	247	416754.493	4585374.212	28.540	16	930	416793.129	4585357.037	24.800	6
100	416728.729	4585364.689	33.330	1	174	416723.215	4585344.288	39.550	14	248	416762.926	4585374.260	27.670	16	931	416792.157	4585354.521	24.700	6
101	416735.911	4585362.140	33.290	1	175	416733.364	4585338.860	40.230	14	249	416770.973	4585373.315	26.760	16	932	416794.063	4585353.002	24.670	6
102	416735.481	4585359.708	33.160	9	176	416743.575	4585332.434	40.830	14	250	416775.530	4585376.156	25.530	16	933	416796.254	4585354.427	24.890	6
103	416735.393	4585359.541	33.110	6	177	416753.595	4585325.586	41.360	14	251	416778.656	4585375.695	25.020	16	934	416796.437	4585354.245	24.930	6
104	416735.467	4585359.214	33.030	11	178	416759.525	4585321.654	41.700	14	252	416783.763	4585370.010	24.750	16	935	416796.432	4585354.250	24.940	16i
105	416735.144	4585358.640	32.850	7	179	416766.540	4585315.897	42.040	14	253	416788.732	4585364.313	24.700	16	936	416799.229	4585353.450	24.940	16
106	416735.086	4585357.705	33.060	19	180	416767.333	4585314.914	42.170	14f	254	416792.130	4585359.776	24.850	16	937	416798.317	4585356.813	25.200	18
107	416742.428	4585354.866	32.990	19	181	416767.091</td													

Actuación C – Paso Inferior de Molins

2779	417337.320	4585198.766	28.231	calz	2854	417338.179	4585213.451	28.024	calz	2958	417373.749	4585216.618	25.375	calz	765	417434.160	4585250.205	26.580	4f
2780	417337.029	4585201.720	28.233	lb	2855	417345.849	4585213.514	27.313	calz	2959	417375.249	4585209.112	25.353	lb	766	417434.302	4585250.277	26.430	3f
2781	417340.962	4585203.944	27.877	lb	2856	417345.862	4585212.975	27.329	lb	2960	417375.259	4585208.819	25.342	calz	767	417436.583	4585233.463	26.690	1
2782	417341.929	4585202.755	27.834	lb	2857	417353.937	4585213.867	26.677	lb	2961	417373.423	4585216.209	25.398	lb	768	417437.352	4585237.137	26.640	1
2783	417341.931	4585202.754	27.836	calz	2858	417353.904	4585214.389	26.680	calz	2962	417369.367	4585215.756	25.556	lb	769	417437.493	4585241.055	26.570	1
2784	417346.431	4585205.105	27.459	calz	2859	417357.656	4585217.916	26.018	sum	2963	417369.228	4585216.107	25.548	calz	770	417437.008	4585244.875	26.480	1f
2785	417346.291	4585205.466	27.487	lb	2860	417358.294	4585219.070	26.227	ct	2964	417369.239	4585216.214	25.749	acera	771	417428.513	4585234.167	26.700	19
2786	417350.338	4585206.128	27.146	lb	2861	417355.613	4585221.894	26.596	ct	2965	417369.137	4585216.894	25.759	acera	772	417427.326	4585231.877	26.720	9
2787	417350.513	4585205.788	27.108	calz	2862	417353.851	4585225.458	26.967	ct	2966	417368.942	4585216.692	25.464	sum	773	417429.039	4585229.824	26.750	19
2788	417357.807	4585206.580	26.487	calz	2863	417351.530	4585227.016	27.000	ct	2967	417363.419	4585215.443	25.921	calz	775	417427.613	4585226.253	26.490	19
2789	417357.669	4585207.056	26.515	lb	2864	417349.462	4585227.630	27.072	ct	2968	417363.429	4585215.049	25.937	lb	777	417425.007	4585223.561	26.030	19f
2791	417350.884	4585180.584	27.038	ct	2865	417350.807	4585231.609	28.377	ct	2969	417358.332	4585217.516	26.147	sum	778	417426.777	4585229.815	26.540	9f
2792	417350.380	4585184.293	26.999	ct	2866	417352.954	4585230.823	28.462	ct	2970	417357.262	4585217.350	26.152	sum	783	417435.720	4585226.673	26.810	2
2793	417352.814	4585186.845	26.759	ct	2867	417352.931	4585230.880	28.487	ct	2971	417357.078	4585218.472	26.161	sum	784	417437.221	4585231.940	26.750	1i
2794	417353.820	4585185.339	26.452	ct	2868	417355.196	4585229.533	28.369	ct	2972	417358.156	4585218.599	26.160	sum	785	417440.974	4585223.751	26.820	1
2795	417354.936	4585182.827	25.692	ct	2869	417354.536	4585233.502	28.958	ct	2973	417363.208	4585217.060	25.896	rell	786	417445.600	4585213.539	26.760	1f
2796	417355.309	4585186.164	26.470	ct	2870	417346.835	4585225.571	26.922	rell	2974	417340.860	4585220.831	27.177	edif	787	417446.057	4585212.583	26.750	1i
2797	417355.343	4585186.179	26.474	ct	2871	417341.615	4585224.011	27.044	rell	2975	417342.075	4585218.060	27.500	arq	788	417448.910	4585217.377	26.810	12i
2798	417356.143	4585189.498	26.540	ct	2873	417336.449	4585220.225	27.844	edif	2976	417341.463	4585216.646	27.652	edif	789	417447.280	4585214.855	26.750	12
2799	417357.389	4585193.514	26.330	ct	2874	417350.066	4585216.249	26.976	rell	2977	417337.024	4585216.036	28.173	edif	790	417449.427	4585213.351	26.780	3i
2800	417360.617	4585197.703	26.077	ct	2875	417343.384	4585215.609	27.442	rell	2978	417357.937	4585203.636	26.376	rell	791	417449.298	4585213.300	26.900	4i
2801	417363.273	4585196.924	25.950	ct	2876	417336.564	4585215.492	28.151	rell	2979	417366.379	4585206.079	25.744	rell	792	417448.248	4585213.643	26.870	4
2802	417363.994	4585194.238	26.301	ct	2877	417334.219	4585221.021	28.039	rell	2980	417367.810	4585202.267	25.664	rell	793	417448.180	4585213.762	26.730	3
2803	417363.536	4585189.645	26.785	ct	2878	417333.766	4585226.182	27.938	rell	2981	417371.082	4585206.923	25.513	rell	794	417447.509	4585212.574	26.630	3
2804	417362.232	4585186.019	26.919	ct	2879	417338.979	4585227.290	27.344	rell	2982	417372.643	4585207.914	25.377	sum	795	417447.646	4585212.615	26.800	4
2805	417359.522	4585179.722	26.714	ct	2880	417355.380	4585218.991	26.475	POSTEL	2983	417353.275	4585179.146	26.114	muro	796	417447.542	4585211.925	26.690	em
2806	417359.508	4585179.755	26.700	ct	2881	417358.386	4585218.859	26.619	muro	2984	417351.267	4585184.570	26.887	muro	797	417446.858	4585212.575	26.730	12
2807	417360.317	4585176.364	26.736	ct	2882	417361.436	4585237.529	30.942	calz	2985	417362.147	4585194.679	25.205	muro	798	417447.746	4585209.550	26.740	12f
2808	417373.040	4585179.033	27.589	ct	2883	417360.944	4585237.340	31.023	muro	2986	417362.625	4585196.793	25.623	muro	799	417449.588	4585208.205	26.730	3
2809	417368.257	4585179.949	27.111	rell	2884	417359.337	4585236.924	30.450	ct	2987	417360.883	4585197.410	25.654	muro	800	417449.692	4585208.374	26.820	4
2810	417366.748	4585186.552	26.988	rell	2885	417364.299	4585229.164	30.962	muro	2988	417360.495	4585195.212	25.243	muro	801	417451.214	4585209.114	26.900	4c
2811	417369.542	4585189.091</td																	

1085	417415.113	4585235.194	30.670	14	1203	417420.986	4585239.658	26.220	22i	1285	417438.985	4585202.813	26.660	s1
1086	417413.810	4585233.293	31.260	6	1204	417423.922	4585230.877	26.310	22	1286	417436.188	4585202.556	26.610	22
1087	417415.671	4585228.733	31.100	6	1205	417425.066	4585232.436	25.620	16f	1287	417436.548	4585205.044	26.410	13i
1088	417416.441	4585227.562	31.050	3i	1207	417425.793	4585232.449	26.330	6i	1288	417437.179	4585205.589	26.420	13
1089	417417.729	4585227.925	31.010	3	1208	417425.186	4585232.544	25.680	7i	1289	417433.497	4585212.000	26.460	13
1090	417418.540	4585227.767	31.020	3	1209	417424.680	4585232.304	25.660	8i	1290	417432.970	4585211.584	26.430	13
1091	417419.448	4585228.145	31.070	3	1210	417424.414	4585232.164	25.850	9i	1291	417431.861	4585211.037	27.200	22f
1092	417415.421	4585230.204	30.950	3	1211	417424.481	4585230.844	26.020	9	1292	417428.148	4585219.403	26.190	18
1093	417415.956	4585230.355	30.970	3f	1212	417424.917	4585230.691	25.580	8	1293	417421.673	4585215.158	25.600	18
1094	417417.230	4585230.402	31.040	mu	1213	417425.543	4585229.941	25.560	7	1294	417419.821	4585218.023	25.600	18
1095	417417.476	4585228.313	30.960	mu	1214	417426.038	4585229.812	26.290	6	1295	417418.607	4585221.171	25.510	18
1097	417417.111	4585229.583	31.020	mu	1215	417425.173	4585227.137	26.120	6	1296	417427.819	4585211.861	29.300	22i
1098	417417.260	4585229.550	31.100	tr	1216	417424.231	4585225.250	25.880	6	1297	417422.988	4585212.539	31.250	22
1100	417417.583	4585228.501	31.030	tr	1217	417423.364	4585224.952	25.170	7f	1299	417420.445	4585218.216	31.210	22
1101	417418.496	4585228.754	31.030	tr	1218	417422.609	4585225.629	25.090	8	1301	417419.087	4585224.480	31.170	22
1103	417418.599	4585228.632	30.950	mu	1219	417422.463	4585224.514	25.200	8f	1302	417421.204	4585227.093	29.390	22
1104	417419.213	4585227.349	30.560	14	1220	417421.978	4585225.996	25.780	9	1304	417424.403	4585230.859	26.610	6i
1105	417419.549	4585225.347	30.510	14f	1221	417421.677	4585225.222	25.670	9	1305	417420.504	4585225.986	25.510	6
1106	417418.282	4585224.412	31.320	mu	1222	417422.092	4585224.218	25.670	9	1306	417418.524	4585223.483	25.550	6
1107	417417.565	4585224.126	31.360	mu	1223	417423.257	4585224.767	25.790	9f	1307	417418.097	4585223.227	25.550	6
1108	417417.962	4585225.129	31.320	mu	1224	417422.350	4585223.652	25.690	st	1308	417418.293	4585222.783	25.550	6f
1109	417417.829	4585225.037	31.380	tr	1225	417415.143	4585221.346	25.360	3i	1309	417416.140	4585212.505	25.670	6i
1110	417418.061	4585224.523	31.360	tr	1226	417415.270	4585220.999	25.420	4i	1310	417422.300	4585213.133	25.820	6
1111	417417.593	4585224.342	31.360	tr	1227	417418.751	4585221.475	25.530	4	1311	417422.457	4585212.712	25.820	6
1112	417417.709	4585223.637	31.240	6	1229	417418.436	4585221.743	25.520	6	1312	417422.927	4585212.833	25.840	6
1113	417417.890	4585223.674	31.280	22i	1231	417418.505	4585222.246	25.560	em	1313	417426.755	4585212.241	25.730	6
1114	417420.018	4585218.484	31.290	22	1232	417418.643	4585221.770	25.530	8i	1314	417418.312	4585222.809	29.840	7i
1116	417422.311	4585212.849	31.370	22	1233	417422.773	4585223.218	25.810	8	1315	417418.404	4585222.652	30.090	7
1117	417422.668	4585212.375	31.230	22f	1234	417423.092	4585222.493	25.830	1i	1316	417418.127	4585222.528	30.250	7
1118	417422.345	4585212.303	31.300	6	1235	417426.614	4585224.968	26.260	1	1317	417418.404	4585222.636	30.520	18
1119	417424.332	4585210.412	31.040	sv	1236	417428.833	4585228.684	26.570	1f	1318	417420.633	4585217.249	30.540	18
1120	417423.856	4585208.951	31.130	3i	1237	417423.070	4585223.397	25.850	8	1319	417420.376	4585217.089	30.270	7
1121	417425.732	4585209.696	30.770	3	1238	417425.585	4585226.420	26.250	8	1320	417426.708	4585211.945	29.450	6
1122	417425.386	4585210.262	30.770	ca	1239	417427.371	4585231.787	26.560	8f	1321	417421.933	4585213.284	30.320	7
1123	417424.542	4585208.023	31.070	mu	1240	417426.358	4585229.289	26.350	5i	1322	417422.227	4585213.324	30.110	7
1124	417424.713	4585207.977	31.160	tr	1241	417426.126	4585228.627	26.340	5f	1323	417422.294	4585213.170	29.940	7f
1126	417425.149	4585206.962	31.200	tr	1242	417425.887	4585227.702	26.290	5i	1324	417422.311	4585213.181	30.600	18
1127	417425.085	4585206.834	31.140	mu	1243	417425.632	4585226.991	26.230	5f					
1128	417426.122	4585207.235	31.040	mu	1244	417422.862	4585228.543	25.920	22i					
1129	417425.997	4585207.255	31.110	tr	1245	417419.850	4585224.744	25.550	22					
1130	417427.121	4585206.536	31.030	3	1246	417418.323	4585222.757	25.420	22f					
1131	417425.524	4585205.743	31.060	3f	1247	417415.529	4585213.412	25.370	3i					
1132	417425.252	4585205.410	31.170	6	1248	417415.530	4585213.766	25.410						

Actuación C – Estructura a ampliar en AP-2 Ramal 4

615	417045.231	4586200.813	38.314	muro	1040	417080.129	4586132.354	37.907	lb	3734	417075.123	4586113.241	43.323	ct	3822	417012.840	4586365.073	48.516	arqdgt
616	417044.750	4586200.715	37.959	muro	1041	417086.967	4586118.380	37.907	lb	3735	417076.551	4586112.881	43.260	ct	3823	417013.021	4586363.789	48.524	arqdgt
618	417061.536	4586210.527	37.655	muro	1042	417087.393	4586118.516	37.901	calz	3736	417077.502	4586110.471	43.236	ct	3824	417013.193	4586359.644	48.526	muro
619	417043.281	4586235.247	37.790	ct	1043	417090.168	4586119.453	37.737	ct	3737	417077.211	4586109.033	43.185	ct	3825	417013.214	4586361.564	48.236	muro
620	417044.437	4586235.460	37.638	muro	1044	417095.356	4586109.550	37.802	ct	3738	417075.955	4586107.852	43.285	ct	3826	417013.411	4586362.707	48.440	muro
621	417037.563	4586246.258	37.815	muro	1045	417092.601	4586108.037	37.861	calz	3739	417075.855	4586106.511	43.422	ct	3827	417012.991	4586366.127	48.442	muro
622	417036.287	4586245.473	37.858	ct	1046	417092.162	4586107.517	37.867	lb	3740	417076.528	4586110.729	43.538	arqdgt	3828	417009.981	4586369.754	48.694	calz
623	417029.985	4586256.164	38.052	ct	1047	417097.447	4586100.420	37.863	calz	3741	417076.079	4586111.934	43.526	arqdgt	3829	417010.654	4586370.281	48.523	cun
624	417030.746	4586257.263	37.926	muro	1048	417100.132	4586102.300	37.614	ct	3742	417075.036	4586111.577	43.528	arqdgt	3830	417012.080	4586370.562	48.306	cun
625	417030.822	4586257.742	39.511	muro	1049	417102.125	4586094.126	37.843	calz	3743	417075.477	4586110.349	43.527	arqdgt	3831	417012.469	4586370.641	48.492	cun
626	417033.201	4586259.477	40.053	rell	1050	417101.074	4586087.577	37.793	lb	3744	417078.091	4586098.603	43.153	ct	3832	417012.976	4586371.503	48.735	muro
627	417038.337	4586261.497	40.229	rell	1051	417106.280	4586074.655	37.745	lb	3745	417082.432	4586084.997	42.642	ct	3833	417007.627	4586385.762	48.616	cun
628	417043.155	4586251.085	39.789	rell	1052	417107.214	4586075.466	37.741	bord	3746	417087.665	4586068.266	42.167	ct	3834	417007.010	4586385.858	48.765	calz
629	417048.668	4586242.477	39.400	rell	1053	417118.256	4586067.509	37.710	bord	3747	417086.714	4586068.111	42.267	calz	3835	417012.971	4586371.708	50.087	muro
631	417052.669	4586232.465	39.658	rell	1054	417115.056	4586065.896	37.758	bord	3748	417083.665	4586078.115	42.582	calz	3836	417013.031	4586371.730	49.711	ct
632	417051.037	4586231.507	39.756	canaleta	1055	417112.103	4586062.489	37.740	bord	3749	417079.837	4586090.527	42.916	calz	3837	417014.528	4586372.046	50.048	ct
633	417046.212	4586241.545	39.862	canaleta	1056	417111.024	4586062.119	37.724	lb	3750	417076.482	4586101.513	43.268	calz	3838	417011.363	4586379.787	52.315	muro
634	417043.989	4586245.396	40.029	canaleta	1057	417107.650	4586060.950	37.630	lb	3751	417072.512	4586114.930	43.765	calz	3839	417013.219	4586380.590	52.645	ct
635	417050.218	4586247.350	42.022	rell	1058	417103.998	4586059.440	37.456	calz	3752	417073.662	4586115.485	44.031	tablero	3840	417013.141	4586366.355	48.284	ct
636	417044.220	4586256.670	42.031	rell	1059	417100.726	4586058.160	37.412	ct	3755	417069.095	4586127.073	44.236	calz	3841	417015.389	4586366.287	48.232	ct
637	417036.112	4586258.476	40.368	canaleta	1060	417098.033	4586069.878	37.490	ct	3756	417070.162	4586127.647	44.224	tablero	3842	417013.742	4586356.817	47.196	ct
638	417033.490	4586266.039	40.974	canaleta	1061	417100.167	4586070.554	37.557	calz	3757	417066.797	4586139.411	44.548	tablero	3843	417018.852	4586358.664	47.204	ct
639	417030.572	4586273.621	41.755	canaleta	1062	417103.526	4586071.929	37.690	lb	3759	417065.646	4586139.097	44.454	calz	3844	417018.053	4586344.332	45.886	ct
640	417026.696	4586282.547	41.965	canaleta	1063	417099.652	4586081.669	37.706	lb	3760	417061.901	4586152.186	44.797	calz	3845	417021.243	4586344.320	46.074	ct
641	417027.265	4586294.185	42.803	cun	1064	417096.849	4586078.116	37.564	muro	3761	417063.008	4586152.759	44.903	tablero	3846	417021.218	4586328.290	45.331	ct
642	417027.833	4586294.535	42.460	cun	1065	417091.527	4586083.146	37.412	muro	3762	417058.839	4586167.859	45.259	tablero	3847	417024.268	4586327.954	45.447	ct
643	417028.406	4586294.693	42.857	cun	1066	417087.968	4586089.111	37.328	muro	3763	417057.684	4586167.514	45.170	calz	3848	417025.644	4586310.040	44.539	ct
644	417029.423	4586295.139	43.411	rell	1067	417093.369	4586087.088	37.636	lb	3764	417054.899	4586177.742	45.398	calz	3849	417031.096	4586309.906	44.842	ct
645	417030.761	4586295.732	43.708	rell	1068	417092.231	4586086.586	37.598	calz	3765	417056.222	4586177.494	45.509	tablero	3850	417030.306	4586296.198	43.730	ct
646	417035.131	4586295.131	43.779	rell	1069	417089.493	4586091.485	37.604	calz	3766	417056.915	4586176.582	44.913	dintel	3851	417035.209	4586295.036	43.746	ct
647	417027.446	4586300.227	43.988	cun	1070	417090.520	4586091.834	37.637	lb	3767	417057.858	4586176.759	44.952	dintel	3852	417030.370	4586291.625	43.171	arqrenfe
648	417026.756	45																	

6049	417051.992	4586216.868	38.867	caRRL	7119	417061.163	4586146.438	44.724	lb	7200	417068.957	4586163.507	38.759	ct	8148	417022.503	4586230.780	44.941	dintel
6050	417052.724	4586217.528	38.491	ct	7120	417063.261	4586147.085	44.676	lb	7201	417069.661	4586161.573	37.851	ct	8149	417021.802	4586233.674	44.975	dintel
6051	417053.568	4586218.006	38.056	ct	7121	417057.216	4586160.575	45.120	lb	7202	417113.948	4586097.366	44.722	ct	8150	417034.680	4586236.832	44.693	dintel
6052	417054.258	4586218.489	38.119	ct	7122	417053.115	4586175.495	45.432	lb	7203	417116.377	4586099.829	45.149	ct	8151	417037.082	4586234.440	44.710	dintel
6053	417054.397	4586218.385	37.684	ct	7123	417055.333	4586176.099	45.400	lb	7204	417109.900	4586100.778	44.721	ct	8152	417036.388	4586237.298	44.704	dintel
6054	417055.573	4586219.058	37.669	muro	7124	417054.919	4586177.418	45.443	lb	7205	417111.477	4586103.172	45.472	ct	8153	417049.032	4586240.535	44.820	dintel
6055	417045.060	4586234.467	37.648	muro	7125	417052.710	4586176.805	45.455	lb	7206	417106.588	4586110.040	46.546	ct	8154	417047.646	4586208.287	44.020	dintel
6056	417044.357	4586234.172	37.634	ct	7126	417049.190	4586189.848	45.817	lb	7207	417103.972	4586107.175	45.200	ct	8155	417044.012	4586207.321	44.020	dintel
6057	417041.593	4586234.005	38.578	ct	7127	417044.978	4586206.085	46.133	lb	7208	417100.553	4586113.247	45.940	ct	8156	417043.929	4586207.215	44.084	dintel
6058	417042.081	4586232.061	38.860	caRRL	7128	417047.157	4586206.671	46.099	lb	7209	417099.676	4586120.282	46.702	ct	8157	417033.694	4586204.683	44.246	dintel
6059	417040.785	4586230.886	38.974	caRRL	7129	417041.474	4586219.703	46.457	lb	7210	417095.760	4586120.360	45.021	ct	8158	417042.482	4586205.303	41.458	pilar
6060	417061.015	4586178.879	39.615	pilar	7130	417037.554	4586235.385	46.747	lb	7211	417090.950	4586131.164	45.081	ct	8159	417042.834	4586206.327	41.436	pilar
6062	417055.261	4586186.764	40.034	muro	7131	417039.799	4586235.894	46.667	lb	7212	417093.227	4586132.727	45.597	ct	8160	417043.576	4586206.448	41.458	pilar
6063	417055.758	4586186.923	40.070	muro	7132	417039.466	4586237.260	46.713	lb	7213	417084.271	4586143.935	44.024	ct	8161	417045.325	4586206.136	41.529	pilar
6065	417073.617	4586195.031	42.495	muro	7133	417037.234	4586236.724	46.789	lb	7214	417084.257	4586143.948	44.027	ct	8162	417045.659	4586207.093	41.510	pilar
6066	417067.820	4586202.886	42.613	muro	7134	417033.971	4586250.177	47.063	lb	7215	417085.445	4586144.836	44.428	ct	8163	417046.538	4586207.201	41.539	pilar
6067	417066.984	4586203.929	42.470	muro	7135	417030.128	4586266.069	47.288	lb	7216	417077.127	4586155.633	42.410	ct	8164	417028.594	4586200.283	44.332	dintel
6068	417064.498	4586206.803	39.524	muro	7136	417032.377	4586266.532	47.283	lb	7217	417079.100	4586157.612	42.244	ct	8165	417044.557	4586204.534	44.001	dintel
6069	417061.902	4586210.573	39.537	muro	7137	417026.730	4586280.554	47.592	lb	7218	417071.863	4586164.315	42.056	ct	8166	417044.720	4586204.497	44.012	dintel
6070	417055.141	4586220.440	39.548	muro	7138	417023.178	4586296.114	47.791	lb	7219	417072.700	4586165.128	42.091	ct	8167	417048.380	4586205.398	44.006	dintel
6071	417044.022	4586236.796	39.538	muro	7139	417025.408	4586296.636	47.782	lb	7220	417068.474	4586170.580	42.012	ct	8168	417029.801	4586202.541	41.969	pilar
6072	417042.046	4586239.868	39.502	muro	7140	417019.663	4586311.668	48.039	lb	7221	417069.592	4586171.561	42.084	ct	8169	417029.930	4586201.622	41.926	pilar
6073	417038.087	4586246.021	39.508	muro	7141	417016.417	4586326.285	48.174	lb	7222	417069.169	4586172.482	41.198	ct	8170	417028.902	4586201.102	41.984	pilar
6074	417045.730	4586237.621	40.924	pilar	7142	417018.718	4586326.781	48.156	lb	7223	417067.613	4586171.348	41.423	ct	8171	417043.388	4586174.530	40.448	pilar
6075	417044.316	4586237.228	40.918	pilar	7143	417013.364	4586340.630	48.420	lb	7224	417066.646	4586174.212	41.012	ct	8172	417044.589	4586174.762	40.432	pilar
6076	417019.876	4586325.493	46.973	estribo	7144	417010.188	4586355.771	48.558	lb	7225	417067.888	4586175.317	40.768	ct	8173	417045.131	4586173.757	40.450	pilar
6077	417019.727	4586325.391	46.970	estribo	7145	417012.433	4586356.251	48.499	lb	7226	417068.432	4586175.406	41.141	muro	8174	417058.042	4586177.834	40.838	pilar
6078	417026.531	4586295.368	45.602	dintel	7150	417017.955	4586345.764	45.918	cun	7227	417066.045	4586178.748	40.954	muro	8175	417058.548	4586178.642	40.813	pilar
6079	417025.137	4586295.042	45.613	dintel	7151	417016.867	4586345.673	45.359	cun	7228	417061.594	4586184.900	40.600	muro	8176	417059.408	4586178.595	40.839	pilar
6088	417045.623	4586205.673	40.390	pilar	7152	417013.516	4586362.865	48.004	ct	8100	416994.521	4586351.874	46.957	estribo	8177	417061.039	4586178.293	40.960	pilar
6089	417044.177	4586205.271	40.396	pilar	7153	417013.139	4586366.181	48.292	ct	8101	416996.177	4586352.195	46.931	estribo	8178	417061.379	4586179.362	40.886	pilar
6091	417052.121	4586177.569	43.667	viga	7154	417014.343</													

8231	417054.928	4586177.750	45.498	acera
8232	417051.309	4586191.242	45.886	acera
8233	417047.586	4586205.392	46.231	acera
8234	417044.021	4586219.373	46.459	acera
8235	417040.496	4586233.315	46.741	acera
8236	417036.334	4586250.314	47.066	acera
8237	417032.720	4586265.286	47.342	acera
8238	417029.460	4586279.019	47.600	acera
8239	417026.429	4586292.336	47.796	acera
8240	417023.240	4586306.448	47.988	acera
8241	417020.065	4586320.782	48.149	acera
8242	417016.901	4586335.600	48.390	acera
8243	417013.942	4586349.685	48.512	acera
8244	417011.964	4586359.279	48.640	acera
8245	417068.039	4586135.177	39.400	muro
8246	417068.228	4586134.519	39.440	muro
8247	417065.573	4586143.834	37.780	lb
8248	417066.407	4586140.896	37.745	calz
8249	417056.095	4586178.081	38.030	lb
8250	417054.752	4586183.072	38.033	muro
8251	417054.342	4586184.596	38.650	muro
8252	417060.769	4586173.287	38.100	muro
8253	417069.059	4586163.172	38.600	muro
8254	417055.753	4586186.501	38.600	
8255	417066.715	4586177.115	41.030	muro
8256	417061.258	4586184.650	40.600	muro
8257	417055.753	4586186.533	40.060	muro
8258	417055.272	4586186.384	40.030	muro
8259	417047.529	4586210.514	38.341	ct
8260	417045.074	4586220.177	38.850	carril
8261	417043.384	4586226.888	38.970	carril
8262	417040.158	4586239.813	37.820	ct
8263	417039.202	4586243.684	37.770	muro
8264	417038.959	4586244.665	39.510	muro
8265	417051.217	4586231.594	39.606	acera
8266	417046.389	4586241.638	39.712	acera
8267	417044.162	4586245.497	39.879	acera
8268	417036.294	4586258.561	40.218	acera
8269	417033.678	4586266.108	40.824	acera
8270	417030.757	4586273.697	41.605	acera
8271	417026.879	4586282.627	41.815	acera
8272	417050.857	4586231.420	39.606	acera
8273	417046.035	4586241.452	39.712	acera
8274	417043.816	4586245.295	39.879	acera
8275	417035.930	4586258.391	40.218	acera
8276	417033.302	4586265.970	40.824	acera
8277	417030.387	4586273.545	41.605	acera
8278	417026.513	4586282.467	41.815	acera
8279	417033.987	4586265.216	40.750	canaleta
8280	417034.106	4586264.719	40.860	canaleta
8281	417034.465	4586263.228	40.750	canaleta
8282	417034.823	4586261.737	40.640	canaleta
8283	417034.942	4586261.240	40.550	canaleta
8284	417073.939	4586195.269	42.495	acera
8285	417068.137	4586203.130	42.613	acera
8286	417067.291	4586204.185	42.470	acera
8287	417064.815	4586207.048	39.524	acera
8288	417062.231	4586210.800	39.537	acera
8289	417055.471	4586220.665	39.548	acera
8290	417044.356	4586237.017	39.538	acera
8291	417042.382	4586240.084	39.502	acera
8292	417039.296	4586244.882	39.510	acera
8293	417057.777	4586220.407	39.050	ct
8294	417066.006	4586208.396	39.010	ct
8295	417068.328	4586205.066	42.300	ct
8296	417074.172	4586197.030	42.230	ct
8297	417073.941	4586195.354	42.190	muro
8298	417067.311	4586204.198	42.150	muro
8299	417064.833	4586207.062	39.050	muro
8300	417062.262	4586210.811	39.170	muro
8301	417055.505	4586220.690	39.300	muro
8302	417073.683	4586115.502	43.450	ct

Actuación E – Estructuras Ramales 1 y 2

193	418044.859	4582256.268	20.460	base	2932	417907.195	4582458.035	20.687	muro	3006	417883.714	4582438.596	20.179	cam	3080	417924.093	4582370.663	19.476	alam
194	417943.470	4582426.848	28.438	base	2933	417911.009	4582463.887	20.419	cam	3007	417885.358	4582439.385	20.148	cam	3081	417917.808	4582380.274	19.319	alam
195	417931.748	4582546.696	28.617	base	2934	417912.909	4582463.771	20.190	cam	3008	417887.264	4582438.101	20.151	cam	3082	417903.679	4582372.166	19.345	alam
196	417761.622	4582297.399	23.263	base	2935	417910.207	4582457.708	20.418	ct	3009	417890.120	4582434.774	20.182	cam	3083	417889.031	4582363.466	19.530	alam
2861	417919.808	4582516.862	18.768	cun	2936	417914.018	4582450.877	19.618	ct	3010	417893.513	4582430.089	20.026	cam	3084	417878.240	4582356.258	19.447	alam
2862	417917.596	4582516.034	18.764	cun	2937	417916.023	4582444.554	19.456	ct	3011	417893.579	4582427.799	20.103	muro	3085	417874.552	4582361.808	19.543	ct
2863	417921.073	4582506.721	18.717	cun	2938	417913.131	4582441.794	18.974	ct	3012	417895.067	4582428.071	20.041	muro	3086	417885.292	4582371.251	19.817	ct
2864	417923.291	4582507.869	18.749	cun	2939	417908.855	4582437.132	19.151	ct	3013	417897.810	4582424.306	19.980	muro	3087	417888.364	4582369.123	19.247	rell
2865	417925.184	4582502.063	18.712	cun	2940	417908.884	4582437.228	18.713	ct	3014	417897.047	4582422.533	19.969	muro	3088	417895.167	4582378.041	19.460	ct
2867	417922.496	4582502.803	18.711	cun	2941	417908.170	4582437.193	18.756	ct	3015	417897.016	4582421.562	20.104	ct	3089	417897.839	4582375.316	19.192	rell
2868	417926.277	4582495.431	18.660	cun	2942	417903.550	4582445.681	19.269	ct	3016	417893.680	4582417.654	20.478	ct	3090	417908.670	4582383.285	19.157	rell
2869	417923.826	4582495.610	18.743	cun	2943	417901.620	4582448.922	19.313	ct	3017	417891.423	4582413.469	20.395	ct	3091	417906.907	4582387.891	19.449	ct
2870	417923.511	4582488.704	18.696	cun	2944	417907.541	4582447.037	19.417	rell	3018	417889.662	4582414.060	19.536	muro	3092	417908.037	4582389.282	19.471	ct
2871	417925.734	4582488.470	18.653	cun	2945	417907.557	4582452.048	19.509	rell	3019	417889.608	4582414.032	19.556	muro	3093	417907.994	4582389.298	19.734	muro
2872	417924.852	4582480.188	18.557	cun	2946	417911.654	4582449.597	19.592	rell	3020	417892.710	4582413.032	21.372	muro	3094	417907.845	4582392.131	21.335	muro
2873	417922.705	4582480.309	18.673	cun	2947	417911.034	4582452.734	19.716	ct	3021	417892.093	4582413.243	20.517	ct	3095	417911.624	4582392.830	19.419	rell
2874	417922.609	4582470.534	18.573	cun	2948	417908.501	4582454.454	19.785	ct	3022	417894.047	4582416.983	20.407	ct	3096	417914.770	4582400.165	19.441	cam
2875	417924.977	4582470.568	18.541	cun	2949	417905.678	4582456.409	20.245	ct	3023	417896.590	4582420.042	20.231	ct	3097	417916.891	4582400.623	19.344	ct
2876	417925.355	4582459.200	18.471	cun	2950	417895.329	4582455.450	19.331	ct	3024	417898.826	4582421.061	19.874	ct	3098	417925.505	4582388.670	18.741	ct
2877	417922.975	4582459.473	18.510	cun	2951	417913.546	4582460.196	20.076	cam	3025	417899.053	4582419.196	19.757	ct	3099	417920.711	4582386.532	19.287	cam
2878	417921.356	4582450.733	18.554	cun	2952	417916.119	4582449.315	19.608	cam	3026	417896.718	4582417.904	19.624	ct	3100	417923.006	4582388.704	19.172	CT
2879	417923.561	4582450.278	18.384	cun	2953	417917.780	4582442.755	19.490	cam	3027	417895.472	4582415.984	19.566	ct	3101	417925.885	4582378.229	19.275	pozsan
2880	417921.738	4582446.478	18.535	cun	2954	417919.084	4582433.025	19.439	cam	3028	417894.455	4582412.483	19.432	ct	3102	417927.127	4582377.419	19.231	cam
2881	417920.601	4582448.531	18.611	cun	2955	417920.004	4582429.313	19.497	cam	3029	417898.407	4582414.970	19.242	rell	3103	417929.375	4582379.307	19.002	ct
2882	417923.536	4582445.223	19.600	ct	2956	417922.509	4582437.164	19.309	cam	3030	417894.921	4582428.730	20.072	cam	3104	417931.079	4582380.681	18.790	ct
2883	417921.902	4582445.724	19.409	ct	2957	417921.023	4582443.344	19.458	cam	3031	417898.430	4582423.788	19.941	cam	3105	417936.467	4582366.542	19.246	cam
2884	417919.864	4582447.919	19.491	ct	2958	417916.491	4582443.789	18.529	cam	3032	417900.621	4582419.102	19.664	cam	3106	417937.385	4582367.498	19.092	ct
2885	417919.624	4582450.591	19.357	ct	2959	417917.250	4582442.005	18.348	cam	3033	417901.392	4582416.135	19.425	cam	3107	417939.082	4582367.976	18.951	ct
2886	417919.276	4582450.515	19.429	cam	2960	417916.624	4582439.527	18.509	cam	3034	417904.178	4582417.806	19.511	cam	3108	417944.013	4582355.178	19.222	cam
2887	417918.567	4582460.860	19.817	cam	2961	417911.509	4582434.377	18.410	cam	3035	417905.666	4582419.250	19.356	ct	3109	417945.335	4582355.561	19.121	ct
2888	417920.747	4582460.835	19.653	ct	2962	417909.937	4582433.700	18.339	cam	3036	417901.257	4582426.833	19.300	ct	3110	417947.095	4582356.397	19.010	ct
2889	417920.777	4582472.060	19.789																

3154	417954.747	4582355.093	13.667	cun	3233	417895.421	4582406.225	25.694	ct	3311	417920.057	4582425.615	19.320	ct	4065	417941.770	4582518.547	29.369	ct
3155	417945.291	4582368.999	13.689	cun	3234	417896.675	4582404.301	25.722	lb	3312	417921.688	4582426.870	19.480	cam	4066	417944.186	4582519.481	29.497	lb
3156	417946.946	4582370.922	13.689	cun	3235	417884.600	4582394.958	24.930	lb	3313	417924.824	4582429.337	19.450	ct	4067	417940.584	4582529.358	29.278	lb
3157	417939.296	4582382.261	13.613	cun	3236	417883.426	4582395.969	24.889	calz	3314	417923.960	4582444.727	19.600	ct	4068	417939.651	4582528.953	29.292	calz
3158	417937.464	4582380.868	13.608	cun	3237	417882.359	4582396.709	24.852	ct	3315	417907.484	4582400.504	19.440	ct	4069	417937.881	4582527.922	29.124	ct
3160	417931.807	4582393.523	13.678	cun	3238	417870.707	4582387.933	24.146	ct	3316	417909.465	4582402.034	19.380	cam	4070	417934.326	4582538.310	28.777	ct
3161	417929.893	4582392.141	13.678	cun	3239	417871.417	4582386.729	24.247	calz	3317	417912.311	4582404.234	19.420	cam	4071	417936.103	4582538.548	28.974	calz
3162	417921.905	4582404.610	13.705	cun	3240	417872.458	4582385.600	24.299	lb	3318	417912.722	4582404.558	19.400	ct	4072	417937.101	4582539.026	28.940	lb
3163	417923.866	4582405.526	13.736	cun	3241	417861.709	4582377.283	23.792	lb	3319	417913.958	4582405.512	19.360	ct	4073	417933.403	4582549.583	28.467	lb
3164	417913.743	4582420.749	14.929	cun	3242	417860.633	4582378.382	23.764	calz	3320	417918.824	4582409.261	13.800	cun	4074	417932.394	4582549.196	28.509	calz
3165	417911.987	4582419.379	14.916	cun	3243	417860.097	4582379.465	23.781	ct	3321	417920.507	4582410.572	13.800	cun	4075	417930.611	4582548.662	28.319	ct
3166	417906.085	4582432.220	14.939	cun	3244	417866.493	4582372.042	23.787	lb	3322	417924.736	4582413.844	19.350	ct	4076	417931.807	4582547.325	28.599	farola
3167	417904.148	4582431.210	14.911	cun	3245	417867.375	4582370.994	23.776	calz	3323	417926.719	4582415.343	19.200	ct	4077	417927.440	4582558.308	27.776	ct
3168	417898.508	4582443.518	14.933	cun	3246	417868.501	4582369.982	23.767	ct	3324	417928.586	4582416.801	19.440	cam	4078	417929.319	4582558.261	28.046	calz
3169	417897.010	4582442.569	14.910	cun	3247	417880.743	4582379.458	24.376	ct	3325	417931.726	4582419.245	19.450	ct	4079	417930.224	4582558.956	27.983	lb
3170	417894.862	4582449.040	14.927	cun	3248	417880.037	4582380.741	24.357	calz	3326	417945.392	4582414.805	19.800	ct	4080	417927.016	4582568.784	27.462	lb
3171	417893.149	4582448.416	14.920	cun	3249	417879.084	4582381.804	24.401	lb	4002	417968.914	4582371.939	19.083	cam	4081	417923.877	4582580.733	26.806	lb
3172	417886.069	4582458.606	14.921	cun	3250	417890.603	4582390.693	25.039	lb	4003	417974.006	4582374.533	19.055	cam	4082	417921.161	4582592.233	26.177	lb
3173	417881.952	4582458.311	14.930	cun	3251	417891.517	4582389.637	24.997	calz	4004	417979.127	4582364.969	19.104	cam	4083	417917.663	4582605.204	25.481	lb
3175	417871.521	4582469.448	14.984	cun	3252	417892.299	4582388.616	25.008	ct	4005	417974.608	4582362.281	19.142	cam	4084	417914.523	4582616.669	24.883	lb
3176	417869.526	4582467.899	14.973	cun	3253	417902.804	4582397.039	25.600	ct	4006	417980.960	4582351.820	19.183	cam	4085	417911.546	4582628.079	24.374	lb
3177	417933.657	4582401.423	18.710	ct	3254	417907.465	4582400.511	25.770	muro	4007	417985.272	4582353.807	19.126	cam	4086	417908.566	4582639.984	23.929	lb
3178	417945.604	4582384.213	18.841	ct	3255	417904.683	4582399.755	25.894	calz	4008	417990.294	4582344.500	19.071	cam	4087	417905.588	4582652.661	23.539	lb
3179	417958.364	4582364.663	18.715	ct	3256	417904.096	4582401.115	25.929	lb	4009	417986.233	4582341.965	19.179	cam	4088	417902.596	4582665.904	23.203	lb
3180	417966.655	4582352.552	18.896	ct	3257	417904.109	4582401.120	25.927	lb	4010	417991.230	4582332.921	19.204	cam	4089	417899.546	4582679.466	23.021	lb
3181	417978.883	4582333.754	18.883	ct	3258	417906.400	4582401.073	25.978	junta	4011	417995.937	4582335.145	19.131	cam	4090	417896.300	4582693.260	22.976	lb
3182	417940.228	4582521.894	29.275	ct	3259	417918.018	4582410.071	26.822	calz	4012	418001.561	4582325.454	19.092	cam	4091	417892.946	4582706.592	23.078	lb
3183	417941.985	4582522.150	29.433	calz	3260	417917.068	4582411.145	26.844	lb	4013	417997.680	4582322.233	19.131	cam	4092	417896.954	4582707.370	23.136	lb
3184	417943.064	4582522.507	29.424	lb	3261	417931.436	4582420.445	27.691	junta	4014	418003.376	4582312.789	19.048	cam	4093	417900.094	4582694.864	23.067	lb
3185	417947.156	4582511.339	29.556	lb	3262	417934.300	4582422.670	27.887	calz	4015	418008.378	4582315.538	19.039	cam	4094	417902.978	4582682.649	23.065	lb
3186	417946.202	4582511.264	29.552	calz	3263	417932.761	4582423.090	27.866	lb	4016	417978.660	4582369.057	19.180	ct	4095	417906.052	4582668.958	23.179	lb
3187	417944.677	4582511.238	29.478	ct	3264	417935.465</													

Actuación E – Ramal 3 (Posible ampliación cuña Puente Arco)

191	418307.627	4582760.359	31.779	base	1074	418282.586	4582753.361	20.357	ct	2797	418254.977	4582694.754	18.133	cam	2871	418268.994	4582693.011	21.600	ct
1001	418268.851	4582726.255	20.985	dest	1075	418279.649	4582750.918	20.284	ct	2798	418262.123	4582696.924	18.341	cam	2872	418269.449	4582692.848	21.600	ct
1002	418263.797	4582746.956	20.545	dest	1076	418281.327	4582737.004	20.598	ct	2799	418262.750	4582697.093	18.476	ct	2873	418269.770	4582692.504	21.600	ct
1003	418277.116	4582752.527	20.445	dest	1077	418283.005	4582727.972	20.788	ct	2800	418267.272	4582666.910	18.508	ct	2874	418273.477	4582687.774	21.640	ct
1004	418308.303	4582684.178	21.828	dest	1078	418281.995	4582727.362	20.923	ct	2801	418266.620	4582662.682	18.472	cam	2875	418274.009	4582686.899	21.640	ct
1005	418293.702	4582676.165	21.990	dest	1079	418280.337	4582738.317	20.773	ct	2802	418260.978	4582659.634	18.510	cam	2876	418273.453	4582686.018	21.630	ct
1006	418278.215	4582696.742	21.200	dest	1080	418278.482	4582751.239	20.544	ct	2803	418253.894	4582655.272	18.390	ct	2877	418272.361	4582685.630	21.650	ct
1007	418248.421	4582679.130	33.824	barrera	1081	418260.705	4582746.005	20.633	ct	2804	418256.121	4582644.702	18.566	ct	2878	418271.422	4582685.957	21.620	ct
1008	418248.458	4582679.215	32.655	barrera	1082	418266.893	4582747.036	20.495	rell	2805	418247.316	4582643.778	12.993	ct					
1009	418275.585	4582700.203	32.168	barrera	1083	418274.153	4582747.876	20.504	rell	2806	418241.271	4582640.882	12.861	rell					
1010	418274.474	4582699.311	33.364	barrera	1084	418276.712	4582732.913	20.777	rell	2807	418227.417	4582678.477	13.100	rell					
1011	418300.180	4582719.177	32.777	barrera	1085	418270.258	4582731.297	20.808	rell	2808	418242.763	4582696.170	13.374	ct					
1012	418301.294	4582720.394	32.183	barrera	1086	418272.516	4582716.577	21.100	rell	2809	418238.737	4582720.639	12.948	ct					
1013	418301.573	4582720.148	31.575	barrera	1087	418278.748	4582717.512	20.922	rell	2810	418231.074	4582720.687	13.217	rell					
1014	418301.541	4582720.112	31.547	estribo	1088	418284.089	4582705.680	21.033	rell	2811	418236.098	4582752.082	13.423	ct					
1015	418298.063	4582717.394	31.473	estribo	1089	418277.609	4582701.207	21.097	rell	2812	418225.497	4582749.269	13.356	rell					
1016	418298.024	4582717.394	28.927	estribo	1090	418271.270	4582694.417	21.556	rell	2813	418307.740	4582769.261	31.672	calz					
1017	418298.643	4582717.881	28.916	estribo	1091	418274.574	4582688.068	21.636	rell	2814	418307.738	4582769.263	31.654	calz					
1018	418299.032	4582715.926	29.900	estribo	1092	418281.452	4582691.593	21.420	rell	2815	418306.242	4582769.154	31.614	ct					
1019	418298.026	4582715.141	29.944	estribo	1093	418289.106	4582696.122	21.305	rell	2816	418306.612	4582759.550	31.613	ct					
1020	418298.840	4582714.039	29.935	estribo	1094	418300.848	4582691.193	21.705	rell	2817	418308.425	4582759.327	31.665	calz					
1021	418298.855	4582714.012	28.959	estribo	1095	418293.759	4582685.421	21.815	rell	2818	418306.972	4582748.793	31.635	calz					
1022	418298.956	4582713.916	28.918	estribo	1096	418286.745	4582680.141	21.759	rell	2819	418305.532	4582748.414	31.660	ct					
1023	418301.513	4582710.625	28.933	estribo	1097	418279.136	4582674.754	21.899	rell	2820	418305.116	4582739.195	31.699	ct					
1024	418301.542	4582710.552	28.992	estribo	1098	418281.651	4582666.881	21.900	rell	2821	418306.304	4582739.495	31.655	calz					
1025	418301.572	4582710.542	29.921	estribo	1099	418289.347	4582674.732	22.031	rell	2822	418307.288	4582732.008	31.739	calz					
1026	418302.390	4582709.432	29.910	estribo	1100	418295.961	4582682.507	21.923	rell	2823	418305.992	4582731.554	31.669	ct					
1027	418299.037	4582715.596	31.588	viga	1101	418304.898	4582688.744	21.714	rell	2824	418305.383	4582726.488	31.701	ct					
1028	418285.314	4582704.973	31.844	viga	1102	418304.968	4582707.068	28.297	ct	2825	418307.127	4582726.849	31.745	calz					
1029	418269.353	4582692.631	32.189	viga	1103	418302.181	4582705.641	27.104	ct	2826	418304.704	4582722.180	31.775	calz					
1030	418252.450	4582679.543	32.525	viga	1104	418299.263	4582706.502	27.267	ct	2827	418303.249	4582722.493	31.649	ct					
1031	418299.114	4582715.573	30.174	viga	1105	418298.050	4582708.883	27.290	ct	2828	418302.564	4582720.844	31.751	ct					
1032	418289.735	4582708.362	30.298	viga	1106	418297.253	4582712.309	27.705	ct	2829	418302.876	4582720.657	31.850	calz					
1033	418282.600	4582702.860	29.300	viga	1107	418295.695	4582716.118	27.519	ct	2830	418301.846	4582719.713	31.953	calz					
1034	418276.729	4582698.319	27.308	viga	1108	418296.987	4582718.619	27.932	ct	2831	418298.439	4582717.209	32.047	junta					
1035	418269.092	4582692.395	23.159	viga	1109	418297.857</td													

Actuación E – Estructura Ramal 4 P.K. 4+100

2696	418419.127	4583037.688	21.041	muro	2771	418415.954	4583022.346	20.991	muro	4186	418414.585	4582999.394	23.050	ct
2697	418424.049	4583037.910	21.164	rell	2772	418420.788	4582999.695	20.971	muro	4406	418461.761	4582991.037	24.771	lb
2698	418428.603	4583029.755	21.245	rell	2773	418417.992	4583000.190	21.146	muro	4407	418448.698	4582995.635	24.472	lb
2699	418421.696	4583025.458	21.006	muro	2774	418418.636	4582996.021	21.230	ct	4408	418436.762	4583000.983	24.157	lb
2700	418424.050	4583014.517	21.045	muro	2775	418419.211	4582991.188	21.120	ct	4409	418424.475	4583008.190	24.095	lb
2701	418426.675	4583015.357	20.889	muro	2776	418422.695	4582990.955	20.965	muro	4410	418415.327	4583016.133	23.919	lb
2702	418427.662	4583010.766	23.410	muro	2777	418420.952	4582990.586	20.989	rell	4411	418397.959	4583039.819	23.601	lb
2703	418426.908	4583015.489	21.061	ct	2778	418420.146	4582997.779	20.929	rell	4417	418399.162	4583028.956	23.895	lb
2704	418431.721	4583015.068	21.136	ct	4117	418427.825	4583010.919	23.407	muro	4418	418405.841	4583019.856	24.068	lb
2705	418438.999	4583012.730	21.275	ct	4118	418427.887	4583011.209	23.375	muro	4419	418413.524	4583011.829	24.199	lb
2706	418446.703	4583009.212	21.522	ct	4119	418428.989	4583010.346	23.614	muro	4420	418423.178	4583004.361	24.385	lb
2707	418455.583	4583005.823	21.518	ct	4120	418428.349	4583008.823	23.692	muro	4421	418431.506	4582999.203	24.364	lb
2708	418456.338	4583008.740	22.175	rell	4121	418429.333	4583008.831	23.693	muro	4422	418438.522	4582994.806	24.433	lb
2709	418458.942	4583013.331	22.255	rell	4122	418428.968	4583009.320	23.662	muro	4423	418443.556	4582990.892	24.469	lb
2710	418449.275	4583018.723	22.087	rell	4123	418428.745	4583010.191	23.619	muro	4424	418448.949	4582986.334	24.477	lb
2711	418444.175	4583012.875	21.945	rell	4124	418429.347	4583007.572	23.935	junta	4425	418453.132	4582986.834	24.566	lb
2712	418433.508	4583019.422	21.613	rell	4125	418428.976	4583009.243	24.012	tablero	4426	418449.854	4582990.647	24.534	lb
2713	418434.632	4583030.017	21.785	rell	4126	418412.445	4583022.289	23.847	tablero	4427	418465.121	4582985.662	24.763	lb
2715	418457.411	4582998.164	24.632	ct	4127	418412.408	4583022.350	23.525	muro	4428	418402.577	4583031.096	23.710	lb
2716	418456.615	4582995.579	24.679	ct	4128	418412.716	4583022.755	23.477	muro	4429	418408.925	4583022.547	23.820	lb
2717	418456.667	4582995.333	24.633	calz	4129	418412.851	4583022.539	23.480	muro					
2718	418447.484	4582998.743	24.368	calz	4131	418412.487	4583020.587	23.720	junta					
2719	418447.702	4582998.889	24.420	ct	4132	418431.872	4582996.100	24.389	junta					
2720	418448.920	4583001.729	24.342	ct	4133	418432.093	4582995.066	24.772	tablero					
2721	418437.842	4583006.069	24.001	ct	4134	418431.785	4582994.606	24.756	tablero					
2722	418437.258	4583003.495	24.121	ct	4135	418432.040	4582995.537	24.446	muro					
2723	418437.337	4583003.245	24.041	calz	4136	418432.172	4582995.081	24.487	muro					
2724	418435.880	4583005.530	24.047	farola	4137	418431.674	4582993.824	24.373	muro					
2725	418431.474	4583008.734	23.675	ct	4138	418431.587	4582994.198	24.470	muro					
2726	418429.002	4583010.315	23.566	ct	4139	418431.950	4582995.946	24.424	muro					
2727	418430.171	4583007.445	23.816	ct	4140	418432.385	4582995.261	24.468	muro					
2728	418430.053	4583007.201	23.868	calz	4141	418432.449	4582994.978	24.453	muro					
2729	418412.209	4583022.501	23.589	ct	4144	418415.401	4583007.562	24.503	tablero					
2730	418411.356	4583021.884	23.601	calz	4145	418415.158	4583008.773	24.462	tablero					
2731	418409.962	4583027.249	23.383	ct	4146	418414.990	4583009.478	24.295	junta					
2732	418408.505	4583026.514	23.537	calz	4147	418415.401	4583007.454	24.311	muro					
2733	418404.043	4583034.043	23.364	calz	4148	418415.531	4583006.964	24.331	muro					
2734	418406.147	4583035.160	23.223	ct	4149	418416.458	4583006.122	24.319	muro					
2735	418398.727	4583044.965	23.451	calz	4150	418416.562	4583005.877	24.198	muro					
2736	418401.126	4583045.738	23.458	ct	4151	418416.421	4583005.838	24.211	muro					
2737	418400.882	4583023.547	23.892	calz	4152	418415.259	4583006.864	24.319	muro					
2738	418400.331	4583023.294	23.934	ct	4153	418412.209	4583021.983	23.600	tablero					
2739	418398.258	4583022.523	23.897	ct	4154	418412.517	4583022.906	23.500	muro					
2740	418407.238	4583012.581	23.470	ct	4155	418412.962	4583036.393	21.050	muro					
2741	418404.714	4583008.922	23.280	rell	4156	418410.004	4583035.860	21.350	muro					
2742	418408.366	4582998.738	23.164	rell	4157	418416.672	4583018.983	20.990	muro					
2743	418411.145	4583003.207	23.094	rell	4158	418416.709	4583018.952	17.490	muro					
2744	418407.685	4583014.609	24.143</											

Actuación E – Estructura Ramal 5 P.K. 5+100 (Bóveda)

2309	418552.337	4582939.811	27.655	calz	2459	418544.270	4582967.538	20.594	pozsan
2378	418552.038	4582942.748	27.668	ct	2460	418542.698	4582961.941	20.471	cam
2379	418559.634	4582942.858	27.345	ct	2461	418549.604	4582960.654	20.531	cam
2380	418559.596	4582939.991	27.425	calz	2462	418557.782	4582959.892	20.702	cam
2381	418566.630	4582938.727	27.212	calz	2463	418568.340	4582957.364	20.445	cam
2382	418567.019	4582941.217	27.087	ct	2464	418573.996	4582954.723	20.611	cam
2383	418573.838	4582940.791	26.980	ct	2465	418577.810	4582951.716	20.617	cam
2384	418573.717	4582938.349	27.013	calz	2466	418577.083	4582950.785	20.732	ct
2385	418581.627	4582940.037	26.833	calz	2467	418571.574	4582954.939	20.570	ct
2386	418581.749	4582942.038	26.815	ct	2468	418566.313	4582956.696	20.653	ct
2387	418588.075	4582944.712	26.686	ct	2469	418543.470	4582960.386	20.466	ct
2388	418588.843	4582943.078	26.613	calz	2470	418582.046	4582956.457	20.705	pozsan
2389	418585.203	4582945.436	25.559	muro	2472	418577.320	4582950.568	20.695	marco
2390	418586.766	4582946.205	25.884	muro	2473	418587.916	4582957.342	20.435	marco
2391	418586.761	4582946.206	25.884	muro	2474	418580.539	4582957.313	20.694	
2392	418588.657	4582947.487	25.633	muro	2475	418594.750	4582964.449	20.615	dest
2393	418589.520	4582948.844	25.092	muro	2476	418560.017	4582963.409	20.596	dest
2394	418592.605	4582945.563	26.411	calz	2477	418582.126	4582947.177	20.382	cam
2395	418592.646	4582945.807	26.339	bord	2478	418587.180	4582949.722	20.404	cam
2396	418593.349	4582948.710	26.031	bord	2479	418588.287	4582956.526	21.097	marco
2397	418592.842	4582948.292	26.102	ct	2480	418588.860	4582954.028	22.516	marco
2398	418594.146	4582949.011	25.939	ct	2481	418588.968	4582952.220	23.455	marco
2399	418593.746	4582949.018	25.959	bord	2482	418588.903	4582951.068	23.988	marco
2400	418594.810	4582947.464	26.178	bord	2483	418588.406	4582949.168	24.840	marco
2401	418595.041	4582947.414	26.210	calz	2484	418586.865	4582947.230	25.356	marco
2402	418595.243	4582950.189	26.071	arqal	2485	418584.686	4582946.549	25.021	marco
2403	418595.861	4582949.355	26.132	farola	2486	418582.617	4582946.860	24.229	marco
2404	418599.204	4582952.911	25.702	ct	2487	418581.191	4582947.435	23.515	marco
2405	418600.633	4582951.785	25.894	calz	2488	418579.806	4582948.234	22.701	marco
2406	418609.309	4582958.507	25.548	calz	2489	418578.917	4582948.922	22.062	marco
2407	418608.138	4582959.931	25.300	ct	2490	418595.156	4582944.950	20.735	marco
2416	418601.763	4582966.777	20.773	ct	2491	418594.690	4582944.675	21.922	marco
2417	418593.244	4582962.263	20.938	ct	2492	418594.288	4582944.434	22.616	marco
2418	418587.407	4582959.039	20.723	ct	2493	418593.699	4582944.087	23.390	marco
2419	418587.718	4582957.997	20.611	ct	2494	418592.762	4582943.532	24.249	marco
2420	418586.776	4582956.767	20.618	cam	2495	418591.184	4582942.599	25.056	marco
2421	418586.230	4582958.651	20.657	cam	2496	418589.780	4582941.774	25.289	marco
2422	418587.507	4582960.281	20.618	cam	2497	418588.546	4582941.041	25.100	marco
2423	418595.952	4582964.288	20.642	cam	2498	418586.771	4582939.980	24.213	marco
2424	418602.898	4582968.142	20.579	cam	2499	418585.559	4582939.299	23.048	marco
2425	418601.239	4582970.691	20.504	cam	2500	418584.839	4582938.840	21.911	marco
2426	418594.836	4582967.156	20.586	cam	2501	418584.421	4582938.608	20.948	marco
2427	418596.399	4582964.080	20.666	alamb	2502	418587.905	4582957.336	20.400	marco
2428	418594.382	4582967.504	20.647	alamb	2503	418588.282	4582956.524	20.400	marco
2429	418592.620	4582967.199	20.681	ct	2504	418588.847	4582954.024	20.400	marco
2430	418594.205	4582968.762	20.664	ct	2505	418588.963	4582952.219	20.400	marco
2431	418596.661	4582968.905	20.395	ct	2506	418588.897	4582951.069	20.400	marco
2432	418601.470	4582971.341	20.428	ct	2507	418588.402	4582949.170	20.400	marco
2433	418601.078	4582971.972	20.054	ct	2508	418586.857	4582947.243	20.400	marco
2434	418594.019	4582969.462	20.154	ct	2509	418584.686	4582946.557	20.400	marco
2435	418590.876	4582968.289	19.998	ct	2510	418582.618	4582946.866	20.400	marco
2436	418590.265	4582980.704	19.857	rell	2511	418581.194	4582947.440	20.400	marco
2437	418578.914	4582974.625	19.813	rell	2512	418579.810	4582948.238	20.400	marco
2438	418582.845	4582992.750	19.882	rell	2513	418578.926	4582948.928	20.400	marco
2439	418570.875	4582986.071	19.806	rell	2514	418577.325	4582950.574	20.400	marco
2440	418576.554	4583003.570	19.860	rell	2515	418586.284	4582964.781	20.100	ct
2441	418564.545	4582998.287	19.809	rell	2516	418564.608	4582963.884	20.290	ct
2442	418565.778	4583016.024	20.002	rell	2517	418577.441	4582961.786	20.250	ct
2443	418554.789	4583006.764	19.837	rell	2518	418580.399	4582962.024	20.230	ct
2444	418540.442	4583002.236	20.503	rell	3600	418620.393	4582911.846	20.384	gas nat
2445	418526.196	4583005.461	20.776	rell	3601	418619.554	4582923.941	20.744	enagas
2446	418536.210	4582993.706	20.426	rell	3602	418618.246			

Ampliacion Taquimétrico Riera Vallvidrera

1	417307.811	4585703.642	30.091	cbici	75	417265.690	4585674.609	29.930	PT	151	417284.095	4585673.057	30.162	ARBOL	226	417254.746	4585645.445	29.080
2	417303.098	4585704.844	30.138	cbici	76	417250.162	4585670.304	29.925	CT	152	417278.667	4585674.353	30.149	ARBOL	227	417257.016	4585616.375	29.910
3	417301.595	4585703.025	30.119	cbici	77	417250.978	4585669.489	29.949	CT	153	417278.365	4585678.201	30.215	ARBOL	229	417269.306	4585588.355	29.570
4	417302.361	4585701.363	30.135	cbici	78	417251.816	4585667.279	29.944	CT	155	417282.264	4585679.421	30.119	ARBOL	230	417271.486	4585673.955	30.290
5	417296.188	4585698.373	29.500	cbici	79	417253.081	4585663.768	29.812	CT	156	417285.453	4585679.966	30.090	re	231	417278.696	4585631.895	29.900
6	417295.277	4585700.053	29.468	cbici	80	417255.591	4585658.842	29.807	CT	157	417286.529	4585675.806	30.094	re	232	417280.886	4585645.275	29.924
7	417289.114	4585697.095	28.740	cbici	81	417258.280	4585652.483	29.723	CT	158	417290.529	4585673.956	30.145	re	233	417285.526	4585607.965	29.810
8	417289.860	4585695.283	28.717	cbici	82	417255.601	4585651.925	28.711	PT	159	417294.315	4585686.005	30.148	re	235	417295.136	4585685.825	30.360
9	417283.575	4585692.416	28.058	cbici	83	417252.769	4585657.992	28.841	PT	160	417289.443	4585682.503	30.095	re	236	417297.736	4585651.545	29.970
10	417282.753	4585694.160	27.986	cbici	84	417250.136	4585663.447	28.878	PT	161	417079.876	4585604.995	24.510		237	417298.256	4585627.155	29.780
11	417277.326	4585689.820	27.327	cbici	85	417248.801	4585668.504	28.763	PT	162	417081.286	4585572.545	23.190		238	417307.946	4585701.225	30.290
12	417276.612	4585691.590	27.329	cbici	86	417245.060	4585669.935	29.789	CT	163	417081.736	4585562.305	22.840		239	417309.546	4585601.835	29.580
13	417268.744	4585687.316	26.421	cbici	87	417247.818	4585661.705	29.618	CT	164	417082.576	4585546.035	22.470		240	417318.306	4585618.365	29.410
14	417268.211	4585689.307	26.424	cbici	88	417250.620	4585654.348	29.473	CT	165	417085.316	4585529.455	22.600		241	417326.066	4585684.455	29.880
15	417260.320	4585688.286	25.556	cbici	89	417253.493	4585647.257	29.401	CT	166	417095.116	4585610.085	23.260		242	417326.866	4585710.605	30.260
16	417259.885	4585686.408	25.518	cbici	90	417252.370	4585644.777	29.920	aglomerado	167	417095.746	4585584.385	23.850		243	417336.216	4585665.195	29.830
17	417253.904	4585686.388	24.747	cbici	91	417250.978	4585644.032	29.950	lb	168	417102.706	4585598.765	24.240		244	417344.836	4585689.835	30.360
18	417253.091	4585688.337	24.747	cbici	92	417247.436	4585651.925	30.066	lb	169	417103.246	4585535.055	23.950		245	417347.226	4585642.465	29.700
19	417247.903	4585686.751	24.461	cbici	93	417248.946	4585652.472	30.005	aglomerado	170	417104.326	4585559.465	24.160		246	417352.016	4585673.265	30.290
20	417248.195	4585688.550	24.479	cbici	94	417248.936	4585652.478	30.010	aglomerado	171	417112.906	4585536.785	24.120		247	417047.447	4585700.792	22.280
21	417241.785	4585689.979	24.568	cbici	95	417245.176	4585660.950	30.126	aglomerado	172	417113.106	4585608.635	26.510		248	417051.789	4585700.259	23.120
22	417241.352	4585688.465	24.656	cbici	96	417243.740	4585660.163	30.211	lb	173	417113.156	4585615.845	24.500		249	417052.406	4585703.477	23.430
23	417237.056	4585687.860	23.708	cbici	97	417240.171	4585668.240	30.275	lb	174	417113.236	4585589.345	25.470		250	417053.922	4585677.480	22.230
24	417236.623	4585689.741	24.296	cbici	98	417241.576	4585668.753	30.251	aglomerado	175	417115.436	4585598.815	26.200		251	417057.314	4585684.606	23.280
25	417144.289	4585630.869	25.040	CAMINO	99	417254.485	4585666.978	30.075	re	176	417115.566	4585572.915	25.280		252	417057.376	4585705.476	24.900
26	417144.812	4585628.587	25.059	CAMINO	100	417259.812	4585661.912	29.891	re	177	417122.166	4585550.335	25.610		253	417057.937	4585705.639	24.910
27	417142.831	4585631.423	25.047	CT	101	417262.618	4585657.179	29.844	re	178	417126.636	4585620.245	25.660		254	417058.704	4585663.570	22.290
28	417137.099	4585630.636	24.758	CT	102	417265.173	4585652.741	29.842	re	179	417127.876	4585612.405	26.960		255	417059.911	4585686.063	23.770
29	417137.062	4585629.928	24.802	CAMINO	103	417271.372	4585653.835	29.791	sendero	180	417128.406	4585597.085	23.963		256	417060.112	4585672.977	23.020
30	417137.788	4585626.086	25.015	CAMINO	104	417270.969	4585659.380	29.879	sendero	181	417129.186	4585580.865	24.280		257	417063.105	4585649.017	22.390
31	417130.635	4585624.397	24.783	CAMINO	105	417271.264	4585664.885	29.939	sendero	182	417129.896	4585628.285	24.600		258	417063.144	4585676.514	23.740
32	417130.642	4585629.300	24.689	CAMINO	106	417272.794	4585669.866	29.859	sendero	183	417131.506	4585529.995	24.350		259	417063.614	4585686.130	24.790
33	417130.305	4585630.572	24.475	CT	107	417274.877	4585675.851	30.022	sendero	184	417139.456	4585637.205	23.890		260	417063.616	4585686.120	

302	417079.014	4585614.246	24.390	379	417092.125	4585716.545	25.080	456	417103.663	4585642.590	24.700	533	417116.317	4585665.354	25.040
303	417079.115	4585606.053	24.500	380	417092.223	4585596.649	23.800	457	417103.705	4585644.182	24.290	534	417116.365	4585655.709	25.000
304	417079.196	4585761.841	25.490	381	417092.327	4585645.466	24.280	458	417103.716	4585644.795	24.640	535	417116.374	4585695.707	25.330
305	417079.288	4585616.559	23.610	382	417092.392	4585665.947	28.070	459	417103.773	4585720.917	25.430	536	417116.839	4585644.743	24.910
306	417079.302	4585620.587	23.620	383	417092.421	4585660.652	24.920	460	417103.925	4585603.514	24.290	537	417116.527	4585637.653	24.620
307	417080.017	4585709.622	24.900	384	417092.545	4585666.913	28.010	461	417104.287	4585611.219	24.200	538	417116.552	4585773.935	32.210
308	417080.361	4585628.435	24.730	385	417092.616	4585745.574	25.450	462	417105.050	4585641.273	24.880	539	417117.046	4585640.971	24.900
309	417080.584	4585722.430	25.140	386	417092.691	4585575.673	23.410	463	417105.062	4585595.983	24.030	540	417116.859	4585591.893	24.020
310	417080.771	4585655.732	24.630	387	417092.726	4585675.068	25.000	464	417105.173	4585691.064	25.070	541	417116.881	4585586.625	24.180
311	417081.076	4585615.727	24.260	388	417092.782	4585646.053	24.680	465	417105.307	4585624.507	24.380	542	417116.901	4585606.908	26.050
312	417081.650	4585620.642	24.420	389	417093.019	4585591.535	23.420	466	417105.597	4585620.059	23.260	543	417116.957	4585617.347	24.220
313	417082.868	4585654.997	24.340	390	417093.174	4585589.548	23.390	467	417105.661	4585617.749	23.290	544	417117.177	4585601.317	25.750
314	417083.188	4585671.659	24.900	391	417093.413	4585596.203	23.760	468	417105.836	4585584.663	23.950	545	417117.610	4585596.321	24.140
315	417083.368	4585614.684	24.340	392	417094.187	4585615.573	23.870	469	417105.979	4585584.327	23.950	546	417117.803	4585616.732	24.530
316	417083.382	4585655.134	23.700	393	417093.917	4585602.108	22.980	470	417106.208	4585582.663	23.970	547	417118.046	4585612.517	25.510
317	417083.878	4585655.282	23.730	394	417093.995	4585594.838	23.590	471	417106.297	4585582.749	23.970	548	417118.391	4585614.563	25.080
318	417083.217	4585647.359	24.790	395	417094.035	4585767.380	25.720	472	417106.336	4585658.804	24.880	549	417118.513	4585614.521	25.080
319	417084.388	4585666.389	25.010	396	417094.058	4585605.681	23.170	473	417106.371	4585770.972	26.240	550	417118.589	4585611.831	25.050
320	417084.581	4585683.337	24.680	397	417094.093	4585619.645	24.480	474	417106.386	4585633.548	24.880	551	417118.795	4585609.996	24.950
321	417084.604	4585743.504	25.390	398	417099.228	4585634.139	24.900	475	417106.421	4585609.041	24.240	552	417118.882	4585648.528	24.830
322	417084.729	4585655.330	24.520	399	417094.604	4585638.679	24.910	476	417106.434	4585633.544	24.880	553	417118.977	4585745.963	26.110
323	417084.769	4585609.541	24.400	400	417094.421	4585603.833	23.060	477	417106.608	4585598.164	24.200	554	417119.636	4585668.579	25.080
324	417084.928	4585648.459	24.670	401	417094.693	4585776.808	26.850	478	417107.101	4585602.062	24.210	555	417119.748	4585600.280	24.080
325	417085.054	4585615.971	24.040	402	417094.898	4585616.120	24.500	479	417107.245	4585650.471	24.890	556	417120.394	4585684.968	25.270
326	417085.123	4585605.833	24.340	403	417095.223	4585775.414	26.960	480	417107.497	4585673.926	24.990	557	417120.422	4585724.055	25.720
327	417085.242	4585626.194	24.590	404	417095.312	4585598.638	24.090	481	417107.588	4585584.690	24.310	558	417120.491	4585634.420	24.090
328	417085.729	4585621.115	24.500	405	417095.378	4585596.959	24.140	482	417107.657	4585785.465	32.030	559	417120.514	4585605.078	25.710
329	417085.769	4585757.113	25.480	406	417095.418	4585670.990	25.050	483	417107.933	4585583.063	24.330	560	417121.277	4585632.949	23.780
330	417085.934	4585662.892	25.160	407	417095.434	4585647.973	24.670	484	417108.058	4585603.077	24.270	561	417121.447	4585653.775	24.980
331	417085.957	4585579.267	22.710	408	417095.619	4585584.788	23.500	485	417108.101	4585576.470	24.000	562	417121.648	4585715.520	25.630
332	417086.112	4585609.899	23.770	409	417095.639	4585595.060	23.520	486	417108.303	4585599.202	25.340	563	417122.089	4585630.141	23.590
333	417086.166	4585674.744	24.910	410	417095.934	4585686.285	24.890	487	417108.946	4585602.028	25.240	564	417122.341	4585758.974	31.900
334	417086.168	4585648.699	23.780	411	417095.956	4585611.300	23.290	488	417109.029	4585638.269	24.920	565	417122.484	4585706.162	25.530
335	417086.476	4585648.893	23.800	412	417095.971	4585751.017	25.590	489	417109.037	4585733.850	25.570	566	417122.549	4585616.560	25.460
336	417086.653	4585764.784	25.640	413	417096.254	4585579.172	23.730	490	417109.061	4585708.547	25.300	567	417122.625	4585627.795	24.260
337	417087.106	4585649.242	24.360	414	417096.491	4585601.283	23.840	491	417109.155	4585613.976	24.320	568	417122.640		

611	417131.588	4585666.019	25.160	688	417142.851	4585630.621	25.170	766	417159.487	4585640.808	24.490	844	417174.311	4585642.185	25.650
612	417131.795	4585703.303	25.530	689	417143.166	4585636.221	23.850	767	417159.559	4585686.841	31.350	845	417174.334	4585649.380	28.680
613	417131.845	4585650.291	25.060	690	417143.385	4585642.396	24.520	768	417159.877	4585686.798	31.350	846	417173.679	4585804.673	33.650
614	417131.883	4585661.329	26.460	691	417143.418	4585657.675	24.810	769	417160.376	4585623.609	26.600	847	417174.399	4585656.677	31.110
615	417132.024	4585655.898	25.140	692	417143.515	4585640.097	24.580	770	417160.419	4585682.970	31.200	848	417174.408	4585649.797	24.580
616	417132.596	4585622.723	25.160	693	417143.601	4585661.561	25.000	771	417160.445	4585664.090	25.370	849	417174.428	4585626.416	25.300
617	417132.598	4585616.043	26.510	694	417143.606	4585624.619	24.540	772	417160.715	4585627.331	25.630	850	417174.545	4585649.514	24.580
618	417132.940	4585647.410	25.000	695	417143.656	4585640.820	24.520	773	417160.752	4585623.998	26.660	851	417174.557	4585656.729	31.110
619	417132.992	4585658.051	26.320	696	417143.820	4585634.946	23.980	774	417160.960	4585663.536	25.450	852	417174.576	4585649.496	24.580
620	417133.120	4585647.263	25.000	697	417143.830	4585715.046	31.320	775	417162.027	4585651.194	24.550	853	417174.818	4585811.559	33.650
621	417133.189	4585646.945	25.120	698	417144.429	4585633.660	24.650	776	417161.709	4585642.655	24.560	854	417174.855	4585632.000	25.600
622	417133.287	4585665.702	26.600	699	417144.468	4585647.691	24.450	777	417162.521	4585659.957	25.630	855	417175.170	4585820.671	32.410
623	417133.354	4585670.544	25.210	700	417144.520	4585663.962	25.100	778	417162.544	4585659.363	25.050	856	417175.500	4585820.766	32.410
624	417133.514	4585632.422	24.340	701	417144.576	4585610.846	24.030	779	417162.686	4585655.435	24.430	857	417175.883	4585820.797	32.410
625	417133.750	4585667.817	25.210	702	417144.808	4585651.337	24.760	780	417162.738	4585656.409	24.500	858	417176.790	4585806.122	33.520
626	417134.211	4585622.284	24.680	703	417144.920	4585716.048	31.490	781	417162.758	4585638.449	24.700	859	417176.848	4585807.016	33.540
627	417134.457	4585710.713	25.490	704	417145.100	4585657.541	24.840	782	417163.258	4585630.676	25.400	860	417177.192	4585805.636	33.470
628	417134.649	4585614.829	26.560	705	417145.128	4585654.725	24.740	783	417163.464	4585623.730	25.570	861	417177.273	4585807.608	33.630
629	417134.782	4585625.928	24.930	706	417145.236	4585682.544	25.020	784	417163.788	4585644.278	24.560	862	417177.291	4585807.259	33.670
630	417135.083	4585637.761	24.630	707	417145.845	4585650.588	24.550	785	417164.002	4585656.523	25.640	863	417177.379	4585821.373	32.560
631	417135.126	4585629.843	24.580	708	417146.644	4585675.036	25.250	786	417164.003	4585656.547	25.640	864	417177.415	4585806.520	33.400
632	417135.251	4585655.034	25.000	709	417146.858	4585633.919	24.900	787	417164.186	4585648.820	24.410	865	417177.434	4585627.445	26.030
633	417135.524	4585635.476	23.460	710	417147.078	4585684.739	25.570	788	417164.478	4585656.804	25.660	866	417178.450	4585805.255	32.270
634	417135.548	4585620.619	24.780	711	417147.445	4585662.339	25.160	789	417164.884	4585633.348	24.050	867	417178.957	4585808.201	32.270
635	417135.603	4585634.804	24.020	712	417147.820	4585604.195	24.020	790	417165.308	4585647.623	23.980	868	417179.259	4585808.304	32.270
636	417135.923	4585671.163	25.160	713	417148.132	4585619.018	23.930	791	417165.328	4585627.147	25.940	869	417179.371	4585644.237	30.910
637	417135.955	4585636.803	23.680	714	417148.371	4585663.473	25.120	792	417165.691	4585641.358	24.930	870	417180.061	4585644.649	31.010
638	417136.069	4585730.735	31.480	715	417148.635	4585623.665	26.230	793	417165.720	4585646.666	23.910	871	417180.104	4585806.082	32.360
639	417136.078	4585611.790	24.070	716	417148.911	4585630.961	25.110	794	417165.900	4585634.519	24.130	872	417180.187	4585644.724	31.010
640	417136.118	4585637.742	24.580	717	417148.926	4585623.103	26.220	795	417166.276	4585645.757	24.530	873	417181.080	4585785.229	33.140
641	417136.534	4585630.082	24.820	718	417148.981	4585646.667	24.550	796	417166.583	4585670.126	31.080	874	417181.734	4585806.537	32.330
642	417136.580	4585662.140	26.230	719	417149.352	4585647.215	24.540	797	417167.194	4585626.568	25.460	875	417182.546	4585794.332	32.040
643	417136.630	4585680.134	25.340	720	417149.425	4585659.897	25.010	798	417167.489	4585635.037	24.630	876	417183.567	4585794.839	32.210
644	417136.645	4585667.743	25.250	721	417149.582	4585636.191	24.650	799	417167.718	4585670.624	31.130	877	417184.353	4585786.505	32.980
645	417136.849	4585635.976	23.630	722	417149.617	4585633.930	25.070	800	417167.866	4585645.973	24.650	878	417184.887	4585786.591	32.980
646	417136.882	4585700.173	25.480	723	417149.676	4585630.157	24.600	801	417167.883	4585670.684	31.130	879	417185.259		

921	417207.293	4585758.343	31.350	998	417230.034	4585695.425	30.580	1079	417255.584	4585709.075	26.830	1169	417229.426	4585620.045	31.530	061133
922	417207.671	4585725.647	31.640	999	417230.215	4585696.870	30.540	1080	417256.016	4585717.468	30.150	1170	417241.836	4585589.595	31.390	061133
923	417208.238	4585725.846	31.540	1000	417230.567	4585667.073	30.880	1081	417256.929	4585708.384	26.650	1171	417250.026	4585569.565	31.410	061133
924	417208.997	4585758.925	31.210	1001	417231.007	4585691.797	30.570	1082	417258.159	4585715.817	30.150	1172	417260.302	4585719.936	31.806	060118
925	417209.491	4585746.364	31.180	1002	417231.065	4585667.379	30.750	1083	417259.461	4585700.895	25.110	1174	417240.134	4585635.979	30.710	060118
926	417210.091	4585746.643	31.170	1003	417231.394	4585693.117	30.360	1084	417260.393	4585705.248	25.360	1175	417253.868	4585600.992	30.640	060118
927	417210.109	4585722.476	31.040	1004	417231.829	4585691.676	30.410	1085	417260.474	4585679.461	29.090	1176	417262.037	4585581.913	30.570	060118
928	417210.270	4585749.645	31.680	1005	417231.840	4585666.774	30.310	1086	417260.581	4585714.205	30.100	1177	417264.697	4585575.569	30.560	060118
929	417210.387	4585722.561	31.040	1006	417231.848	4585691.676	30.410	1087	417260.740	4585701.192	25.130	1178	417210.477	4585721.315	31.170	060126
930	417210.784	4585722.734	31.110	1007	417232.099	4585666.873	30.310	1088	417260.853	4585677.026	29.980	1179	417221.796	4585692.235	30.800	060126
931	417210.384	4585709.772	31.580	1008	417232.317	4585731.008	30.510	1089	417262.278	4585665.516	30.020	1180	417232.266	4585666.195	30.480	060126
932	417212.228	4585744.752	31.660	1009	417232.350	4585691.790	24.900	1090	417262.794	4585694.965	24.530	1181	417246.976	4585631.925	30.020	060126
933	417212.256	4585741.955	31.030	1010	417232.405	4585730.196	30.350	1091	417263.037	4585713.597	29.990	1182	417263.006	4585596.295	29.530	060126
934	417212.363	4585750.079	31.550	1011	417232.704	4585716.793	30.520	1092	417265.602	4585708.998	25.460	1183	417270.875	4585579.194	29.318	060126
935	417212.909	4585742.682	31.770	1012	417233.027	4585667.187	30.400	1093	417266.694	4585715.271	29.900	1184	417210.098	4585721.174	32.334	061133
936	417213.439	4585710.743	31.410	1013	417233.920	4585685.923	30.520	1094	417270.569	4585685.230	29.050	1185	417223.646	4585686.295	31.740	061133
937	417214.012	4585710.945	31.300	1014	417233.644	4585651.648	30.900	1095	417271.773	4585683.431	29.940	1186	417243.256	4585637.265	31.240	061133
938	417214.413	4585745.500	31.590	1015	417234.721	4585704.689	30.460	1096	417272.438	4585713.138	25.610	1187	417257.426	4585602.395	31.170	061133
939	417215.637	4585708.110	30.890	1016	417234.758	4585686.849	24.900	1097	417273.153	4585720.196	29.840	1188	417265.346	4585583.325	31.100	061133
940	417215.857	4585708.202	30.890	1017	417235.085	4585679.774	30.500	1098	417273.953	4585706.578	25.180	1189	417267.876	4585576.865	31.090	061133
941	417215.789	4585728.804	30.960	1018	417235.504	4585687.280	24.890	1099	417274.893	4585674.318	30.170	1190	417209.531	4585720.964	31.805	060124
942	417216.236	4585708.333	30.970	1019	417235.773	4585678.219	30.480	1100	417280.965	4585724.778	29.830	1191	417223.246	4585686.125	31.210	060124
943	417216.674	4585693.975	31.380	1020	417235.993	4585719.870	30.340	1101	417281.190	4585691.003	29.010	1192	417242.796	4585637.075	30.710	060124
944	417217.789	4585729.725	30.980	1021	417236.274	4585652.987	30.730	1102	417282.030	4585710.233	25.220	1193	417256.906	4585602.145	30.640	060124
945	417217.908	4585728.872	30.940	1022	417236.559	4585680.521	30.430	1103	417282.317	4585689.388	29.860	1194	417264.726	4585583.035	30.570	060124
946	417217.990	4585739.060	30.990	1023	417236.786	4585653.229	30.610	1104	417283.651	4585706.638	24.650	1195	417267.376	4585576.655	30.560	060124
947	417218.149	4585736.286	30.990	1024	417236.968	4585698.005	26.090	1105	417286.377	4585720.523	25.390	1196	417211.242	4585721.599	31.031	060118
948	417218.418	4585730.455	30.980	1025	417237.065	4585682.990	24.500	1106	417287.784	4585681.799	30.170	1197	417211.646	4585720.525	31.010	060118
949	417218.602	4585696.914	31.300	1026	417237.153	4585679.162	30.430	1107	417288.678	4585716.094	25.390	1198	417219.066	4585701.105	30.720	060118
950	417218.856	4585726.399	30.890	1027	417237.292	4585698.404	26.050	1108	417288.772	4585713.299	25.330	1199	417224.006	4585688.555	30.600	060118
951	417219.263	4585730.345	30.960	1028	417237.300	4585698.398	26.050	1109	417290.401	4585709.636	24.870	1200	417228.826	4585677.055	30.540	060118
952	417219.494	4585695.216	31.270	1029	417237.445	4585698.306	26.050	1110	417291.488	4585697.279	29.280	1201	417233.130	4585666.657	30.480	060118
953	417219.578	4585725.468	30.910	1030	417237.632	4585652.531	30.140	1111	417292.827	4585695.823	30.040	1202	417241.015	4585648.877	30.250	060118
954	417220.039	4585695.401	31.140	1031	417237.672	4585683.361	24.490	1112								

1247	417195.296	4585631.595	31.130	060118
1248	417188.106	4585649.395	31.200	060118
1249	417183.606	4585660.475	31.180	060118
1250	417179.956	4585669.965	31.160	060118
1251	417175.456	4585681.875	31.190	060118
1252	417169.126	4585698.995	31.500	060118
1253	417166.889	4585705.143	31.645	060118
1254	417224.915	4585562.142	30.758	060126
1255	417218.936	4585576.715	30.830	060126
1256	417203.846	4585614.545	31.040	060126
1257	417189.546	4585649.995	31.150	060126
1258	417178.016	4585678.705	31.160	060126
1259	417171.936	4585695.175	31.550	060126
1260	417174.721	4585646.476	27.000	re

Ampliacion Taquimétrico Ramal 3 Actuación D Molins de Rey

1	417813.146	4584301.119	23.537	PT	40	417898.509	4584124.495	22.128	losa	111	417887.961	4584200.226	22.238	CAMINO	185	417886.136	4584096.215	25.098	alambrada
2	417814.320	4584301.210	23.404	CAMINO	41	417831.730	4584258.344	23.105	CAMINO	112	417883.842	4584201.910	22.191	CAMINO	186	417885.442	4584095.853	25.455	CT
2	417749.907	4584498.786	23.617	pozo	42	417827.910	4584257.519	23.337	PT	113	417884.725	4584203.148	22.285	alambrada	187	417883.139	4584100.424	25.470	CT
3	417720.767	4584574.678	24.970	pozo	43	417831.350	4584250.693	23.227	PT	114	417883.791	4584203.484	22.266	alambrada	188	417883.913	4584100.873	25.089	alambrada
3	417816.625	4584301.551	23.351	CAMINO	43	417998.243	4584124.288	22.954	registro	115	417884.280	4584203.258	22.260	puerta	189	417881.019	4584107.183	25.382	alambrada
4	417817.181	4584303.526	23.280	CAMINO	44	417832.998	4584250.828	23.172	CAMINO	116	417883.014	4584202.568	22.248	CAMINO	190	417880.550	4584107.139	25.433	CT
5	417818.253	4584305.458	23.199	CAMINO	44	417847.389	4584238.051	22.922	mojon	117	417880.049	4584203.612	22.270	CAMINO	191	417878.354	4584111.924	25.389	CT
6	417704.962	4584640.852	26.177	pozo	45	417835.064	4584250.497	23.145	CAMINO	118	417876.863	4584204.486	22.245	CAMINO	192	417878.656	4584112.891	25.381	alambrada
6	417820.477	4584307.226	23.151	CAMINO	46	417836.620	4584249.882	23.272	cañas	119	417875.253	4584204.745	22.266	CAMINO	193	417874.092	4584124.053	25.509	alambrada
7	417824.832	4584308.880	23.365	CAMINO	47	417834.024	4584241.882	23.068	PT	120	417877.355	4584206.138	22.284	alambrada	194	417873.666	4584123.918	25.596	CT
7	417925.012	4584106.331	23.000	pozo	48	417837.610	4584233.786	23.367	PT	121	417875.463	4584204.800	22.360	CAMINO	195	417869.879	4584133.163	25.629	CT
8	417827.467	4584309.590	23.519	CAMINO	49	417839.692	4584233.862	23.082	CAMINO	122	417873.884	4584204.533	22.330	CAMINO	196	417870.690	4584132.707	25.633	alambrada
8	417925.744	4584106.528	22.748	pozo	50	417841.161	4584234.719	23.038	CAMINO	123	417872.039	4584203.460	21.976	CAMINO	197	417868.428	4584138.006	25.708	alambrada
9	417830.728	4584310.334	23.635	CAMINO	51	417842.734	4584236.584	23.259	cañas	124	417871.033	4584202.758	22.011	CAMINO	198	417868.137	4584137.869	25.727	CT
9	417925.190	4584105.328	22.696	pozo	52	417847.288	4584223.893	23.240	cañas	125	417870.915	4584200.951	22.018	CAMINO	199	417865.907	4584143.326	25.810	CT
10	417832.416	4584310.498	23.702	CAMINO	53	417846.373	4584223.553	23.083	CAMINO	126	417871.584	4584198.661	21.999	CAMINO	200	417866.261	4584143.417	25.780	alambrada
10	417923.753	4584106.194	22.800	pozo	54	417845.045	4584222.618	23.066	CAMINO	127	417873.083	4584193.923	22.004	CAMINO	201	417863.402	4584150.534	25.667	alambrada
11	417924.089	4584107.142	22.791	pozo	55	417842.093	4584221.671	23.278	PT	128	417873.658	4584185.680	22.059	CAMINO	202	417862.371	4584152.713	25.705	CT
11	417831.713	4584314.232	23.687	CAMINO	56	417848.074	4584204.446	23.461	PT	129	417871.978	4584182.342	22.150	CAMINO	203	417861.025	4584155.917	25.677	CT
12	417829.442	4584312.177	23.679	CAMINO	57	417848.071	4584204.372	23.436	PT	130	417870.099	4584179.523	22.469	CAMINO	204	417859.663	4584158.841	25.210	CT
13	417941.309	4584093.717	22.012	gas	58	417849.779	4584205.053	23.182	CAMINO	131	417867.939	4584177.373	22.804	CAMINO	205	417858.826	4584161.983	25.651	CT
13	417826.712	4584311.148	23.504	CAMINO	59	417852.780	4584205.477	23.010	CAMINO	132	417866.565	4584175.919	23.054	CAMINO	206	417857.240	4584165.852	25.757	CT
14	417822.443	4584310.137	23.315	CAMINO	60	417853.943	4584206.042	23.190	cañas	133	417875.053	4584174.295	22.804	CAMINO	207	417863.432	4584153.405	25.046	alambrada
14	417910.616	4584054.810	22.743	arq	61	417858.894	4584191.962	23.108	cañas	134	417859.056	4584174.295	22.804	CAMINO	208	417863.831	4584156.522	24.017	alambrada
15	417819.766	4584308.905	23.212	CAMINO	62	417858.079	4584191.560	23.050	CAMINO	135	417859.588	4584154.125	25.856	aglomerado	209	417863.077	4584158.185	23.908	alambrada
15	417911.206	4584053.437	22.748	arq	63	417856.177	4584190.598	23.041	CAMINO	136	417857.412	4584153.306	25.902	lb	210	417862.241	4584160.591	23.972	alambrada
16	417910.204	4584053.048	22.869	arq	64	417853.542	4584189.810	23.082	PT	137	417865.814	4584132.211	25.715	lb	211	417861.336	4584162.065	24.579	alambrada
16	417816.862	4584306.194	23.295	CAMINO	65	417858.248	4584177.489	22.918	PT	138	417867.950	4584132.780	25.655	aglomerado	212	417857.869	4584166.204	25.482	alambrada
17	417909.600	4584054.067	22.963	arq	66	417860.938	4584178.837	22.878	CAMINO	139	417875.031	4584115.179	25.555	aglomerado	213	417855.267	4584171.103	25.357	alambrada
17	417815.478	4584303.486	23.318	CAMINO	67	417862.415	4584179.582	22.903	CAMINO	140	417872.887	4584114.553	25.615	lb	214	417854.638	4584171.763	25.830	CT
18	417877.601	4584126.406	23.092	arq	68	417863.367	4584179.629	23.077	CAMINO	141	417879.441	4584098.170	25.534	lb	215	417851.948	4584178.081	25.886	CT
18	417815.071	4584301.777	23.353	CAMINO	69	417865.570	4584179.894	23.021	CAMINO	142	417881.								

259	417781.600	4584370.177	26.510	CT	336	417728.272	4584531.129	25.892	CT	413	417876.747	4584127.228	23.119	arq	488	417880.802	4584148.776	22.486	regap
260	417778.314	4584379.731	26.457	CT	337	417724.901	4584539.235	26.286	CT	414	417875.425	4584130.988	23.181	PT	489	417879.809	4584148.320	22.633	regap
261	417778.205	4584381.757	26.123	alambrada	338	417723.093	4584545.614	26.408	CT	415	417877.331	4584125.589	23.249	PT	490	417880.017	4584149.407	23.035	regap
262	417774.422	4584393.333	26.033	alambrada	339	417722.071	4584549.326	26.483	CT	416	417880.116	4584118.628	23.345	PT	491	417878.990	4584146.235	22.684	re
263	417773.539	4584392.944	26.340	CT	340	417720.777	4584546.960	26.620	aglomerado	417	417881.799	4584118.979	23.027	re	492	417881.216	4584142.049	22.561	re
264	417769.305	4584405.113	26.197	CT	341	417718.239	4584546.047	26.686	lb	418	417888.600	4584107.291	22.779	re	493	417883.741	4584134.620	22.575	re
265	417770.348	4584404.638	26.070	alambrada	342	417722.872	4584530.458	26.488	lb	419	417886.840	4584106.175	22.977	PT	494	417886.905	4584128.291	22.449	re
266	417770.313	4584404.651	26.078	alambrada	343	417725.568	4584530.901	26.328	aglomerado	420	417891.854	4584095.336	22.732	PT	495	417891.706	4584122.159	22.638	re
267	417767.331	4584413.000	25.958	alambrada	344	417729.681	4584517.699	26.079	aglomerado	421	417893.183	4584096.539	23.252	re	496	417891.334	4584124.077	22.564	regap
268	417766.639	4584412.834	26.104	CT	345	417727.070	4584516.922	26.177	lb	422	417890.550	4584104.096	22.722	re	497	417892.792	4584124.272	22.420	regap
269	417764.504	4584419.994	26.069	CT	346	417731.623	4584502.549	25.945	lb	423	417897.398	4584091.063	22.779	re	498	417892.340	4584128.093	22.415	regap
270	417765.409	4584419.343	25.982	alambrada	347	417734.173	4584503.340	25.866	aglomerado	424	417894.080	4584089.338	22.874	PT	499	417890.859	4584128.006	22.423	regap
271	417764.006	4584424.786	25.599	alambrada	348	417737.997	4584491.914	25.787	aglomerado	425	417899.461	4584078.126	22.975	PT	500	417895.369	4584125.821	22.392	canal
272	417762.897	4584424.535	25.909	CT	349	417735.456	4584490.817	25.832	lb	426	417901.785	4584080.166	22.921	re	501	417892.830	4584127.381	22.425	canal
273	417764.486	4584430.539	23.995	alambrada	350	417740.423	4584476.001	25.743	lb	427	417905.626	4584074.583	22.845	re	502	417889.625	4584132.736	22.419	canal
274	417765.044	4584436.868	23.305	alambrada	351	417743.142	4584476.323	25.666	aglomerado	428	417901.788	4584072.542	22.932	PT	503	417887.818	4584131.915	22.392	canal
275	417766.042	4584445.625	23.334	alambrada	352	417747.669	4584463.102	25.636	aglomerado	429	417903.410	4584065.864	22.897	PT	504	417890.935	4584126.616	22.423	canal
276	417767.062	4584452.546	23.429	alambrada	353	417745.330	4584462.028	25.735	lb	430	417907.748	4584059.570	22.819	PT	505	417892.796	4584124.266	22.429	canal
277	417767.023	4584452.665	23.445	seto	354	417750.917	4584446.030	25.892	lb	431	417910.036	4584057.811	22.697	re	506	417895.768	4584117.546	22.391	canal
278	417764.063	4584460.580	23.311	seto	355	417753.485	4584446.313	25.856	aglomerado	432	417909.784	4584064.721	22.668	re	507	417899.921	4584119.119	22.425	canal
279	417760.085	4584472.331	23.309	seto	356	417758.427	4584432.254	26.049	aglomerado	433	417908.607	4584068.136	22.650	re	508	417895.861	4584119.853	22.606	registro
280	417752.960	4584493.716	23.471	seto	357	417756.088	4584431.412	26.097	lb	434	417909.413	4584071.427	22.764	gas	509	417898.110	4584120.912	22.389	edificio
281	417749.892	4584498.826	23.649	registro	358	417760.275	4584419.469	26.272	lb	434	417909.413	4584071.427	22.764	gas	510	417899.643	4584123.211	22.434	edificio
282	417751.209	4584498.498	23.668	seto	359	417760.240	4584419.683	26.276	lb	435	417907.987	4584071.054	22.691	gas	511	417895.778	4584125.922	22.157	edificio
283	417746.547	4584512.464	23.700	seto	360	417762.676	4584419.958	26.236	aglomerado	435	417907.987	4584071.054	22.691	gas	512	417894.239	4584123.526	22.648	edificio
284	417742.608	4584524.152	24.320	seto	361	417768.216	4584403.916	26.320	aglomerado	436	417913.042	4584065.606	22.674	CAMINO	513	417897.770	4584126.365	22.071	losa
285	417739.380	4584533.749	24.542	seto	362	417765.876	4584403.056	26.439	lb	436	417690.587	4584759.580	25.910	POZO	514	417897.318	4584125.277	22.123	losa
286	417733.735	4584543.217	24.343	seto	363	417773.497	4584380.368	26.648	lb	437	417914.725	4584066.593	22.638	CAMINO	515	417898.838	4584125.190	22.107	losa
287	417728.698	4584551.620	24.532	seto	364	417776.329	4584380.646	26.574	aglomerado	438	417912.484	4584074.338	22.790	CAMINO	516	417898.509	4584124.495	22.128	losa
288	417727.178	4584551.150	24.505	re	365	417783.645	4584359.980	26.741	aglomerado	439	417909.998	4584073.554	22.701	CAMINO	517	417891.563	4584127.482	22.742	tubos
289	417726.657	4584550.921	24.629	PT	366	417781.111	4584358.866	26.823	lb	440	417905.825	4584082.066	22.806	CAMINO	518	417891.901	4584124.962	23.002	tubos
290	417729.796	4584543.814	24.469	PT	367	417783.311	4584352.793	26.863	lb	441</									

565	417873.841	4584193.741	22.044	alambrada	643	417767.201	4584480.157	24.319		724	417797.559	4584380.564	24.442	imbornal	803	417855.407	4584271.305	24.097	registrosan
566	417872.427	4584197.424	21.995	alambrada	644	417782.080	4584457.125	24.233	re	725	417796.504	4584380.061	24.137	registrosan	804	417858.950	4584264.647	24.357	alambrada
567	417872.062	4584199.297	22.034	alambrada	645	417778.773	4584462.869	24.253	re	726	417795.076	4584387.041	23.983	farol	805	417861.250	4584265.890	23.962	farola
568	417871.889	4584200.101	22.130	alambrada	646	417772.579	4584463.724	23.989	arq	728	417788.803	4584407.640	24.065	imbornal	806	417864.441	4584257.634	24.293	alambrada
569	417871.619	4584202.129	21.783	cauce	647	417772.260	4584464.137	24.010	arq	729	417788.654	4584413.286	24.218	farol	807	417869.923	4584255.915	24.239	farola
570	417873.934	4584201.164	21.693	cauce	648	417778.690	4584448.772	23.947		730	417789.643	4584427.018	24.223	farol	808	417872.627	4584252.327	24.281	imbornal
571	417882.766	4584197.844	21.643	cauce	649	417774.150	4584446.016	23.557	re	731	417792.223	4584428.441	24.413	re	809	417874.445	4584246.621	24.398	alambrada
572	417886.248	4584196.645	21.563	cauce	650	417779.442	4584442.255	24.071	re	732	417793.717	4584423.097	24.566	re	810	417879.671	4584245.812	24.482	farola
573	417886.156	4584197.843	22.205	CT	651	417779.557	4584437.505	24.008	re	733	417792.444	4584422.493	24.613	re	811	417884.087	4584238.132	24.572	alambrada
574	417882.122	4584200.312	22.235	CT	652	417775.937	4584436.381	23.472	re	734	417792.391	4584417.432	24.832	re	812	417889.165	4584234.366	24.632	alambrada
575	417877.646	4584202.359	22.206	CT	653	417772.567	4584435.179	23.033	re	735	417794.531	4584417.434	24.899	re	813	417890.609	4584234.856	24.597	registrosan
576	417874.254	4584203.138	22.444	CT	654	417772.236	4584428.391	23.069	re	736	417815.881	4584358.084	24.358	re	814	417890.476	4584236.998	24.663	farola
577	417869.817	4584203.559	22.075	cañas	655	417774.503	4584428.376	23.069	re	737	417813.771	4584360.374	24.390	re	815	417896.530	4584229.128	24.796	alambrada
578	417862.676	4584215.749	22.170	cañas	656	417776.834	4584428.710	23.423	re	738	417814.509	4584361.895	24.452	re	816	417901.458	4584229.565	24.824	farola
579	417854.352	4584219.312	23.294	registro	657	417779.616	4584429.347	24.244	re	739	417809.712	4584367.573	24.701	re	817	417904.783	4584228.632	24.749	imbornal
580	417852.530	4584218.451	23.039	re	658	417780.069	4584421.206	24.299	re	740	417811.258	4584368.863	24.638	re	818	417905.023	4584229.615	24.755	imbornal
581	417850.737	4584222.496	23.081	re	659	41778.335	4584420.720	23.697	re	741	417810.205	4584372.095	24.665	re	819	417900.455	4584226.787	24.912	alambrada
582	417854.362	4584219.298	23.207	registro	660	417774.633	4584419.499	23.052	re	742	417808.031	4584373.935	24.761	re	820	417903.185	4584225.369	24.917	alambrada
583	417861.618	4584220.393	22.196	cañas	661	417776.437	4584411.026	23.178	re	743	417805.552	4584375.353	24.657	re	821	417903.710	4584225.175	24.832	puerta
584	417857.116	4584223.946	22.184	cañas	662	417778.675	4584410.742	23.152	re	744	417807.581	4584377.820	24.631	re	822	417904.190	4584224.970	24.806	alambrada
585	417856.435	4584226.191	22.187	cañas	663	417781.215	4584412.569	24.452	re	745	417807.406	4584381.408	24.556	re	823	417905.111	4584224.536	24.938	papelera
586	417853.502	4584232.842	22.218	cañas	664	41779.161	4584399.382	23.506	re	746	417805.004	4584387.468	24.852	re	824	417909.820	4584222.639	24.853	alambrada
587	417850.318	4584238.622	22.269	cañas	665	417780.843	4584399.685	23.488	re	747	417803.416	4584392.783	24.951	re	825	417916.000	4584221.229	24.844	alambrada
588	417849.117	4584247.529	22.318	cañas	669	417784.169	4584390.040	23.359	re	748	417801.580	4584397.949	24.880	re	826	417921.896	4584220.789	24.822	alambrada
589	417845.628	4584253.890	22.222	cañas	670	417785.638	4584390.247	23.210	re	749	417797.942	4584396.941	25.193	re	827	417918.526	4584217.126	24.730	CT
590	417843.987	4584259.086	22.274	cañas	671	417787.150	4584390.577	23.746	re	750	417798.578	4584393.554	25.148	re	828	417912.029	4584218.080	24.871	CT
591	417839.519	4584264.361	22.341	cañas	672	417788.519	4584390.967	23.951	re	751	417799.746	4584389.834	24.981	re	829	417905.673	4584220.767	24.862	CT
592	417836.636	4584271.398	22.476	cañas	673	417787.305	4584381.009	23.563	re	752	417800.495	4584385.255	24.379	re	830	417898.056	4584224.542	24.708	CT
593	417834.939	4584277.278	22.575	cañas	675	417789.167	4584381.522	23.415	re	753	417800.814	4584382.131	24.389	re	831	417890.379	4584229.077	24.620	CT
594	417832.278	4584284.685	22.675	cañas	676	417791.493	4584382.610	23.948	re	754	417801.727	4584379.042	24.588	re	832	417887.430	4584231.012	24.502	CT
595	417829.397	4584289.853	22.845	cañas	677	417790.913	4584370.284	23.541	re	755	417804.158	4584375.602	24.742	re	833	417884.997	4584232.598	24.524	CT
596	417827.213	4584296.667	23.060	cañas	678	417792.271	4584371.105	23.501	re	756	417806.757	4584393.							

880	417866.323	4584215.815	22.261	alambrada	959	417851.806	4584302.145	24.220	050326	1042	417856.716	4584267.185	24.580	050326	1119	417815.346	4584353.535	23.930	050326
881	417868.081	4584217.194	22.236	re	960	417852.696	4584304.085	24.200	050326	1043	417854.236	4584270.395	24.520	050326	1120	417817.226	4584350.775	23.930	050326
882	417872.651	4584220.287	22.160	re	961	417853.206	4584305.805	24.110	050326	1044	417851.906	4584273.455	24.460	050326	1121	417819.216	4584347.455	23.930	050326
883	417876.012	4584223.368	22.117	re	962	417853.386	4584307.345	24.080	050326	1045	417849.546	4584276.895	24.430	050326	1122	417821.556	4584343.825	23.980	050326
884	417877.728	4584225.219	22.179	PT	963	417853.486	4584309.235	24.060	050326	1046	417847.386	4584280.355	24.350	050326	1123	417823.836	4584339.855	24.000	050326
885	417882.955	4584221.846	22.234	PT	964	417853.296	4584310.675	24.040	050326	1047	417845.416	4584283.675	24.290	050326	1124	417825.336	4584337.025	24.020	050326
886	417888.608	4584218.712	22.349	PT	965	417853.036	4584311.925	24.010	050326	1048	417843.586	4584287.045	24.230	050326	1125	417826.966	4584333.795	24.030	050326
887	417895.554	4584214.737	22.471	PT	966	417852.466	4584313.325	24.000	050326	1049	417841.856	4584290.535	24.180	050326	1126	417828.016	4584334.175	24.000	050326
888	417901.837	4584211.979	22.517	PT	967	417851.576	4584315.005	23.950	050326	1050	417839.956	4584294.435	24.130	050326	1127	417816.706	4584366.335	24.140	050326
889	417907.247	4584210.181	22.513	PT	968	417851.206	4584315.435	23.920	050326	1051	417838.056	4584298.495	24.110	050326	1128	417811.356	4584381.965	24.240	050326
890	417908.752	4584209.397	22.493	PT	969	417850.766	4584315.475	23.920	050326	1052	417836.386	4584302.595	24.070	050326	1129	417805.626	4584398.225	24.340	050326
891	417904.026	4584207.287	22.315	re	970	417848.806	4584315.005	23.920	050326	1053	417834.706	4584306.925	24.000	050326	1130	417799.446	4584415.925	24.360	050326
892	417896.649	4584203.734	22.077	re	971	417845.606	4584314.165	23.930	050326	1054	417833.406	4584310.155	24.000	050326	1131	417794.126	4584431.345	24.400	050326
893	417898.109	4584203.413	22.041	banco	972	417836.316	4584311.815	23.960	050326	1055	417831.976	4584314.145	24.010	050326	1132	417787.816	4584449.025	24.440	050326
894	417895.783	4584201.761	22.091	banco	973	417836.006	4584311.735	23.960	050326	1056	417830.626	4584318.235	24.040	050326	1133	417785.506	4584455.955	24.470	050326
895	417892.988	4584203.204	22.195	re	975	417895.236	4584279.045	24.300	050326	1057	417829.436	4584321.475	24.040	050326	1134	417784.516	4584458.985	24.500	050326
896	417896.183	4584207.929	22.069	re	978	417890.076	4584274.955	24.340	050326	1058	417827.976	4584325.005	24.010	050326	1135	417783.926	4584460.375	24.490	050326
897	417889.165	4584212.648	22.049	re	979	417888.446	4584275.605	24.330	050326	1059	417826.706	4584327.925	24.010	050326	1136	417782.946	4584462.085	24.480	050326
898	417885.739	4584207.765	22.220	re	980	417885.916	4584276.495	24.360	050326	1060	417825.116	4584331.315	23.990	050326	1137	417779.716	4584467.475	24.470	050326
899	417879.513	4584210.489	22.232	re	981	417883.406	4584277.155	24.370	050326	1061	417823.736	4584334.065	23.970	050326	1138	417774.206	4584476.595	24.460	050326
900	417881.244	4584216.745	22.098	re	982	417881.776	4584277.385	24.390	050326	1062	417822.356	4584336.585	23.920	050326	1139	417764.726	4584492.375	24.500	050326
901	417876.726	4584220.096	22.110	re	983	417880.296	4584277.425	24.410	050326	1063	417820.836	4584339.275	23.910	050326	1140	417754.546	4584509.195	24.610	050326
902	417874.505	4584217.629	22.138	re	984	417878.646	4584277.205	24.420	050326	1064	417819.236	4584341.985	23.900	050326	1141	417743.906	4584527.115	24.650	050326
903	417873.259	4584214.364	22.287	re	985	417876.666	4584276.635	24.450	050326	1065	417817.216	4584345.395	23.950	050326	1142	417742.326	4584526.105	24.620	050326
904	417872.388	4584212.172	22.309	re	986	417875.036	4584276.065	24.460	050326	1066	417814.686	4584349.145	23.970	050326	1143	417847.196	4584321.565	23.840	050326
905	417869.275	4584209.687	22.183	alambrada	987	417872.606	4584275.515	24.460	050326	1067	417812.306	4584352.715	23.970	050326	1144	417845.946	4584320.805	23.860	050326
908	417870.000	4584179.275	22.562	sendero	988	417870.096	4584275.165	24.460	050326	1068	417809.506	4584356.505	23.930	050326	1150	417844.596	4584320.245	23.870	050326
909	417870.767	4584174.952	22.682	sendero	989	417868.046	4584275.005	24.470	050326	1069	417806.846	4584360.095	23.910	050326	1151	417843.166	4584319.885	23.890	050326
910	417872.510	4584169.429	22.594	sendero	990	417866.066	4584275.065	24.480	050326	1070	417804.586	4584363.185	23.880	050326	1152	417841.716	4584319.745	23.900	050326
911	417874.197	4584164.922	22.591	sendero	991	417864.266	4584275.375	24.470	050326	1071	417802.086	4584366.925							

1207	417842.206	4584321.655	23.760	060146	1390	417898.595	4584195.216	20.850	cauce	1467	417834.002	4584277.055	23.261	canal infanta
1208	417843.666	4584321.995	23.760	060146	1391	417902.934	4584194.321	20.650	cauce	1468	417831.103	4584284.475	23.336	canal infanta
1210	417846.406	4584321.085	23.730	060146	1392	417892.040	4584197.060	22.250	CT	1469	417828.743	4584289.914	23.393	canal infanta
1218	417730.166	4584573.035	24.730		1393	417898.648	4584196.476	22.200	CT	1470	417826.072	4584296.647	23.462	canal infanta
1231	417779.726	4584403.855	23.390		1394	417902.369	4584196.048	22.230	CT	1471	417824.655	4584300.427	23.500	canal infanta
1232	417780.246	4584457.745	24.370		1395	417903.020	4584192.389	22.230	CT					
1234	417785.836	4584418.545	24.420		1396	417898.535	4584193.309	22.200	CT					
1235	417786.946	4584437.825	24.490		1397	417891.789	4584194.706	22.250	CT					
1237	417791.696	4584391.505	24.300		1398	417885.814	4584195.788	22.200	CT					
1240	417795.296	4584406.655	25.330		1399	417882.486	4584197.085	22.230	CT					
1241	417797.156	4584439.625	24.320		1400	417873.807	4584200.412	22.210	CT					
1243	417800.156	4584394.895	25.530		1401	417871.479	4584200.905	22.250	CT					
1244	417803.126	4584385.045	24.850		1402	417867.952	4584205.272	21.950	cañas					
1248	417811.896	4584365.115	24.800		1403	417870.278	4584192.559	21.980	cañas					
1265	417843.496	4584299.915	24.450		1404	417868.046	4584182.862	23.090	cañas					
1270	417847.026	4584310.585	24.410		1405	417705.384	4584576.126	27.314	060118					
1271	417848.946	4584284.035	24.380		1406	417710.086	4584559.865	26.880	060118					
1278	417856.386	4584306.645	24.140		1407	417717.636	4584534.545	26.570	060118					
1279	417859.616	4584196.585	23.230		1408	417725.056	4584510.705	26.210	060118					
1282	417860.956	4584157.305	23.300		1409	417731.426	4584491.035	25.960	060118					
1287	417868.836	4584254.875	24.560		1410	417734.256	4584482.345	25.870	060118					
1288	417869.716	4584179.235	22.750		1411	417737.976	4584471.405	25.840	060118					
1289	417870.356	4584203.455	22.470		1412	417741.626	4584460.645	25.870	060118					
1293	417873.476	4584137.895	23.280		1413	417746.286	4584447.385	25.890	060118					
1298	417876.886	4584195.145	22.350		1414	417750.946	4584433.945	26.120	060118					
1301	417879.256	4584171.825	22.310		1415	417752.796	4584428.625	26.230	060118					
1302	417879.486	4584162.775	22.350		1416	417754.706	4584423.175	26.340	060118					
1305	417882.666	4584280.205	24.540		1417	417755.656	4584420.475	26.400	060118					
1308	417885.316	4584108.885	23.050		1418	417758.976	4584411.365	26.470	060118					
1309	417886.866	4584143.625	22.450		1419	417758.736	4584411.275	26.470	060118					
1310	417886.996	4584184.025	22.430		1420	417755.506	4584419.375	26.410	060118					
1315	417892.086	4584276.165	24.400		1421	417752.166	4584427.955	26.170	060118					
1316	417892.796	4584207.335	22.530		1422	417751.956	4584428.485	26.150	060118					
1320	417899.646	4584095.675	23.060		1423	417747.606	4584439.355	26.190	060118					
1322	417900.566	4584183.335	22.390		1424	417745.666	4584444.135	26.190	060118					
1326	417903.166	4584154.315	22.260		1425	417743.366	4584449.825	26.090	060118					
1327	417903.246	4584056.555	25.130		1426	417741.286	4584455.035	25.990	060118					
1328	417903.986	4584172.855	22.310		1427	417738.896	4584460.875	25.830	060118					
1329	417904.346	4584203.595	22.100		1428	417736.706	4584466.235	25.790	060118					
1330	417906.346	4584104.485	22.360		1429	417734.386	4584471.795	25.670	060118					
1331	417906.706	4584137.745	22.250		1430	417731.946	4584477.775	25.690	060118					
1334	417911.616	4584046.225	24.450		1431	417728.956	4584485.125	25.470	060118					
1335	417911.716	4584114.455	22.352		1432	417723.076	4584499.415	25.230	060118					
1339	417915.296	4584160.465	22.300		1433	417714.406	4584520.325	24.910	060118					
1342	417918.816	4584050.535	22.360		1434	417704.306	4584544.815	24.570	060118					
1343	417918.876	4584131.415	22.370		1435	417693.996	4584569.485	24.070	060118					
1345	417920.216	4584091.065	22.280		1436	417693.791	4584569.977	24.063	060118					
1346	417921.536	4584061.605	22.840		1437	417704.558	4584575.688	27.309	060126					
1348	417924.496	4584102.885	22.350		1438	417709.206	4584559.615	26.880	060126					
1350	417926.316	4584113.495	22.340		1439	417716.756	4584534.275	26.570	060126					
1352	417926.716	4584225.795	25.340		1440	417724.186	4584510.425	26.210	060126					

Taquimétrico Puente Arco Metálico Río Llobregat

1	418028.622	4582439.879	30.491	lb	75	418091.280	4582505.885	19.735	cun	151	418122.735	4582558.106	19.391	acera	269	418301.423	4582695.436	21.663	PT
2	418035.102	4582445.973	30.755	lb	76	418091.640	4582505.867	19.231	fondocun	152	418121.822	4582557.569	19.424	acera	270	418305.248	4582695.673	21.902	PT
3	418035.583	4582446.495	30.769	lb	77	418092.045	4582506.179	19.202	fondocun	153	418121.801	4582557.558	19.405	CAMINO	271	418309.567	4582696.103	22.107	PT
4	418038.601	4582450.382	30.874	lb	79	418092.337	4582506.618	19.711	cun	154	418120.129	4582556.295	19.380	CAMINO	272	418312.764	4582697.195	22.242	PT
5	418042.642	4582457.314	31.013	lb	80	418093.131	4582507.659	20.100	CT	155	418119.427	4582555.844	19.029	PT	273	418315.738	4582697.955	22.320	PT
6	418046.194	4582446.975	30.863	lb	81	418094.727	4582508.813	20.095	CAMINO	156	418123.631	4582546.739	18.981	fondocun	274	418320.626	4582695.558	22.131	PT
7	418050.934	4582434.622	30.535	lb	82	418098.355	4582510.783	20.064	CAMINO	157	418127.800	4582536.533	19.015	fondocun	275	418325.943	4582694.057	22.139	PT
8	418056.695	4582436.639	30.666	lb	83	418093.894	4582519.768	19.941	CAMINO	158	418129.358	4582534.898	19.442	CAMINO	276	418331.143	4582692.791	22.239	PT
9	418053.581	4582444.081	30.882	lb	84	418090.666	4582518.597	19.950	CAMINO	159	418127.309	4582539.819	19.356	CAMINO	277	418338.270	4582691.677	22.466	PT
10	418050.941	4582450.857	31.040	lb	85	418088.973	4582517.748	19.937	CT	160	418124.259	4582546.869	19.377	CAMINO	278	418342.812	4582690.497	22.490	PT
11	418049.029	4582457.567	31.135	lb	86	418087.934	4582517.310	19.729	cun	161	418125.868	4582548.071	19.512	CAMINO	279	418342.818	4582686.882	22.294	re
12	418047.952	4582463.583	31.153	lb	87	418087.662	4582517.174	19.276	fondocun	162	418125.979	4582548.056	19.509	acera	280	418341.122	4582679.540	21.930	re
13	418047.458	4582469.441	31.201	lb	88	418086.959	4582517.034	19.282	fondocun	163	418127.016	4582548.405	19.590	acera	281	418333.416	4582683.998	22.025	arq
14	418047.593	4582478.111	31.266	lb	89	418086.686	4582517.112	19.747	cun	164	418130.306	4582541.407	19.521	acera	282	418332.868	4582685.022	21.933	arq
15	418047.382	4582483.810	31.305	lb	90	418086.533	4582516.879	19.740	alambrada	165	418129.379	4582540.922	19.520	acera	283	418331.736	4582684.483	21.840	arq
16	418046.355	4582489.545	31.322	lb	91	418090.519	4582526.409	19.891	CAMINO	166	418129.330	4582540.901	19.507	CAMINO	284	418332.347	4582683.410	21.878	arq
17	418044.730	4582495.916	31.345	lb	92	418086.292	4582535.717	19.925	CAMINO	167	418131.062	4582536.833	19.540	CAMINO	285	418336.177	4582682.568	21.861	re
18	418044.047	4582500.228	31.373	lb	93	418078.838	4582553.675	19.942	CAMINO	168	418131.134	4582536.853	19.561	acera	286	418334.554	4582686.899	22.008	re
19	418051.234	4582514.966	31.542	lb	94	418075.660	4582553.218	19.949	CAMINO	169	418132.057	4582537.270	19.516	acera	287	418328.561	4582688.118	21.822	re
20	418058.865	4582520.946	31.727	lb	95	418077.174	4582548.978	19.866	CAMINO	170	418128.489	4582536.820	19.363	cun	288	418326.634	4582685.209	21.794	re
21	418065.673	4582526.237	31.893	lb	96	418076.373	4582548.015	19.843	CT	171	418126.212	4582541.845	19.348	cun	289	418318.984	4582690.691	21.818	re
22	418066.136	4582524.763	31.854	aglomerado	97	418075.805	4582547.926	19.813	cun	172	418123.955	4582546.833	19.316	cun	290	418315.053	4582687.623	21.719	re
23	418058.810	4582519.112	31.676	aglomerado	98	418075.494	4582547.707	19.324	fondocun	173	418122.297	4582546.643	19.252	cun	291	418309.727	4582692.032	21.783	re
24	418051.742	4582513.646	31.523	aglomerado	99	418074.832	4582547.573	19.256	fondocun	174	418123.971	4582543.026	19.311	cun	292	418302.726	4582692.621	21.563	re
25	418049.988	4582512.318	31.486	aglomerado	100	418074.532	4582547.555	19.759	cun	175	418127.075	4582536.385	19.338	cun	293	418298.027	4582694.707	21.495	re
26	418048.072	4582509.944	31.423	aglomerado	101	418074.355	4582547.513	19.761	alambrada	176	418123.542	4582534.827	19.279	CT	294	418329.169	4582679.561	21.897	CAMINO
27	418046.401	4582506.690	31.408	aglomerado	102	418080.796	4582531.110	19.799	alambrada	177	418121.576	4582533.795	19.313	CT	295	418320.761	4582682.658	21.838	CAMINO
28	418045.773	4582503.776	31.399	aglomerado	103	418081.092	4582531.213	19.766	cun	178	418117.883	4582532.063	19.408	CT	296	418311.464	4582685.973	21.670	CAMINO
29	418046.240	4582499.449	31.404	aglomerado	104	418081.286	4582531.217	19.294	fondocun	179	418121.055	4582540.257	19.271	CT	297	418304.020	4582689.101	21.648	CAMINO
30	418047.711	4582494.594	31.401	aglomerado	105	418081.902	4582531.478	19.294	fondocun	180	418119.077	4582544.948	19.333	CT	298	418298.829	4582692.180	21.505	CAMINO
31	418049.115	4582489.181	31.376	aglomerado	106	418082.163	4582531.545	19.794	cun	181	418118.547	4582547.591	19.241	riego	299	418294.760	4582694.233	21.331	CAMINO
32	418049.901	4582483.668	31.351	aglomerado	107	418082.869	4582531.743	19.863	CT	182	418117.995	458254							

343	418308.360	4582711.548	31.136	alambrada	420	418262.627	4582653.395	18.470	CAMINO	498	418241.189	4582680.567	13.686	re	3077	418108.586	4582489.395	20.290	CAMINO
344	418311.874	4582712.024	31.324	alambrada	421	418260.563	4582650.919	18.397	re	499	418242.178	4582685.812	13.810	re	3078	418108.086	4582506.235	20.230	re
345	418315.826	4582712.161	31.267	alambrada	422	418255.942	4582649.531	18.523	CT	510	418300.724	4582540.786	18.210	EMSA	3079	418131.366	4582505.655	19.450	re
346	418319.229	4582711.803	31.565	alambrada	423	418254.612	4582655.662	18.439	CT	511	418302.206	4582541.522	18.146	EMSA	3080	418113.056	4582513.055	20.000	re
347	418322.598	4582710.898	31.583	alambrada	424	418255.203	4582659.094	18.401	CT	512	418302.813	4582540.067	18.357	EMSA	3081	418131.896	4582525.935	19.390	camino
348	418325.697	4582709.844	31.552	alambrada	425	418254.384	4582660.649	18.332	CT	513	418301.478	4582539.484	18.333	EMSA	3082	418137.506	4582526.605	19.440	camino
349	418329.030	4582708.576	31.632	alambrada	426	418254.220	4582664.704	18.346	CT	514	418302.017	4582540.217	18.396	EMSA	3083	418149.066	4582534.335	19.000	ct
350	418332.475	4582707.566	31.710	alambrada	427	418254.060	4582668.094	18.243	CT	515	418308.974	4582508.519	18.227	salmueras	3084	418187.256	4582579.225	13.032	RE
351	418335.849	4582706.868	31.739	alambrada	428	418254.207	4582669.457	18.280	CT	516	418310.072	4582505.964	18.285	salmueras	3085	418205.496	4582598.205	13.190	RE
352	418339.165	4582706.422	31.587	alambrada	429	418256.569	4582670.909	18.338	re	517	418301.807	4582503.382	17.480	salmussep	3086	418235.662	4582648.955	12.750	RE
353	418342.724	4582705.758	31.534	alambrada	430	418256.932	4582666.055	18.388	re	518	418272.316	4582518.560	12.712	EMSA	3087	418229.796	4582637.245	13.020	RE
354	418343.217	4582706.339	31.800	CT	432	418257.667	4582661.419	18.417	re	519	418163.314	4582438.877	19.222	EMSA	3088	418234.876	4582632.855	13.060	RE
355	418339.815	4582707.043	31.810	CT	433	418260.010	4582662.243	18.450	CAMINO	520	418162.724	4582439.368	19.140	EMSA	3089	418237.026	4582644.055	13.050	RE
356	418335.941	4582707.424	31.832	CT	434	418264.216	4582663.531	18.541	CAMINO	521	418163.676	4582439.639	19.115	EMSA	3090	418239.256	4582652.015	13.100	RE
357	418331.041	4582708.232	31.791	CT	435	418266.622	4582664.222	18.476	PT	522	418163.923	4582438.621	19.215	EMSA	3091	418223.426	4582642.696	12.700	RE
358	418327.982	4582709.338	31.655	CT	436	418265.265	4582673.379	18.607	PT	523	418162.872	4582438.333	19.206	EMSA	3092	418234.563	4582640.770	12.740	RE
359	418325.155	4582710.455	31.709	CT	437	418262.777	4582675.804	18.505	CAMINO	524	418169.532	4582423.775	18.873	oleoducto	3093	418225.468	4582663.387	12.640	RE
360	418322.731	4582711.421	31.680	CT	438	418258.398	4582672.593	18.324	CAMINO	3007	418106.036	4582585.676	19.185		3094	418220.727	4582661.459	12.634	RE
361	418320.652	4582711.883	31.598	CT	439	418262.620	4582692.425	18.395	PT	3008	418106.146	4582583.575	19.218		3095	418215.561	4582656.779	12.680	RE
362	418316.725	4582712.624	31.636	CT	440	418262.330	4582698.380	18.380	PT	3009	418113.646	4582581.686	19.381	BR	3096	418212.967	4582613.176	13.020	RE
363	418312.545	4582713.106	31.711	CT	441	418261.372	4582704.369	18.359	PT	3010	418113.648	4582581.686	19.382	BR	3097	418190.787	4582594.594	13.020	RE
364	418310.765	4582712.743	31.687	CT	442	418259.772	4582704.225	18.401	CAMINO	3011	418126.092	4582595.434	19.465	BR	3098	418230.775	4582668.070	13.320	RE
365	418309.718	4582712.382	31.791	CT	443	418260.123	4582699.613	18.381	CAMINO	3012	418126.094	4582595.432	19.452	BR	3099	418239.101	4582674.627	13.200	RE
366	418307.968	4582711.790	31.950	CT	444	418260.999	4582692.298	18.327	CAMINO	3013	418126.093	4582595.436	19.452	BR	3100	418322.976	4582720.035	32.010	RE
367	418307.826	4582712.022	31.827	aglobiond	445	418257.474	4582690.618	18.202	CAMINO	3014	418121.985	4582559.838	19.418	BR	3101	418344.836	4582716.065	32.080	RE
368	418309.001	4582712.991	31.776	aglobiond	446	418256.557	4582695.506	18.189	CAMINO	3015	418121.984	4582559.841	19.413	BR	3102	418361.376	4582731.015	32.460	RE
369	418311.461	4582713.948	31.732	aglobiond	447	418255.782	4582702.985	18.280	CAMINO	3016	418121.974	4582559.849	19.400	BR	3103	418357.366	4582734.235	32.450	LB
370	418314.959	4582714.402	31.719	aglobiond	448	418253.046	4582702.993	18.338	re	3018	418107.634	4582540.766	20.461		3104	418354.496	4582729.195	32.330	LB
371	418317.906	4582714.389	31.741	aglobiond	449	418252.922	4582698.853	18.231	re	3030	418282.960	4582719.003	20.949	BR	3105	418350.296	4582725.175	32.200	LB
372	418320.468	4582713.764	31.768	aglobiond	450	418251.073	4582700.126	18.592	CT	3031	418282.963	4582718.972	20.946	BR	3106	418342.326	4582721.785	32.000	.
373	418322.911	4582712.785	31.790	aglobiond	451	418251.331	4582695.100	17.905	CT	3032	418282.940	4582719.003	20.953	BR	3107	418333.666	4582722.035	31.830	.
374	418326.308	4582711.439	31.776	aglobiond	452	418251.570	4582692.850	17.959											

3154	418059.756	4582541.275	20.930	alambrada	3231	418091.196	4582496.075	20.910	PT	3308	418228.195	4582666.428	13.350	re
3155	418061.999	4582535.617	20.920	alambrada	3232	418087.796	4582504.415	20.920	PT	3309	418269.770	4582681.182	21.050	re
3156	418064.929	4582537.821	21.840	via	3233	418085.546	4582509.975	20.920	PT	3310	418264.693	4582677.622	18.559	PT
3157	418066.298	4582538.886	21.840	via	3234	418081.806	4582519.255	20.930	PT					
3158	418068.422	4582540.503	21.840	via	3235	418078.446	4582527.595	20.930	PT					
3159	418069.790	4582541.578	21.840	via	3236	418076.603	4582532.110	20.930	PT					
3160	418092.146	4582502.750	19.630	alambrad	3237	418088.256	4582568.929	19.620	re					
3161	418095.196	4582495.355	19.610	alambrad	3238	418026.866	4582522.735	31.350	aglomerado					
3162	418101.297	4582480.563	19.560	alambrada	3239	418022.496	4582527.085	31.290	aglomerado					
3163	418060.696	4582570.745	21.340	catenaria	3240	418021.346	4582525.715	31.290	Ib					
3164	418051.096	4582567.095	21.340	catenaria	3241	418026.376	4582521.575	31.380	Ib					
3165	418055.886	4582545.555	21.220	catenaria	3242	418029.526	4582519.745	31.470	Ib					
3166	418045.126	4582541.445	21.210	catenaria	3243	418031.386	4582518.885	31.490	Ib					
3167	418049.416	4582554.735	21.920	via	3244	418075.002	4582545.601	20.380	alambrada					
3168	418048.076	4582554.215	21.920	via	3245	418044.374	4582505.077	31.390	Ib					
3169	418045.096	4582553.055	21.920	via	3246	418046.045	4582509.781	31.540	Ib					
3170	418043.756	4582552.535	21.920	via	3247	418048.646	4582512.815	31.600	Ib					
3171	418058.109	4582532.621	21.860	via	3248	418144.388	4582584.601	12.960	RIO					
3172	418056.927	4582531.670	21.860	via	3249	418146.586	4582580.245	12.960	RIO					
3173	418054.293	4582529.650	21.860	via	3250	418148.886	4582573.235	12.960	RIO					
3174	418053.103	4582528.746	21.860	via	3251	418151.036	4582567.445	12.960	RIO					
3175	418049.151	4582525.703	20.320	alambrada	3252	418150.336	4582559.285	12.960	RIO					
3176	418044.172	4582536.617	20.330	alambrada	3253	418151.696	4582552.925	12.960	RIO					
3177	418040.958	4582543.939	20.360	alambrada	3254	418153.326	4582549.045	12.960	RIO					
3178	418039.371	4582535.625	22.960	alambrada	3255	418180.466	4582576.365	12.970	RIO					
3179	418035.041	4582542.280	24.090	alambrada	3256	418177.986	4582590.155	12.970	RIO					
3180	418031.848	4582549.614	23.640	alambrada	3257	418177.156	4582600.895	12.970	RIO					
3181	418048.276	4582526.845	20.320	cuneta	3258	418176.649	4582609.492	12.970	RIO					
3182	418047.166	4582526.265	20.320	cuneta	3259	418064.824	4582478.671	19.620	murete					
3183	418043.316	4582536.315	20.330	cuneta	3260	418046.937	4582524.232	19.620	PT					
3184	418042.196	4582535.765	20.330	cuneta	3261	418042.771	4582530.828	19.620	PT					
3185	418040.986	4582541.395	20.360	cuneta	3262	418039.724	4582536.008	19.620	PT					
3186	418039.836	4582540.895	20.360	cuneta	3263	418052.324	4582512.964	19.620	PT					
3187	418039.426	4582535.565	22.920	aleta	3264	418054.275	4582507.618	19.620	PT					
3188	418043.396	4582528.645	26.000	aleta	3265	418058.351	4582499.128	19.620	PT					
3189	418046.330	4582523.528	27.840	aleta	3266	418061.404	4582489.685	19.620	PT					
3190	418040.906	4582518.885	31.530	aglomerado	3267	418063.883	4582482.470	19.620	PT					
3191	418038.926	4582518.435	31.530	aglomerado	3268	418301.546	4582720.225	32.190	ISLA					
3192	418037.306	4582518.355	31.530	aglomerado	3269	418308.586	4582711.475	32.810	ISLA					
3193	418032.966	4582519.235	31.490	aglomerado	3270	418050.836	4582512.205	31.670	ISLA					
3194	418029.816	4582520.785	31.430	aglomerado	3271	418043.706	4582521.505	31.810	ISLA					
3195	418069.846	4582473.820	19.120	alambrada	3272	418083.857	4582553.040	19.620	re					
3196	418073.606	4582468.815	20.860	pt	3273	418088.449	4582556.485	19.620	re					
3197	418069.386	4582479.125	20.880	pt	3274	418093.105	4582560.055	19.620	re					
3198	418067.496	4582483.755	20.880	pt	3275	418102.314	4582567.278	19.620	re					
3199	418063.726	4582493.015	20.910	pt	3276	418109.848	4582572.938	19.100	re					
3200	418061.856	4582497.655	20.920	pt	3277	418122.681	4582583.173	19.480	re					
3201	418060.356	4582501.365	20.930	pt	3278	418194.433	4582639.722	13.610	re					
3202	418056.636	4582510.645	20.940	pt	3279	418206.386	4582649.901	13.180	re					
3203	418054.806	4582515.276	20.940	pt	3280	418201.267	4582645.656	13.330	re					
3204	418049.366	4582528.975	20.960	pt	3281	418260.936	4582673.814	18.450	re					
3205	418050.296	4582526.597	20.950	pt	3282	418267.907	4582679.288	20.020	re					

3.12.3.- Puntos de estructuras y obras de drenaje

Actuación B - Marco Ramal 4 P.K. 4+200																			
539	416514.709	4586576.478	28.404	of	1207	416655.899	4586149.491	29.739	muro	3614	416454.285	4585320.974	37.504	estribo	3846	416368.946	4585269.372	40.909	pilar
540	416514.669	4586576.437	28.902	of	1208	416656.253	4586148.521	29.232	muro	3615	416454.299	4585320.968	37.657	estribo	3847	416366.972	4585273.798	40.999	pilar
541	416514.424	4586575.990	29.154	of	1209	416656.274	4586148.530	27.732	muro	3616	416456.187	4585315.785	37.651	estribo	3848	416366.636	4585274.463	40.979	pilar
542	416507.205	4586580.678	31.720	of	1210	416656.686	4586148.420	30.428	muro	3617	416456.182	4585315.782	37.599	estribo	3849	416362.417	4585283.843	40.743	pilar
543	416506.706	4586580.942	31.716	of	1211	416656.292	4586148.512	30.441	muro	3618	416458.100	4585310.528	37.600	estribo	3850	416362.124	4585284.516	40.724	pilar
544	416507.002	4586580.341	31.801	of	1212	416656.296	4586148.425	30.598	muro	3619	416458.096	4585310.527	37.515	estribo	3851	416361.623	4585284.818	40.825	viga
545	416506.620	4586580.188	31.947	of	1213	416653.512	4586156.289	30.666	muro	3620	416460.010	4585305.281	37.517	estribo	3852	416362.702	4585283.485	40.857	viga
546	416500.409	4586592.153	31.969	of	1214	416653.613	4586156.010	30.441	muro	3621	416460.006	4585305.284	37.416	estribo	3853	416364.177	4585279.900	40.946	viga
547	416500.815	4586592.179	31.953	of	1215	416653.815	4586156.174	30.434	muro	3622	416461.925	4585300.030	37.412	estribo	3854	416364.691	4585278.282	40.959	viga
548	416500.895	4586592.157	31.742	of	1216	416609.085	4586138.315	27.302	dest	3623	416462.733	4585300.493	39.116	estribo	3855	416366.735	4585274.969	41.064	viga
549	416501.265	4586591.491	31.750	of	1217	416605.150	4586148.766	27.941	muro	3624	416458.873	4585306.845	37.712	viga	3856	416367.162	4585273.299	41.069	viga
550	416506.042	4586594.340	28.804	of	1218	416608.835	4586145.500	27.345	dest	3625	416458.758	4585308.659	37.732	viga	3857	416369.013	4585269.919	40.991	viga
551	416505.703	4586594.843	29.054	of	1219	416615.204	4586146.501	27.357	canaleta	3626	416457.028	4585312.099	37.812	viga	3858	416369.566	4585268.316	40.993	viga
604	416458.137	4586578.024	28.509	of	1220	416610.920	4586146.980	30.823	muro	3627	416456.637	4585313.783	37.811	viga	3859	416370.938	4585264.690	40.910	viga
605	416458.208	4586578.032	29.375	of	1221	416611.230	4586146.882	30.832	muro	3628	416455.094	4585317.375	37.862	viga	3860	416371.560	4585263.126	40.889	viga
606	416458.443	4586577.606	29.358	of	1222	416611.164	4586147.345	31.042	muro	3629	416454.575	4585318.993	37.859	viga	3902	416350.779	4585253.138	41.638	pilar
607	416463.204	4586580.085	32.033	of	1223	416613.466	4586138.889	31.048	muro	3630	416453.566	4585322.805	37.720	viga	3903	416348.299	4585258.085	41.750	pilar
608	416462.832	4586580.781	31.996	of	1224	416613.315	4586139.200	30.865	muro	3631	416452.829	4585324.308	37.712	viga	3904	416348.059	4585258.837	41.682	pilar
609	416463.288	4586580.080	32.150	of	1225	416612.967	4586138.909	30.875	muro	3632	416451.643	4585328.049	37.596	viga	3905	416345.835	4585263.114	41.786	pilar
610	416463.769	4586580.271	32.340	of	1226	416607.576	4586133.969	27.999	muro	3633	416451.097	4585329.638	37.557	viga	3906	416345.563	4585263.809	41.747	pilar
611	416457.395	4586592.051	32.292	of	1227	416621.603	4586141.061	27.310	muro	3634	416437.181	4585303.561	38.467	pilar	3910	416340.124	4585274.057	41.610	viga
612	416456.967	4586591.877	32.185	of	1228	416613.366	4586139.275	27.323	muro	3642	416435.584	4585308.124	38.514	pilar	3911	416340.845	4585272.543	41.639	viga
613	416457.210	4586591.218	32.030	of	1229	416611.287	4586146.792	28.132	muro	3643	416435.262	4585308.804	38.500	pilar	3912	416342.546	4585269.071	41.732	viga
614	416456.612	4586591.576	32.003	of	1230	416617.873	4586148.231	28.053	muro	3644	416433.697	4585313.344	38.355	pilar	3913	416343.129	4585267.479	41.741	viga
615	416456.934	4586591.952	32.064	of	1231	416611.302	4586146.789	29.605	muro	3645	416433.398	4585314.032	38.345	pilar	3914	416345.025	4585264.101	41.841	viga
616	416451.507	4586595.009	30.326	of	1232	416611.581	4586145.827	30.104	muro	3646	416431.805	4585318.619	38.220	pilar	3915	416345.720	4585262.569	41.834	viga
617	416451.276	4586594.608	30.341	of	1233	416613.103	4586140.236	30.153	muro	3647	416431.467	4585319.315	38.225	pilar	3916	416347.954	4585259.359	41.748	viga
618	416451.469	4586595.089	29.797	of	1234	416613.360	4586139.235	29.660	muro	3648	416431.156	4585319.643	38.281	viga	3917	416348.569	4585257.789	41.751	viga
619	416451.140	4586594.599	29.293	of	1235	416627.687	4585852.865	25.617	muro	3649	416432.319	4585318.362	38.296	viga	3919	416350.662	4585252.641	41.642	viga
Actuación B - O.D. Ramal 4 P.K. 4+960																			
Actuación B - Marco Ramal 4 P.K. 4+480																			
1250	416552.276	4586322.471	27.246	dest	1819	416626.893	4585852.865	25.617	muro	3651	416435.747	4585307.672	38.553	viga	3963	41632			

4022	416291.095	4585214.448	44.155	estribo	1726	416863.324	4585250.547	28.863	muro	2324	417162.533	4585659.969	25.626	marco	Actuación E – Estructura Ramal 0 sobre Canal				
4023	416289.435	4585217.591	44.151	estribo	1727	416853.417	4585263.105	28.860	muro	2325	417169.927	4585659.528	27.106	marco	2977	417923.989	4582444.738	20.061	muro
4024	416285.823	4585224.183	44.102	estribo	1728	416853.409	4585263.105	29.420	muro	2326	417170.366	4585658.662	28.084	marco	2978	417924.874	4582429.297	27.596	muro
4025	416285.824	4585224.183	44.041	estribo	1729	416853.272	4585263.111	29.417	muro	2327	417170.400	4585658.685	28.254	marco	3018	417889.662	4582414.060	19.536	muro
4026	416283.160	4585229.041	44.039	estribo	2055	416857.603	4585248.507	23.501	muro	2328	417174.489	4585650.488	28.242	marco	3019	417889.608	4582414.032	19.556	muro
4027	416280.489	4585233.882	43.870	estribo	2264	416853.753	4585262.693	23.148		2329	417174.465	4585650.486	28.087	marco	3020	417892.710	4582413.032	21.372	muro
4028	416275.078	4585243.704	43.779	estribo	2265	416853.814	4585262.672	27.055		2330	417174.800	4585649.725	27.239	marco	3093	417907.994	4582389.298	19.734	muro
4029	416274.322	4585243.330	44.732	estribo	2266	416854.833	4585261.341	27.509		2331	417174.796	4585649.613	27.214	marco	3094	417907.845	4582392.131	21.335	muro
Actuación B - O.D. Ramal 0 B-24 P.K. 0+060					2267	416863.340	4585250.586	27.053		2332	417174.847	4585649.607	24.613	marco	3120	417945.406	4582414.840	20.267	muro
					2268	416862.407	4585251.750	27.528		2333	417186.518	4585655.550	24.381	marco	3121	417943.446	4582415.478	21.288	muro
					2269	416863.331	4585250.595	24.100		2334	417182.035	4585665.638	24.664	marco	3223	417925.839	4582428.730	27.727	junta
1001	416259.979	4585242.009	43.239	of-600	2270	416863.423	4585251.669	24.063		2335	417169.957	4585659.544	24.637	marco	3228	417900.770	4582409.402	26.000	junta
1002	416261.513	4585238.284	45.430	sum	2271	416863.420	4585251.705	23.191		2671	417231.841	4585691.687	30.414	muro	3231	417900.551	4582410.482	25.744	muro
1029	416268.836	4585223.333	46.127	sum	2273	416873.763	4585259.303	24.617		2672	417238.038	4585681.372	30.389	muro	3254	417907.465	4582400.511	25.770	muro
1053	416273.910	4585212.409	44.620	of-600	2275	416863.282	4585251.717	23.189	canaleta	2673	417237.910	4585681.709	30.151	muro	3258	417906.400	4582401.073	25.978	junta
Actuación B - O.D. Ramal 0 P.K. 0+560					2279	416857.706	4585257.702	23.190	muro	2674	417239.222	4585681.722	29.633	muro	3261	417931.436	4582420.445	27.691	junta
					2280	416857.320	4585258.178	23.057	muro	2675	417238.079	4585681.064	30.123	ct	3265	417931.723	4582419.253	27.462	muro
					2281	416857.280	4585258.143	24.111	muro	2737	417237.457	4585698.317	25.008	ct	3287	417924.836	4582429.307	27.488	estribo
					2294	416853.749	4585262.681	23.140	muro	2762	417237.684	4585683.372	24.487	rell	3288	417924.867	4582428.850	27.262	estribo
					3269	416946.696	4585247.014	28.674	muro	2763	417235.516	4585687.291	24.886	rell	3289	417924.891	4582428.733	25.692	estribo
					3270	416950.650	4585235.578	28.751	muro	2765	417238.612	4585681.781	24.432	ct	3290	417928.019	4582424.112	25.775	estribo
1039	416719.401	4585441.051	27.650	muro	3306	416950.444	4585248.200	24.637	muro	2766	417243.934	4585682.058	24.906	rell	3291	417931.131	4582419.466	25.686	estribo
1040	416721.287	4585439.673	25.750	muro	3308	416959.190	4585228.414	24.877		2782	417237.304	4585698.415	26.050	muro	3292	417900.641	4582410.529	25.710	estribo
1044	416717.443	4585439.005	27.646	muro	3309	416950.463	4585248.349	25.781	muro	2783	417236.990	4585697.998	26.092	muro	3293	417901.065	4582410.356	25.419	estribo
1045	416661.131	4585496.794	25.855	rell	3310	416951.185	4585236.682	23.035	canaleta	2784	417231.945	4585691.814	30.181	muro	3294	417901.171	4582410.314	23.973	estribo
1046	416660.503	4585494.736	26.313	muro	3311	416955.883	4585232.583	23.190	canaleta	2785	417231.607	4585691.420	30.243	muro	3295	417904.287	4582405.746	24.067	estribo
1047	416662.035	4585493.582	28.192	muro	3312	416955.905	4585232.518	23.531	canaleta	2786	417231.611	4585691.381	25.366	muro	3296	417907.404	4582401.146	23.937	estribo
1049	416663.773	4585495.448	28.194	muro	3313	416951.230	4585236.548	23.939	canaleta	2787	417237.559	4585681.612	24.462	muro					
1050	416661.948	4585498.947	25.880	muro	3314	416952.287	4585236.756	22.902	cam	2788	417237.475	4585681.630	30.248	muro					
3752	416718.903	4585437.181	25.730	muro	3357	416946.320	4585246.820	23.099	muro	2789	417237.938	4585681.651	30.226	muro					
3753	416721.284	4585439.661	25.250	muro	3358	416946.312	4585246.830	26.859	muro	2790	417245.441	4585681.873	27.056	muro					
3754	416719.403	4585441.031	25.280	muro	3359	416946.717	4585245.788	27.355	muro	2791	417244.132	4585681.849	27.627	muro					
3755	416717.458	4585439.003	25.270	muro</td															

2841	418264.765	4582689.108	32.842	lb	2350	418412.408	4583022.350	23.525	muro	9	418087.750	4582544.220	21.994 pilas	86	418057.635	4582532.713	28.068 catenaria
2842	418276.562	4582698.242	32.583	lb	2351	418412.716	4583022.755	23.477	muro	10	418088.500	4582543.643	22.006 pilas	87	418053.069	4582544.510	28.515 catenaria
2843	418290.001	4582708.657	32.313	lb	2352	418412.851	4583022.539	22.023	muro	11	418089.631	4582543.765	22.003 pilas	88	418055.696	4582545.398	30.350 catenaria
2844	418298.870	4582715.483	32.137	lb	2353	418412.934	4583022.157	22.039	muro	12	418085.244	4582547.382	20.493 pilas	89	418045.192	4582541.417	30.335 catenaria
2845	418307.843	4582711.933	31.970	calz	2354	418412.487	4583020.587	23.720	junta	13	418088.318	4582543.668	22.012 pilas	90	418054.653	4582540.328	28.303 catenaria
2846	418307.341	4582712.275	31.940	lb	2355	418431.872	4582996.100	24.389	junta	14	418051.845	4582515.259	29.457 estribos	91	418050.277	4582538.598	28.026 catenaria
2847	418304.565	4582709.380	32.066	junta	2356	418432.093	4582995.066	24.772	tablero	15	418051.258	4582515.974	29.446 estribos	92	418051.943	4582534.340	28.142 catenaria
2848	418291.715	4582699.331	32.350	calz	2357	418431.785	4582994.606	24.756	tablero	16	418061.732	4582522.066	27.079 estribos	93	418050.278	4582538.597	28.025 catenaria
2849	418291.347	4582699.794	32.362	lb	2358	418432.040	4582995.537	24.446	muro	17	418051.298	4582515.540	29.509 estribos	94	418053.254	4582530.964	28.062 catenaria
2850	418283.108	4582693.655	32.527	lb	2359	418432.172	4582995.081	24.487	muro	18	418051.272	4582515.516	29.612 estribos	95	418056.213	4582523.333	27.967 catenaria
2851	418274.886	4582687.904	32.712	lb	2360	418431.674	4582993.824	24.373	muro	19	418048.240	4582519.832	29.430 estribos	96	418059.189	4582515.696	27.956 catenaria
2852	418275.643	4582686.894	32.723	calz	2361	418431.587	4582994.198	24.470	muro	20	418047.722	4582520.531	29.430 estribos	97	418062.162	4582508.037	28.040 catenaria
2853	418264.088	4582677.973	32.883	calz	2362	418431.950	4582995.946	24.424	muro	21	418047.219	4582521.220	29.432 estribos	98	418063.486	4582504.623	28.112 catenaria
2854	418263.125	4582678.879	32.914	lb	2363	418432.385	4582995.261	24.468	muro	22	418047.550	4582520.418	29.520 estribos	99	418073.991	4582511.328	28.796 catenaria
2855	418249.970	4582668.713	33.108	lb	2364	418432.449	4582994.978	24.453	muro	23	418047.514	4582520.405	29.613 estribos	100	418071.147	4582518.192	28.654 catenaria
2856	418250.531	4582667.474	33.089	calz	2365	418431.468	4582994.366	22.990	muro	24	418051.638	4582515.506	29.458 estribos	101	418068.981	4582523.448	28.628 catenaria
Actuación E – Vano1 Puente Arco Ramal 3					2366	418431.366	4582994.734	22.965	muro	25	418051.947	4582515.970	29.674 puente metalico	102	418067.435	4582527.196	28.656 catenaria
Alzado Lateral					2367	418415.401	4583007.562	24.503	tablero	26	418053.579	4582517.224	29.715 puente metalico	103	418065.390	4582532.147	28.753 catenaria
Actuación E – Bóveda Ramal 5 P.K. 5+100					2368	418415.158	4583008.773	24.462	tablero	27	418058.566	4582521.062	29.839 puente metalico	104	418062.805	4582538.417	28.962 catenaria
Actuación E – Estructura Ramal 4 P.K. 4+110					2369	418414.990	4583009.478	24.295	junta	28	418061.619	4582523.410	29.926 puente metalico	105	418060.330	4582544.423	29.266 catenaria
Ampliación Puente Arco Metálico. Catenarias FF.CC. existentes					2370	418415.401	4583007.454	24.311	muro	29	418063.482	4582524.848	29.980 puente metalico	106	418058.977	4582547.697	29.475 catenaria
FF.CC. existentes					2371	418415.531	4583006.964	24.331	muro	30	418066.207	4582526.953	30.064 puente metalico	107	418057.027	4582552.420	29.823 catenaria
1007	418248.421	4582679.130	33.824	barrera	2372	418416.458	4583006.122	24.319	muro	31	418068.146	4582528.452	30.061 puente metalico	108	418051.125	4582566.809	31.254 catenaria
1008	418248.458	4582679.215	32.655	barrera	2373	418416.562	4583005.877	24.198	muro	32	418069.396	4582529.415	29.999 puente metalico	109	418074.150	4582499.063	31.019 catenaria
1009	418275.585	4582700.203	32.168	barrera	2374	418416.421	4583005.838	24.211	muro	33	418070.309	4582530.125	29.925 puente metalico	110	418069.097	4582512.294	29.892 catenaria
1010	418274.474	4582699.311	33.364	barrera	2375	418415.259	4583006.864	24.319	muro	34	418071.616	4582531.156	29.778 puente metalico	111	418066.787	4582518.358	29.510 catenaria
1011	418300.180	4582719.177	32.777	barrera	2376	418416.578	4583006.278	22.799	muro	35	418069.899	4582529.805	29.961 puente metalico	112	418065.553	4582521.596	29.347 catenaria
1012	418301.294	4582720.394	32.183	barrera	2377	418416.488	4583006.640	22.826	muro	36	418071.725	4582531.236	29.764 puente metalico	113	418063.972	4582525.743	29.162 catenaria
1013	418301.573	4582720.148	31.575	barrera	2408	418398.164	4583027.324	20.989		37	418072.579	4582531.901	29.620 puente metalico	114	418063.008	4582528.297	29.079 catenaria
1027	418299.037	4582715.596	31.588	viga	2412	418418.289	4583017.658	23.933	cota	38	418074.353	4582533.280	29.267 puente metalico	115	418062.121	4582530.605	29.010 catenaria
1028	418285.314	4582704.973	31.844	viga	2413	418418.311	4583017.688	23.645	cota	39	418076.604	4582535.035	28.680 puente metalico	116	418060.951	4582533.686	28.946 catenaria
1029	418269.353	4582692.631	32.189	viga	2414	418418.320	4583017.701	23.401	cota	40	418078.689	4582536.686	27.995 puente metalico	117	418059.100	4582538.541	28.878 catenaria
1030	418252.450	4582679.543	32.525	viga	2415	418418.312	4583017.690	22.199									

178	418175.757	4582620.055	22.901 pilas	3006	418124.418	4582499.253	35.090 BR
179	418175.904	4582619.805	22.898 pilas	3030	418282.960	4582719.003	20.949 BR
180	418177.759	4582617.361	22.895 pilas	3031	418277.749	4582676.259	21.781 BR
181	418178.788	4582615.968	22.888 pilas	3032	418057.437	4582520.193	29.811 INTERSECC
182	418179.327	4582615.275	22.897 pilas	3033	418054.545	4582517.968	29.739 INTERSECC
183	418179.658	4582614.874	22.907 pilas	3034	418061.327	4582523.186	29.918 INTERSECC
184	418180.006	4582614.642	22.916 pilas	3035	418068.907	4582529.038	30.024 INTERSECC
185	418180.687	4582614.478	22.905 pilas	3036	418067.214	4582527.732	30.063 INTERSECC
192	418176.612	4582620.212	23.050 pilas	3037	418072.374	4582531.741	29.655 INTERSECC
193	418176.724	4582620.267	23.218 pilas	3038	418076.033	4582534.592	28.829 INTERSECC
194	418179.376	4582615.291	22.910 pilas	3039	418062.267	4582500.263	28.640 catenaria
195	418180.331	4582615.711	23.215 pilas	3040	418056.974	4582503.187	29.674 arco metalico
196	418221.665	4582656.856	22.776 pilas	3041	418058.606	4582504.441	29.715 arco metalico
197	418221.761	4582655.256	22.764 pilas	3042	418059.572	4582505.185	29.739 arco metalico
198	418221.446	4582656.249	22.769 pilas	3043	418062.464	4582507.410	29.811 arco metalico
199	418222.992	4582653.686	22.768 pilas	3044	418063.593	4582508.279	29.839 arco metalico
200	418181.633	4582616.565	22.910 pilas	3045	418066.354	4582510.403	29.918 arco metalico
201	418225.402	4582650.531	22.769 pilas	3046	418066.646	4582510.627	29.926 arco metalico
202	418226.147	4582650.039	22.776 pilas	3047	418068.509	4582512.065	29.980 arco metalico
203	418226.720	4582650.036	22.784 pilas	3048	418069.151	4582512.562	30.000 arco metalico
210	418222.453	4582655.711	22.891 pilas	3049	418071.234	4582514.170	30.064 arco metalico
211	418226.012	4582651.123	22.883 pilas	3050	418072.241	4582514.949	30.063 arco metalico
212	418226.167	4582651.216	23.072 pilas	3051	418073.173	4582515.669	30.061 arco metalico
300	418181.628	4582616.563	22.911 pilas	3052	418073.934	4582516.255	30.024 arco metalico
301	418181.625	4582616.561	22.913 pilas	3053	418074.423	4582516.632	29.999 arco metalico
302	418181.128	4582616.221	23.049 pilas	3054	418074.927	4582517.022	29.961 arco metalico
303	418180.885	4582616.102	23.223 pilas	3055	418075.336	4582517.342	29.925 arco metalico
304	418180.217	4582618.511	22.905 pilas	3056	418076.643	4582518.373	29.778 arco metalico
305	418178.935	4582620.238	22.904 pilas	3057	418076.752	4582518.453	29.764 arco metalico
306	418178.030	4582621.407	22.915 pilas	3058	418077.401	4582518.958	29.655 arco metalico
307	418177.252	4582621.913	22.913 pilas	3059	418077.606	4582519.118	29.620 arco metalico
308	418177.445	4582620.799	23.053 pilas	3060	418079.380	4582520.497	29.267 arco metalico
309	418177.279	4582620.658	23.227 pilas	3061	418079.459	4582520.565	29.248 arco metalico
310	418227.256	4582650.355	22.819 pilas	3062	418081.060	4582521.809	28.829 arco metalico
311	418226.554	4582650.569	22.814 pilas	3063	418081.631	4582522.252	28.680 arco metalico
312	418227.557	4582651.600	22.808 pilas	3064	418082.171	4582522.654	28.518 arco metalico
313	418227.354	4582652.328	22.787 pilas	3065	418083.716	4582523.903	27.995 arco metalico
314	418226.845	4582651.709	22.901 pilas	3066	418085.608	4582525.334	27.252 arco metalico
315	418226.722	4582651.607	23.075 pilas	3067	418086.279	4582525.812	26.966 arco metalico
316	418226.068	4582654.002	22.788 pilas	3068	418088.248	4582527.324	26.036 arco metalico
317	418225.523	4582654.781	22.778 pilas	3069	418090.232	4582528.853	24.989 arco metalico
318	418224.972	4582655.512	22.776 pilas	3070	418091.952	4582530.181	23.979 arco metalico
319	418223.813	4582656.967	22.780 pilas	3071	418093.633	4582531.447	22.912 arco metalico
320	418223.234	4582657.384	22.788 pilas	3072	418093.886	4582531.646	22.374 arco metalico
321	418223.288	4582656.294	22.901 pilas				
322	418223.147	4582656.243	23.072 pilas				
323	418267.566	4582692.111	22.189 pilas				
324	418267.761	4582690.753	22.181 pilas				
325	418269.569	4582688.412	22.192 pilas				
326	418270.803	4582686.846	22.192 pilas				
327	418271.376	4582686.130	22.195 pilas				
328	418272.035	4582685.680	22.202 pilas				
329	418273.115	4582685.880	22.212 pilas				
330	418273.291	4582687.666	22.207 pilas				
331	418273.043	4582688.003	22.202 pilas				
332	418272.595	4582688.557	22.202 pilas				
333	418272.246	4582688.993	22.199 pilas				
334	418268.717	4582690.972	22.293 pilas				
335	418268.638	4582690.929	22.476 pilas				
336	418272.490	4582686.466	22.204 pilas				
337	418272.459	4582686.525	22.296 pilas				
338	418272.480	4582686.542	22.469 pilas				
339	418297.877	4582715.005	29.895 estribos				
340	418298.304	4582714.457	29.897 estribos				
341	418298.734	4582713.878	29.894 estribos				
342	418298.501	4582714.536	29.962 estribos				
343	418298.556	4582714.576	30.098 estribos				
344	418301.428	4582710.422	29.878 estribos				
345	418301.796	4582709.961	29.882 estribos				
346	418302.287	4582709.295	29.894 estribos				
347	418301.942	4582710.071	29.963 estribos				
348	418301.978	4582710.121	30.094 estribos				
3001	418087.995	4582535.082	20.075 BR				
3002	418107.634	4582540.778	20.463 BR				
3003	418113.636	4582581.666	19.365 BR				
3004	418126.072	4582595.442	19.482 BR				
3005	418121.980	4582559.810	19.420 BR				

3.12.4.- Puntos tomados de servicios existentes

P.K: autovías		1030	416701.714	4586094.115	28.112	clh	1108	417919.801	4582516.807	18.713	cun	1189	417115.106	4585600.762	31.023	tat			
7106	418363.208	4583180.179	24.881	b23-pk9	1031	416677.433	4586156.998	27.963	clh	1109	417920.378	4582516.994	19.081	cun	1190	417028.697	4585815.396	25.794	pozsan
7107	416558.458	4586447.805	34.177	a2-pk598	1032	416677.481	4586158.314	28.504	pozo campsa	1110	417915.288	4582433.738	20.221	pozsan	1191	417062.812	4585878.471	27.565	gas nat
7111	417146.000	4585893.811	36.109	ap2-pk12	1033	416664.472	4586169.304	28.725	pozsan	1111	417930.317	4582410.593	19.883	pozsan	1192	417053.367	4585888.938	27.615	enagas
					1034	416708.561	4586067.600	28.032	pozsan	1112	417949.602	4582395.476	19.900	pozsan	1193	417039.092	4585929.619	28.140	enagas
					1035	416650.441	4586240.484	27.262	clh	1113	417946.782	4582387.455	20.530	pozsan	1194	417026.387	4585979.298	28.662	gas nat
					1036	416634.110	4586272.073	27.320	pozsan	1114	417887.238	4582436.761	21.083	pozsan	1195	417011.629	4586007.650	28.809	enagas
					1037	416627.753	4586313.493	26.977	clh	1115	417892.626	4582416.455	20.365	cun	1196	416998.030	4586046.754	28.914	enagas
					1038	416619.398	4586319.074	28.568	pozsan	1116	417889.757	4582418.318	18.844	cun	1197	416998.106	4586047.419	28.918	enagas
					1039	416821.641	4585971.552	26.772	pozsan	1117	417888.926	4582418.876	18.172	cun	1198	416999.607	4586062.599	29.842	enagas
					1040	416833.732	4585918.307	26.904	pozsan	1118	417887.469	4582420.064	18.126	cun	1199	416997.257	4586062.159	29.281	gas nat
					1041	416858.393	4585817.550	26.624	arqueton	1119	417886.375	4582420.591	18.908	cun	1200	416982.601	4586045.545	25.792	arqueton
					1042	416857.470	4585820.542	26.665	arqueton	1120	418019.063	4582282.192	19.769	pozsan	1201	416978.926	4586044.900	25.956	arqueton
					1043	416854.668	4585819.655	26.785	arqueton	1121	418022.990	4582285.430	19.115	arqueton	1202	416983.078	4586042.584	25.763	arqueton
					1044	416855.562	4585816.818	26.772	arqueton	1122	418021.636	4582284.538	18.944	arqueton	1203	416979.363	4586041.941	26.029	arqueton
					1045	416904.427	4585689.473	26.337	pozsan	1123	418020.380	4582286.396	18.858	arqueton	1204	416970.168	4586022.547	25.711	arqueton
					1046	416901.769	4585665.701	26.543	clh	1124	418021.758	4582287.300	19.148	arqueton	1205	416970.643	4586020.926	25.619	arqueton
					1047	416918.783	4585646.819	26.407	pozsan	1125	417031.260	4584973.999	24.659	of 1710 400	1206	416969.029	4586020.451	25.548	arqueton
					1048	416938.857	4585584.776	26.407	pozsan	1126	416997.824	4585035.376	25.374	of 1670 400	1207	416968.546	4586022.097	25.623	arqueton
					1049	416931.783	4585576.966	26.350	clh	1127	417323.098	4585320.985	30.040		1208	416932.079	4586118.096	25.706	arqueton
					1050	416941.979	4585553.985	25.887	muro clh	1128	417321.421	4585325.496	30.169		1209	416933.054	4586115.554	25.712	arqueton
					1051	416936.289	4585552.046	26.014	muro clh	1129	417170.196	4585642.185	24.736	gas nat	1210	416930.535	4586114.546	25.707	arqueton
					1052	416940.320	4585540.288	26.041	muro clh	1130	417170.736	4585632.528	25.215	gas nat	1211	416929.621	4586117.033	25.733	arqueton
					1053	416945.990	4585542.261	25.857	muro clh	1131	417171.418	4585641.620	25.647	transf	1212	416973.203	4586022.916	25.818	enagas
					1054	416957.644	4585533.197	25.794	pozsan	1132	417173.618	4585642.723	25.628	transf	1213	416985.329	4585917.412	25.135	pozsan
					1055	416971.845	4585491.829	25.600	pozsan	1133	417169.730	4585644.766	25.634	transf	1214	416983.943	4585916.957	25.117	pozsal
					1056	416971.400	4585467.465	25.405	clh	1134	417171.927	4585645.880	25.599	transf	1215	417508.473	4584566.394	26.094	enagas
					1058	416985.676	4585451.040	25.237	pozsan	1135	417171.672	4585644.447	27.941	cota	1216	417505.367	4585463.993	25.778	enagas
					1059	416990.286	4585411.792	25.269	pozsan	1136	417162.556	4585659.375	25.045	gas nat	1217	417508.544	4584568.749	24.987	enagas
					1060	416996.123	4585409.710	25.295	arqueton	1137	417142.401	4585659.662	25.299	arqueton	1218	417515.572	4584572.058	25.814	gas nat
					1061	416997.109	4585406.582	25.228	arqueton	1138	417143.430	4585657.687	25.322	arqueton	1219	417512.091	4584563.426	23.632	enagas
					1062	417000.013	4585407.634	25.329	arqueton	1139	417141.432	4585656.642	25.324	arqueton	1220	417515.365	4584557.241	23.099	enagas
					1063	416999.001	4585410.645	25.276	arqueton	1140	417140.393	4585658.647	25.302	arqueton	1221	417527.792	4584574.702	23.369	gas nat
					1064	416998.998	4585410.652	25.271	arqueton	1141	417142.268	4585674.010	25.351	gas nat	1222	417546.367	4584526.724	23.177	enagas
					1065	417001.119	4585409.273	25.365	pozsan	1142	417121.661	4585715.532	25.632	gas nat	1223	417559.152	4584536.349	23.208	enagas
					1066	417051.699	4585263.486	25.482	pozsan	1143	417097.351	4585769.664	25.878	gas nat	1224	417528.656	4584526.853	23.511	arqueton

1269	417968.556	4582259.065	25.903	tat	1352	416957.350	4585586.585	24.397	transf	692	416969.576	4585561.429	24.185	PH	799	418616.403	4582985.943	20.415	ARQ
1270	417976.118	4582265.151	25.859	tat	1353	416958.453	4585581.644	24.379	transf	693	416969.421	4585561.921	24.255	PH	800	418617.133	4582986.652	20.449	ARQ
1271	417982.213	4582257.759	25.872	tat	1354	416954.739	4585585.721	25.237	transf	694	416969.285	4585561.336	24.237	PH	801	418616.589	4582987.229	20.412	ARQ
1272	416319.364	4585328.654	30.581	gas nat	1355	416957.102	4585586.239	24.414	transf	695	416970.183	4585567.672	23.841	AUXILIAR1	802	418615.820	4582986.560	20.440	ARQ
1273	416342.293	4585315.584	30.266	gas nat	1356	416958.079	4585581.845	24.376	transf	696	416968.290	4585572.944	23.851	AUXILIAR2	803	418616.376	4582986.650	20.714	COTA
1275	416370.462	4585311.552	29.812	pozsan	1357	416965.824	4585566.871	29.891	edif	697	416968.076	4585573.575	23.818	AUXILIAR3	804	418510.527	4583045.942	20.552	TM
1276	416386.751	4585314.410	29.705	pozsan	1358	416965.064	4585568.152	29.882	edif	698	416967.392	4585575.577	23.870	AUXILIAR4	805	418509.877	4583044.993	20.419	TM
1277	416401.735	4585317.795	29.474	pozsan	1359	416963.694	4585567.878	29.862	edif	699	417892.976	4582427.724	19.811	OF	806	418508.934	4583045.631	20.665	TM
1278	416403.328	4585315.095	29.485	pozsan	1360	416965.489	4585567.794	26.604	edif	700	417893.027	4582427.452	19.667	OF	807	418509.556	4583046.595	20.599	TM
1279	416406.519	4585322.337	29.332	pozsan	1361	416964.034	4585571.186	26.608	edif	701	417893.076	4582427.495	20.408	OF	808	417819.105	4584277.285	23.973	POZO
1280	416398.801	4585322.339	29.618	gas nat	1362	416961.844	4585570.277	26.619	edif	702	417893.048	4582427.674	20.426	OF	809	417819.583	4584276.014	23.901	POZO
1281	416397.874	4585321.896	29.561	bincen	1363	416962.907	4585571.924	26.417	edif	703	417895.015	4582428.096	20.069	OF	810	417817.464	4584276.648	24.963	POZO
1282	416398.640	4585321.156	29.554	arqap	1364	416962.336	4585574.411	26.302	edif	704	417894.965	4582428.041	20.436	OF	811	417817.911	4584275.417	24.499	POZO
1283	416426.178	4585334.260	29.275	gas nat	1366	416960.579	4585574.022	25.616	edif	705	417894.967	4582427.883	20.440	OF	812	417818.356	4584276.157	25.243	COTA
1284	416426.915	4585334.565	29.237	arqgas	1367	416965.184	4585570.004	23.803	rell	706	417897.771	4582424.343	20.010	OF	888	417556.109	4584984.620	25.739	TM
1285	416426.780	4585335.035	29.253	arqgas	42055	415334.725	4585718.334	268.588	of1670 400	707	417897.570	4582424.354	20.271	OF	889	417554.755	4584982.444	25.752	TM
1286	416427.039	4585335.253	29.213	arqgas	42067	418490.839	4589321.702	341.988		708	417897.792	4582424.317	20.014	OF	938	417552.599	4584983.678	25.737	TM
1287	416449.813	4585285.571	29.022	gas nat	2710	416796.613	4586052.882	26.981	clh	709	417897.027	4582422.464	19.918	OF	939	417090.176	4585667.563	28.278	TM
1288	416454.012	4585289.734	28.938	pozsan	2711	416798.678	4586041.451	27.107	clh	710	417896.988	4582422.513	20.262	OF	940	417091.179	4585667.907	28.232	TM
1289	416497.513	4585310.542	28.279	pozsan	2712	416802.838	4586011.039	26.961	clh	711	417896.832	4582422.581	20.275	OF	941	417090.795	4585668.867	28.278	TM
1290	416513.377	4585320.352	27.962	pozsan	2713	416704.094	4585308.449	26.754	pozsan	712	417896.825	4582422.544	19.737	OF	942	417089.897	4585668.535	28.331	TM
1291	416543.788	4585330.231	27.767	pozsan	2714	416734.244	4585287.583	26.645	pozsan	713	417897.261	4582424.269	19.447	OF	943	417449.577	4584967.055	28.800	RG
1292	416549.320	4585333.839	27.646	pozsan	2715	416766.663	4585265.477	26.111	pozsan	714	417896.929	4582424.709	19.229	OF	944	417572.500	4584662.710	30.857	FAROLA
1293	416592.488	4585335.446	27.489	pozsan	2716	416831.102	4585258.380	26.104	pozsan	715	417895.376	4582422.886	18.916	OF	945	417558.672	4584682.765	30.064	FAROLA
1294	416957.852	4585552.925	26.143		2717	416677.098	4585313.098	27.459	pozsan	716	417889.910	4582418.439	18.880	OF	946	417550.082	4584721.425	27.674	FAROLA
1298	416947.320	4585470.603	40.775	post cat	2718	416656.287	4585318.235	26.776	pozsan	717	417889.545	4582419.528	18.171	OF	947	417538.101	4584758.708	26.819	FAROLA
1299	416942.637	4585441.338	40.443	post cat	2719	416655.413	4585328.890	27.207	pozsan	718	417888.571	4582420.787	18.149	OF	948	417525.675	4584795.539	27.355	FAROLA
1300	416932.297	4585437.558	40.451	post cat	2720	416592.489	4585335.402	27.526	pozsan	719	417887.670	4582421.586	18.939	OF	949	418483.865	4582959.741	20.832	TM
1301	416937.621	4585467.210	39.844	post cat	2721	417472.190	4584670.430	23.628	enagas	720	417895.457	4582426.858	19.294	OF	950	418482.740	4582960.141	20.844	TM
1302	416913.938	4585489.527	40.796	post cat	2722	417474.925	4584678.162	23.834	enagas	721	417894.945	4582427.643	19.631	OF	951	418483.503	4582958.713	20.765	BASE
1303	416924.699	4585493.298	40.828	post cat	2723	417476.896	4584685.230	23.885	gas nat	722	417882.313	4582417.285	18.904	OF	952	418482.381	4582959.000	20.916	TM
1304	416919.712	4585517.897	40.1																

1851	4584729.453	417667.354	52.470	1f	1940	4584830.000	417630.431	44.460	1	3132	417532.556	4584730.695	24.440	torrelec	3218	417537.212	4584983.446	44.360	CAT
1852	4584730.676	417666.820	52.780	1i	1941	4584838.181	417627.451	44.920	1	3133	417530.556	4584730.695	24.440	torrelec	3220	417434.686	4584969.407	50.889	POSTE
1853	4584739.272	417663.067	52.940	1	1942	4584845.157	417624.902	45.460	1	3134	417976.422	4582266.321	18.747	torrelec	3222	417446.190	4584972.076	44.077	CAT
1854	4584754.056	417657.700	50.300	1	1943	4584642.849	417704.937	41.390	1	3135	417976.248	4582265.807	19.286	torrelec	3223	417457.714	4584973.592	42.738	CAT
1855	4584766.871	417653.385	50.500	1f	1944	4584638.645	417700.379	40.670	1	3136	417967.168	4582258.965	18.740	torrelec	3224	417457.715	4584973.579	42.727	CAT
1856	4584759.157	417645.924	39.720	1i	1945	4584631.905	417693.074	39.710	1	3137	417967.551	4582258.781	19.266	torrelec	3225	417474.072	4584975.684	41.508	CAT
1857	4584758.705	417645.382	39.710	1	1946	4584628.202	417689.061	38.550	1f	3138	417974.318	4582250.098	18.828	torrelec	3226	417490.411	4584977.701	41.105	CAT
1858	4584750.356	417636.358	39.370	1						3139	417974.392	4582250.602	19.287	torrelec	3227	417506.984	4584979.722	41.502	CAT
1859	4584747.725	417634.025	39.250	1f						3140	417983.300	4582258.058	18.731	torrelec	3228	417608.115	4584890.058	51.459	CAT
1861	4584888.169	417609.166	51.610	1i						3141	417982.920	4582257.857	19.300	torrelec	3229	417591.023	4584920.733	46.045	CAT
1862	4584985.600	417554.057	47.190	2i						3148	417976.191	4582258.617	69.304	POSTE	3230	417591.072	4584920.698	46.042	CAT
1863	4584984.757	417545.653	45.720	2	1	417713.190	4584649.921	25.738	torrelec	3149	418055.105	4582309.983	48.447	CAT	3231	417580.884	4584939.006	44.656	CAT
1864	4584983.835	417537.941	44.530	2	3	417714.964	4584650.301	25.913	torrelec	3150	418043.179	4582299.803	50.500	CAT	3232	417560.447	4584975.708	46.030	CAT
1865	4584983.224	417533.231	43.900	2	5	417713.150	4584648.401	25.732	torreelec	3151	418021.635	4582281.503	54.642	CAT	3233	417553.831	4584983.786	49.733	POSTE
1866	4584982.594	417527.899	43.260	2	10	417543.587	4584662.802	24.077	torrelec	3152	418005.588	4582267.918	58.086	CAT	3235	417547.121	4584661.905	51.532	CAT
1867	4584981.795	417520.934	42.530	2	11	417543.896	4584662.876	24.459	torrelec	3153	417993.828	4582258.423	60.770	CAT	3236	417532.259	4584730.807	46.145	POSTE
1868	4584980.472	417510.300	41.770	2	12	417545.520	4584660.909	24.660	torrelec	3154	417988.173	4582253.088	62.204	CAT	3239	417455.039	4584601.230	36.098	POSTE
1869	4584978.824	417496.273	41.240	2	13	417547.432	4584662.111	24.878	torrelec	3155	417985.904	4582251.143	62.800	CAT	3240	417455.040	4584601.229	36.099	POSTE
1870	4584975.863	417472.404	41.710	2	20	417455.913	4584601.284	22.892	torrelec	3156	418059.516	4582313.820	47.769	CAT	3241	417530.711	4584730.291	44.568	CAT
1871	4584973.458	417455.184	43.090	2	21	417455.215	4584600.875	22.897	torrelec	3157	418061.813	4582315.644	47.448	CAT	3242	417532.405	4584721.503	44.849	CAT
1872	4584973.200	417452.703	43.350	2	22	417455.845	4584599.892	22.798	torrelec	3158	417967.968	4582267.650	63.550	CAT	3243	417533.720	4584714.773	45.278	CAT
1873	4584970.985	417435.932	45.680	2f	23	417456.457	4584600.341	22.811	torrelec	3160	417971.933	4582270.739	62.498	CAT	3244	417536.521	4584700.555	46.788	CAT
1876	4584881.228	417611.735	50.280	1	25	417549.386	4584452.501	23.218	torrelec	3161	417978.619	4582276.439	60.849	CAT	3245	417553.407	4584668.094	49.732	CAT
1877	4584866.776	417617.028	47.900	1	26	417548.181	4584452.513	23.280	torrelec	3162	417989.231	4582285.460	58.369	CAT	3246	417538.877	4584688.715	48.694	CAT
1879	4585739.358	417073.453	42.060	1i	27	417547.906	4584451.308	23.220	torrelec	3163	418004.654	4582298.562	55.023	CAT	3248	417545.969	4584659.578	54.420	CAT
1880	4585750.987	417070.486	41.250	1	28	417549.518	4584451.042	23.160	torrelec	3164	418014.833	4582307.216	52.983	CAT	3249	417530.789	4584649.679	49.759	CAT
1881	4585762.240	417067.603	40.820	1	30	417669.456	4584730.858	25.338	torrelec	3165	418020.711	4582312.204	51.863	CAT	3250	417513.743	4584638.465	45.241	CAT
1882	4585772.651	417064.884	40.760	1f	31	417668.947	4584732.046	25.363	torrelec	3166	417119.570	4586101.276	78.700	PT	3251	417498.698	4584628.360	41.860	CAT
1883	4585776.296	417060.339	40.750	1i	32	417667.524	4584731.585	25.365	torrelec	3167	417085.990	4586045.377	55.353	CAT	3252	417456.658	4584600.211	35.469	CAT
1884	4585759.518	417064.672	40.800	1	33	417668.206	4584730.142	25.351	torrelec	3168	417082.913	4586039.845	54.340	CAT	3253	417489.057	4584621.318	39.835	CAT
1885	4585744.776	417068.444	41.540	1	34	417646.223	4584758.734	24.737	torrelec	3169	417067.972	4586013.163	50.527	CAT	3254	417473.299	4584610.582	37.315	CAT
1886	4585738.527	417070.052	42.060	1f	35	417647.150	4584758.053	24.609	torrelec	3170	417061.188	4586000.971	49.390	CAT	3255	417462.819	4584603		

3314 417687.155 4584625.956	39.014 CAT	3415 416933.930 4585117.149	35.802 CAT	3504 416855.940 4585240.994	25.082 EMSA	3651 417163.516 4585621.305	25.360 torrelec
3316 417678.791 4584618.050	38.349 CAT	3416 416940.122 4585107.301	34.643 CAT	3505 416855.935 4585241.719	25.178 EMSA	3652 417165.516 4585621.305	25.360 torrelec
3317 417711.485 4584649.043	47.522 POSTE	3417 416946.058 4585097.852	33.800 CAT	3506 416856.673 4585241.135	25.208 EMSA	3653 417165.516 4585619.305	25.360 torrelec
3318 417652.352 4584593.074	38.137 CAT	3418 416952.099 4585088.265	33.219 CAT	3507 416856.150 4585240.430	25.172 EMSA	3654 417163.516 4585619.305	25.360 torrelec
3319 417629.813 4584571.866	40.259 CAT	3419 416957.130 4585080.247	32.942 CAT	3508 416855.409 4585241.099	25.132 EMSA	3655 417320.428 4585506.206	28.367 torrelec
3320 417620.337 4584562.879	41.783 CAT	3420 416961.792 4585072.814	32.852 CAT	3509 416853.927 4585253.499	23.439 ELECT	3656 417321.495 4585508.386	28.232 torrelec
3321 417613.851 4584556.803	43.040 CAT	3421 416965.326 4585067.186	32.890 CAT	3510 416850.670 4585252.677	23.557 ELECT	3657 417319.189 4585509.771	28.375 torrelec
3322 417603.893 4584547.324	45.325 CAT	3422 416866.716 4585222.319	37.878 CAT	3511 416845.435 4585250.113	23.865 ELECT	3658 417318.138 4585507.526	28.387 torrelec
3323 417600.743 4584544.341	46.127 CAT	3423 416964.975 4585065.808	34.321	3512 416840.582 4585247.413	24.132 ELECT	3659 417318.734 4585507.476	29.055 torrelec
3324 417599.714 4584544.034	46.080 CAT	3428 416966.386 4585065.594	32.879 CAT	3513 416836.925 4585245.500	24.373 ELECT	3660 417319.404 4585508.908	29.073 torrelec
3325 417587.986 4584563.577	40.946 CAT	3429 416969.727 4585060.414	32.670 CAT	3514 416865.220 4585222.652	25.374 torrelec	3661 417320.273 4585506.738	29.055 torrelec
3326 417593.255 4584554.832	42.972 CAT	3430 416973.190 4585055.045	32.547 CAT	3517 416925.678 4585128.625	26.043 torrelec	3662 417320.960 4585508.073	28.944 torrelec
3327 417585.732 4584567.337	40.227 CAT	3431 416977.841 4585047.831	32.526 CAT	3518 416965.311 4585066.128	25.938 phorm	3663 417522.098 4584981.584	42.931 CAT
3329 417599.364 4584542.685	46.019 CAT	3432 416981.856 4585041.603	32.642 CAT	3520 417010.212 4584995.858	25.654 phorm	3664 417570.666 4584957.357	45.343 CAT
3330 417596.267 4584537.359	44.529 CAT	3433 416986.323 4585034.679	32.914 CAT	3523 417022.070 4584913.252	26.616 torrelec	3665 417599.593 4584905.378	48.751 CAT
3331 417590.486 4584527.427	42.033 CAT	3434 416991.629 4585026.469	33.428 CAT	3524 417023.855 4584914.106	26.876 torrelec	3666 417587.732 4584701.413	42.901 CAT
3334 417586.053 4584568.693	40.796 POSTE	3435 416999.422 4585014.378	34.570 CAT	3525 417022.958 4584916.004	27.178 torrelec	3667 417665.571 4584605.562	38.243 CAT
3335 417587.046 4584569.035	40.655 POSTE	3436 417010.601 4584997.073	37.005 CAT	3526 417021.315 4584915.078	26.915 torrelec	3668 417641.083 4584582.470	39.198 CAT
3337 417600.935 4584541.565	51.665 POSTE	3437 416875.459 4585208.647	36.590 CAT	3576 416990.464 4585490.253	25.629 phorm	3669 418124.760 4582499.387	35.090 POSTE
3338 417600.936 4584541.567	51.666 POSTE	3438 417010.605 4584997.069	37.005 CAT	3579 416975.981 4585537.967	24.548 phorm	3670 418297.696 4582556.886	32.440 POSTE
3341 417548.793 4584452.039	36.608 POSTE	3441 417009.828 4584995.573	37.870	3582 416969.424 4585561.548	24.054	3671 418331.518 4582559.277	57.150 POSTE
3342 417547.469 4584452.598	35.287 CAT	3442 417011.356 4584995.109	37.137 CAT	3585 416969.615 4585560.828	24.137 arma		
3343 417555.180 4584465.953	35.000 CAT	3443 417012.741 4584985.999	37.323 CAT	3586 416969.240 4585560.674	24.167 arma		
3344 417666.237 4584731.131	52.651 CAT	3444 417014.403 4584975.107	37.758 CAT	3587 416969.552 4585559.765	24.030 arma		
3345 417561.449 4584477.229	35.268 CAT	3445 417016.003 4584964.622	38.388 CAT	3588 416969.876 4585559.888	24.066 arma	2 417749.907 4584498.786	23.617 pozo
3346 417567.094 4584486.914	35.844 CAT	3446 417019.285 4584943.180	40.338 CAT	3594 416588.721 4585328.453	27.670 posteHOR	3 417720.767 4584574.678	24.970 pozo
3347 417599.514 4584542.637	46.116 CAT	3447 417020.952 4584932.331	41.662 CAT	3595 416615.224 4585321.287	27.493 posteM	6 417704.962 4584640.852	26.177 pozo
3348 417667.113 4584729.278	52.445 CAT	3448 416881.802 4585198.716	35.927 CAT	3596 416643.139 4585314.470	27.234 posteM	7 417925.012 4584106.331	23.000 pozo
3349 417673.750 4584717.549	48.829 CAT	3449 417022.425 4584922.747	43.015 CAT	3597 416671.289 4585307.044	27.575 posteM	8 417925.744 4584106.528	22.748 pozo
3350 417679.302 4584707.759	46.386 CAT	3450 417023.451 4584916.125	44.055 CAT	3598 416685.992 4585274.186	27.656 posteM	9 417925.190 4584105.328	22.696 pozo
3351 417319.744 4585507.844	48.120 POSTE	3451 417022.487 4584914.806	47.800	3599 416700.727 4585234.726	26.947 posteM	10 417923.753 4584106.194	22.800 pozo
3352 417235.770 4585452.902	45.745	3452 416887.420 4585189.905	35.519 CAT	3600 416721.683 4585228.572	26.644 posteM	11 417924.089 4584107.142	22.791 pozo
3358 417320.288 4585506.888	43.142 CAT	3453 416896.734 4585172.556	36.110 CAT	3601 416744.525 4585213.527	26.217 posteM	13 417941.309 4584093.717	22.012 gas
3359 417282.701 4585482.856	42.812 CAT	3454 416903.401 4585162.096	36.434 CAT	3602 416769.389 4585202.022	25.730 posteM	14 417910.616 4584054.810	22.743 arq
3360 417272.504 4585476.343	43.130 CAT	3455 416911.406 4585149.567	37.212 CAT	3603 416677.005 4585300.710	27.602 arq	15 417911.206 4584053.437	22.748 arq
3361 417261.512 4585469.315	43.669 CAT	3456 416918.923 4585140.568	36.567 CAT	3604 416676.375 4585300.561	27.613 arq	16 417910.204 4584053.048	22.869 arq
3362 417252.463 4585463.539	44.268 CAT	3458 418492.376 4585299.167	34.686 CAT	3605 416676.503 4585299.823	27.615 arq	17 417909.600 4584054.067	22.963 arq
3363 417243.105 4585457.558	45.030 CAT	3461 418498.726 4583014.977	35.425 CAT	3606 416677.224 4585299.934	27.594 arq	18 417877.601 4584126.406	23.092 arq
3364 417239.037 4585454.958	45.408 CAT	3462 418504.062 4583031.521	36.921 CAT	3607 416678.645 4585300.608	27.579 arq	19 417878.723 4584126.848	23.150 arq
3365 417235.811 4585452.900	45.728 CAT	3463 418506.327 4583038.469	37.782 CAT	3608 416678.446 4585301.211	27.580 arq	20 417878.402 4584128.005	23.055 arq
3366 417235.809 4585452.896	45.729 CAT	3464 418509.555 4583045.286	40.139 POSTE	3609 416679.108 4585301.490	27.584 arq	21 417877.218 4584127.457	23.057 arq
3367 417234.514 4585453.879</td							

3.13.- COLECCIÓN DE NEGATIVOS ORIGINALES

SE ENTREGARÁN A LA DEMARCACIÓN DE CARRETERAS DEL ESTADO EN CATALUÑA (BARCELONA).

3.14.- FOTOGRAMAS. Puntos de apoyo pinchados

SE ENTREGARÁN A LA DEMARCACIÓN DE CARRETERAS DEL ESTADO EN CATALUÑA (BARCELONA).

(Se adjunta fotocopia. Original en color)

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MEJORA DE LA ACCESIBILIDAD ENTRE LAS
CITAS. DEL ENTORNO DEL BAIX LLOBREGAT

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CTRS. DEL ENTORNO DEL BAIX LLOBREGAT

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MEJORA DE LA ACCESIBILIDAD ENTRE LAS
CTRAS. DEL ENTORNO DEL BAIX LLOBREGAT

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MEJORA DE LA ACCESIBILIDAD ENTRE LAS
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CTRAS. DEL ENTORNO DEL BAIX LLOBREGAT

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CTRS. DEL ENTORNO DEL BAIX LLOBREGAT

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CTRS. DEL ENTORNO DEL BAIX LLOBREGAT

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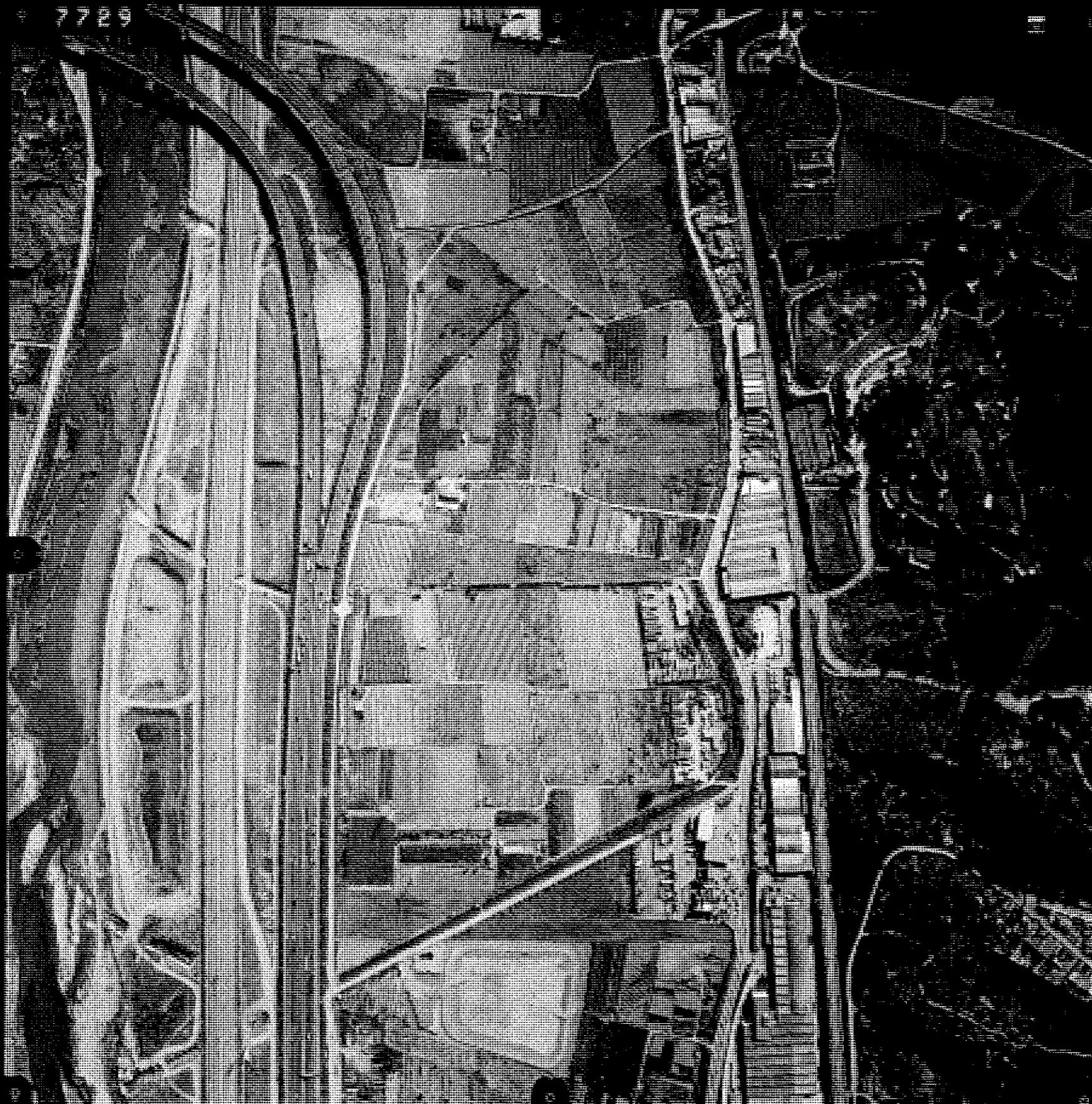
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3.15.- LIBRERÍA DE CÓDIGOS UTILIZADA

CODIGOS

LIMITES

CODIGOS T-ELEM NOMBRE

"010101" linea "LINEA DE SOLAPE"
 "010102" linea "EJE GASODUCTO-OLEODUCTO EXISTENTE"
 "010103" linea "EJE GASODUCTO-OLEODUCTO"
 "010104" linea "ELEMENTO OCULTO"
 "010123" linea "LIMITE PROVINCIAL"
 "010223" linea "LIMITE DE TERMINO MUNICIPAL"
 "010225" linea "LIMITE DE PARROQUIA"
 "010226" linea "TERMINO SIN DESLINDE"
 "010325" linea "LIMITE PARQUE NATURAL"
 "010326" linea "LIMITE PARQUE NACIONAL"
 "010328" linea "LIMITE DE DISTRITO"
 "010329" linea "LIMITE DE BARRIO"
 "010423" linea "LIMITE DE NACION"
 "010424" linea "LIMITE AUTONOMICO"

VERTICES Y PUNTOS DE APOYO

CODIGOS T-ELEM NOMBRE

"000101" punto "VERTICE GEODESICO 1er ORDEN"
 "000102" punto "VERTICE GEODESICO DE ORDEN INFERIOR"
 "000103" punto "VERTICE TOPOGRAFICO"
 "000104" punto "PUNTO DE APOYO"
 "000105" punto "N", "MOJON DE TRES TERMINOS"
 "000106" punto "h", "MOJON DE DOS TERMINOS"
 "000107" punto "ESTACION DE POLIGONAL"
 "000301" punto "MOJON DE MONTE"
 "010201" punto "BASES DE REPLANTEO"
 "010203" punto "SEÑAL DE NIVELACION TRIGONOMETRICA"
 "000108" punto "PUNTO DE TAQUIMETRICO"
 "000109" punto "HITO DE PROVINCIA"
 "000110" punto "PUNTO PRINCIPAL"

ALTIMETRIA

CODIGOS T-ELEM NOMBRE

"020123" linea "CURVA DE NIVEL FINA"
 "020124" linea "CURVA DE NIVEL DIRECTORA"
 "020125" linea "CURVA AUXILIAR (INTERPOLACION)"
 "020126" linea "CURVA DE DEPRESION FINA"
 "020127" linea "CURVA DE DEPRESION DIRECTORA"
 "020128" linea "CURVA FINA OCULTA"
 "020129" linea "CURVA DIRECTORA OCULTA"
 "020223" linea "ESCARPE"
 "020224" linea "ACANTILADO"
 "020225" linea "ZANJA"
 "020246" linea "ESCARPADO"
 "020247" linea "DESMONTE"
 "020248" linea "TERRAPLEN"
 "020249" linea "ROQUEDO"
 "020301" linea "CUEVA NATURAL"
 "020302" linea "CUEVA ARTIFICIAL"

"020303" linea "CUEVA HABITADA"
 "020401" punto+texto "COTAS"
 "020423" linea "PIE DE TALUD"
 "020424" linea "CABEZA DE TALUD"

HIDROGRAFIA

CODIGOS T-ELEM NOMBRE

"030120" linea "CUNETA DE TIERRA"
 "030121" linea "CUNETA DE OBRA"
 "030123" linea "CAUCE DE RIO PERMANENTE"
 "030124" linea "CAUCE DE RIO ESTACIONAL"
 "030125" linea "CAUCE DE RIO-MARGEN DERECHO"
 "030126" linea "CAUCE DE RIO-MARGEN IZQUIERDO"
 "030127" linea "EJE DE CAUCE FLUVIAL (VAGUADAS)"
 "030128" linea "EMBALSE"
 "030130" linea "PERIMETRO ISLA FLUVIAL"
 "030131" linea "LIMITE DE LAMINA DE AGUA EN EMBALSE"
 "030132" linea "LINEA DE COSTA"
 "030222" linea "RAMBLA"
 "030246" linea "ZONA ENCHARCABLE"
 "030247" linea "ZONA PANTANOSA"
 "030248" linea "LAGO"
 "030249" linea "LAGUNA-BALSA"
 "030250" linea "SALINA"
 "030301" linea "SIFONES"
 "030302" linea "RESPIRADEROS"
 "030303" punto "SIFON"
 "030304" punto "RESPIRADERO"
 "030322" linea "BORDE ACEQUIA"
 "030323" linea "ACEQUIA"
 "030324" linea "ACUEDUCTO"
 "030325" linea "CANAL"
 "030326" linea "CONDUCCION SUPERFICIAL"
 "030327" linea "CONDUCCION SUBTERRANEA"
 "030328" linea "ACEQUIA DE OBRA"
 "030329" linea "EJE DE CANAL"
 "030346" linea "DEPOSITO DE AGUA ELEVADO"
 "030347" linea "DEPOSITO DE AGUA NO ELEVADO"
 "030348" linea "ESTACION DEPURADORA"
 "030349" punto "TOMA DE AGUA - HIDRANTE"
 "030350" linea "ESTACION DE BOMBEO"
 "030351" linea "DEPOSITO DE CONSTRUCCION"
 "030352" linea "DEPOSITO METALICO"
 "030423" linea "ESCLUSA"
 "030446" linea "PRESA-DIQUE"
 "030447" linea "PANTALAN DEPORTIVO"
 "030448" linea "EMBARCADERO"
 "030449" linea "MOLINO DE AGUA"
 "030450" linea "PISCINA"
 "030451" linea "ESTANQUE"
 "030452" linea "BORDE ESTANQUE O PISCINA"
 "030523" linea "MANANTIAL"
 "030524" linea "FUENTE"
 "030525" linea "POZO"
 "030526" linea "ABREVADERO"

"030527" punto "VALVULA"

VEGETACION Y USOS DEL SUELO
CODIGOS T-ELEM NOMBRE

"040000" linea "MASA DE ARBOLES CON SIMBOLOGIA"
 "040123" linea "LINDE DE POLIGONO CATASTRAL"
 "040124" linea "LINDE DE PARCELA"
 "040125" linea "LINDE DE SUBPARCELA"
 "040126" linea "TAPIAS"
 "040127" linea "ALAMBRADA"
 "040128" linea "TAPIA CON VERJA-ALAMBRADA"
 "040129" linea "VALLA PUBLICITARIA"
 "040130" linea "VALLA DE MADERA"
 "040131" linea "PILARES"
 "040142" linea "PUERTA DE ENTRADA"
 "040255" linea "INVERNADEROS"
 "040256" linea "MASA DE ARBOLES SIN SIMBOLOGIA"
 "040257" linea "CORTAFUEGOS"
 "040258" linea "JARDIN ¢ ZONA VERDE PUBLICA"
 "040259" linea "SETO"
 "040260" linea "ARBOL AISLADO,NO SIMBOL."
 "040261" punto "PALMERA"
 "040262" punto "ARBOL AISLADO"
 "040263" punto "ARBOL CON ALCORQUE"
 "040264" punto "ALCORQUE PUNTUAL"
 "040265" linea "ALCORQUE LINEAL"
 "040301" linea "MINA EN EXPLORACION"
 "040302" linea "MINA ABANDONADA"
 "040303" linea "CANTERA EN EXPLORACION"
 "040304" linea "CANTERA ABANDONADA"
 "040445" linea "ESCOMBRERA"
 "040446" linea "VERTEDERO"
 "040447" linea "EXCAVACION"
 "040523" linea "MURO DE CONTENCION"
 "040524" linea "BANCALES"
 "040525" linea "TORRES DE VIGILANCIA"
 "040526" linea "MURO CON ANCHO"
 "040527" linea "MURETE DE PIEDRA"

EDIFICACIONES /CONSTRUCCION
CODIGOS T-ELEM NOMBRE

"050145" linea "CONSTRUCCION EN GENERAL"
 "050146" linea "CASA-EDIFICIO PRIVADO"
 "050147" linea "EDIFICIO PUBLICO"
 "050148" linea "EDIFICIO SINGULAR"
 "050149" linea "EDIFICIO HISTORICO-ARTISTICO"
 "050150" linea "EDIFICIO EN CONSTRUCCION"
 "050151" linea "EDIFICIO EN RUINAS"
 "050152" linea "EDIFICIO AISLADO"
 "050153" linea "CASILLA DE USO AGRICOLA - CHAMIZO"
 "050154" linea "ENCERRADERO"
 "050155" linea "INSTALACION PROVISIONAL"
 "050156" linea "INSTALACIONES DEPORTIVAS"
 "050157" linea "IGLESIA"

"050158" linea "TECHADO"
 "050159" linea "CEMENTERIO"
 "050160" linea "MUELLE-PUERTO"
 "050161" linea "MOLINO"
 "050162" linea "FARO"
 "050163" linea "LIMATESAS"
 "050164" linea "LIMAHOYA"
 "050165" linea "DIVISION DE ALTURAS"
 "050166" linea "PUERTA DE FINCA"
 "050167" linea "CUMBRERA"
 "050168" linea "PORCHE"
 "050169" linea "GRADAS DESCUBIERTAS"
 "050246" linea "NAVES INDUSTRIALES"
 "050247" linea "SILOS"
 "050301" linea "VISTA PANORAMICA"
 "050323" linea "CALZADA ROMANA"
 "050324" linea "MEDIANERIAS"
 "050325" linea "VIE-AGUAS"
 "050326" linea "BORDILLO"
 "050327" linea "OBRAS"
 "050328" linea "ESCALERAS"
 "050329" linea "BASCULA"
 "050330" linea "PLATAFORMA"
 "050331" linea "VOLADIZO"
 "050332" linea "MARQUESINA"
 "050333" linea "ESTRUCTURA METALICA"
 "050334" linea "CHIMENEA"
 "050335" linea "RAMPAS"
 "050336" linea "GRUA"
 "050337" linea "OBRA DE FABRICA"
 "050350" linea "RESTOS ARQUEOLOGICOS"
 "050351" linea "AREA DE OCIO"
 "050352" linea "MIRADOR-TERRAZA"
 "050355" linea "LINEA DE PATIO"
 "050356" linea "LINEA DE MANZANA"
 "050357" linea "CLARABOYA - TRAGALUZ"
 "050358" linea "LINEA DE JUEGOS"
 "050360" linea "MONUMENTO LINEAL"

REDES DE COMUNICACION
CODIGOS T-ELEM NOMBRE

"060101" linea "VADO"
 "060102" punto "HITO KM. DE CARRETERA"
 "060103" punto "TELEFONO AUTOPISTA"
 "060104" punto "PIVOTE DE CARRETERA"
 "060118" linea "MARCA VIAL CONTINUA"
 "060119" linea "MARCA VIAL DISCONTINUA"
 "060120" linea "EJE DE CARRETERA CONTINUO"
 "060121" linea "EJE DE CARRETERA DISCONTINUO"
 "060122" linea "PASO DISCONTINUO"
 "060123" linea "AUTOPISTA DE PEAJE"
 "060124" linea "AUTOPISTA ESTATAL"
 "060125" linea "AUTOPISTA EN CONSTRUCCION"
 "060126" linea "CARRETERA ESTATAL"
 "060127" linea "CARRETERA EN CONSTRUCCION"

"060128"	linea	"AUTOVIA ESTATAL"	"060523"	linea	"CARRETERA SIN IDENTIFICAR"
"060129"	linea	"AUTOVIA EN CONSTRUCCION"	"060524"	linea	"CARRETERA PARTICULAR"
"060130"	linea	"PUESTO DE PRIMEROS AUXILIOS"	"060525"	linea	"CAMINO SIN IDENTIFICAR"
"060131"	linea	"LIMITE DE PAVIMENTO"	"060534"	linea	"CINTA TRANSPORTADORA"
"060132"	linea	"CARRETERA DE 2º ORDEN"	"060624"	linea	"BARANDILLA"
"060133"	linea	"QUITAMIEDOS METALICO"	"060701"	linea	"JUNTA DE DILATACION"
"061133"	linea	"QUITAMIEDOS DE OBRA"	"060702"	linea	"PASO DE AGUA"
"060134"	linea	"CARRETERA LOCAL"	"060601"	linea	"PISTAS AEROPUERTO"
"060135"	linea	"CARRETERA LOCAL EN CONSTRUCCION	"060602"	linea	"HELIPUERTO"
"060136"	linea	"VIADUCTO"			
"060137"	linea	"TUNEL"			
"060139"	linea	"PISTA"			
"060140"	linea	"CAMINO CARRETERO"			
"060138"	linea	"CAMINO ASFALTADO"	"070101"	punto	T.M "TORRE METALICA"
"061140"	linea	"CAMINO POR EL EJE"	"070102"	linea	"TRANSFORMADOR EN POSTE ¢ PARED"
"060141"	linea	"CAMINO DE HERRADURA"	"070120"	linea	"LINEA DE BAJA TENSION"
"060142"	linea	"SENDA"	"070123"	linea	"LINEA DE ALTA TENSION"
"060143"	linea	"VIA PECUARIA"	"070124"	linea	"LINEA DE MEDIA TENSION"
"060144"	linea	"CARRETERA ABANDONADA"	"070125"	linea	"CENTRAL ELECTRICA"
"060145"	linea	"RODADA"	"070126"	linea	"SUBESTACION TRANSFORMADORA"
"060146"	linea	"APARCAMIENTO"	"070127"	linea	"TRANSFORMADOR EN CASETA"
"060147"	linea	"ESTACION DE SERVICIO"	"070146"	linea	"TORRE METALICA LINEAL"
"060148"	linea	"ESTACION DE PEAJE"	"070147"	linea	"ZAPATA TORRE METALICA"
"060149"	linea	"AREA DE SERVICIOS"	"070201"	punto	P,"POSTE TELEFONICO"
"060150"	linea	"PUESTO DE PRIMEROS AUXILIOS"	"070223"	linea	"LINEA TELEFONICA"
"060151"	linea	"PUENTES Y TAJEAS"	"070224"	linea	"LINEA TELEGRAFICA"
"060152"	linea	"ARCEN"	"070323"	linea	"OLEODUCTO SUPERFICIAL"
"060153"	linea	"ACERA"	"070324"	linea	"GASODUCTO SUPERFICIAL"
"060154"	linea	"PUENTES Y TAJEAS EN CONSTRUC."	"070325"	linea	"OLEODUCTO SUBTERRANEO"
"060155"	linea	"PUENTE METALICO"	"070326"	linea	"GASODUCTO SUBTERRANEO"
"060164"	linea	"ALCANTARILLA LINEAL"	"070327"	linea	"TUBERIA"
"060200"	linea	"PASO SUBTERRANEO"	"070329"	linea	"CONDUCCION SUB. SIN IDENTIF."
"060201"	linea	"PASO A NIVEL"	"070330"	linea	"CONDUCCION Aerea SIN IDENTIF."
"060202"	linea	"PASO SUPERIOR"			
"060203"	linea	"PASO INFERIOR"			
"060204"	punto	"h","HITO FF.CC."			
"060222"	linea	"TOPE DE FERROCARRIL"			
"060223"	linea	"F.F.C.C. ANCHO N. VIA DOBLE"	"080101"	punto	P,"POSTE SIN IDENTIFICAR"
"060224"	linea	"F.F.C.C. ANCHO N. VIA UNICA"	"080102"	punto	P,"POSTE DE INFORMACION"
"060225"	linea	"F.F.C.C. VIA ESTRECHA"	"080103"	punto	P Luz,"PUNTO DE LUZ"
"060226"	linea	"F.F.C.C. ELECTRIFICADO"	"080104"	punto	F,"FAROLA"
"060227"	linea	"F.F.C.C. ABANDONADO"	"080105"	punto	Rg,"REGISTRO SIN IDENTIFICAR"
"060228"	linea	"VIADUCTO DE F.F.C.C."	"080106"	punto	Rg A,"REGISTRO DE AGUA"
"060229"	linea	"TUNEL DE F.F.C.C."	"080107"	punto	Rg G,"REGISTRO DE GAS"
"060249"	linea	"ANDEN"	"080108"	punto	Rg E,"REGISTRO ELECTRICO"
"060250"	linea	"ESTACION DE F.F.C.C."	"080109"	punto	Rg T,"REGISTRO TELEFONICO"
"060251"	linea	"F.F.C.C. EN CONST."	"080110"	punto	Riego,"BOCA DE RIEGO"
"060252"	linea	"RAILES"	"080111"	punto	"BOCA DE INCENDIOS"
"060253"	punto	"CATENARIA CIRCULAR"	"080112"	punto	"ALCANTARILLA"
"060301"	punto	"SOPORTE DE TELEFERICO"	"080113"	punto	St,"SEÑAL DE TRAFICO"
"060324"	linea	"TELEFERICO-FUNICULAR"	"080114"	punto	Sf,"SEMAFORO"
"060325"	linea	"TELESILLA"	"080115"	punto	"FUENTE PUBLICA"
"060326"	linea	"TELESQUI"	"080116"	linea	"SUMIDERO LINEAL"
"060401"	punto	"ANTENA EMISORA DE RADIO"	"080117"	punto	"BUZON"
"060446"	punto	"REPETIDOR DE COMUNICACIONES"	"080118"	punto	"PAPELERA"
"060447"	linea	"ESTACION DE COMUNICACIONES"	"080119"	punto	"SURTIDOR DE GASOLINA"

"080120" linea "BANCO (DE PARQUE)"
 "080122" punto H.TLF., "MOJON DE CABLE COAXIAL"
 "080123" linea "REGISTRO LINEAL"
 "080124" punto "FAROLA DE FACHADA"
 "080125" punto "FAROLA MULTIPLE"
 "080126" punto "REGISTRO DE SEMAFOROS"
 "080127" punto Sum, "SUMIDERO CIRCULAR"
 "080128" punto C.T., "CABINA DE TELEFONOS"
 "080129" punto Arq., "ARQUETA DE SANEAMIENTO"
 "080130" punto "ESTATUA PUNTUAL"
 "080131" punto Rg, "POZO DE REGISTRO"
 "080132" punto Placa Gas, "PLACA DE GAS"
 "080133" linea "BANCO DE PARQUE"
 "080135" linea "REGISTRO DE ARMARIO"
 "080136" punto "KIOSCO PUNTUAL"
 "080137" linea "KIOSCO LINEAL"
 "080138" punto "BOCA DE METRO"
 "080139" linea "BOCA DE METRO LINEA"
 "080140" linea "CABINA TFNO. LINEAL"
 "080145" linea "SEÑAL DE TRÁFICO LINEAL"

CODIGOS DE USOS DEL SUELO

CODIGOS T-ELEM NOMBRE

"090100" punto PJ, "PUNTOS DEL JARDIN (PATRON)"
 "090102" punto TC, "Terreno de Cultivo"
 "090103" punto Tc/Arb, "TC Y ARBOLES"
 "090104" punto Fr, "Frutales"
 "090105" punto O, "Olivar"
 "090106" punto V, "Viñedo"
 "090107" punto S, "Secano"
 "090108" punto Er, "Erial"
 "090109" punto J, "Jardin"
 "090110" punto H, "Huerta"
 "090111" punto Mb, "MONTE BAJO"
 "090112" punto Ma, "Monte Alto"
 "090113" punto A, "Arrozal"
 "090114" punto Nr, "Citricos"
 "090115" punto Pd/Dh, "Prados y Dehesas"
 "090116" punto R, "Regadio"
 "090117" punto Zp, "Zona Pantanosa"
 "090118" punto Pinar, "PINAR-Coniferas"
 "090119" punto R.F, "Re poblacion Forestal"
 "090120" punto Er/Arb, "ERIAL-ARBOLES"
 "090121" punto Mb/Arb, "MONTE BAJO-ARBOLES"
 "090122" punto J, "JARDIN"
 "090123" punto O.V., "OLIVAR-VIÑEDO"
 "090124" punto Ep, "Erial-Pastos"
 "090125" punto S, "Solar"

ROTULACION // TEXTOS

CODIGOS T-ELEM NOMBRE

"100101" texto "VERTICE GEODESICO 1er ORDEN"
 "100102" texto "VERTICE GEODESICO DE OR INF."
 "100103" texto "VERTICE TOPOGRAFICO"

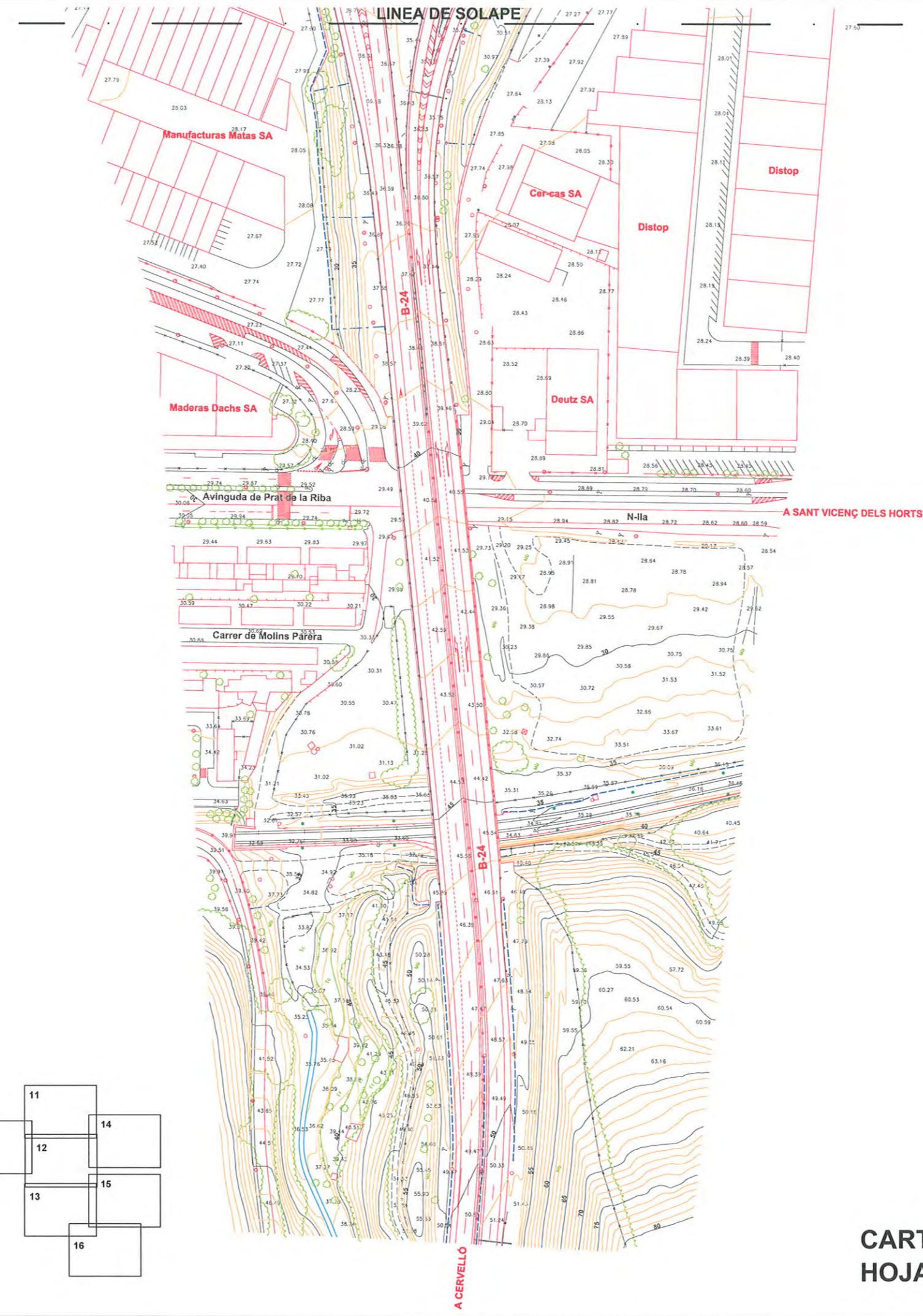
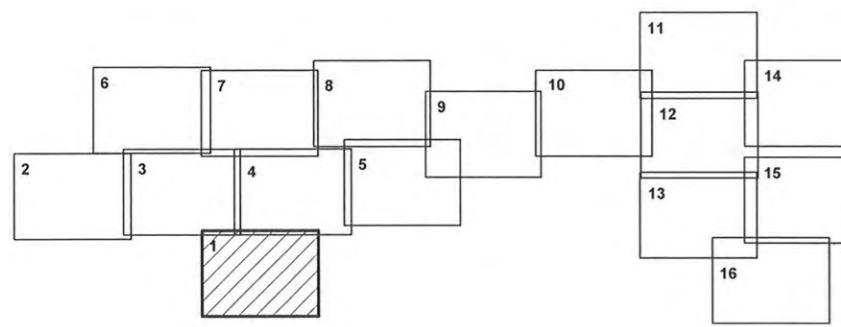
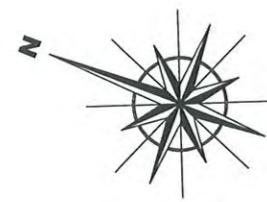
"100104" texto P.A., "PUNTO DE APOYO"
 "100105" texto N, "MOJON DE TRES TERMINOS"
 "100106" texto h, "MOJON DE DOS TERMINOS"
 "100108" texto "ROTULO DE PUNTO DE TAQUIMETRICO"
 "100301" texto "Mojon de monte"
 "110123" texto "LIMITE PROVINCIAL"
 "110201" texto "BASES DE REPLANTEO"
 "110203" texto "SEÑAL DE NIVELACION"
 "110223" texto "LIMITE DE TERMINO MUNICIPAL"
 "110225" texto "LIMITE DE PARROQUIA"
 "110226" texto "TERMINO SIN DESLINDE"
 "110325" texto "LIMITE PARQUE NATURAL"
 "110326" texto "LIMITE PARQUE NACIONAL"
 "110328" texto "LIMITE DE DISTRITO"
 "110329" texto "LIMITE DE BARRIO"
 "110423" texto "LIMITE DE NACION"
 "110424" texto "LIMITE AUTONOMICO"
 "100000" texto ROTULO GRUESO"
 "HOJAS" linea "MARCO DE HOJAS"
 "TEXTO" texto "TEXTOS ROTULACION"
 "120124" texto "ROTULO CURVA DIRECTORA"
 "120127" texto "ROTULO CURVA DEPRESION DIRECTORA"
 "130123" texto "ROTULOS RIOS"
 "130127" texto "ROTULO DE ARROYO"
 "130128" texto "ROTULOS EMBALSES"
 "130525" texto "ROTULOS POZOS"
 "150146" texto "ROTULOS CASA, TRANSFOR."
 "150147" texto "ROTULOS EDIFICIOS PUBLICOS"
 "150158" texto "ROTULOS CAPILLA, HUMILLADERO"
 "150159" texto "ROTULO CEMENTERIO"
 "150246" texto "ROTULOS INDUSTRIAS"
 "150247" texto "NUMERO DE POLICIA"
 "150248" texto "VIVIENDAS, LOCALES, ALTURAS"
 "150351" texto "ROTULO AREA OCIO"
 "150354" texto "P, "ROTULO DE PATIO"
 "150447" texto "ROTULO PUEBLO"
 "150450" texto "ROTULO URBANIZACION"
 "150556" texto "ROTULO DE DETALLE"
 "160102" texto "ROTULO HITO KILOMETRICO"
 "160124" texto "ROTULO AUTOPISTA"
 "160126" texto "ROTULOS CARRETERAS"
 "160140" texto "ROTULO CAMINO"
 "160154" texto "ROTULO CALLE"
 "160204" texto h, "ROTULO HITO F.F.C.C."
 "160223" texto "ROTULO F.F.C.C."
 "160401" texto "ROTULO ANTENA"
 "170101" texto T.M, "ROTULO TORRE METALICA"
 "170123" texto "ROTULO TENDIDOS"
 "170125" texto "ROTULO ESTACION ELECTRICA"
 "170201" texto P, "ROTULO POSTE TELEFONICO"
 "180101" texto P, "ROTULO POSTE SIN IDENTIFICAR"
 "180102" texto PI, "ROTULO POSTE DE INFORMACION"
 "180103" texto PL, "ROTULO PUNTO DE LUZ"
 "180104" texto F, "ROTULO FAROLA"
 "180105" texto Rg, "ROTULO REG SIN IDENTIFICAR"
 "180106" texto Rg A, "ROTULO REG DE AGUA"

"180107" texto Rg G,"ROTULO REG DE GAS"
"180108" texto Rg E,"ROTULO REG ELECTRICO"
"180109" texto Rg T,"ROTULO REG TELEFONICO"
"180110" texto Riego,"ROTULO BOCA DE RIEGO"
"180111" texto Inc,"ROTULO BOCA DE INCENDIOS"
"180112" texto Alc,"ROTULO ALCANTARILLA"
"180113" texto St,"ROTULO SEÑAL DE TRAFICO"
"180114" texto Sf,"ROTULO SEMAFORO"
"180117" texto "ROTULO BUZON"
"180118" texto "ROTULO PAPELERA"
"180122" texto H.TLF.,"ROTULO MOJON CABLE COAXIAL
"180127" texto Sum,"ROTULO SUMIDERO"
"180129" texto Arq.,"ROTULO ARQ.DE SANEAMIENTO"
"190102" texto TC,"ROTULO Terreno de Cultivo"
"190103" texto TC/ARB,"ROTULO TC-ARBOLES"
"190104" texto Fr,"ROTULO Frutales"
"190105" texto O,"ROTULO Olivar"
"190106" texto V,"ROTULO Viñedo"
"190107" texto S,"ROTULO Secano"
"190108" texto Er,"ROTULO Erial"
"190109" texto J,"ROTULO Jardin"
"190110" texto H,"ROTULO Huerta"
"190111" texto Mb,"ROTULO Monte BAJO"
"190112" texto Ma,"ROTULO Monte Alto"
"190113" texto A,"ROTULO Arrozal"
"190114" texto Nr,"ROTULO Citricos"
"190115" texto Pd,"ROTULO Prados y Dehesas"
"190116" texto R,"ROTULO Regadio"
"190117" texto Zp,"ROTULO Zona Pantanosa"
"190118" texto Pinar,"ROTULO PINAR-Coniferas"
"190119" texto R.F,"ROTULO Repoblacion Forestal"
"190120" texto Er/Arb,"ROTULO ERIAL-ARBOLES"
"190121" texto Mb/Arb,"ROTULO MB-ARBOLES"
"190122" texto J,"ROTULO JARDIN"
"190123" texto O./V.,"ROTULO OLIVAR-VIÑEDO"
"190124" texto Ep "Erial Pastos"
"190125" texto S,"ROTULO DE SOLAR"
"191724" texto "TEXTOS BARRANCO"
"192151" texto "ROTULACION PARAJES"
"192152" texto "ROTULACION SIERRAS, COMARCAS,..."
"192153" texto "TEXTO ROTULACION PROVINCIA"
"192154" texto "ROTULACION CERROS, COLLADOS, PLAYAS,..."
"COTAS" texto "TEXTO DE COTAS EN PA"
"PUNTOS" texto "TEXTO DE PUNTOS EN PA"
"ERROR" punto "AVISO DE FOTOGRAMETRIA"
"ERROR1" punto "ERRORES"
"ERROR2" punto "ERRORES"
"ERROR3" punto "ERRORES"

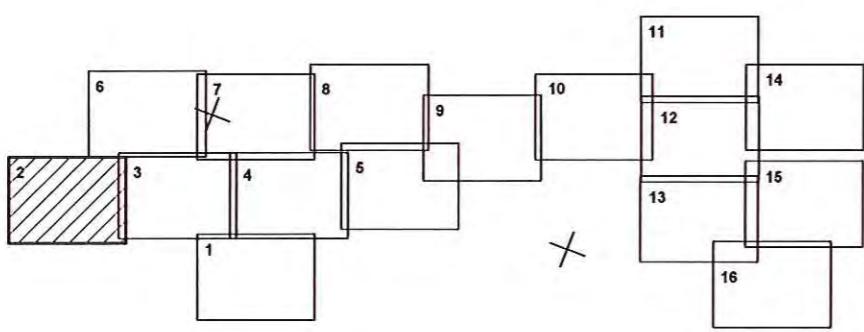
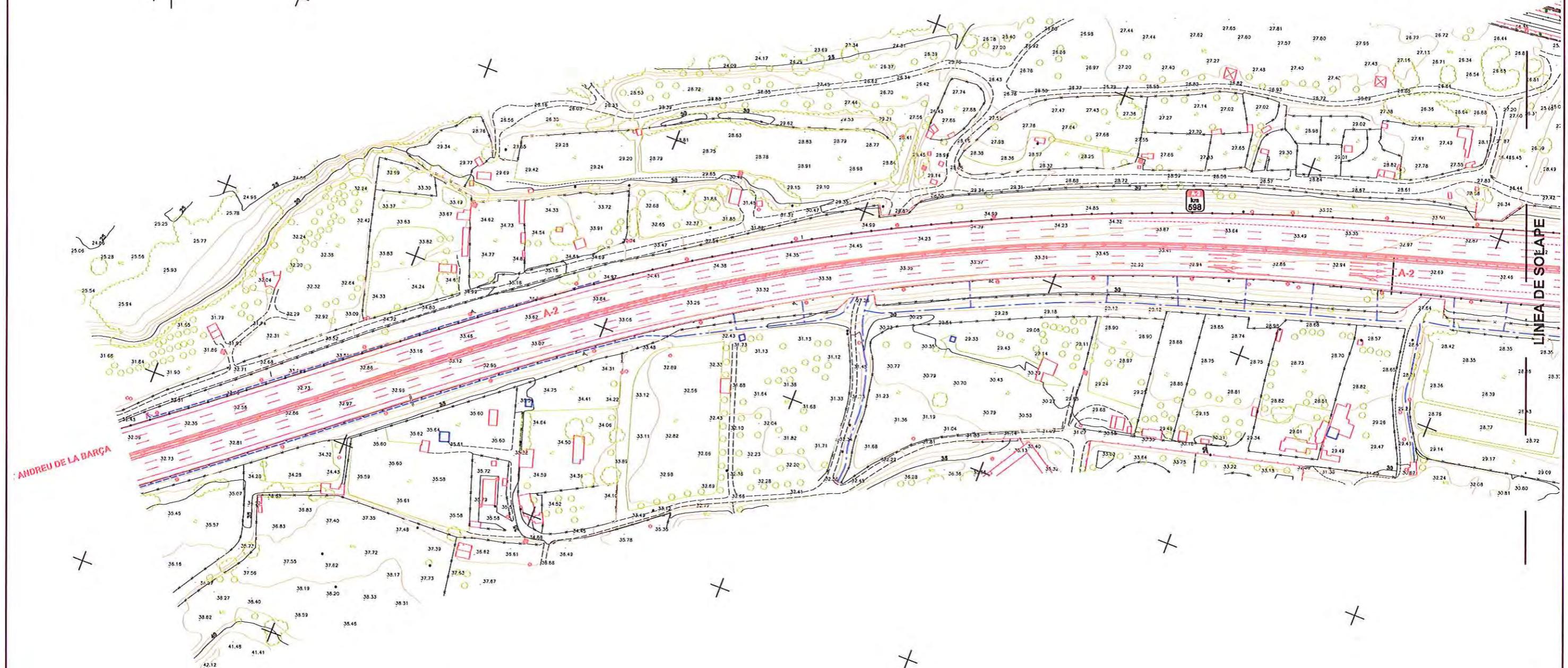
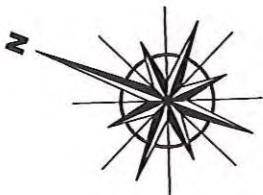
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(CD entregado aparte)**

3.17.- CARTOGRAFÍA

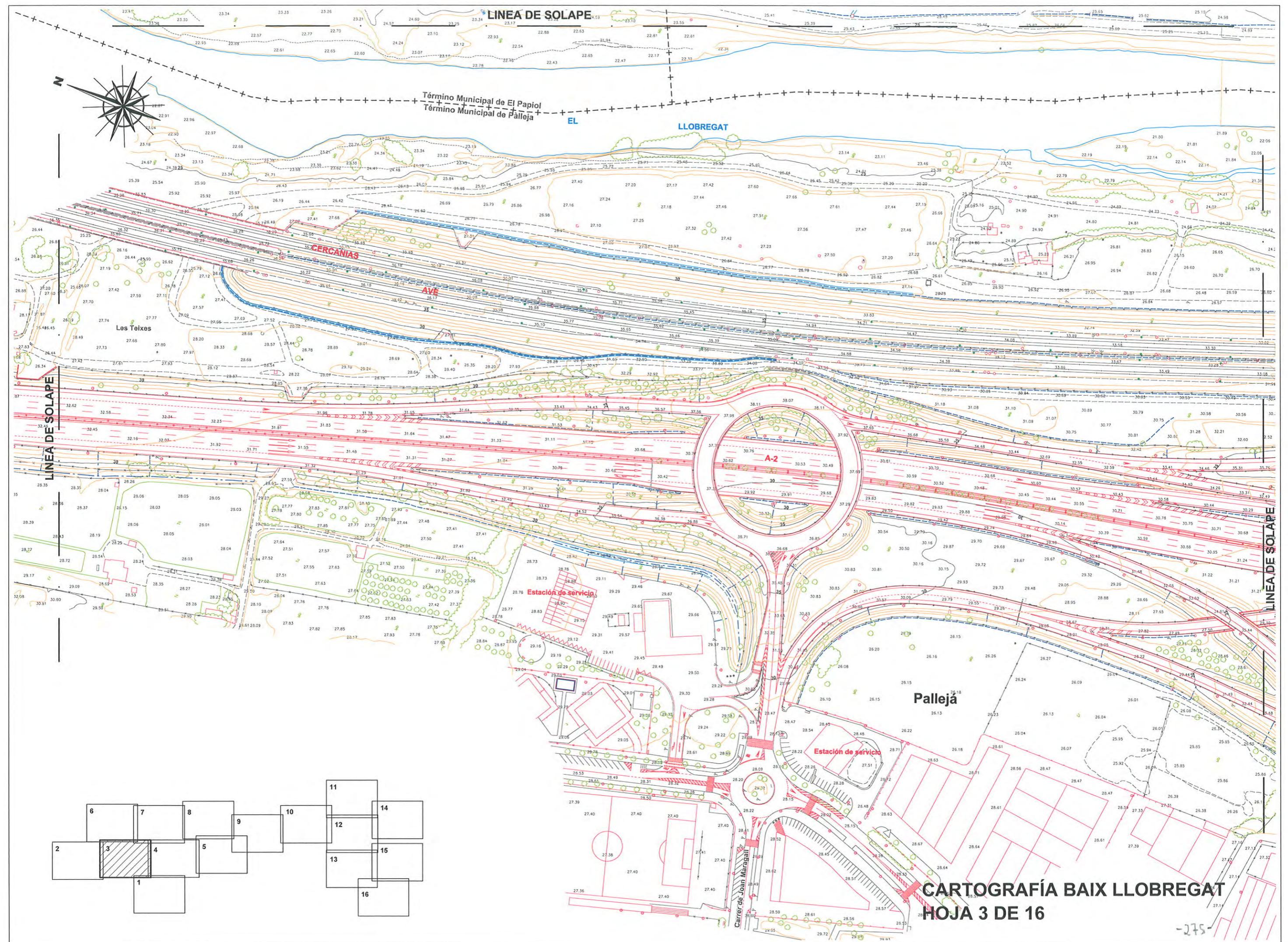
3.17.1.-Minutas procedentes de la restitución

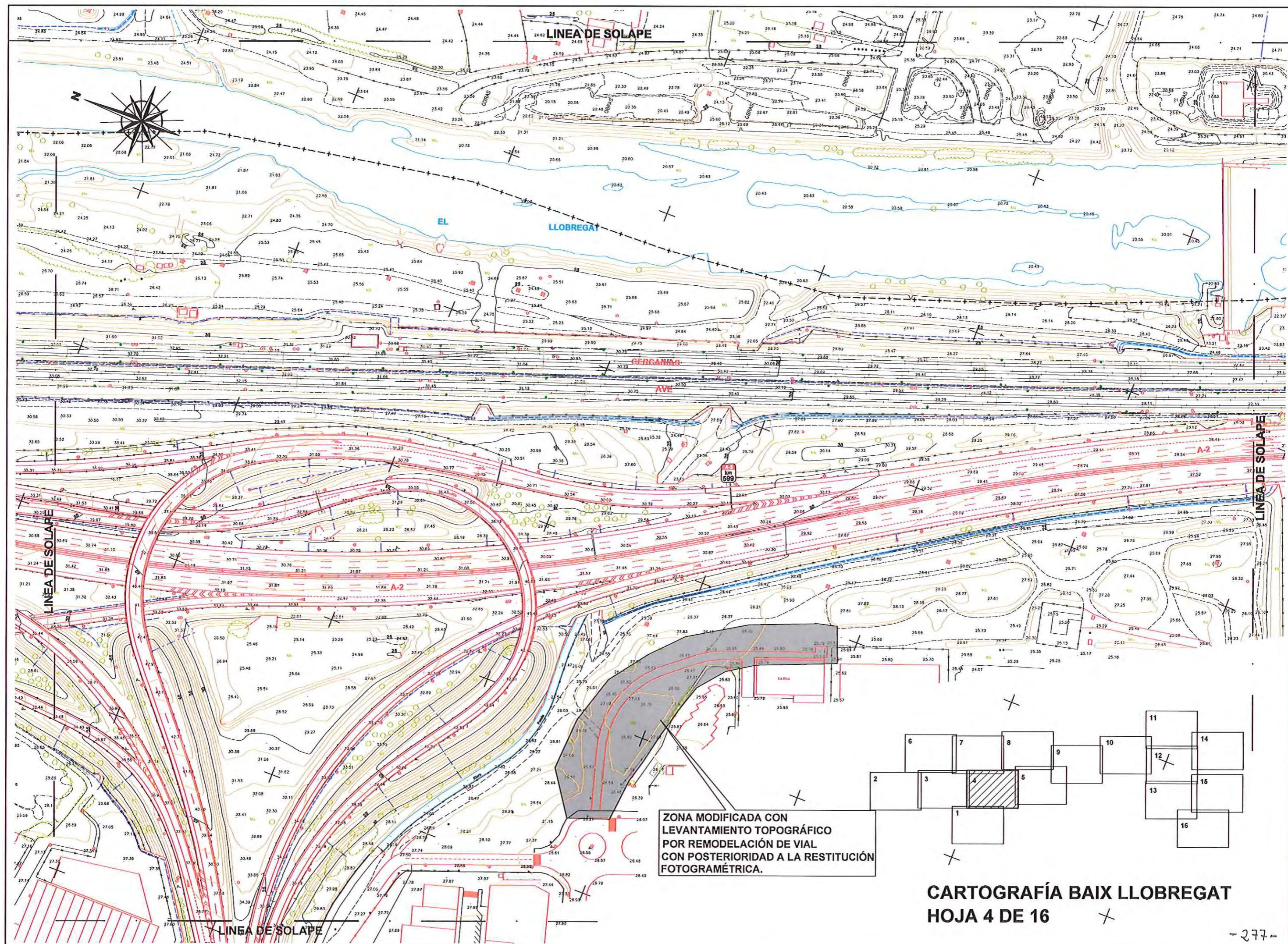


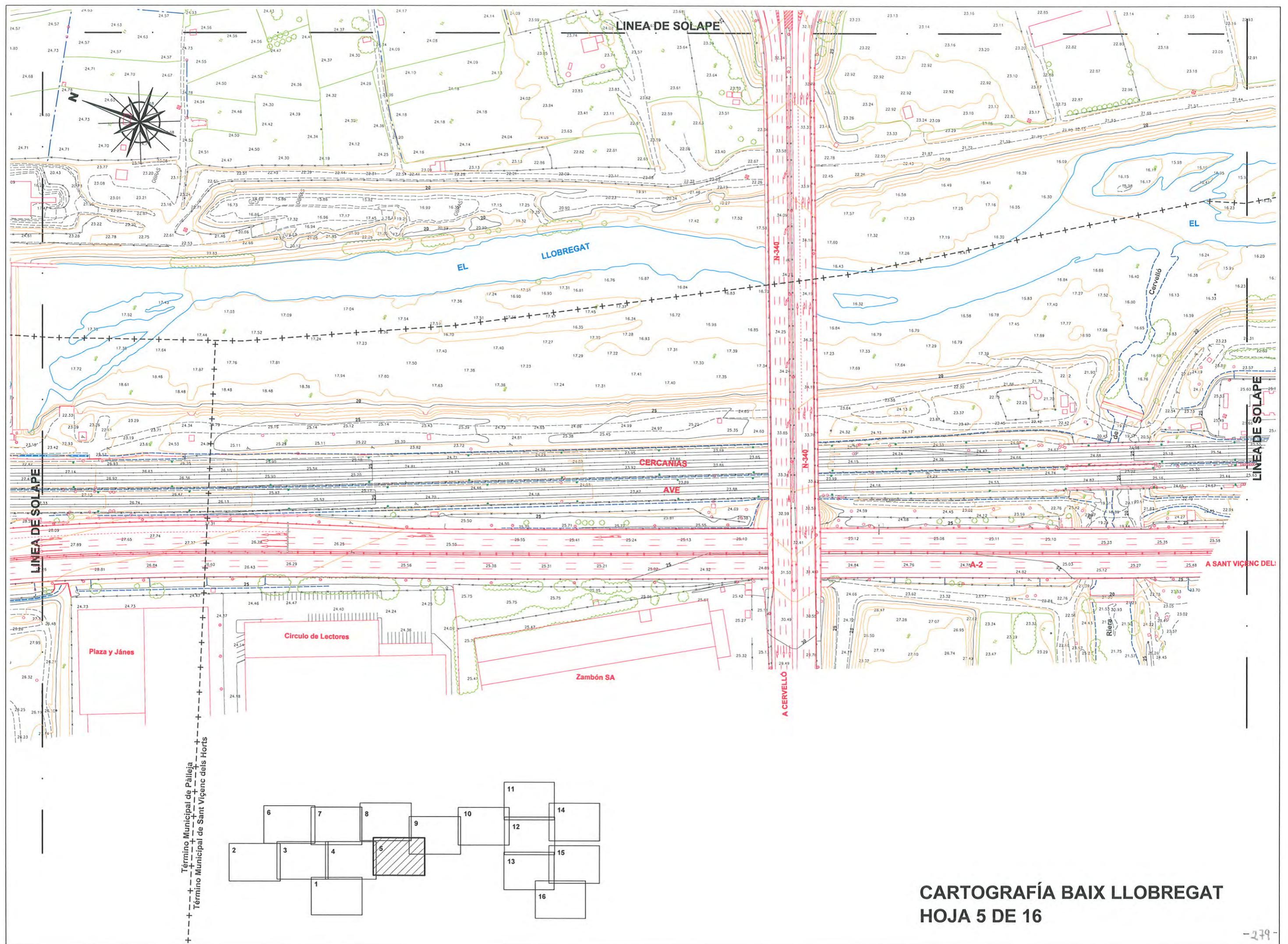
CARTOGRAFÍA BAIX LLOBREGAT
HOJA 1 DE 16

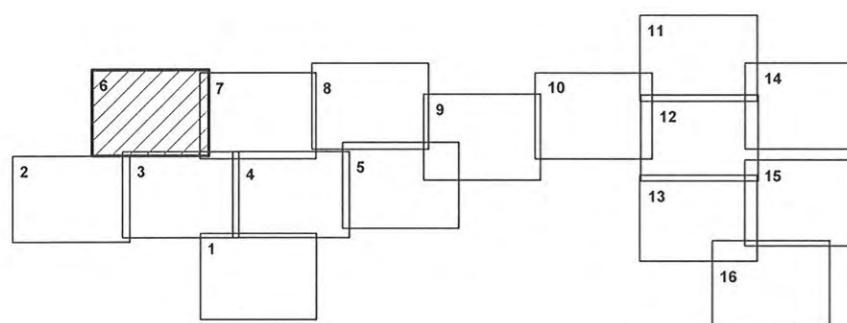
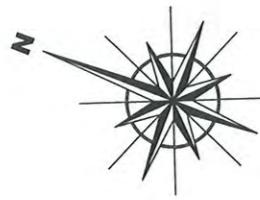


CARTOGRAFÍA BAIX LLOBREGAT
HOJA 2 DE 16

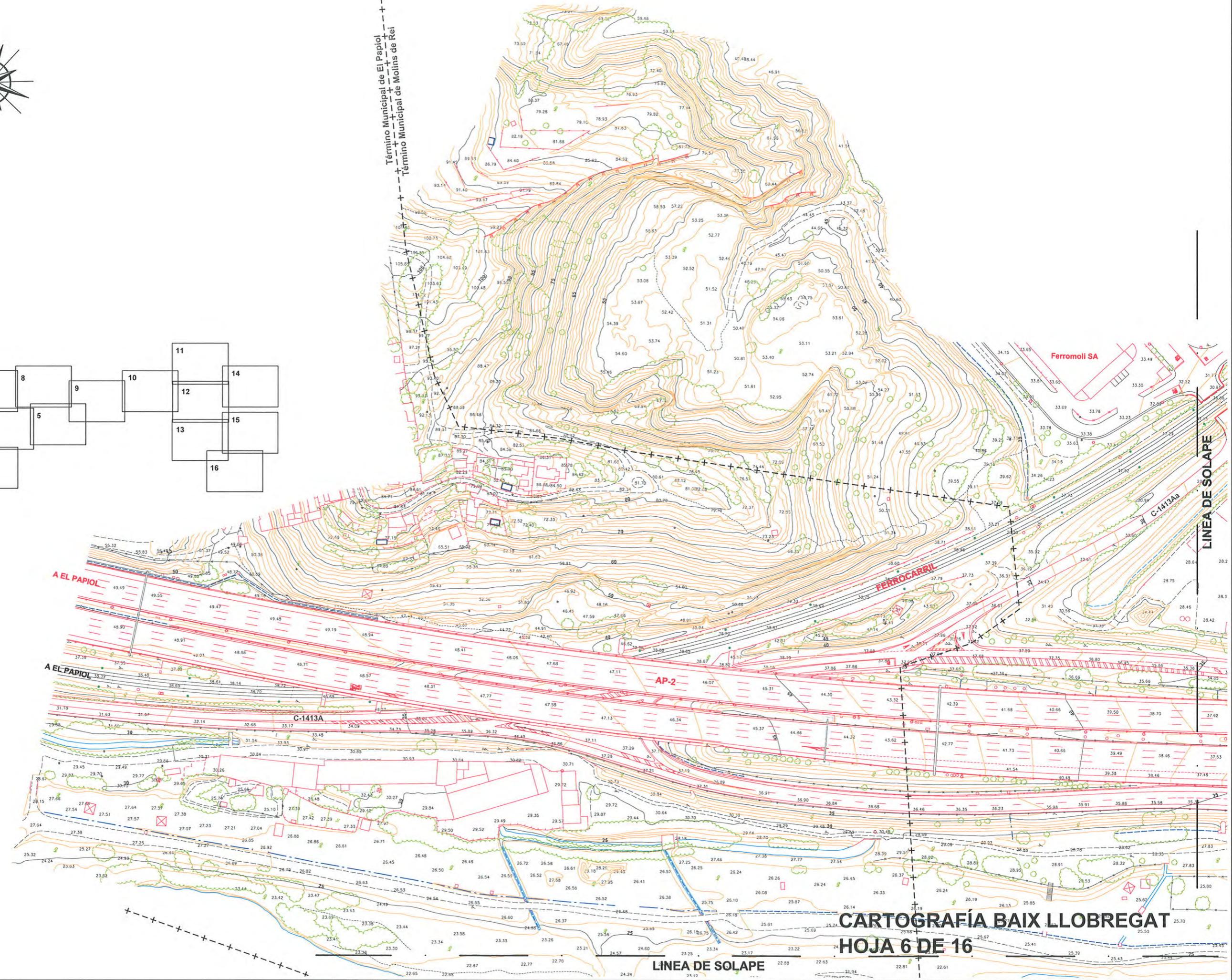


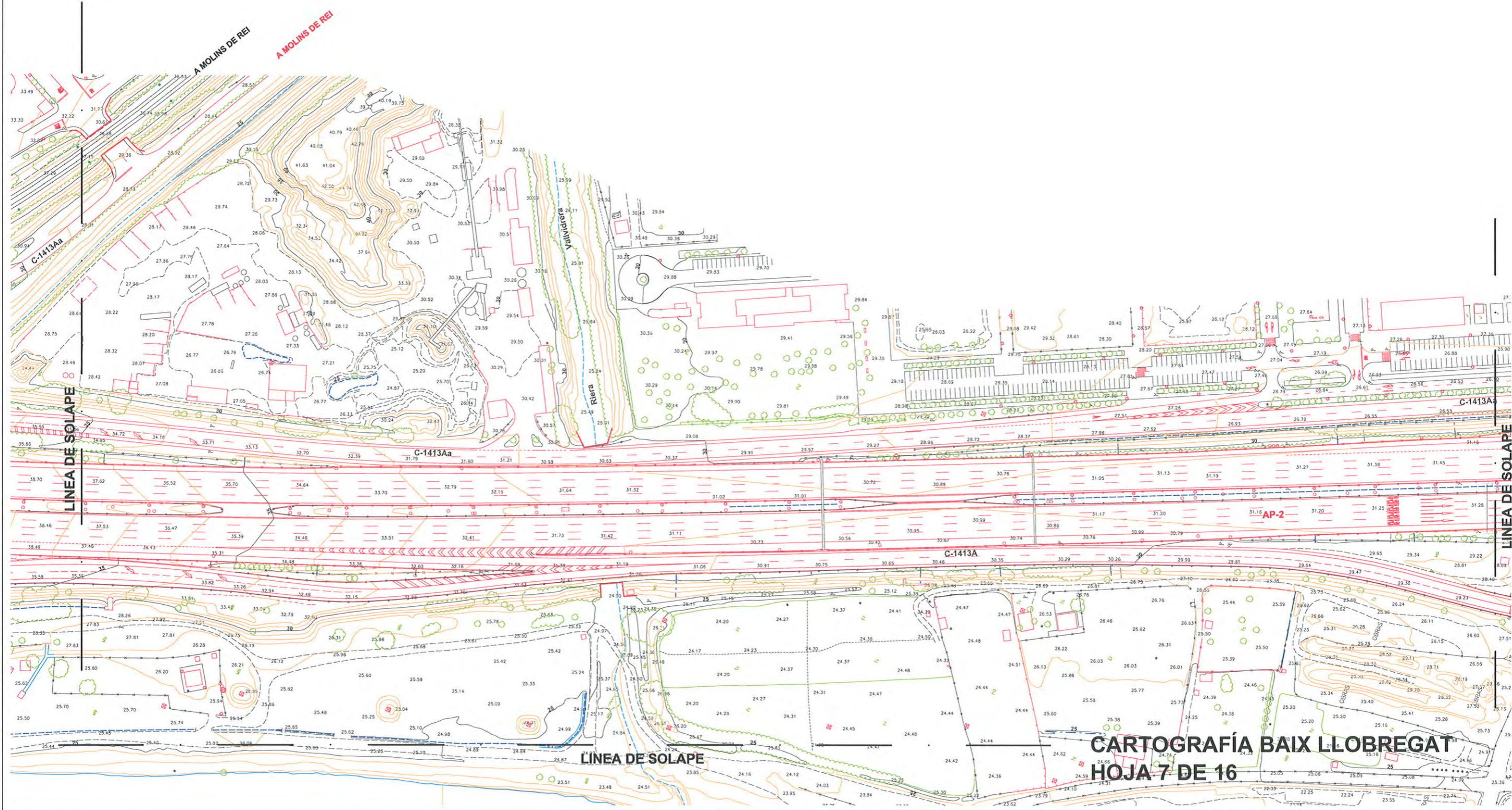
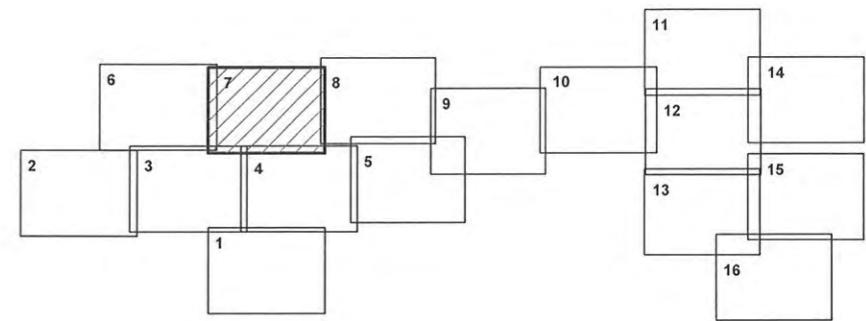
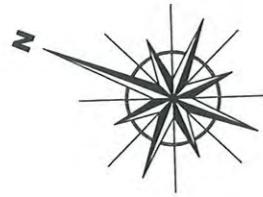


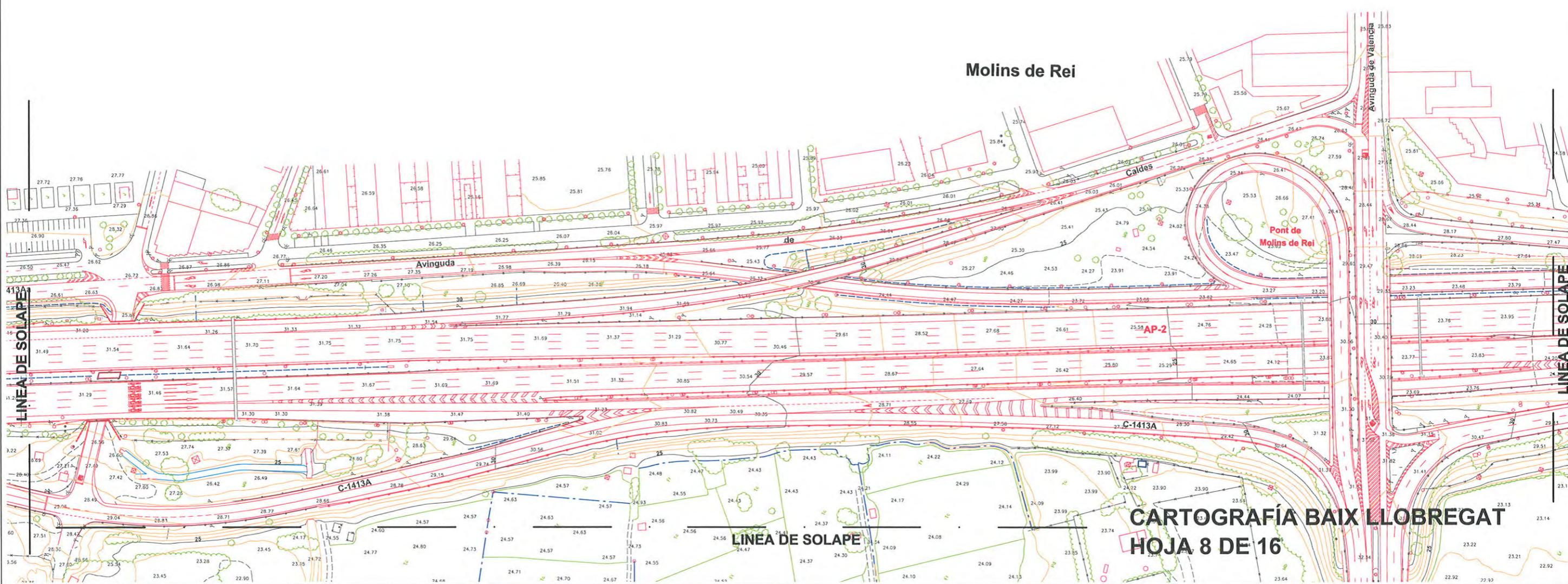
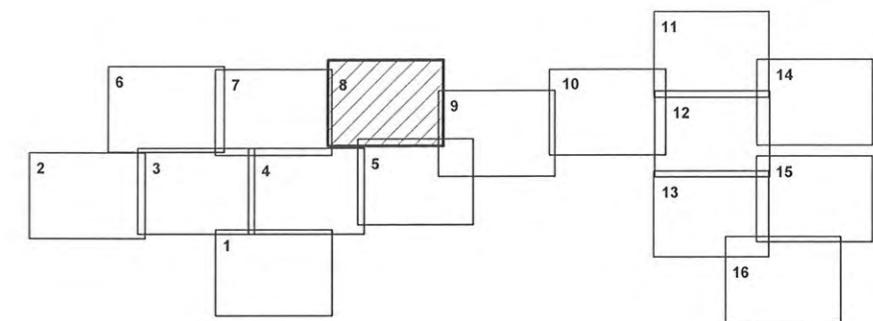
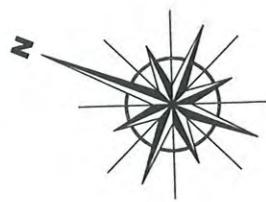


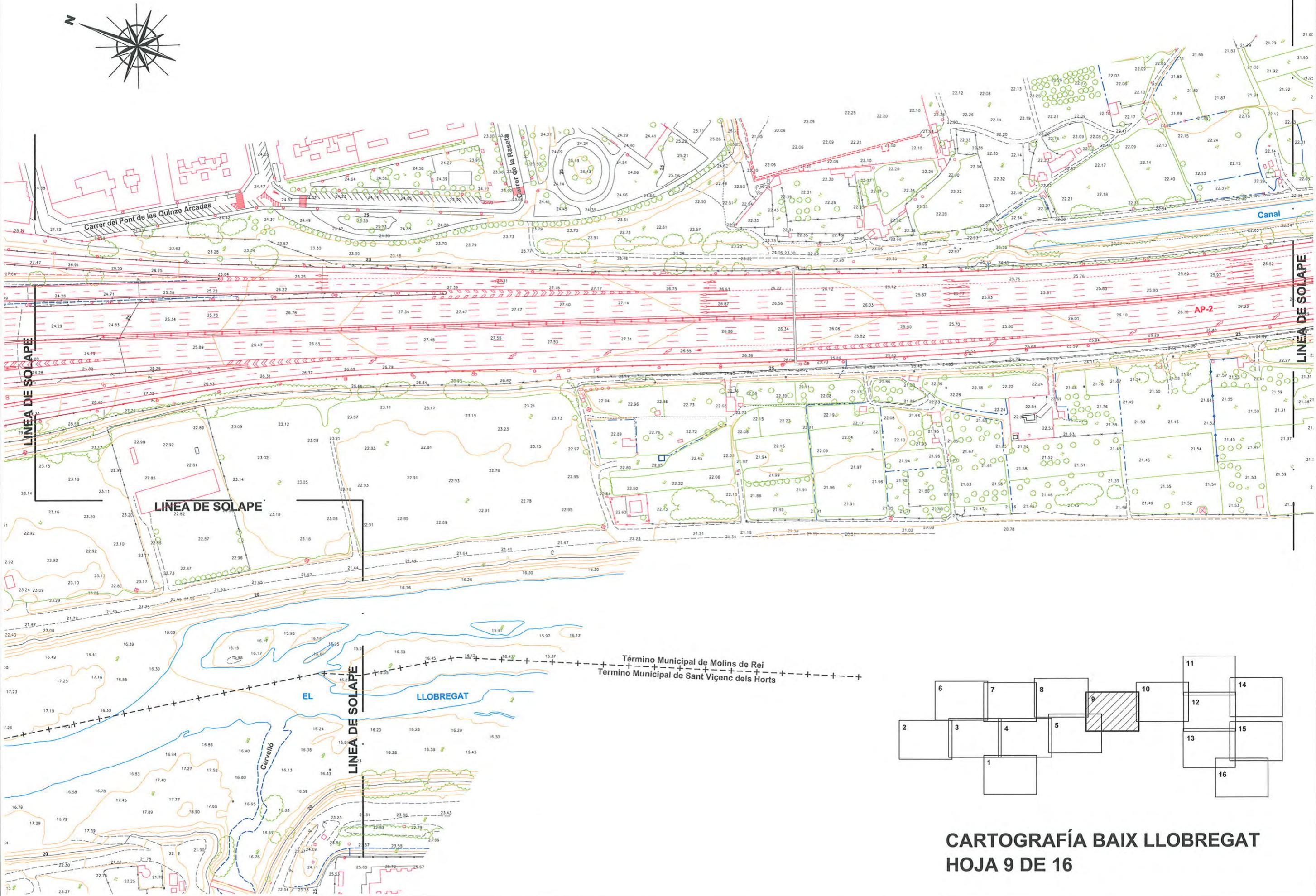
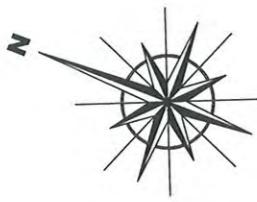


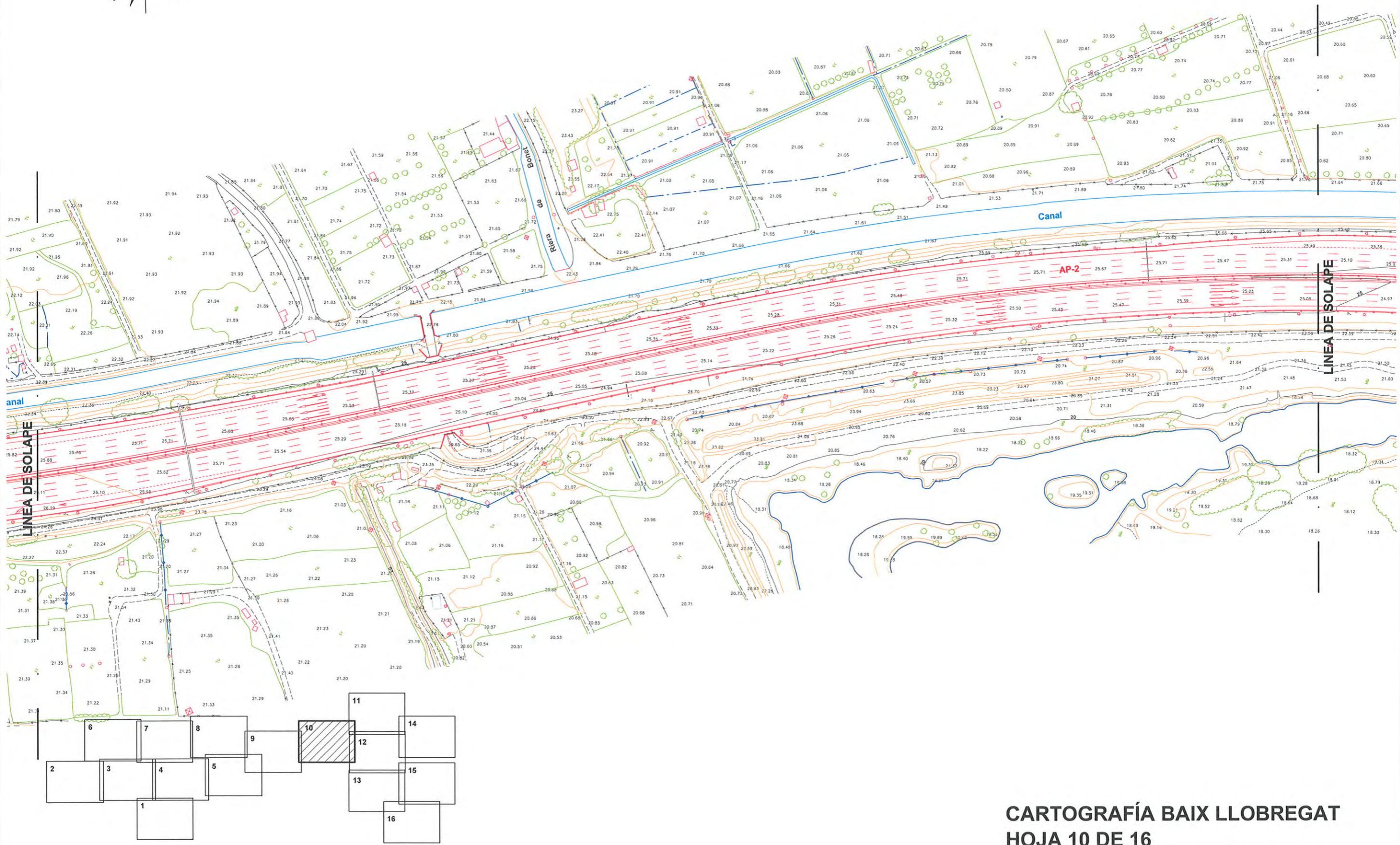
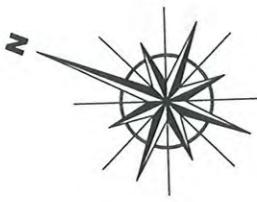
Término Municipal de El Papiol
Término Municipal de Molins de Rei



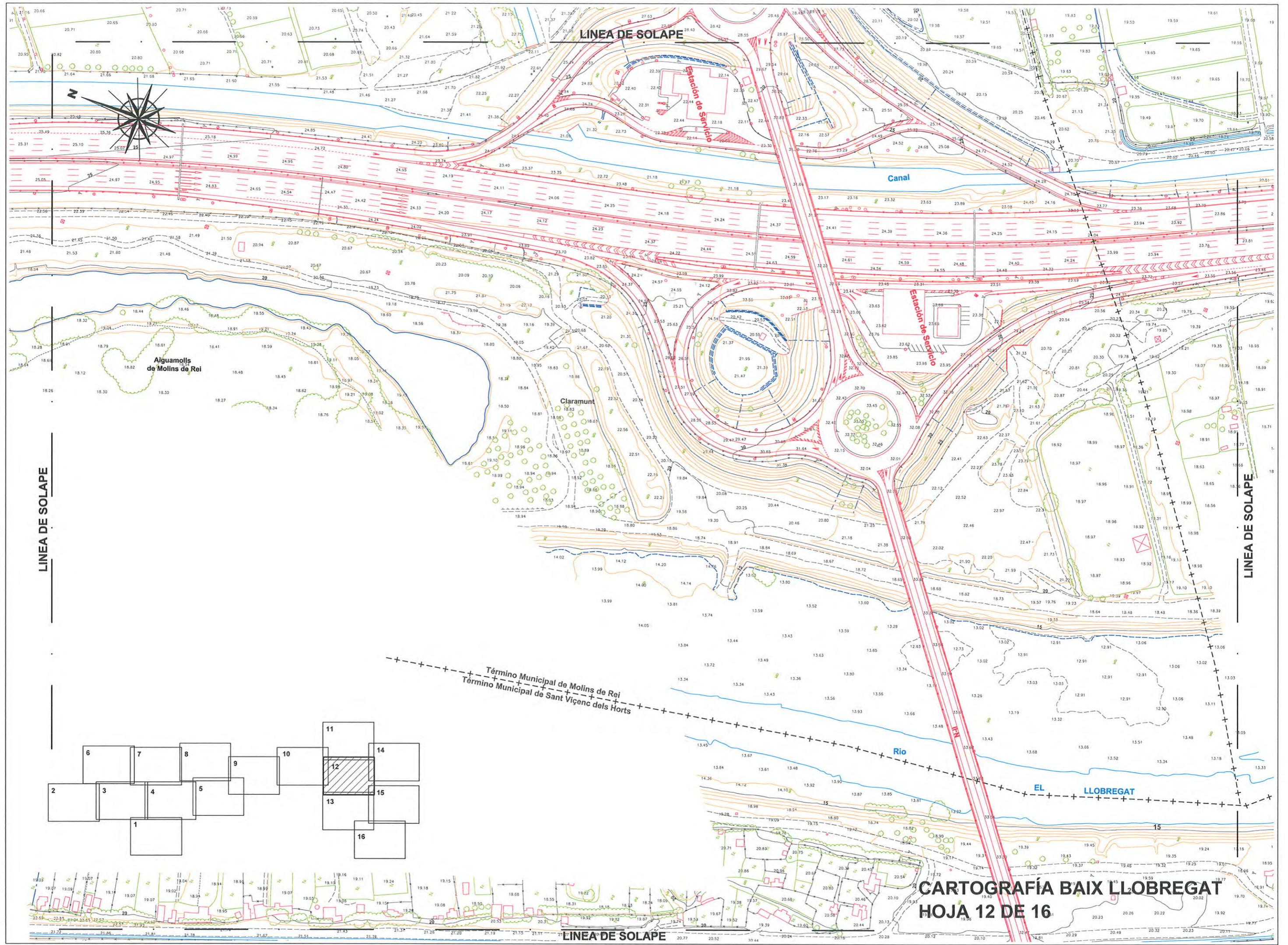


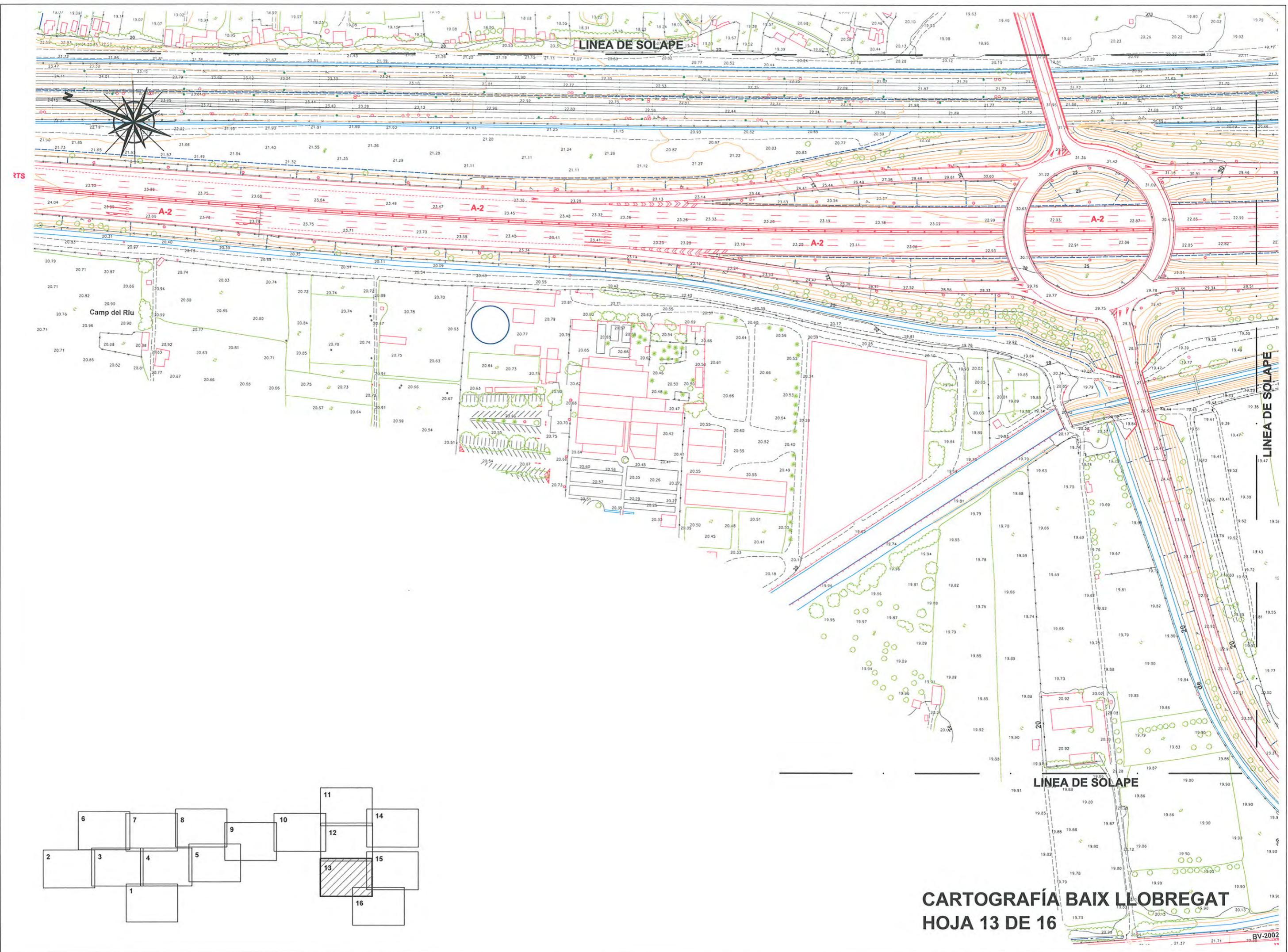


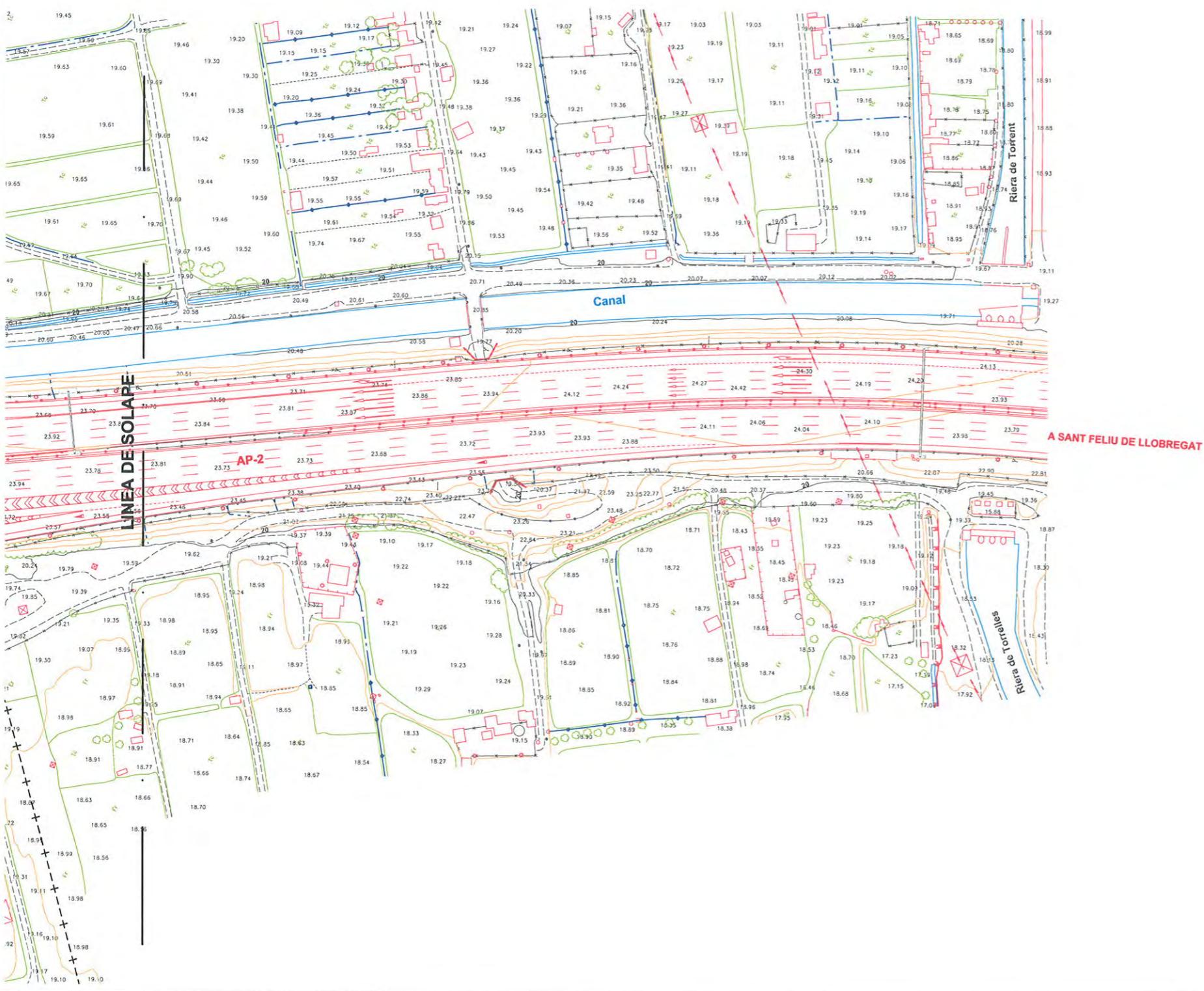
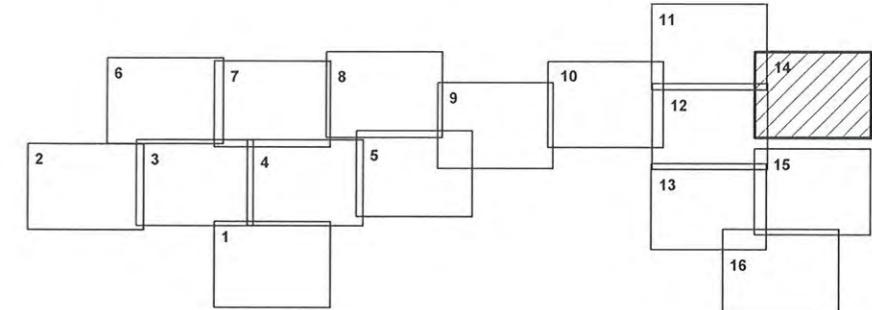
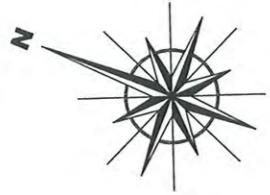


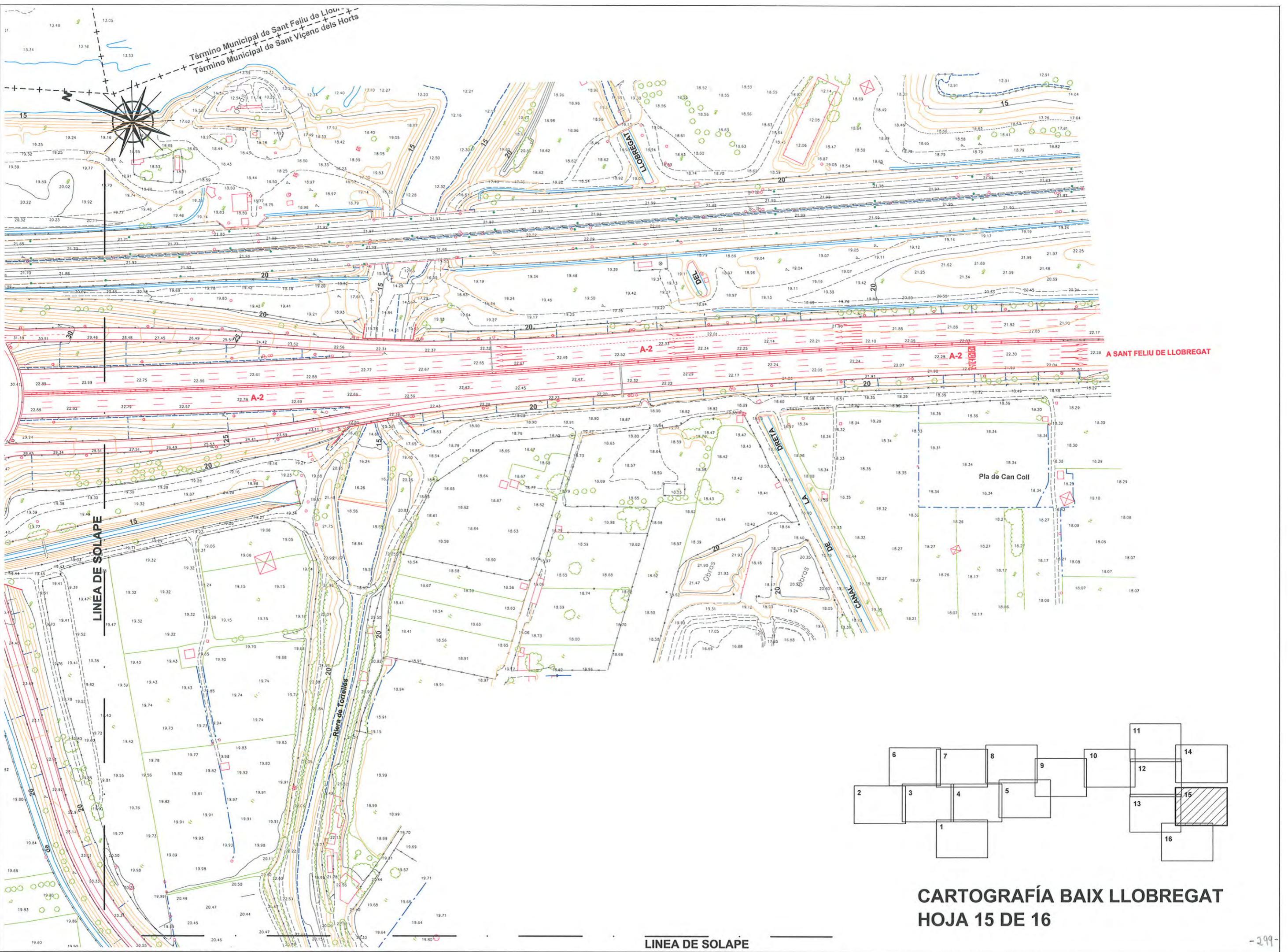


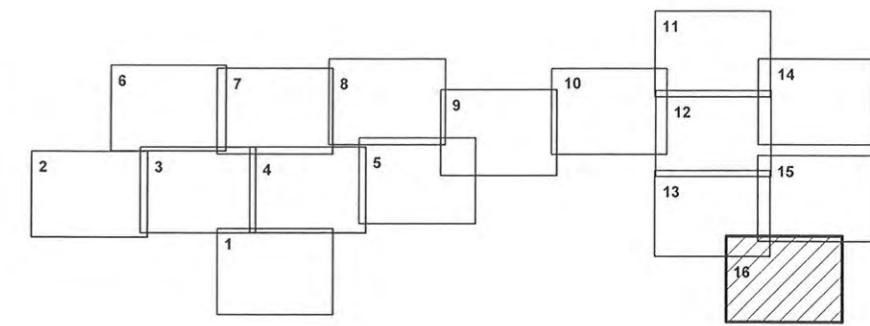
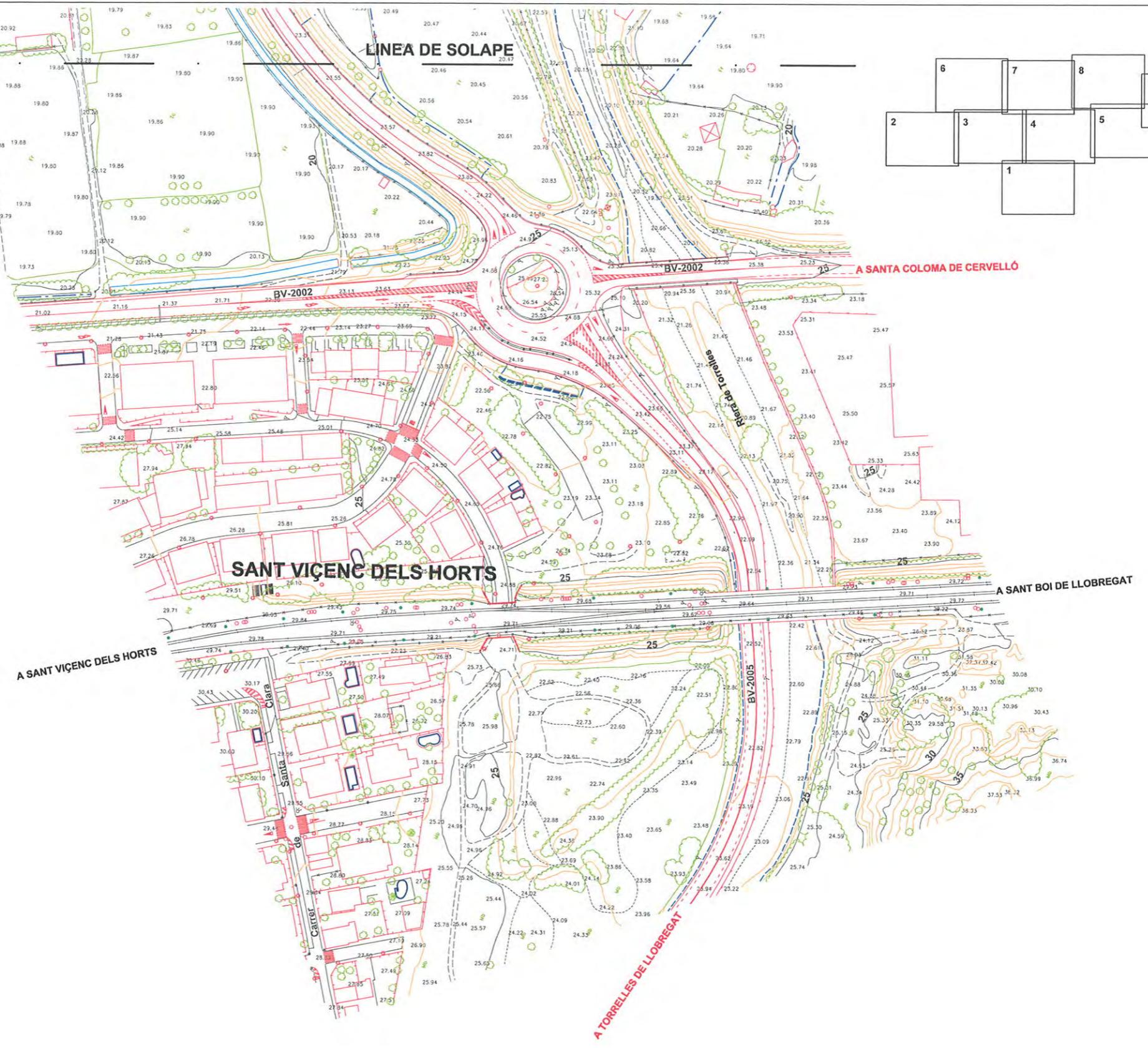
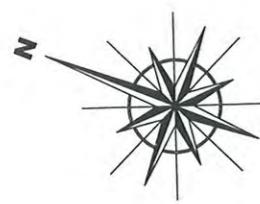






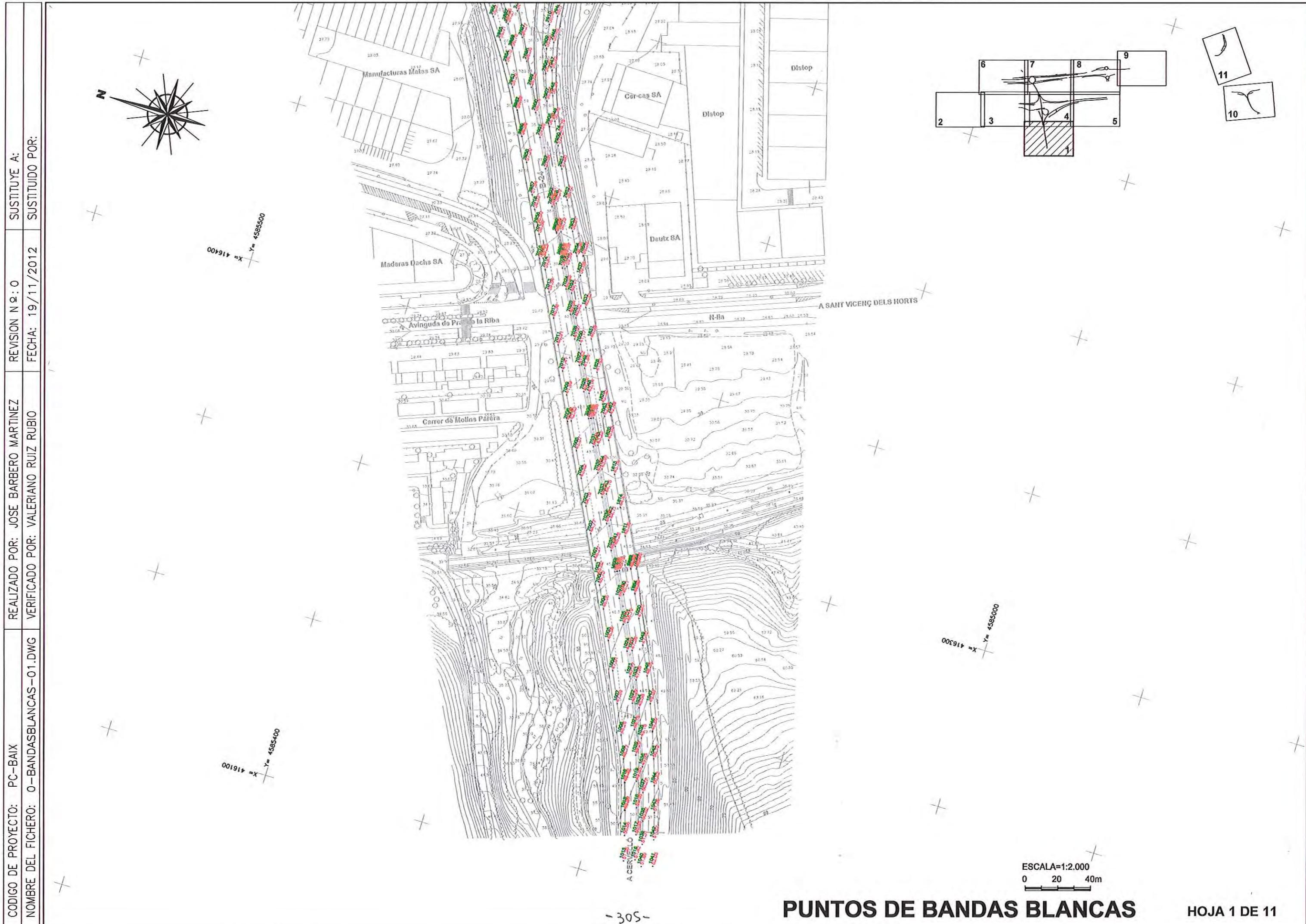


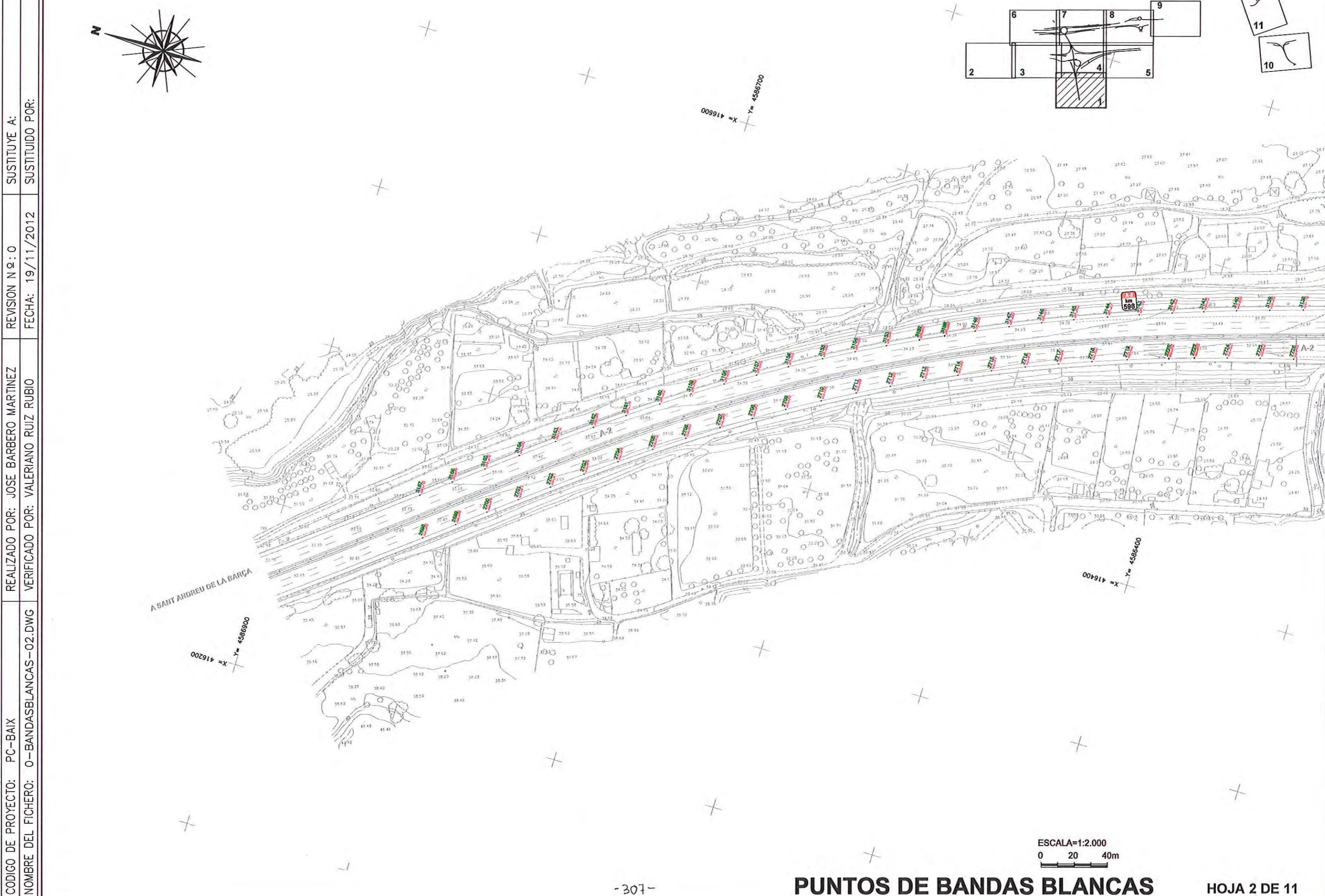




CARTOGRAFÍA BAIX LLOBREGAT
HOJA 16 DE 16

3.17.2.- Bandas blancas

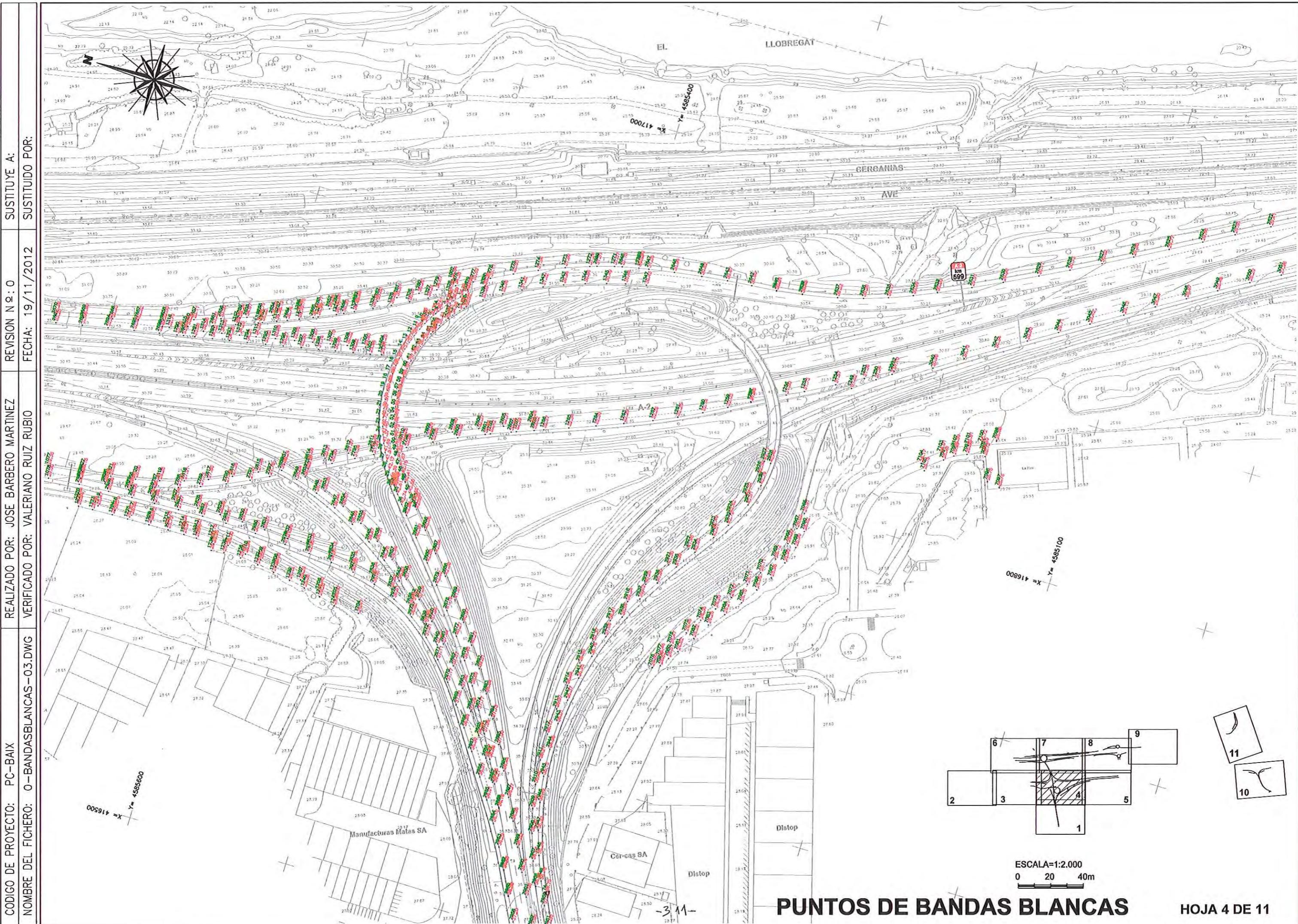




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PUNTOS DE BANDAS BLANCAS

HOJA 3 DE 11



CODIGO DE PROYECTO: PC-BAIX **REALIZADO POR:** JOSE BARBERO MARTINEZ **REVISION N°:** 0 **SUSTUYE A:**

NOMBRE DEL FICHERO: O-BANDASBLANCAS-04.DWG **VERIFICADO POR:** VALERIANO RUIZ RUBIO **FECHA:** 19/11/2012 **SUSTITUIDO POR:**

Mapa Cadastral del Municipio de Palleja
Término Municipal de Sant Vicenç dels Horts

ESCALA=1:2.000
0 20 40m

PUNTOS DE BANDAS BLANCAS

CÓDIGO DE PROYECTO: PC-BAIX

REALIZADO POR: JOSE BARBERO MARTINEZ

REVISIÓN N°: 0

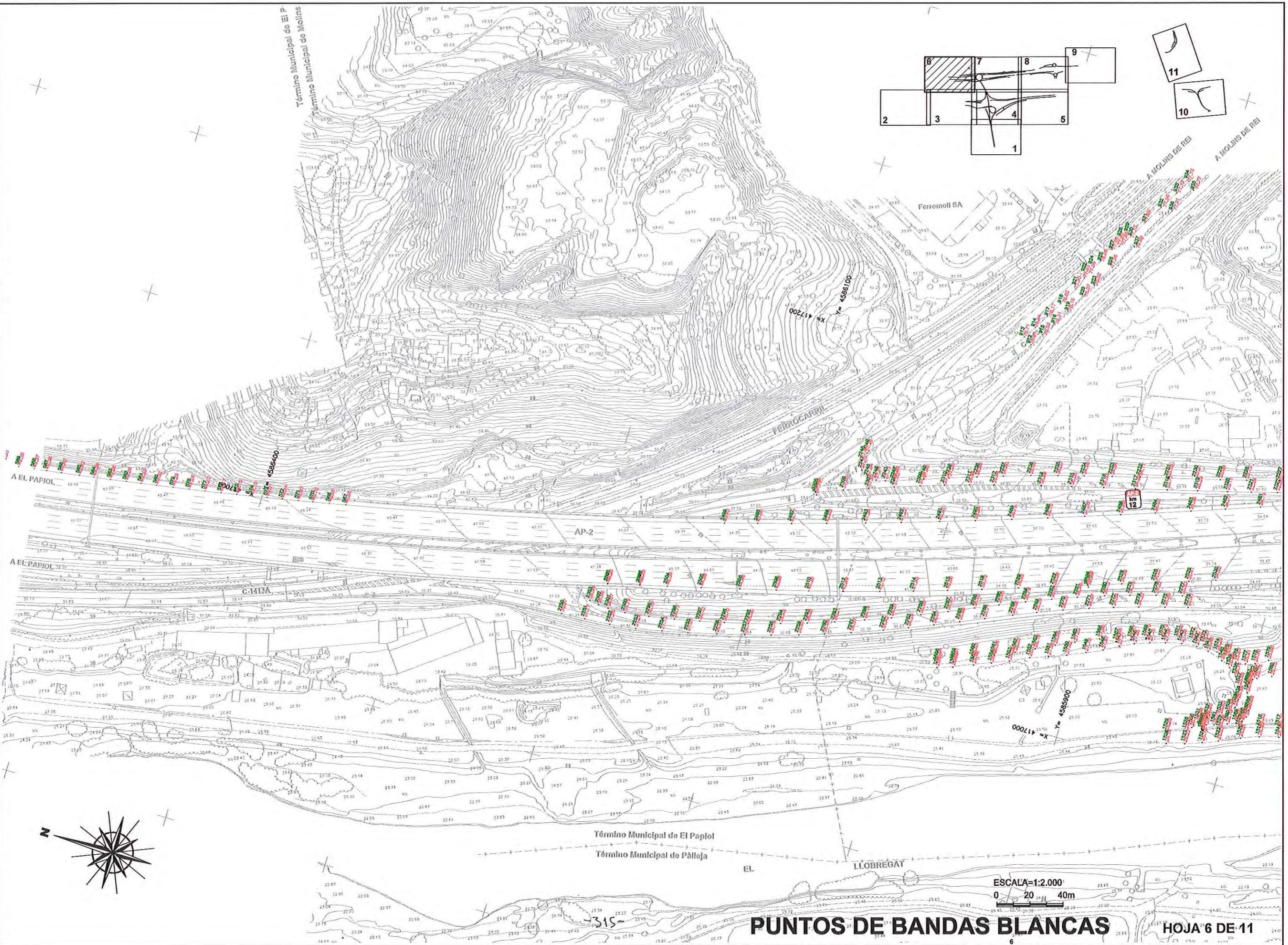
SUSTITUYE A:

NOMBRE DEL FICHERO: 0-bandasblancas-06.DWG

VERIFICADO POR: VALERIANO RUIZ RUBIO

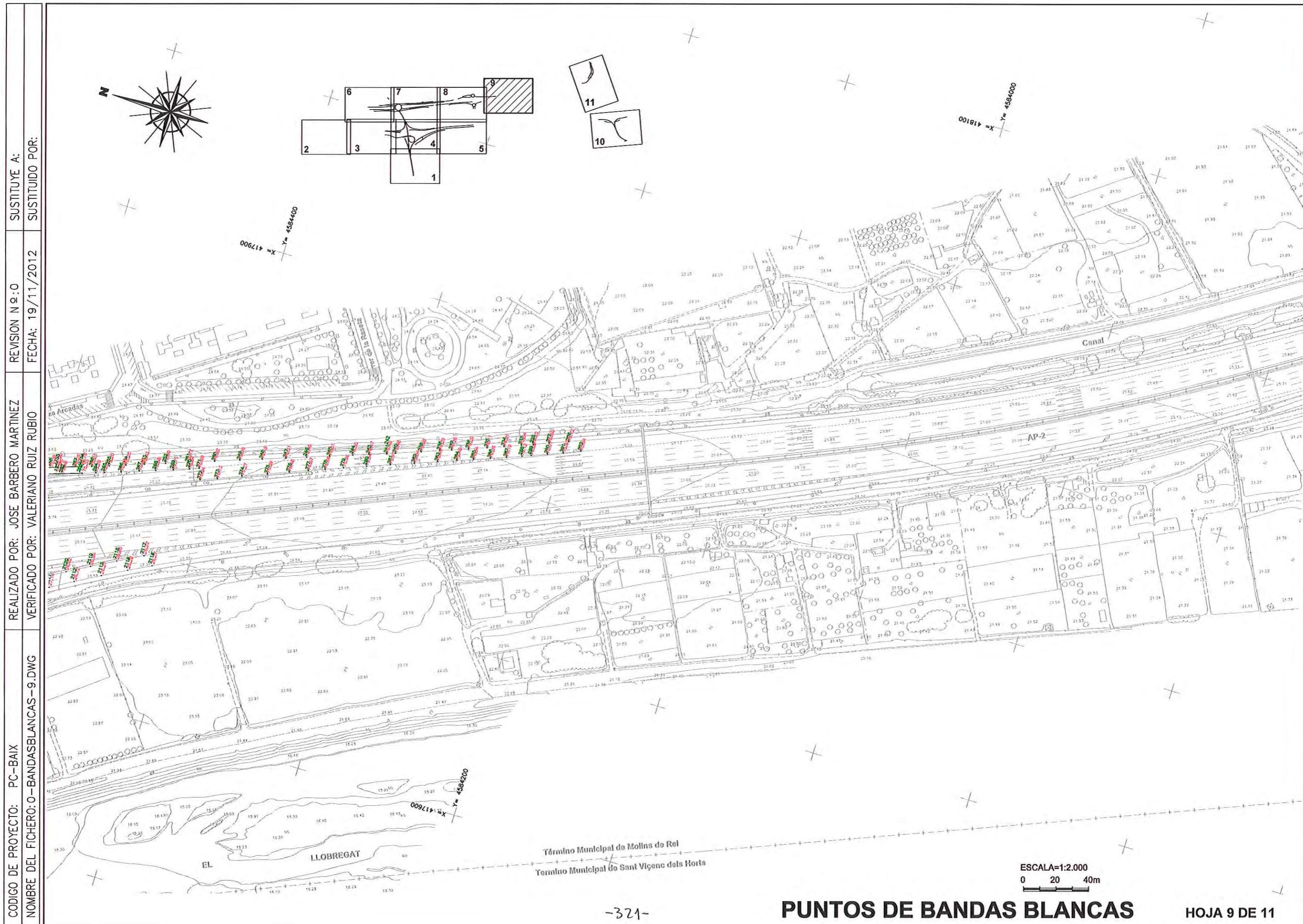
FECHA: 19/11/2012

SUSTITUIDO POR:









CODIGO DE PROYECTO: PC-BAIX

REALIZADO POR: JOSE BARBERO MARTINEZ

REVISION N°: 0

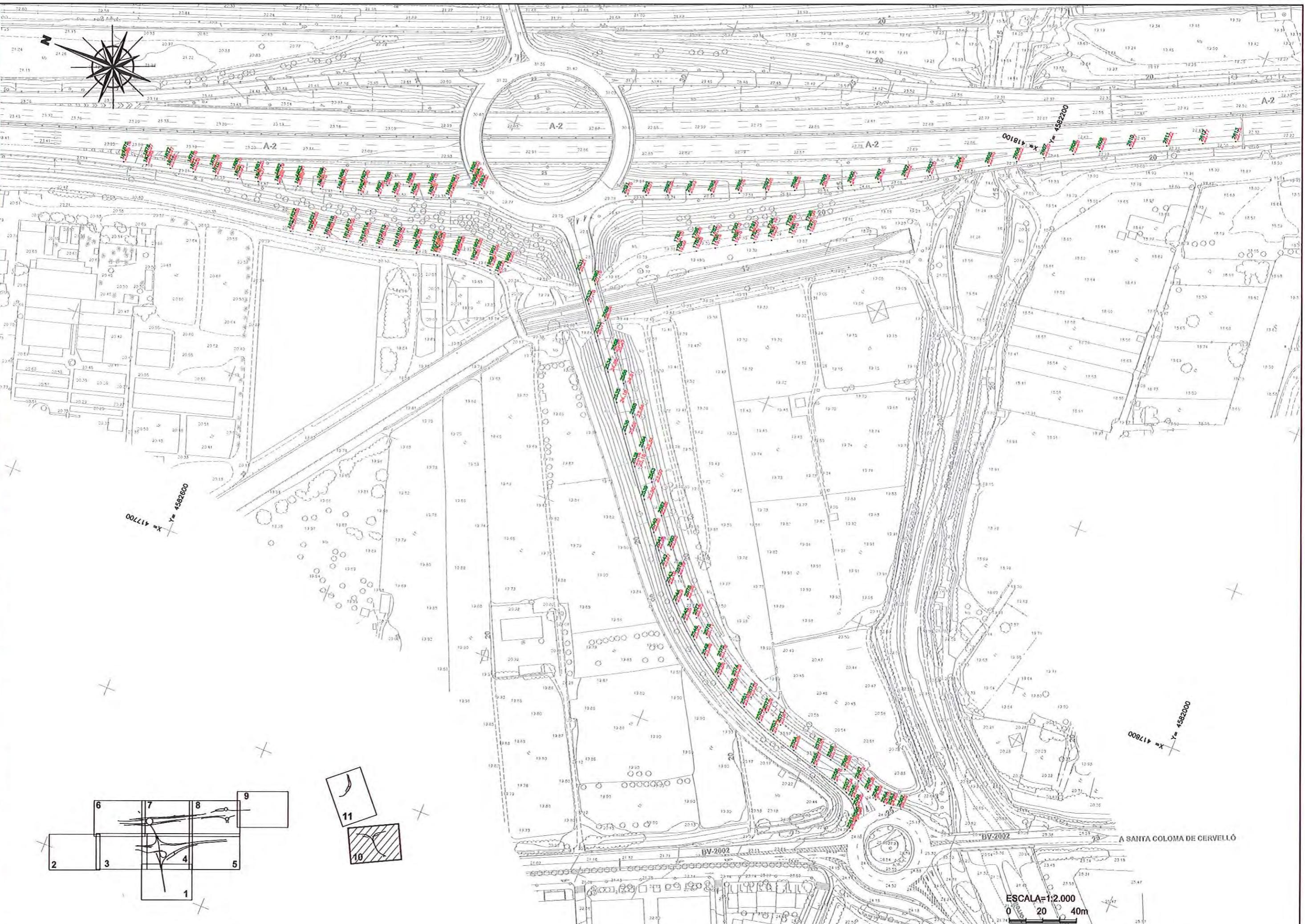
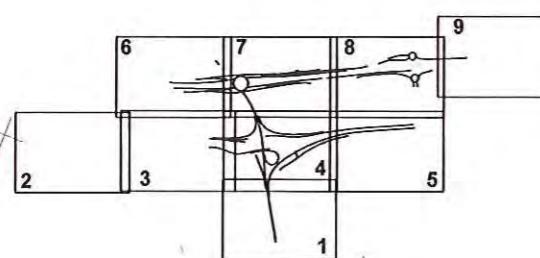
SUSTITUYE A:

NOMBRE DEL FICHERO: O-BANDASBLANCAS-10.DWG

VERIFICADO POR: VALERIANO RUIZ RUBIO

FECHA: 19/11/2012

SUSTITUIDO POR:



CÓDIGO DE PROYECTO: PC-BAIX

REALIZADO POR: JOSE BARBERO MARTINEZ

REVISIÓN N°: 0

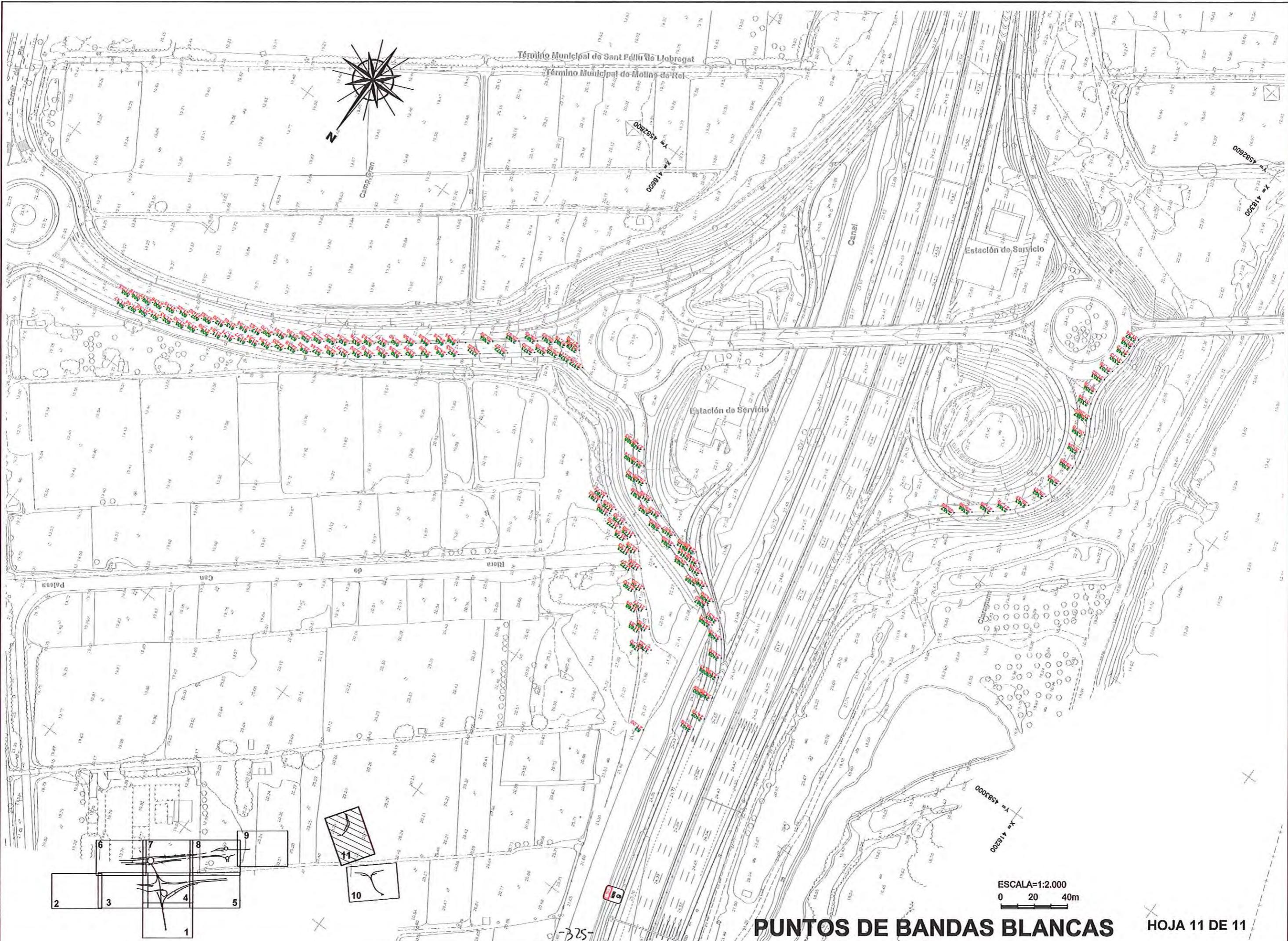
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VERIFICADO POR: VALERIANO RUIZ RUBIO

FECHA: 19/11/2012

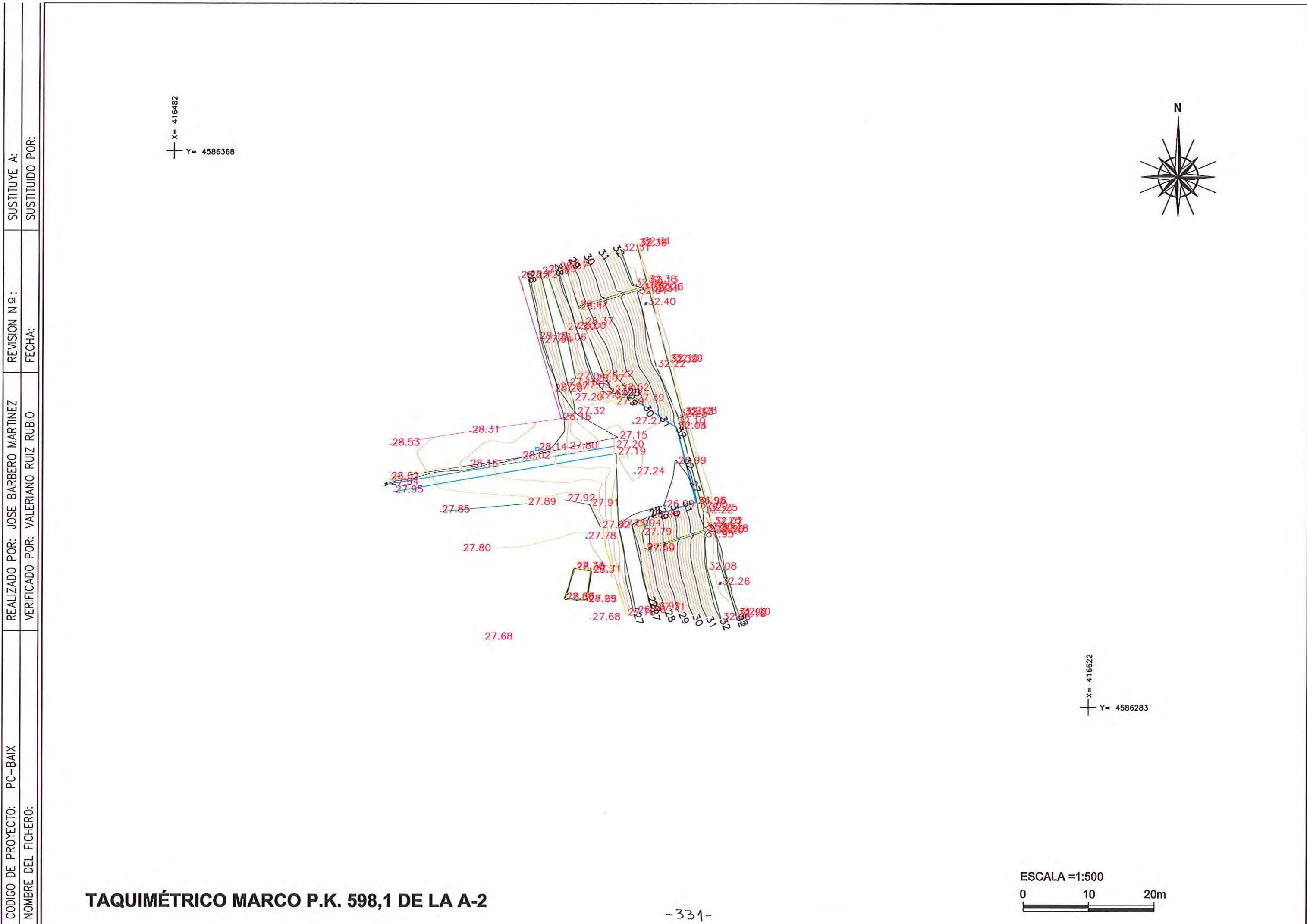
SUSTITUIDO POR:

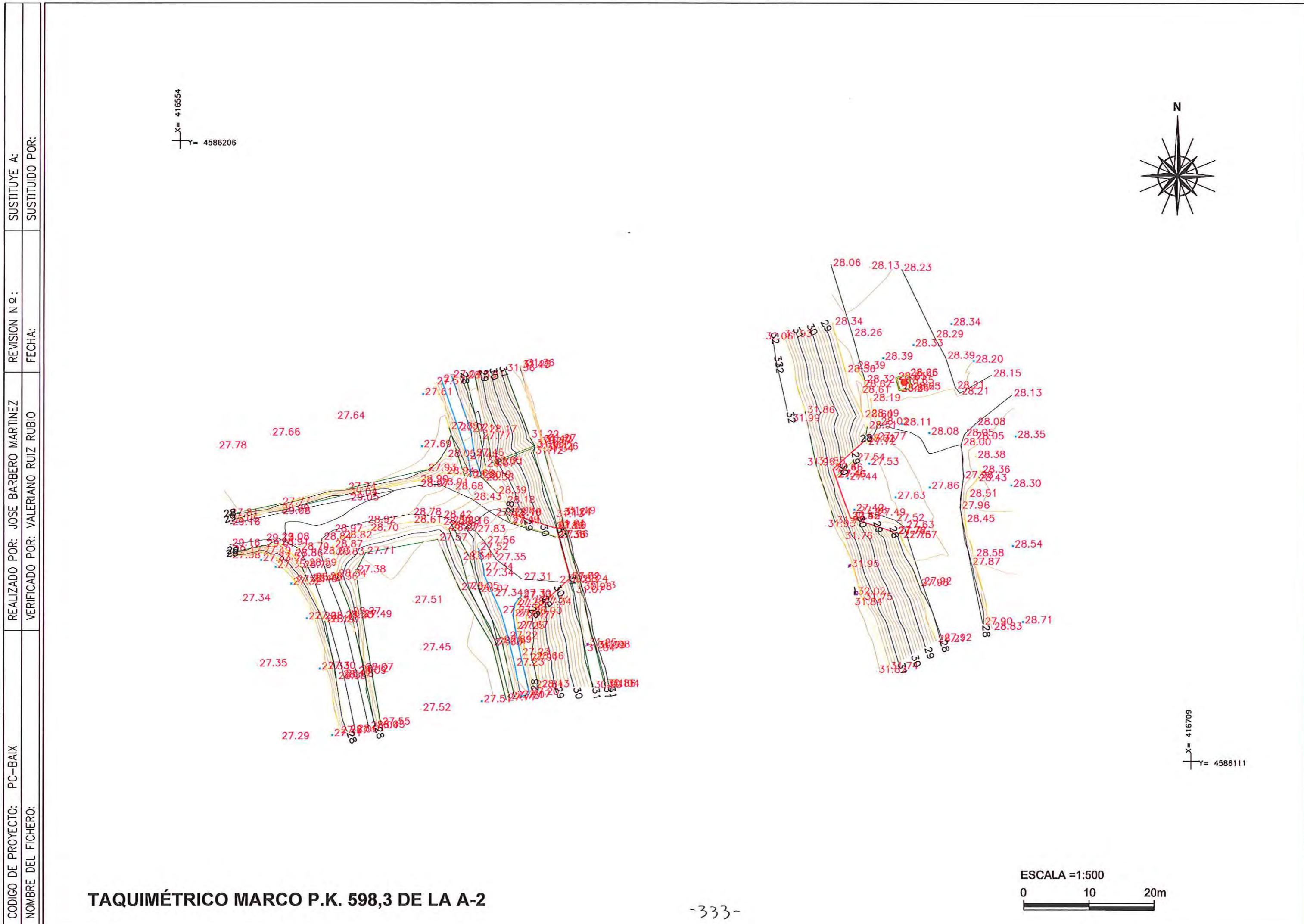


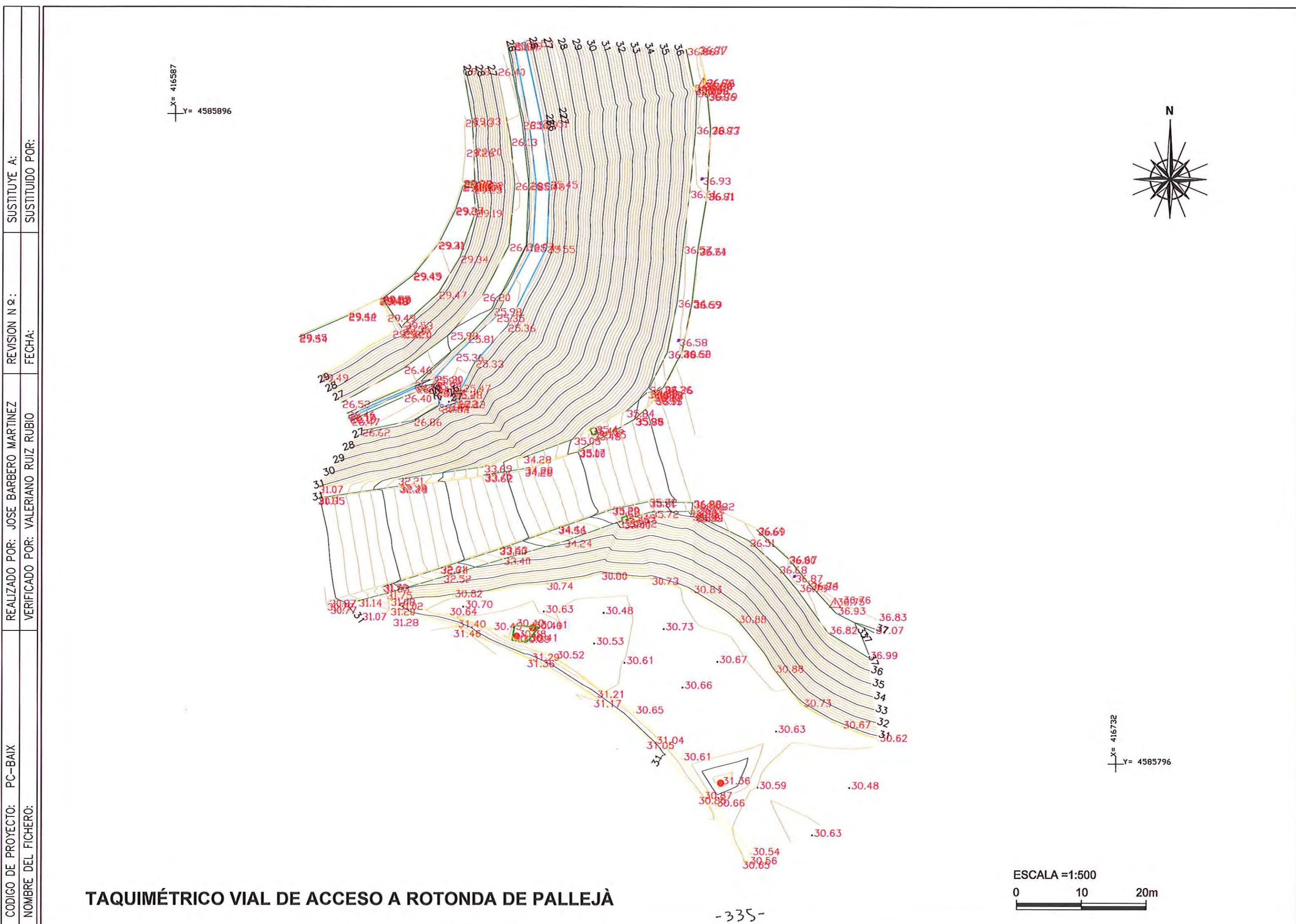
3.17.3.- Taquimétricos

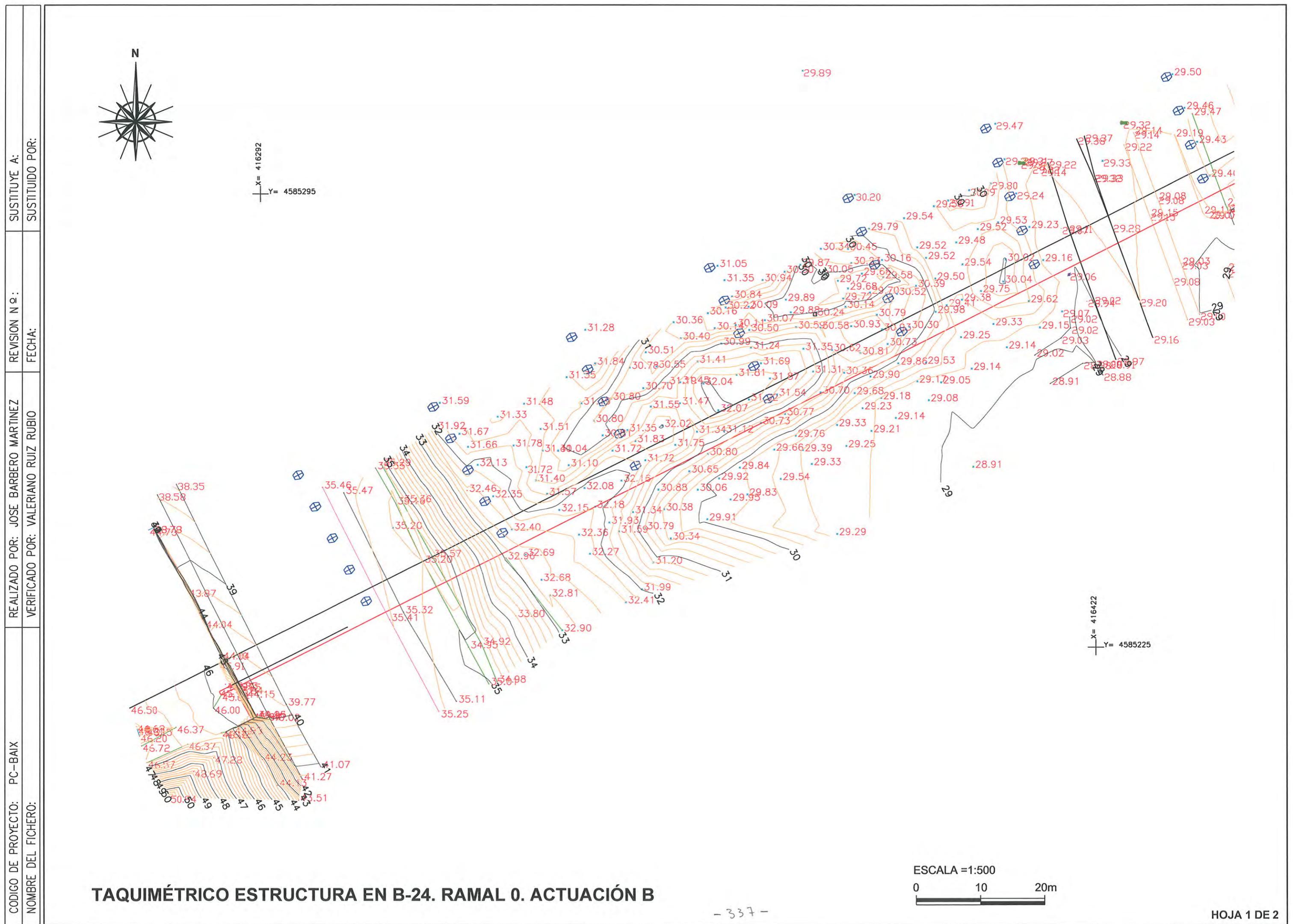












TAQUIMÉTRICO ESTRUCTURA EN B-24. RAMAL 0. ACTUACIÓN B

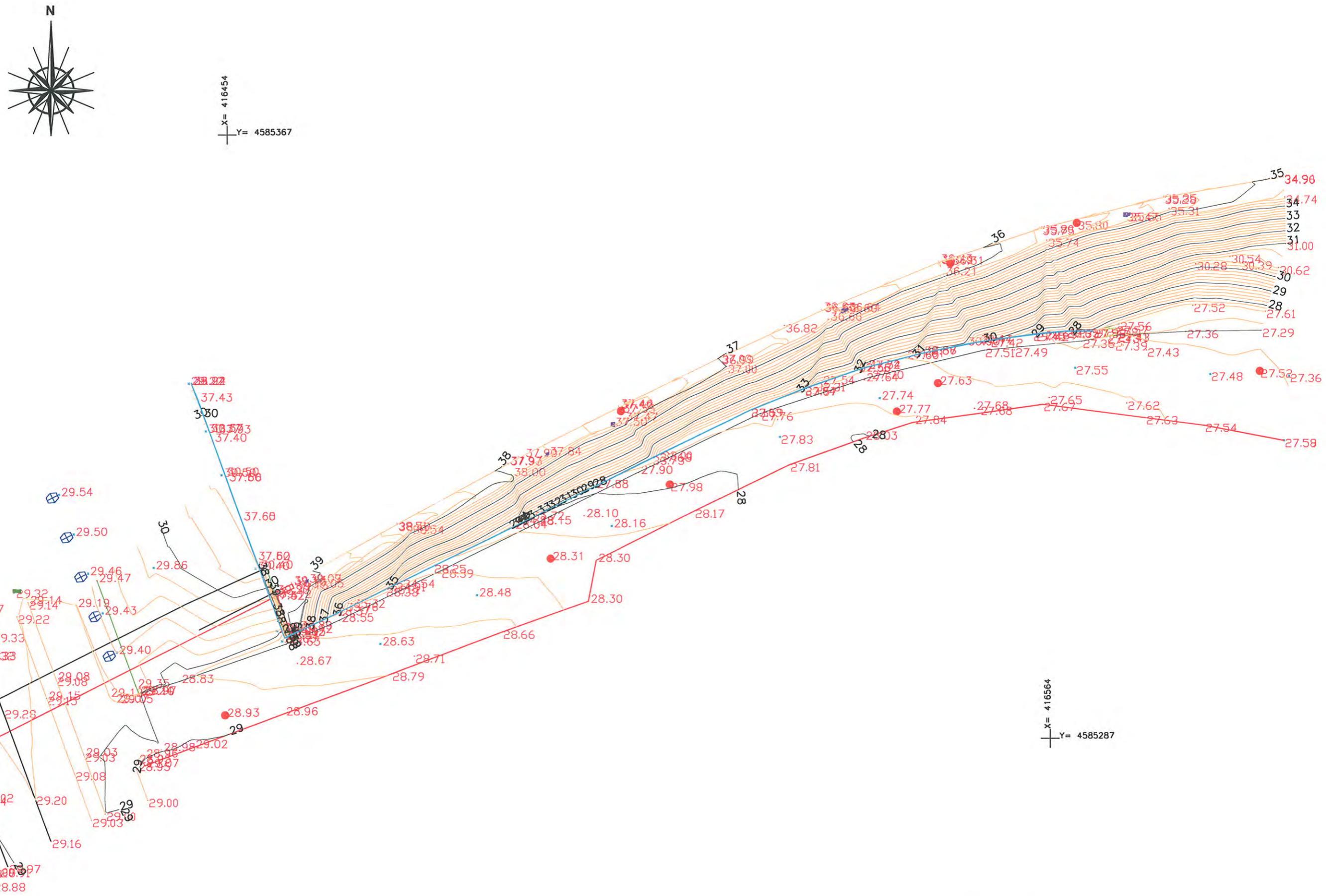
ESCALA =1:500

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HOJA 1 DE 2

CODIGO DE PROYECTO:	PC-BAIX	REALIZADO POR:	JOSE BARBERO MARTINEZ	REVISION N º:	SUSTITUYE A:
NOMBRE DEL FICHERO:		VERIFICADO POR:	VALERIANO RUIZ RUBIO	FECHA:	SUSTITUIDO POR:

AQUIMÉTRICO ESTRUCTURA EN B-24. RAMAL 0. ACTUACIÓN I



- 330

ESCALA =1:50



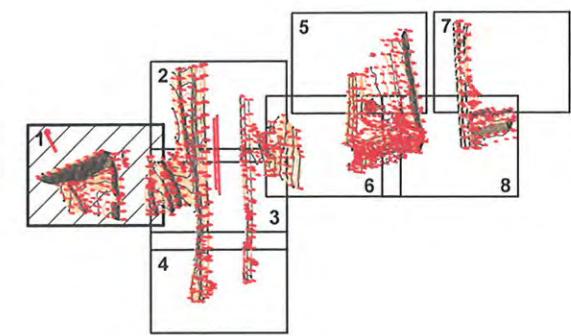
HOJA 2 DE 2

CÓDIGO DE PROYECTO: PC-BAIX REALIZADO POR: JOSE BARBERO MARTINEZ REVISIÓN N°: SUSTITUYE A:

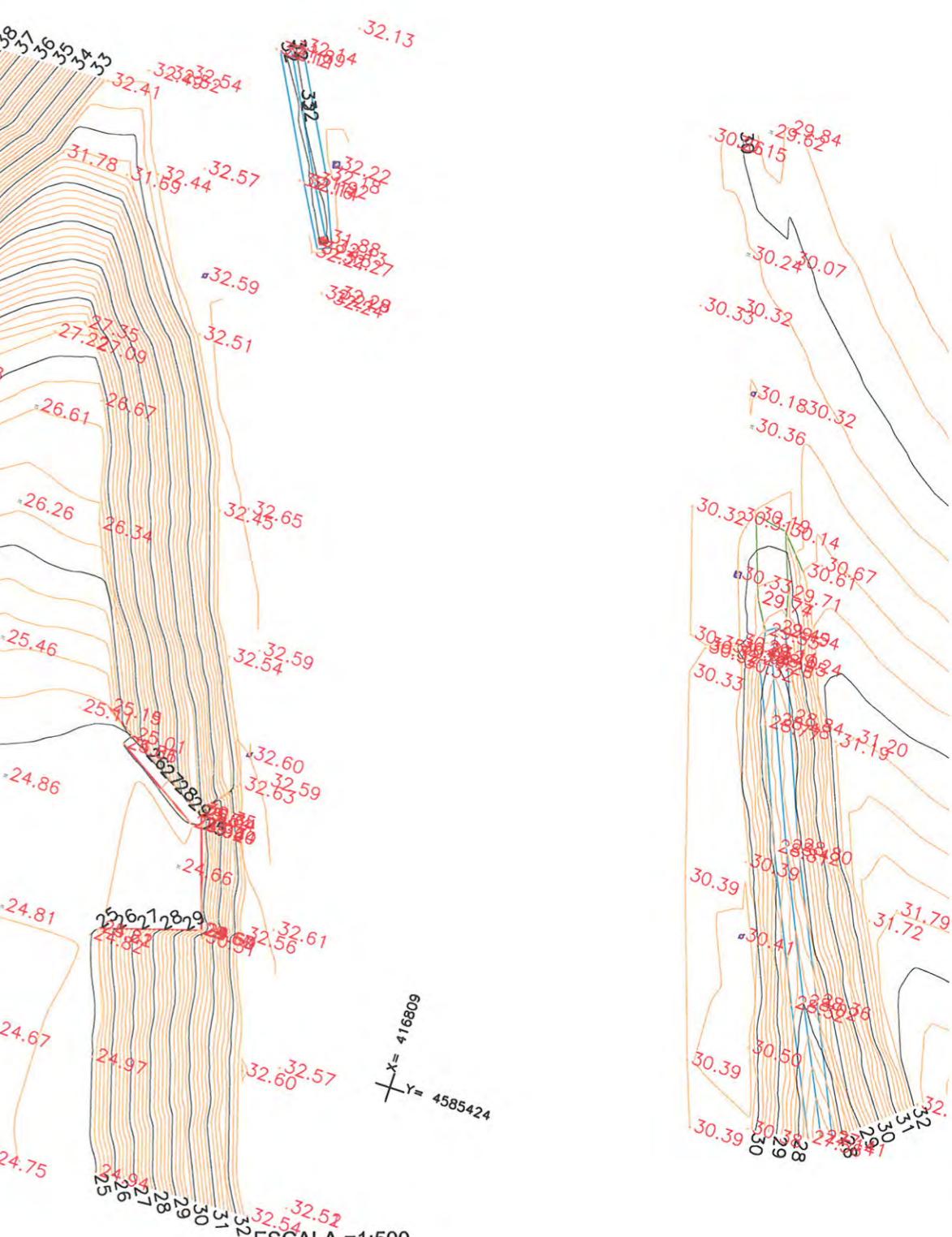
NOMBRE DEL FICHERO: VERIFICADO POR: VALERIANO RUIZ RUBIO FECHA: SUSTITUIDO POR:


 $X = 416654$
 $Y = 4585464$

26.88
25.86
26.28.89
25.89



TAQUIMÉTRICO RAMAL 0 ACTUACIÓN B



ESCALA = 1:500

TAQUIMÉTRICO RAMAL 0 ACTUACIÓN B

ESCALA = 1:500

0 10 20m

HOJA 2 DE 8

SUSTITUYE A:

REALIZADO POR: JOSE BARBERO MARTINEZ

REVISIÓN N°:

FECHA:

CÓDIGO DE PROYECTO: PC-BAIX

NOMBRE DEL FICHERO:

SUSTITUIDO POR:

VERIFICADO POR: VALERIANO RUIZ RUBIO



$X= 416803$
 $Y= 4585518$

30.51
29.84
30.15

36.68

37.10

36.54

35.32

34.89

35.49

35.20

35.07

35.06

35.07

35.08

35.09

35.10

35.11

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35.171

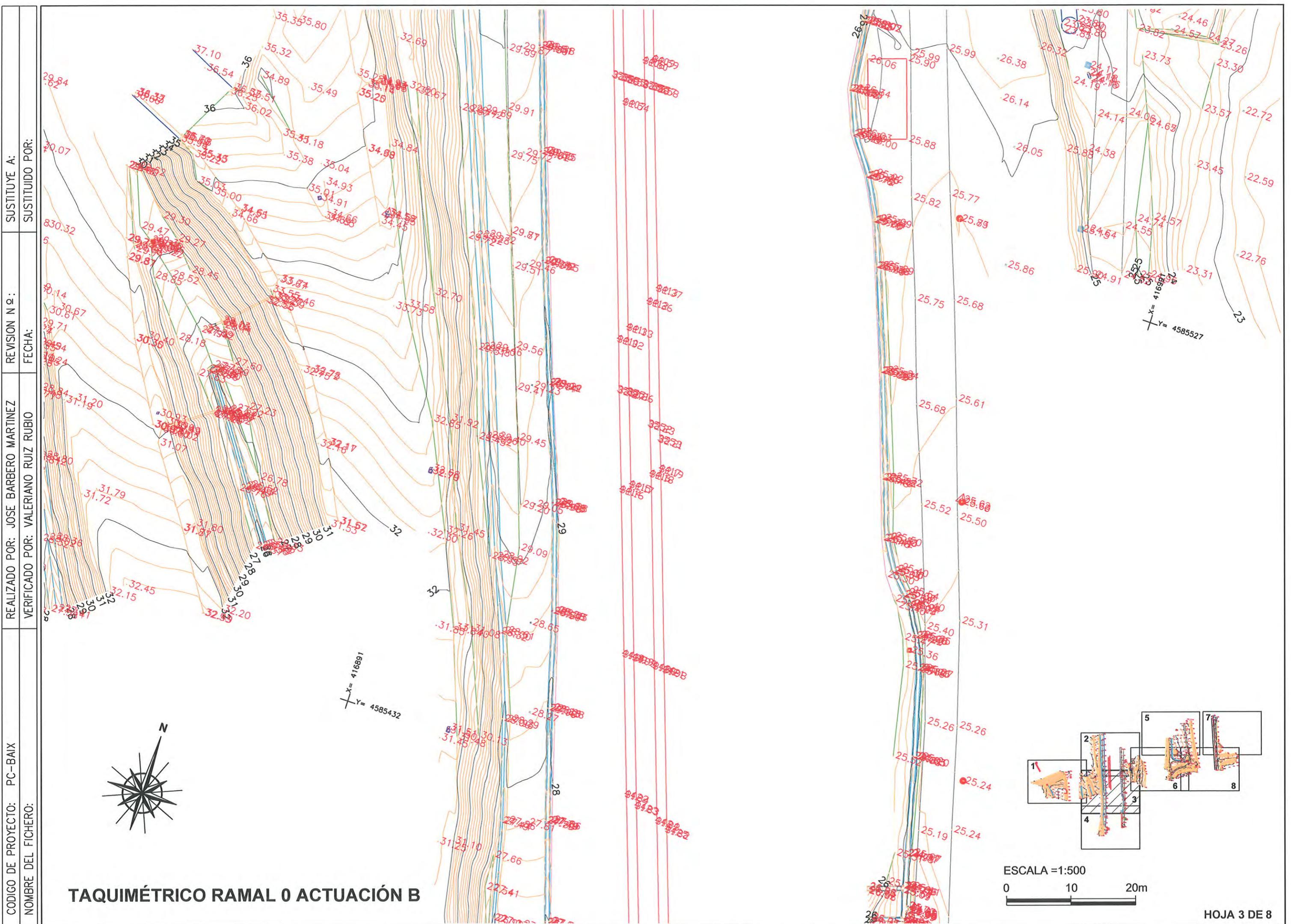
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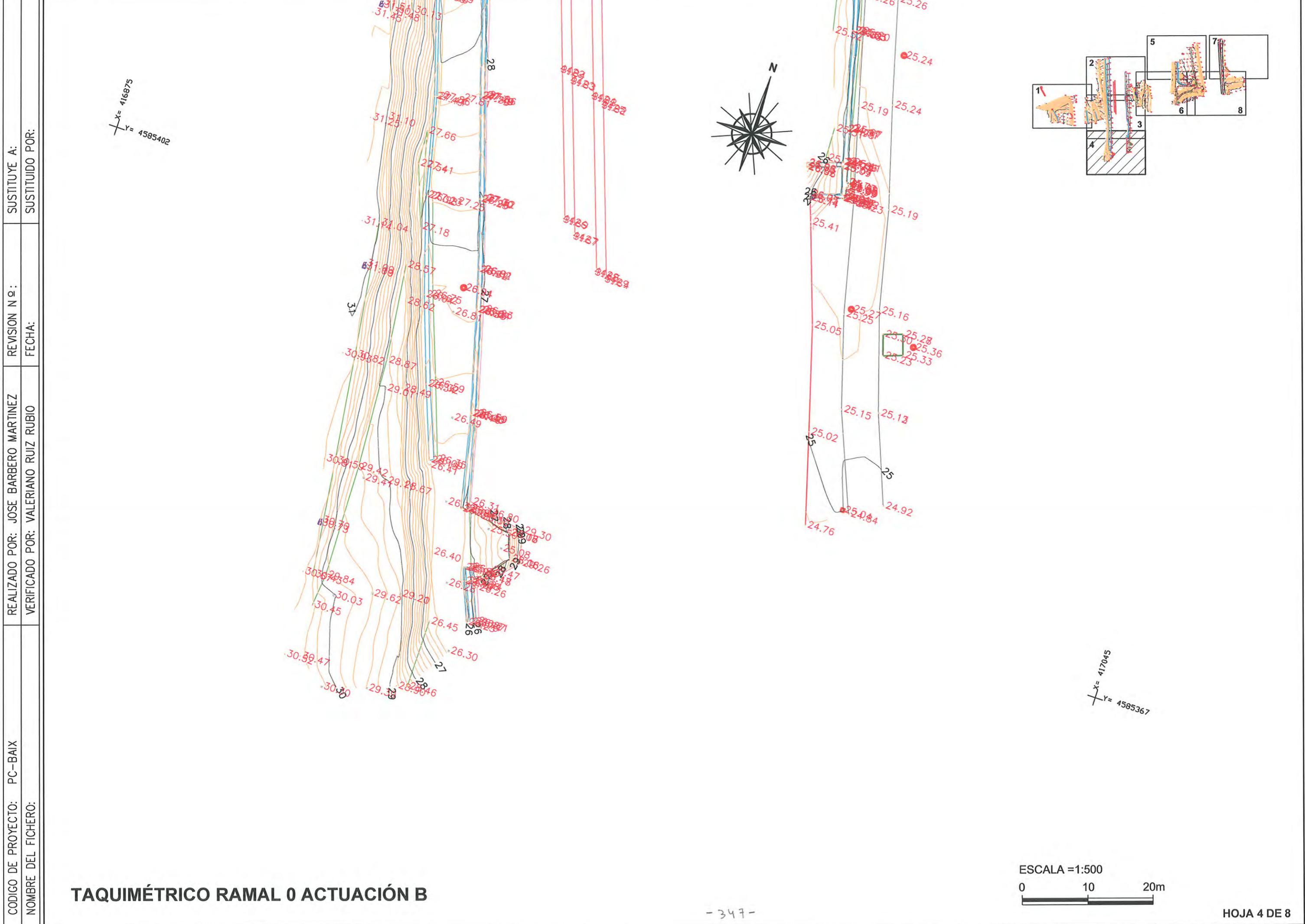
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35.174

3







ESCALA = 1:500
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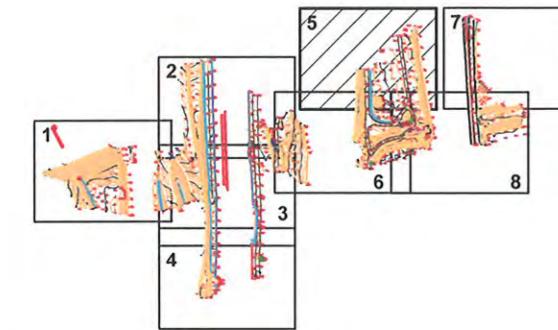
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 $y = 4585748$

SUSTITUYE A:

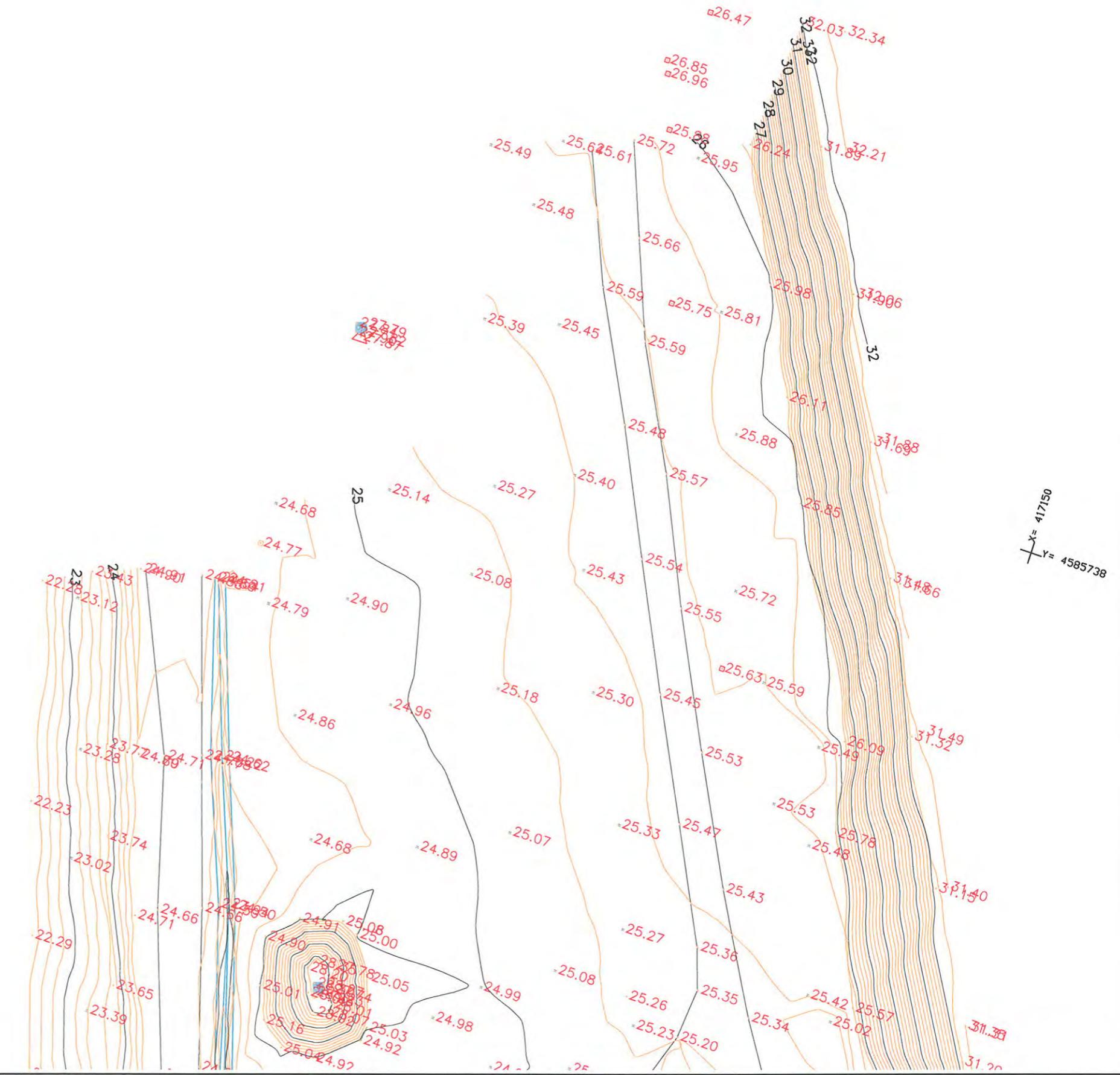
REALIZADO POR: JOSE BARBERO MARTINEZ
VERIFICADO POR: VALERIANO RUIZ RUBIO

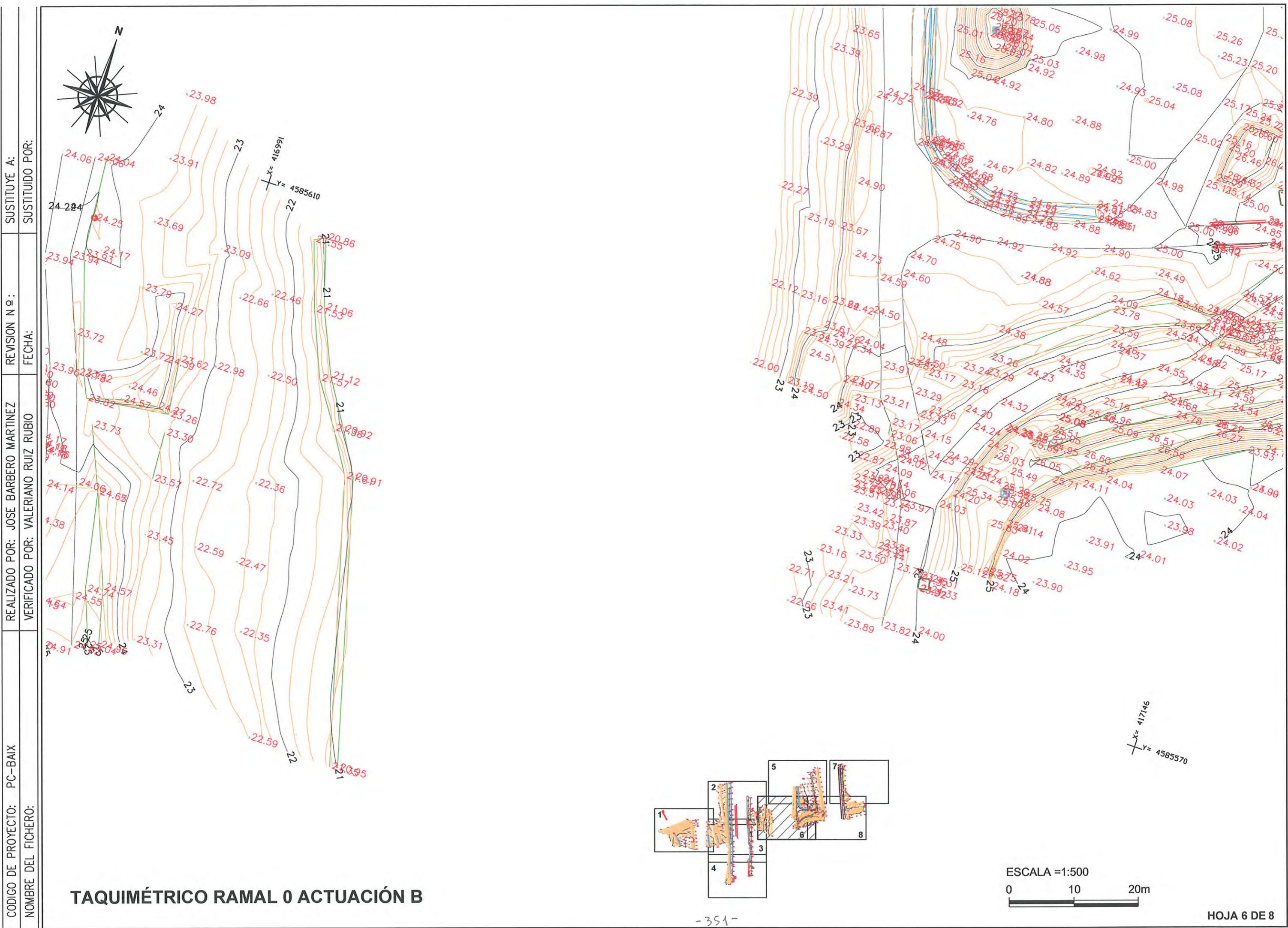
CÓDIGO DE PROYECTO: PC-BAIX
NOMBRE DEL FICHERO:

HOJA 5 DE 8



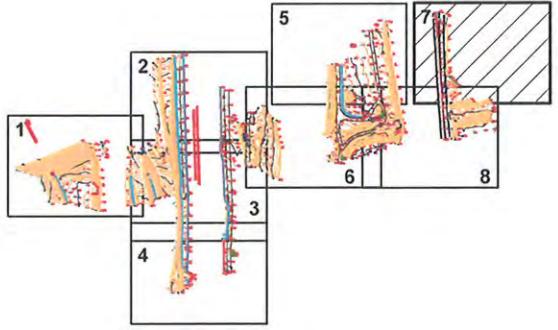
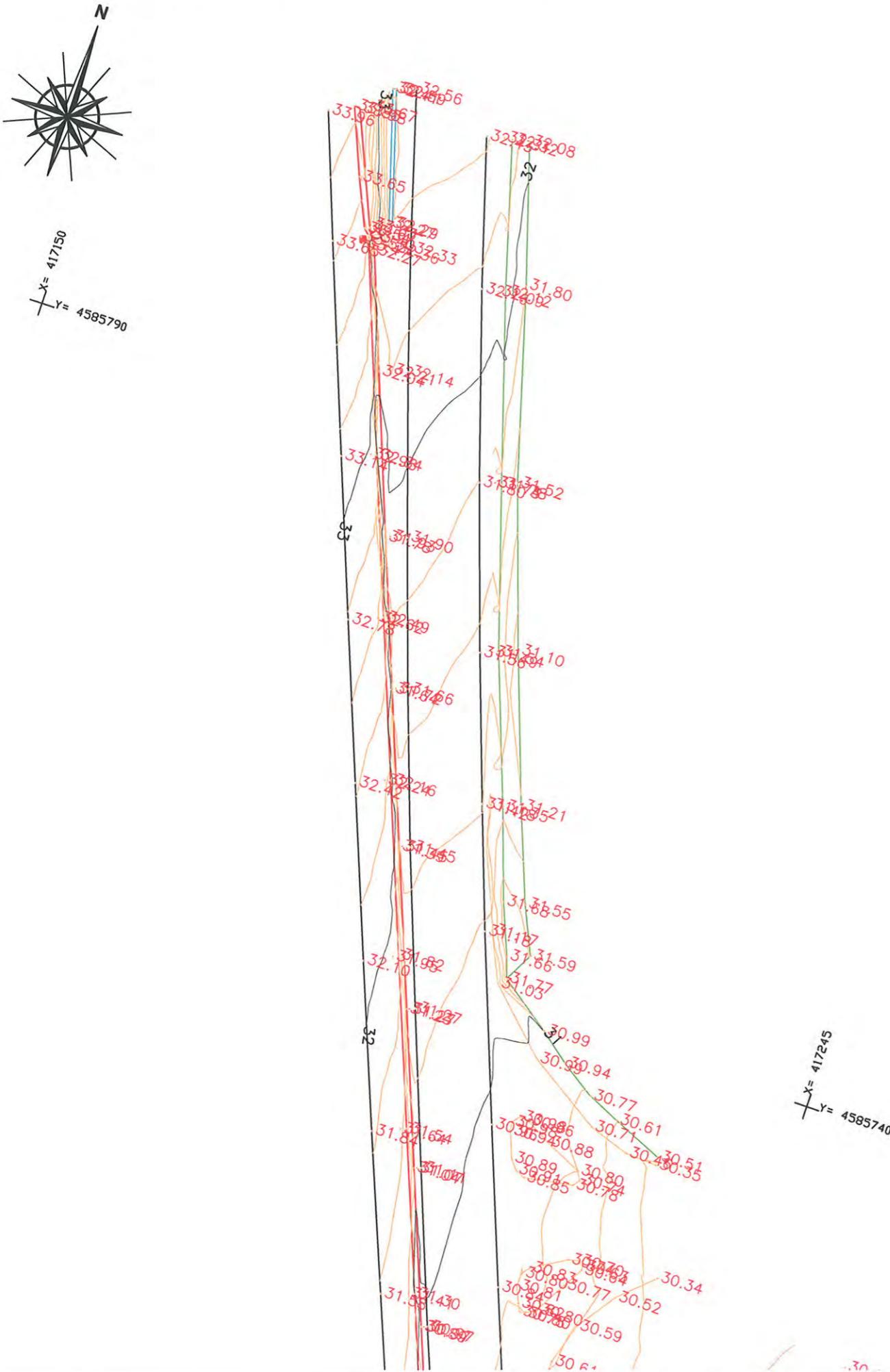
TAQUIMÉTRICO RAMAL 0 ACTUACIÓN B



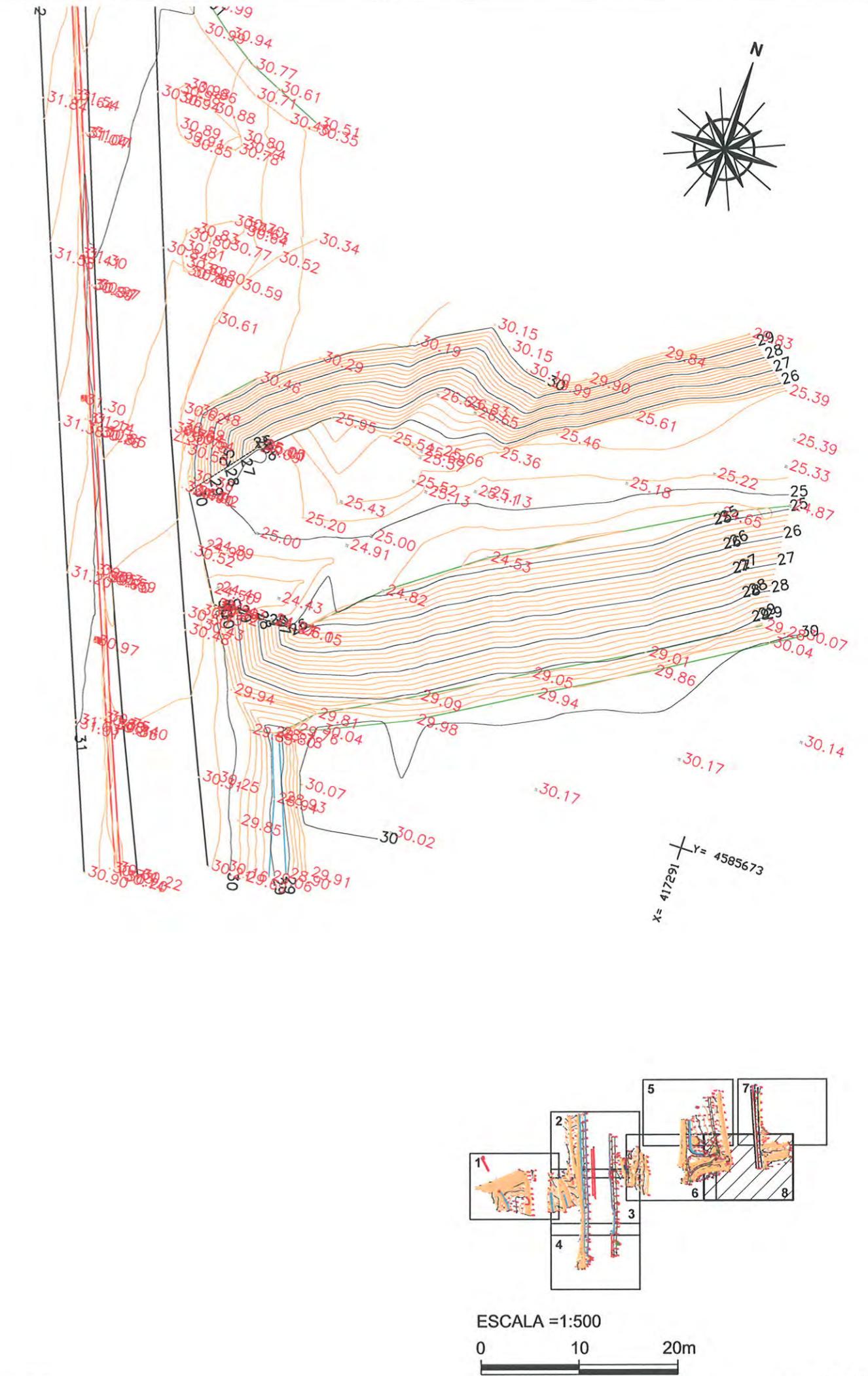


TAQUIMÉTRICO RAMAL 0 ACTUACIÓN B

CODIGO DE PROYECTO:	PC-BAIX	REALIZADO POR:	JOSE BARBERO MARTINEZ	REVISION N°:	SUSTITUYE A:
NOMBRE DEL FICHERO:		VERIFICADO POR:	VALERIANO RUIZ RUBIO	FECHA:	SUSTITUIDO POR:



ESCALA =1:500



CODIGO DE PROYECTO:	PC-BAIX	REALIZADO POR:	JOSE BARBERO MARTINEZ	REVISION N º:	SUSTITUYE A:
NOMBRE DEL FICHERO:		VERIFICADO POR:	VALERIANO RUIZ RUBIO	FECHA:	SUSTITUIDO POR



SUSTITUYE A:

REALIZADO POR: JOSE BARBERO MARTINEZ

CODIGO DE PROYECTO: PC-BAIX

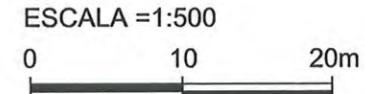
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SUSTITUIDO POR:

VERIFICADO POR: VALERIANO RUIZ RUBIO



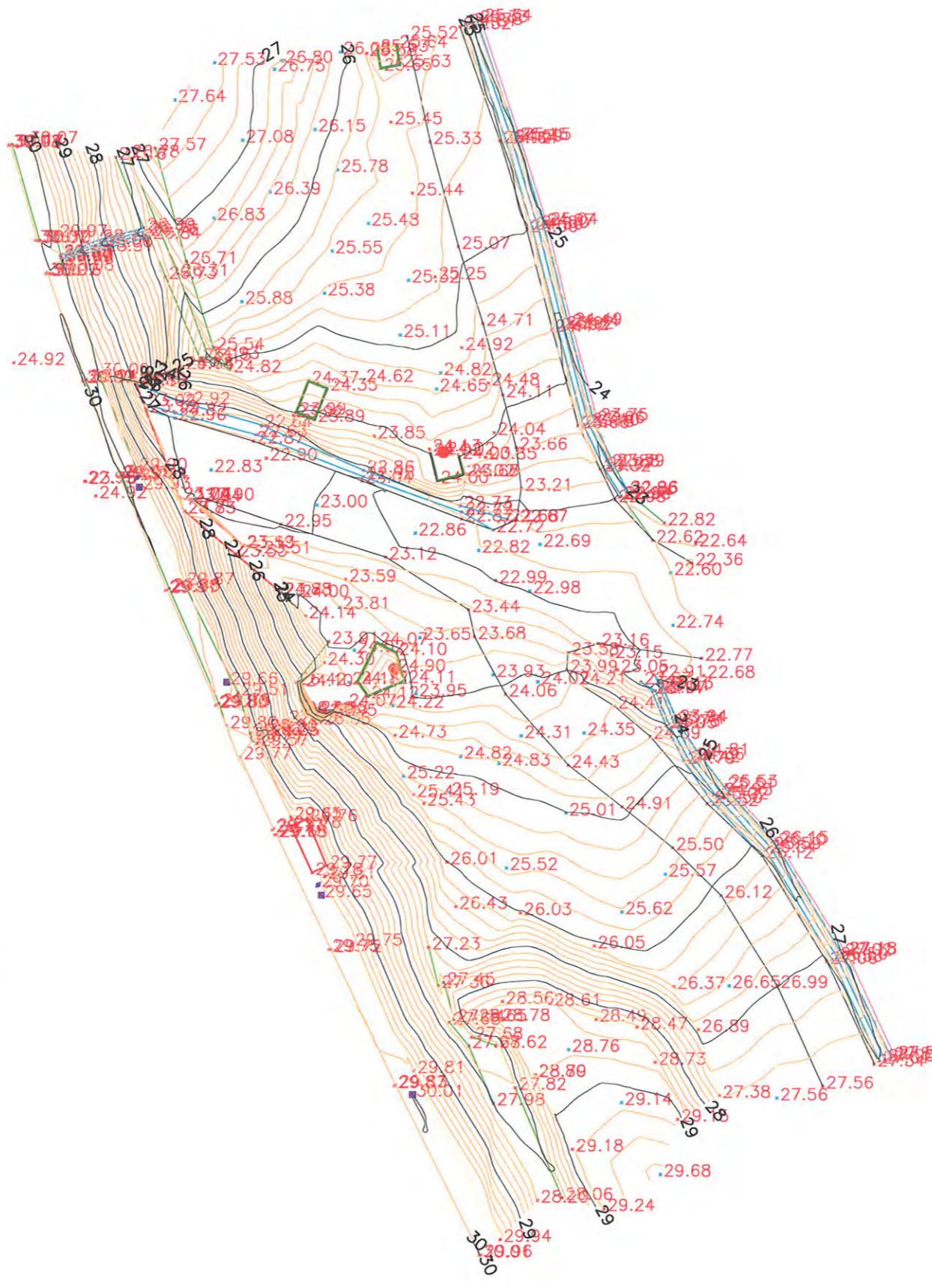
TAQUIMÉTRICO RAMAL 1 PK 1+400 ACTUACIÓN B



CÓDIGO DE PROYECTO: PC-BAIX REALIZADO POR: JOSE BARBERO MARTINEZ REVISIÓN N°: SUSTITUYE A:
NOMBRE DEL FICHERO: VERIFICADO POR: VALERIANO RUIZ RUBIO FECHA: SUSTITUIDO POR:



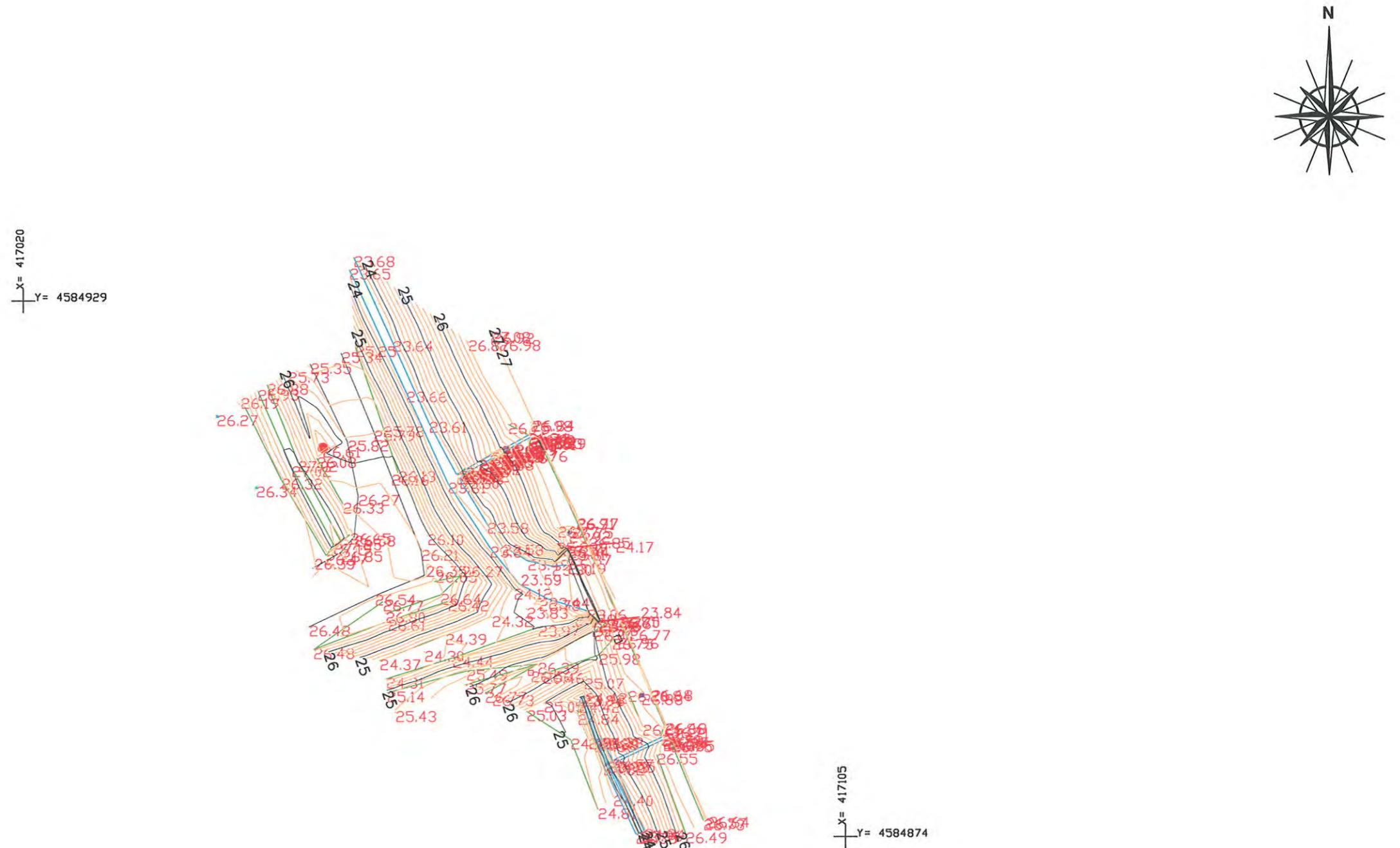
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Y= 4585197



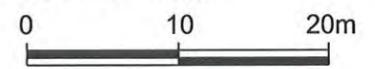
CODIGO DE PROYECTO:	PC-BAIX	REALIZADO POR:	JOSE BARBERO MARTINEZ	REVISION N º:	SUSTITUYE A:
NOMBRE DEL FICHERO:		VERIFICADO POR:	VALERIANO RUIZ RUBIO	FECHA:	SUSTITUIDO POR:

TAQUIMÉTRICO RAMAL 1 PK. 1+800 ACTUACIÓN E

- 361 -



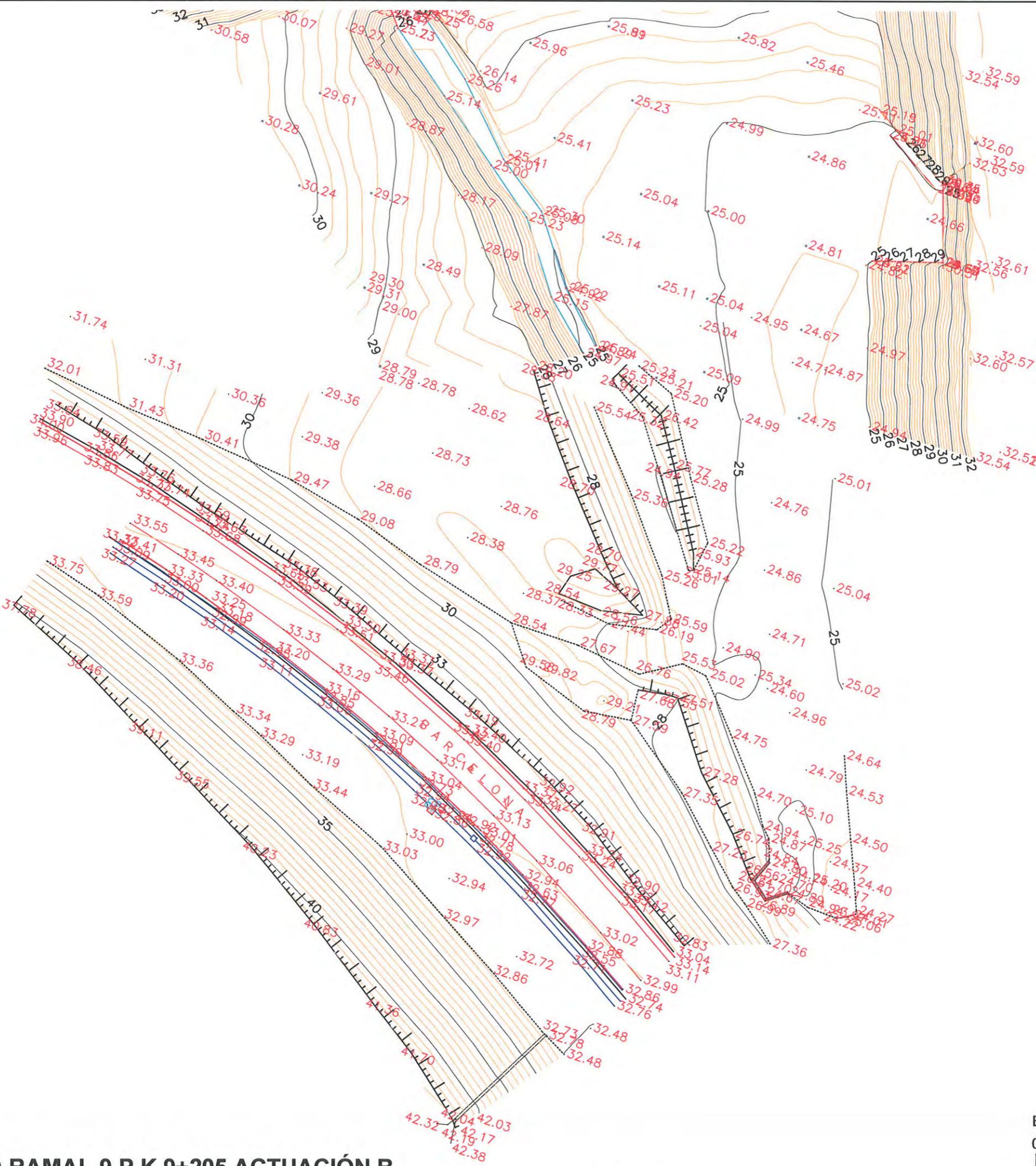
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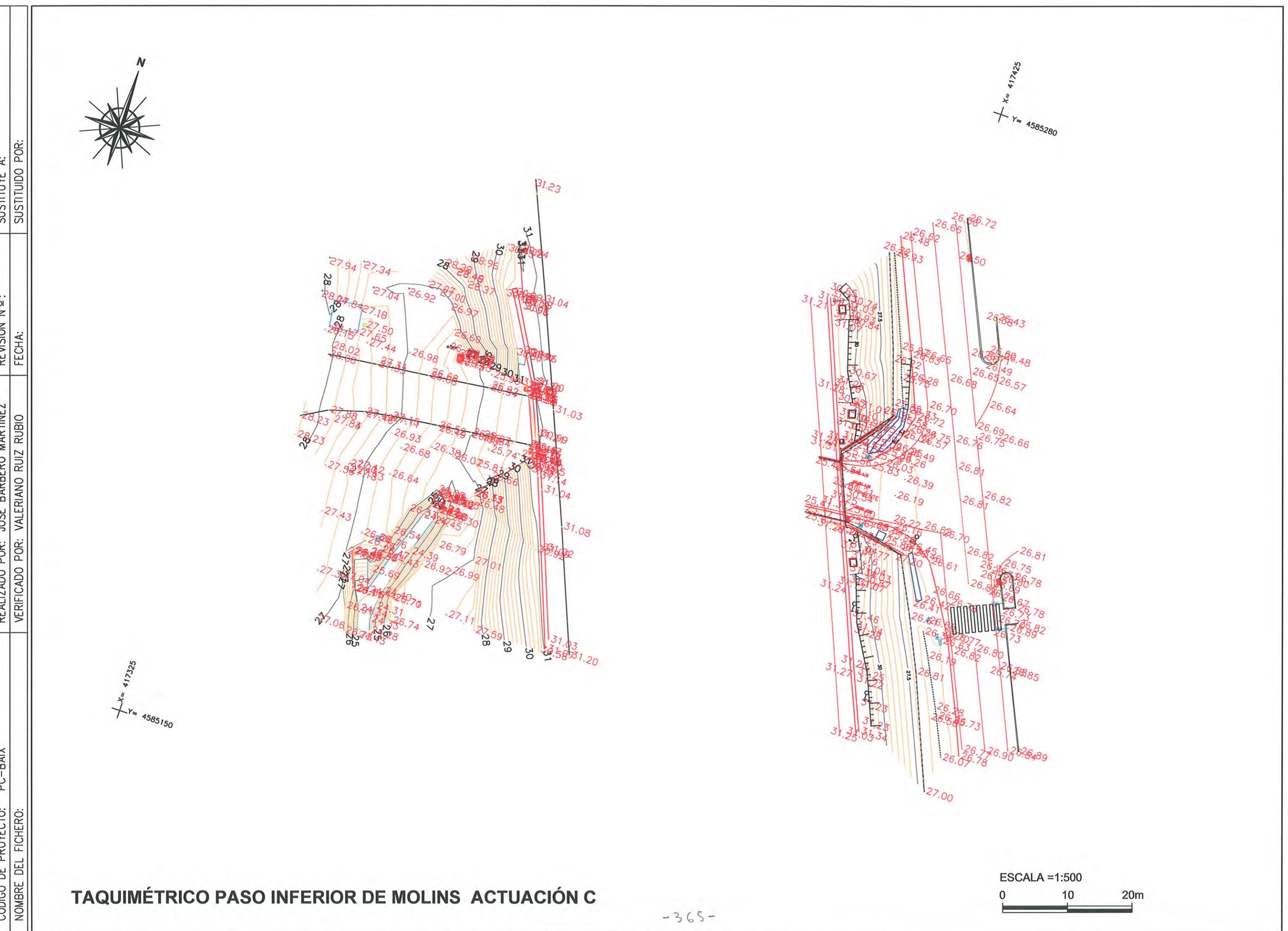
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NOMBRE DEL FICHERO: VERIFICADO POR: VALERIANO RUIZ RUBIO FECHA: SUSTITUIDO POR:

$X = 416690$
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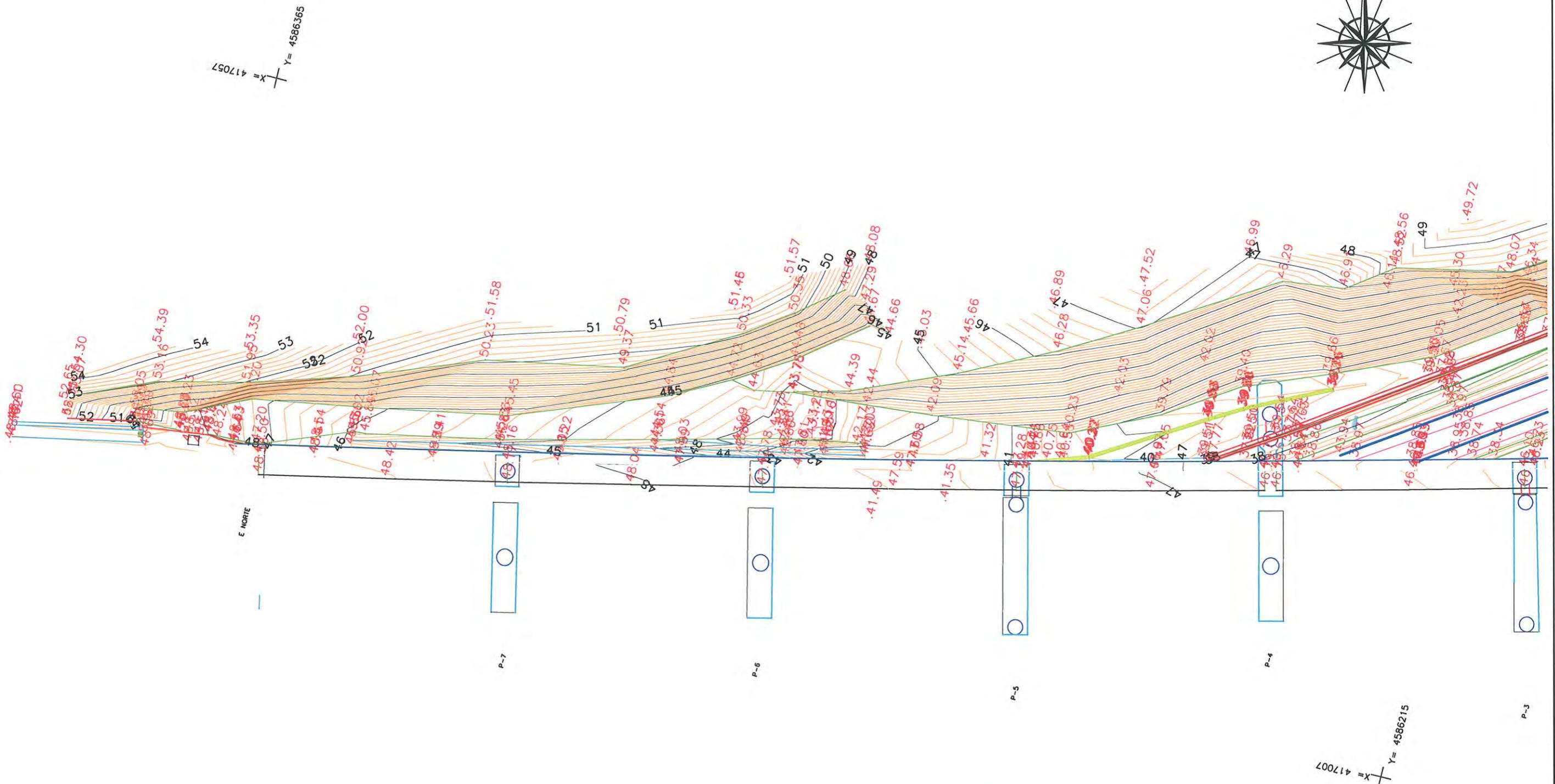
TAQUIMÉTRICO RAMAL 9 P.K.9+205 ACTUACIÓN B



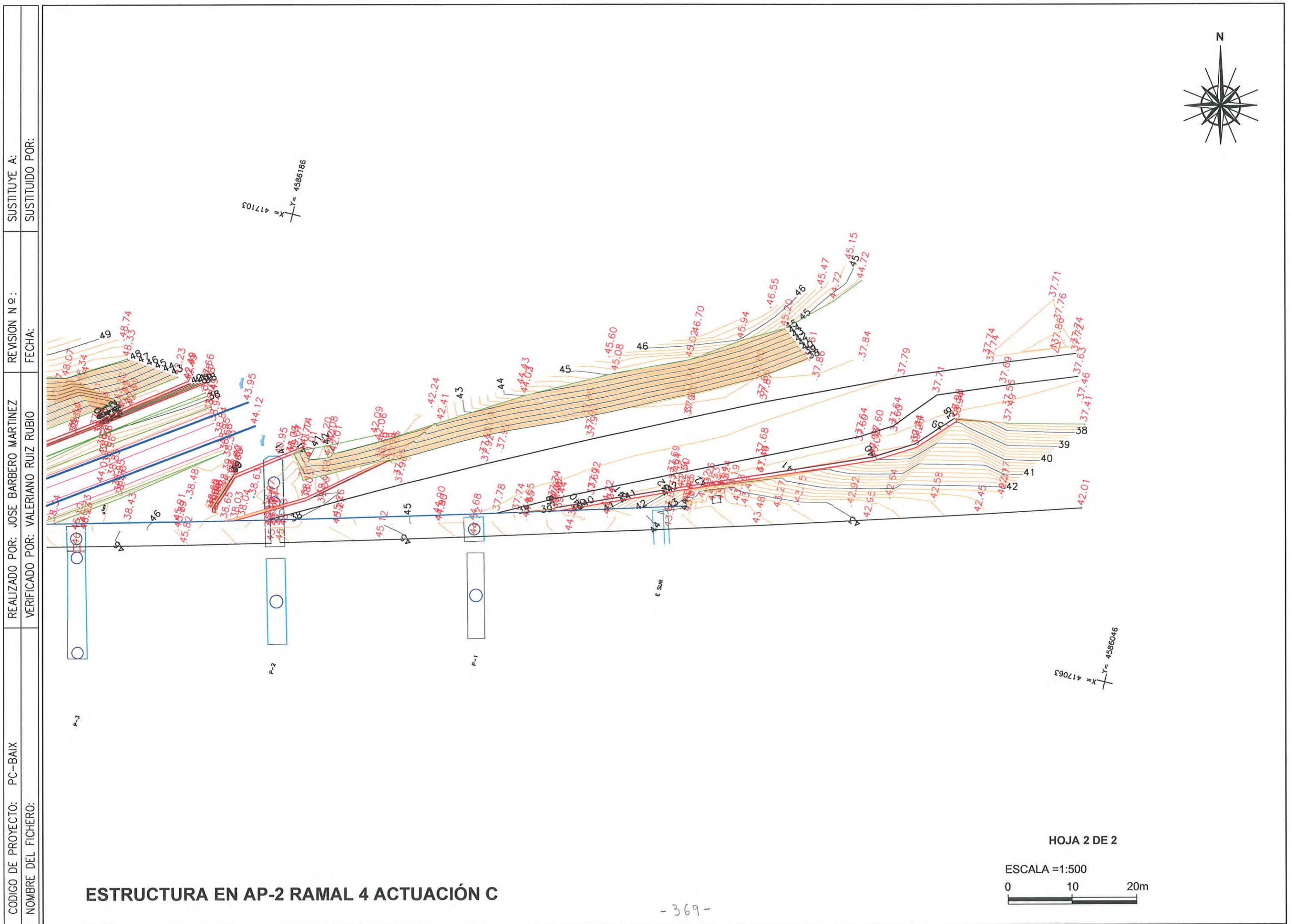
TAQUIMÉTRICO PASO INFERIOR DE MOLINS ACTUACIÓN C

- 365 -

CÓDIGO DE PROYECTO: PC-BAIX REALIZADO POR: JOSE BARBERO MARTINEZ REVISIÓN N°: SUSTITUYE A:
NOMBRE DEL FICHERO: VERIFICADO POR: VALERIANO RUIZ RUBIO FECHA: SUSTITUIDO POR:



ESTRUCTURA EN AP-2 RAMAL 4 ACTUACION C



TAQUIMÉTRICO RAMALES 1 Y 2 ACTUACIÓN E

CÓDIGO DE PROYECTO: PC-BAIX	REALIZADO POR: JOSE BARBERO MARTINEZ	REVISIÓN N.º:	SUSTITUYE A:
NOMBRE DEL FICHERO:	VERIFICADO POR: VALERIANO RUIZ RUBIO	FECHA:	SUSTITUIDO POR:

14.97 14.98

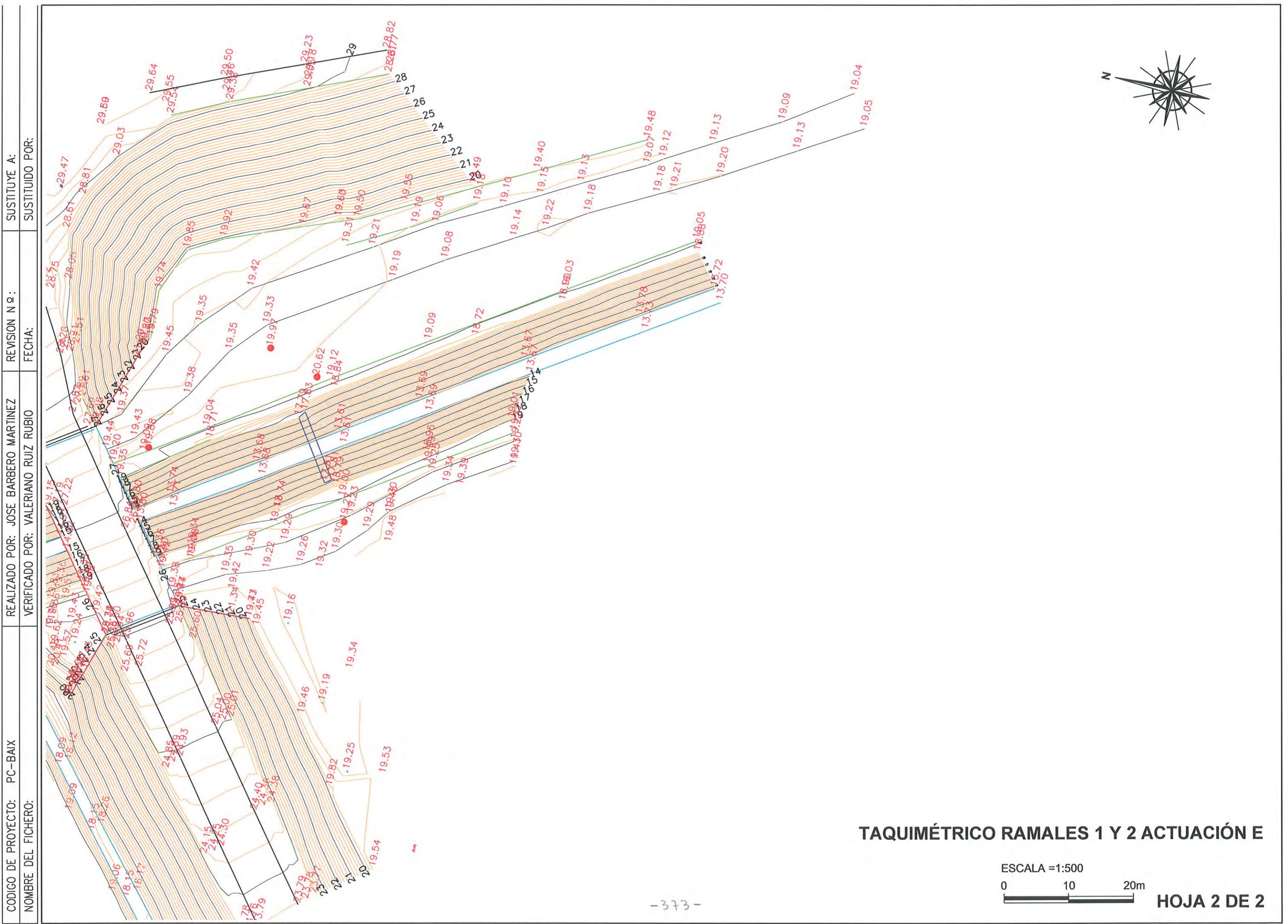
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0 10 20m

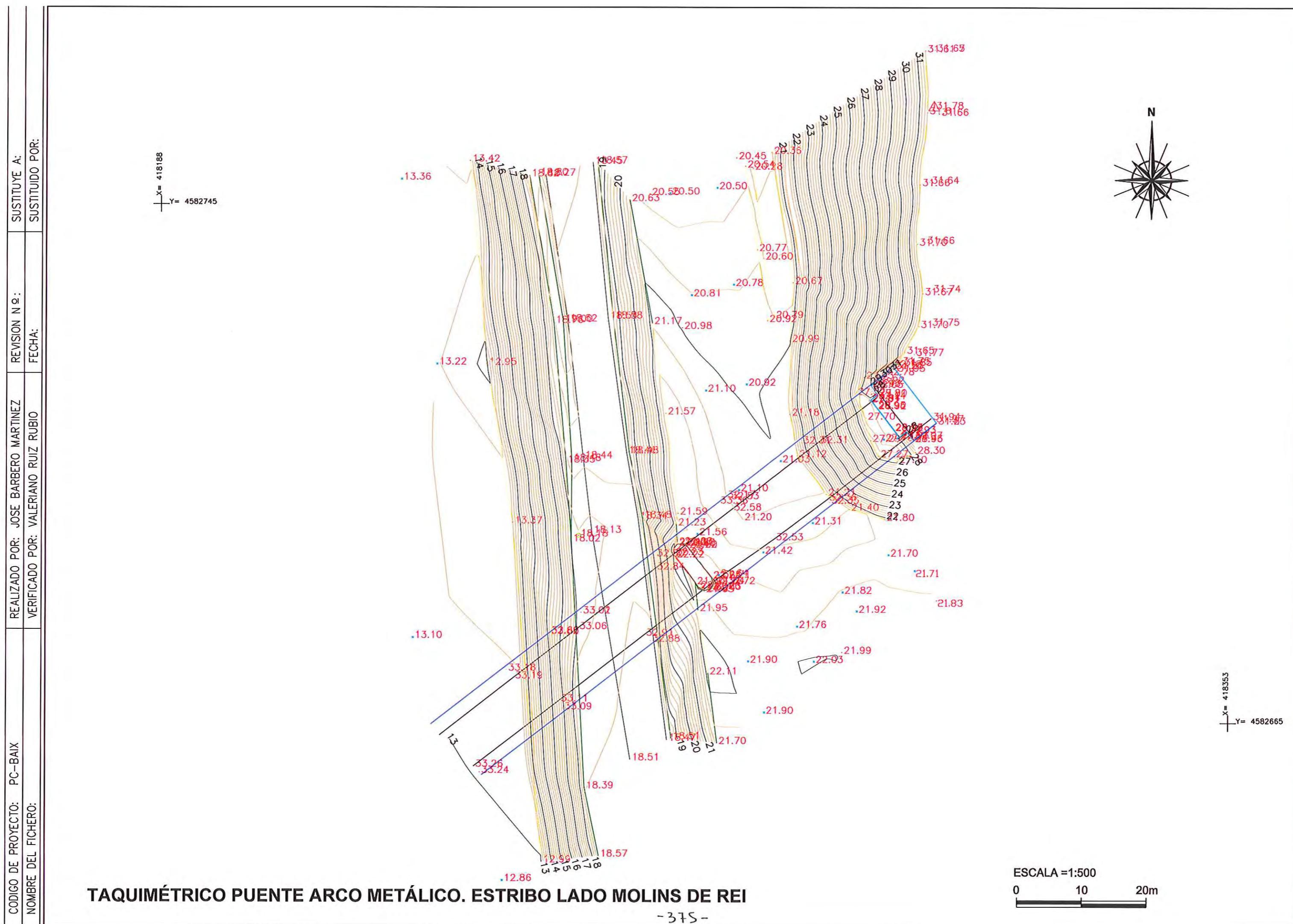
HOJA 1 DE 2

N

TAQUIMÉTRICO RAMALES 1 Y 2 ACTUACIÓN E

- 371 -





CÓDIGO DE PROYECTO: PC-BAIX
NOMBRE DEL FICHERO:

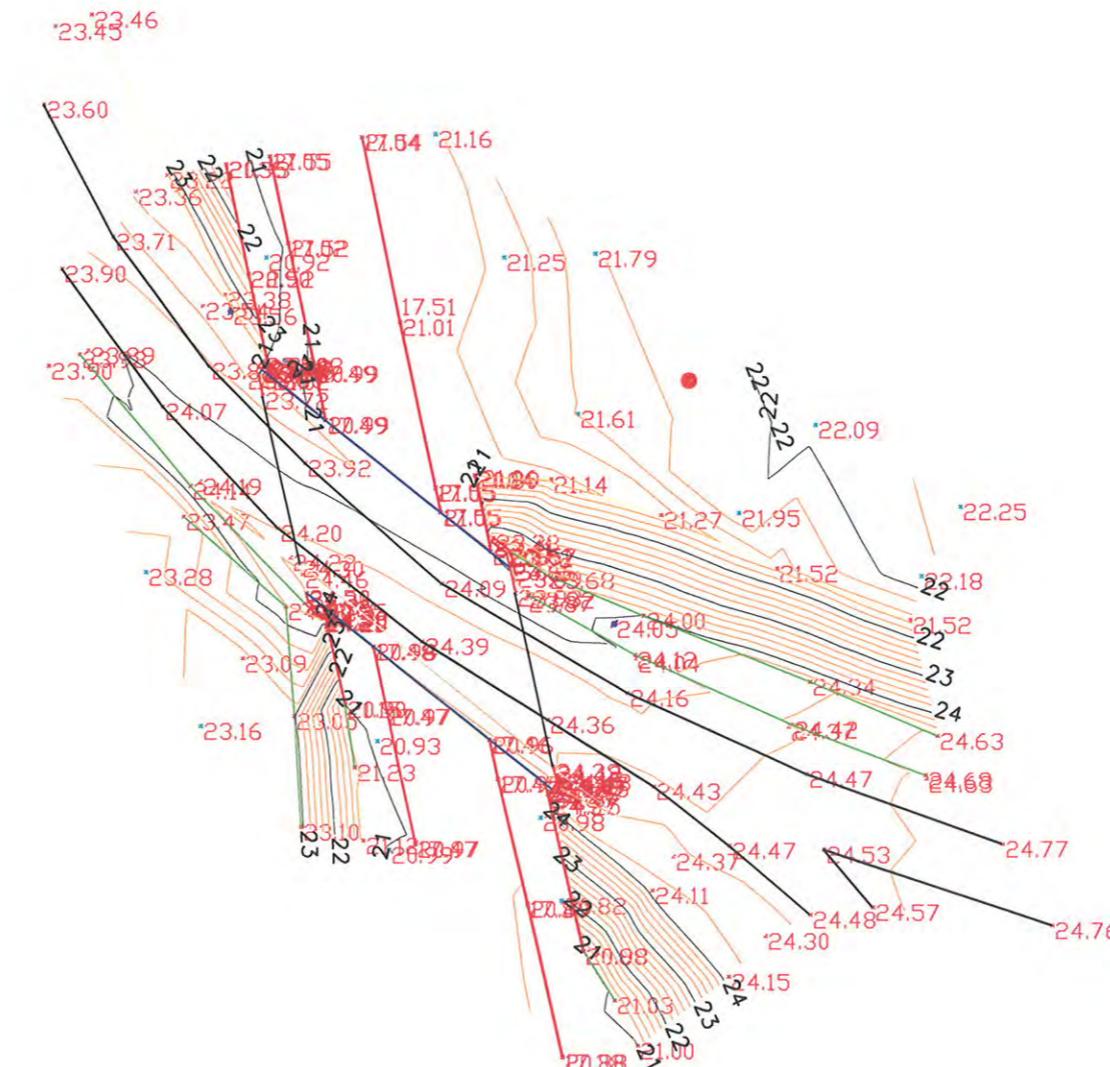
REALIZADO POR: JOSE BARBERO MARTINEZ
VERIFICADO POR: VALERIANO RUIZ RUBIO

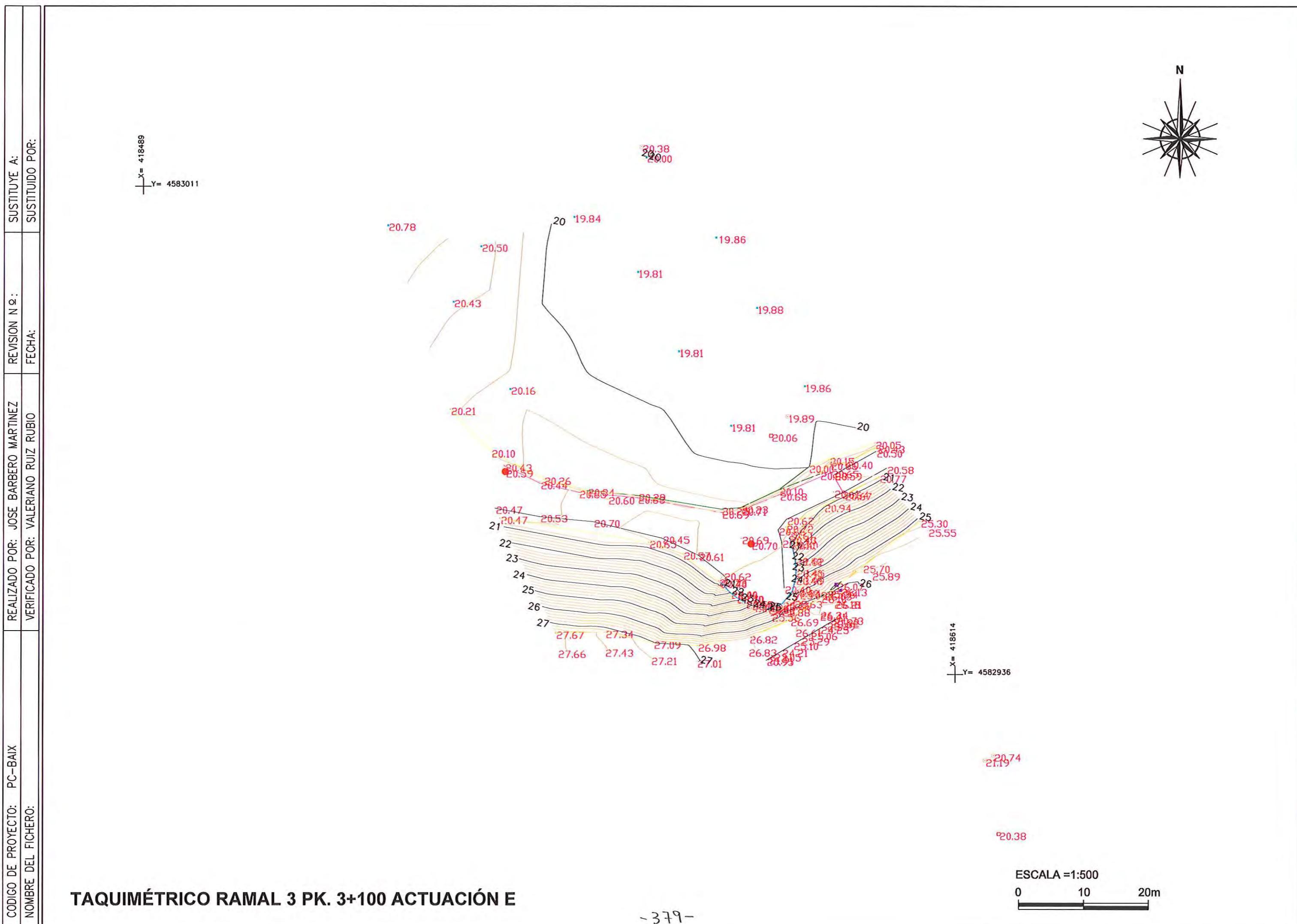
REVISIÓN N.º:

SUSTITUYE A:

SUSTITUIDO POR:

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Y= 4583047

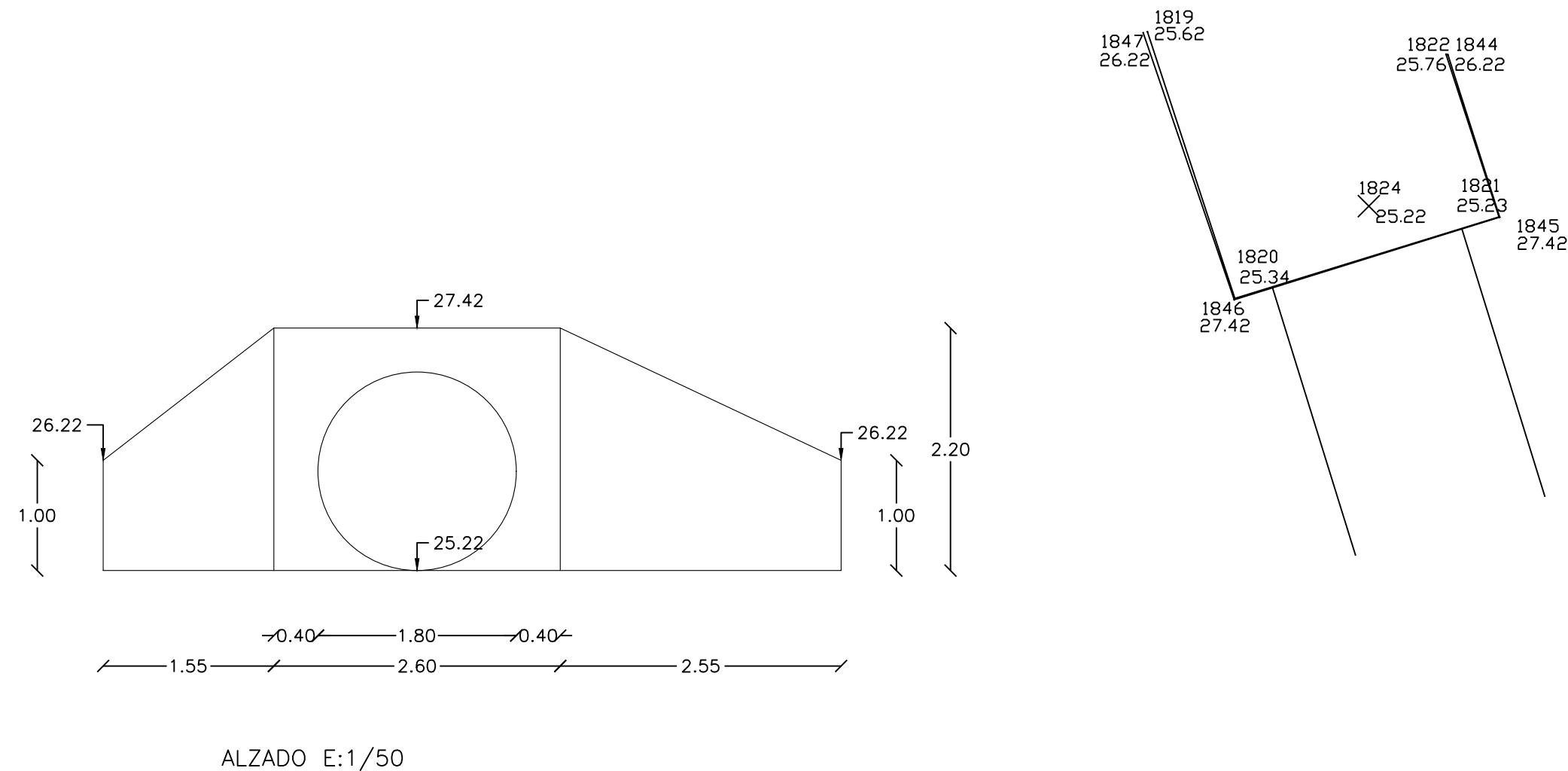




3.17.4.-Obras de Drenaje y Estructuras

CÓDIGO DE PROYECTO:	NOMBRE DEL FICHERO: 01SECCION OD RAMAL 4 PK 4+960.dwg
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VERIFICADO POR:	FECHA:

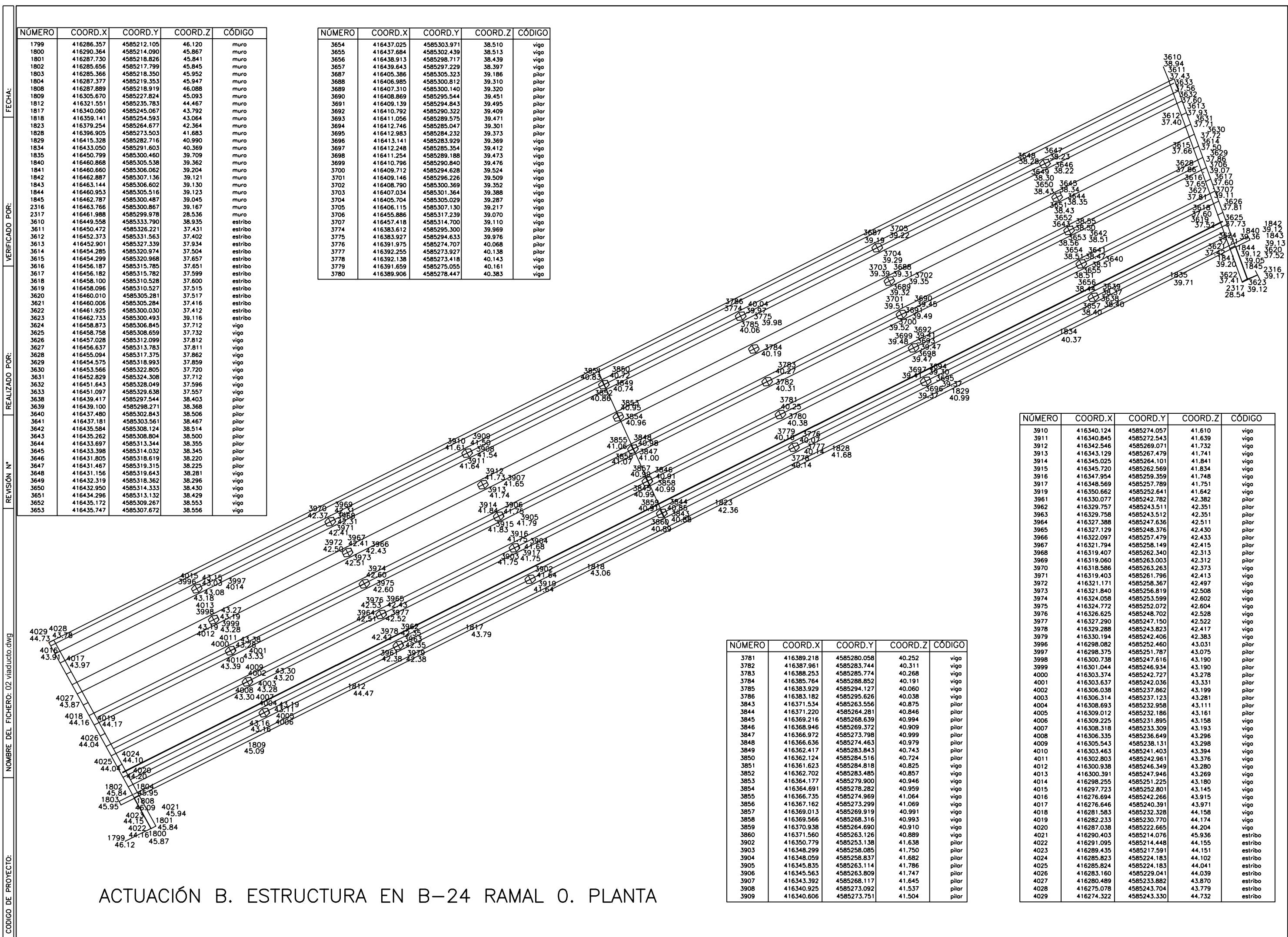
NÚMERO	COORD.X	COORD.Y	COORD.Z
1819	416626.893	4585852.865	25.617
1820	416627.687	4585850.446	25.339
1821	416630.085	4585851.184	25.235
1822	416629.604	4585852.659	25.761
1824	416628.903	4585851.282	25.222
1844	416629.621	4585852.656	26.220
1845	416630.092	4585851.181	27.420
1846	416627.681	4585850.433	27.420
1847	416626.855	4585852.855	26.220

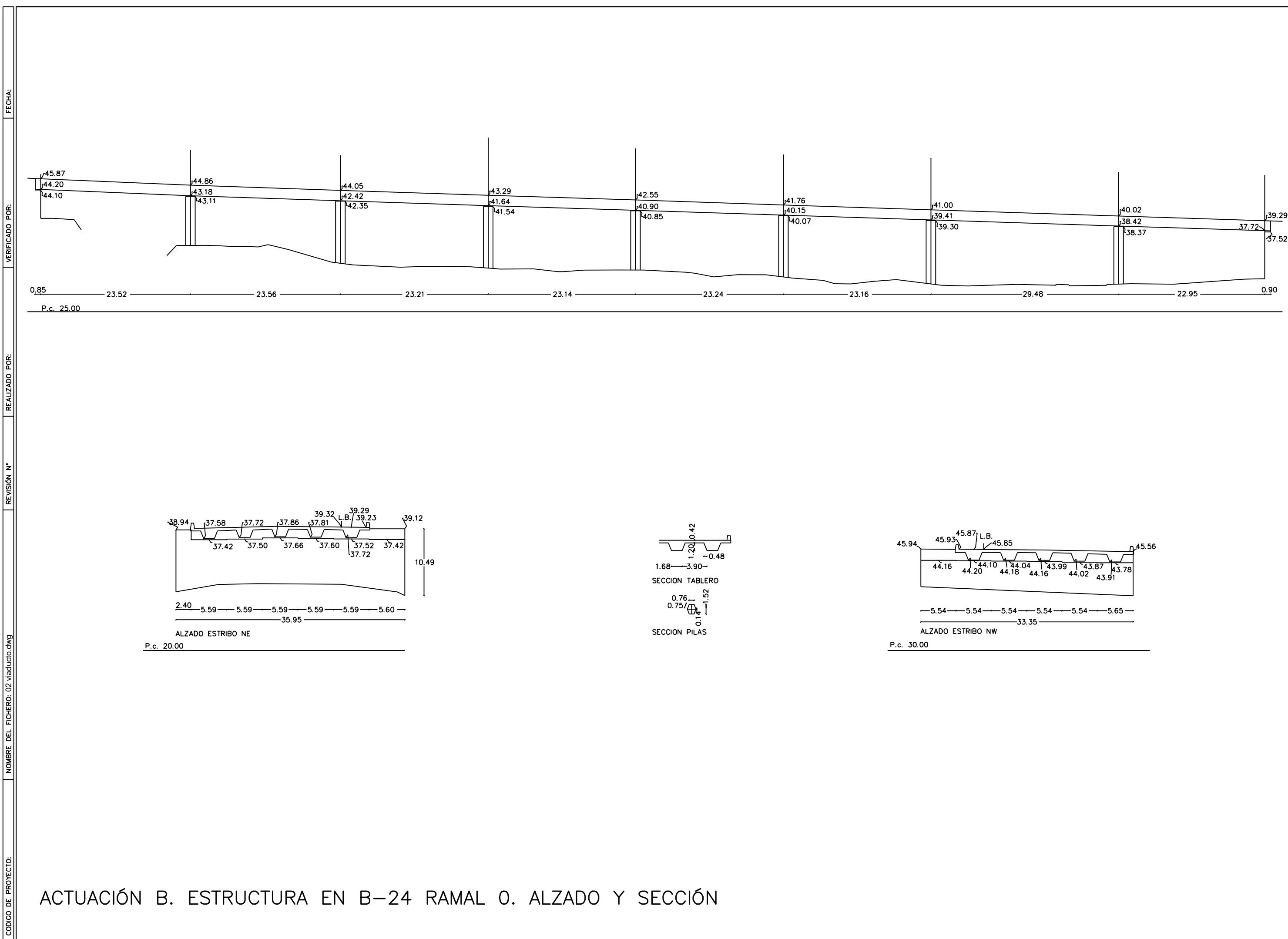


ACTUACIÓN B O.D. RAMAL 4 PK. 4+740 (ENTRADA DEL DESAGÜE DE LA CUNETA DE PIE DE TERRAPLÉN)

ACTUACIÓN B O.D. RAMAL 4 PK. 4+740 (ENTRADA DEL DESAGÜE DE LA CUNETA DE PIE DE TERRAPLÉN)







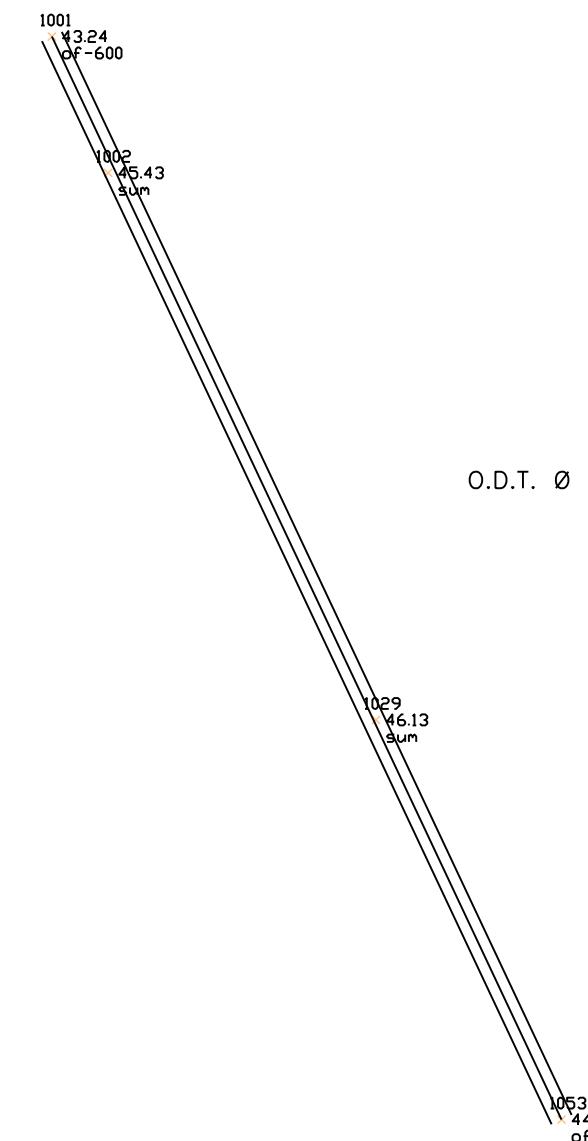
ACTUACIÓN B ESTRUCTURA EN B-24 RAMAL 0. ESTRIBO LADO ESTE



ACTUACIÓN B ESTRUCTURA EN B-24 RAMAL 0. PILAS Y TABLERO



CÓDIGO DE PROYECTO:	NOMBRE DEL FICHERO: 03 DESAGÜE RAMAL 0 B-24 0+060.dwg
REVISIÓN N°	REALIZADO POR:
VERIFICADO POR:	FECHA:

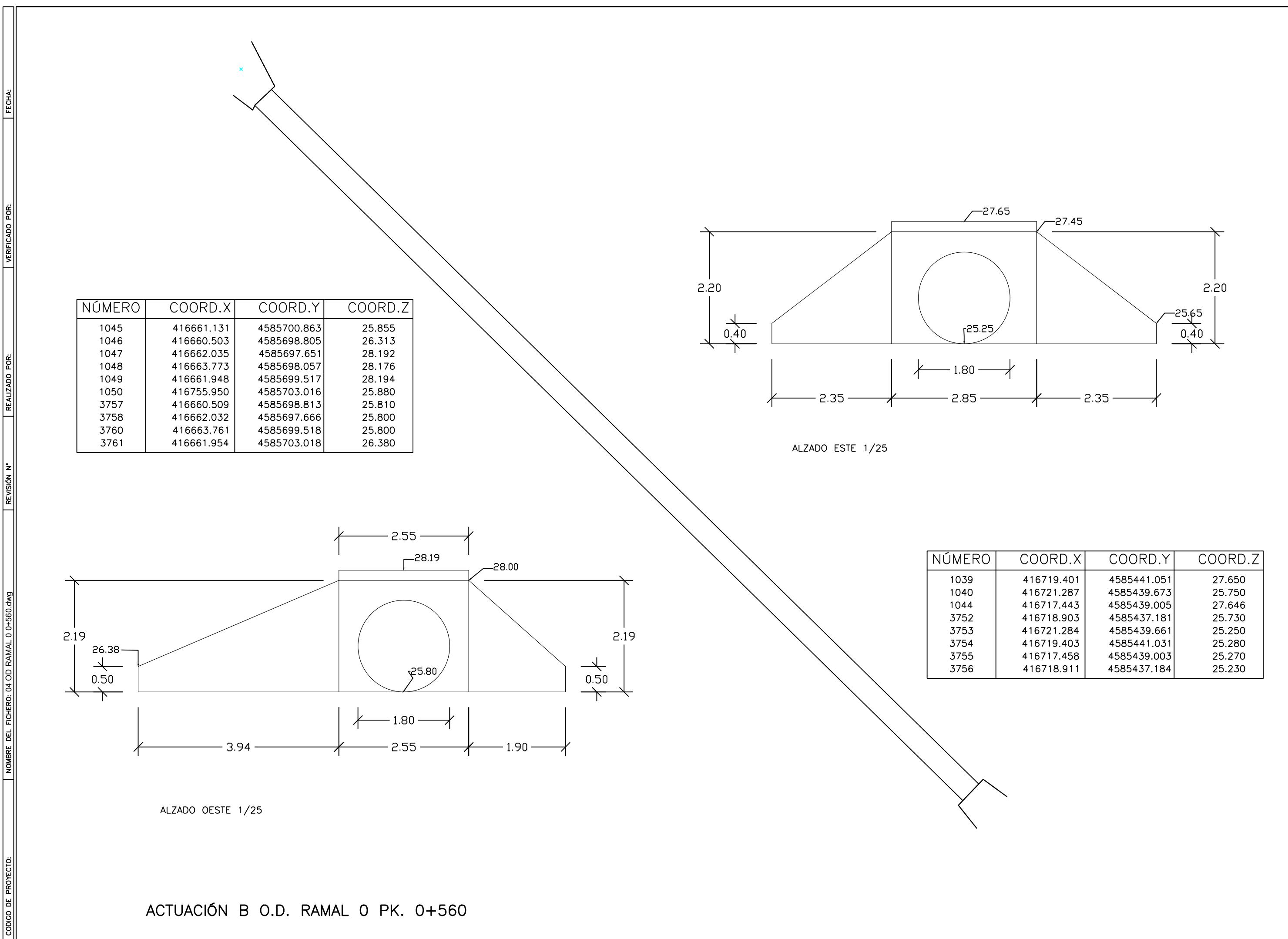


NÚMERO	COORD.X	COORD.Y	COORD.Z	CÓDIGO
1001	416259.979	4585242.009	43.239	Of-600 Lámina de agua
1002	416261.513	4585238.284	45.430	sumidero
1029	416268.836	4585223.333	46.127	sumidero
1053	416273.910	4585212.409	44.620	Of-600 Lámina de agua

DESAGÜE RAMAL 0 B-24 P.K. 0+060

DESAGÜE RAMAL 0 B-24 P.K. 0+060





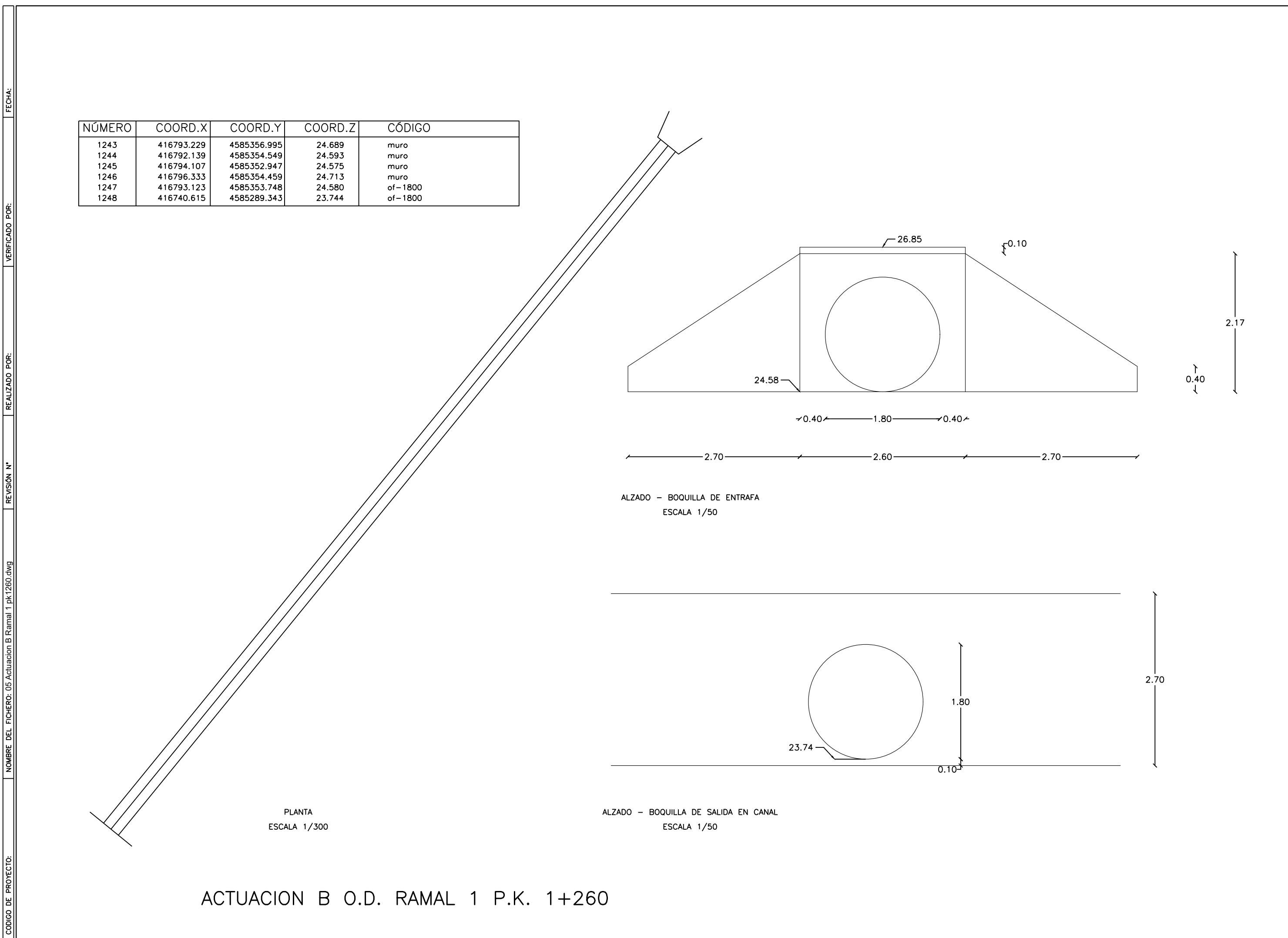
ACTUACIÓN B O.D. RAMAL 0 P.K. 0+560



Margen Izquierda (entrada en ramal existente Pallejà-Cervelló)



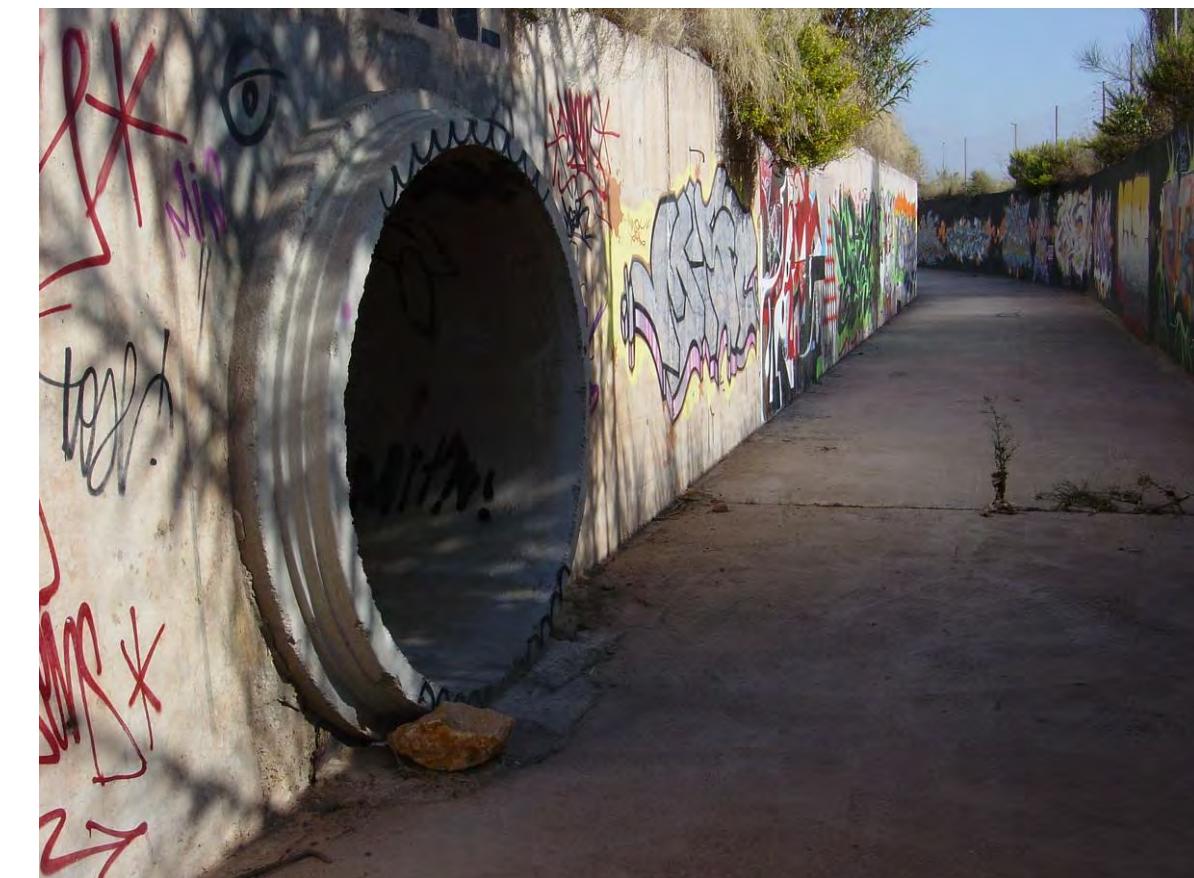
Margen derecha (salida en ramal 9)



ACTUACIÓN B O.D. RAMAL 1 P.K. 1+260

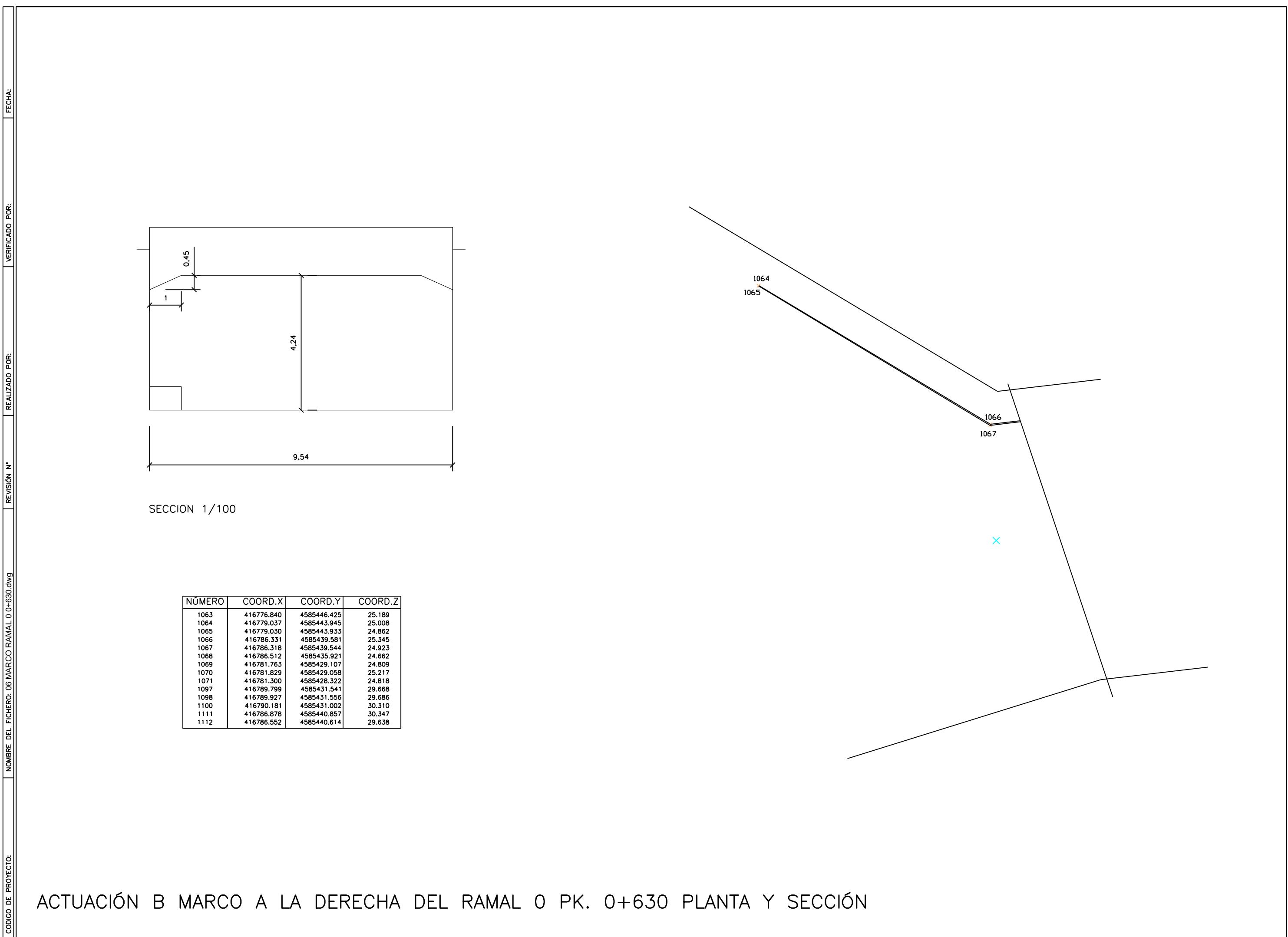


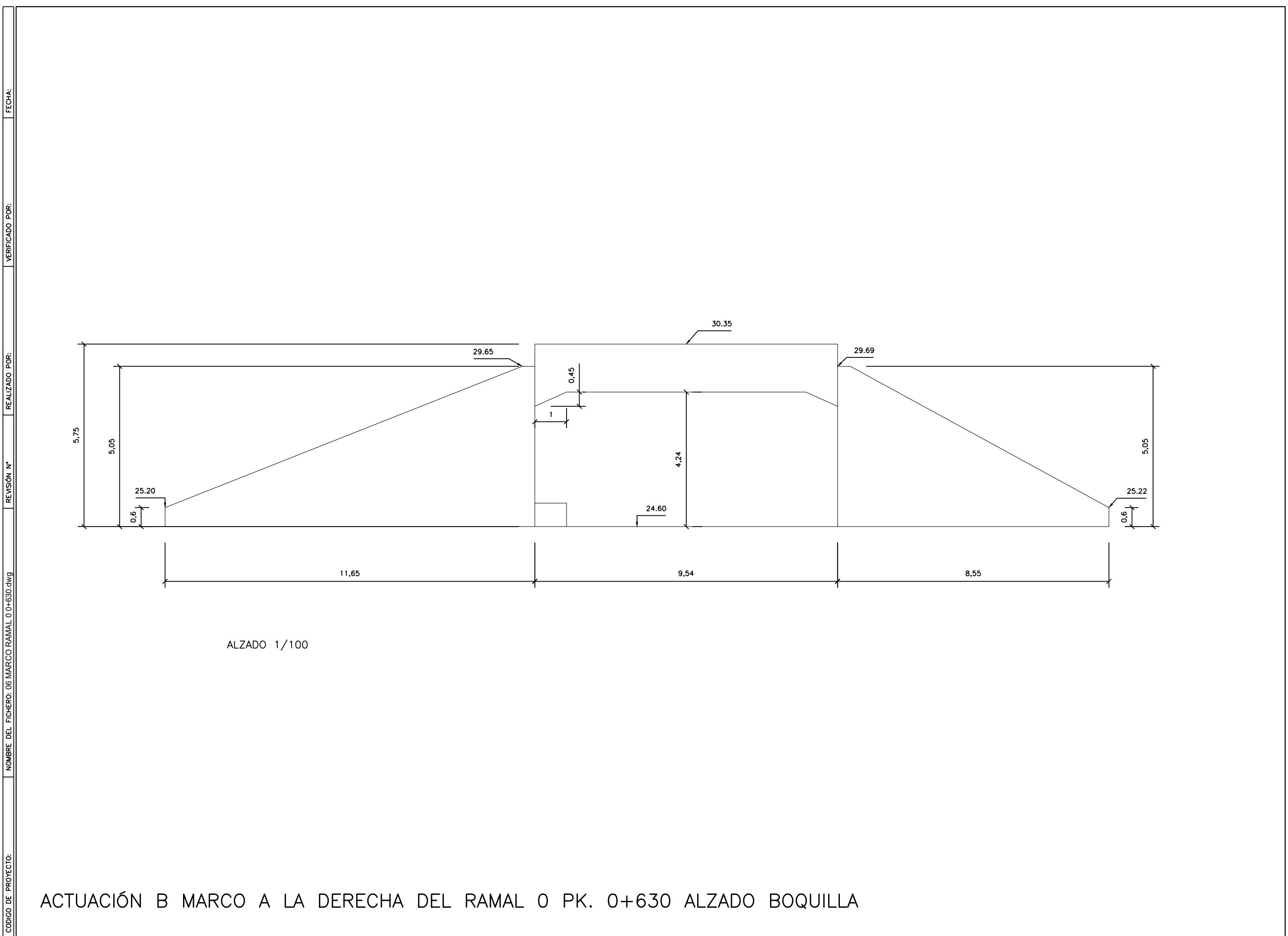
Boquilla de entrada



Salida al canal de la riera de Fonda







ACTUACIÓN B MARCO RAMAL 0 P.K. 0+630. (BOQUILLA LADO PALLEJÀ)



NOMBRE DEL FICHERO: 07 ZA-B SECCION DE RAMAL 1 1+400.dwg

REVISIÓN N°

REALIZADO POR:

VERIFICADO POR:

FECHA:

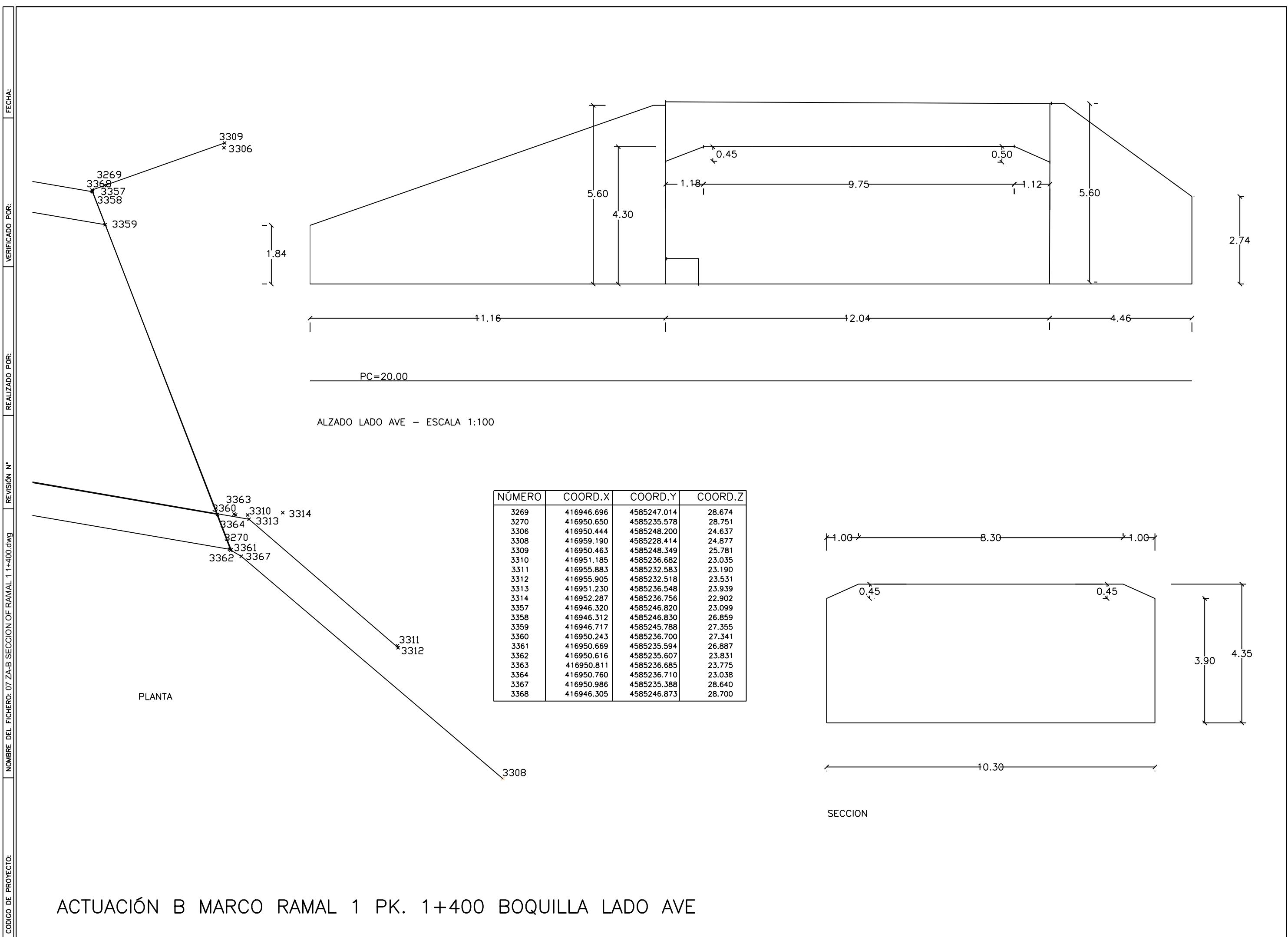
NÚMERO	COORD.X	COORD.Y	COORD.Z
1724	416857.684	4585248.413	25.542
1725	416862.969	4585250.409	28.838
1726	416863.324	4585250.547	28.863
1727	416853.417	4585263.105	28.860
1728	416853.409	4585263.105	29.420
1729	416853.272	4585263.111	29.417
2055	416857.603	4585248.507	23.501
2264	416853.753	4585262.693	23.148
2265	416853.814	4585262.672	27.055
2266	416854.833	4585261.341	27.509
2267	416863.340	4585250.586	27.053
2268	416862.407	4585251.750	27.528
2269	416863.331	4585250.595	24.100
2270	416863.423	4585251.669	24.063
2271	416863.420	4585251.705	23.191
2275	416863.282	4585251.717	23.189
2279	416857.706	4585257.702	23.190
2280	416857.320	4585258.178	23.057
2281	416857.280	4585258.143	24.111
2294	416853.749	4585262.681	23.140

ALZADO LADO PALLEJÁ - ESCALA 1:100

PC=20.00

PLANTA

ACTUACIÓN B MARCO RAMAL 1 PK. 1+400 BOQUILLA LADO PALLEJÁ



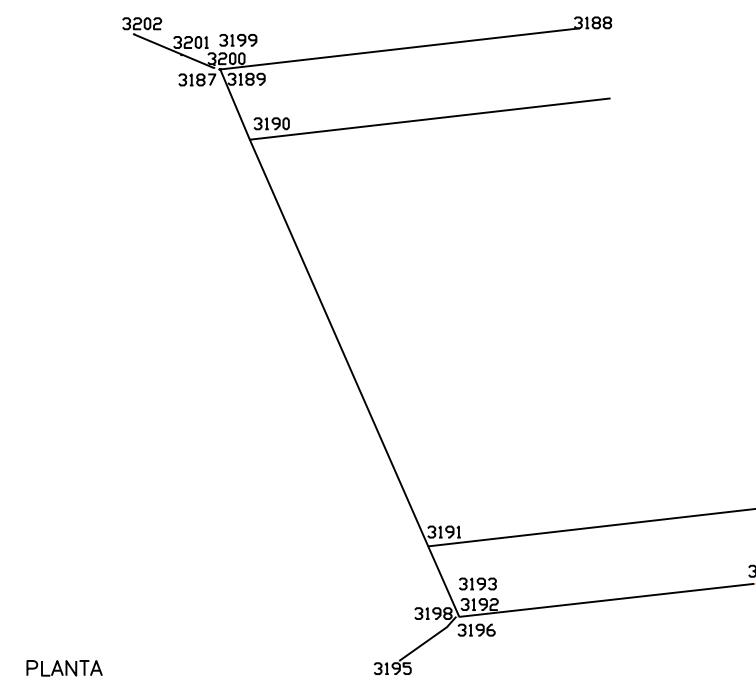
ACTUACIÓN B MARCO RAMAL 1 P.K 1+400 (RIERA DE FONDA). LADO
PALLEJÁ



ACTUACIÓN B MARCO RAMAL 1 P.K 1+400 (RIERA DE FONDA). LADO AVE

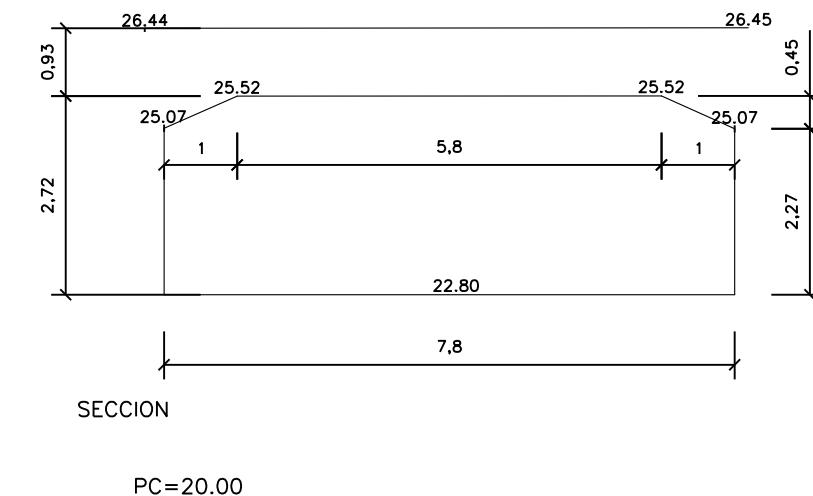
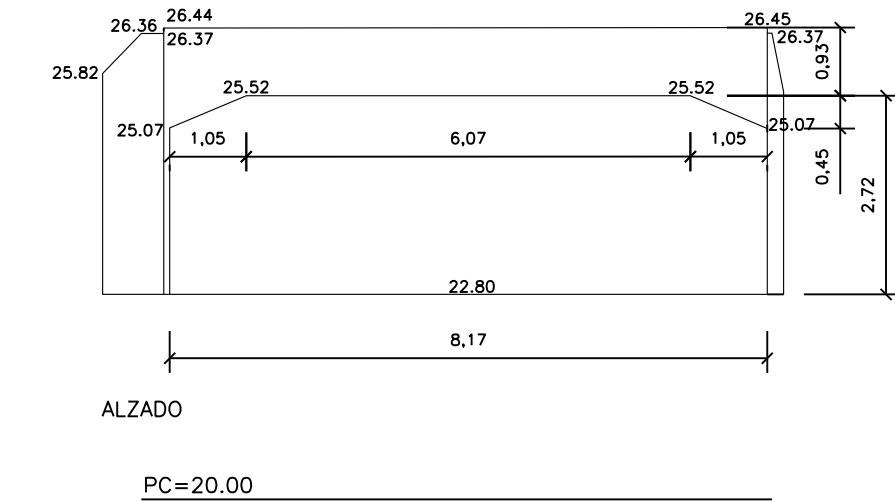


CÓDIGO DE PROYECTO:	NOMBRE DEL FICHERO: 08 SECCIÓN OF ZA-B RAMAL 1 PK 1+800.dwg	REVISIÓN N°	REALIZADO POR:	VERIFICADO POR:	FECHA:
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ACTUACIÓN B MARCO RAMAL 1 PK. 1+800

NÚMERO	COORD.X	COORD.Y	COORD.Z
3187	417076.580	4584903.941	24.382
3188	417081.513	4584904.505	24.166
3189	417076.593	4584903.950	25.075
3190	417076.999	4584902.984	25.515
3191	417079.439	4584897.427	25.516
3192	417079.862	4584896.464	25.067
3193	417079.874	4584896.463	23.877
3194	417083.896	4584896.914	23.842
3195	417079.042	4584895.860	25.565
3196	417079.695	4584896.321	26.373
3198	417079.821	4584896.465	26.447
3199	417076.510	4584904.002	26.441
3200	417076.504	4584903.966	26.366
3201	417076.060	4584904.138	26.361
3202	417075.413	4584904.425	25.825



ACTUACIÓN B MARCO RAMAL 1 P.K 1+800 (LADO PALLEJÁ)



DESAGUE DE MEDIANA $\phi = 40$ CM A LA IZQUIERDA DEL MARCO



ACTUACIÓN C PUENTE DE LA AP-2 A AMPLIAR (datos en taquimétrico)

Vista general hacia el sur desde la pila 8 por el lado Molins.



Muro de Aleta lado Molins estribo 1



Muro de Aleta lado Molins estribo 1



Detalle del final del muro de Aleta estribo 1 lado Molins



Vista desde el lado Molins de los vanos 1 y 2 hacia el Papiol



Otra vista del Estribo 1 (estribo sur) bajo el tablero a ampliar.



Estribo 1 (estribo sur) del tablero a ampliar. Ya hubo una ampliación de 5 a 7 vigas



Detalle de capitel de la Pila 1. Se empleó el tablero de 5 a 7 vigas.



Pila 1 vista desde el lado Molins



Pila 2 vista desde el vano 1 hacia el norte.



Pila 2 vista desde el vano 3 hacia el sur.



Detalle de la Pila 2 vista desde el vano 3 hacia el sur.



Vista hacia Molins de las pilas 4 y 3 (pórtico).



Cargadero de la Pila 2 vista por debajo desde el vano 3 hacia el sur.



Vista bajo el vano 4 hacia el sur.



Detalle de apoyo de las vigas sobre la pila 4.



Vista del vano 4 hacia el norte. Entre las pilas 4 y 5 cruza el ferrocarril.



Vista hacia Barcelona desde la pila 6 por el lado Molins.



Vista bajo el vano 6 hacia el estribo 1 (estribo sur). Detrás a la izquierda se ve el pórtico de la pila 5.



Vista hacia el lado Molins, bajo el vano 5, de la pila 6 hacia el estribo 2.



Vista por debajo del vano 6 hacia el estribo 2 (estribo norte)



Vista hacia Molins bajo el tablero de los vanos 7 y 6.



Apoyos de la pila 8 vista bajo el tablero



Detalle de apoyo de vigas sobre pila 8.



Vista desde el estribo 2 hacia Barcelona por el lado Molins.

NÚMERO	COORD.X	COORD.Y	COORD.Z
2153	417160.972	4585663.548	25.446
2154	417163.980	4585656.546	24.544
2193	417168.333	4585654.318	24.739
2314	417168.364	4585646.182	25.630
2315	417168.843	4585646.472	25.632
2316	417174.321	4585649.385	28.676
2317	417174.346	4585649.392	28.813
2318	417174.864	4585649.639	28.821
2319	417174.483	4585649.725	29.296
2320	417169.773	4585659.434	29.298
2321	417168.728	4585658.916	28.275
2322	417164.490	4585656.816	25.657
2323	417164.015	4585656.559	25.637
2324	417162.533	4585659.969	25.626
2325	417169.927	4585659.528	27.106
2326	417170.366	4585658.662	28.084
2327	417170.400	4585658.685	28.254
2328	417174.489	4585650.488	28.242
2329	417174.465	4585650.486	28.087
2330	417174.800	4585649.725	27.239
2331	417174.796	4585649.613	27.214
2332	417174.847	4585649.607	24.613
2333	417186.518	4585655.550	24.381
2334	417182.035	4585665.638	24.664
2335	417169.957	4585659.544	24.637
2800	417231.841	4585691.687	28.810
2801	417238.038	4585681.372	28.810

FECHA:

VERIFICADO POR:

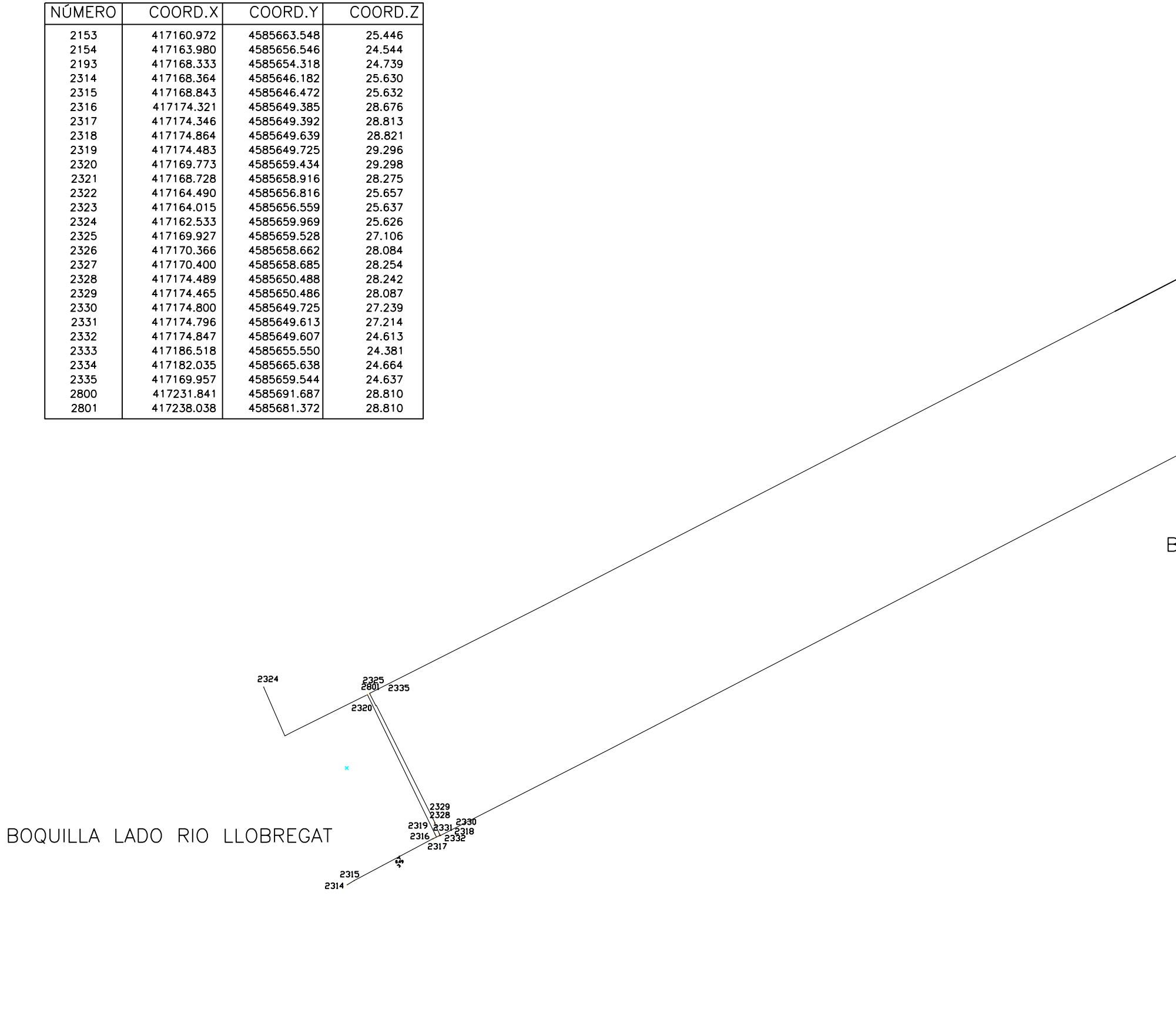
REALIZADO POR:

REVISIÓN N°

NOMBRE DEL FICHERO: 09 MARCO C-1413.dwg

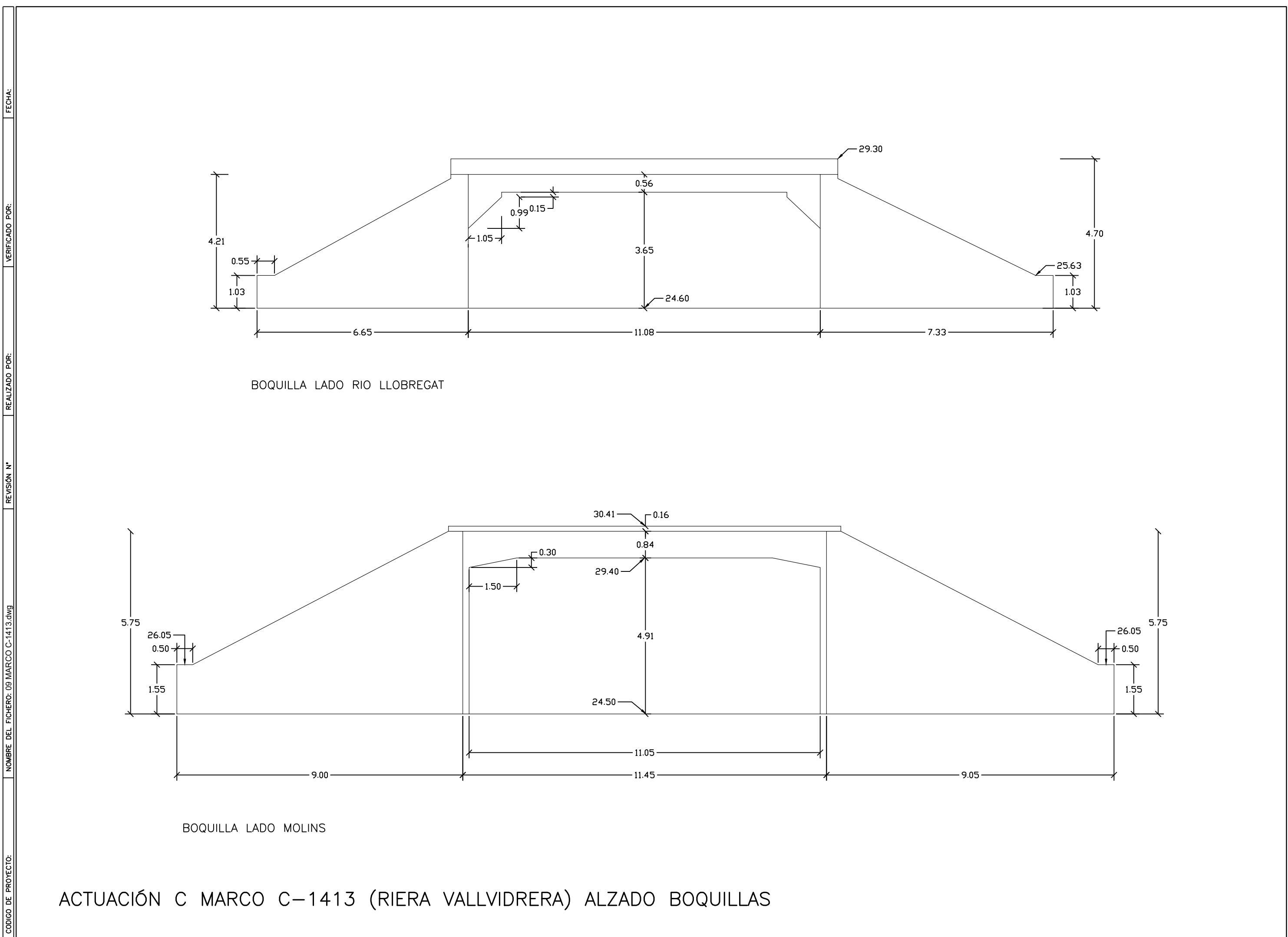
CÓDIGO DE PROYECTO:

ACTUACIÓN C MARCO C-1413 (RIERA VALLVIDRERA) PLANTA



BOQUILLA LADO MOLINS

NÚMERO	COORD.X	COORD.Y	COORD.Z
2671	417231.841	4585691.687	30.414
2672	417238.038	4585681.372	30.389
2673	417237.910	4585681.709	30.151
2674	417239.222	4585681.722	29.633
2675	417238.079	4585681.064	30.123
2737	417237.457	4585698.317	25.008
2762	417237.684	4585683.372	24.487
2763	417235.516	4585687.291	24.886
2765	417238.612	4585681.781	24.432
2766	417243.934	4585682.058	24.906
2782	417237.304	4585698.415	26.050
2783	417236.990	4585697.998	26.092
2784	417231.945	4585691.814	30.181
2785	417231.607	4585691.420	30.243
2786	417231.611	4585691.381	25.366
2787	417237.559	4585681.612	24.462
2788	417237.475	4585681.630	30.248
2789	417237.938	4585681.651	30.226
2790	417245.441	4585681.873	27.056
2791	417244.132	4585681.849	27.627
2792	417237.428	4585681.782	29.114
2793	417236.629	4585683.072	29.412
2794	417232.448	4585689.961	29.402
2795	417231.709	4585691.242	29.098
2796	417231.715	4585691.210	24.883
2797	417221.913	4585686.155	24.795
2798	417226.672	4585676.318	24.574
2799	417237.473	4585681.791	24.243



ACTUACIÓN C MARCO C1413 (RIERA VALLVIDRERA). LADO MOLINS



ACTUACIÓN C MARCO C1413 (RIERA VALLVIDRERA). LADO RÍO
LLOBREGAT

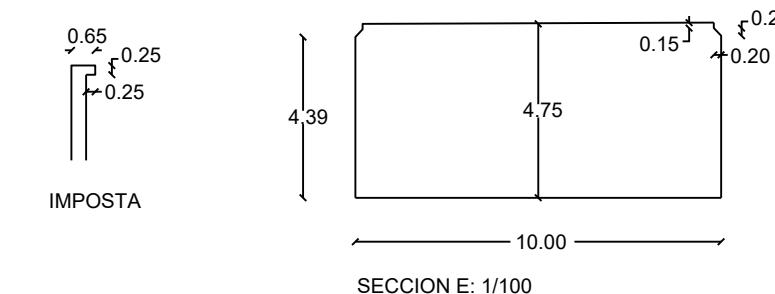
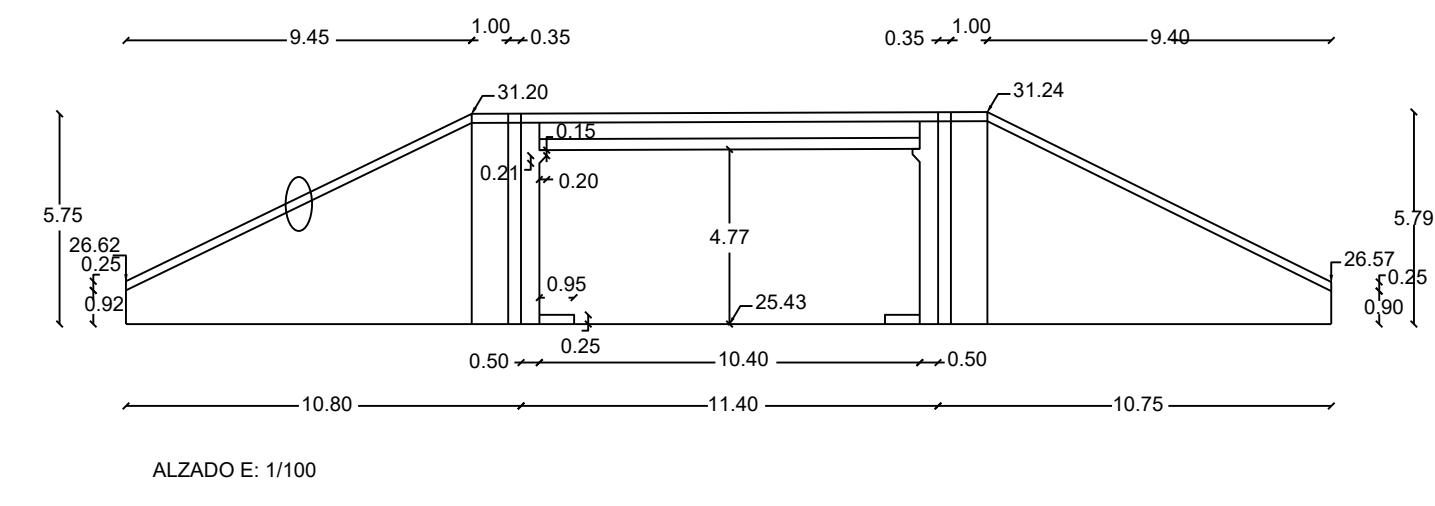
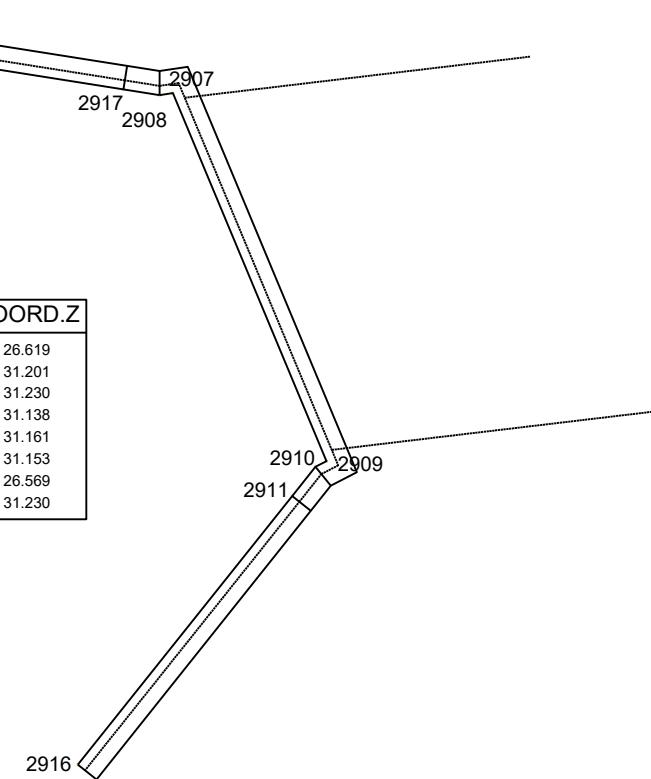


CÓDIGO DE PROYECTO: NOMBRE DEL FICHERO: 10 Marco Molins de Rei.dwg REVISIÓN N°: REALIZADO POR: VERIFICADO POR: FECHA:

NOMBRE DEL FICHERO: 10 Marco Molins de Rei.dwg

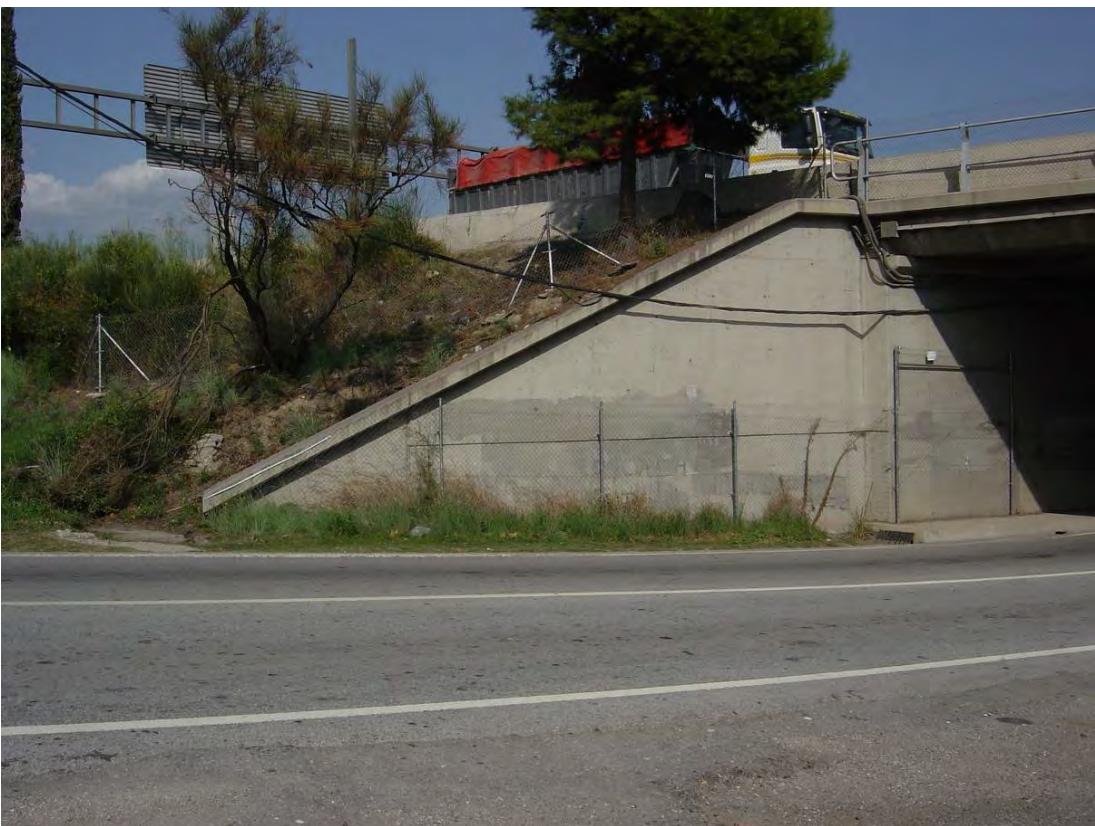
CODIGO DE PROYECTO:

NÚMERO	COORD.X	COORD.Y	COORD.Z
2881	417358.386	4585218.859	26.619
2907	417369.063	4585217.283	31.201
2908	417368.698	4585217.228	31.230
2909	417373.262	4585207.226	31.138
2910	417372.959	4585207.070	31.161
2911	417372.324	4585206.272	31.153
2916	417366.465	4585198.932	26.569
2917	417367.710	4585217.384	31.230



ACTUACIÓN C MARCO RAMAL 2 PASO INFERIOR DE MOLINS

**ACTUACIÓN C ESTRUCTURA RAMAL 2 PASO INFERIOR DE MOLINS.
BOQUILLA LADO RÍO.**

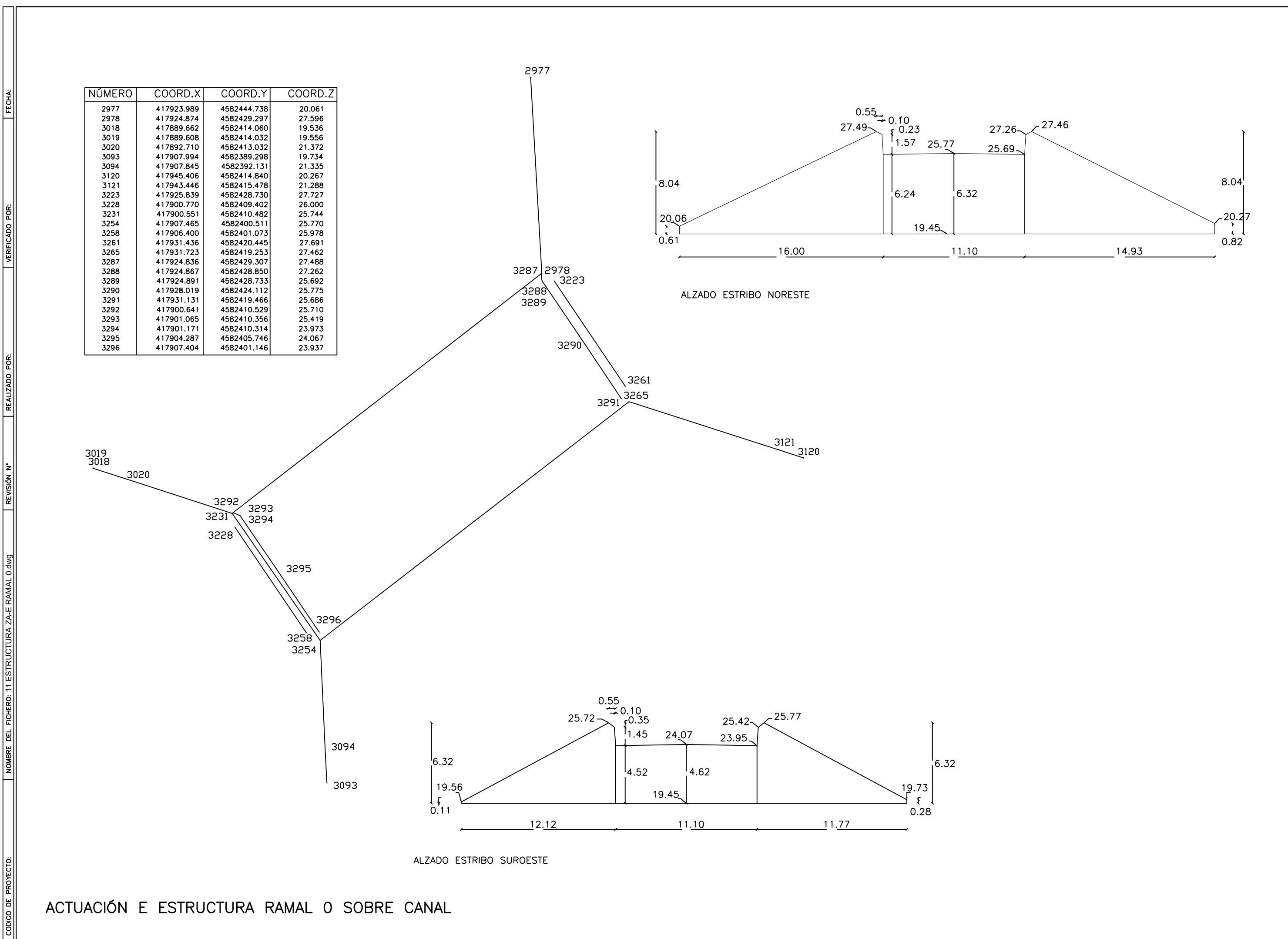


ACTUACIÓN C MARCO RAMAL 2 PASO INFERIOR DE MOLINS (DETALLE DE ESTRIBOS Y TABLERO POR EL LADO RÍO).



**ACTUACIÓN C ESTRUCTURA RAMAL 2 PASO INFERIOR DE MOLINS.
BOQUILLA LADO MOLINS.**



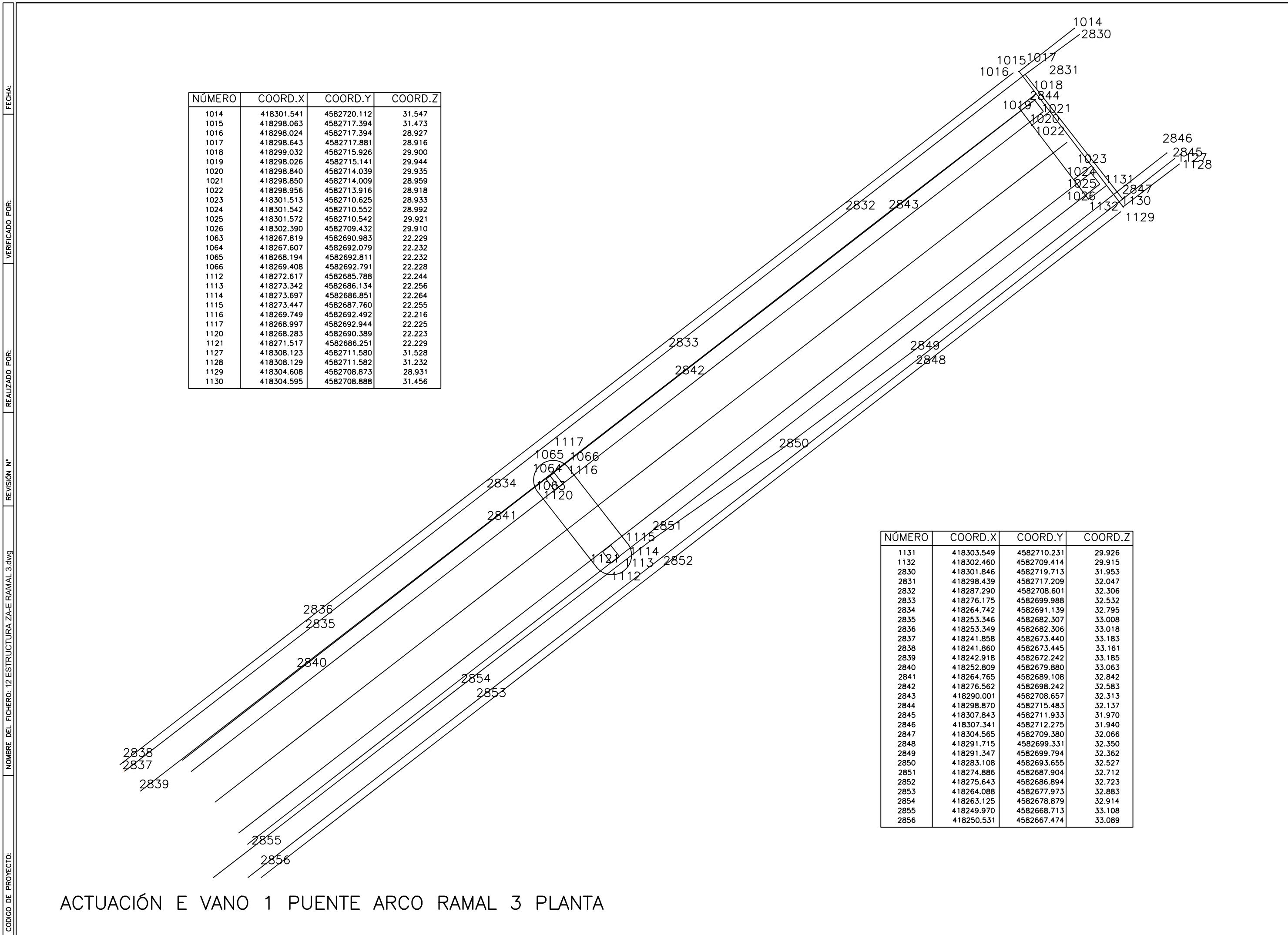


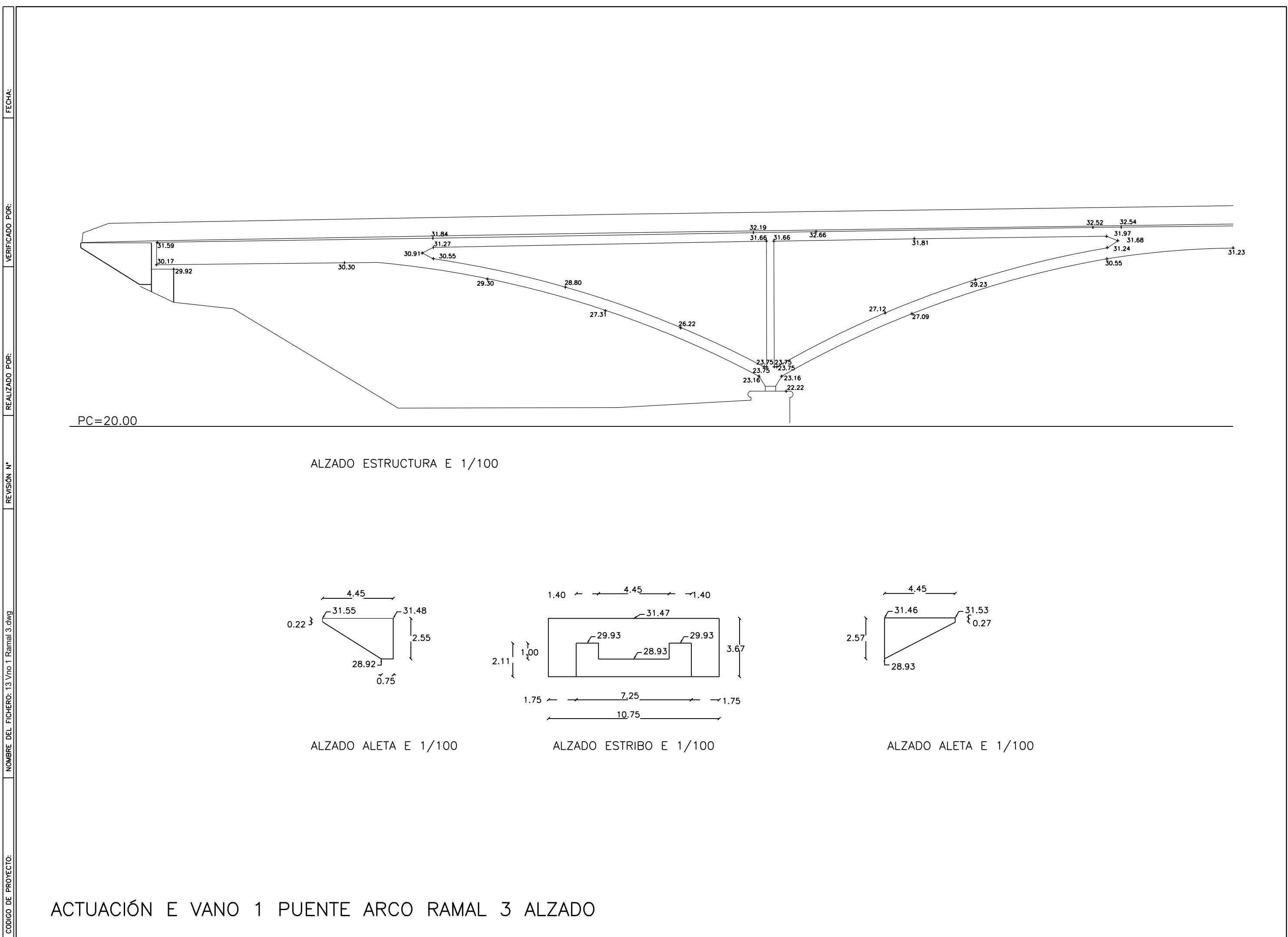
ACTUACIÓN E ESTRUCTURA RAMAL 0 SOBRE CANAL (VISTA DESDE EL SUR) Y ESTRIBO ESTE)



ACTUACIÓN E ESTRUCTURA RAMAL 0 SOBRE CANAL (ESTRIBO OESTE)

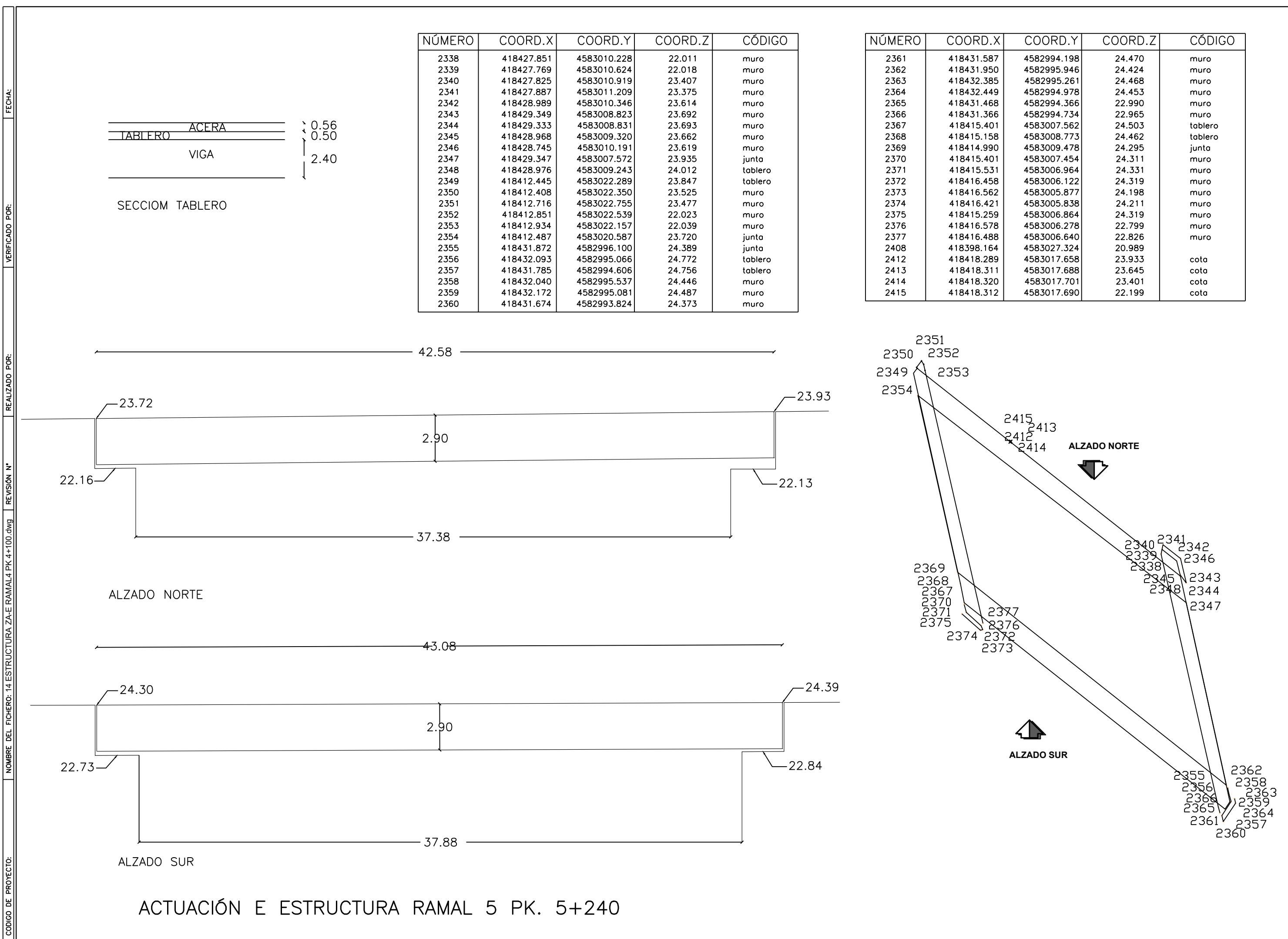






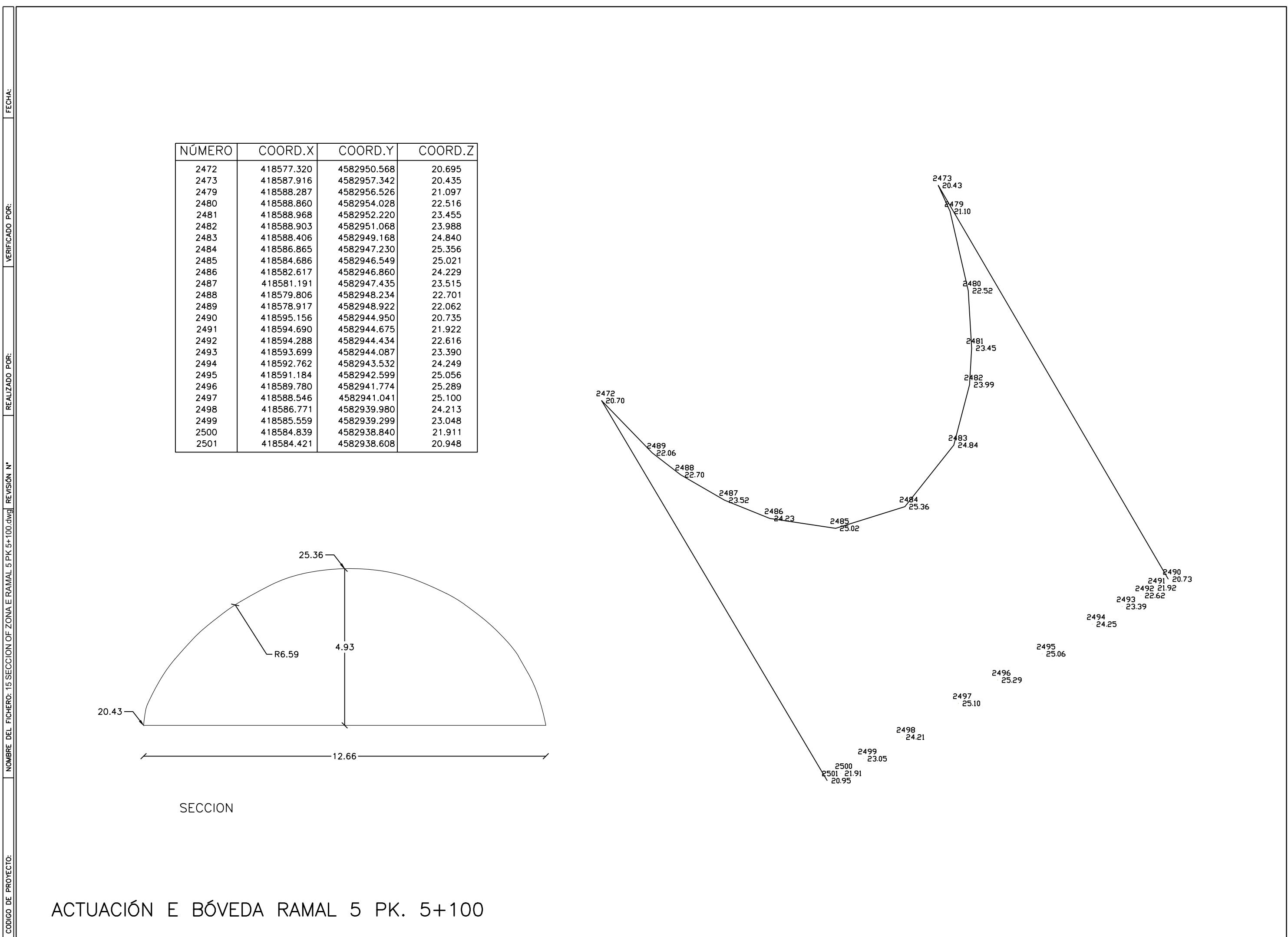
ACTUACIÓN E VANO 1 PUENTE ARCO RAMAL 3





ACTUACIÓN E ESTRUCTURA RAMAL 5 PK 5+240





ACTUACIÓN E BÓVEDA RAMAL 5 PK 5+100

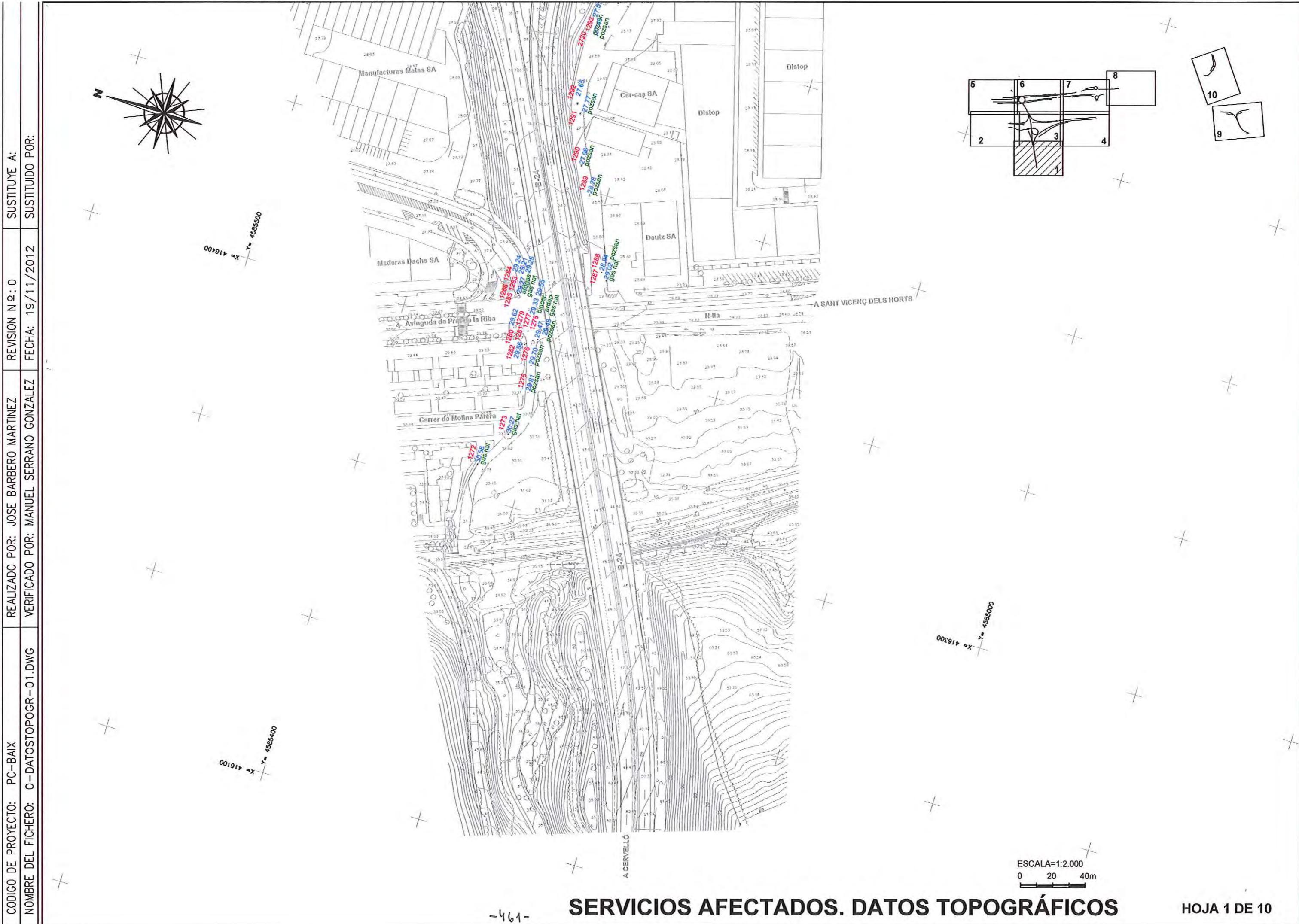


LADO NORTE (A AMPLIAR)



LADO SUR

3.17.5.- Servicios Afectados



CÓDIGO DE PROYECTO: PC-BAIX
NOMBRE DEL FICHERO: O-DATOSTOPOGR-02.DWG

REALIZADO POR: JOSE BARBERO MARTINEZ
VERIFICADO POR: MANUEL SERRANO GONZALEZ

REVISIÓN N.º: 0
FECHA: 19/11/2012

SUSTITUYE A:

SUSTITUIDO POR:



SERVICIOS AFECTADOS. DATOS TOPOGRÁFICOS

ESCALA=1:2.000
0 20 40m

CÓDIGO DE PROYECTO:	REALIZADO POR:	JOSE BARBERO MARTINEZ	REVISIÓN N°:	0	SUSTITUYE A:
NOMBRE DEL FICHERO:	VERIFICADO POR:	MANUEL SERRANO GONZALEZ	FECHA:	19/11/2012	SUSTITUIDO POR:



SERVICIOS AFECTADOS. DATOS TOPOGRÁFICOS

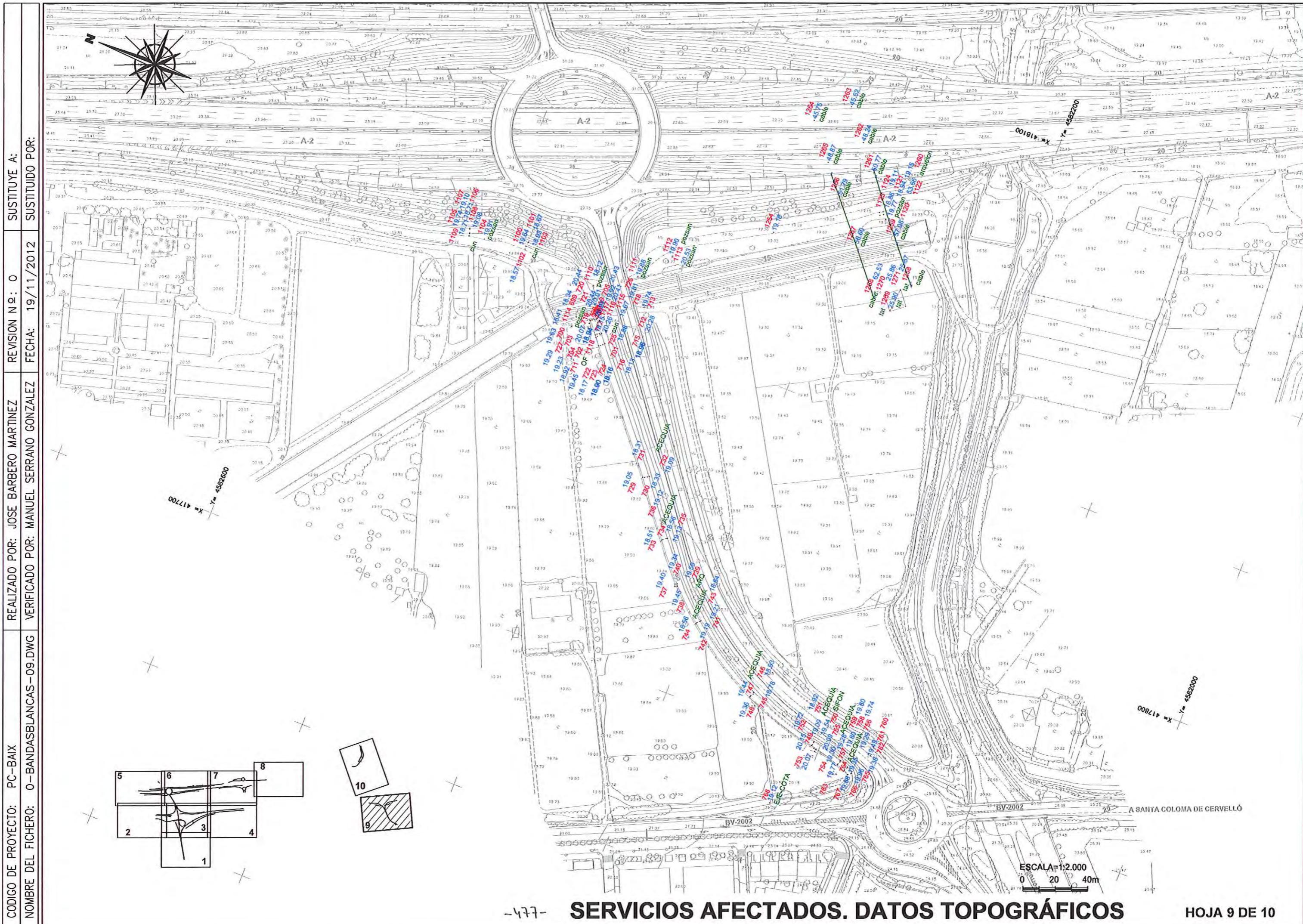
HOJA 6 DE 10

CÓDIGO DE PROYECTO: PC-BAIX	REALIZADO POR: JOSE BARBERO MARTINEZ	REVISIÓN N.º: 0	SUSTITUYE A:
NOMBRE DEL FICHERO: O-DATOSTOPOGR-07.DWG	VERIFICADO POR: MANUEL SERRANO GONZALEZ	FECHA: 09/08/2010	SUSTITUIDO POR:

ESCALA=1:2.000
0 20 40m







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SERVICIOS AFECTADOS. DATOS TOPOGRÁFICOS

HOJA 10 DE 10

3.18.- TRANSVERSALES DE CAMPO

EL PRESENTE PROYECTO CORRESPONDE A ACTUACIONES EN ENLACES. AL NO EXISTIR TRONCO, NO SE REQUIEREN TRANSVERSALES DE CAMPO.