

ANEJO N° 2

CARTOGRAFÍA Y TOPOGRAFÍA

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1 CARTOGRAFIA Y TOPOGRAFÍA

Por encargo de la empresa ESTEYCO la empresa GESERTO, S.L., ha realizado los trabajos de campo y de gabinete necesarios para el Contrato de Elaboración de Cartografía en el Ámbito del Proyecto de "P.R Vía – Línea TXORIERRI – Tramo: ZAMIDIO - LEZAMA".

Los trabajos consisten en:

- la implantación de una Red Básica planimétrica y altimétrica de precisión a lo largo de la traza con vértices ubicados como máximo a 2Km. de distancia que servirá de base topográfica a la redacción de los posteriores proyectos y ejecución de las obras
- Ejecución de la cartografía a escala 1/500 con equidistancia de curvas de 0.25 metros

2 RED BASICA

1.1 CALCULO PLANIMETRIA

Las coordenadas WGS-84 de los Vértices de la RED BASICA, se han obtenido con técnicas GPS, por el método de observación ESTÁTICO RELATIVO, con observaciones de un mínimo de diecisiete minutos de duración, cinco segundos por Época (intervalo de registro de la observación) y una máscara de elevación de los satélites sobre el horizonte de 15º.

El GDOP máximo de cada observación ha sido siempre inferior a 8.

Las cotas ORTOMETRICAS finales de los Vértices de la red básica se han obtenido por medio de nivelación **GEOMETRICA**.

En un principio se proyectó enlazar con la línea de Nivelación de alta precisión 10234 DURANGO_COLINDRES, que transcurre por la carretera BI-737 (antigua N-637), para lo cual se buscaron las señales SSK-21.200, SSK-22.300, SSK23.300 próximas a la zona del trabajo. Estas señales han desaparecido, al acerar y pavimentar los márgenes de la carretera donde estaban situadas. Por esta circunstancia se tomó como origen de cotas ortométricas la cota ortométrica del Vértice B-9004 obtenida aplicando el modelo de Geoide IBERGEO 2008.

Se ha empleado un nivel automático SPRINTER-150 de la casa LEICA, con lectura de código de barras, con lo que se elimina el error de lectura del operador (ecuación personal). Se ha empleado el sistema del punto medio y se han realizado 6 anillos cerrados de ida y vuelta. Los errores de cierre de estos anillos han sido mínimos y no se ha superado el error kilométrico de 10 raíz c. de K en ninguno de los anillos. La compensación se ha realizado promediando las cotas absolutas corridas, obtenidas de la ida y la vuelta. Como segunda estación de referencia se usó el vértice B-9004. Este vértice se calculó mediante una

observación de tres horas y media de duración con dos referencias, la estación **KAST** antes mencionada y la estación **GERN** también de la red GNSS de EUSKADI.

Una vez calculado el punto principal B-9004 se procedió a calcular todos los demás puntos que conforman la RED BASICA, utilizando siempre como referencias la estación fija GNSS **KAST** y el Vértice B-9004 antes mencionado.

El cálculo se ha realizado con dos frecuencias L1 y L2, en post-proceso, en código y fase, y se han resuelto las ambigüedades de las BASELINEAS en todos los casos.

Las diferencias máximas entre las coordenadas obtenidas para cada vértice en el cálculo han sido del orden de 0.023m. Estos valores obtenidos se han promediado entre sí.

Una vez obtenidas las coordenadas promediadas ETRS-89 Geográficas con cota elipsoídicas de todos los vértices, se procedió a calcular los cierres de los triángulos de las baselíneas de la red de observaciones y posteriormente a ajustar por **mínimos cuadrados** las observaciones de dicha red.

Se aportan los informes correspondientes a estos ajustes, comprobando que las correcciones del ajuste y sus errores son mínimos.

A continuación se han obtenido las coordenadas **UTM ETRS89 HUSO 30**, con cota **Ortométrica**, empleando el Elipsoide **GRS1980** y el modelo de geoide **IBERGEO 2008**.

Estas coordenadas se han obtenido directamente del programa de cálculo GEO-OFFICE de la casa LEICA con el que se han realizado todos los cálculos y ajustes del trabajo.

1.2 CALCULO ALTIMETRIA

Las cotas ORTOMETRICAS finales de los Vértices de la red básica se han obtenido por medio de nivelación **GEOMETRICA**.

En un principio se proyectó enlazar con la línea de Nivelación de alta precisión 10234 DURANGO_COLINDRES, que transcurre por la carretera BI-737 (antigua N-637), para lo cual se buscaron las señales SSK-21.200, SSK-22.300, SSK23.300 próximas a la zona del trabajo. Estas señales han desaparecido, al acerar y pavimentar los márgenes de la carretera donde estaban situadas. Por esta circunstancia se tomó como origen de cotas ortométricas la cota ortométrica del Vértice B-9004 obtenida aplicando el modelo de Geoide IBERGEO 2008.

Se ha empleado un nivel automático SPRINTER-150 de la casa LEICA, con lectura de código de barras, con lo que se elimina el error de lectura del operador (ecuación personal). Se ha empleado el sistema del punto medio y se han realizado 6 anillos cerrados de ida y vuelta. Los errores de cierre de estos anillos han sido mínimos y no se ha superado el error kilométrico de 10 raíz c. de K en ninguno de los anillos. La compensación se ha realizado promediando las cotas absolutas corridas, obtenidas de la ida y la vuelta.

3 LEVANTAMIENTOS TOPOGRÁFICOS

Se han realizado varios levantamientos que han consistido en:

- Levantamiento topográfico de la vía, elementos ferroviarios y estaciones a lo largo y ancho de la zona de ejecución de los trabajos.

1.3 APARATOS EMPLEADOS Y OBSERVACION

Se han utilizado dos receptores de doble frecuencia marca LEICA, SYSTEM 530 y 1200, para trabajos RTK (Real Time Kinematic), con la siguiente configuración:

- Mínimo número de satélites..... 4
- Máscara de observación..... 10º
- Calidad mínima de observación..... 5cm

Además, no se observarán puntos en el campo con un GDOP (precisión en el posicionamiento) superior a 5.

La toma de datos es en tiempo real (RTK), con lo que el tiempo invertido en tomar cada punto es de 1 a 3 segundos, ya que se toma con la configuración de "tomar puntos por precisión" y no "por posición" con lo que la toma de datos es instantánea.

Para la realización de estos trabajos unimos con la red de estaciones permanentes de EUSKADI .

El objetivo de la red RTK es reducir al mínimo la influencia de los errores dependientes de distancia para los equipos móviles que calculan su posición dentro de los límites de la red. El software de servidor de red RTK comienza este proceso por:

Fijar las ambigüedades de los satélites dentro de la red.

Usar los datos de todas (o un subconjunto de) las estaciones para generar las correcciones de referencia que se envían al móvil.

1.4 CALCULOS

La medición de los puntos se ejecuta inicialmente en el sistema de coordenadas WGS-84 para luego aplicarle el sistema ETRS89 con proyección UTM, y para la altura ortométrica le aplicamos el modelo de geoide "GRS1980" y el modelo de geoide "IBERGEO 2008", y esto se hace con el software de Leica LGO (Leica Geo Office).

APÉNDICE N° 1

RED BÁSICA

1.1 RED BÁSICA GRÁFICO DE OBSERVACIÓN

PROYECTO RENOVACION DE VIA, LINEA TXORIERRI

TRAMO: ZAMUDIO LEZAMA

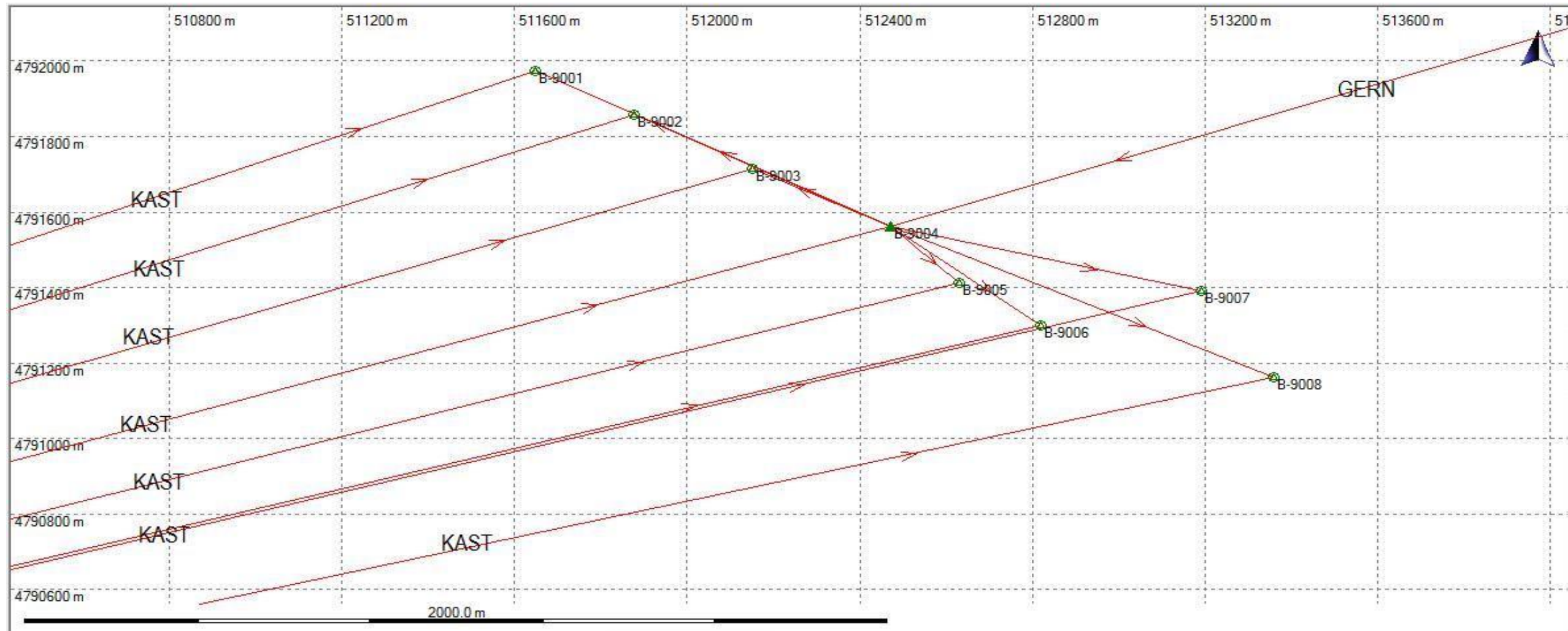


GRAFICO DE BASELINEAS GPS

1.2 RESEÑAS VÉRTICES RED GNSS EUSKADI

18/6/2020

Aplicaciones en tiempo real. Red GPS/GNSS de Euskadi

GERN: [sitelog](#)

Nº: 5 Estación de referencia: **GERNIKA**

Localidad: **Gernika** Municipio: **Gernika** Territorio: **Bizkaia**

Ubicación:

Receptor GPS :**Leica GR10**Número de serie: **1700986**

Antena :**Leica AS10**Número de serie: **11471031**

Coordenadas en vigor desde el 1 de Enero de 2019

Coordenadas Cartesianas ETRS89

[Época 1989.0 (Z. Altamimi), en metros]

[Medidas a la base de la antena]

Geocéntricas
Tridimensionales X:4642811.6670
Y:-217223.4750
Z:4353278.4670

Geodésicas Lat:43° 19' 2.659643"
Lon: -2° 40' 43.48987"
H elip: 78.931 m

UTM X:526049.6092 m
Y:4796113.2144 m
Ond. Geoide:49.282 m
Huso:30
F. Escala:0.99960835



MAPA DE SITUACIÓN



ORTOFOTO

www.gps2.euskadi.eus/red_estaciones.php?est=GERN

1/2

18/6/2020

Aplicaciones en tiempo real. Red GPS/GNSS de Euskadi

KAST: [sitelog](#)

Nº: 7 Estación de referencia: **KASTREXANA**

Localidad: **Kastrexana** Municipio: **Kastrexana** Territorio: **Bizkaia**

Ubicación: **Artiga, 48002**

Receptor GPS :**GR30**Número de serie: **1705199**

Antena :**AS10** Número de serie: **16201021**

Estación meteorológica :XXXXXXXXXXXXXXXXXX

Coordenadas en vigor desde el 15 de Marzo de 2018

Coordenadas Cartesianas ETRS89

[Época 1989.0 (Z. Altamimi), en metros]

[Medidas a la base de la antena]

Geocéntricas
Tridimensionales X:4646949.4390
Y:-240747.8220
Z:4348014.5760

Geodésicas Lat:43° 15' 0.950072"
Lon: -2° 57' 56.56256"
H elip: 321.640 m

UTM X:502783.4031 m
Y:4788607.3581 m
Ond. Geoide:49.960 m
Huso:30
F. Escala:0.99960010



www.gps2.euskadi.eus/red_estaciones.php?est=KAST

1/2

1.3 RESEÑAS VÉRTICES RED BÁSICA



RESEÑA DE VERTICE DE RED BASICA

P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9001	43º 16' 49.807501"N	2º 51' 23.159573"W	91.168	49.627 m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
511648.521	4791974.847	41.5629	41.542	0.99960167

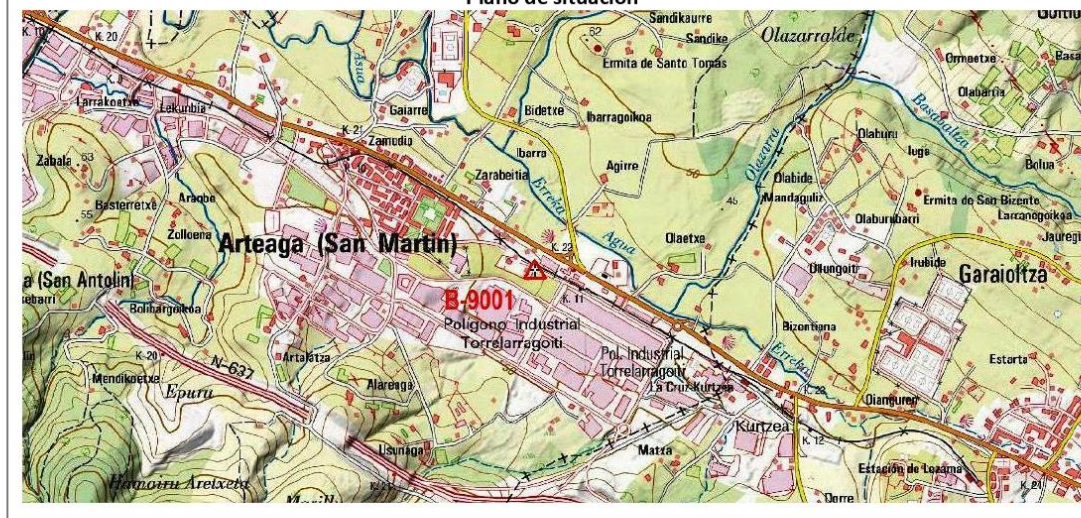
Situación

Situado en el borde norte de la carretera de acceso a unos caseríos, a unos 9 metros al Sur de la vía a la altura del PK-10.930. A 1.63 m de un poste de hormigón Enfrente de una nave, almacén del ayuntamiento de Zamudio.

SEÑAL: clavo metálico de cabeza semiesférica con granetazo central, empotrado en el aglomerado y remarcado con pintura azul.



Plano de situación



RESEÑA DE VERTICE DE RED BASICA

P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9002	43º 16' 46.03059" N	2º 51' 12.99730" W	91.434	49.630 m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
511877.762	4791858.733	41.7910	41.804	0.99960174

Situación

Situado en la calle Norte del Polígono Industrial TORRELARAGOITI, en el borde SE de la entrada de vehículos de la nave de CODISOR, a 2.25 m de la acera y a unos once metros de la vía a la altura del PK-11.200.

SEÑAL: clavo metálico de cabeza semiesférica con granetazo central, empotrado en el aglomerado y remarcado con pintura azul.



Plano de situación





RESEÑA DE VERTICE DE RED BASICA

P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9007	43º 16' 30.78684"N	2º 50' 14.79366"W	105.790	49.641m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
513190.490	4791390.915	56.1259	56.149	0.99960214

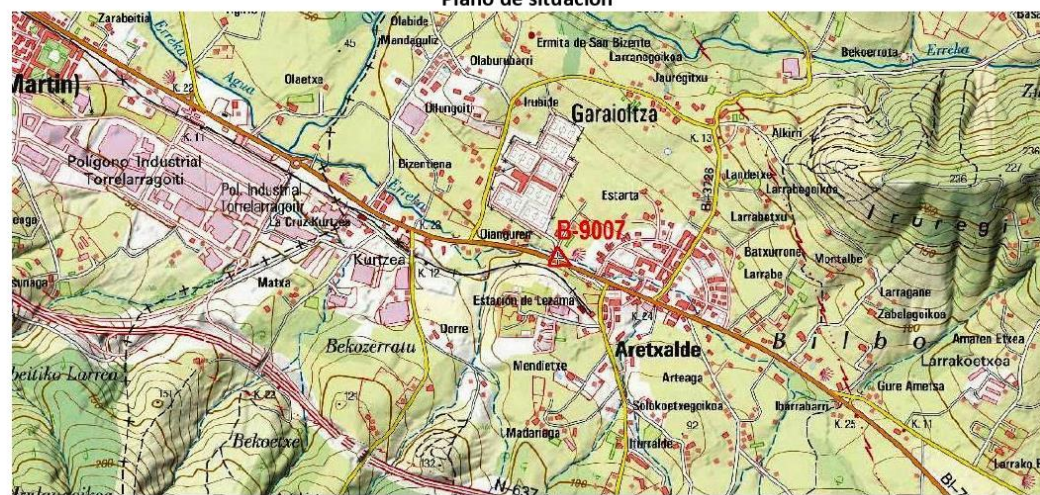
Situación

Situado sobre el bordillo de la barbacana del paso de peatones de la carretera BI-737 en la entrada a las instalaciones de la escuela de fútbol de LEZAMA.

SEÑAL: Clavo metálico de cabeza semiesférica con granetazo central, empotrado en la solera y remarcado con pintura azul.



Plano de situación



RESEÑA DE VERTICE DE RED BASICA

P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9003	43º 16' 41.37218" N	2º 51' 0.93551" W	95.971	49.635 m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
512149.872	4791715.511	46.3507	46.336	0.99960182

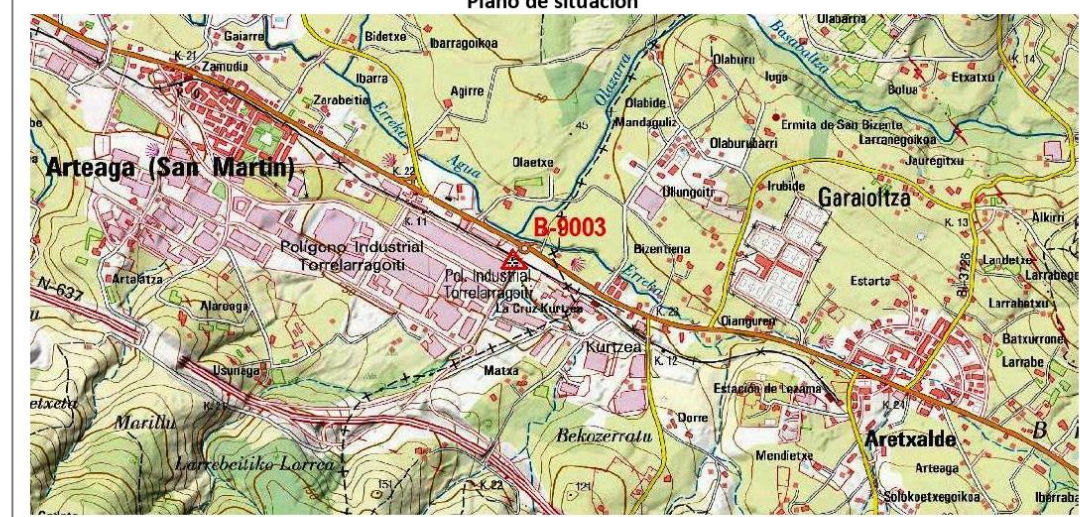
Situación

Situado al principio de la calle Norte del Polígono Industrial TORRELARAGOITI, cerca de la entrada de vehículos de la nave de PROCOMSA, a un metro del muro de hormigón que protege la curva y a unos 8 m de la vía, a la altura del PK11.500.

SEÑAL: Clavo metálico de cabeza semiesférica con granetazo central, empotrado en hormigón y remarcado con pintura azul.



Plano de situación





RESEÑA DE VERTICE SECUNDARIO

P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9031	43º 16' 41.77797"N	2º 50' 59.73823W	90.176	49.634m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
512176.835	4791728.077	--	40.558	0.99960182

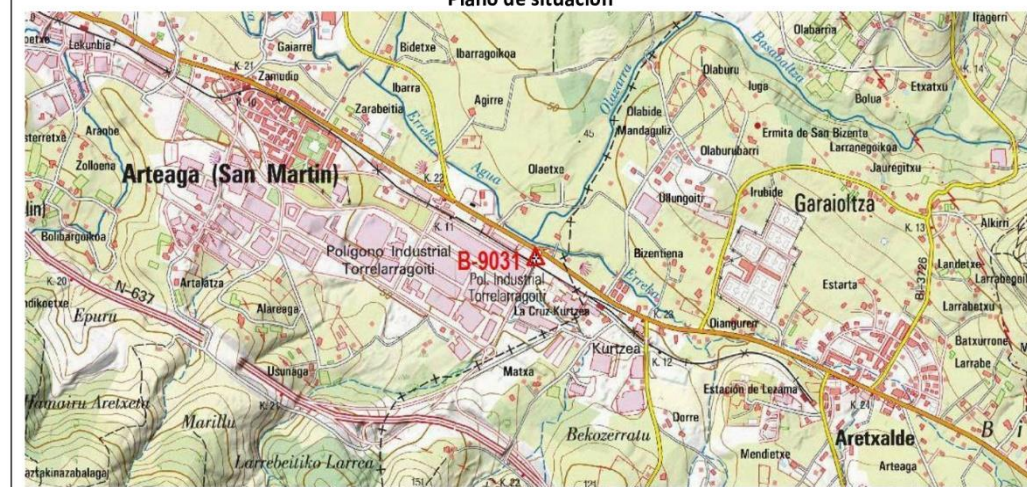
Situación

En la zona Este de una isleta situada en la parte Sur de la rotonda de la carretera BI-737 en su cruce con la carretera de acceso al polígono industrial de TORRELARRAGOITI.

SEÑAL: Clavo metálico empotrado entre el bordillo y el solado de la isleta.



Plano de situación



RESEÑA DE VERTICE DE RED BASICA

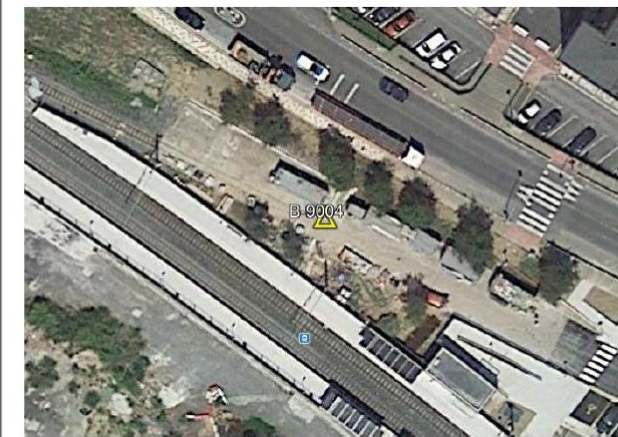
P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9004	43º 16' 36.34625"N	2º 50' 46.76106"W	98.077	49.640m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
512469.633	4791561.050	48.4380	48.438	0.99960191

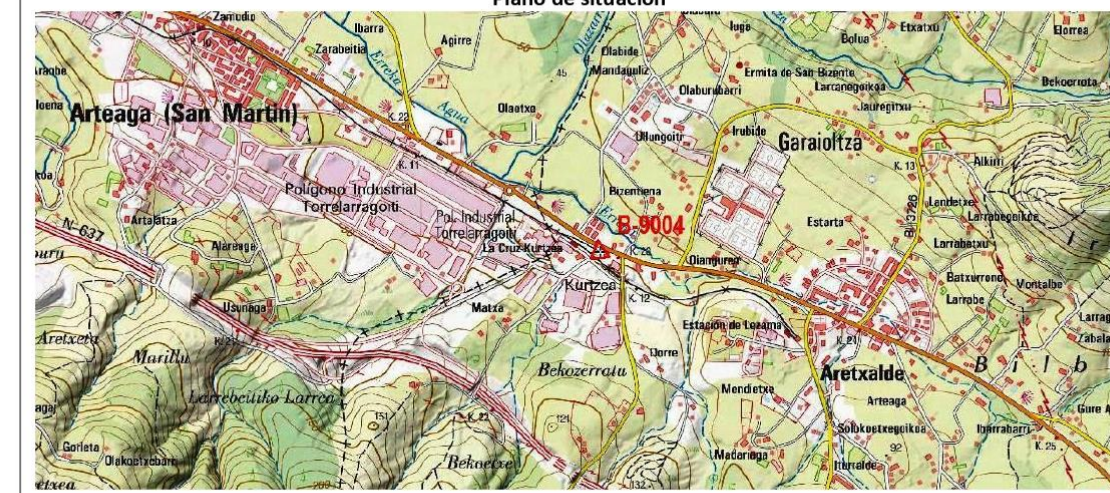
Situación

Situado en el aparcamiento de la estación de CRUCES. en el lado N de la puerta de entrada a la vía muerta.

SEÑAL: Clavo metálico de cabeza semiesférica con granetazo central, empotrado en la solera y remarcado con pintura azul.



Plano de situación





RESEÑA DE VERTICE DE RED BASICA

P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9005	43º 16' 31.47762" N	2º 50' 39.66695" W	106.064	49.646 m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
512629.809	4791411.157	56.4283	56.418	0.99960196

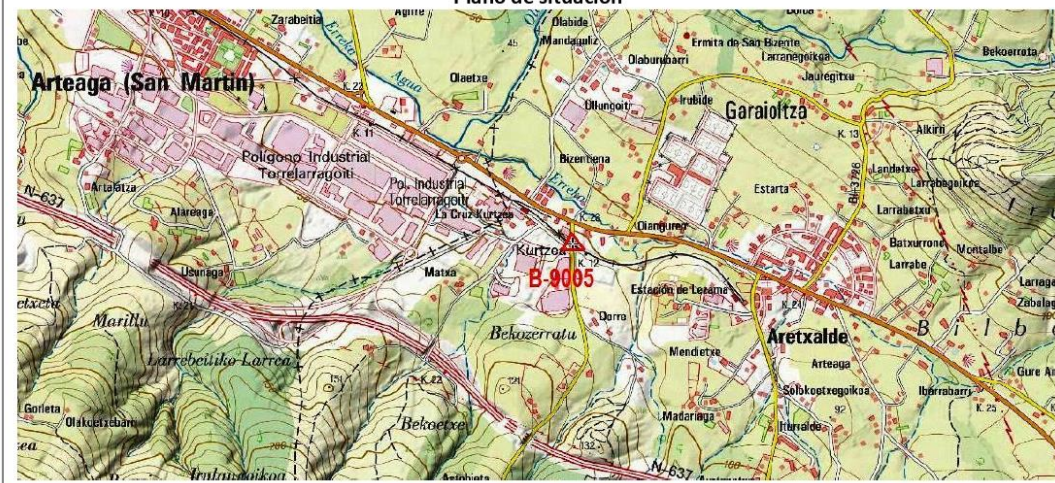
Situación

Situado sobre el falso túnel de la carretera que une la parte Este del polígono KURTZEA con la carretera BI-737. Sobre la acera. a unos 3.5m al NE de unos buzones y a unos 0.4m del bordillo del césped.

SEÑAL: Clavo metálico de cabeza semiesférica con granetazo central, empotrado en la solera y remarcado con pintura azul.



Plano de situación



RESEÑA DE VERTICE DE RED BASICA

P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9008	43º 16' 23.38620" N	2º 50' 7.33551" W	119.424	49.651m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
513359.045	4791162.947	69.7604	69.774	0.99960220

Situación

Situado entre la acera y el bordillo interior de la carretera de acceso a la estación de LEZAMA, a 5.70m al Sureste de la esquina del muro de contención.

SEÑAL: Clavo metálico de cabeza semiesférica con granetazo central, empotrado en la solera y remarcado con pintura azul.



Plano de situación





RESEÑA DE VERTICE SECUNDARIO

P. R. VIA, LINEA TXORIERRI, TRAMO: ZAMUDIO LEZAMA

Nombre	COORDENADAS GEOGRAFICAS (WGS-84)			
	Latitud	Longitud	Cota elipsoidal	Ondulación IBERGEO-2008
B-9032	43º 16' 42.57907"N	2º 50' 58.54174"W	92.162	49.632m
Elipsoide: GRS 1980. Proyección: UTM ETRS89, HUSO 30 N				
X UTM	Y UTM	Cota Nivelación	Cota ORTO. IBERGEO-2008	Anamorfosis
512203.758	4791752.838	--	42.545	0.99960183

Situación

En el borde Oeste de una isleta, situada en la parte Este de la rotonda de la carretera BI-737 en su cruce con la carretera de acceso al polígono industrial de TORRELARRAGOITI.

SEÑAL: Clavo metálico empotrado entre el bordillo y el solado de la isleta.



Plano de situación



1.4 LIBRETA DE NIVELACIÓN GEOMÉTRICA

LEZAMA- NIVELACION										
10 * V''K''''	K= LONGITUD EN KILOMETROS									
NIVELADA	ESPALDA	FRENTE	DESNIVEL	Z-RELATIVA	Z-CORRIDA-IDA	Z-CORR.-VUELTA	D-ESPALDA	D-FRENTE	PUNTO	Z-PROMEDIADA
A01	1.0524			100.0000	48.4380		82.391		B-9004	48.4380
A02	1.9471	1.7809	-0.7284	99.2716	47.7096		56.635	65.153	MOJON	47.7087
A03	2.5587	1.0055	0.9416	100.2132	48.6512		79.461	97.772		
A04	2.3432	0.3838	2.1749	102.3882	50.8262		71.844	72.244		
A05	3.2438	0.3204	2.0228	104.4110	52.8490		74.022	68.877		
A06	1.6381	0.3743	2.8695	107.2805	55.7185		15.735	54.287		
A07	3.4255	1.2302	0.4079	107.6884	56.1264		69.638	14.495	B-9007	56.1259
A08	2.9589	0.3591	3.0664	110.7547	59.1927		81.545	48.388		
A09	3.5942	0.2000	2.7589	113.5136	61.9516		31.176	24.489		
A10	3.4431	0.1622	3.4320	116.9456	65.3836		27.071	20.440		
A11	2.2554	0.3438	3.0993	120.0449	68.4829		12.322	18.344		
A12	0.5815	0.9763	1.2792	121.3241	69.7621	69.7587	18.535	11.932	B-9008	69.7604
A13	0.2519	3.5807	-2.9993	118.3248		66.7594	17.888	32.576		
A14	0.2022	3.7445	-3.4926	114.8322		63.2668	19.044	33.226		
A15	0.7311	3.2858	-3.0836	111.7486		60.1832	33.681	59.628		
A16	0.9409	3.2114	-2.4803	109.2684		57.7030	24.247	75.159		
A17	0.8353	2.5185	-1.5776	107.6908		56.1254	41.785	31.000		
A18	0.4988	3.2309	-2.3955	105.2952		53.7298	43.379	78.773		
A19	0.7336	3.0711	-2.5724	102.7228		51.1575	49.513	106.810		
A20	0.5268	2.5407	-1.8070	100.9158		49.3504	58.175	101.676		
A21	1.9293	1.8948	-1.3679	99.5479		47.9825	29.682	67.472		
A22	1.8756	2.2041	-0.2747	99.2732		47.7078	61.312	37.574		
A23		1.1454	0.7302	100.0034		48.4380		80.321		
				ERROR DE CIERRE	0.0034 m		LONGITUD	2199.720 m		
							TOLERANCIA	14.8315 mm		

NIVELADA	ESPALDA	FRENTE	DESNIVEL	Z-RELATIVA	Z-CORRIDA-IDA	Z-CORR.-VUELTA	D-ESPALDA	D-FRENTE	PUNTO	Z-PROMEDIADA
B01	3.5348			100.0000	47.7087		61.312		MOJON	47.7087
B02	3.6214	0.0735	3.4613	103.4613	51.1699		19.902	16.672		
B03	2.8994	0.2919	3.3295	106.7908	54.4994		14.525	14.794		
B04	0.7401	0.9712	1.9282	108.7189	56.4276	56.4290	15.669	14.208	B-9005	56.4283
B05	0.2874	3.0289	-2.2889	106.4300		54.1401	14.829	15.610		
B06	0.3649	3.7253	-3.4379	102.9921		50.7022	14.209	20.815		
B07		3.3584	-2.9935	99.9986		47.7087		60.421		
			ERROR DE CIERRE		-0.0014	m	LONGITUD	282.967	m	
							TOLERANCIA	5.3195	mm	

NIVELADA	ESPALDA	FRENTE	DESNIVEL	Z-RELATIVA	Z-CORRIDA-IDA	Z-CORR.-VUELTA	D-ESPALDA	D-FRENTE	PUNTO	Z-PROMEDIADA
C01	3.2251			100.0000	56.4283		51.739		B-9005	56.4283
C02	3.8886	0.0907	3.1344	103.1344	59.5627		30.613	19.112		
C03	2.6020	0.1515	3.7371	106.8715	63.2998		14.809	17.183		
C04	0.5359	0.5096	2.0924	108.9639	65.3922		11.796	11.870	INTER-2	65.3911
C05	1.5241	1.9753	-1.4394	107.5245	63.9528		73.736	69.750		
C06	1.5885	1.5778	-0.0537	107.4707	63.8990	63.8973	58.230	58.986	B-9006	63.8982
C07	2.0343	1.5348	0.0537	107.5245		63.9510	70.534	74.531		
C08	0.5719	0.5953	1.4390	108.9635		65.3901	11.584	11.258		
C09	0.2236	3.6389	-3.0670	105.8965		62.3231	15.986	27.257		
C10	0.5673	3.7068	-3.4832	102.4133		58.8399	16.539	28.750		
C11		2.9789	-2.4116	100.0017		56.4283	103.188	46.547		
			ERROR DE CIERRE		0.0017	m	LONGITUD	823.996	m	
							TOLERANCIA	9.0774	mm	

NIVELADA	ESPALDA	FRENTE	DESNIVEL	Z-RELATIVA	Z-CORRIDA-IDA	Z-CORR.-VUELTA	D-ESPALDA	D-FRENTE	PUNTO	Z-PROMEDIADA
D01	2.2398			100.0000	56.4283		103.188		B-9005	56.4283
D02	0.3597	3.1590	-0.9192	99.0808	55.5091		69.976	84.509		
D03	2.1948	2.2595	-1.8997	97.1811	53.6094	53.6096	68.282	71.783	INTER-1	53.6095
D04	3.0901	0.2671	1.9277	99.1088		55.5373	79.984	74.328		
D05	1.0549	1.4950	1.5951	100.7039		57.1324	43.897	73.094		
D06		1.7589	-0.7041	99.9998		56.4283		22.711		
			ERROR DE CIERRE		-0.0002	m	LONGITUD	691.752	m	
							TOLERANCIA	8.3172	mm	

NIVELADA	ESPALDA	FRENTE	DESNIVEL	Z-RELATIVA	Z-CORRIDA-IDA	Z-CORR.-VUELTA	D-ESPALDA	D-FRENTE	PUNTO	Z-PROMEDIADA
E01	0.0062			100.0000	53.6095		47.276		INTER-1	53.6095
E02	0.2428	2.9105	-2.9043	97.0957	50.7052		48.129	46.894		
E03	0.8269	2.8838	-2.6410	94.4547	48.0643		61.830	75.774		
E04	2.5251	2.5406	-1.7138	92.7410	46.3505	46.3508	103.567	103.198	B-9003	46.3507
E05	2.6494	0.6067	1.9184	94.6594		48.2693	63.665	71.510		
E06	2.9298	0.2333	2.4162	97.0756		50.6854	47.657	48.273		
E07		0.0057	2.9241	99.9997		53.6095		47.262		
			ERROR DE CIERRE		-0.0003	m	LONGITUD	765.036	m	
							TOLERANCIA	8.7466	mm	

1.5 RED BÁSICA AJUSTE DE RED

ZAMUDIO-LEZAMA

RED BASICA

Ajuste de Red

www.MOVE3.com

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Creado: 06/04/2020 11:37:38

Información del proyecto

Nombre del proyecto:	LEZAMA-BASES
Fecha de creación:	05/18/2020 23:31:23
Huso horario:	1h 00'
Sistema de coordenadas:	ETRS89-30-ORTO-GRS1980
Programa de aplicación:	LEICA Geo Office 5.0
Kernel de procesamiento:	MOVE3 3.4

Información general

Ajuste

Tipo:	Forzado
Dimensión:	3D
Sistema de coordenadas:	WGS 1984
Tipo de altura:	Elipsoidal
Número de iteraciones:	1

Corrección máxima de coordenadas en la última iteración: 0.0000 m ✓ (tolerancia alcanzada)

Estaciones

Número de estaciones (parcialmente) conocidas:	3
Número de estaciones desconocidas:	7
Total:	10

Observaciones

Diferencias de coordenadas GPS:	48 (16 líneas base)
Coordenadas conocidas:	9
Total:	57

Incógnitas

Coordenadas:	30
Total:	30

Grados de libertad: 27

Pruebas

Alfa (multi dimensional):	0.4680
Alfa 0 (una dimensión):	5.0 %
Beta:	80.0 %
Sigma a-priori (GPS):	10.0
Valor crítico de Prueba W:	1.96

Valor crítico de la prueba T (2 dimensiones):	2.42		DY	-13732.5369 m
Valor crítico de la prueba T (3 dimensiones):	1.89		DZ	-3273.1947 m
Valor crítico de prueba F:	1.00		DX KAST B-9004	-1686.2892 m
Prueba F:	0.34	✓ (aceptado)	DY	9791.8162 m

Resultados basados en el factor de varianza a posteriori

Datos de entrada

Coordenadas aproximadas

Estación	Latitud	Longitud	Altura [m]	
B-9001	43° 16' 49.80742" N	2° 51' 23.15965" W	91.1673	
B-9002	43° 16' 46.03048" N	2° 51' 12.99731" W	91.4259	
B-9003	43° 16' 41.37202" N	2° 51' 00.93567" W	95.9715	
B-9004	43° 16' 36.34625" N	2° 50' 46.76106" W	98.0773	Conocido en posición y altura
B-9005	43° 16' 31.47764" N	2° 50' 39.66684" W	106.0576	
B-9006	43° 16' 27.89755" N	2° 50' 31.33947" W	113.5366	
B-9007	43° 16' 30.78688" N	2° 50' 14.79362" W	105.7801	
B-9008	43° 16' 23.38622" N	2° 50' 07.33547" W	119.4175	
GERN	43° 19' 02.65964" N	2° 40' 43.48988" W	78.9310	Conocido en posición y altura
KAST	43° 15' 00.95007" N	2° 57' 56.56257" W	321.6409	Conocido en posición y altura

Observaciones

	Estación	Pto visado	Alt inst	Alt obs	Lectura
DX	GERN	B-9004			2451.5046 m

DY	-13732.5369 m
DZ	-3273.1947 m
DX KAST B-9004	-1686.2892 m
DY	9791.8162 m
DZ	1990.6677 m
DX KAST B-9008	-1352.8739 m
DY	10665.3890 m
DZ	1714.1016 m
DX KAST B-9007	-1527.4899 m
DY	10505.6535 m
DZ	1871.0372 m
DX KAST B-9006	-1479.2747 m
DY	10129.7022 m
DZ	1811.4394 m
DX KAST B-9005	-1569.6721 m
DY	9946.1861 m
DZ	1886.7525 m
DX KAST B-9003	-1809.8854 m
DY	9477.9503 m
DZ	2102.1543 m
DX KAST B-9002	-1925.1641 m
DY	9211.3932 m
DZ	2203.6935 m
DX KAST B-9001	-2016.5700 m

			8986.5300 m	Desviaciones estándar					
			2288.3814 m						
DX	B-9004	B-9008	333.4237 m	Estación	Pto visado	D. E. abs / Cor	D. E. rel / Cor	D. E. tot / Cor	
DY			873.5701 m	DX	GERN	B-9004	0.0050 m	1.0 ppm	0.0193 m
DZ			-276.5662 m	DY			0.0050 m	1.0 ppm	0.0193 m
DX	B-9004	B-9007	158.8189 m	DZ			0.0050 m	1.0 ppm	0.0193 m
DY			713.8357 m	DX	KAST	B-9004	0.0050 m	1.0 ppm	0.0151 m
DZ			-119.6236 m	DY			0.0050 m	1.0 ppm	0.0151 m
DX	B-9004	B-9006	207.0175 m	DZ			0.0050 m	1.0 ppm	0.0151 m
DY			337.8872 m	DX	KAST	B-9008	0.0050 m	1.0 ppm	0.0159 m
DZ			-179.2318 m	DY			0.0050 m	1.0 ppm	0.0159 m
DX	B-9004	B-9005	116.6227 m	DZ			0.0050 m	1.0 ppm	0.0159 m
DY			154.3651 m	DX	KAST	B-9007	0.0050 m	1.0 ppm	0.0158 m
DZ			-103.9153 m	DY			0.0050 m	1.0 ppm	0.0158 m
DX	B-9004	B-9003	-123.6128 m	DZ			0.0050 m	1.0 ppm	0.0158 m
DY			-313.8560 m	DX	KAST	B-9006	0.0050 m	1.0 ppm	0.0154 m
DZ			111.4803 m	DY			0.0050 m	1.0 ppm	0.0154 m
DX	B-9004	B-9002	-238.8759 m	DZ			0.0050 m	1.0 ppm	0.0154 m
DY			-580.4205 m	DX	KAST	B-9005	0.0050 m	1.0 ppm	0.0152 m
DZ			213.0356 m	DY			0.0050 m	1.0 ppm	0.0152 m
DX	B-9004	B-9001	-330.2939 m	DZ			0.0050 m	1.0 ppm	0.0152 m
DY			-805.2790 m	DX	KAST	B-9003	0.0050 m	1.0 ppm	0.0149 m
DZ			297.7083 m	DY			0.0050 m	1.0 ppm	0.0149 m
				DZ			0.0050 m	1.0 ppm	0.0149 m

DX	KAST	B-9002	0.0050 m	1.0 ppm	0.0147 m
DY			0.0050 m	1.0 ppm	0.0147 m
DZ			0.0050 m	1.0 ppm	0.0147 m
DX	KAST	B-9001	0.0050 m	1.0 ppm	0.0145 m
DY			0.0050 m	1.0 ppm	0.0145 m
DZ			0.0050 m	1.0 ppm	0.0145 m
DX	B-9004	B-9008	0.0050 m	1.0 ppm	0.0060 m
DY			0.0050 m	1.0 ppm	0.0060 m
DZ			0.0050 m	1.0 ppm	0.0060 m
DX	B-9004	B-9007	0.0050 m	1.0 ppm	0.0057 m
DY			0.0050 m	1.0 ppm	0.0057 m
DZ			0.0050 m	1.0 ppm	0.0057 m
DX	B-9004	B-9006	0.0050 m	1.0 ppm	0.0054 m
DY			0.0050 m	1.0 ppm	0.0054 m
DZ			0.0050 m	1.0 ppm	0.0054 m
DX	B-9004	B-9005	0.0050 m	1.0 ppm	0.0052 m
DY			0.0050 m	1.0 ppm	0.0052 m
DZ			0.0050 m	1.0 ppm	0.0052 m
DX	B-9004	B-9003	0.0050 m	1.0 ppm	0.0054 m
DY			0.0050 m	1.0 ppm	0.0054 m
DZ			0.0050 m	1.0 ppm	0.0054 m
DX	B-9004	B-9002	0.0050 m	1.0 ppm	0.0057 m
DY			0.0050 m	1.0 ppm	0.0057 m
DZ			0.0050 m	1.0 ppm	0.0057 m

DX	B-9004	B-9001	0.0050 m	1.0 ppm	0.0059 m
DY			0.0050 m	1.0 ppm	0.0059 m
DZ			0.0050 m	1.0 ppm	0.0059 m

Resultados del ajuste

Coordenadas

Estación	Coordenada	Corr	Desv. Est.		
B-9001	Latitud	43° 16' 49.80750" N	0.0025 m	0.0032 m	
	Longitud	2° 51' 23.15957" W	0.0017 m	0.0032 m	
	Altura	91.1682 m	0.0009 m	0.0032 m	
B-9002	Latitud	43° 16' 46.03058" N	0.0030 m	0.0031 m	
	Longitud	2° 51' 12.99731" W	0.0001 m	0.0031 m	
	Altura	91.4343 m	0.0084 m	0.0031 m	
B-9003	Latitud	43° 16' 41.37218" N	0.0050 m	0.0029 m	
	Longitud	2° 51' 00.93551" W	0.0038 m	0.0029 m	
	Altura	95.9709 m	-0.0006 m	0.0029 m	
B-9004	Latitud	43° 16' 36.34625" N	0.0000 m	-	fijo
	Longitud	2° 50' 46.76106" W	0.0000 m	-	fijo
	Altura	98.0773 m	0.0000 m	-	fijo
B-9005	Latitud	43° 16' 31.47762" N	-0.0007 m	0.0029 m	
	Longitud	2° 50' 39.66695" W	-0.0024 m	0.0029 m	
	Altura	106.0642 m	0.0067 m	0.0029 m	
B-9006	Latitud	43° 16' 27.89755" N	-0.0001 m	0.0030 m	
	Longitud	2° 50' 31.33949" W	-0.0003 m	0.0030 m	

	Altura	113.5404 m	0.0038 m	0.0030 m	DY			10665.3846 m	0.0044 m	0.0033 m	0.0035 m
B-9007	Latitud	43° 16' 30.78684" N	-0.0010 m	0.0031 m	DZ			1714.1052 m	-0.0036 m	-0.0088 m	0.0038 m
	Longitud	2° 50' 14.79366" W	-0.0009 m	0.0031 m	DX	KAST	B-9007	-1527.4715 m	-0.0184 m	0.0025 m	0.0038 m
	Altura	105.7897 m	0.0096 m	0.0031 m	DY			10505.6501 m	0.0034 m	0.0055 m	0.0033 m
B-9008	Latitud	43° 16' 23.38620" N	-0.0007 m	0.0033 m	DZ			1871.0470 m	-0.0099 m	-0.0203 m	0.0038 m
	Longitud	2° 50' 07.33551" W	-0.0008 m	0.0033 m	DX	KAST	B-9006	-1479.2710 m	-0.0037 m	0.0008 m	0.0037 m
	Altura	119.4241 m	0.0066 m	0.0033 m	DY			10129.7012 m	0.0009 m	0.0021 m	0.0032 m
GERN	Latitud	43° 19' 02.65964" N	0.0000 m	-	fijo			1811.4400 m	-0.0007 m	-0.0032 m	0.0036 m
	Longitud	2° 40' 43.48988" W	0.0000 m	-	fijo						
	Altura	78.9310 m	0.0000 m	-	fijo						
KAST	Latitud	43° 15' 00.95007" N	0.0000 m	-	fijo						
	Longitud	2° 57' 56.56257" W	0.0000 m	-	fijo						
	Altura	321.6409 m	0.0000 m	-	fijo						

Observaciones y residuales

	Estación	Pto visado	Obs. ajus.	Resid	Resid (ENA)	Desv. Est.						
DX	GERN	B-9004	2451.4840 m	0.0206 m	-0.0028 m	0.0024 m	DZ					
DY			-13732.5331 m	-0.0038 m	0.0035 m	0.0013 m	DX	KAST	B-9001	-2016.5802 m	0.0102 m	-0.0036 m
DZ			-3273.2191 m	0.0244 m	0.0318 m	0.0023 m	DY			8986.5342 m	-0.0042 m	-0.0064 m
DX	KAST	B-9004	-1686.2880 m	-0.0012 m	0.0022 m	0.0024 m	DZ			2288.3804 m	0.0011 m	0.0083 m
DY			9791.8139 m	0.0023 m	-0.0022 m	0.0013 m	DX	B-9004	B-9008	333.4225 m	0.0012 m	-0.0006 m
DZ			1990.6719 m	-0.0043 m	-0.0039 m	0.0023 m	DY			873.5707 m	-0.0006 m	-0.0005 m
DX	KAST	B-9008	-1352.8655 m	-0.0084 m	0.0040 m	0.0039 m	DZ			-276.5668 m	0.0005 m	0.0012 m

DX	B-9004	B-9007	158.8165 m	0.0024 m	-0.0003 m	0.0032 m
DY			713.8362 m	-0.0005 m	-0.0007 m	0.0031 m
DZ			-119.6249 m	0.0013 m	0.0027 m	0.0031 m
DX	B-9004	B-9006	207.0171 m	0.0005 m	-0.0001 m	0.0030 m
DY			337.8873 m	-0.0001 m	-0.0003 m	0.0030 m
DZ			-179.2319 m	0.0001 m	0.0004 m	0.0030 m
DX	B-9004	B-9005	116.6220 m	0.0007 m	-0.0007 m	0.0029 m
DY			154.3658 m	-0.0008 m	-0.0002 m	0.0029 m
DZ			-103.9158 m	0.0004 m	0.0008 m	0.0029 m
DX	B-9004	B-9003	-123.6111 m	-0.0018 m	0.0008 m	0.0029 m
DY			-313.8568 m	0.0009 m	0.0011 m	0.0029 m
DZ			111.4805 m	-0.0002 m	-0.0015 m	0.0029 m
DX	B-9004	B-9002	-238.8759 m	0.0000 m	0.0000 m	0.0031 m
DY			-580.4205 m	0.0000 m	0.0013 m	0.0031 m
DZ			213.0337 m	0.0018 m	0.0013 m	0.0031 m
DX	B-9004	B-9001	-330.2922 m	-0.0017 m	0.0006 m	0.0032 m
DY			-805.2797 m	0.0007 m	0.0011 m	0.0032 m
DZ			297.7085 m	-0.0002 m	-0.0014 m	0.0032 m

DV	KAST	B-9008	10886.6354	0.0102	0.9
DV	KAST	B-9007	10779.7342	0.0212	2.0
DV	KAST	B-9006	10396.1726	0.0039	0.4
DV	KAST	B-9005	10244.5201	0.0095	0.9
DV	KAST	B-9003	9875.5481	0.0154	1.6
DV	KAST	B-9002	9665.0061	0.0121	1.3
DV	KAST	B-9001	9490.0515	0.0111	1.2
DV	B-9004	B-9008	975.0823	0.0014	1.5
DV	B-9004	B-9007	741.0094	0.0028	3.8
DV	B-9004	B-9006	434.9115	0.0005	1.1
DV	B-9004	B-9005	219.6087	0.0011	5.1
DV	B-9004	B-9003	355.2657	0.0020	5.6
DV	B-9004	B-9002	662.8221	0.0018	2.7
DV	B-9004	B-9001	919.8906	0.0019	2.0

Fiabilidad externa

Estación		Fiab Ext [m]		Estación		Pto visado	
B-9001	Latitud	0.0160		DZ	B-9004	B-9001	
	Longitud	0.0216		DY	B-9004	B-9001	
	Altura	0.0146		DX	B-9004	B-9001	
B-9002	Latitud	0.0163		DZ	B-9004	B-9002	
	Longitud	0.0220		DY	B-9004	B-9002	
	Altura	0.0149		DX	B-9004	B-9002	

Residuales del vector de línea base GPS

Estación	Pto visado	Vector ajus. [m]	Resid [m]	Resid [ppm]
DV GERN	B-9004	14328.5101	0.0321	2.2
DV KAST	B-9004	10133.4082	0.0050	0.5

						Elipses de error absoluto (2D - 39.4% 1D - 68.3%)						
						Estación	A [m]	B [m]	A/B	Phi	Desv. Est. Alt [m]	
B-9003	Latitud	0.0167	DZ	B-9004	B-9003							
	Longitud	0.0225	DY	B-9004	B-9003							
	Altura	0.0153	DX	B-9004	B-9003							
B-9004	Latitud	0.0078	Latitud	B-9004	-	B-9001	0.0032	0.0032	1.0	3°	0.0032	
	Longitud	0.0080	Longitud	B-9004	-	B-9002	0.0031	0.0031	1.0	90°	0.0031	
	Altura	0.0026	Altura	B-9004	-	B-9003	0.0029	0.0029	1.0	90°	0.0029	
B-9005	Latitud	0.0172	DZ	B-9004	B-9005	B-9004	0.0000	0.0000	1.0	90°	0.0000	
	Longitud	0.0232	DY	B-9004	B-9005	B-9005	0.0029	0.0029	1.0	90°	0.0029	
	Altura	0.0158	DX	B-9004	B-9005	B-9006	0.0030	0.0030	1.0	90°	0.0030	
B-9006	Latitud	0.0173	DZ	B-9004	B-9006	B-9007	0.0031	0.0031	1.0	-1°	0.0031	
	Longitud	0.0233	DY	B-9004	B-9006	B-9008	0.0033	0.0033	1.0	90°	0.0033	
	Altura	0.0159	DX	B-9004	B-9006	GERN	0.0000	0.0000	1.0	90°	0.0000	
B-9007	Latitud	0.0177	DZ	B-9004	B-9007	KAST	0.0000	0.0000	1.0	90°	0.0000	
	Longitud	0.0239	DY	B-9004	B-9007							
	Altura	0.0164	DX	B-9004	B-9007							
						Elipses de error relativo (2D - 39.4%)						
B-9008	Latitud	0.0177	DZ	B-9004	B-9008	Estación	Estación	A [m]	B [m]	A/B	Psi	Desv. Est. Alt [m]
	Longitud	0.0239	DY	B-9004	B-9008	GERN	B-9004	0.0000	0.0000	1.0	18°	0.0000
	Altura	0.0164	DX	B-9004	B-9008	KAST	B-9004	0.0000	0.0000	1.0	17°	0.0000
GERN	Latitud	0.0000	DZ	GERN	B-9004	KAST	B-9008	0.0033	0.0033	1.0	14°	0.0033
	Longitud	0.0000	DY	GERN	B-9004	KAST	B-9007	0.0031	0.0031	1.0	-76°	0.0031
	Altura	0.0000	DX	GERN	B-9004	KAST	B-9006	0.0030	0.0030	1.0	15°	0.0030
KAST	Latitud	0.0000	Latitud	B-9004	-	KAST	B-9005	0.0029	0.0029	1.0	16°	0.0029
	Longitud	0.0000	Longitud	B-9004	-	KAST	B-9003	0.0029	0.0029	1.0	18°	0.0029
	Altura	0.0000	Altura	B-9004	-							

DY			0.0258 m	85	1.2	-0.02		
DZ			0.0264 m	81	1.3	-1.58		
DX	KAST	B-9001	0.0264 m	79	1.4	1.36	0.73	
DY			0.0257 m	83	1.2	-0.54		
DZ			0.0263 m	80	1.4	0.14		
DX	B-9004	B-9008	0.0285 m	11	7.7	1.01	0.50	
DY			0.0278 m	12	7.5	-0.52		
DZ			0.0284 m	11	7.7	0.43		
DX	B-9004	B-9007	0.0282 m	10	8.0	2.21	⚠ 2.22 ⚠	
DY			0.0275 m	11	7.8	-0.40		
DZ			0.0281 m	11	8.0	1.18		
DX	B-9004	B-9006	0.0274 m	10	8.2	0.46	0.08	
DY			0.0268 m	10	8.0	-0.11		
DZ			0.0274 m	10	8.2	0.08		
DX	B-9004	B-9005	0.0271 m	9	8.5	0.75	0.47	
DY			0.0265 m	10	8.3	-0.77		
DZ			0.0270 m	9	8.5	0.46		
DX	B-9004	B-9003	0.0266 m	10	8.1	-1.74	1.29	
DY			0.0260 m	11	7.9	0.84		
DZ			0.0266 m	10	8.1	-0.24		
DX	B-9004	B-9002	0.0265 m	12	7.6	0.03	0.84	
DY			0.0258 m	12	7.3	0.02		
DZ			0.0264 m	12	7.5	1.58		

DX	B-9004	B-9001	0.0264 m	13	7.2	-1.36	0.73
DY			0.0257 m	14	6.9	0.54	
DZ			0.0263 m	13	7.1	-0.14	

Redundancia:

Prueba W:

Prueba T (3 dimensiones):

Errores estimados (observaciones)

Errores estimados para observaciones rechazadas por las pruebas W (máx. 10)

	Estación	Pto visado	Prueba W	Fact	Err est
DZ	GERN	B-9004	2.22	1.1	0.0255 m
DX	B-9004	B-9007	2.21	1.1	0.0222 m
DX	KAST	B-9007	-2.21	1.1	-0.0222 m

Errores estimados para observaciones con altura de antena rechazadas por las pruebas W (máx. 10)

	Estación	Pto visado	Prueba W	Fact	MDB [m]	Err est ant [m]
	GERN	B-9004	2.94	1.5	0.0326	0.0343
	KAST	B-9007	-2.48	1.3	0.0287	-0.0254
	B-9004	B-9007	2.48	1.3	0.0287	0.0254

Errores estimados para observaciones rechazadas por las pruebas T (máx. 10)

	Estación	Pto visado	Prueba T	Fact	Err est
DX	GERN	B-9004	2.94	1.2	0.0223 m
DY					-0.0039 m
DZ					0.0261 m
DX	B-9004	B-9007	2.22	1.1	0.0227 m
DY					-0.0040 m
DZ					0.0128 m
DX	KAST	B-9007	2.22	1.1	-0.0227 m
DY					0.0040 m
DZ					-0.0128 m

1.6 PROCESAMIENTO RED BÁSICA

Resumen de procesamiento

ZAMUDIO-LEZAMA

RED BASICA

Información	del	proyecto
Nombre del proyecto:	ZAMUDIO-LEZAMA	
Fecha de creación:	05/18/2020 23:31:23	
Huso horario:	1h 00'	
Sistema de coordenadas:	ETRS89-30-ORTO-GRS1980	
Programa de aplicación:	LEICA Geo Office 5.0	
Fecha y hora de inicio:	05/18/2020 16:48:22	
Fecha y hora de término:	05/18/2020 20:21:02	
Puntos ocupados manualmente:	2	
Kernel de procesamiento:	PSI-Pro 2.0	
Procesado:	05/25/2020 12:58:58	

Parámetros	de	procesamiento
Parámetros		Selección
Ángulo de elevación:		15°
Tipo de efemérides:		Transmitidas
Tipo de solución:		Automático
Tipo GNSS:		Automático

Frecuencia:	L1 y L2
Fijar ambigüedades hasta:	80 km
Duración mínima para solución flotante (estático):	5' 00"
Intervalo de muestreo:	Usar todas
Modelo troposférico:	Hopfield
Modelo ionosférico:	Automático
Emplear modelo estocástico:	Sí
Dist. mínima:	8 km
Actividad ionosférica:	Media

Inf.	general	de	línea	base
KAST - B-9004	Referencia: KAST		Móvil: B-9004	
Tipo de receptor / N/S:	LEICAGR30 / 1705199		GX1230 / 468733	
Tipo de antena / N/S:	LEIAS10 NONE / 16201021		AX1202 en bastón / -	
Altura de antena:	0.0350 m		2.0050 m	
Coordenadas:				
Latitud:	43° 15' 00.95007" N		43° 16' 36.34617" N	
Longitud:	2° 57' 56.56257" W		2° 50' 46.76095" W	
Alt Elip.:	321.6409 m		98.0607 m	
Tipo de solución:	Phase: all fix			
Tipo GNSS:	GPS			
Frecuencia:	L1 y L2			

Ambigüedad: Sí

Intervalo de observación: 05/18/2020 16:48:22 - 05/18/2020 20:21:02

Duración: 3h 32' 40"

Calidad: Desv. Est. Lat: 0.0001 m Desv. Est. Lon: 0.0001 m Desv. Est. Alt.: 0.0002 m
 Q Posic.: 0.0001 m Desv. Est. geom.: 0.0001 m

Vector de línea base: DLat: 0° 01' 35.39610" DLon: 0° 07' 09.80161" DAlt: -223.5802 m
 Geométrica: 10133.4098 m

DOPs (mín-máx): GDOP: 1.7 - 4.0
 PDOP: 1.5 - 3.3 HDOP: 0.8 - 1.5 VDOP: 1.3 - 3.0

Frecuencia: L1 y L2

Ambigüedad: Sí

Intervalo de observación: 05/18/2020 16:48:22 - 05/18/2020 20:21:02

Duración: 3h 32' 40"

Calidad: Desv. Est. Lat: 0.0001 m Desv. Est. Lon: 0.0001 m Desv. Est. Alt.: 0.0002 m
 Q Posic.: 0.0002 m Desv. Est. geom.: 0.0001 m

Vector de línea base: DLat: -0° 02' 26.31329" DLon: -0° 10' 03.27130" DAlt: 19.1654 m
 Geométrica: 14328.5117 m

DOPs (mín-máx): GDOP: 1.7 - 5.2
 PDOP: 1.5 - 4.3 HDOP: 0.8 - 1.9 VDOP: 1.3 - 3.8

GERN - B-9004 Referencia: GERN Móvil: B-9004

Tipo de receptor / N/S: LEICAGR30 / - GX1230 / 468733

Tipo de antena / N/S: LEIAS10 NONE / 16201021 AX1202 en bastón / -

Altura de antena: 0.0771 m 2.0050 m

Coordenadas:

Latitud: 43° 19' 02.65964" N 43° 16' 36.34635" N

Longitud: 2° 40' 43.48988" W 2° 50' 46.76118" W

Alt Elip.: 78.9310 m 98.0964 m

Tipo de solución: Phase: all fix

Tipo GNSS: GPS

Inf. general de línea base

B-9004 - B-9005 Referencia: B-9004 Móvil: B-9005

Tipo de receptor / N/S: GX1230 / 468733 SR530 / 32885

Tipo de antena / N/S: AX1202 en bastón / - AT502 Pillar / -

Altura de antena: 2.0050 m 1.4000 m

Coordenadas:

Latitud: 43° 16' 36.34625" N 43° 16' 31.47761" N
 Longitud: 2° 50' 46.76106" W 2° 50' 39.66698" W
 Alt Elip.: 98.0773 m 106.0664 m

Tipo de solución:

Phase: all fix

Tipo GNSS:

GPS

Frecuencia:

L1 y L2

Ambigüedad:

Sí

Intervalo de observación:

05/18/2020 17:10:02 - 05/18/2020 17:30:07

Duración:

20' 05"

Calidad:

Desv. Est. Lat: 0.0003 m Desv. Est. Lon: 0.0002 m Desv. Est. Alt.: 0.0006 m

Q Posic.: 0.0003 m Desv. Est. geom.: 0.0002 m

Vector de línea base:

DLat: -0° 00' 04.86864" DLon: 0° 00' 07.09407" DAlt: 7.9891 m

Geométrica: 219.6083 m

DOPs (mín-máx):

GDOP: 2.2 - 2.7

PDOP: 1.9 - 2.3 HDOP: 1.1 - 1.2 VDOP: 1.6 - 1.9

KAST - B-9005

Referencia: KAST

Móvil: B-9005

Tipo de receptor / N/S:

LEICAGR30 / 1705199

SR530 / 32885

Tipo de antena / N/S:

LEIAS10 NONE / 16201021

AT502 Pillar / -

Altura de antena:

0.0350 m

1.4000 m

Coordenadas:

Latitud: 43° 15' 00.95007" N 43° 16' 31.47766" N
 Longitud: 2° 57' 56.56257" W 2° 50' 39.66668" W
 Alt Elip.: 321.6409 m 106.0457 m

Tipo de solución:

Phase: all fix

Tipo GNSS:

GPS

Frecuencia:

L1 y L2

Ambigüedad:

Sí

Intervalo de observación:

05/18/2020 17:10:02 - 05/18/2020 17:30:07

Duración:

20' 05"

Calidad:

Desv. Est. Lat: 0.0003 m Desv. Est. Lon: 0.0002 m Desv. Est. Alt.: 0.0007 m

Q Posic.: 0.0004 m Desv. Est. geom.: 0.0002 m

Vector de línea base:

DLat: 0° 01' 30.52759" DLon: 0° 07' 16.89589" DAlt: -215.5952 m

Geométrica: 10244.5265 m

DOPs (mín-máx):

GDOP: 2.2 - 2.7

PDOP: 1.9 - 2.3 HDOP: 1.1 - 1.2 VDOP: 1.6 - 1.9

B-9004 - B-9006

Referencia: B-9004

Móvil: B-9006

Tipo de receptor / N/S:

GX1230 / 468733

SR530 / 32885

Tipo de antena / N/S:

AX1202 en bastón / -

AT502 Pillar / -

Altura de antena: 2.0050 m 1.4000 m
 Tipo de antena / N/S: LEIAS10 NONE / 16201021 AT502 Pillar / -
 Altura de antena: 0.0350 m 1.4000 m

Coordenadas:
 Latitud: 43° 16' 36.34625" N 43° 16' 27.89754" N
 Longitud: 2° 50' 46.76106" W 2° 50' 31.33949" W
 Alt Elip.: 98.0773 m 113.5422 m

Tipo de solución: Phase: all fix
 Tipo GNSS: GPS
 Frecuencia: L1 y L2
 Ambigüedad: Sí
 Intervalo de observación: 05/18/2020 17:41:17 - 05/18/2020 17:59:32
 Duración: 18' 15"

Calidad: Desv. Est. Lat: 0.0003 m Desv. Est. Lon: 0.0002 m Desv. Est. Alt.: 0.0006 m
 Q Posic.: 0.0004 m Desv. Est. geom.: 0.0003 m

Vector de línea base: DLat: -0° 00' 08.44871" DLon: 0° 00' 15.42157" DAlt: 15.4650 m
 Geométrica: 434.9116 m

DOPs (mín-máx): GDOP: 2.1 - 4.0
 PDOP: 1.9 - 3.3 HDOP: 1.1 - 1.5 VDOP: 1.5 - 3.0

KAST - B-9006 Referencia: KAST Móvil: B-9006
 Tipo de receptor / N/S: LEICAGR30 / 1705199 SR530 / 32885

Coordenadas:
 Latitud: 43° 15' 00.95007" N 43° 16' 27.89760" N
 Longitud: 2° 57' 56.56257" W 2° 50' 31.33945" W
 Alt Elip.: 321.6409 m 113.5259 m

Tipo de solución: Phase: all fix
 Tipo GNSS: GPS
 Frecuencia: L1 y L2
 Ambigüedad: Sí
 Intervalo de observación: 05/18/2020 17:41:17 - 05/18/2020 17:59:32
 Duración: 18' 15"

Calidad: Desv. Est. Lat: 0.0004 m Desv. Est. Lon: 0.0003 m Desv. Est. Alt.: 0.0009 m
 Q Posic.: 0.0005 m Desv. Est. geom.: 0.0003 m

Vector de línea base: DLat: 0° 01' 26.94753" DLon: 0° 07' 25.22312" DAlt: -208.1150 m
 Geométrica: 10396.1739 m

DOPs (mín-máx): GDOP: 2.1 - 4.0
 PDOP: 1.9 - 3.3 HDOP: 1.1 - 1.5 VDOP: 1.5 - 3.0

B-9004 - B-9007 Referencia: B-9004 Móvil: B-9007

Tipo de receptor / N/S: GX1230 / 468733 SR530 / 32885

Tipo de antena / N/S: AX1202 en bastón / - AT502 Pillar / -

Altura de antena: 2.0050 m 1.4000 m

Coordenadas:

Latitud: 43° 16' 36.34625" N 43° 16' 30.78682" N

Longitud: 2° 50' 46.76106" W 2° 50' 14.79368" W

Alt Elip.: 98.0773 m 105.7938 m

Tipo de solución: Phase: all fix

Tipo GNSS: GPS

Frecuencia: L1 y L2

Ambigüedad: Sí

Intervalo de observación: 05/18/2020 18:21:52 - 05/18/2020 18:40:37

Duración: 18' 45"

Calidad: Desv. Est. Lat: 0.0004 m Desv. Est. Lon: 0.0003 m Desv. Est. Alt.: 0.0009 m
 Q Posic.: 0.0006 m Desv. Est. geom.: 0.0003 m

Vector de línea base: DLat: -0° 00' 05.55943" DLon: 0° 00' 31.96738" DAlt: 7.7166 m
 Geométrica: 741.0092 m

DOPs (mín-máx): GDOP: 2.4 - 4.1
 PDOP: 2.0 - 3.4 HDOP: 1.1 - 2.0 VDOP: 1.7 - 2.8

KAST - B-9007	Referencia: KAST	Móvil: B-9007
Tipo de receptor / N/S:	LEICAGR30 / 1705199	SR530 / 32885
Tipo de antena / N/S:	LEIAS10 NONE / 16201021	AT502 Pillar / -
Altura de antena:	0.0350 m	1.4000 m
Coordenadas:		
Latitud:	43° 15' 00.95007" N	43° 16' 30.78701" N
Longitud:	2° 57' 56.56257" W	2° 50' 14.79355" W
Alt Elip.:	321.6409 m	105.7582 m
Tipo de solución:	Phase: all fix	
Tipo GNSS:	GPS	
Frecuencia:	L1 y L2	
Ambigüedad:	Sí	
Intervalo de observación:	05/18/2020 18:21:52 - 05/18/2020 18:40:37	
Duración:	18' 45"	
Calidad:	Desv. Est. Lat: 0.0005 m Desv. Est. Lon: 0.0004 m Desv. Est. Alt.: 0.0012 m Q Posic.: 0.0007 m Desv. Est. geom.: 0.0004 m	
Vector de línea base:	DLat: 0° 01' 29.83694" DLon: 0° 07' 41.76902" DAlt: -215.8827 m Geométrica: 10779.7385 m	
DOPs (mín-máx):	GDOP: 2.4 - 7.6 PDOP: 2.0 - 5.9 HDOP: 1.1 - 2.6 VDOP: 1.7 - 5.3	

DOPs (mín-máx): GDOP: 2.5 - 4.7
 PDOP: 2.2 - 3.8 HDOP: 1.2 - 1.9 VDOP: 1.8 - 3.3

B-9004 - B-9008 Referencia: B-9004 Móvil: B-9008

Tipo de receptor / N/S: GX1230 / 468733 SR530 / 32885
 Tipo de antena / N/S: AX1202 en bastón / - AT502 Pillar / -
 Altura de antena: 2.0050 m 1.4000 m
 Coordenadas:
 Latitud: 43° 16' 36.34625" N 43° 16' 23.38618" N
 Longitud: 2° 50' 46.76106" W 2° 50' 07.33553" W
 Alt Elip.: 98.0773 m 119.4269 m
 Tipo de solución: Phase: all fix
 Tipo GNSS: GPS
 Frecuencia: L1 y L2
 Ambigüedad: Sí
 Intervalo de observación: 05/18/2020 18:47:37 - 05/18/2020 19:06:12
 Duración: 18' 35"
 Calidad: Desv. Est. Lat: 0.0006 m Desv. Est. Lon: 0.0005 m Desv. Est. Alt.: 0.0010 m
 Q Posic.: 0.0007 m Desv. Est. geom.: 0.0004 m
 Vector de línea base: DLat: -0° 00' 12.96007" DLon: 0° 00' 39.42552" DAlt: 21.3496 m
 Geométrica: 975.0820 m

KAST - B-9008 Referencia: KAST Móvil: B-9008

Tipo de receptor / N/S: LEICAGR30 / 1705199 SR530 / 32885
 Tipo de antena / N/S: LEIAS10 NONE / 16201021 AT502 Pillar / -
 Altura de antena: 0.0350 m 1.4000 m
 Coordenadas:
 Latitud: 43° 15' 00.95007" N 43° 16' 23.38629" N
 Longitud: 2° 57' 56.56257" W 2° 50' 07.33533" W
 Alt Elip.: 321.6409 m 119.4042 m
 Tipo de solución: Phase: all fix
 Tipo GNSS: GPS
 Frecuencia: L1 y L2
 Ambigüedad: Sí
 Intervalo de observación: 05/18/2020 18:47:37 - 05/18/2020 19:06:12
 Duración: 18' 35"
 Calidad: Desv. Est. Lat: 0.0007 m Desv. Est. Lon: 0.0006 m Desv. Est. Alt.: 0.0012 m
 Q Posic.: 0.0009 m Desv. Est. geom.: 0.0006 m
 Vector de línea base: DLat: 0° 01' 22.43622" DLon: 0° 07' 49.22724" DAlt: -202.2367 m
 Geométrica: 10886.6402 m

DOPs (mín-máx): GDOP: 2.0 - 4.9

PDOP: 1.8 - 4.0

HDOP: 1.0 - 2.1

VDOP: 1.5 - 3.4

Vector de línea base: DLat: 0° 00' 05.02597" DLon: -0° 00' 14.17441" DAlt: -2.1064 m

Geométrica: 355.2655 m

DOPs (mín-máx): GDOP: 2.1 - 2.2

PDOP: 1.8 - 1.9

HDOP: 1.0 - 1.1

VDOP: 1.5 - 1.6

B-9004 - B-9003 Referencia: B-9004 Móvil: B-9003

Tipo de receptor / N/S: GX1230 / 468733 SR530 / 32885

Tipo de antena / N/S: AX1202 en bastón / - AT502 Pillar / -

Altura de antena: 2.0050 m 1.4000 m

Coordenadas:

Latitud: 43° 16' 36.34625" N 43° 16' 41.37222" N

Longitud: 2° 50' 46.76106" W 2° 51' 00.93547" W

Alt Elip.: 98.0773 m 95.9709 m

Tipo de solución: Phase: all fix

Tipo GNSS: GPS

Frecuencia: L1 y L2

Ambigüedad: Sí

Intervalo de observación: 05/18/2020 19:18:27 - 05/18/2020 19:36:47

Duración: 18' 20"

Calidad: Desv. Est. Lat: 0.0004 m Desv. Est. Lon: 0.0004 m Desv. Est. Alt.: 0.0008 m

Q Posic.: 0.0006 m Desv. Est. geom.: 0.0004 m

KAST - B-9003 Referencia: KAST Móvil: B-9003

Tipo de receptor / N/S: LEICAGR30 / 1705199 SR530 / 32885

Tipo de antena / N/S: LEIAS10 NONE / 16201021 AT502 Pillar / -

Altura de antena: 0.0350 m 1.4000 m

Coordenadas:

Latitud: 43° 15' 00.95007" N 43° 16' 41.37190" N

Longitud: 2° 57' 56.56257" W 2° 51' 00.93577" W

Alt Elip.: 321.6409 m 95.9711 m

Tipo de solución: Phase: all fix

Tipo GNSS: GPS

Frecuencia: L1 y L2

Ambigüedad: Sí

Intervalo de observación: 05/18/2020 19:18:27 - 05/18/2020 19:36:47

Duración: 18' 20"

Calidad: Desv. Est. Lat: 0.0003 m Desv. Est. Lon: 0.0002 m Desv. Est. Alt.: 0.0005 m

Q Posic.: 0.0004 m Desv. Est. geom.: 0.0003 m

Calidad: Desv. Est. Lat: 0.0005 m Desv. Est. Lon: 0.0004 m Desv. Est. Alt.: 0.0009 m
 Q Posic.: 0.0006 m Desv. Est. geom.: 0.0004 m

Vector de línea base: DLat: 0° 01' 40.42183" DLon: 0° 06' 55.62680" DAlt: -225.6698 m
 Geométrica: 9875.5394 m

DOPs (mín-máx): GDOP: 2.1 - 2.2
 PDOP: 1.8 - 1.9 HDOP: 1.0 - 1.1 VDOP: 1.5 - 1.6

Vector de línea base: DLat: 0° 00' 09.68437" DLon: -0° 00' 26.23625" DAlt: -6.6401 m
 Geométrica: 662.8226 m

DOPs (mín-máx): GDOP: 2.3 - 3.4
 PDOP: 1.9 - 2.9 HDOP: 1.1 - 1.8 VDOP: 1.6 - 2.2

B-9004 - B-9002	Referencia: B-9004	Móvil: B-9002
Tipo de receptor / N/S:	GX1230 / 468733	SR530 / 32885
Tipo de antena / N/S:	AX1202 en bastón / -	AT502 Pillar / -
Altura de antena:	2.0050 m	1.4000 m
Coordenadas:		
Latitud:	43° 16' 36.34625" N	43° 16' 46.03062" N
Longitud:	2° 50' 46.76106" W	2° 51' 12.99731" W
Alt Elip.:	98.0773 m	91.4372 m
Tipo de solución:	Phase: all fix	
Tipo GNSS:	GPS	
Frecuencia:	L1 y L2	
Ambigüedad:	Sí	
Intervalo de observación:	05/18/2020 19:40:42 - 05/18/2020 19:59:07	
Duración:	18' 25"	

KAST - B-9002	Referencia: KAST	Móvil: B-9002
Tipo de receptor / N/S:	LEICAGR30 / 1705199	SR530 / 32885
Tipo de antena / N/S:	LEIAS10 NONE / 16201021	AT502 Pillar / -
Altura de antena:	0.0350 m	1.4000 m
Coordenadas:		
Latitud:	43° 15' 00.95007" N	43° 16' 46.03028" N
Longitud:	2° 57' 56.56257" W	2° 51' 12.99731" W
Alt Elip.:	321.6409 m	91.4148 m
Tipo de solución:	Phase: all fix	
Tipo GNSS:	GPS	
Frecuencia:	L1 y L2	
Ambigüedad:	Sí	
Intervalo de observación:	05/18/2020 19:40:42 - 05/18/2020 19:59:07	
Duración:	18' 25"	

Calidad: Desv. Est. Lat: 0.0006 m Desv. Est. Lon: 0.0003 m Desv. Est. Alt.: 0.0008 m
 Q Posic.: 0.0006 m Desv. Est. geom.: 0.0004 m

Vector de línea base: DLat: 0° 01' 45.08021" DLon: 0° 06' 43.56526" DAlt: -230.2261 m
 Geométrica: 9665.0032 m

DOPs (mín-máx): GDOP: 2.3 - 3.4
 PDOP: 1.9 - 2.9 HDOP: 1.1 - 1.8 VDOP: 1.6 - 2.2

Intervalo de observación: 05/18/2020 20:02:27 - 05/18/2020 20:20:07
 Duración: 17' 40"

Calidad: Desv. Est. Lat: 0.0004 m Desv. Est. Lon: 0.0003 m Desv. Est. Alt.: 0.0006 m
 Q Posic.: 0.0004 m Desv. Est. geom.: 0.0003 m

Vector de línea base: DLat: 0° 00' 13.46128" DLon: -0° 00' 36.39849" DAlt: -6.9086 m
 Geométrica: 919.8905 m

DOPs (mín-máx): GDOP: 2.0 - 2.2
 PDOP: 1.7 - 1.9 HDOP: 1.0 - 1.1 VDOP: 1.4 - 1.5

B-9004 - B-9001	Referencia: B-9004	Móvil: B-9001
Tipo de receptor / N/S:	GX1230 / 468733	SR530 / 32885
Tipo de antena / N/S:	AX1202 en bastón / -	AT502 Pillar / -
Altura de antena:	2.0050 m	1.4000 m
Coordenadas:		
Latitud:	43° 16' 36.34625" N	43° 16' 49.80754" N
Longitud:	2° 50' 46.76106" W	2° 51' 23.15955" W
Alt Elip.:	98.0773 m	91.1687 m
Tipo de solución:	Phase: all fix	
Tipo GNSS:	GPS	
Frecuencia:	L1 y L2	
Ambigüedad:	Sí	

KAST - B-9001	Referencia: KAST	Móvil: B-9001
Tipo de receptor / N/S:	LEICAGR30 / 1705199	SR530 / 32885
Tipo de antena / N/S:	LEIAS10 NONE / 16201021	AT502 Pillar / -
Altura de antena:	0.0350 m	1.4000 m
Coordenadas:		
Latitud:	43° 15' 00.95007" N	43° 16' 49.80728" N
Longitud:	2° 57' 56.56257" W	2° 51' 23.15973" W
Alt Elip.:	321.6409 m	91.1656 m
Tipo de solución:	Phase: all fix	
Tipo GNSS:	GPS	
Frecuencia:	L1 y L2	

Ambigüedad: Sí

Intervalo de observación: 05/18/2020 20:02:27 - 05/18/2020 20:20:07

Duración: 17' 40"

Calidad: Desv. Est. Lat: 0.0004 m Desv. Est. Lon: 0.0003 m Desv. Est. Alt.: 0.0006 m

Q Posic.: 0.0005 m Desv. Est. geom.: 0.0003 m

Vector de línea base: DLat: 0° 01' 48.85721" DLon: 0° 06' 33.40284" DAlt: -230.4753 m

Geométrica: 9490.0456 m

DOPs (mín-máx): GDOP: 2.0 - 2.2

PDOP: 1.7 - 1.9 HDOP: 1.0 - 1.1 VDOP: 1.4 - 1.5

1.7 CIERRES RED BÁSICA

ZAMUDIO-LEZAMA

RED BASICA

Cierres de triángulos de baselíneas gps

www.MOVE3.com

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Creado: 06/04/2020 11:32:25

Información	del	proyecto
Nombre del proyecto:	LEZAMA-BASES	
Fecha de creación:	05/18/2020 23:31:23	
Huso horario:	1h 00'	
Sistema de coordenadas:	ETRS89-30-ORTO-GRS1980	
Programa de aplicación:	LEICA Geo Office 5.0	
Kernel de procesamiento:	MOVE3 3.4	
El valor crítico de la prueba W es:	1.96	
Dimensión:	3D	
Cierres	de	líneas base GPS

Cierre 1

Desde	A	dX[m]	dY[m]	dZ[m]
KAST	B-9008	-1352.8739	10665.3890	1714.1016
B-9008	B-9004	-333.4237	-873.5701	276.5662
B-9004	KAST	1686.2892	-9791.8162	-1990.6677
X:	-0.0084 m	Prueba W:	-0.37	
S:	0.0027 m		0.12	
Z:	0.0001 m		0.01	
X local:	0.0023 m	Prueba W:	0.10	
Y local:	0.0060 m		0.26	
Altura:	-0.0061 m		-0.27	
Error de cierre:	0.0089 m	(0.4 ppm)	Razón:(1:2479957)	
Longitud:	21995.1320 m			

Cierre 2

Desde	A	dX[m]	dY[m]	dZ[m]
KAST	B-9004	-1686.2892	9791.8162	1990.6677
B-9004	B-9007	158.8189	713.8357	-119.6236
B-9007	KAST	1527.4899	-10505.6535	-1871.0372
X:	0.0197 m	Prueba W:	0.87	
S:	-0.0016 m		-0.07	

Z: 0.0069 m 0.31

X local: -0.0006 m Prueba W: -0.03

Y local: -0.0085 m -0.37

Altura: 0.0191 m 0.85

Error de cierre: 0.0209 m (1.0 ppm) Razón:(1:1035340)

Longitud: 21654.1575 m

Cierre 3

Desde	A	dX[m]	dY[m]	dZ[m]
KAST	B-9004	-1686.2892	9791.8162	1990.6677
B-9004	B-9006	207.0175	337.8872	-179.2318
B-9006	KAST	1479.2747	-10129.7022	-1811.4394

X: 0.0030 m Prueba W: 0.14

S: 0.0012 m 0.06

Z: -0.0035 m -0.16

X local: 0.0014 m Prueba W: 0.06

Y local: -0.0046 m -0.21

Altura: -0.0002 m -0.01

Error de cierre: 0.0048 m (0.2 ppm) Razón:(1:4384713)

Longitud: 20964.4953 m

Cierre 4

Desde	A	dX[m]	dY[m]	dZ[m]
KAST	B-9004	-1686.2892	9791.8162	1990.6677
B-9004	B-9005	116.6227	154.3651	-103.9153
B-9005	KAST	1569.6721	-9946.1861	-1886.7525

X: 0.0056 m Prueba W: 0.25

S: -0.0048 m -0.22

Z: -0.0001 m -0.01

X local: -0.0045 m Prueba W: -0.20

Y local: -0.0041 m -0.19

Altura: 0.0042 m 0.19

Error de cierre: 0.0074 m (0.4 ppm) Razón:(1:2787143)

Longitud: 20597.5446 m

Cierre 5

Desde	A	dX[m]	dY[m]	dZ[m]
KAST	B-9004	-1686.2892	9791.8162	1990.6677
B-9004	B-9003	-123.6128	-313.8560	111.4803
B-9003	KAST	1809.8854	-9477.9503	-2102.1543

X: -0.0166 m Prueba W: -0.76

S: 0.0100 m 0.46
 Z: -0.0063 m -0.29

Longitud: 20461.2356 m

X local: 0.0091 m Prueba W: 0.42
 Y local: 0.0071 m 0.32
 Altura: -0.0168 m -0.77

Cierre 7

Desde	A	dX[m]	dY[m]	dZ[m]
KAST	B-9004	-1686.2892	9791.8162	1990.6677
B-9004	B-9001	-330.2939	-805.2790	297.7083
B-9001	KAST	2016.5700	-8986.5300	-2288.3814

Error de cierre: 0.0204 m (1.0 ppm) Razón:(1:998613)

Longitud: 20364.2147 m

X: -0.0131 m Prueba W: -0.60
 S: 0.0072 m 0.33
 Z: -0.0055 m -0.25

Cierre 6

Desde	A	dX[m]	dY[m]	dZ[m]
KAST	B-9004	-1686.2892	9791.8162	1990.6677
B-9004	B-9002	-238.8759	-580.4205	213.0356
B-9002	KAST	1925.1641	-9211.3932	-2203.6935

X local: 0.0065 m Prueba W: 0.30
 Y local: 0.0052 m 0.24
 Altura: -0.0136 m -0.62

X: -0.0009 m Prueba W: -0.04
 S: 0.0025 m 0.11
 Z: 0.0097 m 0.44

Error de cierre: 0.0159 m (0.8 ppm) Razón:(1:1289069)

Longitud: 20543.3459 m

X local: 0.0024 m Prueba W: 0.11
 Y local: 0.0078 m 0.36
 Altura: 0.0059 m 0.27

Error de cierre: 0.0101 m (0.5 ppm) Razón:(1:2034705)

1.8 RED BÁSICA COORDENADAS DE VÉRTICES

PROYECTO RENOVACION DE VIA, LINEA TXORIERRI**TRAMO: ZAMUDIO LEZAMA****LISTADO DE COORDENADAS GEOGRAFICAS CON COTA ELIPSOIDICA**

VERTICE COTA ELIPSOIDICA	LONGITUD WGS84	LATITUD WGS 84	COTA ELIPSOIDICA
B-9001	2° 51' 23.159573" W	43° 16' 49.807501" N	91.168
B-9002	2° 51' 12.997309" W	43° 16' 46.030576" N	91.434
B-9003	2° 51' 0.935506" W	43° 16' 41.372185" N	95.971
B-9004	2° 50' 46.761057" W	43° 16' 36.346254" N	98.077
B-9005	2° 50' 39.666952" W	43° 16' 31.477617" N	106.064
B-9006	2° 50' 31.339487" W	43° 16' 27.897547" N	113.540
B-9007	2° 50' 14.793664" W	43° 16' 30.786843" N	105.790
B-9008	2° 50' 7.335508" W	43° 16' 23.386197" N	119.424
B-9021	2° 50' 9.508220" W	43° 16' 24.724610" N	115.987
B-9031	2° 50' 59.738233" W	43° 16' 41.777970" N	90.176
B-9032	2° 50' 58.541740" W	43° 16' 42.579071" N	92.162
GERN	2° 40' 43.489877" W	43° 19' 2.659643" N	78.931
KAST	2° 57' 56.562569" W	43° 15' 0.950072" N	321.641

PROYECTO RENOVACION DE VIA, LINEA TXORIERRI**TRAMO: ZAMUDIO LEZAMA****LISTADO DE COORDENADAS ETRS89, UTM, HUSO 30, ELIPSOIDE GRS1980**

VERTICE 2008	COTA NIVELACION	X	Y	COTA IBERGEO
B-9001	511648.521	4791974.847	41.542	41.5629
B-9002	511877.762	4791858.733	41.804	41.7910
B-9003	512149.872	4791715.511	46.336	46.3507
B-9004	512469.633	4791561.050	48.438	48.4380
B-9005	512629.809	4791411.157	56.418	56.4283
B-9006	512817.717	4791301.070	63.891	63.8982
B-9007	513190.490	4791390.915	56.149	56.1259
B-9008	513359.045	4791162.947	69.774	69.7604
B-9021	513309.990	4791204.138	66.326	
B-9031	512176.835	4791728.077	40.558	
B-9032	512203.758	4791752.838	42.545	
GERN	526049.609	4796113.215	29.650	
KAST	502783.403	4788607.358	271.681	

APÉNDICE N.º 2.

LEVANTAMIENTOS TOPOGRÁFICOS

2.1 LISTADO DE PUNTOS

PUNTOS VIA - ESTACIONES.

Num.	X	Y	Z
1	513020.224	4791353.858	60.000
2	513106.842	4791338.286	70.000
3	513011.502	4791315.196	70.000
4	512985.071	4791324.838	60.000
5	513048.149	4791330.785	70.000
6	513007.663	4791347.136	60.000
7	513084.637	4791337.442	70.000
8	513044.223	4791366.771	60.000
9	513062.097	4791368.657	60.000
10	513094.431	4791346.710	67.226
11	513082.020	4791355.134	64.453
12	513069.609	4791363.558	61.679
13	513072.497	4791346.252	66.996
14	513060.357	4791355.062	63.992
15	513048.217	4791363.873	60.988
16	513036.585	4791340.339	65.859
17	513025.022	4791349.893	61.718
18	512999.163	4791319.697	65.331
19	512824.753	4791304.109	60.000
29	512973.515	4791323.344	60.000
30	512889.585	4791313.883	56.620
31	512904.490	4791315.564	57.220
32	512919.396	4791317.244	57.821

33	512934.302	4791318.924	58.421
34	512949.207	4791320.604	59.021
35	512964.113	4791322.284	59.621
36	512994.647	4791327.719	61.089
37	513004.223	4791330.601	62.178
38	513013.799	4791333.482	63.267
39	513023.374	4791336.364	64.357
40	513032.950	4791339.245	65.446
41	513019.010	4791353.770	59.680
42	513020.750	4791359.450	58.090
43	512949.540	4791323.520	53.770
44	513068.650	4791352.740	66.590
45	513078.990	4791352.150	67.410
46	513036.430	4791332.690	68.990
47	513022.100	4791338.130	65.810
48	513030.480	4791340.820	66.370
49	513040.420	4791337.790	68.190
50	513048.680	4791335.100	69.320
51	513082.760	4791331.170	71.100
52	513095.970	4791331.770	70.800
53	513109.040	4791329.590	70.850
54	513109.480	4791336.880	69.420
55	513101.670	4791339.020	69.480
56	513086.220	4791339.840	69.550
57	513074.470	4791336.620	70.090

58	513063.690	4791340.650	69.070	83	513018.090	4791335.110	67.610
59	513061.430	4791347.880	67.520	84	513016.090	4791342.380	64.300
60	513067.660	4791343.610	68.590	85	513016.040	4791355.790	58.540
61	513072.520	4791349.810	67.560	86	513018.640	4791345.610	62.320
62	513085.010	4791350.060	67.780	87	513010.040	4791342.310	63.050
63	513093.470	4791346.800	68.400	88	513011.210	4791346.110	61.900
64	513105.740	4791344.220	68.690	89	513008.720	4791351.820	58.040
65	513118.070	4791339.710	69.360	90	513008.760	4791354.070	57.380
66	513115.240	4791347.990	67.920	91	513003.960	4791347.920	58.040
67	513104.390	4791350.550	67.580	92	513003.700	4791353.090	57.070
68	513096.000	4791352.310	67.340	93	512999.140	4791351.550	56.630
69	513089.670	4791353.580	67.180	94	512997.240	4791347.130	58.070
70	513079.690	4791355.430	66.590	95	512991.940	4791348.040	56.550
71	513075.830	4791356.150	66.430	96	512989.640	4791345.070	55.820
72	513065.630	4791356.740	65.710	97	512988.660	4791340.320	56.830
73	513062.370	4791352.580	66.540	98	512987.310	4791336.370	56.990
74	513052.870	4791350.150	66.450	99	512977.830	4791329.900	56.260
75	513046.990	4791348.520	66.300	100	512976.990	4791333.070	55.650
76	513040.450	4791347.970	65.770	101	512978.380	4791340.170	55.250
77	513023.610	4791350.010	62.040	102	512980.780	4791343.250	54.720
78	513029.290	4791347.330	64.460	103	512975.110	4791341.550	54.370
79	513039.560	4791354.750	63.380	104	512972.890	4791336.540	54.810
80	513031.970	4791354.880	62.080	105	512968.790	4791337.590	54.480
81	513013.810	4791337.520	65.920	106	512962.810	4791337.210	53.790
82	513014.180	4791330.090	67.770	107	512960.200	4791322.400	54.480

108	512927.440	4791322.370	52.980	133	512900.690	4791314.940	56.020
109	512933.590	4791327.010	53.010	134	512889.585	4791313.883	56.620
110	512944.960	4791332.360	53.270	135	512824.753	4791304.109	60.000
111	512941.140	4791331.470	53.190	136	513062.097	4791368.657	60.000
112	512954.200	4791333.630	53.660	137	513044.223	4791366.771	60.000
113	512957.750	4791335.950	53.740	138	513321.169	4791175.501	69.003
114	512961.740	4791328.520	54.390	139	513328.898	4791166.324	68.900
115	512965.600	4791325.890	54.990	140	513341.798	4791156.341	65.541
116	512955.780	4791324.190	54.150	141	513381.675	4791164.357	64.487
117	512944.070	4791309.130	53.890	142	513382.260	4791164.976	64.658
118	512945.590	4791315.070	53.790	143	513311.252	4791215.468	67.081
119	512948.700	4791319.080	53.860	144	512956.727	4791355.277	53.110
120	512950.710	4791326.890	53.690	145	513359.045	4791162.947	69.760
121	512948.200	4791333.110	53.380	146	513190.490	4791390.915	56.126
122	512941.050	4791327.330	53.250	147	512817.717	4791301.070	63.898
123	512944.470	4791326.270	53.400	148	513323.014	4791171.728	69.613
124	512913.970	4791297.600	56.170	149	513315.480	4791180.620	70.164
125	512910.500	4791302.910	56.260	150	513305.421	4791192.473	69.961
126	512937.050	4791307.460	53.740	151	513306.304	4791191.425	70.222
127	512934.320	4791313.200	53.400	152	513321.254	4791179.111	71.510
128	512934.020	4791318.290	53.250	153	513320.098	4791178.122	71.497
129	512930.470	4791322.990	53.030	154	513328.865	4791165.833	70.736
130	512928.550	4791326.110	52.940	155	513325.349	4791170.539	69.200
131	512919.320	4791321.800	50.310	156	513311.588	4791190.741	64.904
132	512904.180	4791309.940	56.180	157	513258.938	4791263.642	64.385

158	513259.824	4791263.704	65.148	183	513334.124	4791187.190	68.143
159	513305.569	4791198.025	65.077	184	513334.636	4791187.584	68.408
160	513323.753	4791178.191	70.270	185	513331.657	4791190.117	68.212
161	513330.929	4791184.232	70.266	186	513329.744	4791179.992	66.320
162	513331.984	4791185.185	70.214	187	513325.458	4791182.804	66.324
163	513320.456	4791180.697	71.522	188	513326.535	4791183.710	66.330
164	513329.609	4791188.210	71.505	189	513316.436	4791195.677	66.326
165	513329.514	4791188.358	71.523	190	513315.367	4791194.779	66.322
166	513324.746	4791197.089	67.877	191	513313.787	4791196.627	66.330
167	513318.224	4791204.482	67.846	192	513313.788	4791196.625	66.330
168	513326.271	4791196.178	68.196	193	513314.892	4791197.540	66.331
169	513319.901	4791203.304	68.074	194	513308.646	4791204.064	66.351
170	513346.539	4791163.117	66.330	195	513310.152	4791202.264	66.344
171	513347.856	4791161.510	66.330	196	513320.384	4791190.112	66.343
172	513353.172	4791166.003	66.859	197	513321.891	4791188.334	66.338
173	513351.818	4791167.671	66.865	198	513322.866	4791187.103	66.328
174	513342.952	4791178.038	67.893	199	513331.940	4791176.456	66.311
175	513344.984	4791179.221	67.902	200	513333.428	4791174.655	66.314
176	513342.745	4791176.924	67.343	201	513322.529	4791183.233	66.294
177	513342.296	4791177.509	67.398	202	513314.762	4791192.385	66.296
178	513342.816	4791177.910	67.642	203	513311.738	4791194.665	65.239
179	513339.198	4791181.127	67.640	204	513310.867	4791194.051	65.232
180	513338.745	4791181.665	67.712	205	513302.249	4791204.612	65.236
181	513339.263	4791182.109	68.015	206	513303.156	4791205.201	65.242
182	513334.595	4791186.639	68.065	207	513303.575	4791206.130	66.293

208	513299.234	4791216.276	66.299	233	513332.869	4791179.256	66.268
209	513297.736	4791218.043	66.302	234	513319.912	4791194.615	66.283
210	513291.678	4791227.565	66.297	235	513309.025	4791207.521	66.295
211	513291.127	4791227.109	66.296	236	513303.128	4791214.544	66.290
212	513290.819	4791227.500	66.291	237	513299.215	4791211.883	66.262
213	513290.624	4791226.374	66.291	238	513294.020	4791219.145	66.261
214	513295.493	4791220.561	66.300	239	513297.206	4791221.581	66.293
215	513300.750	4791213.294	66.290	240	513291.271	4791228.624	66.288
216	513306.526	4791206.426	66.331	241	513288.966	4791226.658	66.267
217	513312.001	4791199.823	66.342	242	513289.695	4791227.276	66.278
218	513318.073	4791192.589	66.326	243	513290.475	4791227.945	66.281
219	513323.883	4791185.748	66.326	244	513321.252	4791194.386	65.237
220	513329.702	4791178.864	66.325	245	513322.236	4791194.834	65.236
221	513336.949	4791170.394	66.307	246	513322.691	4791195.153	65.059
222	513330.874	4791170.365	65.239	247	513323.412	4791195.513	64.793
223	513331.653	4791171.059	65.241	248	513334.087	4791183.202	64.816
224	513337.476	4791165.414	65.113	249	513333.343	4791182.475	65.041
225	513338.781	4791163.805	65.050	250	513332.963	4791182.123	65.225
226	513338.059	4791161.848	65.239	251	513332.214	4791181.356	65.226
227	513339.850	4791161.214	65.244	252	513331.555	4791180.899	65.072
228	513339.136	4791160.612	65.231	253	513341.476	4791169.108	65.062
229	513340.738	4791159.442	65.081	254	513343.073	4791167.435	65.034
230	513332.931	4791170.917	66.289	255	513345.011	4791167.833	65.211
231	513338.127	4791164.779	66.282	256	513344.194	4791167.158	65.207
232	513341.661	4791168.807	66.262	257	513345.265	4791165.879	65.205

258	513346.058	4791166.555	65.207	283	513301.602	4791240.665	67.708
259	513347.277	4791165.119	65.204	284	513296.230	4791249.158	67.483
260	513346.451	4791164.473	65.201	285	513297.759	4791252.083	67.347
261	513346.328	4791163.452	65.084	286	513300.719	4791254.946	67.058
262	513348.597	4791165.638	65.053	287	513307.436	4791256.046	66.610
263	513348.650	4791166.155	65.034	288	513302.304	4791256.433	67.038
264	513347.078	4791164.482	65.065	289	513300.866	4791256.346	67.094
265	513338.675	4791158.806	64.767	290	513287.845	4791257.662	67.754
266	513340.023	4791158.432	65.541	291	513294.190	4791258.118	67.305
267	513338.969	4791164.134	66.271	292	513304.885	4791258.799	66.559
268	513342.692	4791167.308	66.275	293	513304.728	4791259.759	65.892
269	513310.183	4791255.999	66.393	294	513293.961	4791259.282	66.994
270	513309.626	4791250.646	66.671	295	513285.225	4791257.890	67.358
271	513304.488	4791247.836	67.166	296	513292.323	4791249.680	68.373
272	513308.687	4791240.693	67.257	297	513297.592	4791242.903	68.363
273	513315.282	4791243.253	66.563	298	513300.673	4791238.368	68.573
274	513320.094	4791236.006	66.658	299	513307.870	4791229.459	67.938
275	513314.654	4791232.233	67.269	300	513307.365	4791230.629	67.889
276	513320.340	4791225.043	67.186	301	513305.740	4791229.721	68.163
277	513325.769	4791225.948	66.773	302	513310.799	4791221.924	68.425
278	513331.127	4791217.715	66.851	303	513311.343	4791221.025	68.349
279	513325.655	4791217.007	67.377	304	513313.561	4791217.386	68.462
280	513317.459	4791216.071	67.932	305	513316.224	4791215.734	68.095
281	513313.902	4791221.343	67.928	306	513317.147	4791214.738	68.209
282	513307.819	4791230.969	67.799	307	513317.628	4791214.190	68.103

308	513324.671	4791215.181	67.685	333	513341.119	4791184.130	71.505
309	513332.670	4791216.357	67.019	334	513335.302	4791191.015	71.516
310	513331.505	4791192.794	69.039	335	513334.083	4791189.956	71.535
311	513329.615	4791194.941	68.993	336	513332.937	4791188.988	71.542
312	513336.358	4791192.662	69.195	337	513331.862	4791188.060	71.628
313	513337.412	4791192.896	69.027	338	513330.692	4791189.339	71.202
314	513337.238	4791193.132	69.003	339	513331.803	4791190.345	71.238
315	513337.067	4791192.785	69.088	340	513325.897	4791196.899	70.466
316	513340.207	4791190.998	69.044	341	513324.834	4791195.866	70.436
317	513340.429	4791191.370	68.961	342	513318.080	4791203.423	69.651
318	513340.222	4791191.140	69.043	343	513316.816	4791204.791	69.622
319	513338.012	4791192.415	69.105	344	513317.604	4791206.073	69.599
320	513328.505	4791194.211	69.091	345	513318.952	4791206.680	69.683
321	513329.443	4791194.954	69.036	346	513319.989	4791205.508	69.562
322	513330.662	4791193.557	70.102	347	513319.196	4791204.599	69.583
323	513329.790	4791192.812	70.107	348	513323.724	4791199.468	69.184
324	513330.430	4791192.090	70.122	349	513324.696	4791200.281	69.137
325	513331.285	4791192.849	70.127	350	513319.082	4791206.819	69.013
326	513332.515	4791191.458	71.254	351	513315.750	4791212.405	68.959
327	513331.651	4791190.729	71.258	352	513317.744	4791213.893	68.726
328	513333.007	4791189.092	71.305	353	513324.788	4791214.952	68.475
329	513333.910	4791189.867	71.310	354	513331.885	4791216.015	67.906
330	513344.287	4791175.299	71.575	355	513329.848	4791212.638	68.578
331	513344.432	4791175.063	71.629	356	513334.315	4791203.625	68.710
332	513346.885	4791177.229	71.568	357	513330.663	4791202.234	69.017

358	513329.521	4791205.737	68.984	383	513338.656	4791196.005	68.907
359	513326.056	4791209.766	69.036	384	513339.927	4791196.756	68.734
360	513323.788	4791213.406	68.746	385	513341.324	4791197.044	68.740
361	513319.897	4791212.603	69.104	386	513340.715	4791197.725	68.695
362	513320.649	4791209.295	69.247	387	513343.593	4791198.929	68.473
363	513322.453	4791206.990	69.418	388	513343.043	4791199.625	68.477
364	513322.920	4791207.501	69.266	389	513343.162	4791199.875	68.458
365	513323.377	4791207.071	69.325	390	513339.710	4791203.209	68.474
366	513322.933	4791206.575	69.344	391	513335.534	4791199.766	68.941
367	513331.413	4791201.888	69.028	392	513338.745	4791195.886	68.914
368	513333.491	4791204.113	68.890	393	513344.551	4791192.880	68.861
369	513332.777	4791204.720	68.894	394	513351.577	4791189.290	68.759
370	513330.731	4791202.529	69.056	395	513348.632	4791191.006	68.796
371	513328.524	4791201.709	69.268	396	513349.156	4791191.807	68.749
372	513328.953	4791202.125	69.182	397	513351.727	4791190.445	68.699
373	513330.943	4791200.064	69.192	398	513351.271	4791189.647	68.759
374	513331.134	4791200.333	69.160	399	513352.618	4791184.622	68.822
375	513328.043	4791196.579	69.002	400	513348.088	4791187.160	68.860
376	513327.322	4791197.380	68.998	401	513346.454	4791185.278	69.271
377	513324.795	4791200.268	69.134	402	513347.033	4791184.767	69.283
378	513326.044	4791198.779	69.023	403	513345.957	4791183.548	69.267
379	513328.467	4791200.893	69.021	404	513344.772	4791184.640	69.261
380	513330.577	4791198.395	69.036	405	513345.840	4791185.832	69.261
381	513334.189	4791201.353	68.931	406	513347.354	4791187.581	68.865
382	513338.745	4791205.110	68.455	407	513344.982	4791188.870	68.886

408	513339.662	4791191.996	68.923	433	513352.309	4791177.195	69.157
409	513336.396	4791193.724	68.968	434	513351.946	4791177.691	69.178
410	513335.145	4791193.345	68.968	435	513352.470	4791178.100	69.141
411	513334.465	4791192.435	68.977	436	513352.377	4791182.372	69.026
412	513334.408	4791191.507	68.928	437	513367.143	4791181.358	68.463
413	513334.560	4791191.459	68.936	438	513367.131	4791179.685	68.395
414	513334.760	4791191.611	69.118	439	513367.732	4791174.830	68.647
415	513339.317	4791186.870	69.219	440	513368.329	4791169.406	69.017
416	513339.881	4791185.748	69.274	441	513369.060	4791164.907	69.214
417	513343.582	4791181.420	69.182	442	513370.124	4791159.402	69.469
418	513346.153	4791178.314	69.609	443	513355.220	4791133.477	70.885
419	513346.338	4791178.465	69.177	444	513355.509	4791132.878	70.884
420	513347.276	4791177.304	69.288	445	513356.120	4791133.172	70.851
421	513345.851	4791178.655	69.347	446	513355.781	4791133.806	70.843
422	513345.531	4791179.052	69.352	447	513354.988	4791134.058	70.943
423	513345.956	4791179.375	69.231	448	513355.295	4791133.231	70.833
424	513346.403	4791179.759	69.254	449	513355.484	4791132.881	70.854
425	513346.765	4791179.338	69.270	450	513354.716	4791132.695	70.879
426	513346.977	4791178.260	69.285	451	513354.641	4791132.856	70.736
427	513347.322	4791178.020	69.295	452	513354.626	4791132.985	70.885
428	513347.614	4791177.634	69.291	453	513347.808	4791131.616	71.212
429	513347.272	4791177.359	69.284	454	513347.744	4791131.815	71.050
430	513347.385	4791176.814	69.280	455	513347.699	4791131.987	71.229
431	513347.886	4791177.214	69.266	456	513341.524	4791131.224	71.411
432	513348.319	4791176.724	69.293	457	513341.526	4791130.936	71.549

458	513341.498	4791131.419	71.571	483	513357.855	4791194.829	67.261
459	513341.345	4791131.750	71.610	484	513355.915	4791192.912	67.652
460	513259.643	4791264.269	64.852	485	513356.376	4791196.608	67.404
461	513260.379	4791263.500	64.881	486	513356.451	4791186.893	68.019
462	513356.012	4791133.516	70.796	487	513356.681	4791182.314	68.338
463	513357.118	4791134.880	70.753	488	513357.147	4791176.686	68.666
464	513358.874	4791137.327	70.577	489	513357.090	4791175.882	68.709
465	513359.914	4791139.597	70.471	490	513356.740	4791174.799	68.723
466	513360.129	4791140.085	70.431	491	513357.359	4791174.287	68.821
467	513361.242	4791144.102	70.317	492	513358.069	4791168.176	69.092
468	513361.446	4791145.707	70.251	493	513359.356	4791159.467	69.409
469	513361.718	4791149.056	70.147	494	513355.265	4791164.076	69.121
470	513361.526	4791153.016	69.910	495	513356.988	4791168.843	69.152
471	513361.023	4791158.341	69.719	496	513356.319	4791168.706	69.187
472	513359.925	4791166.561	69.399	497	513356.199	4791169.384	69.148
473	513359.035	4791173.766	69.107	498	513346.993	4791177.119	68.867
474	513358.640	4791179.306	68.760	499	513350.386	4791173.035	68.762
475	513358.477	4791179.574	68.289	500	513355.289	4791167.207	68.991
476	513358.242	4791181.796	68.311	501	513353.538	4791165.685	68.905
477	513358.052	4791186.258	67.977	502	513353.762	4791165.405	68.961
478	513357.052	4791189.016	67.877	503	513348.864	4791161.029	69.298
479	513357.708	4791189.005	67.858	504	513345.747	4791158.208	69.501
480	513357.723	4791188.271	67.893	505	513339.119	4791152.688	69.050
481	513357.062	4791188.286	67.918	506	513339.143	4791152.705	69.234
482	513357.978	4791187.948	67.711	507	513341.530	4791149.813	69.270

508	513343.983	4791146.915	69.480	533	513359.685	4791153.310	69.652
509	513345.180	4791146.413	69.707	534	513359.799	4791151.557	69.723
510	513345.661	4791145.178	69.709	535	513359.813	4791150.836	69.818
511	513345.956	4791145.417	69.656	536	513359.988	4791150.185	69.764
512	513345.133	4791146.921	69.588	537	513359.636	4791155.213	69.562
513	513344.678	4791146.745	69.561	538	513359.844	4791154.293	69.585
514	513344.111	4791146.798	69.426	539	513360.123	4791148.865	69.799
515	513355.581	4791152.452	69.649	540	513358.893	4791146.844	69.932
516	513354.214	4791148.117	69.858	541	513359.286	4791148.546	69.849
517	513355.313	4791143.971	70.165	542	513360.035	4791148.367	69.810
518	513351.241	4791143.324	69.929	543	513359.580	4791148.285	69.895
519	513349.486	4791145.980	69.749	544	513359.379	4791147.008	69.902
520	513348.517	4791146.010	69.761	545	513359.653	4791146.663	69.934
521	513348.997	4791146.484	69.727	546	513358.135	4791142.855	70.045
522	513348.614	4791147.425	69.671	547	513355.060	4791138.882	70.449
523	513348.158	4791147.883	69.701	548	513354.545	4791133.515	70.419
524	513347.706	4791147.487	69.736	549	513352.917	4791137.137	70.520
525	513346.834	4791147.434	69.626	550	513352.549	4791136.896	70.490
526	513349.132	4791151.527	69.538	551	513355.951	4791133.408	70.308
527	513348.037	4791154.373	69.829	552	513355.677	4791133.325	70.370
528	513356.125	4791158.691	69.533	553	512650.352	4791407.211	49.852
529	513359.023	4791158.329	69.492	554	512649.900	4791406.501	49.634
530	513357.640	4791156.864	69.577	555	512648.676	4791405.115	49.505
531	513358.247	4791157.039	69.539	556	512649.275	4791406.403	49.683
532	513358.470	4791156.340	69.596	557	512649.296	4791405.195	49.593

558	512648.228	4791403.902	49.149	583	512813.723	4791339.043	52.899
559	512648.065	4791399.438	52.927	584	512813.000	4791337.711	52.999
560	512648.017	4791399.542	54.002	585	512812.953	4791337.559	52.702
561	512754.795	4791357.166	51.966	586	512812.953	4791337.236	53.002
562	512753.854	4791354.704	51.361	587	512818.278	4791338.005	51.913
563	512753.749	4791354.478	51.062	588	512818.563	4791336.410	53.073
564	512753.709	4791354.302	51.335	589	512832.910	4791333.304	53.270
565	512763.270	4791350.774	51.556	590	512833.806	4791336.762	52.368
566	512763.165	4791350.572	51.282	591	512833.613	4791334.432	53.535
567	512763.067	4791350.342	51.601	592	512834.178	4791334.443	53.517
568	512779.318	4791339.802	51.980	593	512834.199	4791334.979	53.498
569	512779.884	4791339.805	52.012	594	512833.563	4791335.001	53.478
570	512779.644	4791338.978	52.331	595	512832.999	4791334.962	53.509
571	512778.571	4791339.245	52.310	596	512833.588	4791334.418	53.587
572	512784.000	4791345.925	53.984	597	512833.041	4791334.359	53.543
573	512782.591	4791344.143	52.247	598	512825.033	4791325.007	53.824
574	512782.520	4791343.948	51.915	599	512824.453	4791325.027	53.821
575	512782.447	4791343.764	52.196	600	512825.625	4791326.834	53.162
576	512792.097	4791341.567	52.500	601	512825.158	4791326.940	53.148
577	512792.032	4791341.421	52.159	602	512826.068	4791326.960	53.724
578	512792.233	4791341.087	52.391	603	512826.444	4791328.289	53.640
579	512801.987	4791342.334	53.530	604	512827.196	4791329.465	53.363
580	512801.220	4791339.705	52.680	605	512828.140	4791329.535	53.388
581	512801.243	4791339.465	52.390	606	512827.735	4791330.247	53.812
582	512801.209	4791339.192	52.712	607	512824.359	4791330.425	53.070

608	512816.770	4791331.501	53.328	633	512792.620	4791338.837	53.120
609	512816.736	4791332.599	53.916	634	512792.359	4791337.795	53.282
610	512816.804	4791333.166	53.900	635	512792.123	4791337.257	53.117
611	512816.402	4791334.313	53.775	636	512791.710	4791336.121	52.635
612	512816.594	4791334.826	53.605	637	512783.831	4791338.320	52.588
613	512816.778	4791335.381	53.182	638	512784.348	4791339.277	53.066
614	512809.471	4791336.699	52.983	639	512784.527	4791339.864	53.073
615	512809.049	4791335.737	53.372	640	512784.781	4791340.898	53.027
616	512809.355	4791335.345	53.549	641	512785.037	4791341.417	52.857
617	512809.224	4791334.257	53.699	642	512785.201	4791341.990	52.386
618	512809.056	4791333.591	53.626	643	512776.329	4791344.803	51.947
619	512809.152	4791332.210	53.194	644	512776.144	4791344.109	52.421
620	512809.757	4791331.618	53.132	645	512776.003	4791343.495	52.695
621	512808.490	4791331.835	53.162	646	512775.588	4791342.453	52.821
622	512802.858	4791333.834	52.939	647	512775.268	4791341.953	52.703
623	512803.832	4791332.814	52.902	648	512775.105	4791341.226	52.259
624	512803.482	4791333.601	53.113	649	512766.998	4791343.718	51.972
625	512799.918	4791334.545	52.965	650	512767.264	4791344.670	52.473
626	512800.335	4791335.292	53.337	651	512767.408	4791345.282	52.579
627	512800.413	4791335.978	53.444	652	512767.762	4791346.303	52.483
628	512800.599	4791337.036	53.363	653	512767.817	4791346.970	52.252
629	512800.951	4791337.578	53.097	654	512767.953	4791347.641	51.774
630	512800.993	4791338.277	52.762	655	512759.374	4791350.846	51.548
631	512792.858	4791340.263	52.605	656	512758.998	4791350.250	52.068
632	512792.816	4791339.465	52.929	657	512758.830	4791349.600	52.272

658	512758.444	4791348.596	52.327	683	512839.641	4791323.416	54.081
659	512758.180	4791348.090	52.088	684	512843.127	4791327.078	53.919
660	512757.775	4791347.103	51.674	685	512843.075	4791327.313	53.646
661	512755.704	4791347.959	51.895	686	512843.213	4791327.550	53.764
662	512803.963	4791333.654	52.960	687	512842.919	4791329.136	53.876
663	512802.733	4791332.925	52.860	688	512843.215	4791329.019	53.839
664	512797.675	4791333.867	52.867	689	512843.168	4791330.264	54.363
665	512797.574	4791333.654	52.552	690	512842.998	4791330.923	54.484
666	512797.492	4791333.418	52.755	691	512843.336	4791331.915	54.422
667	512787.403	4791336.424	52.593	692	512843.420	4791332.576	54.227
668	512787.470	4791336.154	52.212	693	512843.777	4791333.452	53.762
669	512787.402	4791335.920	52.522	694	512843.884	4791334.787	53.637
670	512775.189	4791339.503	52.236	695	512844.071	4791336.045	52.677
671	512775.210	4791339.761	51.933	696	512946.780	4791353.778	55.198
672	512775.308	4791339.979	52.210	697	512947.202	4791351.780	56.237
673	512824.864	4791327.263	53.876	698	512947.400	4791350.158	56.440
674	512825.227	4791328.608	53.809	699	512947.686	4791349.385	56.910
675	512826.230	4791330.432	53.615	700	512947.852	4791348.755	57.090
676	512826.483	4791331.598	54.122	701	512948.169	4791347.742	57.117
677	512826.605	4791332.052	54.258	702	512948.259	4791347.104	56.977
678	512826.825	4791333.003	54.033	703	512948.162	4791346.071	56.478
679	512833.750	4791329.784	53.893	704	512939.338	4791343.280	56.249
680	512833.582	4791328.834	53.910	705	512939.069	4791344.732	56.817
681	512834.848	4791328.705	53.942	706	512938.873	4791345.152	56.866
682	512834.970	4791329.638	53.946	707	512938.570	4791346.169	56.792

708	512938.434	4791346.763	56.677	733	512910.529	4791336.760	56.138
709	512938.181	4791348.178	56.145	734	512910.956	4791335.468	55.536
710	512937.745	4791348.925	56.069	735	512901.648	4791333.661	55.390
711	512936.035	4791350.805	54.940	736	512901.208	4791334.862	56.055
712	512928.838	4791348.730	54.824	737	512901.062	4791335.706	55.998
713	512928.581	4791346.432	55.846	738	512900.876	4791336.723	55.900
714	512928.319	4791345.150	55.909	739	512900.332	4791337.732	55.595
715	512928.598	4791343.972	56.452	740	512900.200	4791338.782	55.213
716	512928.815	4791343.356	56.641	741	512900.156	4791340.139	55.029
717	512929.087	4791342.308	56.648	742	512899.893	4791341.962	54.138
718	512929.299	4791341.612	56.560	743	512891.600	4791340.082	53.831
719	512929.461	4791340.046	55.967	744	512891.860	4791337.970	54.949
720	512920.293	4791337.790	55.692	745	512891.747	4791336.779	55.116
721	512919.711	4791339.184	56.321	746	512891.924	4791336.047	55.449
722	512919.511	4791339.884	56.425	747	512891.984	4791335.171	55.743
723	512919.236	4791340.947	56.379	748	512892.137	4791334.106	55.832
724	512918.999	4791341.666	56.127	749	512891.993	4791333.029	55.730
725	512918.113	4791343.089	55.578	750	512892.383	4791332.443	55.525
726	512918.376	4791343.955	55.515	751	512883.745	4791330.493	55.173
727	512918.492	4791346.393	54.577	752	512883.054	4791331.993	55.574
728	512909.590	4791342.037	55.190	753	512882.959	4791332.807	55.589
729	512909.831	4791339.918	55.366	754	512882.896	4791333.894	55.451
730	512910.097	4791339.337	55.842	755	512882.848	4791334.741	55.255
731	512910.188	4791338.667	56.116	756	512882.823	4791335.221	54.986
732	512910.460	4791337.655	56.169	757	512882.577	4791336.323	54.877

758	512882.439	4791339.373	53.745	783	512854.128	4791328.854	54.182
759	512874.268	4791337.730	53.093	784	512852.921	4791329.091	54.445
760	512874.174	4791335.505	54.552	785	512853.449	4791329.277	54.486
761	512874.218	4791334.184	54.686	786	512853.446	4791328.325	54.248
762	512874.184	4791333.451	55.108	787	512852.285	4791328.271	54.173
763	512874.252	4791332.867	55.256	788	512849.474	4791323.885	54.041
764	512874.350	4791331.794	55.371	789	512852.950	4791327.023	53.975
765	512874.274	4791330.892	55.363	790	512853.003	4791327.235	53.673
766	512874.541	4791329.773	54.924	791	512852.958	4791327.458	53.991
767	512865.232	4791329.166	54.600	792	512863.621	4791327.474	54.418
768	512865.352	4791330.374	55.034	793	512863.592	4791327.257	54.139
769	512865.268	4791331.203	55.131	794	512863.570	4791326.991	54.438
770	512865.446	4791332.309	55.030	795	512865.691	4791324.217	54.798
771	512865.445	4791332.953	54.771	796	512867.126	4791324.564	54.866
772	512865.458	4791333.839	54.382	797	512877.932	4791330.472	55.242
773	512865.259	4791334.893	54.297	798	512878.428	4791330.710	55.169
774	512875.563	4791335.653	55.278	799	512878.496	4791329.713	55.016
775	512867.725	4791336.712	53.399	800	512877.357	4791329.654	54.941
776	512856.690	4791336.273	52.922	801	512881.457	4791326.596	55.094
777	512854.643	4791335.041	53.849	802	512884.012	4791326.533	55.017
778	512853.961	4791333.221	54.138	803	512890.664	4791331.684	55.251
779	512854.001	4791332.521	54.668	804	512889.915	4791331.502	55.237
780	512853.931	4791331.860	54.794	805	512890.093	4791330.847	55.226
781	512854.042	4791330.700	54.879	806	512890.813	4791331.004	55.181
782	512854.099	4791330.024	54.796	807	512893.111	4791328.846	54.657

808	512902.708	4791334.126	55.805	833	512941.180	4791348.985	56.290
809	512903.176	4791334.492	55.613	834	512943.310	4791349.492	56.303
810	512902.131	4791334.303	55.690	835	512949.684	4791346.445	56.838
811	512902.264	4791333.391	55.263	836	512950.087	4791346.865	56.784
812	512903.361	4791333.562	55.232	837	512949.054	4791346.545	56.775
813	512906.962	4791330.459	54.111	838	512949.389	4791345.537	56.413
814	512907.354	4791333.628	55.287	839	512950.475	4791345.918	56.445
815	512920.350	4791332.133	53.835	840	513011.948	4791361.986	57.274
816	512920.166	4791336.987	55.353	841	513018.851	4791363.758	57.846
817	512927.064	4791340.054	56.262	842	513029.025	4791366.149	57.801
818	512926.417	4791340.197	56.183	843	513024.642	4791363.530	58.238
819	512926.673	4791339.191	55.808	844	513016.679	4791361.435	57.450
820	512927.741	4791339.464	55.877	845	513013.244	4791360.439	57.241
821	512927.988	4791339.754	56.029	846	513008.114	4791363.271	58.251
822	512930.596	4791339.860	55.873	847	513008.802	4791362.673	58.257
823	512932.558	4791336.152	54.184	848	513008.575	4791363.614	58.221
824	512947.164	4791341.739	55.132	849	513007.511	4791363.375	58.198
825	512947.460	4791344.944	56.228	850	513007.780	4791362.370	57.694
826	512955.963	4791346.729	56.311	851	513002.020	4791361.479	58.096
827	512936.216	4791347.179	56.409	852	513002.540	4791360.932	57.473
828	512935.911	4791348.255	56.379	853	513002.199	4791362.127	58.058
829	512937.140	4791348.609	56.381	854	513001.052	4791361.845	58.093
830	512937.472	4791347.537	56.412	855	513001.214	4791360.557	57.454
831	512940.523	4791348.752	56.274	856	512978.711	4791355.070	57.592
832	512940.962	4791349.587	56.312	857	512978.092	4791355.157	57.485

858	512979.161	4791355.504	57.485	883	513017.096	4791374.664	56.577
859	512979.493	4791354.487	57.118	884	513032.944	4791376.630	57.389
860	512978.432	4791354.173	57.093	885	513065.485	4791377.718	59.513
861	512960.926	4791347.825	56.603	886	513066.761	4791377.755	59.536
862	512956.939	4791346.662	56.621	887	513066.779	4791376.451	59.539
863	512956.510	4791346.956	56.600	888	513065.441	4791376.351	59.442
864	512956.416	4791347.230	56.588	889	513042.989	4791376.335	59.038
865	512961.217	4791348.359	56.567	890	513043.077	4791375.728	59.055
866	512961.161	4791348.579	56.575	891	513042.437	4791375.602	59.039
867	512959.016	4791359.205	53.884	892	513032.865	4791368.433	59.069
868	512954.796	4791354.619	56.502	893	513033.387	4791368.804	58.927
869	512958.659	4791355.743	56.536	894	513032.302	4791368.612	58.855
870	512954.406	4791353.975	56.514	895	513032.509	4791367.571	58.237
871	512954.470	4791353.769	56.699	896	513033.607	4791367.815	58.428
872	512959.126	4791355.380	56.519	897	513037.270	4791368.944	58.903
873	512959.188	4791355.131	56.719	898	513038.196	4791367.135	58.371
874	512969.216	4791356.415	57.144	899	513045.661	4791368.759	58.593
875	512971.371	4791357.698	57.152	900	513055.849	4791370.871	59.646
876	512969.234	4791357.166	57.093	901	513056.407	4791371.184	59.396
877	512969.050	4791357.903	57.076	902	513055.243	4791371.087	59.409
878	512971.190	4791358.441	57.121	903	513055.344	4791370.046	59.033
879	512997.041	4791365.069	57.851	904	513056.549	4791370.146	58.996
880	512996.464	4791364.903	57.838	905	513059.590	4791369.487	59.090
881	512996.337	4791365.488	57.846	906	513062.796	4791370.901	59.796
882	512996.903	4791365.630	57.825	907	513063.696	4791371.545	59.705

908	513063.702	4791370.295	59.086	933	513126.616	4791362.270	60.885
909	513062.438	4791370.247	59.084	934	513127.730	4791360.728	61.147
910	513062.423	4791371.544	59.659	935	513139.516	4791357.158	61.409
911	513066.924	4791369.465	59.394	936	513147.728	4791356.025	61.917
912	513065.653	4791369.356	59.375	937	513148.310	4791356.099	61.873
913	513065.642	4791370.598	59.374	938	513147.342	4791356.495	61.785
914	513066.891	4791370.649	59.396	939	513146.879	4791355.609	61.409
915	513080.755	4791370.851	60.185	940	513147.983	4791355.152	61.439
916	513081.270	4791370.113	59.725	941	513151.610	4791352.718	61.656
917	513081.300	4791371.096	60.124	942	513161.477	4791348.455	61.829
918	513080.136	4791371.136	60.046	943	513206.059	4791332.376	65.353
919	513080.067	4791370.161	59.670	944	513207.331	4791330.789	66.135
920	513080.703	4791368.092	59.948	945	513187.503	4791346.543	64.531
921	513091.113	4791367.899	60.024	946	513172.838	4791354.436	64.328
922	513103.799	4791368.239	60.885	947	513157.578	4791361.705	63.757
923	513104.384	4791368.445	60.662	948	513137.548	4791368.763	62.520
924	513103.237	4791368.599	60.641	949	513126.752	4791374.434	61.688
925	513103.105	4791367.601	60.274	950	513119.006	4791376.420	61.407
926	513104.260	4791367.387	60.293	951	513117.979	4791376.183	61.433
927	513104.786	4791366.663	60.329	952	513118.527	4791374.602	62.021
928	513113.856	4791364.477	60.644	953	513126.467	4791372.584	62.382
929	513126.271	4791363.212	61.356	954	513127.361	4791369.932	61.139
930	513126.845	4791363.320	61.258	955	513135.643	4791365.080	61.386
931	513125.766	4791363.605	61.178	956	513140.208	4791365.547	61.434
932	513125.470	4791362.578	60.809	957	513139.655	4791365.759	61.412

958	513139.445	4791365.225	61.401	983	513192.277	4791328.383	62.868
959	513140.005	4791364.978	61.403	984	513200.607	4791322.141	63.127
960	513144.809	4791364.435	61.715	985	513207.008	4791320.897	63.784
961	513154.858	4791360.226	61.952	986	513206.898	4791320.003	63.229
962	513203.116	4791332.632	63.248	987	513207.563	4791320.811	63.582
963	513193.781	4791339.457	62.802	988	513206.676	4791321.486	63.585
964	513185.624	4791344.213	62.653	989	513206.031	4791320.651	63.158
965	513185.049	4791344.613	62.650	990	513204.935	4791318.471	61.037
966	513184.717	4791344.046	62.683	991	513212.495	4791314.461	61.230
967	513180.074	4791347.390	62.425	992	513212.652	4791314.658	63.082
968	513171.582	4791351.922	62.272	993	513212.814	4791314.819	63.479
969	513168.892	4791346.280	62.471	994	513213.664	4791314.138	63.510
970	513169.015	4791345.412	62.039	995	513213.493	4791313.936	63.074
971	513169.488	4791346.304	62.416	996	513213.282	4791313.741	63.517
972	513168.486	4791346.768	62.262	997	513212.296	4791314.203	63.541
973	513168.015	4791345.979	61.893	998	513213.010	4791314.987	63.504
974	513169.061	4791345.418	62.025	999	513213.744	4791314.305	63.533
975	513172.828	4791342.106	62.208	1000	513213.068	4791313.520	63.557
976	513179.711	4791337.269	62.515	1001	513212.821	4791313.597	63.507
977	513188.776	4791334.553	63.219	1002	513212.421	4791313.907	63.503
978	513188.775	4791333.615	62.638	1003	513211.508	4791312.010	64.418
979	513189.314	4791334.470	63.001	1004	513211.227	4791312.424	64.418
980	513188.395	4791335.085	62.963	1005	513215.725	4791310.860	63.818
981	513187.821	4791334.179	62.592	1006	513217.375	4791311.051	63.700
982	513185.964	4791332.766	62.722	1007	513220.353	4791308.502	64.231

1008	513219.195	4791309.689	63.855	1033	513225.880	4791303.630	64.233
1009	513220.204	4791309.645	64.162	1034	513225.109	4791304.437	64.223
1010	513219.264	4791308.825	63.639	1035	513224.367	4791303.789	63.832
1011	513220.169	4791307.874	63.707	1036	513224.078	4791302.504	63.932
1012	513221.047	4791308.693	64.225	1037	513231.744	4791293.423	64.130
1013	513213.445	4791323.708	63.588	1038	513240.049	4791282.677	64.462
1014	513237.057	4791304.992	67.221	1039	513248.837	4791272.657	64.578
1015	513223.157	4791317.122	67.154	1040	513254.099	4791277.503	64.754
1016	513215.067	4791324.109	66.775	1041	513259.928	4791275.220	64.678
1017	513206.386	4791330.057	63.303	1042	513259.303	4791275.893	64.659
1018	513216.832	4791320.703	63.730	1043	513258.662	4791275.292	64.663
1019	513227.327	4791311.265	64.123	1044	513259.311	4791274.581	64.658
1020	513241.756	4791284.664	64.159	1045	513259.309	4791274.392	64.543
1021	513241.104	4791285.508	64.121	1046	513260.167	4791275.191	64.584
1022	513241.809	4791286.135	64.588	1047	513260.579	4791274.692	64.598
1023	513242.545	4791285.366	64.617	1048	513259.739	4791273.919	64.544
1024	513241.990	4791285.570	64.884	1049	513266.175	4791270.042	64.722
1025	513250.729	4791282.873	64.604	1050	513274.118	4791260.526	65.088
1026	513254.280	4791284.185	64.610	1051	513278.042	4791254.853	65.201
1027	513245.737	4791294.062	64.521	1052	513282.113	4791250.152	64.734
1028	513236.931	4791303.624	64.512	1053	513288.016	4791242.967	64.636
1029	513236.070	4791303.968	64.419	1054	513286.967	4791241.958	64.638
1030	513231.660	4791302.978	64.453	1055	513286.476	4791242.600	64.613
1031	513225.323	4791303.856	64.346	1056	513287.377	4791243.210	64.528
1032	513225.206	4791302.925	63.826	1057	513287.822	4791242.494	64.772

1058	513289.177	4791241.921	64.777	1083	513277.216	4791237.156	64.550
1059	513290.417	4791241.107	65.374	1084	513278.120	4791237.667	64.981
1060	513293.966	4791235.700	65.099	1085	513278.454	4791237.069	64.903
1061	513277.154	4791238.741	65.112	1086	513277.591	4791236.532	64.519
1062	513273.536	4791248.593	65.282	1087	513278.554	4791236.312	64.792
1063	513272.601	4791248.057	65.281	1088	513278.242	4791236.804	64.794
1064	513271.883	4791247.514	65.098	1089	513277.721	4791236.507	64.780
1065	513271.360	4791247.027	64.686	1090	513278.043	4791235.998	64.766
1066	513270.856	4791246.590	64.517	1091	513279.343	4791234.791	64.721
1067	513270.687	4791246.378	64.100	1092	513297.843	4791206.905	64.689
1068	513270.500	4791246.214	64.520	1093	513298.125	4791207.233	64.706
1069	513268.876	4791245.251	64.597	1094	513298.796	4791207.963	65.034
1070	513276.141	4791238.798	64.512	1095	513299.414	4791208.465	65.259
1071	513276.722	4791237.874	64.537	1096	513300.252	4791209.098	65.229
1072	513277.630	4791238.403	65.042	1097	513300.904	4791209.571	65.108
1073	513277.058	4791239.335	64.942	1098	513296.445	4791215.719	65.106
1074	513277.460	4791242.405	65.260	1099	513295.725	4791215.224	65.238
1075	513276.640	4791241.778	65.256	1100	513294.905	4791214.517	65.236
1076	513276.047	4791241.432	65.157	1101	513294.241	4791213.943	65.039
1077	513276.581	4791239.849	64.880	1102	513293.627	4791213.654	64.785
1078	513276.224	4791239.533	64.702	1103	513293.200	4791213.324	64.764
1079	513275.847	4791239.040	64.558	1104	513292.877	4791213.063	64.771
1080	513275.643	4791238.918	64.132	1105	513292.298	4791213.566	64.703
1081	513275.431	4791238.753	64.569	1106	513292.365	4791215.463	65.084
1082	513274.648	4791236.267	64.783	1107	513292.822	4791215.258	64.917

1108	513292.202	4791216.162	64.891	1133	512893.754	4791322.656	55.120
1109	513291.399	4791215.635	64.703	1134	512645.829	4791400.452	54.350
1110	513288.744	4791218.609	64.630	1135	512655.071	4791408.076	53.400
1111	513288.996	4791218.771	64.667	1136	512650.496	4791408.727	54.410
1112	513289.067	4791218.944	64.702	1137	513129.539	4791350.050	67.350
1113	513288.850	4791218.719	64.238	1138	513148.746	4791343.311	68.120
1114	513288.642	4791218.658	64.620	1139	513166.542	4791336.190	67.460
1115	513288.772	4791217.106	64.776	1140	513173.750	4791332.201	68.150
1116	513287.425	4791220.632	64.525	1141	513189.698	4791321.287	67.130
1117	513283.050	4791225.100	64.673	1142	513196.969	4791315.571	66.950
1118	513284.240	4791225.425	64.593	1143	513207.499	4791305.815	68.850
1119	513284.432	4791225.594	64.168	1144	513225.096	4791288.212	68.400
1120	513284.655	4791225.752	64.606	1145	513249.790	4791249.807	71.850
1121	513285.291	4791226.130	64.781	1146	513270.737	4791224.346	71.250
1122	513285.815	4791226.689	65.111	1147	513286.280	4791209.748	70.680
1123	513286.435	4791227.004	65.237	1148	513297.640	4791198.547	70.540
1124	513287.261	4791227.665	65.233	1149	513300.485	4791192.141	70.800
1125	513288.628	4791228.658	65.160	1150	513305.365	4791192.554	70.050
1126	513289.380	4791229.318	65.157	1151	513290.627	4791230.650	65.164
1127	513282.148	4791239.918	65.060	1152	512686.818	4791355.636	62.543
1128	513281.261	4791239.207	65.043	1153	512689.028	4791355.217	62.318
1129	513282.091	4791238.162	65.053	1154	512689.706	4791353.627	62.371
1130	512727.491	4791360.215	50.800	1155	512687.285	4791352.567	62.987
1131	512644.158	4791409.110	56.350	1156	512689.139	4791351.681	63.462
1132	513162.507	4791360.818	63.530	1157	512690.773	4791351.372	63.413

1158	512696.125	4791349.808	63.477	1183	512889.585	4791313.883	56.620
1159	512702.452	4791349.276	61.990	1184	512893.660	4791319.652	55.634
1160	512707.306	4791347.445	61.464	1185	512880.582	4791317.826	56.458
1161	512712.972	4791345.412	60.869	1186	512880.691	4791321.277	55.693
1162	512715.467	4791344.424	61.023	1187	512880.360	4791321.786	55.584
1163	512722.258	4791338.992	61.695	1188	512870.414	4791319.053	56.056
1164	512729.780	4791334.910	61.913	1189	512858.017	4791319.820	56.051
1165	512739.390	4791330.060	62.373	1190	512855.638	4791319.279	56.220
1166	512748.448	4791326.574	62.297	1191	512838.941	4791316.083	57.321
1167	512761.739	4791322.445	62.098	1192	512819.665	4791319.246	58.987
1168	512777.524	4791318.357	62.259	1193	512817.553	4791318.687	59.542
1169	512787.606	4791316.788	62.150	1194	512814.846	4791318.786	59.854
1170	512795.115	4791315.631	61.920	1195	512807.973	4791318.943	60.086
1171	512797.399	4791313.941	61.812	1196	512804.182	4791319.129	60.284
1172	512804.251	4791314.490	60.745	1197	512795.883	4791319.530	60.413
1173	512808.155	4791314.832	59.939	1198	512786.688	4791320.933	60.402
1174	512811.485	4791314.800	58.946	1199	512778.167	4791322.419	60.357
1175	512813.136	4791316.525	58.923	1200	512765.410	4791326.560	59.446
1176	512818.830	4791317.309	58.770	1201	512754.195	4791330.033	59.927
1177	512819.021	4791313.148	58.816	1202	512750.644	4791331.894	59.560
1178	512824.071	4791312.069	58.954	1203	512746.955	4791333.757	59.075
1179	512832.699	4791313.030	58.243	1204	512739.425	4791336.604	59.857
1180	512847.933	4791313.850	57.371	1205	512735.755	4791338.444	59.843
1181	512859.140	4791314.768	57.134	1206	512720.631	4791345.038	60.016
1182	512877.880	4791314.199	56.976	1207	512713.267	4791348.124	60.250

1208	512706.569	4791351.475	60.319	1233	513177.170	4791363.998	62.162
1209	512695.546	4791356.943	60.253	1234	513176.697	4791358.824	63.234
1210	512692.168	4791358.695	60.163	1235	513183.501	4791359.135	62.684
1211	512674.534	4791364.411	60.834	1236	513184.860	4791359.822	62.528
1212	512680.495	4791361.230	60.775	1237	513180.070	4791356.363	63.714
1213	512681.295	4791363.721	60.264	1238	513168.574	4791362.115	63.228
1214	512688.321	4791360.750	60.029	1239	513170.950	4791367.205	61.959
1215	512686.101	4791356.998	61.679	1240	513164.040	4791368.818	62.099
1216	512685.613	4791355.608	61.970	1241	513160.840	4791364.352	63.185
1217	512683.921	4791354.654	62.239	1242	513238.998	4791305.946	66.486
1218	512680.994	4791353.603	62.519	1243	513245.059	4791301.152	66.531
1219	512680.426	4791355.179	63.399	1244	513265.959	4791292.482	65.451
1220	512681.646	4791356.288	63.422	1245	513261.003	4791285.093	66.788
1221	512677.468	4791357.411	63.367	1246	513271.067	4791273.266	66.530
1222	512675.432	4791359.307	62.867	1247	513276.775	4791281.805	65.513
1223	512672.819	4791361.357	62.932	1248	513288.445	4791268.102	65.721
1224	512666.532	4791363.960	62.737	1249	513281.724	4791261.047	67.174
1225	512662.879	4791366.919	62.297	1250	513286.645	4791262.406	66.457
1226	512659.759	4791370.029	61.290	1251	513204.687	4791289.549	71.189
1227	512880.243	4791413.396	49.504	1252	513197.418	4791296.034	71.192
1228	513141.594	4791373.022	60.573	1253	513186.261	4791303.126	70.763
1229	513139.753	4791371.420	62.234	1254	513174.354	4791311.969	70.453
1230	513151.191	4791367.339	62.398	1255	513161.840	4791320.123	70.161
1231	513151.287	4791364.614	63.272	1256	513149.492	4791328.044	69.799
1232	513154.108	4791372.494	60.659	1257	513128.669	4791340.745	68.895

1258	513129.008	4791348.260	67.465	1283	513255.680	4791236.869	72.131
1259	513148.095	4791341.706	68.200	1284	513251.115	4791233.198	72.651
1260	513165.656	4791334.725	68.143	1285	513268.997	4791222.794	71.798
1261	513172.596	4791330.491	68.197	1286	513267.937	4791221.721	72.155
1262	513173.470	4791328.162	68.489	1287	513265.159	4791219.592	72.482
1263	513182.286	4791318.877	69.103	1288	513284.986	4791207.934	70.897
1264	513188.449	4791319.645	67.128	1289	513283.333	4791206.054	71.776
1265	513195.628	4791314.012	67.031	1290	513279.609	4791203.420	72.366
1266	513189.709	4791310.757	69.374	1291	513289.945	4791193.302	71.838
1267	513193.850	4791306.550	69.747	1292	513296.132	4791196.675	70.866
1268	513206.096	4791304.223	69.163	1293	513294.962	4791195.560	71.345
1269	513199.366	4791304.164	69.606	1294	513299.140	4791190.798	71.110
1270	513204.023	4791285.665	69.937	1295	513300.971	4791189.364	71.082
1271	513207.069	4791292.247	69.059	1296	513296.529	4791186.982	71.578
1272	513223.894	4791286.539	68.352	1297	513304.727	4791184.249	71.009
1273	513215.087	4791276.759	70.159	1298	513299.913	4791181.695	71.471
1274	513217.467	4791270.292	70.565	1299	513315.020	4791163.999	71.345
1275	513222.409	4791259.758	71.165	1300	513320.607	4791165.526	70.881
1276	513235.435	4791247.183	71.766	1301	513320.390	4791162.850	71.031
1277	513218.268	4791241.883	73.108	1302	513317.793	4791177.480	69.290
1278	513216.819	4791243.677	72.821	1303	513314.170	4791174.122	70.776
1279	513222.310	4791246.722	72.157	1304	513329.066	4791164.270	69.266
1280	513223.706	4791244.578	72.587	1305	513321.676	4791157.942	71.038
1281	513247.831	4791248.395	72.274	1306	513339.025	4791152.148	69.424
1282	513244.799	4791244.103	72.616	1307	513334.636	4791148.747	70.776

1308	513342.847	4791143.954	70.601	1333	512731.946	4791356.504	52.682
1309	513344.589	4791145.268	70.578	1334	512736.804	4791354.472	51.368
1310	513344.754	4791145.355	70.475	1335	512729.207	4791358.419	50.990
1311	513346.774	4791143.138	70.551	1336	512728.037	4791357.546	53.319
1312	513338.171	4791135.903	71.259	1337	512728.187	4791358.072	51.263
1313	513338.926	4791131.658	71.423	1338	512726.115	4791358.633	52.318
1314	513343.996	4791131.801	71.332	1339	512726.200	4791358.237	53.302
1315	513348.430	4791132.354	70.994	1340	512725.243	4791358.997	53.244
1316	513352.431	4791133.339	70.836	1341	512648.714	4791398.214	52.822
1317	513354.624	4791134.072	70.875	1342	512649.027	4791398.694	52.814
1318	512644.656	4791411.678	55.060	1343	512648.810	4791398.261	51.375
1319	512646.157	4791400.927	54.351	1344	512649.013	4791398.726	51.553
1320	512645.802	4791400.455	55.069	1345	512649.113	4791398.776	51.810
1321	512647.592	4791403.812	55.147	1346	512649.219	4791399.055	51.815
1322	512644.419	4791405.169	54.995	1347	512656.304	4791396.064	51.814
1323	512648.371	4791427.628	53.742	1348	512656.157	4791395.826	51.820
1324	512646.360	4791428.213	54.505	1349	512656.135	4791395.848	51.302
1325	512645.104	4791428.810	54.585	1350	512665.678	4791392.063	51.680
1326	512642.396	4791429.008	54.389	1351	512665.557	4791391.815	51.697
1327	512653.028	4791407.111	49.185	1352	512665.526	4791391.799	51.534
1328	512717.180	4791378.139	54.411	1353	512672.967	4791387.839	51.574
1329	512737.907	4791353.941	51.321	1354	512673.030	4791387.872	51.808
1330	512744.376	4791350.794	51.416	1355	512673.170	4791388.096	51.777
1331	512744.053	4791350.123	52.862	1356	512681.630	4791383.606	51.965
1332	512736.454	4791354.156	52.583	1357	512681.487	4791383.379	51.989

1358	512681.482	4791383.332	51.764	1383	512645.381	4791392.150	56.490
1359	512691.425	4791378.415	52.169	1384	512643.766	4791383.936	56.779
1360	512691.254	4791378.196	52.200	1385	512646.402	4791384.288	56.997
1361	512691.204	4791378.173	51.818	1386	512645.432	4791391.366	56.721
1362	512696.875	4791375.196	51.790	1387	512645.364	4791391.478	56.722
1363	512696.852	4791375.237	52.298	1388	512645.180	4791391.519	56.717
1364	512696.964	4791375.505	52.299	1389	512642.840	4791391.112	56.655
1365	512709.810	4791368.794	52.628	1390	512642.810	4791391.106	56.504
1366	512709.662	4791368.548	52.669	1391	512641.839	4791403.959	56.322
1367	512709.603	4791368.563	52.385	1392	512644.156	4791404.280	56.478
1368	512725.413	4791360.216	52.619	1393	512644.051	4791404.122	56.511
1369	512719.922	4791363.113	52.561	1394	512643.999	4791409.124	56.347
1370	512719.871	4791363.182	52.928	1395	512644.358	4791414.017	56.048
1371	512720.007	4791363.455	52.919	1396	512644.524	4791414.068	56.042
1372	512728.244	4791359.050	53.203	1397	512644.516	4791414.249	56.041
1373	512728.126	4791358.832	53.205	1398	512641.854	4791413.926	55.871
1374	512728.123	4791358.758	50.980	1399	512641.844	4791414.069	55.861
1375	512668.943	4791369.964	60.182	1400	512641.974	4791418.755	55.463
1376	512668.323	4791368.960	60.698	1401	512644.572	4791417.426	55.822
1377	512665.957	4791370.201	60.760	1402	512645.396	4791417.387	55.653
1378	512658.427	4791373.397	60.602	1403	512647.209	4791412.830	54.915
1379	512656.594	4791376.100	59.918	1404	512647.915	4791414.758	54.682
1380	512651.886	4791383.821	57.491	1405	512648.558	4791421.960	54.107
1381	512650.680	4791388.061	56.865	1406	512654.996	4791422.024	53.861
1382	512648.056	4791391.220	56.844	1407	512663.711	4791419.565	53.707

1408	512669.610	4791415.437	53.711	1433	512652.185	4791404.866	49.662
1409	512675.017	4791411.474	53.010	1434	512651.777	4791403.895	49.636
1410	512677.045	4791409.619	52.692	1435	512651.424	4791403.237	49.478
1411	512673.814	4791405.601	53.243	1436	512650.857	4791402.366	49.075
1412	512670.763	4791407.259	53.426	1437	512649.067	4791399.876	49.342
1413	512664.377	4791411.840	53.724	1438	512649.195	4791400.053	49.484
1414	512659.192	4791415.503	53.617	1439	512649.179	4791399.955	49.299
1415	512646.348	4791411.224	55.037	1440	512649.274	4791400.084	49.347
1416	512644.400	4791407.044	55.044	1441	512652.868	4791401.571	49.301
1417	512650.485	4791408.775	55.053	1442	512651.726	4791402.144	49.275
1418	512650.484	4791408.944	54.798	1443	512651.143	4791401.010	49.258
1419	512650.322	4791408.280	54.401	1444	512652.317	4791400.395	49.278
1420	512655.095	4791407.600	53.399	1445	512658.081	4791398.530	49.449
1421	512654.963	4791408.894	53.224	1446	512656.566	4791399.075	49.298
1422	512655.029	4791408.926	52.089	1447	512657.368	4791398.625	49.324
1423	512657.832	4791405.351	49.193	1448	512656.933	4791397.846	49.286
1424	512657.610	4791405.153	48.908	1449	512656.133	4791398.263	49.306
1425	512657.517	4791404.912	49.199	1450	512654.974	4791399.349	49.343
1426	512659.793	4791402.938	49.103	1451	512659.435	4791394.620	49.060
1427	512658.951	4791403.302	49.098	1452	512659.643	4791395.141	49.086
1428	512659.305	4791404.021	49.094	1453	512659.743	4791395.240	49.094
1429	512652.814	4791407.015	49.058	1454	512660.370	4791397.165	49.261
1430	512652.993	4791406.654	49.262	1455	512660.954	4791398.031	49.662
1431	512652.686	4791406.064	49.127	1456	512661.400	4791398.570	49.711
1432	512652.551	4791405.277	49.502	1457	512661.862	4791399.533	49.708

1458	512662.167	4791400.239	49.592	1483	512668.803	4791395.776	49.873
1459	512662.865	4791401.107	49.101	1484	512668.099	4791394.181	49.708
1460	512663.255	4791402.053	49.127	1485	512667.239	4791392.917	49.240
1461	512663.331	4791402.310	48.854	1486	512666.140	4791392.905	49.471
1462	512663.547	4791402.530	49.153	1487	512664.936	4791393.643	49.444
1463	512668.775	4791400.100	49.167	1488	512663.710	4791393.423	49.106
1464	512671.425	4791398.393	48.788	1489	512663.776	4791393.592	49.181
1465	512671.247	4791398.176	49.139	1490	512664.830	4791393.741	49.379
1466	512672.998	4791397.038	49.177	1491	512664.807	4791393.477	48.973
1467	512673.145	4791397.247	48.889	1492	512665.752	4791392.939	48.949
1468	512673.044	4791397.016	49.188	1493	512666.163	4791392.870	49.349
1469	512675.488	4791396.029	49.212	1494	512666.148	4791392.429	49.244
1470	512673.591	4791397.805	49.602	1495	512665.666	4791392.476	49.087
1471	512673.305	4791397.477	49.675	1496	512674.692	4791387.301	49.191
1472	512671.729	4791398.850	49.782	1497	512674.982	4791387.639	49.237
1473	512671.544	4791398.458	49.731	1498	512675.040	4791387.792	49.213
1474	512672.853	4791396.862	49.821	1499	512675.549	4791388.391	49.181
1475	512673.443	4791397.877	49.849	1500	512676.616	4791389.413	49.946
1476	512671.226	4791397.884	49.838	1501	512677.165	4791390.012	50.073
1477	512671.206	4791397.822	49.215	1502	512677.709	4791390.929	50.053
1478	512672.882	4791396.867	49.267	1503	512677.949	4791391.457	49.917
1479	512670.450	4791397.264	49.259	1504	512678.620	4791392.389	49.279
1480	512669.502	4791397.469	49.263	1505	512678.655	4791393.331	49.229
1481	512668.922	4791396.398	49.755	1506	512678.770	4791393.584	48.915
1482	512668.301	4791394.838	49.877	1507	512678.901	4791393.866	49.200

1508	512686.511	4791389.436	49.416	1533	512694.424	4791383.737	49.643
1509	512686.460	4791389.151	49.110	1534	512694.869	4791384.073	49.589
1510	512686.238	4791388.941	49.522	1535	512694.929	4791384.346	49.313
1511	512685.923	4791388.308	49.518	1536	512695.135	4791384.560	49.609
1512	512685.535	4791387.360	50.082	1537	512701.801	4791380.862	49.834
1513	512685.150	4791386.858	50.206	1538	512701.646	4791380.498	49.599
1514	512684.540	4791385.948	50.181	1539	512701.409	4791380.365	49.868
1515	512684.249	4791385.320	50.087	1540	512701.101	4791379.784	49.926
1516	512683.806	4791384.152	49.337	1541	512700.806	4791378.971	50.330
1517	512683.332	4791383.411	49.345	1542	512700.461	4791378.496	50.502
1518	512683.160	4791383.287	49.321	1543	512699.936	4791377.556	50.505
1519	512682.933	4791382.930	49.364	1544	512699.522	4791376.999	50.368
1520	512691.266	4791378.517	49.525	1545	512699.278	4791375.985	49.724
1521	512691.532	4791378.855	49.451	1546	512698.745	4791375.296	49.636
1522	512691.602	4791379.069	49.474	1547	512698.605	4791375.135	49.624
1523	512693.234	4791379.558	50.170	1548	512706.338	4791371.042	49.794
1524	512692.812	4791379.984	50.084	1549	512706.460	4791371.192	49.823
1525	512693.746	4791379.433	50.046	1550	512706.903	4791371.890	50.005
1526	512693.273	4791378.553	49.554	1551	512707.305	4791372.840	50.618
1527	512692.326	4791379.111	49.553	1552	512707.662	4791373.318	50.718
1528	512691.701	4791379.796	49.633	1553	512708.125	4791374.290	50.731
1529	512692.253	4791381.071	50.261	1554	512708.258	4791374.982	50.555
1530	512692.883	4791381.452	50.413	1555	512708.783	4791375.547	50.033
1531	512693.649	4791382.224	50.350	1556	512709.098	4791376.788	50.040
1532	512693.695	4791382.957	50.225	1557	512709.023	4791376.561	49.713

1558	512709.001	4791376.290	50.044	1583	512773.428	4791344.293	52.516
1559	512711.065	4791375.017	50.063	1584	512773.758	4791344.899	52.312
1560	512723.333	4791369.389	50.472	1585	512774.417	4791346.507	51.625
1561	512723.118	4791369.138	50.173	1586	512774.365	4791346.239	51.898
1562	512722.935	4791369.015	50.391	1587	512774.110	4791345.586	51.835
1563	512720.927	4791370.059	50.347	1588	512774.500	4791346.725	51.912
1564	512715.344	4791372.138	50.244	1589	512765.329	4791349.997	51.632
1565	512715.042	4791371.282	50.742	1590	512765.372	4791349.759	51.296
1566	512714.636	4791370.820	50.906	1591	512765.251	4791349.531	51.594
1567	512714.409	4791369.724	50.927	1592	512765.053	4791348.947	51.590
1568	512714.134	4791369.134	50.839	1593	512764.699	4791348.036	52.075
1569	512713.611	4791367.934	50.083	1594	512764.284	4791347.512	52.272
1570	512713.436	4791367.587	50.039	1595	512764.038	4791346.483	52.428
1571	512713.055	4791367.593	49.983	1596	512763.840	4791345.800	52.278
1572	512728.270	4791360.656	51.148	1597	512763.316	4791344.858	51.774
1573	512728.846	4791360.632	51.081	1598	512762.861	4791344.075	51.937
1574	512727.853	4791361.134	51.019	1599	512762.806	4791343.788	51.599
1575	512727.728	4791360.809	51.220	1600	512762.539	4791343.567	51.886
1576	512728.483	4791359.712	50.808	1601	512756.276	4791348.081	51.801
1577	512772.335	4791340.269	52.105	1602	512755.888	4791347.072	51.533
1578	512772.298	4791340.527	51.756	1603	512755.273	4791348.432	51.769
1579	512772.433	4791340.782	52.107	1604	512754.843	4791347.452	51.560
1580	512772.452	4791341.598	52.046	1605	512753.726	4791347.187	51.640
1581	512772.976	4791342.671	52.631	1606	512753.770	4791347.458	51.327
1582	512773.072	4791343.295	52.680	1607	512753.742	4791347.698	51.620

1608	512754.202	4791348.373	51.549	1633	512736.861	4791356.306	51.069
1609	512754.529	4791349.443	52.098	1634	512737.241	4791357.246	51.547
1610	512754.763	4791350.121	52.152	1635	512737.547	4791357.846	51.643
1611	512755.134	4791351.123	52.083	1636	512738.046	4791358.790	51.593
1612	512755.493	4791351.724	51.865	1637	512738.217	4791359.328	51.381
1613	512755.801	4791352.681	51.425	1638	512738.866	4791360.298	50.903
1614	512756.220	4791353.134	51.388	1639	512739.184	4791360.930	50.876
1615	512756.427	4791353.322	51.062	1640	512739.425	4791361.178	50.589
1616	512756.479	4791353.598	51.331	1641	512739.506	4791361.389	50.872
1617	512747.712	4791357.511	51.105	1642	512731.198	4791365.403	50.668
1618	512747.673	4791357.257	50.840	1643	512731.149	4791365.092	50.361
1619	512747.614	4791356.973	51.156	1644	512730.994	4791364.849	50.656
1620	512747.246	4791356.700	51.140	1645	512730.756	4791364.288	50.673
1621	512747.320	4791356.198	51.227	1646	512730.260	4791363.301	51.264
1622	512746.917	4791355.367	51.580	1647	512729.972	4791362.763	51.352
1623	512746.491	4791354.855	51.846	1648	512729.522	4791361.784	51.432
1624	512746.069	4791353.873	51.928	1649	512728.756	4791359.317	50.902
1625	512745.762	4791353.303	51.800	1650	512728.784	4791359.020	50.573
1626	512745.409	4791352.088	51.294	1651	512728.414	4791358.940	50.944
1627	512744.836	4791351.515	51.309	1652	512728.253	4791359.056	50.431
1628	512744.746	4791351.280	51.022	1653	512728.470	4791359.324	50.510
1629	512744.653	4791351.073	51.318	1654	512728.555	4791359.599	50.982
1630	512736.267	4791355.064	51.149	1655	512728.623	4791359.640	50.651
1631	512736.356	4791355.352	50.798	1656	512728.583	4791359.966	50.801
1632	512736.531	4791355.589	51.129	1657	512729.063	4791361.225	51.293

1658	512720.326	4791363.299	50.194	1683	512996.788	4791359.302	57.496
1659	512720.552	4791363.574	50.258	1684	512997.065	4791357.416	56.619
1660	512720.595	4791363.849	50.310	1685	513005.226	4791360.038	56.927
1661	512720.658	4791364.234	50.401	1686	513004.720	4791361.480	57.712
1662	512721.331	4791365.339	51.090	1687	512962.280	4791347.560	55.862
1663	512721.868	4791365.784	51.192	1688	512961.586	4791348.875	56.533
1664	512722.378	4791366.676	51.145	1689	512961.270	4791349.698	56.727
1665	512722.590	4791367.307	50.969	1690	512960.997	4791350.741	57.225
1666	512723.045	4791368.131	50.464	1691	512960.872	4791351.513	57.385
1667	512723.162	4791368.904	50.185	1692	512960.674	4791352.562	57.377
1668	512723.490	4791369.292	50.431	1693	512960.452	4791353.254	57.202
1669	512944.739	4791348.620	56.779	1694	512960.913	4791355.295	55.080
1670	512944.694	4791349.350	56.368	1695	512966.501	4791354.915	57.389
1671	512944.213	4791350.965	56.202	1696	512966.271	4791355.880	56.947
1672	512943.801	4791352.475	55.489	1697	512965.554	4791357.875	56.245
1673	512951.503	4791354.238	55.815	1698	512966.122	4791356.864	56.869
1674	512952.112	4791352.804	56.476	1699	512966.942	4791354.402	57.536
1675	512953.144	4791352.027	56.566	1700	512967.306	4791353.389	57.539
1676	512953.801	4791351.305	57.021	1701	512967.563	4791352.790	57.381
1677	512954.036	4791350.614	57.196	1702	512967.554	4791351.826	56.901
1678	512954.252	4791349.551	57.192	1703	512968.131	4791351.157	56.791
1679	512954.597	4791348.836	57.049	1704	512968.879	4791349.256	56.020
1680	512954.896	4791347.894	56.526	1705	512977.525	4791351.433	56.077
1681	512955.867	4791345.816	55.796	1706	512977.018	4791353.022	56.834
1682	512955.415	4791346.860	56.406	1707	512976.640	4791354.450	57.138

1708	512976.320	4791355.362	57.630	1733	512994.738	4791364.904	57.621
1709	512976.283	4791356.051	57.787	1734	512994.473	4791367.140	56.620
1710	512976.197	4791357.126	57.789	1735	513003.463	4791369.892	56.873
1711	512975.992	4791357.735	57.645	1736	513003.968	4791367.223	57.871
1712	512975.609	4791358.396	57.189	1737	513004.043	4791366.620	57.934
1713	512975.510	4791359.084	57.174	1738	513004.227	4791365.747	58.484
1714	512974.985	4791361.249	56.337	1739	513004.368	4791365.019	58.568
1715	512984.058	4791364.119	56.366	1740	513004.629	4791363.980	58.517
1716	512984.884	4791362.479	57.227	1741	513004.834	4791363.445	58.353
1717	512985.229	4791361.505	57.389	1742	513004.802	4791362.050	57.818
1718	512985.661	4791360.693	57.955	1743	513012.004	4791363.993	57.998
1719	512986.039	4791359.986	58.061	1744	513011.616	4791365.037	58.499
1720	512986.329	4791358.951	58.054	1745	513011.599	4791365.720	58.715
1721	512986.551	4791358.322	57.885	1746	513011.268	4791366.741	58.768
1722	512986.785	4791357.405	57.405	1747	513010.806	4791367.341	58.624
1723	512987.010	4791356.817	57.345	1748	513010.431	4791368.314	58.114
1724	512988.210	4791353.820	55.929	1749	513010.477	4791368.987	58.042
1725	512996.625	4791357.319	56.573	1750	513018.221	4791369.114	58.858
1726	512995.792	4791358.941	57.514	1751	513018.116	4791370.212	58.360
1727	512995.564	4791359.926	57.612	1752	513017.941	4791370.842	58.273
1728	512995.387	4791360.876	58.057	1753	513018.382	4791368.340	58.965
1729	512995.350	4791361.507	58.280	1754	513018.630	4791367.275	58.899
1730	512994.984	4791362.524	58.305	1755	513018.763	4791366.740	58.709
1731	512994.754	4791363.162	58.159	1756	513018.974	4791365.645	58.146
1732	512994.849	4791364.243	57.667	1757	513026.203	4791366.985	58.371

1758	513025.950	4791368.104	58.873	1783	513052.924	4791379.180	58.928
1759	513025.754	4791368.762	59.083	1784	513046.104	4791377.457	58.828
1760	513025.645	4791369.817	59.162	1785	513045.852	4791374.727	59.095
1761	513025.296	4791370.443	59.080	1786	513046.035	4791373.536	59.585
1762	513024.984	4791371.500	58.581	1787	513046.006	4791372.806	59.710
1763	513024.796	4791372.340	58.527	1788	513046.335	4791371.773	59.595
1764	513034.117	4791375.104	58.376	1789	513046.405	4791371.145	59.408
1765	513028.558	4791372.897	58.628	1790	513046.558	4791369.610	58.796
1766	513028.620	4791372.019	58.748	1791	513046.559	4791369.425	59.073
1767	513028.822	4791371.229	59.220	1792	513046.614	4791369.167	58.620
1768	513030.104	4791370.616	59.271	1793	513046.603	4791368.828	59.067
1769	513030.268	4791369.543	59.178	1794	513053.689	4791369.332	59.066
1770	513030.361	4791368.939	58.999	1795	513053.752	4791369.676	58.636
1771	513030.513	4791367.822	58.530	1796	513053.666	4791369.862	59.064
1772	513037.926	4791369.146	58.808	1797	513053.503	4791370.552	59.130
1773	513037.882	4791369.919	59.112	1798	513053.398	4791371.721	59.579
1774	513037.421	4791370.716	59.372	1799	513053.058	4791372.360	59.779
1775	513037.246	4791371.733	59.462	1800	513053.036	4791373.417	59.888
1776	513036.877	4791372.296	59.329	1801	513053.144	4791374.089	59.721
1777	513036.751	4791373.584	58.872	1802	513052.925	4791375.459	59.158
1778	513035.243	4791375.287	58.605	1803	513059.430	4791375.630	59.378
1779	513039.968	4791375.945	58.818	1804	513059.269	4791374.477	59.967
1780	513049.783	4791381.441	58.079	1805	513059.112	4791373.748	60.053
1781	513059.974	4791381.037	58.844	1806	513059.282	4791372.633	59.931
1782	513059.753	4791379.953	59.024	1807	513059.252	4791372.111	59.729

1808	513058.923	4791370.889	59.276	1833	513075.813	4791370.224	59.558
1809	513058.980	4791370.057	59.051	1834	513075.766	4791369.881	59.121
1810	513059.073	4791369.742	58.596	1835	513075.684	4791369.622	59.573
1811	513059.002	4791369.470	59.058	1836	513082.968	4791369.323	59.761
1812	513067.108	4791369.807	59.340	1837	513082.674	4791369.633	59.318
1813	513067.133	4791370.068	58.908	1838	513082.690	4791369.916	59.776
1814	513067.040	4791370.420	59.357	1839	513082.658	4791370.526	59.816
1815	513067.067	4791370.908	59.292	1840	513082.817	4791371.749	60.308
1816	513066.646	4791372.222	59.971	1841	513082.938	4791372.278	60.518
1817	513066.648	4791372.828	60.128	1842	513082.934	4791373.376	60.652
1818	513066.650	4791373.915	60.255	1843	513082.725	4791374.105	60.539
1819	513066.813	4791374.681	60.076	1844	513082.749	4791375.281	59.922
1820	513066.814	4791376.068	59.498	1845	513082.659	4791375.877	59.911
1821	513067.072	4791377.317	59.477	1846	513082.660	4791376.112	59.549
1822	513067.148	4791377.059	59.133	1847	513082.672	4791376.401	59.906
1823	513067.094	4791376.731	59.463	1848	513090.959	4791375.551	60.093
1824	513075.835	4791376.865	59.719	1849	513090.978	4791375.276	59.747
1825	513075.868	4791376.665	59.383	1850	513091.171	4791375.002	60.114
1826	513075.765	4791376.359	59.718	1851	513091.077	4791374.556	60.119
1827	513075.781	4791375.757	59.736	1852	513091.021	4791373.340	60.752
1828	513075.615	4791374.373	60.310	1853	513091.068	4791372.605	60.825
1829	513075.527	4791373.785	60.453	1854	513090.995	4791371.547	60.732
1830	513075.529	4791372.696	60.337	1855	513091.097	4791370.906	60.546
1831	513075.676	4791372.015	60.194	1856	513090.963	4791370.069	60.051
1832	513075.681	4791370.975	59.692	1857	513091.041	4791369.349	59.969

1858	513090.862	4791369.034	59.517	1883	513107.456	4791366.337	59.911
1859	513090.920	4791368.742	59.963	1884	513107.435	4791366.087	60.362
1860	513099.202	4791367.637	60.129	1885	513116.115	4791364.222	60.569
1861	513099.090	4791367.912	59.689	1886	513116.300	4791364.483	60.140
1862	513099.256	4791368.233	60.134	1887	513116.150	4791364.833	60.592
1863	513099.196	4791368.923	60.253	1888	513116.307	4791365.828	60.833
1864	513099.287	4791369.845	60.710	1889	513116.283	4791366.644	61.155
1865	513099.368	4791370.456	60.926	1890	513116.350	4791367.270	61.376
1866	513099.461	4791371.565	61.053	1891	513116.556	4791368.263	61.474
1867	513099.655	4791372.303	60.928	1892	513116.897	4791368.907	61.393
1868	513099.363	4791373.416	60.376	1893	513117.461	4791370.198	60.808
1869	513099.356	4791374.013	60.326	1894	513117.456	4791370.599	60.808
1870	513099.260	4791374.337	59.965	1895	513117.458	4791370.898	60.445
1871	513099.338	4791374.564	60.293	1896	513117.502	4791371.143	60.771
1872	513109.117	4791372.944	60.563	1897	513126.954	4791368.786	61.049
1873	513109.097	4791372.688	60.255	1898	513126.928	4791368.496	60.702
1874	513108.981	4791372.437	60.583	1899	513126.774	4791368.286	61.019
1875	513108.801	4791371.950	60.618	1900	513126.413	4791367.812	61.019
1876	513108.640	4791370.683	61.119	1901	513126.005	4791366.591	61.660
1877	513108.554	4791369.998	61.276	1902	513125.767	4791366.069	61.704
1878	513108.004	4791369.009	61.139	1903	513125.418	4791365.001	61.596
1879	513107.897	4791368.352	60.990	1904	513125.010	4791364.449	61.348
1880	513107.729	4791367.401	60.432	1905	513124.832	4791363.472	60.942
1881	513107.630	4791366.652	60.349	1906	513124.952	4791362.695	60.821
1882	513107.622	4791366.656	60.353	1907	513124.763	4791362.432	60.386

1908	513124.817	4791362.080	60.825	1933	513150.193	4791353.451	61.529
1909	513134.576	4791359.330	61.082	1934	513150.267	4791353.746	61.078
1910	513134.590	4791359.585	60.640	1935	513150.597	4791353.986	61.554
1911	513134.889	4791359.878	61.095	1936	513150.804	4791354.493	61.593
1912	513135.069	4791360.269	61.156	1937	513151.350	4791355.500	62.041
1913	513135.636	4791361.271	61.669	1938	513151.600	4791356.063	62.282
1914	513135.782	4791361.913	61.856	1939	513151.911	4791357.108	62.379
1915	513136.086	4791362.949	61.981	1940	513151.999	4791357.721	62.260
1916	513136.157	4791363.736	61.838	1941	513152.573	4791358.791	61.770
1917	513136.677	4791364.681	61.358	1942	513152.966	4791359.285	61.754
1918	513136.851	4791365.251	61.296	1943	513153.085	4791359.563	61.412
1919	513136.966	4791365.506	60.961	1944	513153.234	4791359.802	61.747
1920	513137.041	4791365.742	61.302	1945	513161.750	4791356.095	61.925
1921	513145.634	4791362.770	61.563	1946	513161.617	4791355.868	61.596
1922	513145.607	4791362.475	61.220	1947	513161.544	4791355.625	61.932
1923	513145.544	4791362.225	61.561	1948	513161.356	4791355.102	62.006
1924	513145.234	4791361.656	61.649	1949	513160.937	4791353.935	62.534
1925	513144.910	4791360.647	62.105	1950	513160.615	4791353.274	62.616
1926	513144.565	4791359.991	62.217	1951	513160.182	4791352.269	62.509
1927	513144.100	4791359.017	62.097	1952	513159.471	4791351.802	62.285
1928	513143.816	4791358.332	61.845	1953	513158.930	4791350.888	61.766
1929	513143.407	4791357.384	61.338	1954	513158.896	4791350.399	61.739
1930	513143.322	4791356.927	61.364	1955	513158.633	4791350.104	61.284
1931	513143.049	4791356.611	60.884	1956	513158.626	4791349.868	61.744
1932	513142.994	4791356.338	61.330	1957	513166.624	4791345.904	61.903

1958	513166.636	4791346.198	61.509	1983	513182.826	4791337.401	62.462
1959	513166.940	4791346.452	61.968	1984	513183.213	4791338.162	62.549
1960	513167.208	4791346.889	62.014	1985	513183.653	4791338.940	63.024
1961	513167.907	4791347.895	62.554	1986	513184.126	4791339.369	63.197
1962	513168.288	4791348.337	62.729	1987	513184.573	4791340.360	63.315
1963	513168.841	4791349.284	62.905	1988	513184.784	4791341.031	63.238
1964	513168.986	4791349.942	62.804	1989	513185.427	4791341.870	62.680
1965	513169.607	4791351.063	62.213	1990	513185.794	4791342.478	62.662
1966	513169.922	4791351.592	62.193	1991	513186.020	4791342.670	62.334
1967	513170.091	4791351.823	61.855	1992	513186.212	4791342.828	62.636
1968	513170.188	4791352.049	62.181	1993	513192.903	4791338.520	62.849
1969	513178.245	4791347.612	62.408	1994	513192.752	4791338.315	62.529
1970	513178.177	4791347.350	62.072	1995	513192.632	4791338.077	62.859
1971	513177.981	4791347.155	62.429	1996	513192.320	4791337.712	62.846
1972	513177.818	4791346.816	62.390	1997	513191.683	4791336.638	63.418
1973	513177.227	4791345.737	63.027	1998	513191.275	4791335.974	63.531
1974	513176.648	4791345.108	63.114	1999	513190.653	4791335.107	63.413
1975	513176.086	4791344.145	62.971	2000	513190.284	4791334.778	63.275
1976	513175.703	4791343.739	62.754	2001	513189.693	4791333.862	62.737
1977	513175.297	4791342.555	62.243	2002	513189.261	4791333.261	62.634
1978	513175.096	4791341.979	62.217	2003	513189.037	4791333.085	62.179
1979	513174.833	4791341.726	61.752	2004	513188.802	4791332.853	62.615
1980	513174.787	4791341.445	62.193	2005	513196.479	4791327.393	62.855
1981	513182.500	4791336.851	62.441	2006	513196.554	4791327.631	62.397
1982	513182.677	4791337.085	61.987	2007	513196.905	4791327.829	62.871

2008	513197.454	4791328.623	63.070	2033	513214.499	4791317.794	64.256
2009	513197.885	4791329.175	63.487	2034	513214.760	4791318.269	64.161
2010	513198.306	4791329.664	63.654	2035	513215.697	4791319.211	63.661
2011	513198.933	4791330.545	63.779	2036	513216.208	4791319.671	63.686
2012	513199.208	4791331.118	63.651	2037	513216.272	4791319.942	63.333
2013	513200.063	4791332.029	63.120	2038	513216.525	4791320.111	63.662
2014	513200.616	4791332.413	63.069	2039	513222.379	4791314.764	63.881
2015	513200.736	4791332.632	62.727	2040	513222.165	4791314.553	63.523
2016	513200.931	4791332.870	63.065	2041	513222.131	4791314.242	63.863
2017	513208.117	4791327.306	63.356	2042	513221.645	4791313.501	63.944
2018	513208.022	4791327.054	63.007	2043	513221.098	4791312.671	64.385
2019	513207.930	4791326.861	63.349	2044	513220.690	4791312.042	64.462
2020	513207.539	4791326.148	63.412	2045	513219.968	4791311.238	64.381
2021	513207.093	4791325.164	63.977	2046	513219.576	4791310.832	64.196
2022	513206.626	4791324.533	64.073	2047	513218.867	4791310.097	63.736
2023	513205.969	4791323.669	63.934	2048	513218.505	4791309.600	63.615
2024	513205.527	4791323.194	63.689	2049	513218.228	4791309.387	63.144
2025	513205.191	4791322.708	63.389	2050	513218.054	4791309.156	63.609
2026	513204.630	4791321.754	63.171	2051	513225.105	4791302.109	63.754
2027	513204.333	4791321.601	62.722	2052	513225.236	4791302.331	63.355
2028	513204.061	4791321.442	63.153	2053	513225.521	4791302.592	63.801
2029	513211.478	4791315.266	63.450	2054	513225.748	4791302.780	63.894
2030	513211.804	4791315.432	63.017	2055	513226.576	4791303.819	64.469
2031	513211.910	4791315.711	63.462	2056	513226.826	4791304.490	64.611
2032	513213.813	4791316.943	64.160	2057	513227.592	4791305.249	64.667

2058	513227.956	4791305.799	64.525	2083	513238.590	4791291.831	64.911
2059	513228.757	4791306.603	64.132	2084	513238.118	4791291.223	64.725
2060	513229.462	4791306.941	64.110	2085	513237.413	4791290.799	64.248
2061	513229.510	4791307.173	63.754	2086	513236.796	4791290.318	63.975
2062	513229.741	4791307.423	64.099	2087	513236.549	4791290.118	63.523
2063	513234.177	4791298.324	64.820	2088	513236.432	4791289.818	63.982
2064	513233.416	4791297.555	64.778	2089	513241.935	4791283.455	64.109
2065	513233.005	4791297.146	64.618	2090	513242.072	4791283.686	63.634
2066	513232.233	4791296.553	64.167	2091	513242.397	4791283.912	64.132
2067	513231.811	4791296.032	63.920	2092	513242.756	4791284.526	64.265
2068	513231.538	4791295.851	63.432	2093	513243.611	4791284.984	64.869
2069	513231.301	4791295.643	63.920	2094	513244.221	4791285.486	65.025
2070	513235.078	4791299.815	64.298	2095	513244.982	4791286.251	65.052
2071	513234.347	4791299.262	64.758	2096	513245.371	4791286.890	64.974
2072	513234.355	4791299.238	64.756	2097	513246.475	4791287.396	64.448
2073	513235.259	4791299.733	64.278	2098	513246.809	4791287.911	64.416
2074	513235.691	4791300.353	64.256	2099	513246.876	4791288.172	64.085
2075	513235.792	4791300.537	63.905	2100	513247.004	4791288.428	64.418
2076	513236.111	4791300.717	64.233	2101	513252.592	4791281.828	64.503
2077	513241.573	4791294.718	64.325	2102	513252.506	4791281.520	64.177
2078	513241.319	4791294.592	64.007	2103	513252.316	4791281.280	64.531
2079	513241.189	4791294.318	64.344	2104	513252.070	4791280.924	64.528
2080	513240.786	4791294.075	64.320	2105	513251.267	4791280.250	65.144
2081	513240.040	4791293.101	64.951	2106	513250.523	4791279.818	65.152
2082	513239.449	4791292.525	64.951	2107	513249.684	4791279.126	65.133

2108	513249.385	4791278.552	64.972	2133	513269.967	4791254.132	65.273
2109	513248.418	4791277.798	64.413	2134	513257.706	4791267.931	64.965
2110	513248.023	4791277.274	64.187	2135	513256.991	4791267.354	64.576
2111	513247.810	4791276.993	63.795	2136	513261.830	4791260.905	64.572
2112	513247.647	4791276.691	64.222	2137	513262.402	4791261.606	65.006
2113	513246.411	4791275.540	64.259	2138	513263.978	4791263.043	65.242
2114	513254.821	4791268.930	64.316	2139	513263.007	4791262.535	65.231
2115	513254.595	4791268.705	63.866	2140	513260.017	4791268.380	65.233
2116	513254.367	4791268.495	64.309	2141	513259.058	4791267.846	65.237
2117	513253.355	4791267.810	64.343	2142	513254.932	4791272.974	65.207
2118	513258.197	4791261.593	64.500	2143	513255.767	4791273.667	65.201
2119	513259.139	4791262.354	64.370	2144	513257.092	4791273.778	32.444
2120	513259.311	4791262.610	63.923	2145	513256.824	4791273.540	64.943
2121	513259.590	4791262.798	64.423	2146	513257.099	4791273.183	64.829
2122	513264.320	4791256.318	64.404	2147	513257.666	4791273.659	64.874
2123	513264.118	4791256.153	63.949	2148	513257.361	4791274.016	64.888
2124	513263.926	4791255.808	64.403	2149	513266.749	4791265.485	64.593
2125	513262.670	4791255.221	64.529	2150	513266.483	4791265.306	64.289
2126	513265.607	4791251.141	64.467	2151	513266.353	4791265.135	64.687
2127	513266.558	4791252.103	64.428	2152	513265.958	4791264.694	64.525
2128	513266.738	4791252.216	63.986	2153	513265.196	4791263.703	65.041
2129	513267.058	4791252.347	64.430	2154	513264.009	4791262.320	65.238
2130	513267.658	4791252.790	64.618	2155	513264.860	4791262.973	65.246
2131	513268.624	4791253.397	65.113	2156	513266.063	4791259.958	65.195
2132	513269.073	4791253.469	65.290	2157	513265.419	4791261.002	65.222

2158	513265.237	4791260.860	65.226	2183	513283.655	4791244.116	65.044
2159	513267.739	4791257.530	65.227	2184	513283.132	4791243.691	65.062
2160	513267.928	4791257.674	65.232	2185	513283.434	4791243.352	65.011
2161	513270.463	4791254.666	65.243	2186	513283.942	4791243.781	65.084
2162	513271.128	4791255.546	65.244	2187	513285.018	4791243.599	64.501
2163	513273.915	4791248.758	65.135	2188	513284.758	4791243.484	64.147
2164	513274.711	4791249.440	65.180	2189	513284.588	4791243.315	64.541
2165	513274.820	4791249.546	65.266	2190	513285.585	4791241.257	64.472
2166	513275.632	4791250.238	65.257	2191	513287.512	4791238.834	64.583
2167	513276.203	4791250.680	65.127	2192	513286.721	4791237.974	65.076
2168	513277.082	4791251.447	64.601	2193	513286.506	4791237.381	65.246
2169	513277.761	4791251.808	64.558	2194	513285.731	4791236.632	65.259
2170	513277.953	4791251.974	64.230	2195	513286.089	4791232.825	65.043
2171	513278.093	4791252.292	64.548	2196	513286.309	4791232.565	65.045
2172	513278.418	4791248.975	64.849	2197	513286.572	4791232.804	65.080
2173	513279.452	4791249.783	64.519	2198	513286.352	4791233.064	65.030
2174	513280.258	4791248.758	64.467	2199	513286.093	4791233.331	65.055
2175	513279.263	4791247.880	64.938	2200	513285.841	4791233.136	65.062
2176	513278.421	4791242.849	65.147	2201	513285.667	4791233.366	65.047
2177	513279.065	4791243.291	65.155	2202	513285.918	4791233.561	65.031
2178	513283.610	4791244.510	64.526	2203	513288.328	4791237.577	64.647
2179	513284.280	4791243.618	64.492	2204	513289.162	4791237.245	64.532
2180	513283.484	4791243.023	64.766	2205	513289.271	4791237.519	64.159
2181	513282.764	4791243.815	64.831	2206	513289.575	4791237.711	64.507
2182	513282.230	4791244.127	64.940	2207	513298.295	4791225.246	64.605

2208	513298.595	4791225.466	64.204	2233	511776.505	4791948.135	38.755
2209	513298.840	4791225.712	64.598	2234	511773.687	4791950.454	38.668
2210	513300.234	4791223.825	64.606	2235	511770.557	4791942.672	38.850
2211	513299.968	4791223.359	64.650	2236	511781.586	4791912.096	40.724
2212	513300.087	4791222.988	64.674	2237	512173.128	4791684.090	47.154
2213	513304.814	4791217.597	64.761	2238	512179.728	4791688.307	47.231
2214	513309.064	4791213.737	65.106	2239	512190.182	4791677.404	47.525
2215	513308.616	4791213.338	65.027	2240	512203.699	4791670.045	47.476
2216	513308.898	4791213.012	65.035	2241	512209.417	4791673.130	47.426
2217	513310.668	4791210.464	64.778	2242	512222.677	4791666.300	47.488
2218	513310.178	4791209.893	65.095	2243	512221.858	4791660.386	47.584
2219	513309.964	4791209.457	65.225	2244	512216.427	4791673.027	47.424
2220	513309.084	4791208.798	65.264	2245	512196.567	4791683.968	47.439
2221	513308.629	4791208.112	65.092	2246	512189.968	4791679.980	47.471
2222	513300.397	4791217.995	65.088	2247	512188.914	4791679.936	47.471
2223	513300.840	4791218.659	65.219	2248	512629.809	4791411.157	56.428
2224	513301.738	4791219.244	65.224	2249	512469.633	4791561.050	48.438
2225	513302.213	4791219.525	65.027	2250	512149.872	4791715.511	46.351
2226	513292.081	4791231.717	65.077	2251	511877.762	4791858.733	41.791
2227	513290.537	4791230.909	65.248	2252	511648.521	4791974.847	41.563
2228	513287.248	4791229.380	65.114	2253	512173.068	4791700.605	44.511
2229	512427.926	4791574.294	48.160	2254	512161.840	4791704.491	44.436
2230	512045.116	4791786.460	41.778	2255	512165.047	4791714.564	43.943
2231	512096.995	4791771.527	39.600	2256	512165.047	4791714.563	43.943
2232	512093.963	4791764.698	40.050	2257	512176.340	4791711.830	44.894

2258	512167.859	4791716.427	44.736	2283	512156.557	4791692.478	38.726
2259	512172.039	4791699.494	44.777	2284	512156.280	4791691.960	38.746
2260	512162.078	4791704.818	44.771	2285	512155.776	4791692.221	38.746
2261	512166.540	4791723.670	39.739	2286	512155.495	4791692.291	38.842
2262	512166.195	4791723.675	39.614	2287	512160.952	4791702.762	38.884
2263	512165.962	4791723.696	39.767	2288	512162.195	4791705.504	38.946
2264	512166.405	4791719.041	39.502	2289	512163.582	4791709.318	39.034
2265	512166.105	4791719.050	39.371	2290	512165.000	4791714.485	39.200
2266	512165.827	4791719.060	39.484	2291	512165.481	4791718.133	39.423
2267	512165.883	4791714.480	39.248	2292	512165.825	4791725.251	39.870
2268	512165.609	4791714.531	39.119	2293	512180.357	4791716.668	39.981
2269	512165.338	4791714.559	39.229	2294	512176.530	4791708.494	39.496
2270	512164.289	4791710.299	39.074	2295	512172.657	4791700.108	39.162
2271	512164.534	4791710.250	38.941	2296	512170.189	4791694.771	39.048
2272	512164.820	4791710.150	39.085	2297	512168.378	4791691.529	38.997
2273	512163.310	4791705.881	38.981	2298	512167.269	4791689.795	38.955
2274	512163.043	4791705.986	38.851	2299	512165.242	4791686.135	38.937
2275	512162.793	4791706.085	38.965	2300	512164.626	4791686.466	38.848
2276	512160.961	4791702.029	38.875	2301	512165.062	4791686.229	38.851
2277	512161.184	4791701.896	38.777	2302	512165.276	4791686.662	38.857
2278	512161.450	4791701.764	38.904	2303	512164.872	4791686.915	38.844
2279	512156.614	4791692.490	38.843	2304	512164.849	4791687.009	38.958
2280	512156.341	4791692.643	38.690	2305	512165.106	4791686.807	38.827
2281	512156.123	4791692.775	38.813	2306	512165.348	4791686.693	38.916
2282	512156.057	4791692.758	38.723	2307	512170.400	4791696.309	39.077

2308	512170.183	4791696.447	38.963	2333	512164.083	4791731.324	40.394
2309	512169.962	4791696.557	39.076	2334	512163.127	4791730.905	40.538
2310	512174.950	4791706.932	39.437	2335	512165.340	4791732.795	40.219
2311	512175.181	4791706.836	39.311	2336	512165.112	4791732.741	40.184
2312	512175.422	4791706.707	39.412	2337	512164.911	4791732.686	40.219
2313	512179.221	4791715.404	39.815	2338	512165.279	4791731.058	40.121
2314	512178.983	4791715.463	39.710	2339	512165.712	4791731.104	40.139
2315	512178.723	4791715.523	39.821	2340	512165.440	4791731.064	40.027
2316	512163.359	4791732.500	40.484	2341	512165.384	4791730.490	39.961
2317	512163.723	4791731.903	40.477	2342	512165.572	4791729.864	39.935
2318	512191.939	4791731.272	41.257	2343	512165.296	4791729.797	40.063
2319	512188.595	4791731.432	40.846	2344	512165.116	4791730.386	40.088
2320	512191.213	4791733.483	41.028	2345	512165.760	4791730.555	40.097
2321	512191.394	4791733.382	41.230	2346	512165.900	4791729.939	40.063
2322	512188.392	4791730.858	40.986	2347	512166.267	4791728.202	39.984
2323	512160.337	4791746.624	40.788	2348	512165.977	4791728.214	39.882
2324	512158.452	4791745.546	40.967	2349	512165.753	4791728.206	39.982
2325	512159.824	4791742.046	40.921	2350	512166.535	4791724.985	39.810
2326	512160.695	4791738.644	40.777	2351	512166.308	4791725.037	39.721
2327	512162.811	4791739.435	40.577	2352	512166.028	4791724.941	39.795
2328	512163.087	4791738.484	40.528	2353	512174.064	4791717.551	39.750
2329	512164.304	4791734.625	40.290	2354	512174.725	4791719.339	39.834
2330	512162.523	4791732.841	40.521	2355	512175.172	4791721.167	39.951
2331	512164.677	4791733.199	40.223	2356	512175.784	4791723.184	40.069
2332	512164.660	4791731.985	40.288	2357	512175.444	4791724.081	40.115

2358	512176.616	4791723.802	40.133	2383	512165.171	4791734.211	40.336
2359	512177.357	4791730.862	40.702	2384	512164.818	4791734.872	40.361
2360	512179.882	4791735.381	40.927	2385	512163.847	4791738.047	40.539
2361	512180.064	4791735.999	40.972	2386	512163.994	4791738.618	40.568
2362	512180.092	4791736.172	40.985	2387	512171.323	4791736.944	40.686
2363	512179.812	4791736.312	40.980	2388	512179.664	4791735.142	40.901
2364	512178.298	4791736.477	40.944	2389	512186.194	4791729.808	40.746
2365	512176.728	4791736.819	40.902	2390	512183.773	4791726.686	40.504
2366	512176.533	4791736.725	40.894	2391	512179.408	4791717.171	39.911
2367	512176.528	4791735.990	40.861	2392	512179.622	4791717.006	39.808
2368	512176.705	4791735.794	40.850	2393	512179.892	4791716.922	39.882
2369	512178.263	4791735.453	40.879	2394	512182.118	4791722.184	40.179
2370	512179.674	4791735.204	40.912	2395	512181.919	4791722.301	40.103
2371	512178.033	4791731.318	40.656	2396	512181.664	4791722.473	40.213
2372	512177.002	4791731.559	40.613	2397	512183.842	4791726.267	40.481
2373	512176.845	4791731.537	40.605	2398	512184.049	4791726.134	40.388
2374	512176.755	4791731.316	40.587	2399	512184.327	4791725.979	40.469
2375	512176.694	4791729.095	40.461	2400	512183.050	4791722.348	40.301
2376	512176.436	4791726.682	40.312	2401	512189.125	4791728.664	40.957
2377	512176.619	4791726.362	40.291	2402	512187.370	4791726.463	40.782
2378	512176.944	4791726.628	40.320	2403	512184.976	4791722.716	40.500
2379	512177.404	4791728.618	40.450	2404	512183.402	4791719.885	40.329
2380	512178.241	4791731.144	40.606	2405	512182.621	4791721.124	40.253
2381	512178.030	4791731.371	40.637	2406	512182.262	4791722.349	40.180
2382	512171.523	4791732.810	40.485	2407	512183.762	4791724.994	40.412

2408	512184.299	4791725.896	40.460	2433	512123.791	4791759.882	42.189
2409	512186.632	4791729.188	40.665	2434	512134.525	4791754.072	42.422
2410	512187.261	4791729.898	40.735	2435	512144.975	4791748.446	42.684
2411	512188.217	4791731.018	40.806	2436	512155.594	4791743.786	42.913
2412	512189.957	4791729.231	41.013	2437	512157.129	4791744.303	42.889
2413	512156.329	4791692.706	38.825	2438	512155.924	4791744.005	43.033
2414	512156.190	4791692.699	38.774	2439	512155.983	4791743.577	43.117
2415	512166.555	4791712.841	39.180	2440	512157.227	4791740.135	43.312
2416	512165.763	4791709.186	39.129	2441	512157.320	4791740.228	43.212
2417	512161.929	4791699.891	39.031	2442	512156.934	4791739.973	43.123
2418	512159.547	4791695.407	38.906	2443	512161.332	4791727.357	43.810
2419	512167.562	4791719.694	39.390	2444	512161.673	4791727.334	44.002
2420	512167.773	4791723.992	39.782	2445	512160.730	4791725.278	44.081
2421	512167.417	4791728.777	40.087	2446	512161.949	4791726.822	43.943
2422	512166.462	4791733.769	40.334	2447	512161.361	4791727.139	43.836
2423	512164.849	4791738.978	40.621	2448	512160.547	4791725.346	44.004
2424	512163.320	4791741.600	40.676	2449	512160.503	4791722.103	45.148
2425	512161.852	4791744.275	40.767	2450	512156.669	4791724.904	45.113
2426	512160.942	4791744.811	40.735	2451	512147.913	4791729.545	44.998
2427	512158.724	4791744.319	40.939	2452	512147.495	4791729.716	45.065
2428	512110.278	4791769.115	41.732	2453	512146.854	4791730.062	45.048
2429	512113.499	4791766.701	41.896	2454	512147.066	4791730.468	45.050
2430	512114.628	4791764.765	42.006	2455	512147.729	4791730.128	45.062
2431	512117.942	4791767.571	41.824	2456	512152.951	4791731.078	43.709
2432	512115.811	4791763.971	42.054	2457	512152.249	4791731.297	43.729

2458	512150.416	4791732.888	43.526	2483	512100.012	4791767.495	42.046
2459	512149.349	4791731.335	43.731	2484	512104.080	4791774.517	41.714
2460	512126.752	4791743.467	43.195	2485	512106.669	4791773.242	41.590
2461	512127.455	4791745.288	42.941	2486	512098.786	4791776.140	39.399
2462	512142.536	4791737.201	43.325	2487	512099.006	4791779.581	38.108
2463	512141.545	4791735.472	43.526	2488	512098.939	4791779.087	38.061
2464	512140.412	4791733.563	44.731	2489	512096.988	4791781.342	38.338
2465	512132.288	4791737.966	44.790	2490	512096.920	4791779.890	38.286
2466	512131.485	4791738.433	44.761	2491	512097.960	4791776.208	37.986
2467	512126.808	4791741.042	44.479	2492	512097.060	4791773.530	38.050
2468	512127.749	4791742.919	43.237	2493	512094.859	4791768.251	38.161
2469	512128.857	4791744.486	42.982	2494	512092.944	4791763.891	38.466
2470	512117.412	4791750.146	42.868	2495	512090.575	4791761.105	38.536
2471	512117.925	4791749.817	42.933	2496	512088.018	4791761.878	38.581
2472	512117.141	4791746.151	44.146	2497	512088.959	4791763.440	38.545
2473	512118.334	4791747.948	42.998	2498	512090.866	4791765.904	38.526
2474	512119.305	4791749.677	42.760	2499	512093.255	4791769.083	38.446
2475	512106.703	4791756.389	42.460	2500	512095.154	4791773.626	38.501
2476	512105.674	4791754.670	42.693	2501	512096.104	4791777.108	38.415
2477	512104.140	4791753.189	43.546	2502	512096.698	4791779.754	38.247
2478	512093.300	4791760.292	41.925	2503	512097.136	4791780.983	38.215
2479	512093.541	4791758.507	43.115	2504	512096.079	4791780.851	40.499
2480	512095.810	4791759.922	42.256	2505	512096.033	4791779.902	40.441
2481	512099.360	4791760.350	42.232	2506	512098.586	4791779.126	40.644
2482	512102.449	4791765.790	42.005	2507	512103.187	4791777.727	40.869

2508	512103.732	4791778.557	40.981	2533	511971.059	4791833.290	41.091
2509	512105.077	4791777.102	40.989	2534	511983.963	4791852.831	39.763
2510	512103.873	4791774.998	40.953	2535	511989.039	4791844.397	39.983
2511	512101.879	4791775.538	40.906	2536	511994.674	4791851.003	39.824
2512	512101.576	4791775.535	40.877	2537	511990.407	4791844.778	39.928
2513	512097.910	4791776.671	40.666	2538	511987.199	4791840.321	40.153
2514	512095.282	4791777.486	40.553	2539	511982.069	4791832.737	40.607
2515	512094.175	4791774.237	40.413	2540	511976.173	4791824.251	41.504
2516	512092.879	4791770.668	40.491	2541	511975.647	4791823.411	41.485
2517	512091.024	4791767.035	40.543	2542	511971.543	4791825.713	41.563
2518	512087.965	4791762.852	40.488	2543	511967.479	4791827.965	41.687
2519	512087.338	4791762.494	40.505	2544	511930.120	4791854.194	40.426
2520	512086.686	4791763.225	41.696	2545	511920.341	4791870.074	40.067
2521	512087.204	4791763.505	40.594	2546	511929.425	4791864.984	39.999
2522	512087.609	4791763.709	40.509	2547	511938.389	4791859.270	40.404
2523	511974.602	4791837.839	40.514	2548	511938.168	4791859.277	40.384
2524	511977.061	4791839.661	40.240	2549	511947.837	4791854.019	40.396
2525	511978.672	4791843.200	40.034	2550	511939.609	4791842.956	40.957
2526	511984.099	4791852.855	39.940	2551	511939.463	4791842.433	40.909
2527	511979.643	4791846.565	39.949	2552	511939.753	4791842.450	40.872
2528	511979.054	4791845.746	39.802	2553	511933.295	4791845.535	40.907
2529	511977.389	4791843.062	39.847	2554	511922.507	4791851.179	40.770
2530	511974.454	4791839.164	39.997	2555	511925.133	4791858.822	40.295
2531	511973.408	4791837.478	40.707	2556	511924.189	4791866.664	40.117
2532	511972.479	4791835.072	40.827	2557	511914.974	4791868.617	40.281

2558	511905.598	4791875.423	39.983	2583	511845.561	4791900.437	40.098
2559	511897.813	4791864.048	40.463	2584	511839.418	4791894.571	39.866
2560	511894.100	4791873.376	39.921	2585	511840.942	4791898.685	39.705
2561	511892.199	4791881.958	39.759	2586	511842.523	4791901.857	39.885
2562	511875.549	4791875.517	39.923	2587	511838.255	4791904.875	39.857
2563	511883.452	4791887.872	39.860	2588	511838.022	4791904.379	39.787
2564	511867.877	4791895.322	39.802	2589	511835.971	4791899.952	40.183
2565	511859.437	4791884.317	39.933	2590	511835.744	4791899.481	39.869
2566	511850.175	4791889.089	39.808	2591	511834.526	4791897.140	39.839
2567	511849.694	4791910.483	39.785	2592	511834.442	4791897.503	39.910
2568	511847.354	4791911.645	39.637	2593	511838.626	4791906.202	39.810
2569	511845.084	4791906.941	39.690	2594	511844.438	4791918.561	39.475
2570	511842.625	4791901.746	39.876	2595	511852.162	4791914.746	39.493
2571	511843.884	4791903.616	39.682	2596	511856.388	4791912.622	39.459
2572	511849.602	4791909.586	39.800	2597	511858.058	4791911.809	39.411
2573	511847.373	4791910.638	39.815	2598	511858.209	4791911.760	39.428
2574	511847.461	4791911.207	39.786	2599	511860.836	4791910.576	39.342
2575	511847.573	4791911.415	39.774	2600	511852.251	4791892.822	39.807
2576	511851.443	4791909.216	39.762	2601	511856.689	4791901.407	39.722
2577	511851.734	4791909.396	39.747	2602	511776.704	4791947.384	38.702
2578	511854.113	4791907.849	39.765	2603	511773.179	4791940.208	38.928
2579	511854.252	4791908.127	39.769	2604	511770.585	4791950.356	38.679
2580	511856.243	4791912.340	39.492	2605	511770.263	4791949.714	38.679
2581	511852.655	4791904.849	39.823	2606	511769.638	4791950.036	38.676
2582	511849.672	4791898.635	39.981	2607	511769.287	4791950.306	38.660

2608	511769.016	4791950.410	38.761	2633	511661.106	4791991.825	39.526
2609	511769.072	4791951.709	38.744	2634	511659.062	4791995.356	39.484
2610	511767.634	4791948.890	38.758	2635	511667.877	4792011.359	39.429
2611	511765.359	4791943.854	38.863	2636	511675.918	4792015.336	39.442
2612	511760.728	4791933.532	38.706	2637	511675.567	4792025.803	39.441
2613	511765.449	4791930.133	39.317	2638	511654.853	4791977.447	40.904
2614	511764.627	4791930.660	39.323	2639	512513.399	4791536.592	48.299
2615	511736.425	4791974.798	38.973	2640	512525.062	4791530.805	48.176
2616	511737.908	4791981.087	39.255	2641	512525.430	4791530.563	48.109
2617	511734.154	4791983.234	39.634	2642	512535.609	4791525.244	48.116
2618	511720.131	4791991.062	39.872	2643	512543.202	4791518.167	48.099
2619	511715.768	4791993.291	39.601	2644	512543.453	4791518.134	48.107
2620	511704.380	4791999.704	39.512	2645	512545.395	4791520.178	47.960
2621	511702.325	4792000.977	40.017	2646	512545.233	4791520.402	47.952
2622	511675.906	4792015.360	39.810	2647	512547.707	4791522.690	47.765
2623	511669.777	4792004.430	39.861	2648	512547.481	4791522.868	47.791
2624	511655.327	4791988.314	40.262	2649	512538.556	4791527.238	47.823
2625	511663.252	4791992.537	39.972	2650	512531.054	4791531.285	47.962
2626	511671.248	4791987.978	40.098	2651	512531.210	4791530.947	47.981
2627	511682.045	4791982.172	39.944	2652	512525.692	4791533.619	48.144
2628	511681.159	4791978.378	39.908	2653	512525.806	4791533.870	48.141
2629	511665.849	4791986.925	39.430	2654	512518.433	4791537.247	48.142
2630	511661.420	4791992.427	39.540	2655	512518.524	4791537.446	48.156
2631	511661.989	4791992.131	39.535	2656	512509.532	4791541.633	48.216
2632	511661.705	4791991.530	39.513	2657	512509.634	4791541.854	48.222

2658	512508.757	4791542.254	48.326	2683	512499.347	4791528.883	48.400
2659	512508.626	4791542.019	48.343	2684	512500.021	4791529.667	48.413
2660	512507.267	4791539.541	48.296	2685	512500.092	4791529.781	48.423
2661	512503.954	4791541.189	48.355	2686	512501.022	4791529.028	48.405
2662	512499.971	4791543.408	48.309	2687	512501.679	4791529.811	48.409
2663	512491.273	4791548.372	48.299	2688	512500.736	4791530.588	48.408
2664	512482.186	4791553.450	48.370	2689	512504.828	4791537.195	48.440
2665	512467.069	4791556.358	48.424	2690	512501.661	4791538.949	48.417
2666	512475.404	4791552.158	48.383	2691	512503.393	4791538.640	48.463
2667	512486.047	4791546.891	48.379	2692	512505.161	4791537.764	48.422
2668	512543.087	4791518.089	48.099	2693	512508.500	4791542.116	48.327
2669	512543.271	4791518.307	48.072	2694	512506.711	4791543.025	48.328
2670	512533.510	4791522.865	48.185	2695	512508.777	4791542.279	48.308
2671	512533.691	4791523.119	48.180	2696	512505.758	4791543.780	48.310
2672	512524.271	4791527.783	48.248	2697	512505.698	4791543.853	48.279
2673	512524.163	4791527.521	48.251	2698	512506.379	4791544.752	48.234
2674	512523.443	4791526.845	48.302	2699	512506.487	4791544.051	48.352
2675	512512.176	4791531.175	48.367	2700	512504.941	4791543.638	48.263
2676	512509.860	4791534.653	48.330	2701	512505.220	4791543.971	48.264
2677	512510.042	4791534.911	48.318	2702	512504.854	4791544.229	48.215
2678	512505.052	4791537.060	48.429	2703	512505.902	4791544.576	48.220
2679	512505.029	4791537.401	48.438	2704	512505.640	4791544.603	48.198
2680	512500.755	4791531.228	48.610	2705	512505.770	4791544.790	48.185
2681	512500.926	4791528.889	48.387	2706	512500.502	4791547.529	48.182
2682	512500.267	4791528.107	48.391	2707	512500.610	4791547.771	48.178

2708	512490.381	4791553.229	48.179	2733	512486.095	4791546.407	49.236
2709	512490.566	4791553.446	48.142	2734	512484.565	4791542.776	49.218
2710	512480.380	4791558.836	48.262	2735	512483.843	4791543.447	49.252
2711	512480.513	4791559.082	48.229	2736	512489.388	4791539.028	49.582
2712	512470.657	4791564.232	48.353	2737	512486.214	4791545.023	49.219
2713	512470.784	4791564.479	48.310	2738	512484.069	4791543.548	49.257
2714	512470.869	4791564.743	48.297	2739	512484.911	4791543.295	49.262
2715	512468.955	4791560.970	48.491	2740	512485.321	4791542.336	49.284
2716	512467.102	4791557.373	48.475	2741	512486.462	4791543.769	49.242
2717	512464.755	4791552.698	48.547	2742	512487.428	4791545.706	49.200
2718	512468.493	4791550.287	48.619	2743	512492.700	4791540.823	48.794
2719	512468.828	4791550.743	48.615	2744	512493.597	4791542.639	48.782
2720	512472.552	4791546.927	48.659	2745	512498.186	4791537.864	48.622
2721	512480.091	4791541.202	48.692	2746	512498.219	4791538.047	48.628
2722	512484.387	4791542.739	48.603	2747	512492.716	4791540.788	48.798
2723	512483.486	4791543.378	48.531	2748	512486.614	4791543.887	49.221
2724	512486.017	4791546.682	48.385	2749	512486.542	4791543.692	49.218
2725	512492.150	4791543.656	48.351	2750	512491.117	4791541.283	49.509
2726	512501.514	4791538.984	48.413	2751	512491.275	4791540.982	49.517
2727	512501.321	4791539.189	48.377	2752	512492.104	4791536.790	49.383
2728	512500.683	4791538.301	48.558	2753	512491.886	4791537.045	49.526
2729	512501.651	4791538.726	48.527	2754	512494.104	4791539.827	49.521
2730	512501.385	4791538.792	48.524	2755	512495.712	4791539.044	48.709
2731	512499.149	4791539.841	48.615	2756	512493.310	4791535.923	48.760
2732	512495.218	4791541.830	48.780	2757	512493.571	4791535.639	48.724

2758	512493.709	4791535.600	48.805	2783	512496.557	4791526.559	48.522
2759	512496.005	4791534.458	48.720	2784	512508.777	4791522.602	48.634
2760	512494.238	4791531.048	48.629	2785	512508.846	4791525.045	48.493
2761	512493.915	4791530.618	48.629	2786	512509.612	4791524.796	48.523
2762	512489.696	4791533.649	48.522	2787	512508.702	4791522.540	48.586
2763	512493.418	4791535.464	48.623	2788	512507.476	4791521.015	48.690
2764	512492.158	4791536.429	48.601	2789	512504.792	4791523.082	50.249
2765	512491.966	4791536.423	48.637	2790	512503.958	4791523.798	50.331
2766	512491.346	4791535.600	48.628	2791	512503.719	4791524.053	50.415
2767	512492.284	4791534.862	48.631	2792	512504.929	4791525.551	50.330
2768	512492.938	4791535.678	48.625	2793	512502.510	4791527.528	51.886
2769	512493.527	4791535.524	48.726	2794	512501.276	4791526.009	51.880
2770	512497.495	4791533.615	48.631	2795	512499.896	4791526.914	51.841
2771	512494.516	4791529.716	48.537	2796	512499.783	4791524.390	51.884
2772	512498.243	4791523.685	48.578	2797	512501.036	4791525.883	51.859
2773	512496.447	4791525.123	49.747	2798	512503.584	4791523.969	53.432
2774	512499.364	4791524.329	48.627	2799	512503.929	4791523.822	53.130
2775	512502.365	4791521.940	48.581	2800	512503.413	4791523.957	53.456
2776	512507.527	4791520.268	48.713	2801	512502.182	4791522.430	53.432
2777	512507.531	4791520.247	48.749	2802	512503.358	4791521.485	53.459
2778	512497.839	4791528.107	48.525	2803	512504.550	4791523.007	53.499
2779	512500.697	4791532.050	48.616	2804	512504.443	4791523.242	53.462
2780	512505.476	4791529.662	48.513	2805	512507.093	4791521.059	55.048
2781	512511.889	4791526.433	48.511	2806	512506.955	4791521.040	55.067
2782	512503.390	4791521.091	48.619	2807	512505.726	4791519.516	55.054

2808	512505.290	4791515.089	55.005	2833	512487.104	4791520.303	49.558
2809	512503.616	4791516.211	55.008	2834	512485.996	4791523.109	49.743
2810	512500.116	4791512.011	55.040	2835	512486.476	4791522.688	49.575
2811	512501.762	4791510.756	55.032	2836	512486.063	4791522.231	49.512
2812	512507.091	4791521.091	55.016	2837	512489.397	4791519.651	49.510
2813	512507.384	4791520.831	54.999	2838	512489.754	4791520.104	49.475
2814	512507.476	4791520.926	55.018	2839	512489.281	4791520.411	49.508
2815	512509.005	4791519.740	55.121	2840	512488.504	4791520.047	49.544
2816	512507.500	4791517.876	55.124	2841	512488.227	4791519.701	49.538
2817	512500.551	4791509.319	55.084	2842	512487.854	4791519.961	49.563
2818	512498.759	4791510.602	55.102	2843	512477.071	4791526.819	50.382
2819	512497.537	4791509.121	55.013	2844	512496.005	4791507.919	51.841
2820	512497.108	4791512.028	53.891	2845	512497.660	4791508.775	50.806
2821	512495.870	4791510.457	53.924	2846	512499.147	4791507.722	50.769
2822	512494.557	4791511.548	53.827	2847	512499.016	4791507.513	50.755
2823	512495.843	4791513.055	53.844	2848	512500.956	4791506.043	50.892
2824	512493.712	4791514.778	52.549	2849	512501.086	4791506.024	50.842
2825	512492.433	4791513.298	52.403	2850	512502.401	4791507.571	50.910
2826	512491.308	4791514.216	52.390	2851	512503.531	4791506.310	50.767
2827	512492.568	4791515.715	52.396	2852	512503.853	4791506.421	50.806
2828	512489.948	4791517.870	50.808	2853	512503.369	4791505.789	50.796
2829	512488.592	4791516.437	50.634	2854	512508.773	4791501.241	50.721
2830	512488.668	4791516.359	50.665	2855	512494.062	4791511.654	50.788
2831	512489.753	4791517.855	50.633	2856	512502.159	4791508.077	49.322
2832	512488.553	4791518.814	50.606	2857	512503.087	4791509.086	49.385

2858	512501.799	4791510.973	49.417	2883	512502.815	4791503.714	50.668
2859	512500.093	4791512.434	49.520	2884	512503.901	4791502.752	50.658
2860	512495.482	4791516.095	49.485	2885	512504.655	4791502.118	50.649
2861	512486.555	4791523.369	49.642	2886	512506.606	4791500.516	50.672
2862	512486.537	4791523.551	49.501	2887	512507.349	4791499.825	50.644
2863	512485.905	4791524.109	49.509	2888	512507.752	4791499.504	50.663
2864	512488.410	4791522.516	49.481	2889	512509.049	4791500.952	50.593
2865	512488.204	4791522.238	49.468	2890	512492.813	4791514.835	49.514
2866	512488.111	4791522.317	49.493	2891	512492.543	4791516.069	49.570
2867	512485.456	4791519.012	49.576	2892	512487.163	4791520.441	49.608
2868	512484.127	4791521.773	49.465	2893	512486.953	4791520.144	49.637
2869	512484.262	4791520.004	49.612	2894	512485.802	4791518.702	49.616
2870	512484.260	4791520.023	49.537	2895	512487.342	4791517.421	50.614
2871	512483.857	4791521.508	50.385	2896	512488.512	4791518.868	50.585
2872	512483.913	4791519.786	50.505	2897	512489.799	4791517.789	50.672
2873	512487.338	4791517.415	50.600	2898	512488.572	4791516.303	50.654
2874	512487.143	4791517.172	50.602	2899	512489.313	4791517.973	50.653
2875	512486.985	4791517.293	50.542	2900	512490.228	4791517.775	50.750
2876	512486.061	4791516.162	50.570	2901	512488.615	4791516.231	50.676
2877	512487.731	4791514.801	50.601	2902	512491.295	4791514.088	52.381
2878	512488.304	4791514.288	50.628	2903	512492.665	4791515.749	52.377
2879	512494.513	4791509.246	50.699	2904	512493.498	4791515.102	52.367
2880	512501.087	4791505.974	50.850	2905	512492.152	4791513.385	52.355
2881	512500.941	4791505.380	50.748	2906	512494.575	4791511.383	53.826
2882	512501.435	4791503.602	50.692	2907	512495.966	4791513.073	53.826

2908	512496.608	4791512.660	53.518	2933	511935.265	4791843.227	40.615
2909	512496.833	4791512.355	53.839	2934	511934.815	4791842.302	40.699
2910	512495.516	4791510.663	53.915	2935	511935.749	4791841.780	40.785
2911	512497.569	4791508.937	55.062	2936	511936.682	4791841.934	40.902
2912	512498.934	4791510.647	55.074	2937	511939.405	4791842.242	40.617
2913	512505.930	4791519.217	55.050	2938	511960.832	4791830.969	40.651
2914	512505.705	4791519.393	55.032	2939	511960.147	4791829.780	40.600
2915	512503.069	4791521.555	53.446	2940	511959.181	4791830.302	40.665
2916	512502.176	4791522.275	53.454	2941	511960.079	4791829.372	41.000
2917	512499.470	4791524.486	51.825	2942	511960.208	4791829.622	41.100
2918	512498.542	4791525.240	51.833	2943	511958.792	4791830.162	40.933
2919	512501.322	4791528.642	51.824	2944	511958.931	4791830.398	40.943
2920	512502.561	4791527.606	51.843	2945	511961.229	4791830.886	41.001
2921	512505.227	4791525.450	50.261	2946	511962.089	4791829.946	41.209
2922	512504.689	4791523.042	50.253	2947	511961.689	4791828.893	41.267
2923	512506.041	4791524.654	50.257	2948	511962.255	4791828.643	41.313
2924	512508.726	4791522.617	48.613	2949	511963.117	4791828.689	41.228
2925	512507.481	4791520.926	48.555	2950	511962.907	4791828.260	41.191
2926	512507.576	4791520.926	48.681	2951	511962.460	4791828.487	41.207
2927	512509.020	4791519.776	48.573	2952	511963.443	4791829.176	41.276
2928	512513.717	4791525.559	48.504	2953	511963.092	4791828.189	41.287
2929	511795.217	4791915.281	39.279	2954	511963.600	4791827.989	41.380
2930	511823.455	4791902.486	38.828	2955	511965.234	4791827.776	41.476
2931	511935.407	4791842.285	40.856	2956	511965.532	4791827.039	41.601
2932	511936.223	4791842.678	40.689	2957	511965.407	4791826.804	41.627

2958	511964.655	4791827.231	41.475	2983	512021.059	4791797.060	42.289
2959	511965.034	4791827.889	41.486	2984	512022.214	4791796.408	42.313
2960	511964.838	4791828.706	41.546	2985	512028.297	4791794.364	41.326
2961	511964.560	4791828.220	41.569	2986	512027.945	4791793.637	42.220
2962	511965.251	4791827.891	41.528	2987	512027.724	4791793.490	42.504
2963	511971.526	4791825.336	41.738	2988	512061.262	4791776.454	41.710
2964	511975.699	4791823.011	41.540	2989	512044.963	4791785.447	41.486
2965	511978.597	4791822.764	41.530	2990	512044.161	4791784.656	42.761
2966	511979.041	4791818.773	41.606	2991	512044.113	4791784.618	42.765
2967	511981.680	4791817.347	41.745	2992	512045.351	4791783.959	42.810
2968	511982.045	4791816.790	41.692	2993	512045.497	4791784.237	42.563
2969	511982.042	4791816.786	41.691	2994	512057.991	4791776.520	43.304
2970	511980.876	4791817.318	41.682	2995	512056.854	4791776.623	43.315
2971	511981.520	4791818.537	41.314	2996	512057.337	4791777.471	43.067
2972	511982.752	4791817.903	41.311	2997	512058.621	4791776.755	43.169
2973	511985.291	4791819.116	41.033	2998	512061.043	4791777.750	41.300
2974	511989.734	4791812.973	41.659	2999	512061.044	4791775.051	43.338
2975	511989.454	4791813.742	41.528	3000	512061.705	4791775.077	43.250
2976	511989.971	4791813.543	41.400	3001	512061.853	4791775.392	43.076
2977	511996.384	4791813.124	40.675	3002	512061.872	4791775.661	42.085
2978	512007.454	4791807.122	40.714	3003	512063.568	4791773.387	43.723
2979	512018.823	4791800.773	40.918	3004	512063.382	4791774.266	43.264
2980	512020.140	4791797.867	41.997	3005	512062.916	4791773.342	43.568
2981	512020.052	4791797.631	42.266	3006	512063.844	4791772.884	43.527
2982	512021.356	4791796.156	42.548	3007	512064.344	4791773.716	43.355

3008	512073.448	4791768.900	43.468	3033	512105.840	4791750.387	44.458
3009	512073.476	4791768.944	43.465	3034	512106.831	4791749.887	44.492
3010	512074.070	4791768.590	43.484	3035	512107.278	4791750.751	44.272
3011	512074.073	4791768.952	42.953	3036	512109.597	4791749.973	44.079
3012	512074.264	4791770.595	43.465	3037	512110.218	4791749.495	44.103
3013	512085.847	4791762.155	43.732	3038	512110.070	4791749.172	44.268
3014	512086.012	4791762.387	42.577	3039	512112.055	4791747.614	44.563
3015	512090.867	4791759.728	42.975	3040	512112.088	4791747.128	44.562
3016	512091.224	4791759.297	43.845	3041	512111.623	4791747.383	44.543
3017	512085.940	4791761.465	43.793	3042	512112.084	4791748.171	44.380
3018	512090.279	4791759.073	43.878	3043	512112.540	4791747.899	44.394
3019	512099.912	4791754.653	44.013	3044	512121.224	4791743.599	44.381
3020	512100.026	4791754.907	44.601	3045	512120.970	4791743.222	44.537
3021	512100.991	4791754.428	44.592	3046	512121.251	4791743.685	44.352
3022	512099.542	4791753.895	44.655	3047	512130.540	4791738.651	44.554
3023	512099.969	4791754.730	44.611	3048	512131.039	4791737.812	44.782
3024	512100.895	4791754.225	44.623	3049	512131.275	4791738.114	44.559
3025	512100.422	4791753.436	44.661	3050	512132.152	4791737.678	44.595
3026	512101.069	4791754.311	44.109	3051	512131.965	4791737.358	44.685
3027	512100.700	4791753.731	44.129	3052	512130.998	4791737.532	44.706
3028	512104.277	4791751.355	44.348	3053	512131.804	4791737.106	44.786
3029	512104.589	4791751.780	44.185	3054	512132.876	4791737.357	44.613
3030	512105.133	4791751.441	44.176	3055	512134.685	4791736.293	44.634
3031	512106.543	4791750.462	44.524	3056	512134.558	4791735.927	44.797
3032	512106.347	4791751.318	44.228	3057	512144.528	4791731.131	44.902

3058	512147.332	4791729.463	45.187	3083	512163.252	4791719.638	45.679
3059	512147.219	4791729.146	45.087	3084	512163.056	4791719.401	45.701
3060	512149.784	4791727.559	45.221	3085	512162.959	4791719.265	45.887
3061	512150.727	4791726.541	45.571	3086	512173.112	4791713.872	46.076
3062	512150.594	4791727.488	45.228	3087	512172.992	4791714.077	45.815
3063	512150.136	4791726.591	45.454	3088	512173.214	4791714.271	45.823
3064	512151.118	4791726.032	45.491	3089	512173.515	4791714.721	45.805
3065	512151.636	4791726.975	45.277	3090	512179.831	4791710.065	46.184
3066	512151.886	4791727.074	45.232	3091	512182.914	4791708.788	46.007
3067	512151.629	4791726.828	45.246	3092	512182.957	4791709.045	45.918
3068	512156.624	4791724.469	45.300	3093	512183.210	4791709.543	45.919
3069	512156.404	4791724.279	45.319	3094	512183.754	4791708.680	45.957
3070	512159.266	4791721.822	45.541	3095	512183.003	4791708.973	45.927
3071	512162.858	4791720.577	45.394	3096	512183.288	4791709.622	45.889
3072	512160.429	4791721.715	45.690	3097	512184.008	4791709.279	45.893
3073	512160.049	4791721.336	45.647	3098	512181.018	4791710.838	45.813
3074	512159.775	4791721.000	45.781	3099	512183.359	4791709.678	45.768
3075	512159.047	4791721.377	45.712	3100	512188.400	4791707.584	45.729
3076	512159.622	4791722.342	45.678	3101	512188.308	4791707.425	45.707
3077	512160.445	4791721.891	45.687	3102	512188.016	4791706.973	45.738
3078	512159.834	4791720.823	45.899	3103	512195.614	4791705.007	45.772
3079	512159.908	4791721.070	45.644	3104	512194.296	4791703.163	46.330
3080	512162.798	4791719.232	45.900	3105	512194.657	4791702.468	46.204
3081	512162.878	4791719.445	45.696	3106	512193.531	4791703.080	46.169
3082	512163.567	4791720.079	45.699	3107	512194.234	4791704.506	45.800

3108	512195.447	4791703.862	45.775	3133	512221.460	4791690.955	46.331
3109	512196.017	4791704.489	45.785	3134	512221.023	4791690.157	46.349
3110	512195.619	4791703.702	45.749	3135	512221.844	4791689.671	46.336
3111	512200.014	4791700.319	46.523	3136	512221.217	4791690.754	46.300
3112	512200.072	4791701.067	45.766	3137	512221.109	4791690.391	46.317
3113	512199.521	4791699.841	46.296	3138	512221.427	4791691.012	46.282
3114	512200.634	4791699.258	46.412	3139	512222.334	4791690.571	46.306
3115	512201.299	4791700.428	46.006	3140	512222.220	4791690.273	46.173
3116	512203.133	4791699.874	45.995	3141	512222.032	4791689.829	46.329
3117	512203.776	4791700.101	46.075	3142	512233.539	4791682.119	46.838
3118	512205.134	4791697.692	46.098	3143	512233.883	4791681.596	46.539
3119	512208.146	4791696.407	46.253	3144	512232.908	4791682.182	46.572
3120	512208.824	4791695.695	46.208	3145	512233.449	4791683.028	46.527
3121	512207.039	4791697.853	46.180	3146	512234.445	4791682.485	46.549
3122	512211.712	4791695.376	46.228	3147	512246.347	4791680.069	46.132
3123	512216.128	4791693.075	46.258	3148	512234.265	4791685.606	46.190
3124	512211.697	4791695.312	46.228	3149	512232.830	4791684.111	46.473
3125	512212.085	4791694.224	46.218	3150	512233.287	4791684.199	46.391
3126	512211.728	4791694.424	46.215	3151	512244.737	4791679.058	46.486
3127	512212.017	4791694.863	46.233	3152	512244.601	4791678.640	46.548
3128	512212.362	4791694.644	46.225	3153	512245.566	4791677.039	46.620
3129	512214.437	4791692.039	46.389	3154	512245.890	4791677.562	46.631
3130	512216.166	4791693.687	46.287	3155	512246.403	4791677.270	46.645
3131	512216.806	4791693.378	46.277	3156	512246.071	4791676.713	46.645
3132	512222.264	4791690.560	46.347	3157	512249.927	4791678.372	46.262

3158	512251.836	4791674.228	46.610	3183	512274.370	4791666.045	46.626
3159	512251.650	4791673.882	46.618	3184	512274.084	4791662.256	46.773
3160	512252.905	4791674.047	46.614	3185	512273.948	4791661.853	46.827
3161	512251.975	4791674.509	46.598	3186	512279.810	4791656.870	46.954
3162	512251.535	4791673.622	46.635	3187	512280.319	4791657.708	46.937
3163	512252.406	4791673.171	46.623	3188	512281.198	4791657.227	46.937
3164	512252.762	4791673.706	46.533	3189	512284.795	4791660.446	46.539
3165	512252.598	4791673.391	46.594	3190	512282.931	4791657.801	46.892
3166	512264.043	4791666.060	46.967	3191	512283.656	4791657.384	46.836
3167	512262.863	4791665.928	46.864	3192	512283.300	4791656.610	46.895
3168	512263.967	4791665.363	46.838	3193	512282.532	4791657.042	46.899
3169	512264.590	4791666.525	46.707	3194	512282.650	4791657.327	46.851
3170	512263.466	4791667.113	46.724	3195	512282.789	4791657.582	46.794
3171	512262.665	4791672.004	46.583	3196	512283.663	4791657.130	46.852
3172	512261.156	4791669.190	46.695	3197	512283.509	4791656.818	46.864
3173	512260.815	4791668.836	46.693	3198	512292.843	4791656.100	46.633
3174	512271.360	4791663.738	46.753	3199	512292.463	4791652.340	46.969
3175	512271.046	4791663.323	46.765	3200	512292.372	4791652.094	46.952
3176	512269.413	4791662.708	47.187	3201	512297.585	4791647.627	47.252
3177	512268.836	4791662.827	46.989	3202	512297.922	4791647.126	47.224
3178	512269.350	4791663.676	46.701	3203	512296.932	4791647.667	47.176
3179	512270.280	4791663.113	46.754	3204	512297.454	4791648.538	46.994
3180	512270.711	4791661.992	46.797	3205	512298.416	4791647.990	47.060
3181	512271.156	4791662.727	46.815	3206	512303.327	4791645.552	46.968
3182	512272.110	4791662.247	46.817	3207	512302.927	4791644.881	47.159

3208	512302.237	4791645.283	47.114	3233	512323.793	4791634.288	47.234
3209	512303.412	4791650.397	46.548	3234	512324.737	4791633.712	47.263
3210	512303.257	4791646.632	46.995	3235	512331.192	4791631.468	47.314
3211	512303.065	4791646.326	46.972	3236	512340.321	4791632.245	47.172
3212	512309.447	4791642.214	47.168	3237	512338.589	4791628.462	47.461
3213	512309.614	4791641.618	47.149	3238	512338.519	4791627.776	47.319
3214	512309.819	4791641.991	47.185	3239	512337.391	4791628.326	47.363
3215	512315.793	4791640.513	47.166	3240	512337.987	4791629.443	47.329
3216	512315.939	4791640.795	47.041	3241	512339.105	4791628.855	47.271
3217	512311.540	4791639.676	47.372	3242	512343.380	4791625.467	47.952
3218	512317.619	4791643.420	47.008	3243	512342.465	4791625.751	47.672
3219	512315.599	4791640.166	47.195	3244	512343.016	4791626.791	47.426
3220	512316.087	4791640.899	47.175	3245	512344.824	4791625.916	47.416
3221	512317.223	4791640.429	47.171	3246	512345.030	4791625.337	47.599
3222	512316.713	4791639.418	47.199	3247	512444.663	4791577.941	48.147
3223	512317.956	4791636.256	47.340	3248	512429.409	4791585.857	48.632
3224	512319.019	4791635.627	47.419	3249	512417.375	4791592.098	48.627
3225	512319.100	4791636.295	47.379	3250	512406.232	4791597.903	48.591
3226	512319.857	4791637.261	47.233	3251	512394.796	4791604.088	48.400
3227	512318.864	4791637.872	47.153	3252	512385.891	4791606.285	48.269
3228	512318.533	4791637.333	47.375	3253	512381.183	4791611.507	48.007
3229	512319.520	4791636.736	47.321	3254	512369.552	4791617.837	47.722
3230	512325.175	4791639.693	47.043	3255	512369.556	4791617.844	47.723
3231	512323.833	4791633.327	47.684	3256	512358.840	4791623.132	47.544
3232	512323.296	4791633.425	47.577	3257	512357.383	4791619.213	48.057

3258	512357.425	4791618.423	47.729	3283	512370.398	4791611.208	47.812
3259	512358.037	4791619.618	47.643	3284	512370.175	4791610.651	47.972
3260	512356.895	4791620.245	47.490	3285	512370.708	4791611.312	47.768
3261	512356.218	4791619.098	47.651	3286	512372.673	4791611.291	47.852
3262	512354.302	4791619.628	47.888	3287	512372.606	4791611.057	47.632
3263	512353.087	4791620.265	47.881	3288	512372.462	4791610.895	47.880
3264	512353.630	4791621.332	47.878	3289	512372.234	4791610.582	47.842
3265	512354.817	4791620.692	47.895	3290	512372.032	4791610.048	48.021
3266	512354.658	4791620.270	47.524	3291	512377.132	4791608.474	47.573
3267	512354.361	4791619.749	47.889	3292	512377.294	4791608.649	47.873
3268	512356.396	4791618.970	47.936	3293	512377.037	4791608.238	47.874
3269	512356.081	4791618.483	47.911	3294	512376.865	4791607.934	47.847
3270	512360.197	4791617.295	47.705	3295	512376.547	4791607.459	48.026
3271	512362.315	4791616.075	48.250	3296	512379.501	4791607.346	47.870
3272	512362.661	4791617.456	47.714	3297	512379.412	4791607.156	47.592
3273	512363.630	4791616.444	47.672	3298	512379.257	4791606.959	47.872
3274	512363.011	4791615.338	47.779	3299	512377.294	4791607.723	47.861
3275	512361.818	4791617.326	47.733	3300	512377.790	4791608.703	47.932
3276	512361.280	4791616.281	47.806	3301	512379.584	4791607.727	47.929
3277	512364.406	4791614.750	47.738	3302	512379.114	4791606.663	47.868
3278	512364.671	4791615.298	47.639	3303	512378.820	4791606.140	48.033
3279	512365.156	4791615.057	47.637	3304	512389.346	4791602.225	48.242
3280	512364.904	4791614.538	47.698	3305	512388.766	4791601.205	48.225
3281	512364.050	4791614.732	47.795	3306	512386.335	4791601.872	47.997
3282	512363.641	4791614.250	47.981	3307	512386.619	4791602.400	47.803

3308	512386.949	4791602.590	47.834	3333	512447.082	4791571.744	48.473
3309	512387.061	4791602.796	47.572	3334	512449.290	4791576.410	48.288
3310	512387.185	4791602.972	47.842	3335	512449.334	4791576.240	48.265
3311	512387.666	4791603.104	48.224	3336	512449.400	4791576.439	48.264
3312	512387.096	4791602.137	48.220	3337	512449.836	4791575.950	48.305
3313	512394.136	4791598.882	48.228	3338	512460.518	4791570.103	48.334
3314	512428.814	4791575.508	48.549	3339	512470.515	4791564.618	48.307
3315	512438.371	4791570.898	48.256	3340	512468.682	4791561.096	48.475
3316	512439.497	4791571.003	48.270	3341	512467.046	4791557.586	48.461
3317	512444.055	4791568.582	48.255	3342	512468.753	4791560.900	48.455
3318	512445.146	4791567.174	48.410	3343	512457.217	4791566.720	48.457
3319	512444.793	4791567.753	48.606	3344	512468.662	4791561.011	48.471
3320	512445.434	4791567.745	48.464	3345	512466.918	4791557.576	48.489
3321	512445.413	4791566.963	48.429	3346	512454.949	4791563.489	48.469
3322	512444.507	4791567.365	48.249	3347	512444.492	4791568.611	48.479
3323	512444.862	4791568.047	48.257	3348	512446.271	4791572.060	48.473
3324	512445.739	4791567.668	48.338	3349	512445.065	4791569.955	48.586
3325	512445.693	4791566.345	48.621	3350	512445.627	4791570.819	48.490
3326	512453.068	4791561.126	48.473	3351	512445.585	4791571.638	48.455
3327	512460.005	4791557.902	48.508	3352	512444.532	4791573.627	48.094
3328	512464.745	4791554.993	48.563	3353	512445.212	4791575.766	48.058
3329	512464.506	4791552.843	48.629	3354	512444.945	4791575.072	48.166
3330	512466.854	4791557.493	48.493	3355	512444.601	4791575.202	48.068
3331	512449.278	4791576.052	48.266	3356	512444.840	4791575.870	47.803
3332	512446.809	4791571.864	48.459	3357	512444.760	4791575.664	47.510

3358	512444.664	4791575.467	47.797	3383	512425.642	4791583.600	48.328
3359	512437.795	4791573.448	48.523	3384	512426.787	4791583.069	48.315
3360	512438.203	4791574.487	48.490	3385	512427.779	4791582.488	47.820
3361	512438.404	4791574.962	48.291	3386	512426.139	4791581.729	48.322
3362	512438.959	4791576.102	47.967	3387	512417.756	4791585.269	48.321
3363	512439.424	4791577.594	47.837	3388	512413.219	4791587.455	48.365
3364	512439.511	4791577.835	47.533	3389	512417.742	4791586.417	48.015
3365	512439.602	4791578.024	47.818	3390	512417.896	4791587.001	47.828
3366	512432.729	4791580.992	47.829	3391	512418.006	4791587.202	47.824
3367	512432.567	4791580.816	47.554	3392	512418.119	4791587.377	47.546
3368	512432.363	4791580.608	47.830	3393	512418.286	4791587.551	47.821
3369	512430.474	4791579.135	48.310	3394	512416.934	4791588.154	47.926
3370	512430.584	4791579.745	48.144	3395	512418.141	4791588.183	47.725
3371	512427.131	4791578.770	48.471	3396	512417.566	4791587.076	47.902
3372	512427.559	4791579.735	48.463	3397	512416.371	4791587.620	47.897
3373	512426.314	4791583.838	47.824	3398	512411.732	4791590.133	48.972
3374	512426.229	4791583.635	47.532	3399	512412.947	4791590.492	47.939
3375	512426.153	4791583.419	47.814	3400	512412.507	4791589.515	47.845
3376	512425.562	4791583.579	47.808	3401	512411.082	4791591.351	48.171
3377	512426.302	4791582.071	48.336	3402	512410.605	4791590.454	47.887
3378	512425.126	4791582.598	48.335	3403	512407.471	4791591.335	48.123
3379	512424.869	4791582.069	48.433	3404	512407.765	4791591.794	47.849
3380	512423.740	4791582.596	48.401	3405	512407.841	4791592.038	47.876
3381	512424.167	4791583.544	48.335	3406	512407.937	4791592.225	47.592
3382	512425.346	4791583.013	48.316	3407	512408.042	4791592.487	47.876

3408	512398.346	4791597.318	47.850	3433	512509.663	4791503.123	48.239
3409	512398.253	4791597.092	47.552	3434	512509.442	4791502.894	48.850
3410	512398.164	4791596.854	47.829	3435	512505.853	4791506.123	48.967
3411	512397.975	4791596.652	47.877	3436	512505.554	4791506.365	49.522
3412	512397.665	4791596.097	48.052	3437	512505.795	4791506.402	48.318
3413	512396.478	4791595.233	48.407	3438	512505.599	4791506.150	48.969
3414	512395.944	4791594.339	48.395	3439	512504.410	4791507.522	48.317
3415	512504.581	4791508.324	48.266	3440	512504.174	4791507.320	49.377
3416	512502.426	4791511.421	48.376	3441	512503.075	4791508.871	49.461
3417	512502.092	4791510.927	48.326	3442	512502.490	4791507.895	49.414
3418	512504.127	4791507.992	48.069	3443	512504.265	4791506.472	49.384
3419	512529.931	4791483.137	48.714	3444	512503.693	4791505.777	49.216
3420	512530.174	4791482.899	48.400	3445	512510.105	4791500.420	48.809
3421	512530.177	4791483.742	48.734	3446	512520.405	4791491.421	48.974
3422	512530.518	4791483.709	48.333	3447	512524.102	4791489.240	48.718
3423	512530.145	4791484.357	48.757	3448	512524.487	4791489.667	48.715
3424	512530.454	4791484.414	48.283	3449	512524.553	4791488.857	48.698
3425	512529.780	4791484.960	48.691	3450	512528.572	4791484.095	48.832
3426	512530.007	4791485.202	48.269	3451	512528.413	4791483.886	49.111
3427	512526.542	4791487.825	48.711	3452	512525.991	4791486.030	50.464
3428	512526.705	4791488.109	48.298	3453	512525.011	4791486.943	51.069
3429	512521.720	4791492.150	48.872	3454	512525.265	4791486.724	51.390
3430	512521.967	4791492.339	48.324	3455	512524.030	4791485.684	51.594
3431	512515.626	4791497.499	48.727	3456	512523.983	4791485.851	51.082
3432	512515.869	4791497.752	48.269	3457	512528.724	4791481.702	48.797

3458	512528.986	4791481.476	48.515	3483	512491.475	4791526.851	48.435
3459	512531.127	4791479.563	48.495	3484	512497.290	4791521.849	48.419
3460	512532.631	4791478.215	49.846	3485	512496.529	4791521.084	48.437
3461	512532.489	4791480.962	48.519	3486	512495.131	4791519.589	48.462
3462	512531.471	4791481.912	48.516	3487	512494.535	4791518.690	48.479
3463	512532.025	4791481.587	47.887	3488	512494.322	4791518.047	48.261
3464	512532.668	4791482.875	48.298	3489	512494.165	4791517.893	47.953
3465	512532.322	4791482.208	48.233	3490	512493.979	4791517.721	48.289
3466	512531.858	4791481.674	48.189	3491	512530.017	4791495.930	48.427
3467	512532.174	4791481.395	48.180	3492	512529.817	4791495.800	48.199
3468	512532.634	4791481.938	48.248	3493	512529.666	4791495.633	48.459
3469	512533.217	4791482.389	48.320	3494	512519.292	4791506.161	48.360
3470	512534.255	4791480.316	48.301	3495	512519.156	4791505.963	48.069
3471	512533.187	4791480.989	48.388	3496	512519.008	4791505.775	48.360
3472	512531.259	4791479.748	48.601	3497	512511.953	4791511.380	48.199
3473	512491.422	4791519.866	48.242	3498	512513.009	4791511.238	48.241
3474	512491.528	4791520.002	47.956	3499	512512.183	4791512.062	48.193
3475	512491.646	4791520.162	48.231	3500	512511.269	4791511.135	48.217
3476	512491.640	4791520.330	48.396	3501	512512.171	4791510.348	48.216
3477	512491.262	4791519.835	48.432	3502	512499.177	4791522.602	48.483
3478	512488.743	4791521.883	48.454	3503	512499.846	4791522.141	48.517
3479	512489.146	4791522.388	48.446	3504	512495.472	4791525.143	48.308
3480	512488.757	4791523.390	48.477	3505	512495.423	4791524.911	48.081
3481	512489.396	4791524.255	48.484	3506	512495.250	4791524.783	48.264
3482	512490.818	4791526.004	48.444	3507	512492.834	4791527.228	48.259

3508	512492.673	4791527.054	47.977	3533	512530.787	4791495.577	48.498
3509	512492.533	4791526.872	48.239	3534	512529.649	4791494.336	48.419
3510	512492.924	4791527.401	48.598	3535	512530.136	4791494.879	48.441
3511	512495.576	4791525.238	48.508	3536	512530.726	4791494.285	48.421
3512	512496.417	4791524.566	48.565	3537	512530.211	4791493.792	48.410
3513	512490.410	4791524.504	48.312	3538	512529.915	4791491.719	48.271
3514	512496.542	4791519.668	48.331	3539	512538.013	4791485.421	48.351
3515	512498.894	4791522.139	48.279	3540	512539.845	4791484.909	48.431
3516	512507.749	4791515.630	48.204	3541	512539.633	4791484.941	48.324
3517	512506.997	4791514.675	48.244	3542	512538.735	4791484.380	48.509
3518	512506.197	4791515.278	48.329	3543	512565.458	4791461.761	48.719
3519	512509.017	4791515.938	48.369	3544	512565.688	4791461.233	48.756
3520	512515.009	4791510.445	48.330	3545	512565.540	4791462.759	48.515
3521	512523.616	4791502.106	48.439	3546	512566.362	4791461.941	48.440
3522	512524.587	4791495.564	48.354	3547	512571.392	4791459.435	48.599
3523	512524.254	4791495.889	48.266	3548	512571.900	4791459.055	48.602
3524	512524.784	4791496.421	48.342	3549	512572.269	4791459.558	48.576
3525	512525.104	4791496.135	48.310	3550	512570.551	4791457.872	48.761
3526	512526.962	4791496.217	48.406	3551	512570.748	4791456.837	48.801
3527	512529.123	4791495.274	48.383	3552	512569.855	4791457.647	48.732
3528	512528.825	4791495.650	48.409	3553	512570.611	4791458.626	48.552
3529	512529.146	4791495.938	48.434	3554	512571.616	4791457.740	48.563
3530	512529.488	4791495.625	48.440	3555	512572.663	4791456.377	48.640
3531	512530.046	4791495.679	48.494	3556	512577.280	4791456.961	48.797
3532	512530.365	4791495.282	48.495	3557	512576.846	4791456.543	48.617

3558	512582.008	4791452.405	48.790	3583	512581.071	4791443.309	48.436
3559	512588.132	4791447.961	48.549	3584	512582.491	4791441.395	48.520
3560	512595.750	4791442.246	48.637	3585	512582.377	4791441.211	48.516
3561	512604.603	4791436.512	48.860	3586	512581.927	4791440.968	51.416
3562	512613.946	4791431.059	49.150	3587	512594.279	4791433.052	51.498
3563	512622.230	4791425.687	48.921	3588	512594.465	4791433.374	48.582
3564	512596.916	4791441.293	48.685	3589	512594.604	4791433.538	48.719
3565	512596.561	4791440.762	48.670	3590	512600.509	4791429.345	48.737
3566	512596.063	4791441.107	48.652	3591	512600.381	4791429.189	48.679
3567	512588.763	4791444.228	48.747	3592	512599.162	4791429.626	51.587
3568	512589.338	4791444.983	48.601	3593	512599.193	4791429.591	52.946
3569	512590.242	4791444.318	48.634	3594	512606.441	4791425.091	53.032
3570	512589.566	4791443.541	48.770	3595	512606.885	4791425.237	48.837
3571	512589.306	4791444.077	48.797	3596	512606.925	4791425.409	49.071
3572	512614.975	4791427.602	48.847	3597	512617.330	4791418.952	48.916
3573	512615.266	4791427.123	48.954	3598	512617.170	4791418.777	48.750
3574	512615.829	4791427.962	48.582	3599	512616.951	4791418.518	52.969
3575	512614.897	4791428.552	48.795	3600	512619.477	4791417.434	48.864
3576	512614.351	4791427.669	48.884	3601	512619.566	4791417.386	48.911
3577	512579.015	4791442.954	51.627	3602	512624.932	4791421.810	49.136
3578	512579.415	4791443.574	48.825	3603	512625.092	4791421.939	48.864
3579	512580.846	4791442.574	48.881	3604	512625.111	4791422.129	49.200
3580	512580.402	4791441.968	51.597	3605	512620.643	4791425.726	48.832
3581	512580.645	4791442.963	48.507	3606	512620.506	4791425.581	48.520
3582	512581.387	4791443.209	48.466	3607	512620.408	4791425.397	48.784

3608	512621.653	4791424.498	48.826	3633	512514.687	4791516.519	0.000
3609	512621.713	4791424.586	48.599	3634	512027.112	4791776.401	44.210
3610	512621.836	4791424.824	48.856	3635	512410.487	4791574.085	50.100
3611	512621.736	4791425.365	48.819	3636	512399.844	4791580.002	50.020
3612	512621.193	4791426.171	48.814	3637	512539.138	4791511.264	48.480
3613	512620.901	4791425.721	48.830	3638	512525.023	4791503.234	48.650
3614	512621.239	4791425.488	48.827	3639	512173.725	4791696.469	45.850
3615	512620.573	4791424.431	49.087	3640	512173.560	4791696.160	45.840
3616	512620.943	4791423.553	49.051	3641	512621.112	4791410.120	56.180
3617	512619.920	4791424.270	49.070	3642	511722.925	4791951.851	41.583
3618	512620.581	4791425.243	48.789	3643	512557.496	4791476.152	52.571
3619	512621.571	4791424.467	48.834	3644	512384.986	4791579.491	50.494
3620	512621.523	4791423.578	48.943	3645	512384.816	4791580.492	50.537
3621	512624.573	4791421.457	49.201	3646	512384.414	4791579.932	50.523
3622	512624.355	4791421.125	49.259	3647	512378.671	4791591.580	50.950
3623	512623.922	4791420.546	49.407	3648	512377.653	4791589.532	50.729
3624	512623.127	4791419.756	49.488	3649	512373.129	4791581.900	50.848
3625	512622.631	4791419.271	49.524	3650	512369.177	4791575.249	50.980
3626	512622.208	4791418.468	48.679	3651	512368.944	4791574.840	50.984
3627	512621.068	4791418.308	48.887	3652	512368.425	4791574.054	51.020
3628	512620.071	4791419.925	48.970	3653	512366.682	4791571.109	51.129
3629	512618.926	4791419.622	48.930	3654	512367.666	4791568.921	51.115
3630	512619.605	4791419.239	48.965	3655	512374.822	4791571.651	50.919
3631	512427.660	4791574.949	48.160	3656	512374.303	4791571.959	50.917
3632	511804.986	4791910.039	38.890	3657	512373.983	4791571.428	50.961

3658	512374.522	4791571.148	50.947	3683	512466.352	4791537.531	49.533
3659	512377.545	4791566.903	51.036	3684	512465.157	4791536.556	49.611
3660	512381.266	4791573.406	50.603	3685	512463.128	4791538.147	49.530
3661	512479.005	4791561.853	47.951	3686	512462.719	4791538.924	49.524
3662	512485.428	4791561.882	47.593	3687	512462.282	4791539.140	49.627
3663	512491.457	4791558.451	47.588	3688	512462.733	4791542.366	49.495
3664	512498.523	4791554.683	47.670	3689	512460.277	4791540.281	49.611
3665	512497.483	4791555.212	47.609	3690	512461.268	4791539.835	49.586
3666	512496.654	4791555.552	47.667	3691	512460.066	4791540.322	49.561
3667	512496.509	4791555.205	47.716	3692	512455.951	4791543.719	49.577
3668	512492.327	4791553.988	48.210	3693	512455.197	4791543.933	49.607
3669	512493.321	4791553.849	48.200	3694	512456.771	4791544.792	49.515
3670	512411.357	4791573.934	48.170	3695	512457.850	4791545.984	49.500
3671	512411.976	4791573.386	48.134	3696	512453.140	4791545.617	49.590
3672	512410.459	4791575.744	48.067	3697	512452.202	4791546.112	49.549
3673	512475.105	4791529.002	49.554	3698	512453.964	4791548.844	49.483
3674	512476.746	4791531.146	49.510	3699	512446.402	4791550.464	49.515
3675	512475.729	4791528.576	49.971	3700	512444.904	4791551.580	49.645
3676	512476.522	4791529.683	49.491	3701	512448.873	4791550.736	49.526
3677	512477.704	4791530.938	49.506	3702	512447.068	4791551.857	49.515
3678	512462.235	4791538.835	50.545	3703	512446.126	4791554.468	49.510
3679	512467.702	4791534.638	49.526	3704	512442.782	4791553.150	49.696
3680	512469.190	4791536.909	49.521	3705	512438.048	4791556.336	50.863
3681	512469.205	4791537.469	49.489	3706	512440.332	4791555.586	49.551
3682	512465.571	4791536.509	49.599	3707	512438.342	4791556.945	49.537

3708	512437.694	4791556.889	49.548	3733	512428.755	4791575.393	49.482
3709	512436.680	4791557.584	49.552	3734	512428.037	4791574.380	49.466
3710	512436.406	4791557.652	49.515	3735	512434.504	4791570.049	49.457
3711	512440.012	4791557.059	49.529	3736	512438.274	4791570.804	49.528
3712	512439.679	4791556.592	49.550	3737	512436.053	4791571.834	49.495
3713	512439.202	4791556.930	49.550	3738	512435.789	4791571.364	49.495
3714	512439.532	4791557.417	49.530	3739	512436.667	4791571.549	49.488
3715	512440.309	4791558.584	49.492	3740	512436.435	4791571.038	49.484
3716	512432.089	4791560.295	49.617	3741	512439.526	4791569.344	49.495
3717	512432.286	4791560.322	49.583	3742	512439.255	4791568.947	49.484
3718	512432.752	4791561.075	49.554	3743	512438.463	4791569.460	49.486
3719	512433.071	4791559.807	49.597	3744	512437.990	4791570.769	49.496
3720	512433.537	4791560.560	49.552	3745	512440.144	4791569.414	49.525
3721	512434.975	4791562.253	49.524	3746	512442.474	4791564.584	49.465
3722	512429.157	4791562.862	49.640	3747	512449.360	4791559.764	49.450
3723	512426.500	4791564.455	49.538	3748	512449.989	4791562.892	49.544
3724	512428.122	4791566.939	49.516	3749	512447.907	4791564.388	49.518
3725	512420.731	4791571.852	49.508	3750	512444.519	4791566.542	49.508
3726	512415.144	4791574.417	49.452	3751	512445.172	4791566.437	49.535
3727	512416.511	4791571.064	49.537	3752	512451.611	4791561.924	49.528
3728	512416.290	4791571.049	49.593	3753	512451.508	4791561.761	49.522
3729	512414.018	4791572.261	49.637	3754	512451.198	4791561.283	49.509
3730	512412.036	4791573.224	49.571	3755	512453.168	4791559.912	49.499
3731	512413.424	4791573.897	49.546	3756	512453.548	4791560.437	49.521
3732	512414.057	4791576.250	49.506	3757	512454.364	4791559.623	49.518

3758	512453.659	4791558.761	49.493	3783	512482.483	4791537.535	49.531
3759	512455.563	4791555.313	49.463	3784	512482.868	4791537.246	49.520
3760	512457.602	4791557.569	49.546	3785	512482.591	4791536.900	49.466
3761	512473.736	4791545.679	49.514	3786	512481.442	4791535.921	49.461
3762	512464.818	4791552.332	49.513	3787	512486.708	4791531.771	49.471
3763	512460.260	4791555.416	49.537	3788	512489.501	4791533.256	49.489
3764	512462.345	4791553.936	49.547	3789	512491.939	4791530.870	49.519
3765	512463.301	4791551.726	49.496	3790	512491.563	4791530.407	49.509
3766	512464.062	4791552.545	49.507	3791	512492.039	4791530.029	49.523
3767	512465.827	4791547.782	49.473	3792	512492.411	4791530.490	49.573
3768	512464.581	4791550.561	49.497	3793	512492.514	4791530.744	49.527
3769	512469.893	4791548.135	49.451	3794	512493.043	4791528.743	49.502
3770	512494.330	4791529.542	49.532	3795	512492.571	4791527.151	49.479
3771	512472.872	4791542.969	49.467	3796	512494.428	4791529.472	49.576
3772	512474.580	4791545.025	49.460	3797	512480.266	4791564.757	47.601
3773	512470.506	4791547.943	49.546	3798	512480.038	4791564.407	47.703
3774	512472.571	4791546.393	49.533	3799	512480.453	4791564.093	47.719
3775	512473.646	4791545.412	49.510	3800	512480.717	4791564.458	47.613
3776	512472.911	4791544.587	49.484	3801	512482.375	4791563.530	47.599
3777	512476.431	4791541.816	49.532	3802	512475.625	4791567.483	47.528
3778	512480.474	4791536.704	49.440	3803	512475.817	4791567.814	47.502
3779	512481.634	4791539.046	49.540	3804	512466.627	4791573.107	47.461
3780	512480.231	4791537.241	49.440	3805	512453.629	4791581.281	47.305
3781	512482.864	4791538.012	49.530	3806	512441.572	4791588.821	47.195
3782	512482.206	4791537.189	49.476	3807	512441.791	4791589.159	47.177

3808	512444.344	4791586.838	47.300	3833	512387.290	4791613.974	47.945
3809	512444.742	4791587.207	47.227	3834	512387.321	4791613.737	47.949
3810	512453.643	4791581.349	47.327	3835	512386.311	4791614.176	47.891
3811	512453.427	4791580.964	47.335	3836	512386.644	4791613.140	47.886
3812	512441.786	4791580.492	48.727	3837	512395.404	4791615.370	47.897
3813	512442.224	4791581.177	48.738	3838	512395.150	4791616.427	47.853
3814	512442.834	4791580.748	48.738	3839	512395.063	4791616.934	47.813
3815	512442.378	4791580.092	48.736	3840	512382.609	4791621.441	47.684
3816	512443.020	4791580.314	48.616	3841	512371.204	4791626.076	47.794
3817	512444.015	4791579.624	48.620	3842	512357.049	4791632.594	47.227
3818	512444.707	4791580.636	48.626	3843	512344.982	4791632.631	47.124
3819	512443.686	4791581.303	48.628	3844	512346.956	4791636.870	46.915
3820	512442.688	4791582.307	48.150	3845	512342.377	4791641.136	46.649
3821	512441.500	4791580.431	48.199	3846	512336.486	4791641.895	46.600
3822	512444.757	4791578.237	48.160	3847	512334.218	4791638.072	46.856
3823	512446.009	4791580.094	48.051	3848	512319.537	4791645.110	46.927
3824	512450.429	4791576.043	48.259	3849	512321.851	4791649.530	46.674
3825	512450.047	4791580.896	48.026	3850	512322.544	4791651.618	46.517
3826	512443.406	4791585.207	48.141	3851	512317.650	4791655.229	46.383
3827	512438.239	4791588.982	48.085	3852	512307.780	4791661.207	46.269
3828	512434.349	4791591.438	48.375	3853	512292.215	4791670.022	46.156
3829	512417.451	4791602.632	48.077	3854	512271.557	4791680.756	46.021
3830	512403.577	4791611.907	47.984	3855	512256.464	4791689.042	45.630
3831	512395.038	4791615.648	47.987	3856	512249.808	4791692.135	45.013
3832	512395.003	4791615.982	47.985	3857	512247.548	4791683.045	45.517

3858	512247.924	4791679.765	46.163	3883	512195.972	4791723.921	44.293
3859	512247.244	4791680.260	46.124	3884	512195.822	4791722.470	44.281
3860	512248.141	4791681.570	45.720	3885	512186.291	4791719.827	43.927
3861	512250.432	4791678.321	46.269	3886	512182.410	4791715.954	44.015
3862	512254.184	4791681.338	46.088	3887	512182.063	4791716.066	43.822
3863	512256.009	4791688.288	45.656	3888	512181.912	4791715.800	43.921
3864	512244.173	4791696.125	44.826	3889	512180.733	4791716.248	43.530
3865	512239.356	4791687.452	45.325	3890	512180.360	4791716.668	43.940
3866	512233.600	4791695.070	44.967	3891	512178.388	4791712.416	44.043
3867	512230.196	4791687.470	46.203	3892	512178.915	4791712.244	43.752
3868	512227.916	4791690.452	46.056	3893	512181.194	4791710.915	45.545
3869	512215.997	4791696.772	45.905	3894	512183.502	4791709.897	45.747
3870	512219.104	4791701.811	44.879	3895	512183.109	4791710.359	45.317
3871	512221.879	4791708.874	44.475	3896	512183.982	4791713.952	45.251
3872	512213.441	4791713.455	44.322	3897	512188.090	4791718.465	44.837
3873	512207.755	4791706.821	44.819	3898	512190.046	4791723.166	44.145
3874	512204.546	4791706.990	44.967	3899	512193.887	4791725.253	44.104
3875	512196.056	4791707.455	45.194	3900	512192.072	4791726.835	43.561
3876	512201.909	4791703.586	45.642	3901	512159.087	4791738.916	43.028
3877	512196.747	4791705.139	45.622	3902	512161.398	4791731.878	43.387
3878	512194.078	4791711.554	45.109	3903	512162.647	4791728.334	43.727
3879	512198.022	4791720.698	44.212	3904	512164.042	4791725.948	43.753
3880	512196.432	4791723.379	44.370	3905	512164.864	4791725.437	43.266
3881	512197.334	4791722.305	44.231	3906	512164.052	4791725.123	43.934
3882	512197.500	4791723.800	44.199	3907	512165.759	4791725.219	43.867

3908	512165.639	4791719.284	43.859	3933	512157.067	4791703.145	46.178
3909	512165.038	4791719.527	43.357	3934	512158.885	4791704.079	45.570
3910	512165.286	4791725.050	43.653	3935	512160.233	4791706.447	45.580
3911	512164.081	4791724.983	43.866	3936	512161.949	4791706.061	44.200
3912	512163.150	4791724.179	44.137	3937	512162.474	4791705.711	44.351
3913	512161.231	4791724.976	44.131	3938	512163.226	4791707.960	44.242
3914	512156.055	4791725.483	45.001	3939	512162.707	4791708.098	44.141
3915	512158.955	4791723.918	45.086	3940	512163.483	4791710.440	44.131
3916	512161.085	4791722.993	44.905	3941	512163.983	4791710.274	44.128
3917	512161.202	4791721.723	44.983	3942	512165.100	4791714.315	43.885
3918	512160.516	4791722.097	45.123	3943	512164.428	4791714.250	43.713
3919	512158.291	4791723.588	45.100	3944	512150.676	4791714.100	46.306
3920	512170.491	4791695.030	46.442	3945	512152.895	4791707.936	46.320
3921	512170.894	4791694.599	46.388	3946	512152.925	4791701.980	46.332
3922	512172.249	4791697.150	45.884	3947	512154.541	4791705.213	46.373
3923	512174.807	4791698.690	45.632	3948	512154.463	4791702.139	46.500
3924	512167.142	4791702.769	45.652	3949	512154.001	4791702.217	46.457
3925	512165.194	4791700.730	45.643	3950	512154.114	4791705.257	46.403
3926	512158.684	4791703.252	45.144	3951	512154.396	4791708.183	46.398
3927	512160.070	4791703.313	44.507	3952	512153.887	4791708.089	46.373
3928	512160.299	4791702.197	44.483	3953	512153.749	4791711.189	46.301
3929	512160.781	4791701.877	44.464	3954	512153.282	4791710.999	46.380
3930	512158.130	4791712.826	46.121	3955	512152.525	4791713.870	46.257
3931	512158.538	4791710.449	45.949	3956	512152.048	4791713.608	46.356
3932	512157.115	4791706.977	46.047	3957	512151.133	4791716.430	46.315

3958	512150.585	4791716.194	46.435	3983	512121.211	4791734.866	45.760
3959	512146.922	4791721.083	46.150	3984	512110.024	4791741.025	45.656
3960	512149.187	4791718.955	46.257	3985	512107.986	4791741.363	45.626
3961	512148.860	4791718.571	46.465	3986	512107.579	4791741.110	45.694
3962	512145.865	4791720.225	46.361	3987	512117.945	4791735.467	45.961
3963	512146.671	4791720.643	46.433	3988	512093.545	4791743.988	45.352
3964	512143.187	4791723.429	46.475	3989	512094.650	4791740.103	45.483
3965	512142.963	4791723.007	46.414	3990	512105.840	4791731.921	45.742
3966	512139.947	4791725.465	45.938	3991	512105.474	4791731.277	45.790
3967	512139.779	4791724.931	46.326	3992	512106.101	4791730.965	45.795
3968	512137.731	4791725.008	46.401	3993	512106.441	4791731.599	45.756
3969	512138.096	4791724.713	46.272	3994	512112.032	4791729.409	45.796
3970	512145.392	4791721.376	46.443	3995	512112.455	4791730.579	45.698
3971	512141.040	4791716.433	46.158	3996	512112.417	4791730.134	45.807
3972	512138.285	4791712.623	46.349	3997	512095.789	4791736.345	45.716
3973	512139.573	4791709.572	46.434	3998	512096.676	4791737.274	45.682
3974	512144.610	4791709.545	46.339	3999	512096.064	4791737.620	45.608
3975	512143.833	4791709.167	46.338	4000	512096.373	4791738.174	45.602
3976	512145.973	4791707.191	46.196	4001	512096.995	4791737.809	45.651
3977	512144.449	4791711.131	46.225	4002	512099.907	4791737.340	45.502
3978	512139.779	4791715.878	46.150	4003	512098.030	4791746.666	45.350
3979	512138.574	4791716.578	46.147	4004	512097.007	4791746.753	45.450
3980	512136.671	4791714.285	46.212	4005	512085.823	4791753.217	45.408
3981	512123.228	4791721.522	46.015	4006	512085.841	4791753.234	45.180
3982	512120.383	4791726.323	45.841	4007	512083.127	4791754.596	45.392

4008	512082.685	4791754.477	45.204	4033	512064.470	4791756.965	44.761
4009	512086.021	4791752.771	45.262	4034	512064.799	4791757.598	44.786
4010	512086.619	4791752.794	45.244	4035	512056.133	4791761.178	44.639
4011	512089.244	4791751.404	45.227	4036	512055.873	4791761.327	44.626
4012	512088.811	4791751.140	45.330	4037	512055.711	4791761.069	44.626
4013	512089.288	4791744.384	45.243	4038	512055.988	4791760.916	44.634
4014	512089.984	4791743.995	45.263	4039	512055.637	4791760.425	44.684
4015	512089.646	4791743.412	45.231	4040	512055.103	4791760.297	44.706
4016	512088.949	4791743.770	45.253	4041	512055.467	4791760.960	44.661
4017	512086.366	4791741.318	45.417	4042	512056.148	4791760.577	44.690
4018	512085.522	4791741.810	45.339	4043	512055.787	4791759.906	44.727
4019	512087.726	4791743.934	45.224	4044	512063.881	4791753.194	45.079
4020	512076.736	4791746.510	45.076	4045	512064.020	4791753.296	45.023
4021	512077.095	4791749.619	45.091	4046	512061.675	4791754.657	44.921
4022	512075.409	4791749.119	45.139	4047	512063.910	4791756.647	44.768
4023	512074.575	4791747.706	45.152	4048	512051.976	4791759.733	44.737
4024	512074.492	4791747.513	45.233	4049	512052.425	4791762.795	44.597
4025	512069.975	4791750.985	45.078	4050	512057.382	4791768.457	44.655
4026	512069.391	4791751.292	45.069	4051	512057.266	4791768.169	44.744
4027	512069.689	4791751.864	45.049	4052	512052.626	4791764.848	44.626
4028	512070.269	4791751.560	45.053	4053	512047.888	4791763.926	44.691
4029	512075.952	4791758.809	44.878	4054	512048.205	4791764.602	44.647
4030	512075.685	4791758.184	45.071	4055	512044.494	4791767.074	44.457
4031	512065.505	4791757.229	44.812	4056	512044.490	4791767.069	44.453
4032	512065.186	4791756.618	44.783	4057	512042.133	4791765.048	44.562

4058	512033.335	4791769.754	44.428	4083	512014.248	4791780.021	44.061
4059	512033.886	4791772.768	44.273	4084	512014.799	4791783.009	43.840
4060	512036.674	4791779.607	44.290	4085	512011.601	4791784.198	43.910
4061	512036.491	4791779.294	44.370	4086	512011.201	4791783.594	43.979
4062	512033.746	4791774.476	44.242	4087	512008.430	4791786.427	43.720
4063	512034.697	4791773.931	44.267	4088	512006.089	4791784.415	43.932
4064	512034.237	4791773.145	44.259	4089	511995.483	4791790.063	43.699
4065	512033.289	4791773.686	44.233	4090	511995.874	4791793.160	43.529
4066	512031.023	4791775.766	44.189	4091	511982.207	4791808.825	43.428
4067	512031.728	4791775.393	44.206	4092	511984.906	4791807.474	43.315
4068	512031.393	4791774.772	44.196	4093	511988.602	4791805.697	43.377
4069	512030.693	4791775.143	44.175	4094	511997.454	4791800.959	43.605
4070	512020.412	4791780.386	43.936	4095	511996.920	4791800.469	43.632
4071	512020.131	4791780.549	43.922	4096	511985.978	4791797.777	43.361
4072	512019.977	4791780.258	43.914	4097	511986.457	4791797.931	43.375
4073	512019.874	4791779.683	43.986	4098	511985.834	4791798.243	43.355
4074	512020.347	4791779.845	43.986	4099	511985.515	4791797.640	43.386
4075	512019.721	4791780.161	43.976	4100	511986.120	4791797.304	43.398
4076	512019.402	4791779.531	44.003	4101	511986.617	4791798.506	43.328
4077	512020.022	4791779.217	44.015	4102	511986.341	4791798.651	43.315
4078	512022.288	4791776.927	44.085	4103	511986.194	4791798.381	43.316
4079	512021.638	4791777.287	44.086	4104	511986.467	4791798.240	43.326
4080	512021.269	4791776.627	44.108	4105	511988.209	4791796.880	43.432
4081	512021.933	4791776.267	44.117	4106	511987.831	4791796.226	43.498
4082	512024.627	4791774.442	44.214	4107	511988.457	4791795.851	43.505

4108	511988.830	4791796.547	43.464	4133	511957.732	4791814.782	42.986
4109	511989.706	4791796.487	43.417	4134	511957.370	4791814.198	43.011
4110	511986.901	4791794.693	43.500	4135	511952.368	4791816.322	43.053
4111	511977.893	4791799.478	43.391	4136	511952.033	4791816.484	43.037
4112	511979.086	4791802.126	43.221	4137	511948.126	4791818.441	43.035
4113	511973.774	4791803.913	43.293	4138	511947.517	4791818.790	43.059
4114	511973.452	4791803.312	43.318	4139	511947.195	4791818.156	43.035
4115	511972.850	4791803.644	43.307	4140	511947.803	4791817.813	43.036
4116	511973.167	4791804.236	43.290	4141	511955.283	4791811.592	43.173
4117	511970.040	4791813.842	43.216	4142	511957.059	4791813.888	43.034
4118	511969.715	4791813.234	43.197	4143	511955.871	4791822.523	43.108
4119	511970.319	4791812.895	43.212	4144	511955.949	4791823.082	43.171
4120	511970.646	4791813.521	43.236	4145	511943.428	4791828.433	42.927
4121	511979.269	4791810.515	43.393	4146	511943.756	4791828.967	42.964
4122	511973.182	4791813.159	43.321	4147	511944.812	4791828.441	42.974
4123	511970.819	4791805.996	43.179	4148	511945.317	4791828.764	43.067
4124	511970.421	4791805.336	43.280	4149	511941.202	4791830.613	43.105
4125	511967.371	4791805.072	43.283	4150	511941.578	4791830.825	43.071
4126	511967.849	4791805.292	43.277	4151	511937.113	4791832.983	43.063
4127	511968.427	4791804.956	43.287	4152	511936.944	4791832.826	42.795
4128	511968.768	4791805.546	43.275	4153	511933.686	4791823.925	43.009
4129	511968.170	4791805.869	43.268	4154	511940.656	4791824.535	42.860
4130	511968.961	4791807.496	43.117	4155	511941.094	4791825.323	42.902
4131	511958.032	4791813.793	43.009	4156	511942.048	4791824.788	42.882
4132	511958.381	4791814.383	42.997	4157	511941.610	4791824.008	42.861

4158	511941.942	4791822.044	42.861	4183	511898.534	4791845.345	42.060
4159	511939.393	4791820.103	42.989	4184	511904.964	4791849.888	42.234
4160	511929.882	4791825.718	43.141	4185	511905.225	4791849.969	42.329
4161	511929.454	4791828.718	42.748	4186	511892.118	4791856.907	42.053
4162	511926.339	4791838.599	42.706	4187	511891.976	4791856.736	42.029
4163	511926.172	4791838.468	42.685	4188	511887.617	4791851.075	41.886
4164	511921.900	4791832.830	42.586	4189	511878.388	4791854.979	41.944
4165	511913.159	4791836.584	42.528	4190	511878.680	4791855.521	41.880
4166	511913.787	4791836.217	42.546	4191	511879.263	4791855.234	41.906
4167	511914.136	4791836.848	42.547	4192	511879.306	4791855.397	41.734
4168	511913.507	4791837.199	42.569	4193	511878.840	4791855.646	41.709
4169	511914.090	4791837.048	42.396	4194	511875.186	4791854.524	42.297
4170	511913.596	4791837.287	42.421	4195	511876.451	4791856.884	41.748
4171	511912.271	4791834.643	42.482	4196	511867.110	4791858.273	41.831
4172	511913.409	4791837.394	42.383	4197	511866.172	4791862.008	41.631
4173	511908.091	4791840.241	42.244	4198	511865.453	4791860.883	41.729
4174	511896.724	4791845.741	42.189	4199	511865.874	4791861.639	41.782
4175	511896.428	4791845.072	42.188	4200	511863.365	4791864.492	41.539
4176	511896.624	4791843.273	42.312	4201	511864.773	4791863.130	41.559
4177	511896.042	4791843.558	42.276	4202	511866.295	4791862.978	41.569
4178	511896.375	4791844.146	42.274	4203	511865.984	4791862.384	41.564
4179	511896.948	4791843.860	42.283	4204	511866.705	4791862.054	41.634
4180	511906.287	4791841.282	42.197	4205	511867.001	4791862.650	41.576
4181	511905.107	4791838.499	42.456	4206	511867.020	4791863.100	41.602
4182	511896.919	4791842.933	42.298	4207	511867.413	4791863.930	41.623

4208	511866.439	4791864.388	41.612	4233	511826.306	4791881.431	41.175
4209	511866.053	4791863.575	41.578	4234	511825.346	4791890.496	41.220
4210	511855.853	4791867.171	41.356	4235	511825.321	4791890.332	41.073
4211	511857.434	4791874.402	41.663	4236	511821.927	4791885.100	40.960
4212	511857.376	4791874.259	41.525	4237	511821.624	4791884.475	40.959
4213	511854.019	4791864.409	41.726	4238	511820.906	4791884.831	40.951
4214	511854.048	4791864.899	41.658	4239	511821.224	4791885.437	40.953
4215	511855.375	4791865.163	41.593	4240	511820.505	4791886.395	40.977
4216	511855.047	4791864.543	41.598	4241	511820.850	4791886.980	40.962
4217	511854.430	4791864.879	41.692	4242	511820.156	4791887.369	40.961
4218	511854.759	4791865.481	41.534	4243	511819.825	4791886.752	40.939
4219	511837.942	4791870.773	41.515	4244	511812.360	4791887.582	41.000
4220	511843.071	4791873.397	41.289	4245	511812.058	4791886.956	41.001
4221	511842.729	4791872.732	41.370	4246	511812.683	4791886.639	41.005
4222	511842.062	4791873.082	41.371	4247	511812.990	4791887.288	41.020
4223	511842.402	4791873.731	41.283	4248	511817.242	4791883.492	41.400
4224	511842.799	4791874.060	41.221	4249	511817.242	4791883.470	41.358
4225	511842.634	4791873.758	41.199	4250	511805.253	4791886.240	41.278
4226	511843.040	4791873.561	41.210	4251	511806.491	4791888.514	40.957
4227	511843.200	4791873.886	41.231	4252	511806.609	4791888.550	40.967
4228	511848.236	4791870.974	41.295	4253	511807.352	4791891.401	40.758
4229	511843.889	4791869.923	41.476	4254	511803.282	4791893.009	40.942
4230	511828.936	4791877.428	41.326	4255	511802.832	4791892.243	40.949
4231	511826.783	4791881.734	41.070	4256	511802.373	4791892.964	40.876
4232	511825.993	4791880.656	41.167	4257	511801.729	4791893.279	40.909

4258	511802.063	4791893.898	40.849	4283	511763.514	4791908.706	40.999
4259	511802.663	4791893.596	40.858	4284	511762.946	4791909.056	40.886
4260	511802.662	4791893.782	40.697	4285	511762.466	4791908.975	40.903
4261	511802.188	4791894.018	40.686	4286	511760.201	4791905.781	41.086
4262	511804.374	4791900.776	40.832	4287	511755.610	4791908.175	40.970
4263	511804.523	4791900.926	40.922	4288	511756.360	4791907.696	40.986
4264	511790.181	4791907.991	40.901	4289	511756.953	4791908.611	40.951
4265	511790.081	4791907.871	40.762	4290	511756.197	4791909.104	40.934
4266	511784.405	4791899.532	40.782	4291	511756.564	4791909.793	40.901
4267	511792.402	4791895.648	40.873	4292	511756.962	4791909.225	40.917
4268	511798.328	4791895.882	40.717	4293	511757.588	4791909.705	40.929
4269	511781.155	4791904.415	40.614	4294	511757.209	4791910.236	40.891
4270	511776.205	4791907.009	40.619	4295	511759.626	4791910.570	40.863
4271	511774.622	4791904.476	40.759	4296	511760.330	4791910.855	40.851
4272	511772.285	4791907.177	40.608	4297	511760.584	4791910.906	40.834
4273	511772.911	4791908.621	40.589	4298	511760.624	4791910.203	40.857
4274	511772.651	4791908.275	40.713	4299	511761.309	4791910.257	40.841
4275	511771.940	4791909.078	40.519	4300	511761.256	4791910.947	40.841
4276	511771.442	4791909.341	40.570	4301	511762.006	4791911.695	40.807
4277	511775.027	4791915.406	40.676	4302	511761.873	4791910.623	40.841
4278	511775.016	4791915.522	40.808	4303	511763.915	4791910.381	40.754
4279	511770.980	4791908.563	40.713	4304	511764.039	4791911.459	40.776
4280	511771.301	4791909.187	40.744	4305	511768.490	4791910.761	40.610
4281	511771.936	4791908.860	40.675	4306	511765.612	4791911.801	40.606
4282	511768.997	4791907.300	40.755	4307	511762.801	4791912.185	40.656

4308	511758.586	4791911.573	40.710	4333	511653.388	4791963.559	40.078
4309	511753.885	4791908.959	40.764	4334	511653.343	4791963.838	40.677
4310	511761.814	4791921.731	40.723	4335	511652.728	4791964.229	40.668
4311	511762.436	4791921.436	40.743	4336	511651.630	4791959.500	40.853
4312	511762.133	4791920.823	40.737	4337	511649.340	4791961.599	40.932
4313	511761.502	4791921.145	40.729	4338	511652.431	4791965.992	41.208
4314	511757.845	4791923.056	40.754	4339	511650.628	4791965.394	41.146
4315	511759.414	4791923.332	40.856	4340	511644.822	4791968.849	41.537
4316	511759.410	4791923.216	40.757	4341	511649.874	4791967.053	41.301
4317	511749.673	4791928.028	40.784	4342	511661.791	4791960.572	41.116
4318	511749.701	4791928.207	40.885	4343	511666.937	4791957.336	41.279
4319	511736.919	4791934.482	40.952	4344	511679.664	4791950.545	41.274
4320	511736.686	4791934.514	40.828	4345	511693.625	4791943.052	41.261
4321	511750.025	4791927.290	40.775	4346	511706.546	4791936.133	41.195
4322	511750.550	4791926.891	40.781	4347	511718.472	4791929.625	41.173
4323	511655.661	4791965.122	41.232	4348	511727.764	4791924.880	41.125
4324	511650.621	4791961.568	40.057	4349	511730.594	4791923.721	40.905
4325	511651.354	4791961.237	39.992	4350	511732.488	4791927.210	40.899
4326	511653.351	4791963.413	40.050	4351	511735.874	4791933.252	40.842
4327	511652.474	4791963.997	40.057	4352	511736.592	4791934.550	40.848
4328	511653.068	4791964.847	40.706	4353	511733.980	4791935.932	41.086
4329	511653.702	4791964.452	40.732	4354	511733.937	4791935.915	41.018
4330	511653.938	4791964.565	40.606	4355	511732.589	4791933.523	40.992
4331	511653.026	4791965.037	40.683	4356	511730.079	4791928.975	41.074
4332	511652.486	4791964.105	40.240	4357	511729.751	4791929.168	41.043

4358	511726.399	4791931.465	41.043	4383	511670.253	4791968.873	40.255
4359	511727.705	4791939.196	40.846	4384	511670.471	4791969.426	40.437
4360	511726.172	4791936.121	41.008	4385	511669.693	4791969.833	40.365
4361	511710.336	4791937.374	40.907	4386	511669.395	4791969.305	40.033
4362	511709.488	4791936.890	41.115	4387	511669.625	4791969.268	39.940
4363	511710.023	4791936.409	41.053	4388	511668.943	4791968.313	40.357
4364	511710.554	4791936.979	41.026	4389	511669.639	4791968.027	40.352
4365	511709.991	4791937.474	40.924	4390	511669.884	4791968.658	40.343
4366	511712.264	4791947.962	40.893	4391	511669.227	4791968.964	40.343
4367	511710.250	4791944.030	41.070	4392	511668.632	4791968.205	40.248
4368	511708.099	4791940.601	41.041	4393	511669.241	4791969.378	40.101
4369	511697.000	4791946.100	41.205	4394	511670.253	4791968.873	40.267
4370	511698.492	4791949.876	41.177	4395	511668.309	4791968.530	40.208
4371	511697.473	4791951.192	41.208	4396	511668.586	4791969.813	40.315
4372	511700.380	4791954.095	41.096	4397	511667.047	4791969.390	40.260
4373	511678.430	4791964.879	41.402	4398	511674.716	4791967.942	41.170
4374	511689.414	4791959.212	41.348	4399	511671.722	4791965.480	41.231
4375	511687.864	4791955.198	41.237	4400	511669.731	4791964.913	41.266
4376	511686.234	4791951.678	41.245	4401	511666.596	4791966.965	41.282
4377	511672.432	4791958.075	41.357	4402	511660.984	4791968.704	41.391
4378	511673.940	4791961.984	41.429	4403	511670.017	4791963.907	41.476
4379	511669.679	4791969.372	39.920	4404	511667.663	4791960.513	41.425
4380	511669.793	4791969.615	39.788	4405	511654.022	4791967.412	41.456
4381	511670.262	4791969.379	39.789	4406	511657.034	4791970.401	41.456
4382	511670.165	4791969.017	39.788	4407	511658.852	4791972.774	40.815

4408	511659.146	4791973.416	40.817	4433	511636.061	4791986.151	41.156
4409	511658.535	4791973.759	40.794	4434	511630.665	4791986.924	41.716
4410	511658.215	4791973.122	40.810	4435	511628.226	4791989.959	41.332
4411	511658.002	4791973.050	40.462	4436	511627.557	4791988.884	41.762
4412	511658.929	4791972.556	40.566	4437	511624.616	4791986.806	41.920
4413	511659.350	4791973.491	40.323	4438	511625.251	4791986.459	41.909
4414	511658.492	4791973.946	40.244	4439	511624.925	4791985.853	41.918
4415	511658.271	4791974.156	40.273	4440	511624.293	4791986.222	41.937
4416	511659.568	4791973.184	40.295	4441	511624.335	4791986.636	41.909
4417	511660.118	4791974.125	40.226	4442	511617.109	4791990.872	42.274
4418	511658.568	4791974.818	40.313	4443	511616.751	4791990.400	42.314
4419	511649.474	4791978.011	40.643	4444	511613.627	4791992.375	42.404
4420	511647.944	4791976.513	41.545	4445	511613.269	4791992.807	42.413
4421	511648.395	4791975.444	41.521	4446	511617.536	4791994.651	42.160
4422	511646.442	4791971.643	41.531	4447	511618.206	4791995.701	41.872
4423	511642.369	4791971.641	41.558	4448	511610.748	4792000.307	42.435
4424	511639.463	4791969.305	41.574	4449	511610.977	4792000.459	42.661
4425	511636.863	4791971.192	41.638	4450	511610.667	4791999.652	42.110
4426	511637.440	4791974.184	41.627	4451	512173.033	4791700.340	44.472
4427	511637.584	4791976.854	41.593	4452	512173.451	4791700.207	44.400
4428	511637.267	4791978.211	41.605	4453	512176.042	4791705.994	44.229
4429	511636.226	4791979.308	41.701	4454	512175.446	4791706.042	44.280
4430	511633.802	4791981.130	41.820	4455	512176.440	4791708.278	44.163
4431	511635.151	4791984.354	41.644	4456	512176.996	4791707.954	44.079
4432	511635.780	4791985.353	41.087	4457	512178.151	4791707.249	44.450

4458	512181.129	4791705.771	45.723	4483	512161.308	4791702.790	45.639
4459	512181.028	4791705.735	45.765	4484	512171.671	4791697.294	45.628
4460	512181.267	4791704.330	45.744	4485	512171.775	4791697.391	46.060
4461	512182.156	4791704.409	45.721	4486	512169.396	4791693.074	46.741
4462	512173.226	4791699.606	44.446	4487	512169.989	4791692.950	46.700
4463	512172.804	4791699.829	44.531	4488	512171.089	4791692.863	46.955
4464	512174.897	4791698.599	45.412	4489	512175.362	4791692.778	46.869
4465	512174.721	4791698.557	45.877	4490	512177.345	4791694.144	46.965
4466	512174.630	4791698.290	45.889	4491	512176.628	4791695.780	46.926
4467	512174.735	4791698.239	45.880	4492	512177.677	4791694.589	46.914
4468	512173.832	4791696.668	45.855	4493	512175.883	4791695.460	46.263
4469	512159.275	4791704.169	45.800	4494	512176.782	4791697.362	46.024
4470	512160.165	4791706.315	45.813	4495	512178.649	4791696.444	46.735
4471	512160.165	4791706.315	45.841	4496	512179.032	4791697.992	46.394
4472	512159.344	4791704.300	45.792	4497	512179.157	4791703.221	45.765
4473	512158.875	4791704.019	45.094	4498	512180.466	4791704.082	45.742
4474	512160.122	4791706.549	45.400	4499	512181.583	4791702.723	46.038
4475	512160.175	4791706.460	45.577	4500	512187.051	4791699.210	46.442
4476	512161.165	4791705.961	45.577	4501	512190.467	4791697.415	46.745
4477	512161.207	4791706.039	45.371	4502	512196.018	4791697.106	46.190
4478	512161.844	4791705.773	44.317	4503	512195.274	4791694.627	47.025
4479	512162.343	4791705.447	44.397	4504	512207.193	4791690.704	46.399
4480	512160.861	4791703.249	45.699	4505	512206.232	4791691.618	46.406
4481	512160.663	4791702.997	44.598	4506	512205.018	4791689.289	47.068
4482	512161.137	4791702.765	44.438	4507	512213.722	4791685.271	47.022

4508	512215.135	4791686.837	46.533	4533	512180.714	4791690.713	47.201
4509	512224.794	4791681.637	46.878	4534	512177.194	4791692.588	47.122
4510	512224.286	4791679.025	47.203	4535	512175.319	4791689.455	47.137
4511	512235.007	4791673.999	46.958	4536	512170.693	4791691.872	47.199
4512	512236.380	4791672.555	47.060	4537	512378.279	4791590.370	50.749
4513	512237.253	4791674.257	46.544	4538	512383.210	4791589.132	50.209
4514	512238.979	4791673.047	46.485	4539	512382.874	4791588.282	50.490
4515	512237.236	4791672.823	46.954	4540	512378.892	4791579.376	50.686
4516	512236.247	4791671.877	47.078	4541	512386.752	4791578.826	50.518
4517	512235.182	4791670.118	47.118	4542	512389.343	4791585.587	50.280
4518	512234.843	4791668.599	47.259	4543	512389.145	4791585.123	50.459
4519	512236.158	4791668.445	47.748	4544	512390.554	4791584.290	50.437
4520	512235.462	4791666.885	47.519	4545	512391.436	4791583.858	50.333
4521	512223.984	4791672.996	47.344	4546	512391.344	4791583.538	50.343
4522	512210.785	4791679.878	47.359	4547	512390.859	4791584.763	50.178
4523	512198.521	4791686.210	47.347	4548	512398.191	4791580.676	50.014
4524	512191.120	4791690.072	47.297	4549	512397.856	4791579.807	50.038
4525	512189.730	4791688.661	48.096	4550	512397.361	4791571.858	50.372
4526	512188.791	4791691.771	47.188	4551	512405.348	4791567.345	50.369
4527	512191.261	4791690.529	47.345	4552	512409.506	4791572.595	50.097
4528	512189.963	4791687.813	47.427	4553	512410.190	4791573.567	49.701
4529	512187.425	4791689.127	47.363	4554	512410.383	4791573.898	50.098
4530	512187.423	4791689.117	47.281	4555	512415.644	4791570.929	50.092
4531	512182.501	4791691.436	47.201	4556	512416.062	4791570.660	50.112
4532	512181.776	4791692.365	47.246	4557	512415.829	4791570.228	50.118

4558	512415.372	4791570.478	50.120	4583	512453.248	4791545.035	50.320
4559	512418.702	4791568.892	50.168	4584	512453.094	4791544.836	50.289
4560	512419.133	4791568.591	50.167	4585	512452.881	4791544.287	50.312
4561	512418.942	4791568.298	50.172	4586	512454.448	4791533.295	50.499
4562	512418.500	4791568.616	50.183	4587	512459.986	4791540.022	50.264
4563	512418.099	4791569.293	50.163	4588	512459.876	4791539.786	50.245
4564	512413.552	4791563.074	50.384	4589	512459.630	4791539.372	50.243
4565	512431.907	4791560.098	50.337	4590	512463.319	4791536.505	50.248
4566	512426.756	4791554.192	50.483	4591	512463.847	4791536.049	50.267
4567	512437.309	4791555.578	50.495	4592	512464.266	4791536.653	50.244
4568	512436.717	4791556.025	50.513	4593	512463.745	4791537.044	50.267
4569	512437.048	4791556.414	50.417	4594	512463.800	4791536.522	50.296
4570	512437.627	4791556.032	50.396	4595	512468.822	4791533.381	50.350
4571	512437.158	4791555.937	50.383	4596	512468.423	4791532.770	50.303
4572	512437.853	4791556.032	50.392	4597	512468.772	4791533.145	50.324
4573	512438.845	4791555.062	50.395	4598	512476.074	4791527.802	50.359
4574	512438.531	4791554.661	50.393	4599	512475.946	4791527.660	50.259
4575	512434.345	4791549.825	50.558	4600	512475.803	4791527.114	50.297
4576	512445.800	4791541.840	50.552	4601	512483.516	4791521.630	50.361
4577	512445.297	4791549.949	50.504	4602	512483.181	4791521.323	50.377
4578	512445.629	4791550.272	50.394	4603	512461.098	4791530.958	50.490
4579	512445.738	4791550.435	50.421	4604	512463.718	4791528.684	50.456
4580	512449.794	4791547.297	50.320	4605	512469.173	4791523.000	50.552
4581	512449.257	4791547.708	50.293	4606	512474.296	4791518.144	50.590
4582	512449.345	4791547.243	50.321	4607	512474.727	4791518.590	50.571

4608	512475.490	4791517.938	50.564	4633	512610.341	4791414.380	55.957
4609	512475.105	4791517.478	50.583	4634	512610.196	4791414.176	55.965
4610	512475.808	4791516.095	50.793	4635	512608.530	4791411.261	56.115
4611	512480.231	4791512.808	50.877	4636	512603.709	4791419.001	55.636
4612	512484.140	4791510.566	50.763	4637	512603.648	4791418.627	55.662
4613	512487.541	4791508.357	50.775	4638	512601.584	4791415.654	55.787
4614	512489.161	4791506.747	50.947	4639	512595.139	4791419.993	55.500
4615	512488.540	4791507.144	51.001	4640	512597.209	4791423.101	55.420
4616	512488.792	4791507.639	50.785	4641	512597.424	4791423.476	55.402
4617	512489.477	4791507.253	50.799	4642	512596.868	4791423.908	55.380
4618	512495.141	4791503.856	50.728	4643	512597.139	4791424.233	55.269
4619	512499.913	4791501.198	50.834	4644	512597.091	4791424.273	55.244
4620	512499.716	4791500.396	50.893	4645	512587.065	4791430.946	54.898
4621	512500.644	4791498.941	50.877	4646	512587.480	4791431.136	54.927
4622	512500.118	4791497.487	51.014	4647	512586.287	4791431.418	54.846
4623	512500.043	4791498.430	51.044	4648	512586.102	4791431.177	54.861
4624	512638.211	4791402.856	56.363	4649	512582.780	4791429.118	54.863
4625	512640.226	4791401.047	56.377	4650	512572.578	4791436.454	54.222
4626	512640.309	4791415.294	55.780	4651	512575.015	4791439.586	54.164
4627	512626.607	4791409.292	56.574	4652	512575.172	4791439.859	54.146
4628	512626.844	4791409.077	56.570	4653	512574.618	4791440.819	54.087
4629	512624.006	4791407.212	56.660	4654	512574.789	4791440.290	54.124
4630	512623.844	4791407.587	56.691	4655	512564.924	4791448.103	53.430
4631	512616.568	4791410.810	56.225	4656	512565.330	4791448.228	53.442
4632	512610.472	4791414.670	55.956	4657	512565.391	4791447.708	53.462

4658	512565.179	4791447.428	53.477	4683	512523.601	4791475.849	51.424
4659	512562.269	4791444.351	53.556	4684	512521.899	4791476.878	51.372
4660	512553.838	4791451.209	53.001	4685	512530.173	4791477.351	51.415
4661	512556.773	4791454.321	52.904	4686	512531.382	4791477.720	51.441
4662	512556.917	4791454.619	52.896	4687	512530.280	4791478.510	51.399
4663	512555.810	4791456.052	52.761	4688	512532.429	4791478.060	50.865
4664	512555.769	4791455.559	52.839	4689	512531.809	4791478.534	51.354
4665	512548.000	4791462.109	52.362	4690	512526.464	4791483.259	51.240
4666	512548.431	4791462.236	52.343	4691	512525.350	4791482.312	51.202
4667	512548.265	4791461.881	52.354	4692	512525.147	4791482.114	51.168
4668	512548.121	4791461.593	52.378	4693	512522.555	4791484.688	51.032
4669	512545.374	4791458.664	52.482	4694	512522.703	4791484.949	51.032
4670	512537.145	4791466.035	52.020	4695	512523.608	4791485.770	51.096
4671	512540.127	4791469.281	51.912	4696	512523.819	4791486.028	51.113
4672	512540.323	4791468.590	51.923	4697	512524.784	4791487.129	51.124
4673	512540.049	4791468.782	51.904	4698	512518.443	4791492.788	50.831
4674	512539.884	4791468.587	51.911	4699	512517.031	4791491.161	50.784
4675	512534.901	4791473.395	51.631	4700	512516.812	4791490.983	50.792
4676	512534.637	4791473.198	51.628	4701	512514.192	4791493.994	50.641
4677	512534.167	4791474.733	51.562	4702	512514.393	4791494.238	50.626
4678	512534.548	4791473.956	51.620	4703	512512.330	4791495.957	50.635
4679	512531.390	4791471.055	51.703	4704	512508.512	4791500.318	50.569
4680	512527.791	4791474.022	51.550	4705	512508.922	4791500.775	50.592
4681	512527.197	4791473.561	51.542	4706	512509.075	4791500.974	50.577
4682	512524.785	4791475.669	51.448	4707	512513.130	4791496.292	50.653

4708	512513.573	4791496.829	50.655	4733	512506.316	4791486.565	50.798
4709	512513.035	4791497.315	50.663	4734	512508.256	4791484.850	50.940
4710	512512.586	4791496.783	50.655	4735	512507.603	4791488.592	51.054
4711	512512.524	4791496.189	50.615	4736	512504.888	4791489.997	51.081
4712	512512.135	4791496.541	50.642	4737	512501.990	4791490.753	51.221
4713	512511.784	4791496.158	50.654	4738	512500.796	4791490.530	51.261
4714	512507.864	4791488.759	51.081	4739	512499.716	4791496.996	51.067
4715	512504.970	4791490.224	51.099	4740	512495.634	4791493.630	51.426
4716	512501.983	4791490.809	51.200	4741	512492.490	4791491.280	51.658
4717	512501.937	4791490.496	51.220	4742	512495.322	4791488.251	51.584
4718	512503.455	4791490.273	51.151	4743	512495.435	4791487.824	51.596
4719	512507.548	4791488.599	51.062	4744	512497.932	4791488.502	51.445
4720	512512.143	4791484.588	51.030	4745	512499.998	4791488.723	51.369
4721	512520.134	4791477.548	51.315	4746	512501.415	4791485.723	51.480
4722	512520.436	4791477.752	51.335	4747	512502.281	4791485.964	51.454
4723	512512.816	4791484.377	51.066	4748	512501.163	4791486.636	51.497
4724	512504.600	4791484.251	51.681	4749	512502.035	4791486.934	51.457
4725	512505.843	4791484.136	51.723	4750	512502.649	4791488.549	51.232
4726	512506.355	4791484.105	51.680	4751	512504.656	4791488.239	51.206
4727	512505.756	4791484.851	51.568	4752	512506.153	4791487.434	51.169
4728	512503.990	4791485.475	51.505	4753	512507.224	4791486.481	51.143
4729	512503.591	4791486.533	51.347	4754	512512.299	4791482.049	51.139
4730	512503.950	4791487.796	51.156	4755	512513.509	4791483.391	51.059
4731	512504.627	4791487.779	50.320	4756	512520.598	4791477.147	51.373
4732	512505.183	4791487.332	50.582	4757	512520.406	4791476.945	51.445

4758	512517.911	4791477.178	51.406	4783	512566.474	4791438.637	54.615
4759	512520.884	4791473.159	52.522	4784	512565.103	4791434.380	54.959
4760	512520.557	4791472.853	52.657	4785	512565.030	4791431.050	55.044
4761	512518.704	4791473.087	52.596	4786	512569.269	4791438.395	54.039
4762	512519.849	4791473.739	52.591	4787	512567.886	4791439.514	53.940
4763	512521.917	4791474.018	52.478	4788	512567.827	4791438.892	53.991
4764	512523.097	4791472.030	52.815	4789	512568.106	4791438.134	54.086
4765	512522.358	4791467.785	53.716	4790	512567.593	4791435.922	54.249
4766	512524.672	4791469.081	53.560	4791	512567.129	4791435.799	54.270
4767	512531.060	4791464.782	53.746	4792	512566.270	4791431.298	54.369
4768	512534.051	4791463.964	53.225	4793	512566.937	4791430.951	54.443
4769	512533.794	4791463.646	53.526	4794	512568.267	4791431.039	55.102
4770	512533.483	4791462.501	53.892	4795	512568.776	4791436.604	54.711
4771	512535.494	4791461.148	53.859	4796	512575.014	4791433.253	54.901
4772	512541.796	4791457.495	53.693	4797	512574.759	4791432.059	55.096
4773	512546.796	4791453.998	53.616	4798	512574.969	4791432.404	55.014
4774	512547.885	4791453.580	53.480	4799	512578.784	4791430.215	55.280
4775	512547.657	4791453.253	53.611	4800	512585.359	4791425.730	55.667
4776	512548.368	4791453.895	53.374	4801	512588.545	4791422.659	55.761
4777	512552.752	4791449.852	53.669	4802	512588.334	4791422.401	55.871
4778	512559.554	4791444.327	54.197	4803	512588.127	4791423.928	55.748
4779	512560.358	4791442.599	54.394	4804	512590.036	4791422.369	55.833
4780	512560.630	4791442.865	54.243	4805	512589.603	4791420.858	56.146
4781	512561.183	4791443.563	54.084	4806	512597.202	4791415.015	56.517
4782	512561.808	4791442.161	54.357	4807	512602.215	4791412.871	56.430

4808	512601.889	4791412.321	56.630	4833	512626.185	4791423.465	54.383
4809	512602.925	4791411.558	56.755	4834	512632.693	4791429.353	54.605
4810	512608.834	4791408.033	56.902	4835	512632.333	4791419.555	55.644
4811	512617.144	4791409.920	56.319	4836	512631.631	4791415.536	56.057
4812	512615.536	4791410.865	56.152	4837	512629.305	4791411.143	56.462
4813	512612.998	4791412.587	56.063	4838	512626.452	4791408.415	56.619
4814	512615.291	4791410.577	56.311	4839	512621.935	4791406.283	56.735
4815	512611.599	4791413.016	56.035	4840	512612.589	4791405.668	56.856
4816	512610.448	4791410.353	56.135	4841	512611.960	4791405.955	56.846
4817	512619.297	4791409.498	56.400	4842	512611.651	4791405.339	56.843
4818	512620.998	4791409.874	56.380	4843	512612.291	4791405.033	56.823
4819	512621.896	4791410.301	56.353	4844	512613.252	4791404.802	56.828
4820	512623.445	4791411.634	56.175	4845	512615.854	4791405.056	56.843
4821	512623.490	4791411.266	56.230	4846	512614.982	4791404.861	56.873
4822	512624.835	4791412.711	56.034	4847	512611.063	4791406.713	56.912
4823	512625.976	4791414.440	55.851	4848	512609.900	4791406.533	56.883
4824	512625.913	4791414.912	55.750	4849	512610.614	4791403.855	56.666
4825	512626.703	4791416.172	55.676	4850	512614.666	4791402.011	56.673
4826	512627.602	4791418.713	55.416	4851	512615.428	4791402.175	56.785
4827	512627.270	4791418.394	55.349	4852	512620.827	4791403.312	56.666
4828	512627.817	4791420.830	55.302	4853	512622.136	4791403.556	56.499
4829	512628.075	4791420.389	55.391	4854	512625.723	4791404.859	56.468
4830	512627.281	4791422.691	54.879	4855	512630.057	4791407.990	56.323
4831	512627.575	4791421.937	55.139	4856	512633.502	4791413.079	55.985
4832	512625.495	4791423.960	54.184	4857	512635.070	4791419.831	55.396

4858	512635.476	4791430.639	54.238	4883	512625.192	4791422.294	54.175
4859	512633.868	4791428.560	54.660	4884	512629.448	4791428.188	54.671
4860	512633.192	4791428.597	54.676	4885	512629.593	4791440.627	53.373
4861	512633.164	4791427.920	54.749	4886	512620.729	4791444.482	52.456
4862	512633.840	4791427.884	54.730	4887	512613.996	4791436.194	53.073
4863	512632.602	4791426.273	54.936	4888	512609.915	4791440.798	52.762
4864	512632.561	4791425.170	55.003	4889	512602.846	4791455.066	51.951
4865	512631.596	4791425.206	55.114	4890	512613.375	4791447.569	52.257
4866	512631.614	4791426.272	55.039	4891	512613.389	4791447.577	52.255
4867	512631.236	4791427.768	54.894	4892	512603.527	4791454.330	51.951
4868	512622.297	4791430.942	53.560	4893	512598.606	4791447.152	52.767
4869	512622.291	4791426.212	53.104	4894	512590.360	4791455.883	51.998
4870	512622.603	4791426.690	53.329	4895	512589.847	4791456.327	51.964
4871	512624.771	4791425.211	54.208	4896	512589.399	4791455.813	51.985
4872	512627.396	4791424.053	54.806	4897	512589.852	4791455.344	51.983
4873	512628.007	4791422.216	55.228	4898	512590.318	4791455.920	51.972
4874	512620.026	4791414.638	54.092	4899	512591.899	4791458.189	51.910
4875	512615.724	4791416.461	53.330	4900	512579.161	4791468.110	50.732
4876	512616.002	4791416.882	53.286	4901	512583.118	4791476.118	50.076
4877	512620.825	4791415.048	54.022	4902	512574.623	4791481.847	49.763
4878	512621.127	4791413.177	55.480	4903	512569.566	4791474.683	50.316
4879	512625.458	4791422.684	54.437	4904	512557.283	4791483.162	49.801
4880	512621.124	4791414.148	55.119	4905	512560.350	4791489.641	49.061
4881	512620.808	4791414.342	54.969	4906	512548.055	4791497.964	49.191
4882	512625.627	4791422.658	54.993	4907	512544.871	4791492.447	49.452

4908	512549.108	4791499.935	49.127	4933	511733.970	4791936.141	40.996
4909	511893.614	4791864.525	40.065	4934	511728.888	4791938.664	40.687
4910	511893.481	4791865.505	39.900	4935	511729.266	4791939.950	40.658
4911	511894.473	4791864.926	39.972	4936	511722.025	4791943.673	40.845
4912	511894.060	4791864.016	39.922	4937	511722.940	4791951.849	39.594
4913	511893.025	4791864.515	39.825	4938	511615.815	4791998.139	42.438
4914	511849.063	4791887.069	39.624	4939	511616.030	4791998.876	42.389
4915	511848.866	4791887.951	39.197	4940	511616.677	4791999.961	42.750
4916	511849.966	4791887.518	39.185	4941	511616.904	4792000.525	42.876
4917	511848.493	4791886.970	39.463	4942	511617.415	4792001.465	42.788
4918	511849.532	4791886.536	39.512	4943	511617.870	4792002.358	42.590
4919	511843.879	4791890.252	39.603	4944	511618.284	4792003.022	42.397
4920	511844.103	4791890.568	39.109	4945	511618.964	4792002.649	42.539
4921	511843.579	4791889.388	39.615	4946	511619.768	4792003.015	41.962
4922	511842.392	4791890.007	39.614	4947	511619.286	4792002.162	42.514
4923	511843.037	4791891.135	39.083	4948	511618.356	4792002.737	42.466
4924	511803.959	4791910.525	38.886	4949	511618.849	4792003.647	41.596
4925	511804.072	4791909.432	39.792	4950	511618.693	4792004.268	41.802
4926	511804.486	4791909.031	39.529	4951	511622.369	4792002.621	41.558
4927	511803.458	4791909.517	39.499	4952	511623.081	4792000.752	42.525
4928	511800.971	4791910.829	39.416	4953	511622.559	4792000.294	42.393
4929	511788.184	4791918.798	38.961	4954	511623.140	4792001.418	41.953
4930	511759.730	4791931.543	40.203	4955	511624.337	4792000.706	41.862
4931	511760.705	4791931.976	39.743	4956	511623.668	4791999.595	42.354
4932	511759.463	4791932.596	39.784	4957	511627.355	4792000.086	41.387

4958	511626.791	4791998.702	42.049	4983	511643.796	4791983.359	41.606
4959	511626.305	4791997.492	42.407	4984	511644.694	4791985.155	42.147
4960	511626.026	4791996.815	42.634	4985	511645.057	4791985.820	42.313
4961	511625.513	4791995.851	42.690	4986	511645.518	4791986.791	42.286
4962	511625.144	4791995.222	42.507	4987	511646.059	4791987.623	42.153
4963	511624.537	4791994.353	42.100	4988	511646.396	4791988.263	41.903
4964	511624.316	4791993.650	42.143	4989	511650.764	4791986.068	41.723
4965	511631.565	4791989.725	42.050	4990	511645.806	4791988.656	41.908
4966	511631.907	4791990.483	41.935	4991	511646.928	4791989.792	41.164
4967	511632.395	4791991.427	42.390	4992	511655.781	4791987.469	40.207
4968	511632.784	4791992.059	42.547	4993	511652.370	4791987.143	40.872
4969	511633.278	4791992.972	42.491	4994	511651.957	4791987.123	40.964
4970	511633.689	4791993.664	42.293	4995	511652.412	4791985.945	41.580
4971	511634.385	4791994.782	41.746	4996	511651.999	4791984.417	41.966
4972	511634.882	4791995.768	41.274	4997	511651.959	4791983.587	42.179
4973	511642.638	4791991.681	41.211	4998	511651.425	4791982.656	42.195
4974	511642.487	4791990.622	41.765	4999	511650.990	4791981.882	42.013
4975	511641.940	4791989.439	42.169	5000	511650.113	4791981.120	41.708
4976	511641.628	4791988.750	42.370	5001	511649.747	4791980.230	41.529
4977	511641.170	4791987.796	42.385	5002	511657.592	4791976.245	41.016
4978	511640.831	4791987.140	42.219	5003	511658.024	4791977.247	41.465
4979	511640.171	4791986.217	41.912	5004	511658.422	4791978.334	41.870
4980	511639.775	4791985.460	41.695	5005	511658.829	4791978.952	42.064
4981	511641.688	4791985.526	42.008	5006	511659.358	4791979.872	42.057
4982	511643.872	4791984.036	41.887	5007	511659.675	4791980.634	41.861

5008	511660.177	4791981.432	41.518	5033	511680.550	4791974.338	39.664
5009	511662.271	4791984.261	39.464	5034	511679.106	4791972.331	41.060
5010	511667.123	4791981.566	39.475	5035	511685.921	4791971.248	40.844
5011	511669.786	4791976.768	41.164	5036	511688.029	4791970.154	40.554
5012	511669.646	4791976.397	41.285	5037	511686.911	4791968.721	41.043
5013	511669.195	4791975.719	41.702	5038	511696.919	4791963.905	40.822
5014	511668.802	4791975.178	41.901	5039	511697.248	4791964.834	40.459
5015	511668.336	4791974.214	41.904	5040	511695.630	4791961.763	41.436
5016	511667.946	4791973.589	41.766	5041	511695.293	4791960.772	41.433
5017	511667.224	4791972.063	41.414	5042	511694.912	4791960.131	41.249
5018	511679.196	4791966.204	41.626	5043	511694.565	4791959.412	41.065
5019	511678.787	4791966.069	41.545	5044	511694.039	4791958.178	41.492
5020	511678.934	4791966.770	41.230	5045	511694.172	4791958.841	41.435
5021	511678.075	4791966.400	41.273	5046	511699.865	4791956.075	41.143
5022	511677.533	4791967.754	41.491	5047	511700.159	4791956.534	40.970
5023	511677.141	4791968.237	41.508	5048	511702.217	4791955.491	40.894
5024	511678.118	4791967.745	41.541	5049	511702.045	4791954.062	40.981
5025	511677.721	4791966.761	41.235	5050	511715.706	4791947.087	40.729
5026	511676.673	4791967.317	41.264	5051	511713.111	4791950.046	40.862
5027	511676.109	4791967.433	41.202	5052	511713.732	4791949.947	40.813
5028	511676.930	4791968.932	41.636	5053	511713.298	4791949.057	40.647
5029	511677.442	4791969.650	41.756	5054	511712.273	4791949.538	40.601
5030	511678.071	4791970.540	41.743	5055	511712.740	4791950.441	40.764
5031	511678.241	4791971.263	41.546	5056	511709.246	4791951.927	40.863
5032	511678.603	4791972.085	41.113	5057	511703.178	4791953.527	40.962

5058	511702.512	4791955.267	40.876	5083	511736.896	4791937.854	40.287
5059	511702.771	4791956.044	41.123	5084	511737.334	4791938.830	40.605
5060	511703.290	4791956.768	41.278	5085	511737.765	4791939.548	40.723
5061	511703.761	4791957.717	41.298	5086	511738.194	4791940.536	40.724
5062	511704.157	4791958.405	41.125	5087	511739.182	4791944.017	39.867
5063	511704.487	4791958.942	40.807	5088	511739.683	4791942.606	40.217
5064	511704.728	4791959.538	40.740	5089	511739.302	4791942.363	40.214
5065	511705.131	4791960.264	40.470	5090	511738.654	4791941.246	40.554
5066	511723.005	4791951.785	39.815	5091	511754.563	4791936.185	39.028
5067	511722.079	4791950.758	40.553	5092	511752.923	4791935.765	39.985
5068	511721.786	4791950.417	40.613	5093	511752.759	4791935.488	40.025
5069	511725.508	4791948.602	40.498	5094	511751.970	4791934.679	40.368
5070	511725.557	4791947.716	40.761	5095	511751.311	4791933.935	40.542
5071	511725.234	4791947.010	40.932	5096	511750.855	4791933.026	40.541
5072	511724.841	4791945.991	40.928	5097	511750.502	4791932.414	40.437
5073	511724.489	4791945.314	40.761	5098	511749.991	4791931.448	40.113
5074	511723.898	4791944.538	40.482	5099	511749.466	4791930.567	40.078
5075	511723.656	4791943.810	40.688	5100	511757.533	4791927.087	39.941
5076	511723.194	4791943.021	40.790	5101	511758.406	4791924.696	40.637
5077	511729.216	4791939.948	40.652	5102	511757.162	4791925.266	40.536
5078	511729.719	4791940.651	40.561	5103	511757.780	4791926.439	39.845
5079	511730.036	4791941.154	40.405	5104	511759.013	4791925.831	39.933
5080	511731.752	4791939.797	40.408	5105	511762.189	4791924.339	39.904
5081	511732.114	4791938.136	40.334	5106	511762.852	4791924.024	39.931
5082	511735.657	4791936.584	40.232	5107	511763.180	4791924.435	39.927

5108	511762.405	4791924.868	39.925	5133	511782.966	4791919.761	39.595
5109	511760.264	4791925.460	39.836	5134	511801.797	4791910.585	39.407
5110	511759.104	4791926.155	39.819	5135	511801.096	4791910.673	39.624
5111	511759.670	4791927.225	40.050	5136	511800.206	4791909.582	40.075
5112	511760.878	4791926.511	40.042	5137	511799.811	4791908.607	40.023
5113	511767.830	4791928.684	38.965	5138	511799.784	4791908.000	39.858
5114	511765.337	4791929.958	39.427	5139	511798.851	4791907.063	39.277
5115	511764.525	4791930.519	39.545	5140	511798.738	4791906.424	39.252
5116	511760.340	4791933.236	39.755	5141	511808.331	4791899.310	40.813
5117	511767.657	4791928.426	39.297	5142	511807.134	4791899.826	40.776
5118	511767.162	4791928.402	39.453	5143	511807.930	4791901.313	39.694
5119	511767.468	4791926.740	40.159	5144	511809.077	4791900.761	39.760
5120	511767.325	4791925.958	40.334	5145	511814.302	4791905.440	38.687
5121	511766.827	4791925.071	40.344	5146	511815.374	4791904.751	38.710
5122	511766.508	4791924.428	40.160	5147	511815.387	4791903.807	39.188
5123	511766.148	4791924.041	39.882	5148	511814.866	4791902.823	39.809
5124	511765.583	4791922.856	39.705	5149	511814.610	4791902.418	39.980
5125	511780.123	4791915.843	39.395	5150	511814.112	4791901.469	39.958
5126	511780.634	4791916.483	39.620	5151	511813.966	4791900.969	39.759
5127	511781.285	4791917.150	39.968	5152	511812.992	4791899.829	39.116
5128	511781.501	4791917.739	40.175	5153	511834.204	4791897.061	39.061
5129	511781.976	4791918.685	40.165	5154	511827.604	4791898.297	39.037
5130	511782.381	4791919.439	40.005	5155	511827.640	4791898.493	38.865
5131	511782.781	4791919.853	39.653	5156	511828.634	4791897.770	39.036
5132	511783.839	4791920.788	38.859	5157	511828.740	4791898.012	38.876

5158	511829.516	4791897.505	38.878	5183	511857.036	4791877.618	39.267
5159	511828.521	4791896.017	39.748	5184	511857.277	4791877.637	39.258
5160	511828.237	4791895.636	39.885	5185	511871.740	4791870.207	39.410
5161	511827.721	4791894.691	39.895	5186	511872.094	4791870.872	39.475
5162	511827.412	4791894.259	39.701	5187	511872.540	4791871.636	39.889
5163	511825.231	4791894.103	39.084	5188	511872.862	4791872.059	40.041
5164	511825.316	4791894.291	39.337	5189	511873.274	4791873.040	40.055
5165	511826.361	4791893.743	39.364	5190	511873.536	4791873.709	39.929
5166	511826.271	4791893.601	39.083	5191	511874.023	4791874.605	39.455
5167	511826.519	4791893.325	39.160	5192	511874.288	4791875.076	39.450
5168	511839.802	4791886.573	39.108	5193	511874.822	4791875.623	39.747
5169	511840.344	4791887.837	39.692	5194	511883.316	4791871.301	39.799
5170	511840.634	4791888.257	39.888	5195	511882.641	4791870.111	39.606
5171	511841.106	4791889.215	39.883	5196	511882.451	4791869.111	40.029
5172	511841.484	4791889.849	39.759	5197	511882.160	4791868.542	40.151
5173	511841.947	4791891.120	39.069	5198	511881.672	4791867.597	40.136
5174	511843.625	4791892.312	39.136	5199	511881.530	4791867.052	40.000
5175	511859.992	4791883.761	39.495	5200	511881.244	4791866.179	39.576
5176	511859.486	4791883.016	39.234	5201	511880.801	4791865.641	39.495
5177	511859.031	4791882.151	39.294	5202	511888.142	4791864.250	40.224
5178	511858.565	4791881.025	39.796	5203	511888.631	4791865.224	40.218
5179	511858.366	4791880.590	39.944	5204	511889.836	4791867.928	39.750
5180	511857.926	4791879.601	39.940	5205	511889.201	4791866.706	39.714
5181	511857.764	4791879.043	39.775	5206	511888.832	4791865.817	40.113
5182	511857.282	4791878.152	39.312	5207	511887.954	4791863.872	40.042

5208	511887.248	4791862.747	39.544	5233	511921.497	4791848.610	40.668
5209	511890.669	4791860.910	39.609	5234	511921.256	4791848.059	40.828
5210	511895.731	4791858.453	39.677	5235	511920.809	4791847.079	40.814
5211	511896.147	4791859.615	40.161	5236	511920.576	4791846.503	40.595
5212	511896.457	4791859.954	40.357	5237	511919.552	4791845.840	40.109
5213	511896.875	4791860.947	40.352	5238	511927.544	4791841.541	40.208
5214	511896.979	4791861.544	40.185	5239	511928.144	4791842.532	40.771
5215	511897.578	4791862.520	39.753	5240	511928.496	4791842.947	40.929
5216	511898.470	4791863.440	39.851	5241	511929.029	4791843.888	40.951
5217	511906.527	4791859.203	40.049	5242	511929.206	4791844.480	40.796
5218	511906.110	4791858.079	39.863	5243	511929.778	4791845.425	40.422
5219	511905.607	4791857.047	40.392	5244	511938.637	4791840.513	40.774
5220	511905.259	4791856.565	40.517	5245	511938.424	4791839.524	40.992
5221	511904.843	4791855.585	40.519	5246	511938.173	4791838.967	41.138
5222	511904.498	4791855.101	40.309	5247	511937.623	4791838.060	41.126
5223	511903.859	4791854.326	39.851	5248	511937.382	4791837.525	40.968
5224	511911.160	4791850.510	39.981	5249	511937.061	4791836.460	40.408
5225	511911.728	4791851.397	40.435	5250	511954.444	4791824.354	41.379
5226	511911.995	4791851.778	40.639	5251	511953.461	4791824.886	41.416
5227	511912.514	4791852.721	40.641	5252	511953.960	4791825.880	41.025
5228	511912.652	4791853.256	40.447	5253	511956.873	4791825.259	40.310
5229	511913.411	4791854.306	40.060	5254	511956.069	4791823.901	42.031
5230	511914.196	4791855.280	40.328	5255	511955.771	4791823.247	42.094
5231	511922.402	4791850.981	40.489	5256	511957.041	4791824.282	41.220
5232	511922.030	4791849.533	40.179	5257	511957.537	4791825.253	40.964

5258	511956.298	4791825.838	40.940	5283	511979.092	4791813.365	41.778
5259	511955.833	4791826.525	40.856	5284	511978.992	4791812.998	41.905
5260	511956.224	4791827.326	41.313	5285	511977.940	4791811.860	42.626
5261	511956.610	4791827.827	41.538	5286	511976.828	4791812.334	42.605
5262	511957.085	4791828.794	41.528	5287	511976.733	4791812.421	42.607
5263	511957.460	4791829.304	41.409	5288	511977.258	4791813.566	42.604
5264	511957.970	4791830.107	41.218	5289	511973.364	4791814.086	41.953
5265	511966.770	4791827.936	41.058	5290	511973.775	4791815.257	41.739
5266	511976.371	4791824.028	41.485	5291	511973.801	4791815.293	41.717
5267	511975.702	4791823.034	41.485	5292	511974.436	4791816.395	41.607
5268	511973.332	4791824.366	41.478	5293	511975.409	4791815.841	41.601
5269	511965.418	4791826.018	41.560	5294	511974.840	4791814.770	41.624
5270	511966.823	4791827.852	41.200	5295	511977.295	4791813.600	41.783
5271	511975.681	4791822.831	41.504	5296	511978.529	4791813.030	41.857
5272	511974.197	4791820.885	41.652	5297	511979.076	4791813.856	41.423
5273	511972.647	4791814.836	41.691	5298	511981.535	4791812.668	41.353
5274	511970.223	4791816.356	41.696	5299	511982.020	4791813.653	41.922
5275	511967.195	4791818.125	41.688	5300	511982.306	4791814.036	42.074
5276	511961.092	4791821.400	41.710	5301	511982.733	4791814.971	42.088
5277	511958.252	4791823.055	41.661	5302	511982.873	4791815.633	41.924
5278	511956.790	4791824.068	41.234	5303	511983.598	4791816.911	41.219
5279	511957.871	4791825.325	41.044	5304	511985.224	4791819.211	41.076
5280	511958.545	4791824.988	41.443	5305	511990.405	4791816.363	41.078
5281	511972.046	4791818.049	41.671	5306	511992.193	4791814.911	41.142
5282	511975.316	4791816.098	41.626	5307	511994.339	4791812.894	41.343

5308	511995.663	4791813.493	40.682	5333	512021.746	4791792.844	43.000
5309	511994.785	4791812.392	41.387	5334	512021.490	4791792.401	42.841
5310	511991.145	4791812.541	41.483	5335	512020.386	4791791.235	42.251
5311	511990.533	4791811.332	42.115	5336	512035.593	4791783.338	42.573
5312	511990.263	4791810.978	42.290	5337	512036.354	4791784.419	43.203
5313	511989.685	4791810.078	42.266	5338	512036.680	4791784.825	43.315
5314	511989.508	4791809.581	42.087	5339	512037.240	4791785.731	43.306
5315	511988.734	4791808.475	41.511	5340	512037.443	4791786.297	43.139
5316	512004.068	4791800.505	41.870	5341	512038.050	4791787.109	42.697
5317	512004.638	4791801.457	42.433	5342	512038.614	4791787.590	42.664
5318	512004.937	4791801.866	42.617	5343	512038.809	4791787.854	42.394
5319	512005.552	4791802.762	42.606	5344	512050.236	4791781.680	42.654
5320	512005.767	4791803.274	42.432	5345	512050.121	4791781.385	42.909
5321	512006.215	4791804.371	41.846	5346	512049.455	4791780.687	42.922
5322	512006.564	4791804.844	41.747	5347	512049.074	4791780.061	43.371
5323	512006.691	4791805.088	41.719	5348	512048.809	4791779.529	43.579
5324	512007.114	4791806.114	41.448	5349	512048.373	4791778.553	43.584
5325	512007.332	4791805.014	41.661	5350	512048.261	4791778.098	43.428
5326	512007.260	4791806.665	41.265	5351	512047.495	4791776.771	42.847
5327	512024.766	4791797.577	41.205	5352	512054.262	4791772.696	43.005
5328	512023.665	4791795.906	42.070	5353	512063.178	4791768.615	43.290
5329	512023.320	4791795.843	42.263	5354	512063.891	4791768.237	43.212
5330	512023.075	4791795.052	42.515	5355	512064.424	4791769.381	43.760
5331	512022.647	4791794.271	42.850	5356	512064.650	4791769.795	43.944
5332	512022.287	4791793.772	42.979	5357	512065.248	4791770.689	43.947

5358	512065.469	4791771.152	43.703	5383	512087.725	4791755.704	43.952
5359	512065.726	4791772.230	43.281	5384	512099.656	4791755.075	43.694
5360	512066.034	4791772.834	43.238	5385	512099.553	4791754.869	44.021
5361	512066.258	4791773.039	43.051	5386	512094.159	4791757.736	43.907
5362	512076.985	4791767.251	43.206	5387	512086.379	4791762.195	43.761
5363	512076.896	4791766.985	43.513	5388	512090.616	4791759.924	43.878
5364	512076.439	4791766.495	43.496	5389	512090.475	4791759.695	43.855
5365	512075.964	4791765.475	43.986	5390	512090.705	4791760.211	43.880
5366	512075.669	4791765.099	44.185	5391	512086.446	4791762.406	43.755
5367	512075.344	4791764.055	44.177	5392	512086.191	4791761.972	43.741
5368	512075.168	4791763.572	43.983	5393	512090.539	4791759.655	43.846
5369	512074.786	4791762.789	43.528	5394	512090.905	4791758.848	43.814
5370	512074.375	4791762.198	43.430	5395	512090.231	4791757.849	44.334
5371	512082.658	4791754.546	45.268	5396	512089.720	4791757.520	44.502
5372	512083.134	4791754.627	45.161	5397	512089.021	4791756.682	44.510
5373	512082.831	4791754.807	45.037	5398	512088.541	4791756.288	44.302
5374	512083.845	4791755.900	44.271	5399	512087.411	4791755.143	43.574
5375	512083.543	4791756.065	44.041	5400	512097.251	4791747.575	45.202
5376	512084.022	4791756.851	43.658	5401	512095.996	4791748.342	45.231
5377	512084.575	4791757.126	44.237	5402	512097.325	4791747.644	44.104
5378	512084.382	4791757.536	43.911	5403	512095.938	4791748.456	44.198
5379	512086.590	4791754.479	44.254	5404	512096.237	4791748.608	44.059
5380	512087.320	4791755.589	44.275	5405	512097.390	4791747.945	44.072
5381	512086.887	4791754.265	44.199	5406	512097.962	4791749.012	44.031
5382	512087.363	4791755.087	43.570	5407	512096.813	4791749.672	44.055

5408	512096.048	4791749.754	44.018	5433	512113.607	4791741.347	44.500
5409	512095.982	4791749.947	43.908	5434	512113.609	4791741.627	44.412
5410	512096.946	4791749.816	43.888	5435	512120.326	4791738.136	44.643
5411	512096.866	4791749.662	44.029	5436	512120.164	4791737.869	45.177
5412	512098.052	4791748.949	44.024	5437	512126.442	4791734.520	45.269
5413	512098.185	4791749.094	43.909	5438	512126.412	4791734.864	44.806
5414	512098.485	4791748.408	44.037	5439	512126.861	4791735.725	45.155
5415	512098.654	4791748.507	43.950	5440	512127.205	4791736.175	45.342
5416	512099.108	4791748.724	43.970	5441	512127.726	4791737.079	45.343
5417	512099.262	4791748.620	43.893	5442	512127.831	4791737.672	45.182
5418	512099.228	4791750.564	44.608	5443	512128.486	4791738.541	44.700
5419	512099.471	4791751.064	44.746	5444	512145.278	4791729.543	45.082
5420	512099.967	4791752.009	44.745	5445	512144.690	4791728.679	45.526
5421	512100.224	4791752.454	44.595	5446	512144.306	4791728.186	45.691
5422	512100.816	4791753.519	44.016	5447	512143.697	4791727.299	45.694
5423	512114.655	4791746.017	44.363	5448	512143.412	4791726.722	45.531
5424	512114.126	4791744.932	44.883	5449	512142.954	4791726.000	45.125
5425	512113.884	4791744.538	45.063	5450	512142.805	4791725.726	45.733
5426	512113.417	4791743.585	45.066	5451	512156.956	4791718.364	45.464
5427	512113.167	4791743.139	44.866	5452	512156.687	4791718.289	45.590
5428	512112.671	4791741.963	44.254	5453	512156.750	4791718.494	45.500
5429	512113.496	4791741.254	44.391	5454	512158.365	4791718.127	45.533
5430	512112.774	4791741.601	44.350	5455	512158.527	4791718.386	45.835
5431	512113.127	4791742.341	44.565	5456	512158.779	4791719.183	45.959
5432	512113.888	4791741.952	44.685	5457	512159.277	4791720.121	45.963

5458	512159.887	4791721.073	45.623	5483	512183.947	4791707.701	46.226
5459	512160.026	4791721.315	45.629	5484	512183.567	4791707.077	46.410
5460	512162.728	4791719.148	45.872	5485	512183.167	4791706.072	46.408
5461	512159.755	4791720.785	45.854	5486	512182.705	4791705.452	46.230
5462	512159.893	4791721.043	45.858	5487	512181.350	4791705.742	45.767
5463	512162.788	4791719.442	45.860	5488	512181.297	4791705.775	46.179
5464	512162.928	4791719.455	45.666	5489	512178.372	4791707.404	46.166
5465	512163.029	4791719.707	45.638	5490	512178.483	4791707.685	46.164
5466	512163.151	4791719.644	45.652	5491	512181.526	4791706.019	46.245
5467	512162.992	4791719.413	45.663	5492	512182.408	4791704.639	45.796
5468	512162.954	4791719.354	45.859	5493	512191.418	4791699.890	45.878
5469	512162.362	4791718.474	46.056	5494	512191.475	4791699.862	46.232
5470	512161.916	4791717.483	46.050	5495	512191.720	4791700.277	46.285
5471	512161.426	4791716.788	45.860	5496	512196.956	4791698.654	46.613
5472	512161.323	4791716.529	45.858	5497	512197.506	4791699.563	46.607
5473	512161.448	4791716.590	45.875	5498	512197.723	4791700.163	46.454
5474	512161.349	4791716.497	45.874	5499	512198.780	4791701.362	45.752
5475	512178.215	4791707.416	46.175	5500	512215.661	4791691.619	46.256
5476	512178.255	4791707.525	46.185	5501	512214.990	4791690.639	46.639
5477	512179.893	4791710.623	45.916	5502	512214.680	4791690.366	46.838
5478	512182.798	4791708.491	46.139	5503	512214.300	4791689.357	46.833
5479	512179.780	4791710.051	46.136	5504	512213.686	4791688.480	46.680
5480	512179.932	4791710.304	45.916	5505	512213.374	4791688.066	46.726
5481	512182.894	4791708.715	46.004	5506	512230.359	4791678.914	46.901
5482	512184.463	4791708.725	45.741	5507	512230.699	4791679.370	46.841

5508	512226.496	4791681.015	46.874	5533	512237.567	4791669.581	48.442
5509	512226.718	4791681.559	46.747	5534	512236.829	4791668.265	49.094
5510	512227.208	4791682.401	46.987	5535	512236.762	4791668.244	49.110
5511	512227.754	4791683.296	46.998	5536	512244.659	4791667.138	48.640
5512	512228.051	4791683.802	46.851	5537	512244.613	4791667.449	47.496
5513	512228.360	4791684.665	46.471	5538	512245.967	4791669.364	46.287
5514	512243.664	4791676.570	46.554	5539	512246.047	4791669.597	46.005
5515	512243.359	4791675.405	46.952	5540	512246.010	4791669.929	47.014
5516	512243.176	4791675.017	47.131	5541	512245.946	4791670.068	46.296
5517	512242.777	4791674.032	47.144	5542	512246.788	4791671.322	46.971
5518	512242.670	4791673.507	46.923	5543	512247.041	4791671.736	47.172
5519	512242.047	4791672.696	46.589	5544	512247.618	4791672.623	47.172
5520	512241.897	4791672.281	46.505	5545	512247.823	4791673.220	46.931
5521	512241.579	4791671.877	46.993	5546	512248.279	4791673.907	46.627
5522	512243.222	4791671.351	46.972	5547	512267.344	4791663.839	46.771
5523	512242.922	4791671.056	46.248	5548	512266.916	4791662.797	47.138
5524	512242.705	4791671.194	46.301	5549	512266.640	4791662.378	47.365
5525	512242.636	4791670.951	46.309	5550	512266.212	4791661.421	47.369
5526	512239.368	4791672.952	46.420	5551	512266.100	4791660.990	47.190
5527	512239.403	4791673.052	47.222	5552	512265.563	4791659.705	46.619
5528	512239.240	4791673.015	46.402	5553	512265.289	4791659.587	47.202
5529	512242.822	4791670.504	46.363	5554	512265.247	4791659.333	46.338
5530	512243.716	4791666.000	48.636	5555	512265.061	4791659.054	46.641
5531	512240.626	4791666.103	49.236	5556	512276.197	4791650.914	48.104
5532	512241.178	4791666.999	48.523	5557	512276.896	4791652.194	46.852

5558	512277.186	4791652.543	46.822	5583	512307.671	4791636.581	47.580
5559	512277.368	4791652.766	46.554	5584	512307.649	4791636.000	47.343
5560	512277.450	4791653.021	47.277	5585	512307.785	4791636.168	47.065
5561	512277.508	4791653.246	46.832	5586	512308.018	4791636.413	47.341
5562	512278.194	4791654.364	47.310	5587	512307.865	4791636.716	47.334
5563	512278.602	4791654.719	47.482	5588	512308.334	4791637.851	47.511
5564	512279.181	4791655.609	47.483	5589	512308.642	4791638.512	47.721
5565	512279.367	4791656.204	47.284	5590	512309.073	4791639.527	47.734
5566	512279.772	4791656.955	46.896	5591	512309.316	4791640.139	47.554
5567	512296.208	4791648.543	46.942	5592	512309.730	4791641.250	47.184
5568	512295.959	4791647.340	47.428	5593	512315.681	4791637.975	47.222
5569	512295.966	4791646.591	47.605	5594	512315.174	4791636.960	47.497
5570	512295.579	4791645.604	47.642	5595	512314.736	4791636.448	47.785
5571	512295.057	4791644.934	47.502	5596	512314.258	4791635.492	47.779
5572	512294.602	4791643.950	47.081	5597	512314.715	4791634.057	47.308
5573	512294.472	4791643.820	47.443	5598	512314.571	4791634.508	47.432
5574	512294.349	4791643.538	46.823	5599	512314.976	4791634.291	47.419
5575	512294.203	4791643.301	47.095	5600	512314.633	4791633.639	47.436
5576	512294.130	4791643.006	47.076	5601	512314.214	4791633.843	47.452
5577	512293.862	4791640.538	48.183	5602	512313.110	4791634.376	47.459
5578	512299.730	4791639.155	47.407	5603	512312.813	4791633.847	47.465
5579	512300.233	4791640.069	47.216	5604	512312.627	4791633.618	47.182
5580	512299.527	4791640.533	47.205	5605	512312.544	4791633.364	47.444
5581	512305.995	4791634.097	48.465	5606	512313.990	4791629.191	50.456
5582	512307.119	4791635.450	47.338	5607	512313.922	4791629.141	51.301

5608	512314.065	4791629.082	49.152	5633	512332.467	4791627.096	47.974
5609	512314.980	4791631.431	47.621	5634	512332.896	4791628.111	47.969
5610	512319.757	4791629.094	47.682	5635	512334.615	4791628.454	47.777
5611	512320.129	4791629.259	47.528	5636	512335.142	4791629.426	47.364
5612	512320.221	4791629.536	47.300	5637	512341.246	4791618.942	47.612
5613	512320.331	4791629.817	47.598	5638	512341.899	4791619.862	47.927
5614	512320.537	4791630.090	47.495	5639	512342.257	4791620.315	48.053
5615	512320.988	4791630.962	47.677	5640	512342.692	4791621.298	48.069
5616	512321.442	4791631.607	47.874	5641	512343.505	4791622.566	48.041
5617	512322.028	4791632.505	47.866	5642	512344.002	4791623.528	48.051
5618	512321.562	4791631.854	47.895	5643	512344.317	4791624.134	47.884
5619	512322.063	4791632.794	47.853	5644	512344.642	4791625.062	47.407
5620	512322.334	4791633.640	47.536	5645	512351.271	4791621.752	47.616
5621	512322.929	4791634.470	47.206	5646	512350.981	4791620.894	47.968
5622	512328.611	4791620.531	49.872	5647	512350.773	4791620.280	48.114
5623	512328.708	4791621.041	48.815	5648	512350.439	4791619.324	48.112
5624	512329.993	4791622.643	47.665	5649	512349.551	4791617.606	48.084
5625	512330.473	4791623.584	47.677	5650	512349.030	4791616.687	48.099
5626	512330.619	4791623.799	47.342	5651	512347.817	4791614.175	47.894
5627	512330.737	4791624.021	47.656	5652	512347.906	4791614.404	47.640
5628	512330.787	4791624.249	47.636	5653	512348.024	4791614.631	47.885
5629	512331.353	4791625.242	47.879	5654	512348.285	4791615.210	47.593
5630	512330.126	4791627.987	47.932	5655	512348.684	4791616.025	47.949
5631	512331.848	4791625.938	47.950	5656	512347.581	4791612.822	47.895
5632	512332.371	4791626.888	47.962	5657	512354.579	4791605.891	50.096

5658	512354.647	4791606.286	49.130	5683	512365.588	4791604.755	47.735
5659	512355.764	4791608.876	47.994	5684	512365.482	4791604.567	48.010
5660	512356.096	4791609.670	47.957	5685	512364.998	4791603.725	48.016
5661	512356.183	4791609.865	47.662	5686	512364.097	4791600.577	50.224
5662	512356.288	4791610.111	47.955	5687	512364.259	4791600.678	49.349
5663	512356.346	4791610.367	47.630	5688	512374.088	4791599.744	48.088
5664	512356.952	4791611.285	47.991	5689	512374.158	4791599.942	47.806
5665	512357.567	4791611.935	48.090	5690	512374.294	4791600.264	48.083
5666	512358.161	4791612.829	48.082	5691	512374.267	4791600.420	47.878
5667	512359.543	4791614.380	48.136	5692	512374.597	4791600.955	48.026
5668	512360.045	4791615.326	48.160	5693	512375.179	4791601.662	48.199
5669	512360.416	4791615.693	48.015	5694	512375.650	4791602.622	48.190
5670	512360.609	4791615.947	47.992	5695	512377.891	4791602.852	48.153
5671	512368.099	4791611.661	47.977	5696	512377.609	4791604.357	48.256
5672	512368.017	4791611.410	47.988	5697	512378.123	4791605.296	48.272
5673	512367.707	4791611.115	48.211	5698	512378.337	4791605.682	48.096
5674	512367.188	4791610.171	48.201	5699	512378.705	4791606.170	48.045
5675	512365.159	4791610.592	48.118	5700	512397.955	4791588.946	48.346
5676	512364.783	4791609.923	48.113	5701	512380.877	4791595.676	48.114
5677	512370.439	4791607.062	47.993	5702	512380.941	4791595.949	47.823
5678	512367.475	4791607.428	48.152	5703	512381.177	4791596.109	48.119
5679	512366.951	4791606.582	48.155	5704	512381.153	4791596.293	47.924
5680	512366.520	4791605.925	48.008	5705	512381.534	4791597.026	48.020
5681	512365.805	4791605.169	47.733	5706	512381.942	4791597.519	48.243
5682	512365.645	4791605.005	48.015	5707	512382.498	4791598.428	48.253

5708	512383.802	4791598.896	47.950	5733	512393.523	4791600.082	47.983
5709	512383.926	4791598.521	47.937	5734	512395.422	4791599.158	47.968
5710	512383.587	4791598.731	47.932	5735	512394.911	4791598.171	47.956
5711	512383.888	4791599.224	47.920	5736	512396.703	4791598.229	47.810
5712	512384.266	4791599.014	47.875	5737	512396.573	4791598.004	47.531
5713	512384.539	4791598.757	47.997	5738	512396.497	4791597.751	47.814
5714	512383.520	4791599.209	47.957	5739	512396.369	4791597.485	47.796
5715	512383.794	4791599.613	48.001	5740	512396.226	4791596.889	47.996
5716	512383.289	4791599.860	48.006	5741	512395.581	4791595.715	48.354
5717	512383.858	4791600.884	48.305	5742	512395.025	4791594.842	48.357
5718	512384.406	4791601.819	48.297	5743	512393.704	4791592.253	48.317
5719	512384.712	4791602.411	48.126	5744	512393.172	4791591.306	48.325
5720	512384.740	4791602.657	48.031	5745	512393.441	4791591.727	48.323
5721	512384.982	4791602.569	48.023	5746	512392.866	4791590.825	48.313
5722	512385.439	4791603.070	47.785	5747	512392.563	4791590.233	48.113
5723	512385.535	4791603.344	47.796	5748	512392.217	4791589.384	47.949
5724	512385.644	4791603.506	47.525	5749	512392.202	4791589.262	48.150
5725	512385.919	4791603.717	47.811	5750	512392.128	4791588.942	47.876
5726	512387.050	4791602.190	47.773	5751	512392.024	4791588.737	48.176
5727	512388.754	4791601.189	0.000	5752	512417.523	4791577.254	48.290
5728	512388.485	4791600.694	48.054	5753	512418.006	4791577.868	48.274
5729	512388.905	4791601.101	47.812	5754	512400.233	4791589.094	48.380
5730	512389.132	4791601.434	47.845	5755	512399.710	4791588.145	48.376
5731	512389.274	4791601.648	47.557	5756	512399.600	4791587.936	48.359
5732	512389.389	4791601.911	47.849	5757	512399.151	4791586.969	48.365

5758	512398.191	4791585.471	48.160	5783	512411.328	4791576.982	48.172
5759	512398.022	4791585.245	47.871	5784	512411.375	4791577.226	47.862
5760	512397.876	4791585.081	48.168	5785	512411.521	4791577.458	48.159
5761	512407.613	4791578.807	48.202	5786	512412.171	4791577.082	48.174
5762	512405.320	4791580.381	48.180	5787	512412.049	4791576.913	47.873
5763	512405.323	4791580.633	47.875	5788	512411.961	4791576.651	48.166
5764	512405.536	4791580.871	48.183	5789	512412.627	4791576.279	48.163
5765	512406.494	4791582.361	48.419	5790	512412.660	4791576.481	47.894
5766	512407.125	4791583.239	48.412	5791	512412.903	4791576.699	48.168
5767	512407.934	4791584.282	48.399	5792	512415.940	4791574.931	48.167
5768	512408.529	4791585.206	48.375	5793	512413.443	4791575.746	48.191
5769	512418.894	4791580.774	48.206	5794	512413.661	4791575.950	47.903
5770	512415.948	4791584.581	48.464	5795	512413.873	4791576.137	48.189
5771	512416.608	4791585.143	48.431	5796	512420.475	4791571.135	48.254
5772	512416.146	4791584.134	48.418	5797	512420.866	4791570.858	48.258
5773	512416.047	4791581.122	48.398	5798	512421.900	4791572.220	48.470
5774	512415.510	4791580.184	48.398	5799	512422.459	4791573.114	48.477
5775	512414.450	4791578.472	48.438	5800	512423.717	4791574.946	48.413
5776	512413.830	4791577.590	48.454	5801	512424.352	4791575.794	48.410
5777	512413.428	4791575.311	49.527	5802	512428.024	4791574.440	49.469
5778	512412.819	4791574.438	49.550	5803	512428.799	4791575.564	49.447
5779	512411.599	4791576.571	48.140	5804	512428.204	4791574.728	49.467
5780	512411.052	4791575.613	48.176	5805	512426.825	4791575.639	48.313
5781	512410.653	4791575.703	48.167	5806	512427.374	4791576.545	48.301
5782	512411.271	4791576.973	48.132	5807	512427.111	4791576.228	48.340

5808	512426.007	4791576.009	48.195	5833	512445.626	4791560.016	48.427
5809	512426.653	4791577.047	48.206	5834	512444.422	4791558.125	48.472
5810	512428.308	4791575.991	48.164	5835	512443.818	4791557.236	48.462
5811	512423.652	4791576.841	48.224	5836	512443.570	4791556.649	48.278
5812	512421.343	4791578.283	48.244	5837	512452.119	4791550.446	48.270
5813	512421.973	4791579.236	48.129	5838	512452.536	4791550.992	48.474
5814	512424.232	4791577.779	47.975	5839	512453.184	4791551.828	48.477
5815	512425.433	4791577.193	48.161	5840	512454.485	4791553.692	48.427
5816	512424.446	4791577.510	47.856	5841	512455.134	4791554.531	48.433
5817	512425.089	4791578.396	48.213	5842	512455.539	4791555.025	48.265
5818	512426.789	4791577.290	48.152	5843	512463.192	4791549.404	48.263
5819	512426.159	4791576.392	48.228	5844	512463.309	4791548.583	48.427
5820	512433.119	4791569.950	48.399	5845	512462.664	4791547.720	48.421
5821	512432.511	4791569.053	48.389	5846	512461.348	4791545.833	48.463
5822	512431.464	4791567.097	48.463	5847	512460.789	4791544.906	48.449
5823	512430.845	4791566.195	48.457	5848	512460.274	4791544.513	48.244
5824	512430.292	4791565.373	48.244	5849	512469.956	4791538.035	48.466
5825	512436.892	4791561.121	48.236	5850	512470.648	4791538.835	48.451
5826	512437.376	4791561.708	48.462	5851	512472.908	4791541.361	48.417
5827	512438.166	4791562.491	48.462	5852	512472.236	4791540.519	48.436
5828	512439.424	4791564.331	48.414	5853	512473.300	4791541.844	48.219
5829	512439.929	4791565.248	48.424	5854	512470.029	4791537.194	48.191
5830	512442.488	4791564.369	48.250	5855	512470.350	4791537.715	48.437
5831	512446.524	4791561.543	48.264	5856	512471.109	4791538.527	48.448
5832	512446.140	4791560.957	48.423	5857	512478.451	4791530.688	48.222

5858	512478.750	4791531.263	48.478	5883	512543.533	4791517.476	48.165
5859	512479.422	4791532.120	48.444	5884	512543.331	4791518.013	48.059
5860	512481.647	4791535.377	48.232	5885	512539.917	4791514.501	48.368
5861	512481.312	4791534.902	48.409	5886	512551.762	4791509.506	48.685
5862	512480.682	4791534.062	48.403	5887	512548.045	4791505.576	48.987
5863	512487.458	4791523.612	48.231	5888	512543.890	4791502.290	49.112
5864	512487.880	4791524.067	48.453	5889	512540.226	4791497.171	49.618
5865	512488.568	4791524.889	48.450	5890	512537.574	4791496.785	49.807
5866	512490.071	4791526.689	48.401	5891	512536.670	4791496.179	49.686
5867	512490.658	4791527.497	48.404	5892	512540.074	4791498.759	49.366
5868	512491.018	4791528.045	48.229	5893	512546.685	4791511.857	48.464
5869	512500.516	4791513.785	48.463	5894	512544.121	4791510.038	48.516
5870	512501.323	4791514.539	48.475	5895	512539.690	4791505.069	48.508
5871	512502.297	4791515.625	48.464	5896	512534.771	4791498.034	48.462
5872	512502.991	4791516.462	48.449	5897	512533.813	4791495.526	48.359
5873	512504.940	4791537.119	48.413	5898	512530.564	4791496.112	48.352
5874	512501.911	4791533.284	48.544	5899	512536.356	4791502.449	48.414
5875	512509.558	4791529.489	48.449	5900	512541.539	4791508.312	48.485
5876	512520.606	4791523.950	48.427	5901	512539.918	4791509.791	48.311
5877	512531.998	4791518.247	48.416	5902	512540.838	4791509.408	48.296
5878	512531.912	4791518.171	48.419	5903	512540.118	4791510.020	48.234
5879	512535.684	4791516.325	48.387	5904	512541.414	4791511.225	48.393
5880	512535.677	4791516.318	48.401	5905	512540.993	4791511.686	48.449
5881	512535.719	4791516.429	48.387	5906	512541.332	4791513.483	48.422
5882	512538.958	4791514.784	48.420	5907	512539.025	4791514.623	48.423

5908	512539.647	4791510.815	48.480	5933	512541.061	4791508.296	48.543
5909	512539.980	4791511.309	48.412	5934	512537.901	4791504.615	48.505
5910	512539.471	4791511.758	48.416	5935	512534.081	4791500.373	48.534
5911	512538.019	4791511.575	48.422	5936	512530.415	4791496.263	48.494
5912	512537.607	4791513.609	48.433	5937	512531.117	4791503.935	48.679
5913	512535.015	4791514.908	48.427	5938	512531.420	4791501.708	48.677
5914	512531.256	4791516.787	48.442	5939	512530.945	4791502.179	48.694
5915	512527.323	4791518.755	48.478	5940	512531.323	4791502.638	48.670
5916	512520.557	4791522.113	48.493	5941	512531.843	4791502.232	48.683
5917	512518.787	4791523.006	48.500	5942	512532.984	4791502.203	48.701
5918	512509.482	4791516.274	48.396	5943	512533.691	4791501.554	48.655
5919	512510.943	4791518.288	48.579	5944	512534.029	4791501.227	48.524
5920	512509.295	4791519.781	47.993	5945	512538.514	4791506.877	48.683
5921	512513.772	4791525.251	48.452	5946	512537.308	4791506.938	48.775
5922	512518.707	4791522.749	48.499	5947	512538.172	4791507.679	48.629
5923	512518.771	4791522.752	48.477	5948	512535.385	4791508.685	48.732
5924	512520.372	4791521.922	48.452	5949	512535.388	4791508.681	48.723
5925	512520.444	4791521.857	48.464	5950	512536.209	4791509.413	48.668
5926	512525.171	4791519.593	48.612	5951	512536.944	4791511.022	48.600
5927	512531.155	4791516.528	48.415	5952	512537.491	4791512.546	48.448
5928	512531.279	4791516.519	48.456	5953	512535.292	4791510.055	48.615
5929	512534.863	4791514.708	48.419	5954	512526.824	4791505.166	48.651
5930	512534.870	4791514.636	48.404	5955	512531.698	4791500.742	48.682
5931	512537.355	4791513.405	48.445	5956	512529.897	4791498.809	48.663
5932	512537.679	4791511.241	48.506	5957	512530.528	4791497.608	48.539

5958	512530.057	4791497.100	48.496	5983	512512.849	4791516.885	48.425
5959	512529.535	4791497.584	48.584	5984	512513.821	4791517.646	48.474
5960	512529.966	4791498.089	48.647	5985	512513.713	4791515.757	48.553
5961	512530.425	4791497.899	48.606	5986	512519.701	4791507.538	48.610
5962	512529.579	4791497.801	48.595	5987	512519.642	4791508.311	48.617
5963	512523.647	4791503.113	48.618	5988	512520.456	4791507.542	48.655
5964	512527.809	4791507.971	48.502	5989	512519.681	4791506.772	48.596
5965	512527.608	4791508.644	48.493	5990	512518.877	4791507.534	48.527
5966	512526.602	4791508.347	48.495	5991	512520.232	4791508.765	48.629
5967	512526.805	4791507.685	48.461	5992	512520.962	4791508.024	48.669
5968	512528.029	4791506.919	48.606	5993	512521.424	4791508.531	48.741
5969	512528.982	4791506.059	48.612	5994	512520.698	4791509.286	48.671
5970	512528.262	4791505.212	48.620	5995	512521.940	4791514.551	48.600
5971	512527.277	4791506.092	48.621	5996	512519.975	4791510.416	48.618
5972	512526.695	4791506.536	48.641	5997	512513.558	4791513.560	48.404
5973	512529.654	4791503.824	48.637	5998	512515.551	4791517.770	48.299
5974	512531.208	4791505.589	48.662	5999	512504.576	4791508.399	48.199
5975	512532.549	4791506.987	48.687	6000	512504.414	4791508.227	47.975
5976	512531.383	4791508.007	48.649	6001	512504.225	4791507.945	48.200
5977	512527.702	4791507.344	48.614	6002	512511.808	4791505.669	48.566
5978	512529.646	4791511.757	48.625	6003	512507.188	4791505.403	48.263
5979	512532.686	4791510.781	48.578	6004	512507.328	4791505.607	47.962
5980	512534.694	4791514.709	48.413	6005	512507.554	4791505.836	48.205
5981	512531.384	4791516.260	48.438	6006	512508.807	4791506.948	48.478
5982	512520.070	4791519.198	48.498	6007	512509.524	4791507.736	48.479

6008	512509.695	4791507.889	48.479	6033	512529.805	4791490.780	48.433
6009	512510.363	4791508.749	48.495	6034	512529.385	4791490.404	48.643
6010	512510.822	4791509.241	48.319	6035	512528.682	4791489.596	48.670
6011	512511.017	4791509.908	48.197	6036	512528.220	4791489.018	48.484
6012	512519.257	4791502.002	48.176	6037	512527.603	4791488.527	48.154
6013	512518.662	4791501.192	48.347	6038	512527.608	4791488.486	48.196
6014	512518.260	4791500.615	48.514	6039	512527.322	4791488.026	48.019
6015	512517.537	4791499.791	48.532	6040	512527.198	4791487.923	48.290
6016	512518.082	4791500.359	48.532	6041	512522.847	4791492.509	48.326
6017	512517.300	4791499.571	48.554	6042	512522.604	4791492.307	48.018
6018	512516.931	4791498.974	48.314	6043	512522.469	4791492.161	48.304
6019	512516.488	4791498.393	48.077	6044	512559.056	4791475.016	50.502
6020	512516.326	4791498.183	48.261	6045	512559.618	4791475.737	50.740
6021	512516.162	4791498.014	47.943	6046	512552.753	4791479.848	50.397
6022	512515.985	4791497.797	48.246	6047	512552.915	4791480.239	50.492
6023	512522.875	4791492.694	48.215	6048	512549.477	4791482.604	50.350
6024	512523.398	4791493.233	48.360	6049	512546.286	4791484.936	50.200
6025	512523.950	4791493.692	48.585	6050	512542.380	4791487.981	49.625
6026	512524.667	4791494.485	48.600	6051	512540.864	4791489.749	49.616
6027	512525.132	4791494.948	48.413	6052	512538.867	4791490.956	49.513
6028	512524.832	4791495.811	48.262	6053	512535.664	4791493.536	49.417
6029	512525.440	4791495.438	48.279	6054	512533.845	4791493.487	48.490
6030	512525.441	4791495.440	48.282	6055	512533.729	4791494.399	48.327
6031	512524.801	4791495.848	48.268	6056	512532.099	4791495.211	48.390
6032	512530.447	4791491.365	48.147	6057	512530.134	4791496.015	48.429

6058	512532.527	4791494.563	48.385	6083	512533.217	4791482.356	48.294
6059	512531.779	4791493.867	48.385	6084	512533.445	4791482.437	47.983
6060	512532.537	4791493.096	48.393	6085	512533.601	4791482.683	48.287
6061	512533.324	4791493.875	48.357	6086	512533.693	4791482.749	48.177
6062	512533.136	4791493.573	48.308	6087	512534.438	4791483.765	48.572
6063	512532.865	4791493.353	48.054	6088	512534.728	4791484.256	48.716
6064	512532.679	4791493.181	48.288	6089	512535.410	4791485.051	48.698
6065	512531.389	4791490.863	48.125	6090	512535.751	4791485.440	48.529
6066	512530.841	4791490.012	48.491	6091	512536.332	4791486.107	48.202
6067	512530.335	4791489.546	48.645	6092	512537.805	4791487.312	48.301
6068	512529.651	4791488.735	48.650	6093	512537.941	4791487.578	48.019
6069	512529.294	4791488.259	48.519	6094	512538.101	4791487.771	48.330
6070	512528.766	4791487.645	48.201	6095	512539.341	4791488.552	48.396
6071	512528.604	4791487.356	48.288	6096	512539.231	4791488.597	48.366
6072	512528.426	4791487.166	48.016	6097	512540.968	4791486.563	48.370
6073	512528.260	4791486.958	48.306	6098	512542.157	4791484.832	48.430
6074	512532.596	4791481.042	48.315	6099	512541.573	4791484.257	48.330
6075	512531.460	4791481.970	48.271	6100	512541.417	4791484.021	48.064
6076	512531.815	4791481.740	48.153	6101	512541.246	4791483.866	48.365
6077	512532.229	4791481.405	48.144	6102	512540.320	4791482.407	48.238
6078	512531.810	4791481.684	47.929	6103	512539.840	4791482.012	48.584
6079	512532.049	4791481.497	47.897	6104	512539.405	4791481.569	48.769
6080	512532.645	4791481.915	48.210	6105	512538.679	4791480.819	48.777
6081	512532.534	4791481.999	47.934	6106	512538.351	4791480.281	48.690
6082	512533.201	4791482.433	47.969	6107	512537.779	4791479.701	48.293

6108	512537.180	4791479.347	48.347	6133	512551.235	4791467.952	48.388
6109	512536.939	4791479.210	48.049	6134	512550.603	4791467.467	48.415
6110	512536.779	4791478.921	48.340	6135	512550.377	4791467.304	48.121
6111	512543.026	4791473.271	48.395	6136	512550.216	4791467.040	48.391
6112	512543.298	4791473.391	48.105	6137	512571.557	4791449.986	48.521
6113	512543.442	4791473.532	48.399	6138	512571.623	4791450.292	48.227
6114	512543.852	4791474.017	48.317	6139	512571.821	4791450.488	48.539
6115	512544.734	4791474.897	48.829	6140	512572.272	4791451.047	48.529
6116	512545.044	4791475.272	48.896	6141	512572.561	4791452.129	49.050
6117	512545.785	4791476.042	48.857	6142	512573.107	4791452.563	49.119
6118	512546.220	4791476.617	48.664	6143	512573.692	4791453.463	49.041
6119	512546.518	4791477.022	48.242	6144	512574.291	4791453.855	48.839
6120	512547.149	4791478.111	48.421	6145	512574.589	4791454.339	48.573
6121	512547.395	4791478.253	48.136	6146	512575.100	4791455.058	48.553
6122	512547.517	4791478.398	48.400	6147	512575.303	4791455.292	48.256
6123	512548.721	4791479.794	48.360	6148	512575.472	4791455.458	48.565
6124	512555.442	4791473.968	48.363	6149	512568.824	4791460.682	48.503
6125	512554.587	4791472.309	48.413	6150	512568.634	4791460.474	48.204
6126	512554.422	4791472.117	48.118	6151	512568.652	4791460.488	48.207
6127	512554.374	4791471.779	48.400	6152	512568.398	4791460.334	48.501
6128	512553.864	4791470.805	48.347	6153	512567.911	4791459.721	48.503
6129	512553.474	4791470.414	48.723	6154	512567.449	4791459.250	48.759
6130	512553.037	4791469.912	48.893	6155	512567.021	4791458.576	48.962
6131	512552.356	4791469.086	48.933	6156	512566.320	4791457.771	49.032
6132	512551.930	4791468.707	48.877	6157	512565.952	4791457.208	48.957

6158	512565.403	4791456.562	48.598	6183	512580.597	4791460.995	51.327
6159	512564.956	4791455.854	48.430	6184	512579.905	4791459.829	51.303
6160	512564.879	4791455.634	48.153	6185	512581.728	4791457.792	51.309
6161	512564.547	4791455.509	48.446	6186	512583.273	4791454.820	51.547
6162	512557.274	4791461.344	48.413	6187	512587.050	4791454.568	51.714
6163	512557.558	4791461.523	48.124	6188	512589.284	4791451.803	52.048
6164	512557.522	4791461.800	48.405	6189	512612.297	4791432.294	52.971
6165	512557.851	4791462.359	48.426	6190	512612.598	4791432.753	53.012
6166	512558.433	4791463.330	48.907	6191	512612.573	4791432.711	52.838
6167	512558.846	4791463.697	48.955	6192	512607.974	4791435.611	52.761
6168	512559.478	4791464.485	48.879	6193	512608.016	4791435.554	52.956
6169	512559.958	4791465.079	48.769	6194	512607.809	4791435.071	52.938
6170	512560.292	4791465.489	48.422	6195	512601.440	4791439.158	52.856
6171	512561.011	4791466.293	48.427	6196	512601.864	4791439.512	52.887
6172	512561.185	4791466.521	48.146	6197	512601.843	4791439.479	52.715
6173	512561.310	4791466.712	48.440	6198	512595.741	4791443.542	52.664
6174	512563.429	4791467.611	48.419	6199	512595.745	4791443.409	52.844
6175	512568.537	4791463.389	48.483	6200	512595.470	4791443.086	52.809
6176	512572.929	4791459.848	48.583	6201	512592.084	4791445.414	52.745
6177	512576.806	4791457.606	48.634	6202	512592.478	4791445.715	52.760
6178	512567.275	4791468.674	50.718	6203	512592.476	4791445.795	52.583
6179	512571.636	4791466.030	50.873	6204	512588.746	4791448.518	52.571
6180	512572.123	4791466.998	50.860	6205	512588.711	4791448.479	52.736
6181	512575.605	4791464.632	51.075	6206	512588.307	4791448.188	52.709
6182	512575.357	4791462.975	51.126	6207	512585.884	4791450.027	52.682

6208	512586.032	4791450.538	52.700	6233	512581.335	4791443.571	48.391
6209	512586.009	4791450.567	52.517	6234	512581.330	4791443.579	48.785
6210	512586.531	4791451.123	52.469	6235	512581.539	4791443.577	48.765
6211	512586.561	4791451.248	52.188	6236	512581.575	4791443.587	48.435
6212	512582.778	4791453.868	52.239	6237	512580.185	4791444.552	48.708
6213	512582.298	4791453.354	52.238	6238	512580.190	4791444.425	48.707
6214	512582.793	4791452.982	52.315	6239	512580.181	4791444.370	48.352
6215	512582.747	4791452.963	52.645	6240	512580.101	4791444.162	48.363
6216	512582.512	4791452.654	52.628	6241	512580.107	4791444.276	48.688
6217	512579.100	4791455.027	50.385	6242	512579.899	4791444.073	48.332
6218	512579.460	4791455.800	49.831	6243	512579.801	4791443.930	48.691
6219	512579.280	4791455.621	50.023	6244	512572.150	4791449.478	48.565
6220	512579.176	4791455.600	50.327	6245	512572.403	4791449.795	48.262
6221	512576.964	4791456.578	48.986	6246	512572.502	4791449.995	48.546
6222	512577.257	4791456.885	49.009	6247	512572.896	4791450.536	48.554
6223	512577.280	4791456.945	48.723	6248	512573.276	4791451.512	49.037
6224	512576.945	4791456.560	48.576	6249	512573.741	4791452.083	49.086
6225	512579.934	4791444.002	48.335	6250	512574.389	4791452.948	49.026
6226	512579.712	4791443.718	48.433	6251	512574.807	4791453.417	48.820
6227	512579.641	4791443.696	48.710	6252	512575.225	4791454.101	48.506
6228	512580.835	4791443.132	48.795	6253	512575.732	4791454.640	48.526
6229	512580.651	4791442.920	48.785	6254	512575.895	4791454.858	48.264
6230	512580.685	4791442.991	48.426	6255	512575.928	4791455.115	48.550
6231	512581.130	4791443.422	48.453	6256	512584.816	4791449.354	48.563
6232	512580.986	4791443.274	48.402	6257	512585.217	4791449.948	48.609

6258	512584.104	4791450.699	48.596	6283	512594.282	4791439.543	48.965
6259	512583.690	4791450.157	48.593	6284	512594.740	4791440.044	48.602
6260	512583.977	4791449.920	48.450	6285	512595.134	4791440.989	48.601
6261	512584.557	4791449.512	48.464	6286	512595.235	4791441.201	48.327
6262	512584.500	4791449.518	48.059	6287	512595.411	4791441.395	48.631
6263	512584.452	4791449.481	48.084	6288	512601.927	4791433.911	49.195
6264	512583.987	4791449.851	48.088	6289	512603.403	4791435.635	48.647
6265	512583.542	4791449.596	48.540	6290	512603.427	4791435.848	48.368
6266	512583.527	4791449.535	48.245	6291	512603.614	4791436.072	48.664
6267	512583.418	4791449.428	48.265	6292	512603.089	4791435.333	48.637
6268	512583.249	4791449.185	48.549	6293	512602.088	4791432.560	49.270
6269	512584.340	4791449.052	48.532	6294	512601.781	4791431.982	49.198
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6273	512584.505	4791447.005	48.678	6298	512606.089	4791427.799	49.287
6274	512584.445	4791446.449	49.006	6299	512605.829	4791428.033	49.111
6275	512584.075	4791445.913	49.075	6300	512606.054	4791428.291	49.211
6276	512583.482	4791445.017	49.151	6301	512606.309	4791428.062	49.265
6277	512583.197	4791444.446	49.067	6302	512609.395	4791425.576	49.538
6278	512582.295	4791443.562	48.509	6303	512609.509	4791425.847	49.580
6279	512592.373	4791436.867	48.543	6304	512609.939	4791425.720	49.537
6280	512592.996	4791437.839	49.086	6305	512609.530	4791425.265	49.721
6281	512593.431	4791438.173	49.209	6306	512617.525	4791420.944	48.885
6282	512594.004	4791439.081	49.148	6307	512617.801	4791420.753	48.873

6308	512617.930	4791420.976	48.920	6333	512611.418	4791430.889	48.366
6309	512617.668	4791421.215	48.927	6334	512611.607	4791431.125	48.656
6310	512613.187	4791423.921	49.088	6335	512619.215	4791426.608	48.749
6311	512613.523	4791423.715	49.089	6336	512619.073	4791426.395	48.484
6312	512613.740	4791424.092	49.162	6337	512618.945	4791426.140	48.767
6313	512613.392	4791424.281	49.205	6338	512618.580	4791425.629	48.701
6314	512610.628	4791424.119	49.502	6339	512618.245	4791424.572	49.164
6315	512609.659	4791424.593	49.658	6340	512617.940	4791424.081	49.315
6316	512609.989	4791425.432	49.759	6341	512617.450	4791423.123	49.379
6317	512609.053	4791425.717	49.654	6342	512617.215	4791422.616	49.317
6318	512607.205	4791427.039	49.735	6343	512616.564	4791421.613	48.848
6319	512607.730	4791425.004	48.996				
6320	512605.501	4791426.693	48.984				
6321	512606.291	4791428.247	49.219				
6322	512606.922	4791428.264	49.174				
6323	512608.949	4791426.973	49.207				
6324	512610.969	4791425.595	49.150				
6325	512611.408	4791424.128	49.126				
6326	512611.313	4791423.292	48.976				
6327	512609.156	4791427.256	49.200				
6328	512609.634	4791427.837	49.318				
6329	512610.191	4791428.748	49.248				
6330	512610.486	4791429.298	49.110				
6331	512610.971	4791430.029	48.681				
6332	512611.373	4791430.667	48.652				

2.2 CERTIFICADOS DE CALIBRACIÓN



CERTIFICADO DE VERIFICACION Y CONTROL

Nº de Certificado : 2017 / CT / 157
 Expedido a : GESERTO,S.L.
 Fecha Calibración: 13/01/2017
 Fecha próxima calibración: 13/01/2018

DATOS DEL EQUIPO

Marca LEICA Modelo SPRINTER 150M Nº de serie 2100232
 Tipo Nivel óptico
 Precisión Eje óptico +/- 2,5 mm Precisión electrónica +/- 1,5 mm
*En nivelación doble de 1 Km *Con mira Invar / Estándar

ANGULO RESPECTO A LA HORIZONTAL DE ENTRADA

	OPTICO		ELECTRONICO	
	mm a 100mts.	Arcseg.(")	mm a 30 mts.	Arcseg.(")
Eje Horizontal	10,00	20,63	1,9	13,06

ANGULO RESPECTO A LA HORIZONTAL DE SALIDA

	OPTICO		ELECTRONICO	
	mm a 100mts.	Arcseg.(")	mm a 30 mts.	Arcseg.(")
Eje Horizontal	0,00	0,00	0,26	1,79
Incertidumbre	0,69	1,42	0,15	1,05

PATRONES UTILIZADOS

Colimador Leica Universal triposicional con compensador Nº Serie 9940 , certificado por el C.E.M. con el Número : 150756001 , cuya incertidumbre asociada es de 0,4 mgon (1,29") con un nivel de confianza del 95 % (k=2) y comprobado con el siguiente patrón.

	MODELO	Nº SERIE	CERTIFICADO CALIBRACIÓN	INCERTIDUMBRE
Nivel óptico	NA 2	5515996	151493001	3,3"

Procedimiento de ajuste conforme a lo establecido por el fabricante en el manual del instrumento en cuestión.

Condiciones Ambientales 23 +/- 5 Cº Temperatura 65 +/- 10 % Humedad

Incertidumbres calculadas con un nivel de confianza del 95% (k=2)
 Los resultados se refieren al momento y condiciones en que se efectuaron las mediciones.

Servicio de Asistencia Técnica
 Ramón Currás Baliña
 Responsable Servicio Técnico

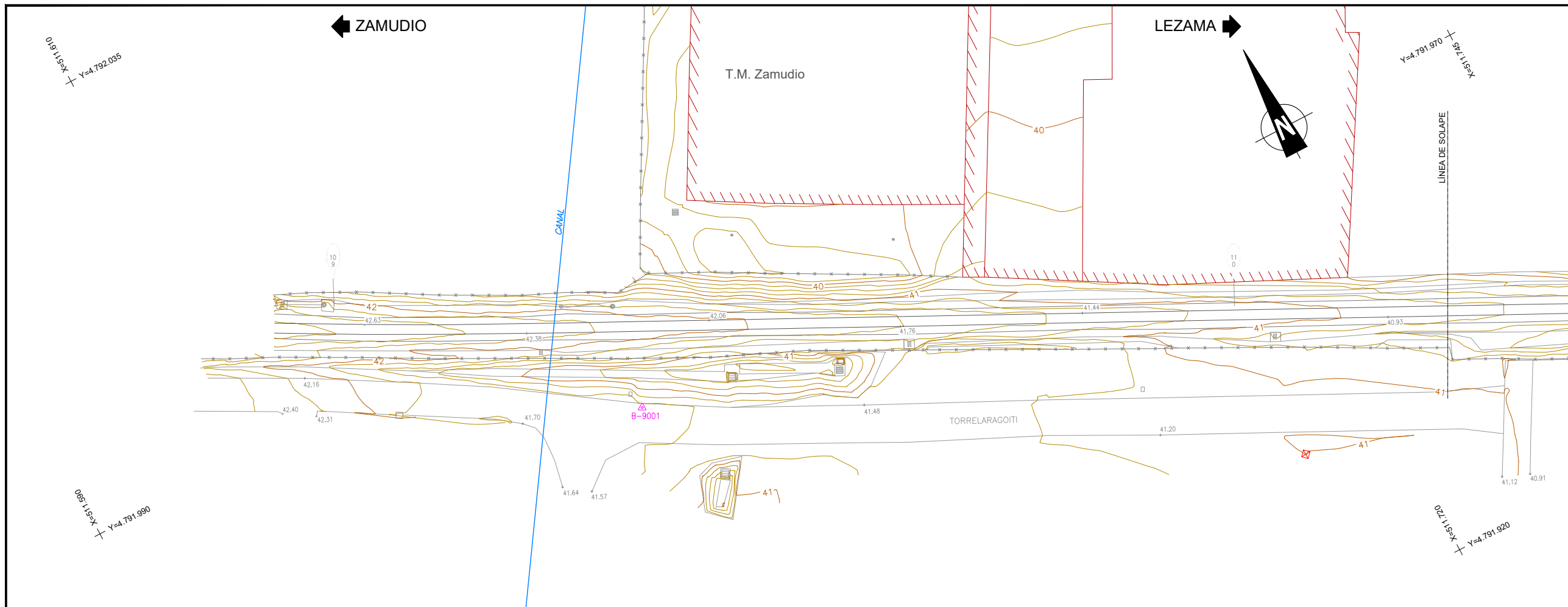
PRECISA Y EFICIENTE S.L.
 LAUNA DEL MARQUESADO 19
 PLANTA OFICINA 28
 28021-MADRID
 C.I.F. B-35938635



Medición precisa y eficiente S.L. inscrita en el Registro Mercantil de Madrid Tomo 27.886. Folio 69. Sección 8. Hoja M-502572. Cif.: B-85938635

APÉNDICE N° 3.

PLANOS



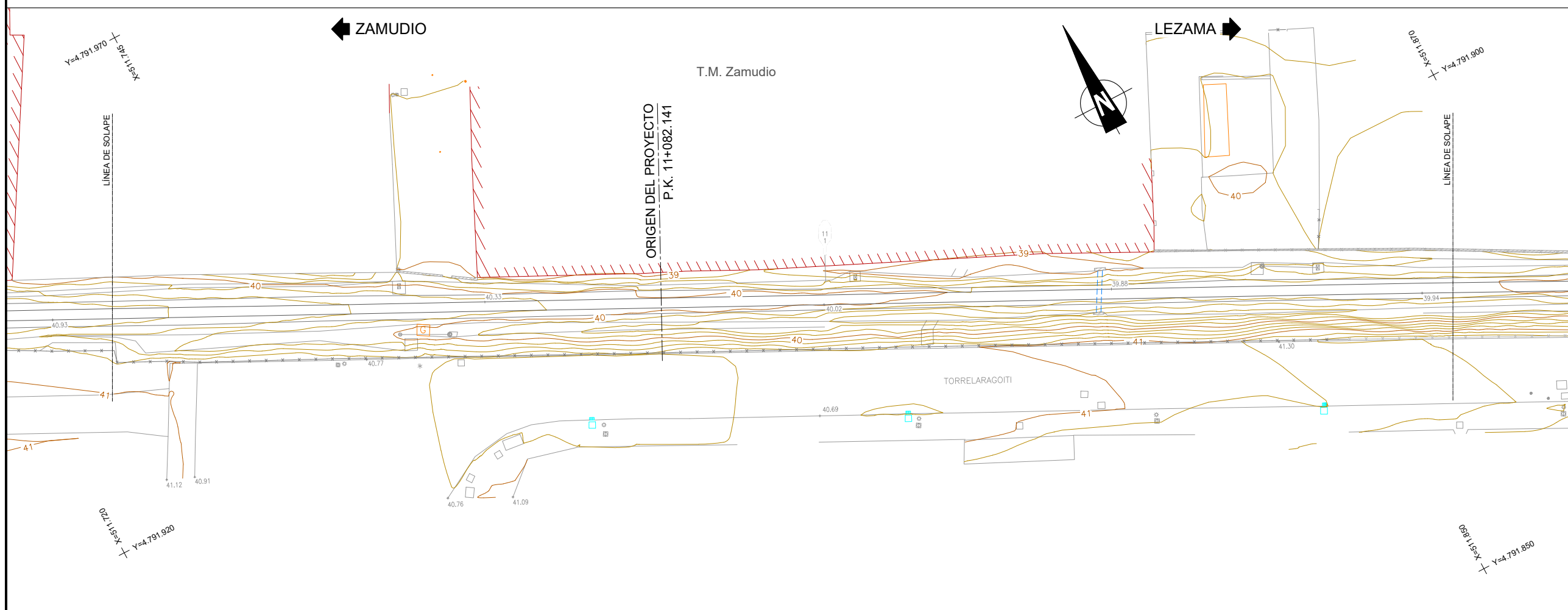
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NOTAS :

LEYENDA

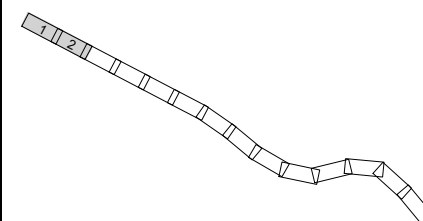
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- POSTE ACOMETIDA
- REGISTRO ALUMBRADO
- △ BASE DE REPLANTEO
- REJILLA
- ARQUETA
- FAROLA
- BOLARDO
- POSTE DE HORMIGON
- ▲ SEMAFORO
- CATENARIA
- SANEAMIENTO
- IMBORNAL
- ARBOL
- REGISTRO GAS
- PILAR
- HIDRANTE
- POSTE CAMARA
- AGUA 500
- REGISTRO INDETERMINADO
- POSTE DE MADERA
- SANEAMIENTO
- TIRANTE
- PK FFCC
- ▨ EDIFICACIÓN
- ▨ ESTRUCTURA
- ×× VALLA

BASE DE REPLANTEO

BASE	X	Y	Z
B-9001	511648.521	4791974.847	41.542



DISTRIBUCIÓN DE HOJAS



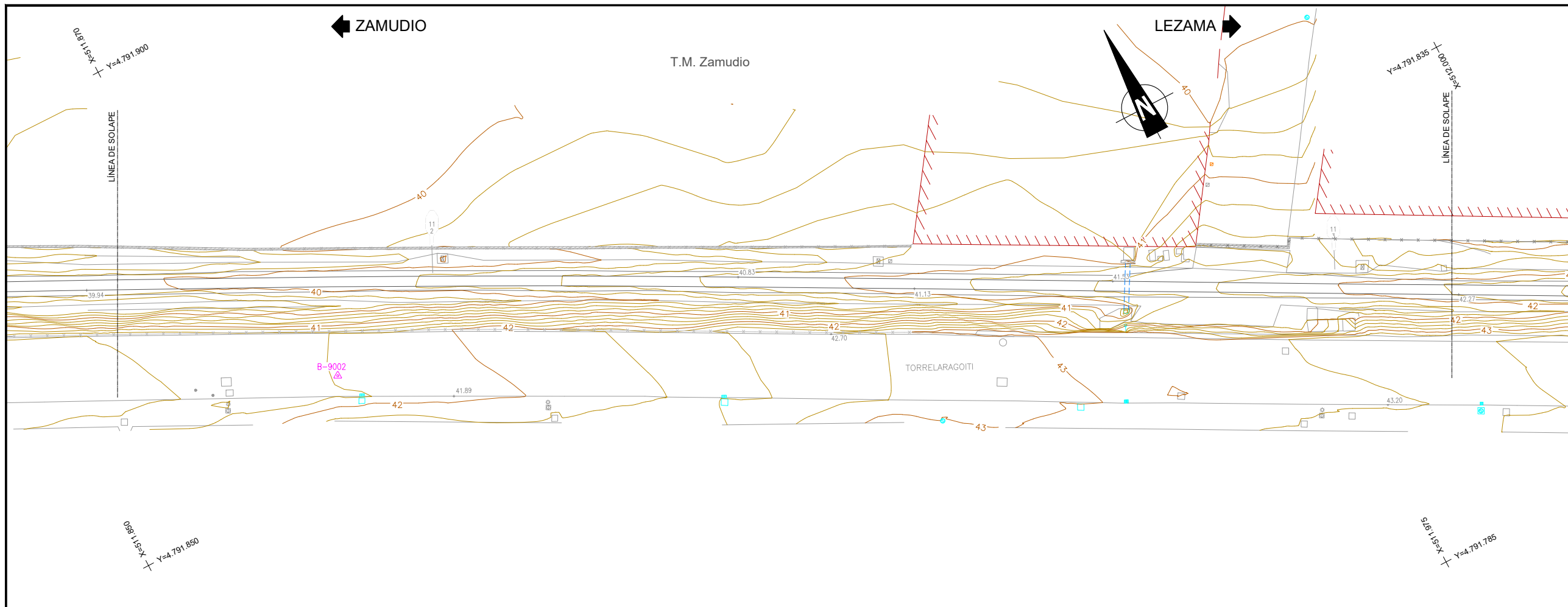
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	CLASE DE MODIFICACION	FECHA	NOMBRE	COMP. OBRA

BERRIKUSPENAK / REVISIONES

AHOLKULARIA / CONSULTOR	INGENIARI EGILEA INGENIERA AUTORA
ESTEYCO	ALEJANDRA FERNÁNDEZ VALLEDOR ICCP Nº de Colegiada 18018

AHOLKULARIAREN ERREFERENTZIA REFERENCIA CONSULTOR	ERREFERENTZIA REFERENCIA
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Planta_topografia



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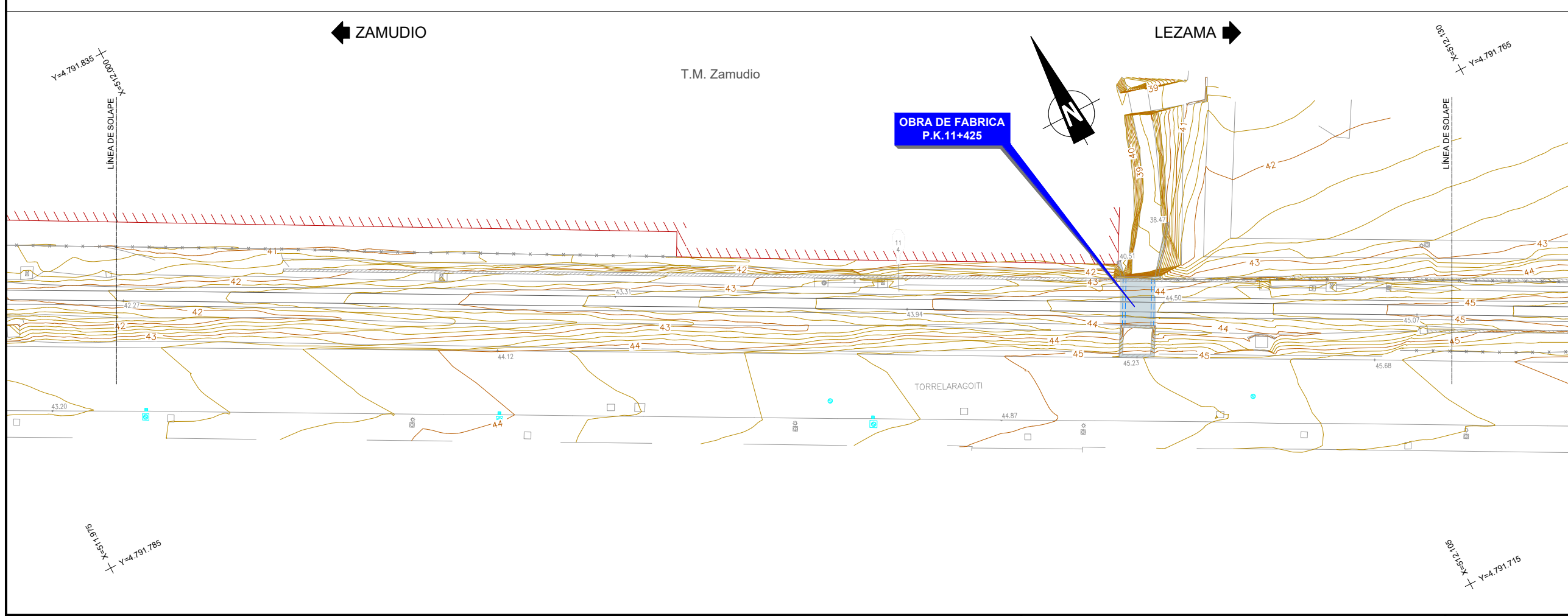
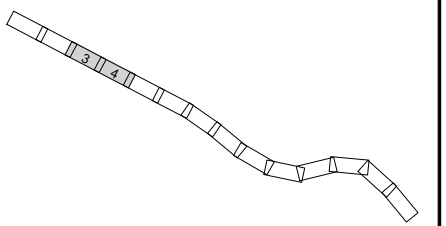
LEYENDA

- CAJETINES
- POSTE ACOMETIDA
- REGISTRO ALUMBRADO
- △ BASE DE REPLANTEO
- REJILLA
- ARQUETA
- FAROLA
- BOLARDO
- POSTE DE HORMIGON
- ▲ SEMAFORO
- CATENARIA
- SANEAMIENTO
- IMBORNAL
- ARBOL
- REGISTRO GAS
- PILAR
- HIDRANTE
- POSTE CAMARA
- AGUA 500
- REGISTRO INDETERMINADO
- POSTE DE MADERA
- SANEAMIENTO
- TIRANTE
- PK FFCC
- ▨ EDIFICACIÓN
- ▨ ESTRUCTURA
- ×× VALLA

BASE DE REPLANTEO

BASE	X	Y	Z
B-9002	511877.762	4791858.733	41.804

DISTRIBUCIÓN DE HOJAS



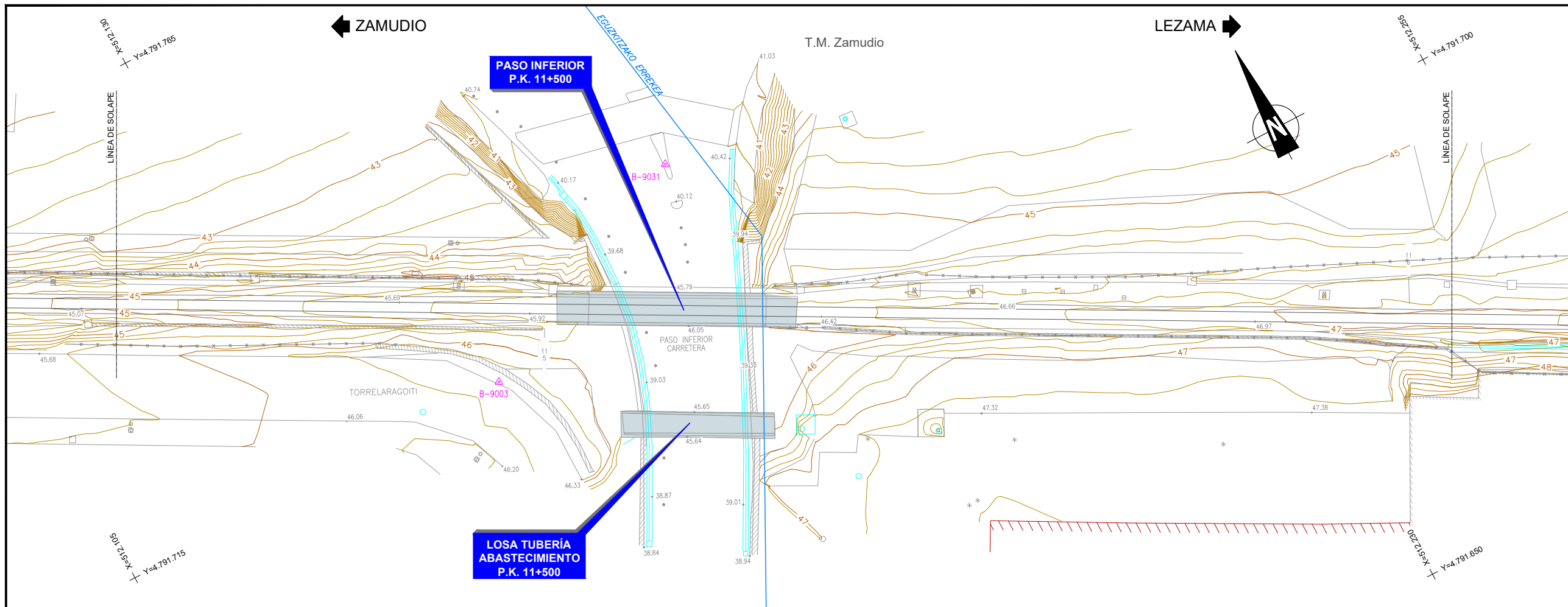
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BERRIKUSPENAK / REVISIONES

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ESTEYCO	ALEJANDRA FERNÁNDEZ VALLEDOR ICCP Nº de Colegiada 18018

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Planta_topografia



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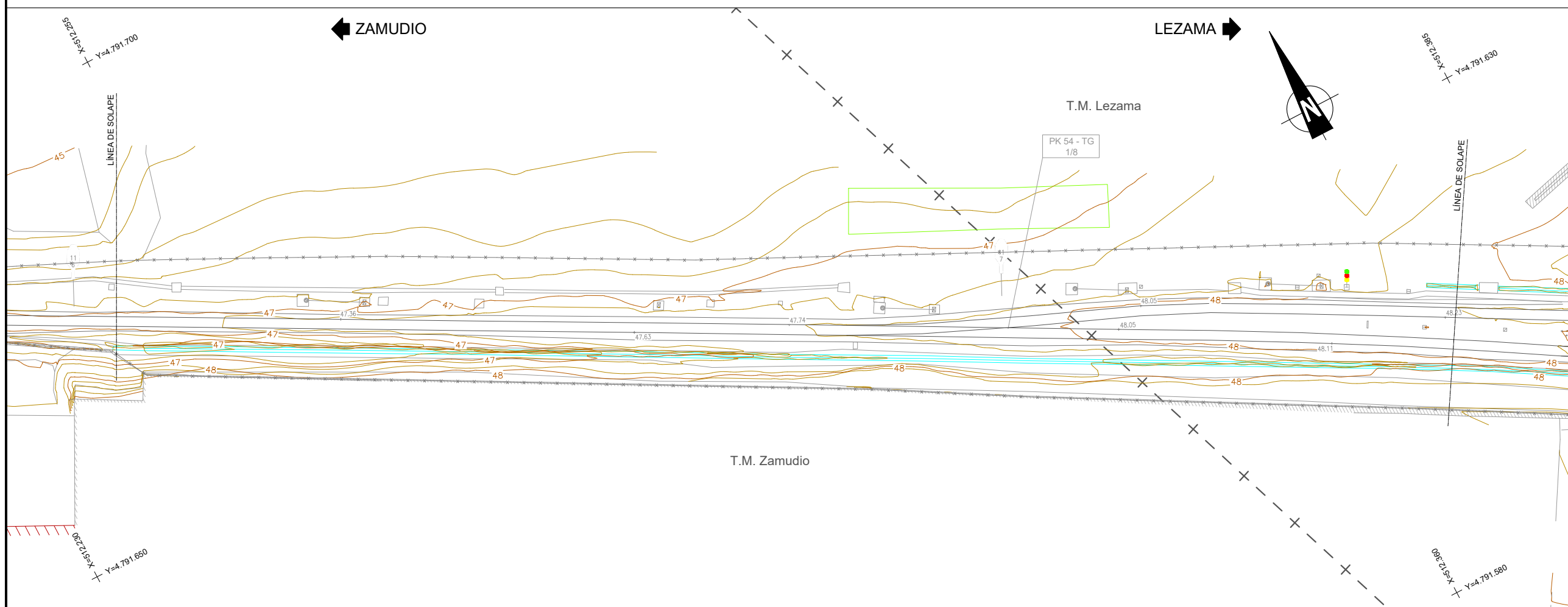
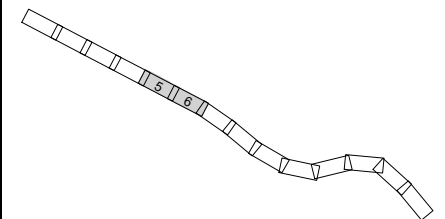
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- ☐ CAJETINES
- ☐ POSTE ACOMETIDA
- ☐ REGISTRO ALUMBRADO
- △ BASE DE REPLANTEO
- ☐ REJILLA
- ☐ ARQUETA
- FAROLA
- BOLARDO
- POSTE DE HORMIGON
- ⬆ SEMAFORO
- ☐ CATENARIA
- SANEAMIENTO
- ▬ IMBORNAL
- ARBOL
- ☐ REGISTRO GAS
- ☐ PILAR
- HIDRANTE
- POSTE CAMARA
- AGUA 500
- ☐ REGISTRO INDETERMINADO
- ☐ POSTE DE MADERA
- SANEAMIENTO
- TIRANTE
- ☐ PK FFCC
- ▨ EDIFICACIÓN
- ▨ ESTRUCTURA
- × VALLA

BASE DE REPLANTEO

BASE	X	Y	Z
B-9003	512149.872	4791715.511	46.336
B-9031	512176.835	4791728.077	40.558

DISTRIBUCIÓN DE HOJAS



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	CLASE DE MODIFICACION	FECHA	NOMBRE	COMP	OBRA

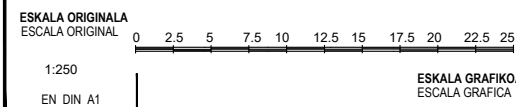
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AHOLKULARIAREN ERREFERENTZIA REFERENCIA CONSULTOR	ERREFERENTZIA REFERENCIA
Planta_topografia	

EUSKO JAURLARITZA GOBIERNO VASCO

LURRALDE PLANGINTZA, ETXEBIZITZA ETA GARRAIO SAILA DEPARTAMENTO DE PLANIFICACIÓN TERRITORIAL, VIVIENDA Y TRANSPORTES

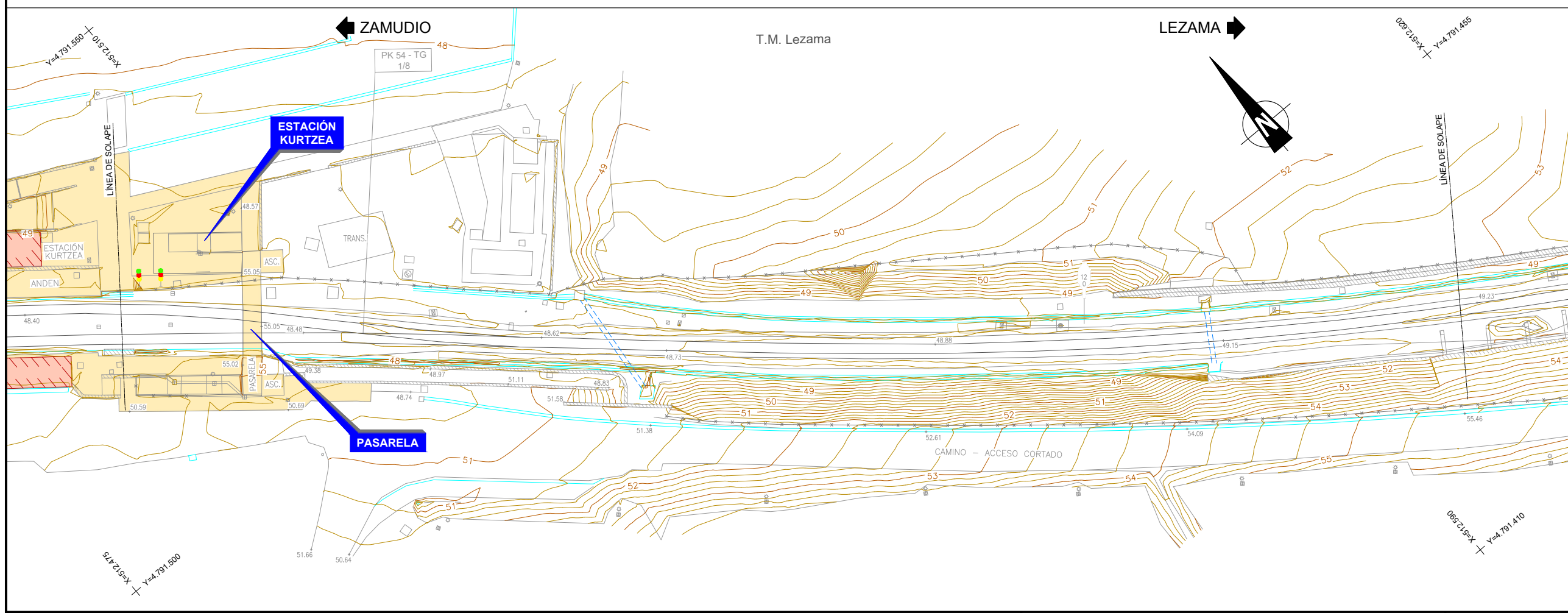
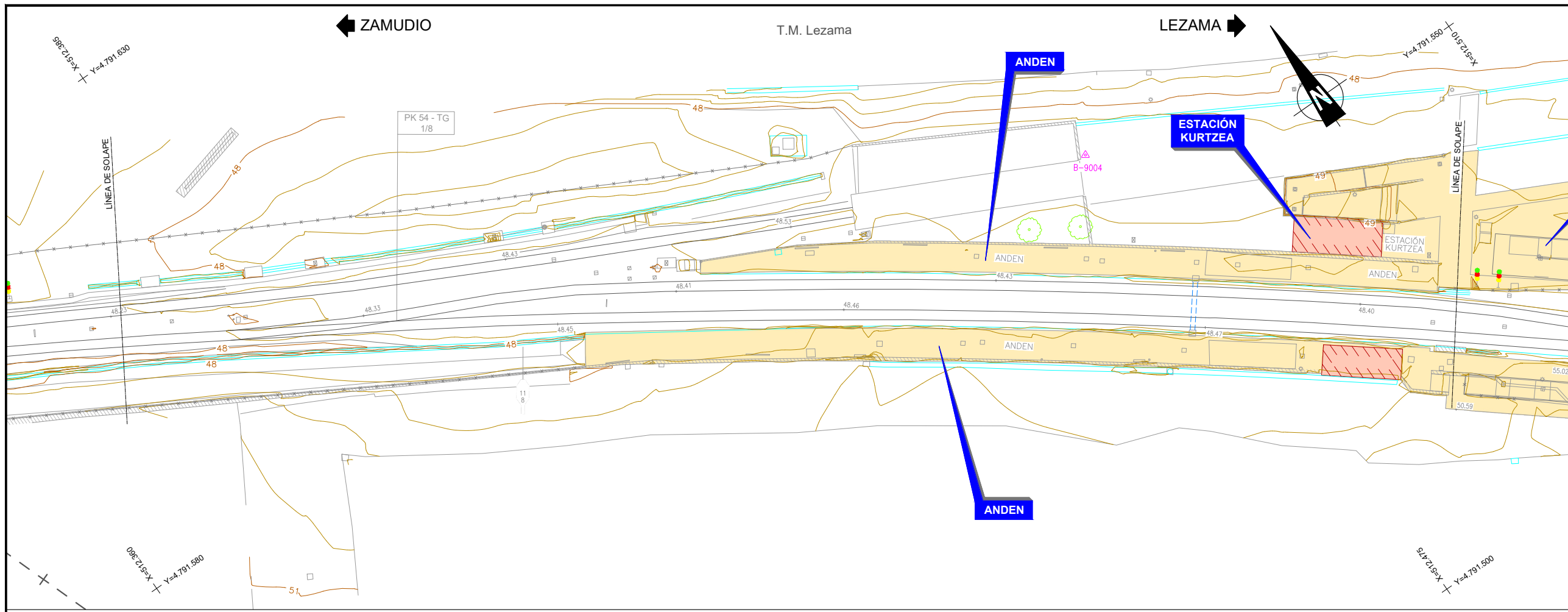
euskal trenbide sarea PROIEKTUAREN IKUSKAPENA ETA ZUZENDARITZA INSPECCIÓN Y DIRECCIÓN DEL PROYECTO



PROIEKTUAREN IZENBURUA TITULO DEL PROYECTO TXORIERRIKO LINEAREN ZAMUDIO - LEZAMA TARTEAN TRENBIDEA BERRITZEKO ERAIKUNTZA-PROIEKTUA PROYECTO CONSTRUCTIVO DE RENOVACIÓN DE VÍA DEL TRAMO ZAMUDIO - LEZAMA DE LA LÍNEA DEL TXORIERRI

PLANOAREN IZENBURUA TITULO DEL PLANO ANEJO Nº2 PLANTAS TOPOGRAFIA 2. ERANSKINA OINPLANTA TOPOGRAFIA

PLANO ZK. / N. PLANO 2 ORRIA / HOJA 3 Sigue 4



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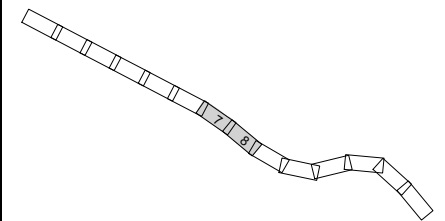
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- BOLARDO
- POSTE DE HORMIGON
- ⬆ SEMAFORO
- CATENARIA
- SANEAMIENTO
- ▬ IMBORNAL
- ARBOL
- REGISTRO GAS
- ☐ PILAR
- HIDRANTE
- POSTE CAMARA
- AGUA 500
- ⊗ REGISTRO INDETERMINADO
- POSTE DE MADERA
- SANEAMIENTO
- TIRANTE
- PK FFCC
- ▨ EDIFICACIÓN
- ▬ ESTRUCTURA
- ⊗ VALLA

BASE DE REPLANTEO

BASE	X	Y	Z
B-9004	512469.633	4791561.050	48.438

DISTRIBUCIÓN DE HOJAS



REV.	PRIMERA EMISION	CLASE DE MODIFICACION	FECHA	NOMBRE	COMP.	OBRA
A	PRIMERA EMISION		Oct. 20	ESTEYCO	ETS	

AHOLKULARIA / CONSULTOR	INGENIARI EGILEA INGENIERA AUTORA
ESTEYCO	ALEJANDRA FERNÁNDEZ VALLEDOR ICCP Nº de Colegiada 18018

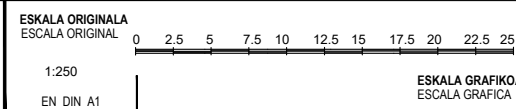
AHOLKULARIAREN ERREFERENTZIA REFERENCIA CONSULTOR	ERREFERENTZIA REFERENCIA
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Planta_topografia

EUSKO JAURLARITZA GOBIERNO VASCO

LURRALDE PLANGINTZA, ETXEBIZITZA ETA GARRAIO SAILA DEPARTAMENTO DE PLANIFICACIÓN TERRITORIAL, VIVIENDA Y TRANSPORTES

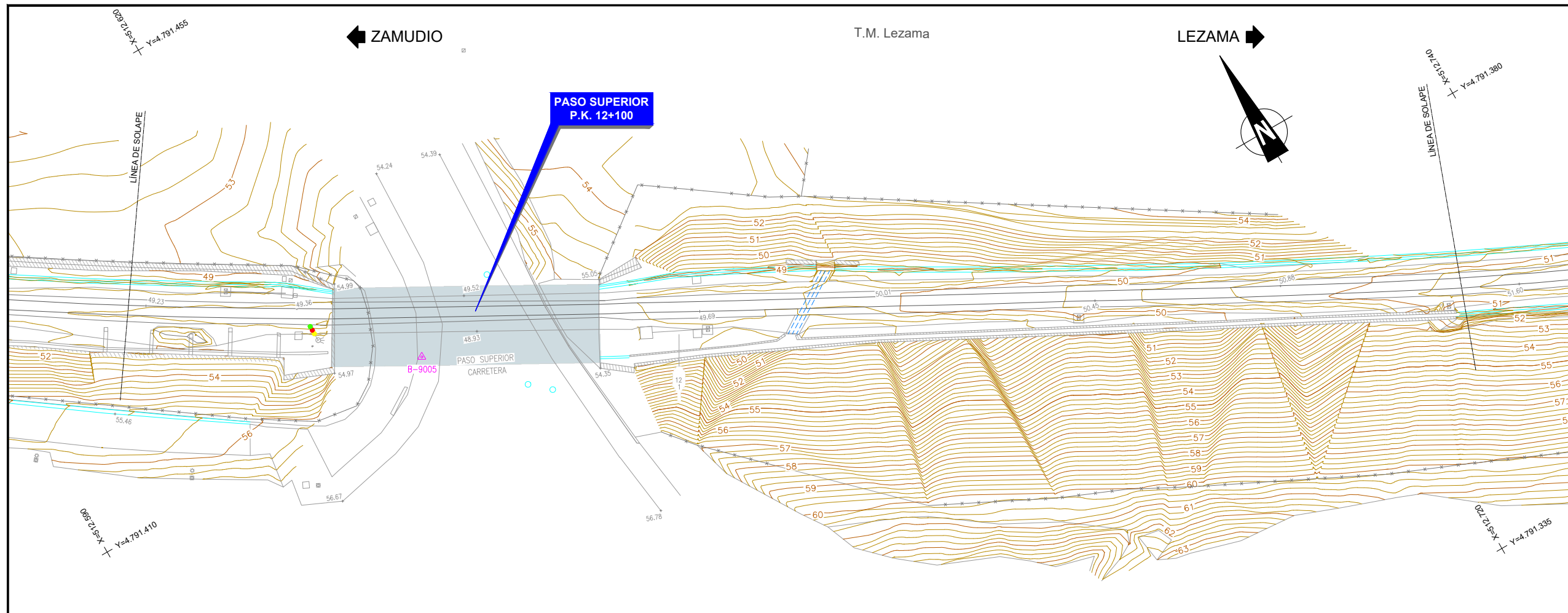
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PROIEKTUAREN IZENBURUA TITULO DEL PROYECTO TXORIERRIKO LINEAREN ZAMUDIO - LEZAMA TARTEAN TRENBIDEA BERRITZEKO ERAIKUNTZA-PROIEKTUA PROYECTO CONSTRUCTIVO DE RENOVACIÓN DE VÍA DEL TRAMO ZAMUDIO - LEZAMA DE LA LÍNEA DEL TXORIERRI

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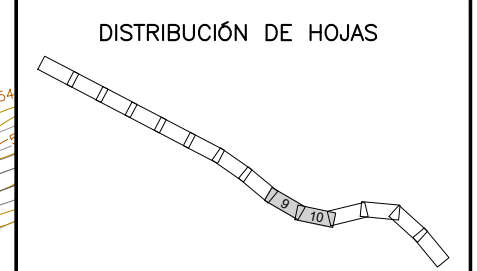
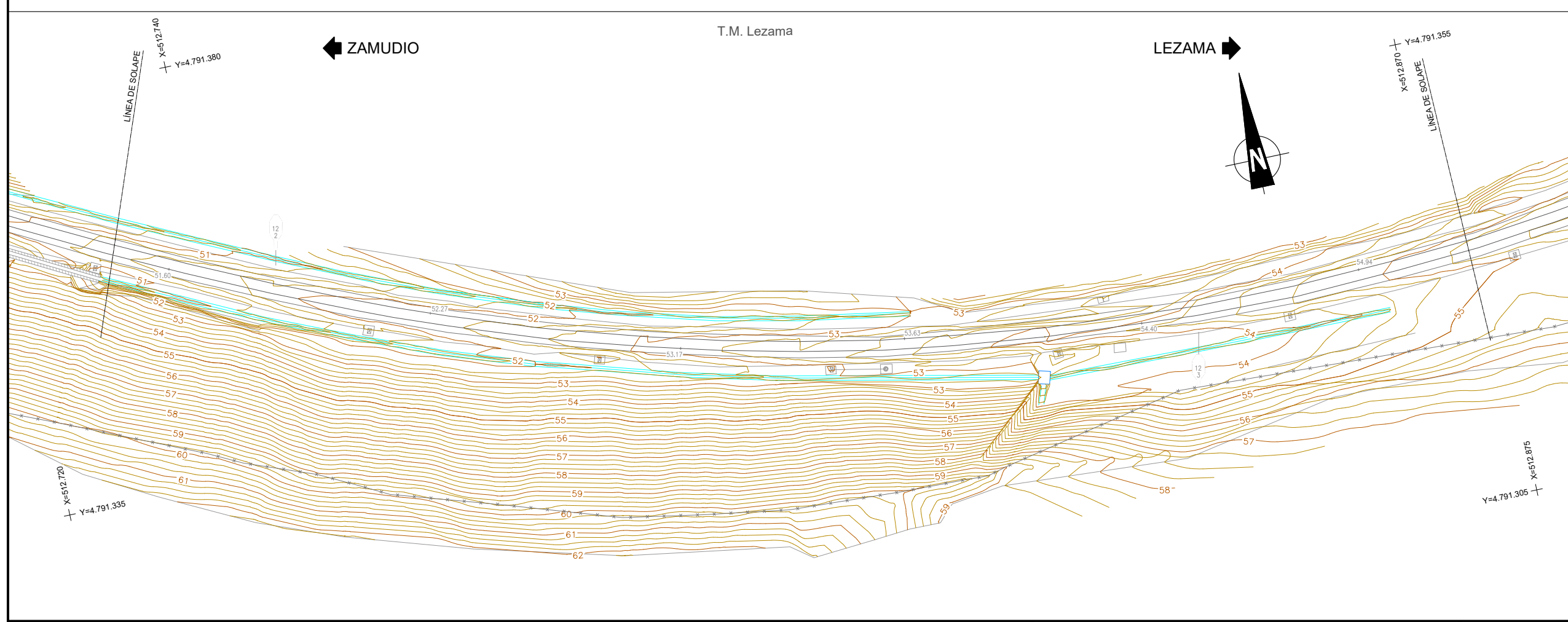
PLANO ZK. / N. PLANO 2 ORRIA / HOJA 4 Sigue 5



- OHARRAK :
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- LEYENDA**
- CAJETINES
 - POSTE ACOMETIDA
 - REGISTRO ALUMBRADO
 - BASE DE REPLANTEO
 - REJILLA
 - ARQUETA
 - FAROLA
 - BOLARDO
 - POSTE DE HORMIGON
 - SEMAFORO
 - CATENARIA
 - SANEAMIENTO
 - IMBORNAL
 - ARBOL
 - REGISTRO GAS
 - PILAR
 - HIDRANTE
 - POSTE CAMARA
 - AGUA 500
 - REGISTRO INDETERMINADO
 - POSTE DE MADERA
 - SANEAMIENTO
 - TIRANTE
 - PK FFCC
 - EDIFICACION
 - ESTRUCTURA
 - VALLA

BASE DE REPLANTEO

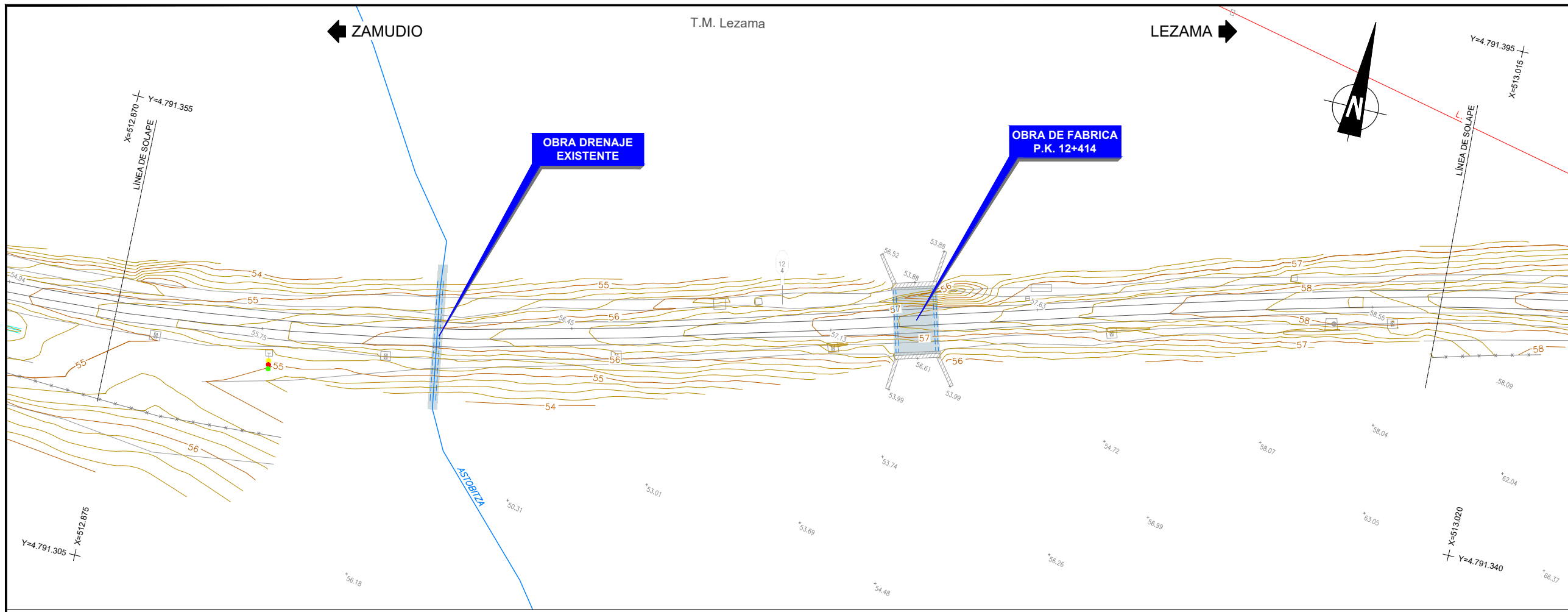
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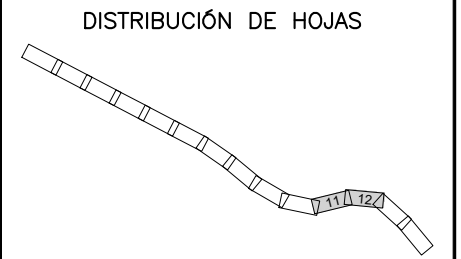
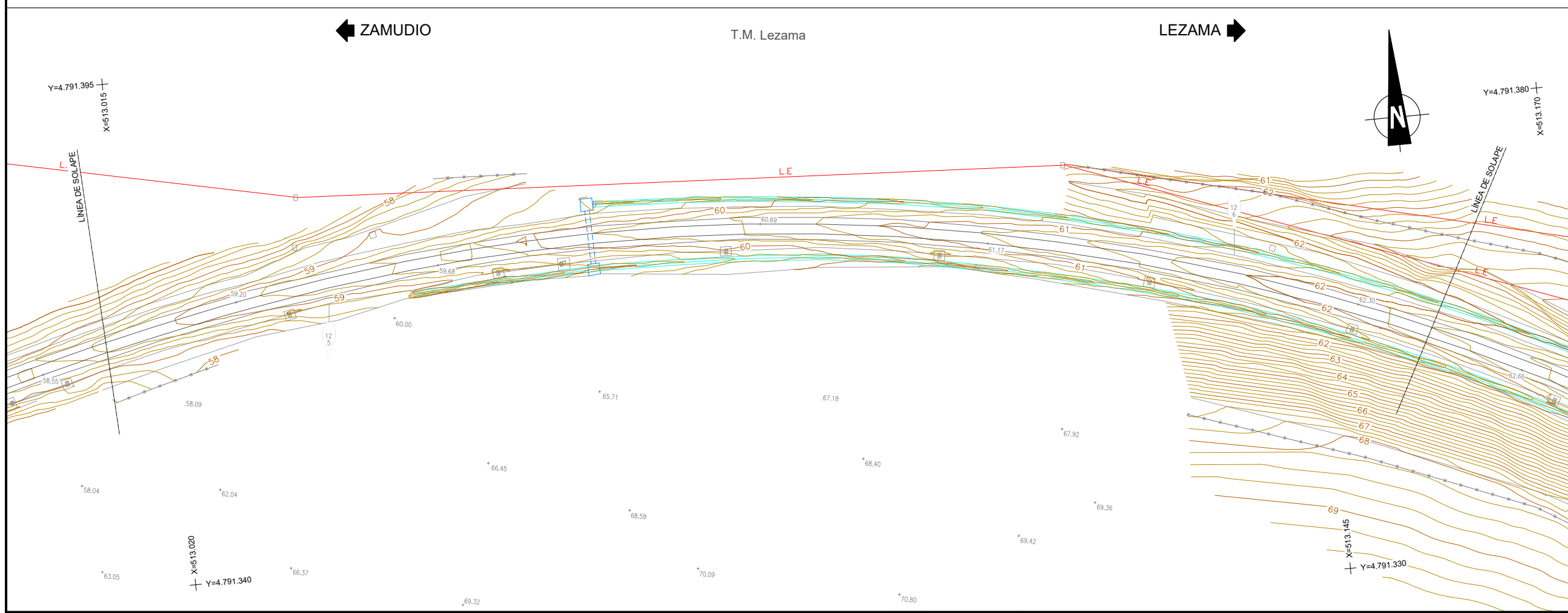
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BERRIKUSPENAK / REVISIONES

AHOLKULARIA / CONSULTOR	INGENIARI EGILEA INGENIERA AUTORA
ESTEYCO	ALEJANDRA FERNÁNDEZ VALLEDOR ICCP Nº de Colegiada 18018
AHOLKULARIAREN ERREFERENTZIA REFERENCIA CONSULTOR	ERREFERENTZIA REFERENCIA
Planta_topografia	



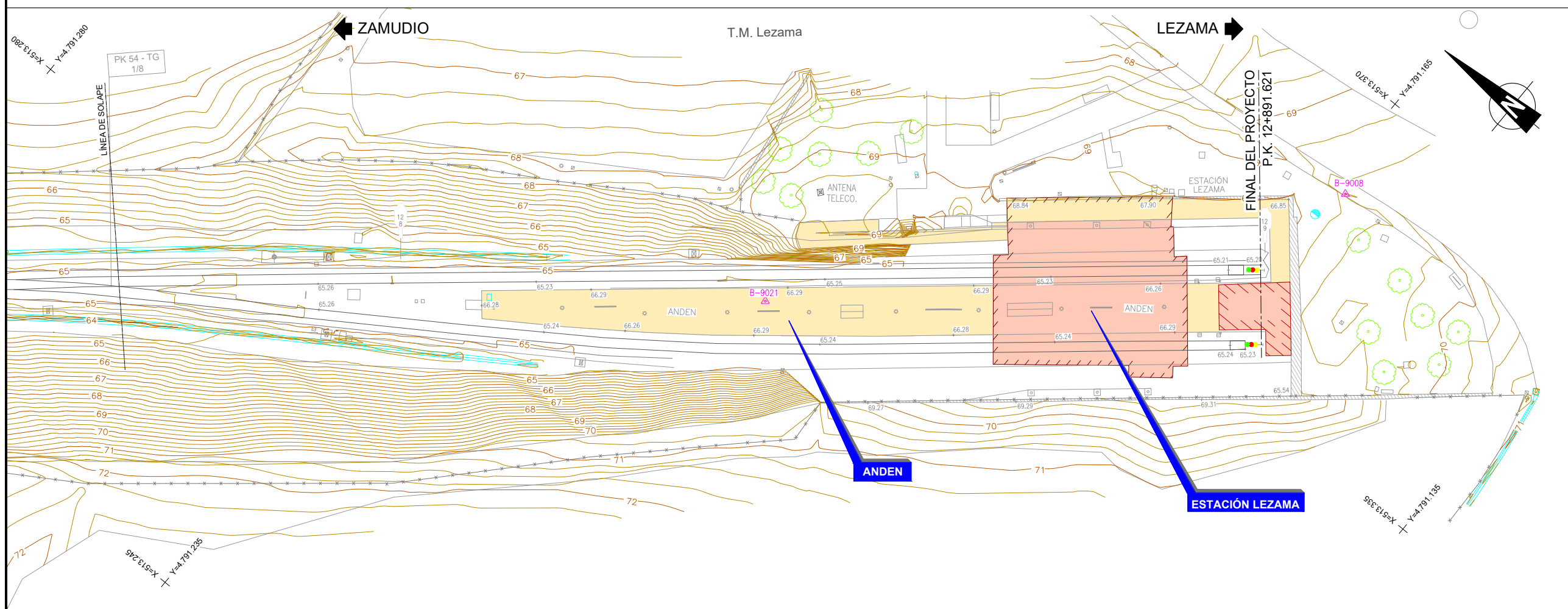
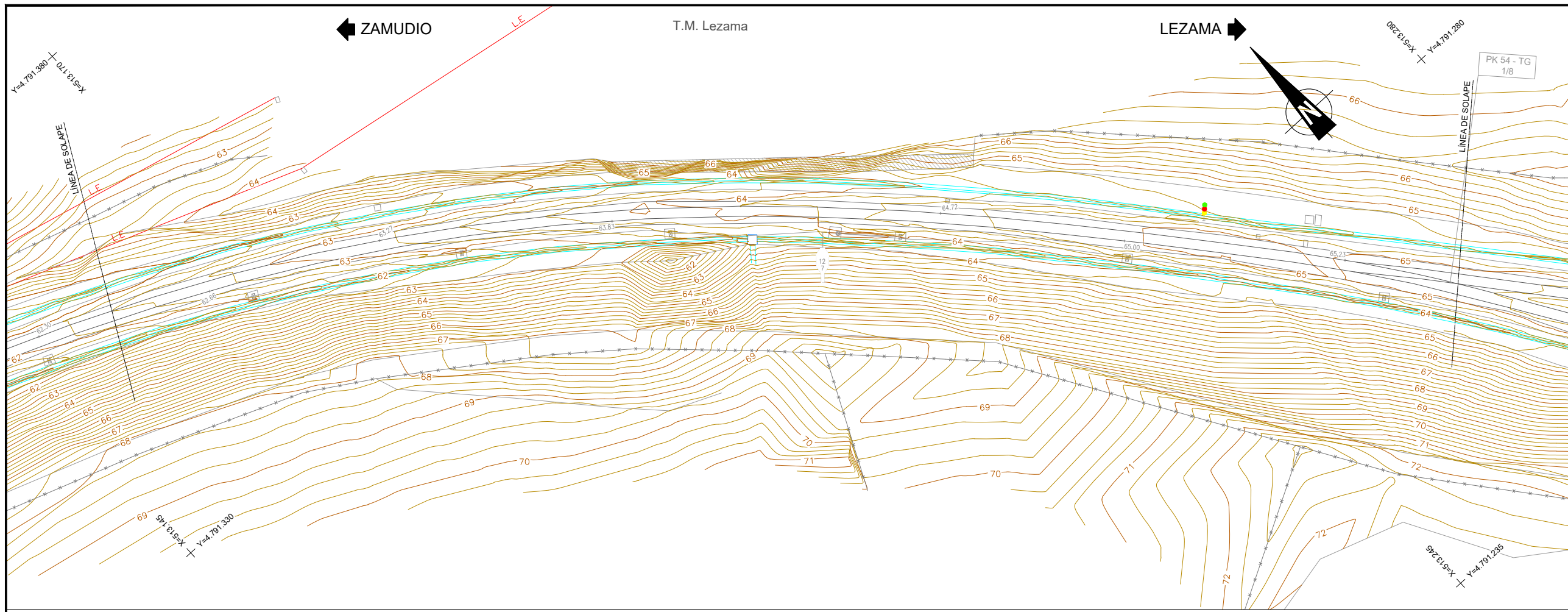
- OHARRAK :
NOTAS :
- LEYENDA**
- CAJETINES
 - POSTE ACOMETIDA
 - REGISTRO ALUMBRADO
 - BASE DE REPLANTEO
 - REJILLA
 - ARQUETA
 - FAROLA
 - BOLARDO
 - POSTE DE HORMIGON
 - SEMAFORO
 - CATENARIA
 - SANEAMIENTO
 - IMBORNAL
 - ARBOL
 - REGISTRO GAS
 - PILAR
 - HIDRANTE
 - POSTE CAMARA
 - AGUA 500
 - REGISTRO INDETERMINADO
 - POSTE DE MADERA
 - SANEAMIENTO
 - TIRANTE
 - PK FFCC
 - EDIFICACIÓN
 - ESTRUCTURA
 - VALLA



REV.	PRIMERA EMISION	CLASE DE MODIFICACION	FECHA	NOMBRE	COMP.	OBRA
A	PRIMERA EMISION		Oct. 20	ESTEYCO	ETS	

BERRIKUSPENAK / REVISIONES

AHOLKULARIA / CONSULTOR	INGENIARI EGILEA INGENIERA AUTORA
ESTEYCO	ALEJANDRA FERNÁNDEZ VALLEDOR ICCP Nº de Colegiada 18018
AHOLKULARIAREN ERREFERENTZIA REFERENCIA CONSULTOR	ERREFERENTZIA REFERENCIA
Planta_topografia	



OHARRAK :
NOTAS :

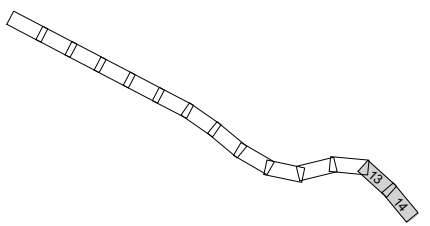
LEYENDA

- ☐ CAJETINES
- ☐ POSTE ACOMETIDA
- ☐ REGISTRO ALUMBRADO
- △ BASE DE REPLANTEO
- ☐ REJILLA
- ☐ ARQUETA
- FAROLA
- BOLARDO
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- 🚦 SEMAFORO
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- TIRANTE
- ☐ PK FFCC
- ▨ EDIFICACIÓN
- ▨ ESTRUCTURA
- ✕ VALLA

BASE DE REPLANTEO

BASE	X	Y	Z
B-9008	513359.045	4791162.947	69.774
B-9021	513309.990	4791204.138	66.326

DISTRIBUCIÓN DE HOJAS



REV.	PRIMERA EMISION	CLASE DE MODIFICACION	FECHA	NOMBRE	COMP.	OBRA
A	PRIMERA EMISION		Oct. 20	ESTEYCO	ETS	

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